Assessing Meaningful Community Engagement in Health & Health Care Programs & Policies

Assessment Instruments

NATIONAL ACADEMY OF MEDICINE

Coalition Self-Assessment Survey

Andrews, M. L., V. Sánchez, C. Carrillo, B. Allen-Ananins, and Y. B. Cruz. 2014. Using a participatory evaluation design to create an online data collection and monitoring system for New Mexico's Community Health Councils. *Evaluation and Program Planning* 42:32-42. https://doi.org/10.1016/j.evalprogplan.2013.09.003.[1]

Sandoval, J. A., J. Lucero, J. Oetzel, M. Avila, L. Belone, M. Mau, C. Pearson, G. Tafoya, B. Duran, L I. Rios, N. Wallerstein. 2012. Process and outcome constructs for evaluating community-based participatory research projects: a matrix of existing measures. Health Education Research 27(4):680-690. https://doi.org/10.1093/her/cyr087.[2]

Allies Against Asthma. 2003. Allies Against Asthma Evaluation Instruments.[3]

ASSESSMENT INSTRUMENT OVERVIEW

The **Coalition Self-Assessment Survey (CSAS)**[1-3] has over 140 questions and sub-questions and is used by community coalitions. It assesses coalition functioning, leadership, and effectiveness of effort.

KEY FEATURES

COMMUNITY/GEOGRAPHY
Community coalitions
Health councils
Pediatric asthma
New Mexico
United States

COMMUNITY ENGAGEMENT OUTCOMES
Strengthened partnerships + alliances
Broad alignment
Diversity + inclusivity
Partnerships + opportunities
Acknowledgment, visibility, recognition
Sustained relationships
Mutual value
Trust
Shared power
Structural supports for community engagement

Expanded knowledge
Broad alignment

Improved health + health care programs + policies
Sustainable solutions

PLACE(S) OF INSTRUMENT USE
Community/community-based organization
Local government agency

LANGUAGE TRANSLATIONS
Spanish

PSYCHOMETRIC PROPERTIES
Reliability

YEAR OF USE/TIME FRAME
2006-2007

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in CSAS were realigned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the CSAS with the Conceptual Model domains and indicators. Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

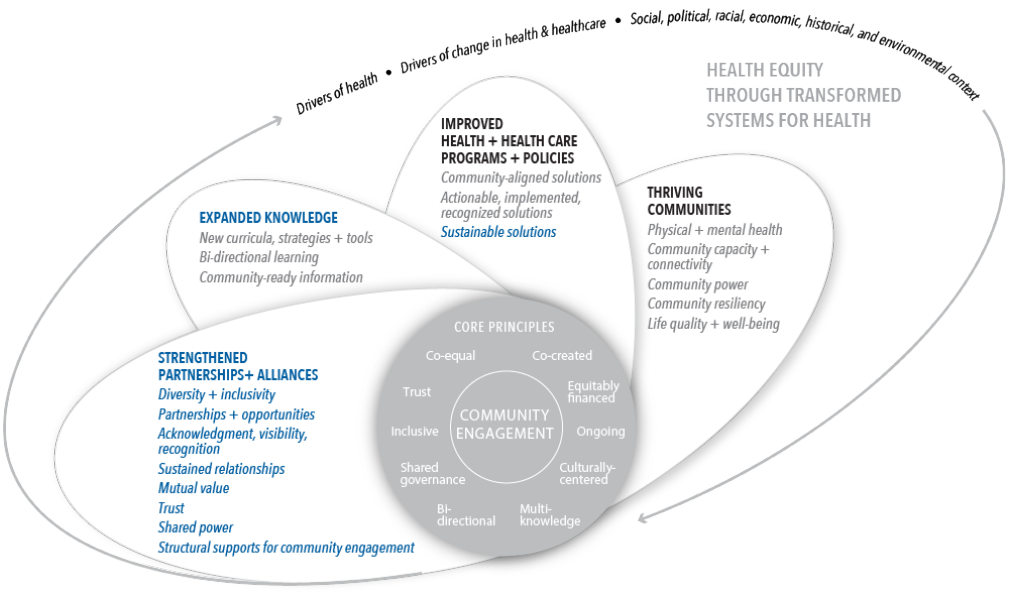

Figure 1 | Alignment of Coalition Self-Assessment Survey with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the questions of the CSAS with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from the CSAS transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Broad alignment with all indicators in this domain**	Q19. Please circle a number to show how much you agree or disagree with each statement: a) The coalition is well managed Q26. Please circle a number to show how much you agree or disagree with the following statements: c) I am satisfied with how the coalition operates Q29. Please circle a number to show to what extent each of the following have been problems for your participation or your organization's participation in the coalition: a) Coalition activities do not reach my primary constituency Q39. Please circle a number to show how much you agree or disagree with the following statements. c) In general I am satisfied with the coalition
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	Q6. In your opinion, does your coalition have sufficient representation from groups, organizations, and/or schools in your community to accomplish the objectives of the coalition? Q6a. If you answered "no" above, in your opinion, which type of the following groups, organizations and/or schools listed are NOT well represented on the coalition? Circle all that apply. Q6b. If you have circled one or more groups above as being not well represented, please select the single group you think is most important to add to the coalition at this time. Write the number of the group in this box: Q6c. Why do you think the group identified as most important to add to the coalition is not well represented at this time? (circle all that apply): Q20. Please circle a number to show whether the following functions are major, minor, not a function, or you don't know: b) network with concerned citizens Q29. Please circle a number to show to what extent each of the following have been problems for your participation or your organization's participation in the coalition: g) i am often the only voice representing my viewpoint
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	Q7. Is your coalition actively recruiting new members? Q20. Please circle a number to show whether the following functions are major, minor, not a function, or you don't know: a) Network with other professionals Q21. Please circle a number to show how much you agree or disagree with the following statements: a) Relationships among coalition members go beyond individuals at the table, to include member organizations Q25. Please circle a number to show how many times over the last year you personally have done the following for the coalition: • a) Recruited new members • b) Served as a spokesperson

	• c) Attempted to get outside support for coalition positions on key issues • d) Worked on implementing activities or events sponsored by the coalition (other than coalition meetings) • e) Acquired funding or other resources for the coalition Q27. Please circle a number to show how much you agree or disagree with the following statements. • a) Staff from my organization contribute time to the coalition • b) Volunteers from my organization contribute time to the coalition • c) My organization supports the positions of the coalition publicly • d) Overall, my organization is committed to the work of the coalition • e) My organization contributes funds to support the coalition Q28. Please circle a number to show to what extent each of the following has been a benefit to your participation or your organization's participation on the coalition: • a) Developing collaborative relationships with other agencies • g) Increasing my professional skills and knowledge* • i) Getting access to key policy makers* Q29. Please circle a number to show to what extent each of the following have been problems for your participation or your organization's participation in the coalition: e) My (or my organization's) opinion is not valued
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	Q14b. Circle the number that best represents your opinion of how much conflict within the coalition was caused by each of the following factors: g) Differences in opinion about who gets public exposure and recognition Q17. With respect to the leadership you just identified, please circle a number to show how much you agree or disagree with the following statements: • b) Is respected in the community • d) Is respected in the coalition Q29. Please circle a number to show to what extent each of the following have been problems for your participation or your organization's participation in the coalition: b) My organization doesn't get enough public recognition for our work on the coalition
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Sustained relationships**	Q23. Please circle a number to show how much you agree or disagree with the following statements: • a) Notification of meetings is timely • b) Background materials needed for meetings are prepared & distributed in advance of meetings (agendas, minutes, study documents) • c) Informative committee and/or task force reports are routinely made to the entire coalition

	Q26. Please circle a number to show how much you agree or disagree with the following statements: b) I go to coalition meetings only because it is part of my job Q32. Please circle a number to show how much you agree or disagree with the following statements: • a) The current method for communication between coalition staff/leadership and its members is effective • b) Members can communicate between themselves as necessary or desired • c) The coalition staff facilitates communication between coalition members • d) The coalition staff effectively and efficiently notifies me of meetings, agenda items, etc. Q38. Please circle a number to show how much you agree or disagree with the following statements: • a) The coalition is making plans to continue operating after current funding is terminated • d) The coalition will continue to exist beyond the Robert Wood Johnson Foundation grant period
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Mutual value**	Q14b. Circle the number that best represents your opinion of how much conflict within the coalition was caused by each of the following factors: d) Personality clashes Q21. Please circle a number to show how much you agree or disagree with the following statements: f) Coalition members respect each others' points of view even if they might disagree* Q28. Please circle a number to show to what extent each of the following has been a benefit to your participation or your organization's participation on the coalition: • b) Helping my organization move toward our goals • c) Getting access to target populations with whom we have previously had little contact • d) Getting funding for my organization • e) Getting services for our clients • f) Getting client referrals from others • g) Increasing my professional skills and knowledge* • h) Staying well informed in a rapidly changing environment* • i) Getting access to key policy makers* • j) Increasing my sense that others share my goals and concerns • k) Getting support for policy issues our organization feels strongly about Q29. Please circle a number to show to what extent each of the following have been problems for your participation or your organization's participation in the coalition: j) The coalition is competing with my organization

	Q30. From your organization's perspective (if applicable), do the benefits of participation in the coalition appear to outweigh the costs at this point? Q31. From your own professional and/or personal perspective, do the benefits of participation in the coalition appear to outweigh the costs at this point? Q36. Has your coalition brought benefit to your community?
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	Q14. Please circle a number to show how much you agree or disagree with the following statements: • b) The coalition follows standard procedures for making decisions • c) The decision-making process used by the coalition is fair • d) The decision-making process used by the coalition is timely • e) The coalition makes good decisions Q14b. Circle the number that best represents your opinion of how much conflict within the coalition was caused by each of the following factors: h) Procedures used for completing the work Q19. Please circle a number to show how much you agree or disagree with each statement: c) People know the roles of staff as compared to coalition members Q21. Please circle a number to show how much you agree or disagree with the following statements: • b) I am comfortable requesting assistance from the other coalition members when I feel their input could be of value • c) I can talk openly and honestly at the coalition meetings • d) I am comfortable expressing my point of view even if they might disagree • e) I am comfortable bringing up new ideas at coalition meetings • f) Coalition members respect each others' points of view even if they might disagree* • g) My opinion is listened to and considered by other members* Q26. Please circle a number to show how much you agree or disagree with the following statements: d) I feel a strong sense of "loyalty" to the coalition
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	Q9. Of those that represent organizations, please circle the number which best represents your opinion about the number of members who participate in your coalition who have enough authority to make commitments of resources or other support for the coalition. Q10. Please circle the number below that shows how much influence you think the person or group has in deciding on the actions and policies for your coalition: • a) Coalition Chair • b) Coalition Officers or Committee Chairs • c) Lead Staff • d) Coalition Members

Q11. Please circle a number to show how much influence you personally have in making coalition decisions.

Q12. How are decisions usually made regarding coalition priorities, policies and actions? Circle the number of the main way(s) you think decisions are usually made. (CIRCLE NO MORE THAN TWO): 1. Coalition members vote, with majority rule 2. Coalition members discuss the issue and come to consensus 3. The coalition chair makes final decisions 4. The coalition executive or steering committee makes final decisions 5. The lead agency for the project makes the decisions 6. Don't know

Q13. Please circle a number to show how comfortable you are overall with the coalition decision-making process.

Q14b. Circle the number that best represents your opinion of how much conflict within the coalition was caused by each of the following factors:

- a) Differences in opinion about coalition mission and goals
- b) Differences in opinion about specific objectives
- c) Differences in opinion about the best strategies to achieve coalition goals and objectives
- e) Fighting for power, prestige and/or influence
- f) Fighting for resources
- i) People aren't sufficiently included in coalition processes/decision-making
- j) Member(s) who dominate the coalition meetings and impede proper collaboration

Q15. Please circle the main strategy your coalition has used to address conflicts that occur. (CIRLCE NO MORE THAN TWO):

Q16. Who do you think is most significant in providing leadership for your coalition? (CIRCLE ONLY ONE NUMBER):

Q17. With respect to the leadership you just identified, please circle a number to show how much you agree or disagree with the following statements:

- f) Intentionally seeks other's views
- g) Utilizes the skills and talents of many, not just a few
- h) Creates an appropriate balance of responsibility between leaders, staff and embers
- j) Builds consensus on key decisions
- k) Works collaboratively with coalition members
- n) Is skillful in resolving conflict
- o) Is ethical

Q18. Who actually sets the agenda for meetings of the coalition and its committee/task forces? (PLEASE CIRCLE ALL THAT APPLY):

Q19. Please circle a number to show how much you agree or disagree with each statement: d) Coalition members take responsibility for getting the work done

	Q21. Please circle a number to show how much you agree or disagree with the following statements: g) My opinion is listened to and considered by other members* Q22. Please circle a number to show how much you agree or disagree with the following statements: • a) Our coalition has a clear and shared understanding of the problems we are trying to address • b) There is a general agreement with respect to the mission of the coalition • c) There is general agreement with respect to the priorities of the coalition • d) Members agree on the strategies the coalition should use in pursuing its priorities • e) Our action plan defines well the roles, responsibilities and timelines for conducting the activities that work towards achieving the stated mission of the coalition Q26. Please circle a number to show how much you agree or disagree with the following statements: a) I feel that I have a voice in what the coalition decides Q29. Please circle a number to show to what extent each of the following have been problems for your participation or your organization's participation in the coalition: • d) My skills and time are not well-used • f) The coalition is not taking any meaningful action
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	Q8. In your opinion, do new members receive adequate orientation to be effective members of the coalition? Q14. Please circle a number to show how much you agree or disagree with the following statements: a) The coalition has clear and explicit procedures for making important decisions Q29. Please circle a number to show to what extent each of the following have been problems for your participation or your organization's participation in the coalition: • h) The financial burden of traveling to coalition meetings is too high • i) The financial burden of participating in coalition activities (barring travel) is too high Q38. Please circle a number to show how much you agree or disagree with the following statements: b) The coalition has begun to find resources to continue operating after current funding is terminated
EXPANDED KNOWLEDGE; **Broad alignment with all indicators in this domain**	Q28. Please circle a number to show to what extent each of the following has been a benefit to your participation or your organization's participation on the coalition: h) Staying well informed in a rapidly changing environment*
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Sustainable solutions**	Q38. Please circle a number to show how much you agree or disagree with the following statements: c) Resources are being identified to support the systemic, programmatic changes implemented through the work of the coalition
Not aligned with Conceptual Model	Q1. What is your role in the coalition? Circle more than one response, if appropriate.

	Q2. Are you part of the coalition as an individual member or as a representative of an organization? Please circle either 1 or 2, or both, if appropriate. Q2a. If you are an individual member not representing an organization, please specify your role (for example, "parent") Q2b. If an individual member not representing an organization, how long have you been an individual member of the coalition? Q3. If you represent an organization, please indicate the one that best describes the organization you represent in this coalition. Please circle only one. Q4. If a representative of an organization, how long has your organization been represented in the coalition? Q5. Please circle the role that fits you best. Circle only one. Q14a. Circle the number that represents the amount of conflict in your coalition. Q17. With respect to the leadership you just identified, please circle a number to show how much you agree or disagree with the following statements: • a) Has a clear vision for the coalition • c) Gets things done • e) Controls decisions • i) Advocates strongly for its own opinions and agendas • l) Controls discussions • m) Keeps the coalition focused on tasks and objectives Q19. Please circle a number to show how much you agree or disagree with each statement: b) The work of the paid staff supports the work of the coalition Q20. Please circle a number to show whether the following functions are major, minor, not a function, or you don't know: • c) Conduct strategic planning • d) Make decisions about priority needs and problems • e) Recommend or make decisions to allocate resources • f) Operate particular programs or activities • g) Advocate for local public policy objectives • h) Advocate for state public policy objectives • i) Provide funding for current programs • j) Raise funds to sustain long-term coalition activities Q24. Over the past year, how involved have you been in coalition activities? Q29. Please circle a number to show to what extent each of the following have been problems for your participation or your organization's participation in the coalition: c) Being involved in policy advocacy is a problem

	Q33. Do you feel you have adequate knowledge about childhood asthma to function effectively in the coalition? Q34. Has the coalition helped you learn more about childhood asthma? Q35. Has your coalition been responsible for activities or programs that otherwise would not have occurred? Q37. Please circle a number to show how much you agree or disagree with the following statements: • a) The coalition is making progress in implementing the activities that have potential to improve childhood asthma. • b) The coalition is improving health outcomes for children with asthma. Q39. Please circle a number to show how much you agree or disagree with the following statements. • a) The coalition is essential to the improvement of pediatric asthma • b) One or a small number of people or agencies could make significant progress in pediatric asthma without the coalition Q40. What issues should the coalition leadership and staff be paying more attention to? Q41. Are there any critical events over the past year that have had an impact on the coalition? Please describe. D1. Your gender: D2. Your Race or Ethnicity: D3. Your age at last birthday: D4. Your education: D5. Did you complete this survey when it was administered a year ago?

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Coalition Self-Assessment Survey questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

Two of the articles describe how CSAS was developed and implemented by two different groups to evaluate their initiatives. The first initiative, Allies Against Asthma, consisted of seven community coalitions focused on developing and sustaining "community-wide pediatric asthma control systems." Funded by the Robert Wood Johnson Foundation, Allies Against Asthma used CSAS to conduct a cross-site evaluation of the community coalitions.[3]

In the other initiative, CSAS was implemented in New Mexico as part of the state's aim to evaluate the impact of 32 county health councils' "actions on local community health systems and health status outcomes." Health councils in the state have received "legislative funding since 1991;" however, a state-wide evaluation to examine the effectiveness of the councils and the investment "(i.e., did health councils increase service integration or help change health behaviors in their communities)" had never been conducted. The University of New Mexico Master of Public Health Program, the New Mexico Department of Health Office of Health Promotion and Community Health Improvement, health council coordinators, and members of a community-based participatory research (CBPR) project developed a multistage participatory evaluation within the state's health council system. As part of the participatory evaluation process to develop an online reporting system, CSAS was administered during stakeholder meetings, serving as an important foundational part of the effort.[1]

Instrument description/purpose

Allies Against Asthma used CSAS "to capture quantitative information from coalition members on coalition structure and processes including coalition functioning, leadership, and effectiveness of effort."[1] In New Mexico, CSAS was used to "assess internal council functioning and the council's relationship with the Department of Health."

CSAS assesses four areas:

- Decision making
- Leadership
- Communication
- Conflict resolution

CSAS includes over 140 questions and sub-questions. Questions use "yes/no" response options, as well as various Likert scale response options.[3]

The CSAS instrument in English and Spanish can be accessed here: http://www.asthma.umich.edu/media/eval_autogen/CSAS.pdf.

Engagement involved in developing, implementing, or evaluating the instrument

Allies Against Asthma used an evaluation approach that was collaboratively designed with participation from "leaders from all seven community coalitions, the program's National Advisory Committee members, and the Allies National Program Office staff." [3]

The development of New Mexico's health council web-based data collection and monitoring plan was collaborative. It was co-developed with representatives of the health councils, including coordinators, members from each region, and Department of Health staff. During the first of eight evaluation planning meetings, the statewide coalition survey was developed to help answer the two questions: 1) "What organizational structures and processes do county health councils have in place that support council development and council actions?" and 2) "What strategies and actions had county health councils implemented in their action plans for FY 07?"[1]

Subsequent meetings were held in Public Health Division regions and included 15 or less participants or were held during statewide events where sessions included 25-100 coordinators, council members, and Department of Health staff.[1]

Additional Information on Populations Engaged in Instrument Use

Not specified.

Notes

- **Potential limitations:** Several challenges emerged during the development of the online reporting, which led to important lessons learned, including: arriving at shared understanding of definitions and terminology; accommodating councils located in remote areas of the state with limited resources to travel; creating functionality and training to address technical issues; noting differences in voluntary participation among health council representatives and staff and satisfaction with the final product; and responding to increased work levels and satisfaction of council coordinators.[1]
- **Important findings:** The collaborative process of developing the evaluation and online reporting system fostered "a sense of connectedness among health councils" and allowed them to see their statewide impact. The credibility of the evaluation and the adoption of the reporting system may have been influenced by the voluntary involvement of health council coordinators who were experienced and knowledgeable. Further, "health council representatives were involved in all phases of system development," placing "respect and inclusion of their perspectives" at the forefront of the process. "Through the online system, health councils reported data on intermediate outcomes, including policy changes and funds leveraged. The system captured data that were common across the health council system, yet was also flexible so that councils could report their unique accomplishments at the county level."[1]
- **Supplemental information:** Additional research has been conducted using the CSAS with other populations. The findings and the resulting modifications can be found in the following articles:

- Rockler, B. E., S. B. Procter, D. Contreras, A. Gold, A. Keim, A. R. Mobley, R. Oscarson, P. Peters, V. Remig, and C. Smathers. 2019. Communities Partnering With Researchers: An Evaluation of Coalition Function in a Community-Engaged Research Approach. *Progress in Community Health Partnerships* 13(1):105-114. https://doi.org/10.1353/cpr.2019.0013.
- Sanchez, V., M. Sanders, M. L. Andrews, R. Hale, and C. Carrillo. 2014. Community health coalitions in context: associations between geographic context, member type and length of membership with coalition functions. *Health Education Research* 29(5):715-29. https://doi.org/10.1093/her/cyu028.

Common Partnership Indicators

Hamzeh, J., P. Pluye, P. L. Bush, C. Ruchon, I. Vedel, and C. Hudon. 2019. Towards an assessment for organizational participatory research health partnerships: A systematic mixed studies review with framework synthesis. Evaluation and Program Planning 73:116-128. https://doi.org/10.1016/j.evalprogplan.2018.12.003.[1]

Kothari, A., L. MacLean, N. Edwards, and A. Hobbs. 2017. Indicators at the interface: managing policymaker-researcher collaboration. *Knowledge Management Research & Practice* 9(3):203-214. https://doi.org/10.1057/kmrp.2011.16.[2]

ASSESSMENT INSTRUMENT OVERVIEW

The **Common Partnership Indicators**[1,2] has 33 questions and is used by policy makers and health researchers. It supports the management of collaborative knowledge generation and assesses the performance of a partnership, with focus on in the areas of communication, collaboration, and dissemination. The Common Partnership Indicators is part of a set of three instruments that also includes the Early Partnership Indicators and the Mature Partnership Indicators.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Policymakers
Researchers
Ontario, Canada

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Acknowledgment, visibility, recognition
Sustained relationships
Mutual value
Trust
Shared power
Structural supports for community engagement

Expanded knowledge
Community-ready information

Improved health + health care programs + policies
Actionable, implemented, recognized solutions

PLACE(S) OF INSTRUMENT USE

Government agency
Academic/research institution/university

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Content validity
Face validity

YEAR OF USE/TIME FRAME

2000-2002

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in Common Partnership Indicators were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the Common Partnership Indicators with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

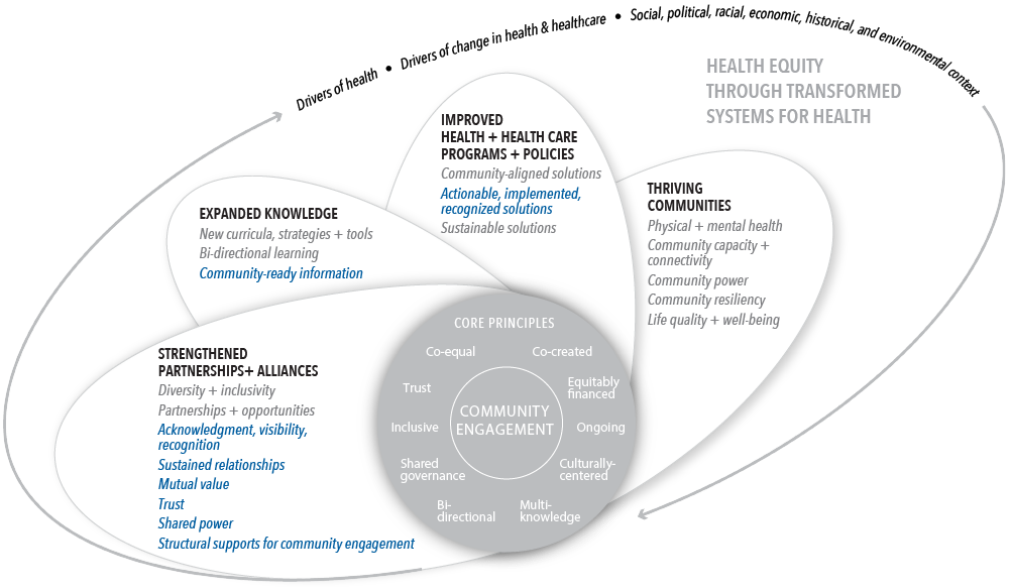

Figure 1 | Alignment of Common Partnership Indicators with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the Common Partnership Indicators with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from the Common Partnership Indicators transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	4.2 Partners are acknowledged in project documents 1.2 Each partner's needs and constraints expressed
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Sustained relationships**	1.0 Communication is clear 1.1 Communication is on-going 1.2 Communication involves face-to-face meetings as well as telephone, mail, email, and fax methods 1.3 The same contact people continue over the life of the project 2.0 Communication is relevant 3.0 Communication is timely 3.1 Communication is frequent 4.0 Communication is respectful* 1.0 Joint meetings occur at most stages of research 2.0 Joint meetings occur to discuss research dissemination and utilization plans 2.2 Response to feedback is prompt 2.3 Only a few rounds of revisions before deliverable is acceptable to all 1.1 Stakeholders and ministry partners received relevant documents
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Mutual value**	1.4 A common language/lexicon is used by both parties 4.0 Communication is respectful** 4.1 Partners value each other's contributions
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	2.1 Roles, expectations, and criteria for deliverables are explicit
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	1.1 Joint identification of research questions 1.3 Joint designing of research protocol 1.4 If relevant, joint data collection 1.5 If relevant, joint data analysis 1.6 Joint ongoing evaluation of relevance of research (e.g. current project, new findings, new partner needs etc.) 1.7 Joint discussion of findings and implications 5.0 Community stakeholders contacted researcher or government partner to discuss the research findings
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	2.1 Feedback about research report is provided before final draft 2.4 Feedback is given after the final deliverable is received
EXPANDED KNOWLEDGE; **Community-ready information**	2.0 Presentation formats in layman's terms
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Actionable, implemented, recognized solutions**	3.0 Presentation formats include recommendations for action

	3.1 Recommendations for action reflect current program and policy challenges
Not aligned with Conceptual Model	1.0 Multiple formats of written and/or other forms of presentation (e.g., newsletter, website summary, interim report, oral presentation) 4.0 Where appropriate, presentation formats are concise (e.g., less than two pages) 4.1 Presentation formats are similar to those used for other communications within the Ministry (e.g. briefing notes)

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Common Partnership Indicators questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article describes a study to "examine research receptor capacity and research utilization needs within the Ontario Ministry of Health and Long Term Care (MOHLTC)." The study explored the "abilities of Ministry staff to find, understand and use evidence-based research in policy development processes." The Health System-Linked Research Unit (HSLRU) engaged with Ontario Ministry partners to develop research directly intended for transfer into government decision-making, supported the development of these three instruments. The instruments reflect both processes and outcomes that can be used to "manage collaborative knowledge generation or assess the performance of a partnership between health researchers and policymakers." The study led to the development of a set of three instruments: the Common Partnership Indicators (discussed here), as well as the Early Partnership Indicators and the Mature Partnership Indicators (discussed in other assessment instrument summaries).[2]

Instrument description/purpose

The Common Partnership Indicators can be used by partnership members as a self-evaluation tool, with the aim of improving partnership functioning. The instrument focuses on three areas:

- Communication is clear, relevant, timely, and respectful
- Collaboration occurs "at most stages of research," and "to discuss research dissemination and utilization plans"
- Dissemination of research includes "multiple formats of written and/or other forms of presentation;" presentation formats are "in layman's terms," "include recommendations for action," and are concise where appropriate; and "community stakeholders contacted researcher or government partner to discuss research findings"

The Common Partnership Indicators has 33 questions. The possible response options to the questions were not presented in the article.[2]

The Common Partnership Indicators can be accessed here: https://doi.org/10.1057/kmrp.2011.16.

Engagement involved in developing, implementing, or evaluating the instrument

The Common Partnership Indicators was developed using a cross-sectional survey followed by qualitative interviews. The article noted the importance of "[improving] access to research information, [enhancing] use of the information once accessed, and [promoting] an organizational culture supportive of research utilization." Study participants involved in developing and validating the instruments included "all eight of Ontario's HSLRUs and their designated partners at the Ministry of Health and Long Term Care." Semi-structured telephone interviews were conducted with eight Research Unit directors (or their designee) and their eight Ministry partners. Using the interview findings and findings from a literature review, the instruments were drafted and then tested with focus groups of HSLRU participants and one Ministry partner (the majority of whom also participated in the interviews) to examine "clarity, feasibility, credibility, relevance, level of specificity, and their ability to support each evaluation question."[2]

Additional information on populations engaged in instrument use

The study participants – HSLRU researchers and Ministry partners – conduct health research in a wide range of areas with policy implications, including "community health, cancer, dental health, rehabilitation, child health, arthritis, mental health, health information." The partnerships often involved multiple projects and included engagement with community, government, and research partners, depending on the content area. Project activities were also wide-ranging and "included literature reviews, surveys, programme and service evaluation, costing estimates for policy initiatives, policy analysis, health system human resource analysis, intervention studies, knowledge dissemination to government and community, and knowledge transfer studies."[2]

Notes

- **Important findings:** The Common Partnership Indicators, as well as the Mature Partnership Indicators and the Early Partnership Indicators (discussed in other assessment instrument summaries), support improved understanding of knowledge translation partnerships, providing opportunities to measure success at each stage of partnership development. The authors maintain that the results of this study are applicable beyond the partners who tested the instruments, especially given the broad range of research content and type conducted. Importantly, the dimension of communication for the Common Partnership Indicators "emerged unanimously as an important factor related to the success of a partnership." Of note, a new partnership may be "unfairly judged if measured against, for example, the ideal standards of effective, informal communication channels that develop with more mature partnerships."[2]

  When considering the maturity of partnerships, the length of time working as partners may influence the characteristics displayed or exhibited among partners. In addition to the Common Partnership Indicators, Early Partnership Indicators, and Mature Partnership Indicators being used to evaluate relationships, they could also be used to monitor partnership processes and guide a set of deliverables that could be included in negotiated agreements.[2]
- **Future research needed:** Future prospective studies could provide evidence on the applicability of the instrument in practice. Other future studies using the Common Partnership Indicators "might focus on prioritizing them, determining optimal frequency of measurement, usefulness in modifying the partnership midway through the partnership, or determining the extent to which they predict the use of research by policymakers. Alternatively, one might study which [measures] are better suited for partnerships with bureaucrats, and which are better for collaborations with elected officials. Validation and reliability work would be required to optimize issues of reliability, validity, and generalizability. Such a study would also want to consider whether there are instances in which the [measures] may obstruct the partnership." Another area for further study would be the maturation of such partnerships, with considerations for the time frames needed to show a shift in early versus mature partnerships.[2]

Community Agency Capacity Questionnaire

Kramlinger, A., P. S. Neufeld, and C. Berg. 2016. Creating a Community Capacity Assessment to Identify Agency Outcomes Related to Occupational Therapy Student Community Partnerships. *Occupational Therapy in Health Care* 30(3):255-271. https://doi.org/10.3109/07380577.2016.1160464.

ASSESSMENT INSTRUMENT OVERVIEW

The **Community Agency Capacity Questionnaire (CACQ)** has 29 questions and is used by non-profit community agencies partnering with students involved in service-learning activities. It captures the experience of the agencies and measures the changes in agency capacities.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Non-profit community agencies
United States

COMMUNITY ENGAGEMENT OUTCOMES

Thriving communities
Community capacity + connectivity

PLACE(S) OF INSTRUMENT USE

Community/community-based organization
Academic/research institution/university
Non-profit organizations

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Face validity

YEAR OF USE/TIME FRAME

Not specified

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions from the CACQ were realigned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the CACQ with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

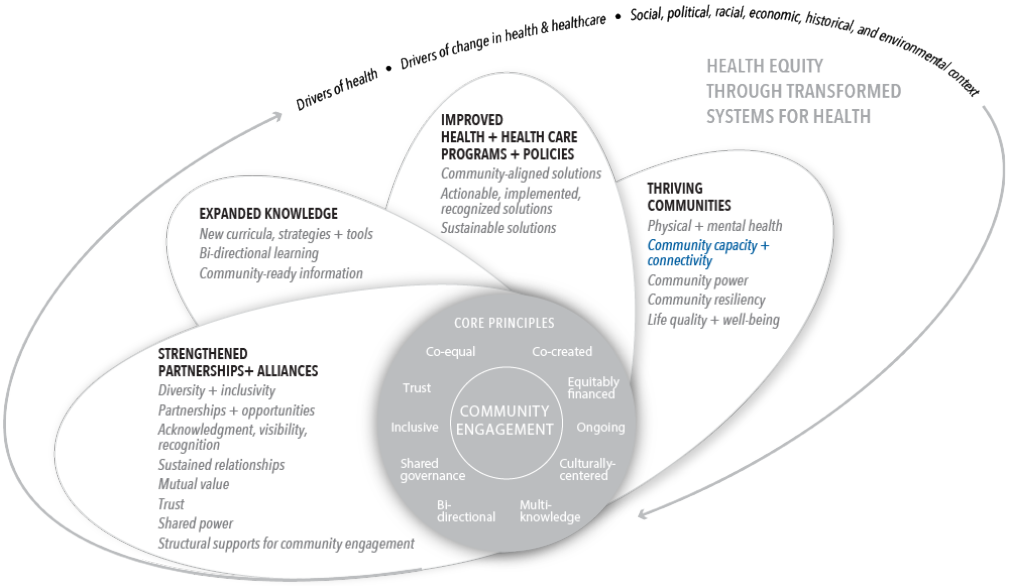

Figure 1 | Alignment of the Community Agency Capacity Questionnaire with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of CACQ's individual questions with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from the CACQ transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
THRIVING COMMUNITIES; **Community capacity + connectivity**	The … project with our agency has ENHANCED OUR CAPACITY IN: • Expanding programs • Changing methods in delivery of programs • Discovering justification for our programs based on research or existing models • Thinking about future directions for programming • Applying a theoretical perspective to our programs

	• Creating activity based programs • Promoting clients' engagement with one another • Increasing clients' satisfaction with programs • Increasing clients' participation in our programs • Capturing information for ongoing program development. • Identifying outcome methods or measures to evaluate programs. • Using evaluation findings to expand our knowledge of clients' needs. • Instituting systematic follow-up evaluation of programs. • Shifting our language/messaging to communicate more effectively with the public • Shifting our language/messaging to communicate more effectively with our clients • Increasing our visibility in the community • Building a community that seeks our programs • Building partnerships to expand programs • Envisioning our agency as a partner for the community • Building partnerships with universities • Envisioning partnerships with occupational therapists • Identifying environmental components needed to support programs • Identifying professional development and training needs for staff • Recruiting volunteers • Retaining volunteers • Using research literature and evidence for writing • Demonstrating program success to our funders • Identifying new funding sources • Reporting to funders the benefits from new academic relationships

Table 1 | Community Agency Capacity Questionnaire questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The CACQ was developed to capture the experience of non-profit community agencies partnering with students involved in service-learning activities. Agencies involved in developing CACQ worked with students studying occupational therapy and taking an accredited course - Promoting Population Health through Community Partnerships - in their final academic semester. Alignment between the course and the non-profit agencies' missions to promote health and community participation facilitated the partnerships. CACQ was developed with input from the community agencies to provide an "objective outcome measurement of changes in agency capacities."

Instrument description/purpose

CACQ consists of 29 questions across six focus areas:

- Programming
- Evaluation
- Partnership
- Staff
- Funding
- Marketing

Response options range from "a great deal" to "not addressed or not relevant," with an option to choose not to answer.

CACQ can be accessed here: https://nam.edu/wp-content/uploads/2023/01/CACQ-Title-Page-and-Instrument-v2.pdf. Of note, additional questions regarding ongoing benefits and implementation are included in the linked instrument; however, since they were not discussed in the article, they are not presented in this summary.

Engagement involved in developing, implementing, or evaluating the instrument

CACQ was developed through community engagement and an iterative mixed methods research design to refine the instrument. Content for CACQ was first developed using key informant interviews with staff at six participating community non-profit agencies. The interviews uncovered 405 statements on capacity building changes that agency staff identified "after participating in the service-learning course." Using an iterative approach, the research team analyzed and categorized these statements and established selection criteria for relevant items. Key informants reviewed the relevant items for validation. Key informants' responses from the Q methodology – a systematic way of studying perspectives and viewpoints from participants where statements are ranked and sorted – were used to determine and select the final questions in CACQ.[i]

Additional information on populations engaged in instrument use

The participating non-profit agencies represented a diverse cohort with respect to agency mission, number of staff, student project focus, and student deliverables. Agencies selected to participate reported positive reactions to and benefits from the student projects, representing "purposive" recruitment of participating agencies. Agencies were thus able to identify "a range of capacity enhancements experienced by successful student collaborations." The staff members who participated in the key informant interviews had worked directly with the students and were involved in the course experience.

Notes

- **Potential limitations:** While ten agencies were approached, only six participated, which represented 12 different projects. While the research team attempted to have participating agencies with different program deliverables and capacity enhancements involved in the creation of the tool, the sample may not have been fully representative. Initial interviews with key informants may have benefited from questions regarding "what they had hoped to gain from the experience but did not achieve." Further exploration of statements about areas of capacity building that were not enhanced or not applicable may have resulted in clarification of rationale for participants' sorting decisions. Additionally, the use of "purposive" agency selection focused on those experiencing positive changes. Involving other agencies that did not indicate "a positive impact may have revealed alternative perspectives on capacity-building."
- **Important findings:** CACQ may be useful in a range of agency contexts, including a variety of missions and populations being served, to help describe capacity building and the benefits of participating in service-learning projects. The outcome measures from the community perspective reflected in CACQ demonstrate the potential outcomes that could occur "after successful and authentic occupational therapy community organization partnership."

[i] BetterEvaluation. n.d. *Q-methodology*. Available at: https://www.betterevaluation.org/en/evaluation-options/qmethodology#:~:text=Q%2Dmethodology%20(also%20known%20as,sort%20a%20series%20of%20statements (accessed May 23, 2022).

Community Engagement in Research Index

Boivin, A., A. L'Espérance, F. Gauvin, V. Dumez, A. C. Macaulay, P. Lehoux, and J. Abelson. 2018. Patient and public engagement in research and health system decision making: A systematic review of evaluation tools. Health Expect 21(6):1075-1084. http://doi.org/10.1111/hex.12804.[1]

Khodyakov, D., S. Stockdale, A. Jones, J. Mango, F. Jones, and E. Lizaola. 2012. On measuring community participation in research. *Health Education & Behavior* 40(3):346-354. https://doi.org/10.1177/1090198112459050.[2]

ASSESSMENT INSTRUMENT OVERVIEW

The **Community Engagement in Research Index (CERI)**[1,2] has 12 questions and is used in community partnered research efforts. It assesses community and academic partners' perception of the engagement of community partners in various activities and, in evaluation, was designed to be used as a predictor of the perceived impact of community engagement in research. CERI is part of a set of two instruments that also includes the Three-Model Approach.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Academic partners
Community partners
Mental health
Substance abuse
Behavioral health
United States

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Diversity + inclusivity
Shared power
Structural supports for community engagement

Improved health + health care programs + policies
Community-aligned solutions

PLACE(S) OF INSTRUMENT USE

Community/community-based organization
Academic/research institution/university

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Content validity
Face validity

YEAR OF USE/TIME FRAME

2010

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in CERI were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of CERI with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

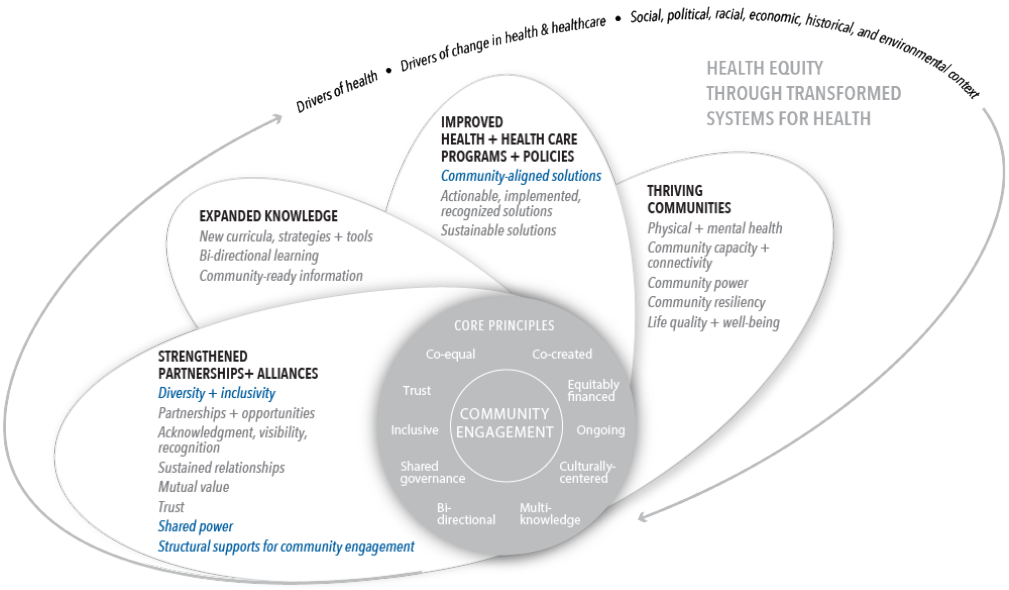

Figure 1 | Alignment of Community Engagement in Research Index with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the questions of the CERI to the Conceptual Model domains and indicators. The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions transcribed from CERI as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS

STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	5.) Please think about the extent to which the community partners participated in the research component of this partnered project and check all the research activities that they have been involved with either as "consultants" or "active participants.": Recruiting study participants
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	Please think about the extent to which the community partners participated in the research component of this partnered project and check all the research activities that they have been involved with either as "consultants" or "active participants": • 2.) Background research • 3.) Choosing research methods • 4.) Developing sampling procedures • 7.) Designing interview and/or survey questions • 8.) Collecting primary data • 9.) Analyzing collected data • 10.) Interpreting study findings
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	Please think about the extent to which the community partners participated in the research component of this partnered project and check all the research activities that they have been involved with either as "consultants" or "active participants.": • 1.) Grant proposal writing • 11.) Writing reports and journal articles • 12.) Giving presentations at meetings and conferences
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Community-aligned solutions**	6.) Please think about the extent to which the community partners participated in the research component of this partnered project and check all the research activities that they have been involved with either as "consultants" or "active participants.": Implementing the intervention

Table 1 | Community Engagement in Research Index questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article discusses the Partnership Evaluation Study (PES), which used a mixed-methods approach to evaluate partnered research projects. In the article, two assessment instruments were developed for the study: The Three-Model Approach (discussed in another assessment instrument summary) to look at "levels of community participation" and CERI, discussed here, to assess the "multidimensional view of community participation in the research process." CERI identifies specific research activities and measures "the extent of community participation in each activity."[2]

Instrument description/purpose

CERI assesses the following area:

- Academic and community members' perceptions of community partner engagement in various common research activities

CERI is an index that consists of 12 questions using a three-point Likert-scale, where : 1 = Community partners did not participate in this activity; 2 = Community partners consulted on this activity; and 3 = Community partners were actively engaged in this activity.[2]

To obtain the final CERI score for each individual respondent, the Likert responses across the 12 activities are totaled then divided by three. CERI final scores range from four, representing low engagement, to 12, representing high engagement.[2]

While CERI was developed to measure an individual's perception of community partner engagement taking place in a research project, it can also be used to assess the project's level of community partner engagement "by averaging individual responses or CERI scores for all respondents within the same project"[2] as well as comparing academic and community partners' perceptions of community involvement in research.

CERI can be accessed here: https://doi.org/10.1177/1090198112459050.

Engagement involved in developing, implementing, or evaluating the instrument

PES "was co-developed and co-led by an academic investigator and a community partner and included both academic and community personnel as staff." The projects evaluated in PES "focused on pressing mental health and substance abuse issues, and partner organizations included research and educational institutions, faith-based and community-based organizations, homelessness agencies, health insurance companies, and various state agencies." Semi-structured interviews were conducted with principal investigators. Online surveys were conducted with academic and community partners working on the projects, which helped identify the common research activities in which community partners participate. The 12 survey items in CERI were reviewed by PES community and academic partners to ensure clarity. The interviews also informed the understanding of how to assess the perceived influence that community participation has on the project and on outcomes.[2]

Additional information on populations engaged in instrument use

Not specified.

Notes

- **Potential limitations:** The findings "are based on a limited sample of projects, all of which dealt with a behavioral health issue and were affiliated with an [National Institute of Mental Health]-funded center." Additionally, terms such as "consulted on" and "were actively engaged in," used in the evaluation, may have been defined and interpreted differently by participants. Further, not all participants who were invited to join the study participated in completing the instrument.[2]
- **Important findings:** The results from the interviews "suggested that a multidimensional approach to measuring community participation in research was necessary to address the challenges associated with the evolution of partnerships and to capture the wide variation in community participation in research activities." Given that CERI was developed based on findings from community and academic partner interviewers, it has strong face and content validity. Researchers and community partners may also find [the instrument] useful for formative evaluation, tracking the extent and type of community engagement over time, and using results to explore the quality of community participation in key areas of research projects." The article concludes that CERI may be more suitable than the Three-Model Approach (discussed in another assessment instrument summary) in understanding and quantifying the degree in which community engagement takes place in research. This is particularly true for "large, complex, multistage partnered projects where multiple partners can be invited to participate in a survey."[2]
- **Future research needed:** The authors have proposed further research on advancing "the science of measuring community engagement in research," including:
    1. "To what degree do these … measures of community engagement operate in a theoretically expected way?
    2. To what extent is the aggregate value of CERI an accurate measure of all partners' perceptions of community participation in research for a given project?
    3. How does perception of community participation in research vary depending on the project's substantive focus or goals?
    4. Is there a consistent response bias on either the community or the academic side in responding to questions about community engagement in research?
    5. How can research partners use CERI to help determine the conditions under which their project may benefit the most from active community participation in research?"[2]

Community Engagement Measure

Boivin, A., A. L'Espérance, F. Gauvin, V. Dumez, A. C. Macaulay, P. Lehoux, and J. Abelson. 2018. Patient and public engagement in research and health system decision making: A systematic review of evaluation tools. Health Expect 21(6):1075-1084. http://doi.org/10.1111/hex.12804.[1]

Goodman, M. S., V. L. Sanders Thompson, C. A. Johnson, R. Gennarelli, B. F. Drake, P. Bajwa, M. Witherspoon, and D. Bowen. 2017. Evaluating Community Engagement in Research: Quantitative Measure Development. *Journal of Community Psychology* 45(1):17-32. https://doi.org/10.1002/jcop.21828.[2]

ASSESSMENT INSTRUMENT OVERVIEW

The **Community Engagement Measure**[1,2] has 48 questions and is used by community-academic partnerships. It assesses the quality and quantity of levels of engagement among community members in the partnerships. The Community Engagement Measure was used in the development of another instrument: Research Engagement Survey Tool.

KEY FEATURES

COMMUNITY/GEOGRAPHY

African American women
Community-academic partnerships
Cancer disparities elimination
United States

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Diversity + inclusivity
Partnerships + opportunities
Acknowledgment, visibility, recognition
Sustained relationships
Mutual value
Shared power
Structural supports for community engagement

Expanded knowledge
Bi-directional learning
Community-ready information

PLACE(S) OF INSTRUMENT USE

Academic/research institution/university
Community/community-based organization

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Internal consistency reliability

YEAR OF USE/TIME FRAME

Not specified

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions from the Community Engagement Measure were realigned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the Community Engagement Measure with the Conceptual Model domain(s) and indicator(s).

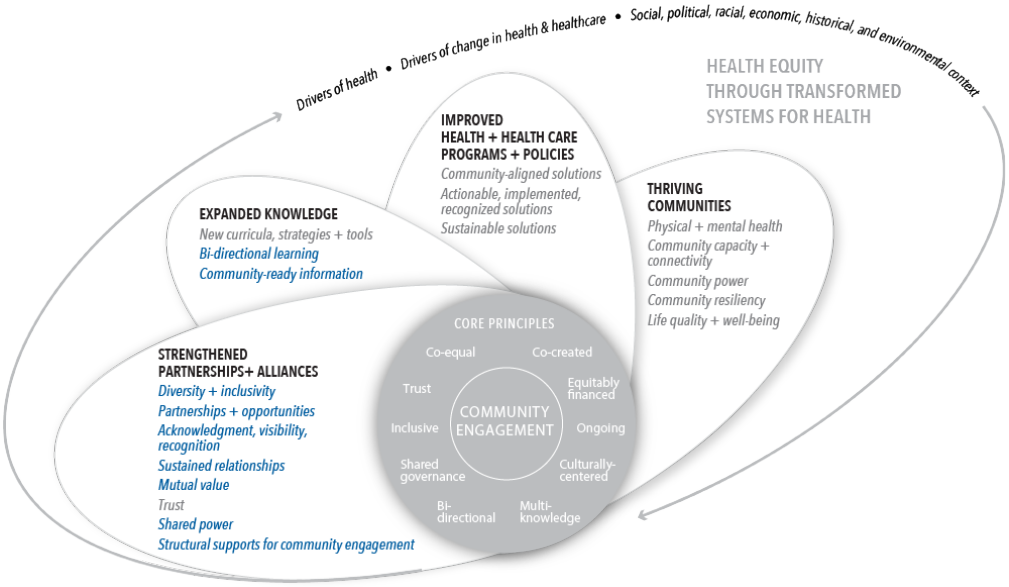

Figure 1 | Alignment of the Community Engagement Measure with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the Community Engagement Measure's individual questions with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from the Community Engagement Conceptual Model transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS

STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	Please rate how often/how well you think the academic team did each of the following: • Focus on issues important to my community. • Focus on health problems that the community thinks are important. • Focus on the combined interaction of factors (i.e. personal, social, economic…) that influence health status. • Focus on cultural factors that influence health behaviors. • Build on strengths within the community. • Build on resources within the community. • Work with existing community networks.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	Please rate how often/how well you think the academic team did each of the following: • Help community members gain important skills from involvement. • Help community members achieve social, educational, or economic goals.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	Please rate how often/how well you think the academic team did each of the following: • Show appreciation for community time and effort. • Highlight the community's involvement. • Give credit to community members and others for work. • Value community perspectives. • Help to fill gaps in community strengths and resources. • Handle disagreements fairly. • Enable community members to voice disagreements. • Enable all people involved to voice their views.
STRENGTHENED PARTNERSHIPS + ALLIANCES**; Sustained relationships**	Please rate how often/how well you think the academic team did each of the following: • Let community members know what is going on with the project. • Share the results of how things turned out with the community. • Seek community input and help at multiple stages of the process. • Inform the community of what happened when their ideas were tried. • Make plans for community-engaged activities to continue for many years. • Make commitments in communities that are long-term. • Want to work with community members for many years.
STRENGTHENED PARTNERSHIPS + ALLIANCES**; Mutual value**	Please rate how often/how well you think the academic team did each of the following: • Help community members with problems of their own.

	• Help community partners get what they need from academic partners. • Treat community members' ideas with openness and respect.
STRENGTHENED PARTNERSHIPS + ALLIANCES**; Shared power**	Please rate how often/how well you think the academic team did each of the following: • Ask community members for input. • Use the ideas and input of community members. • Change plans as a result of community input. • Involve community members in making key decisions. • Ask community members for help with specific task. • Involve the community in determining next steps. • Foster collaborations win [within] which community members are real partners. • Make final decisions that reflect the ideas of everyone involved.
STRENGTHENED PARTNERSHIPS + ALLIANCES**; Structural supports for community engagement**	Please rate how often/how well you think the academic team did each of the following: • Help community members disseminate information using community publications. • Demonstrate that community members are really needed to do a good job. • Demonstrate that community members' ideas make things better. • Demonstrate that community members' ideas are just as important as academics' ideas. • Make sure that all partners are involved with sharing findings. • Include community members in plans for sharing findings. • Involve community members in sharing health messages in community settings. • Listen to community members when planning dissemination activities.
EXPANDED KNOWLEDGE; **Bi-directional learning**	Please rate how often/how well you think the academic team did each of the following: • Learn from community members. • Encourage academic partners and community members to learn from each other.
EXPANDED KNOWLEDGE; **Community-ready information**	Please rate how often/how well you think the academic team did each of the following: • Empower community members with knowledge gained from a joint activity. • Get findings and information to community members.
Not aligned with Conceptual Model	Please rate how often/how well you think the academic team did each of the following: Plan for ongoing problem solving.

Table 1 | Community Engagement Measure questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article discusses leveraging the existing yet limited quantitative measures of community engagement in public health research to develop a new measure – the Community Engagement Measure - to assess the level of engagement among community members in community-academic partnerships. The Community Engagement Measure provides scores on the overall engagement of people in the project and has the ability to differentiate the level of engagement among groups. The Community Engagement Measure was used to evaluate the Program for the Elimination of Cancer Disparities (PECaD) at the Siteman Cancer Center (a National Cancer Institute designated Comprehensive Cancer Center), "a national model for eliminating disparities in cancer through community-based partnerships." The Community Engagement Measure examines engagement longitudinally and over a continuum. It can be used to monitor and improve partnerships and explore how partnerships facilitate outcomes.[2]

Instrument description/purpose

The Community Engagement Measure reviews 11 engagement focus areas that are based on community engaged research (CER):

- Focus on local relevance and social determinants of health
- Acknowledge the community
- Disseminate findings and knowledge gained to all partners
- Seek and use the input of community partners
- Involve a cyclical and iterative process in pursuit of objectives
- Foster co-learning, capacity building, and co-benefit for all partners
- Build on strengths and resources within the community
- Facilitate collaborative and equitable partners
- Integrate and achieve a balance of all partners
- Involve all partners in the dissemination process
- Plan for a long-term process and commitment evaluation, marketing and communication, programs, staff, partnerships, funding.

The Community Engagement Measures uses 48 questions to evaluate quality of the engagement using a five-point Likert scale with response options ranging from "poor" to "excellent." The same 48 questions evaluate quantity (i.e., how often engagement took place) using a five-point Likert scale with responses options ranging from "never" to "always." In the article, the range and mean scores across each of the focus areas were examined.[2]

The Community Engagement Measure can be found here: https://doi.org/10.1002/jcop.21828.

Engagement involved in developing, implementing, or evaluating the instrument

The PECaD was created to address cancer health disparities through community-based partnerships. The PECaD worked closely with the Disparities Elimination Advisory Committee (DEAC) "comprising community leaders representing Federally Qualified Health Centers; private physicians; health, social service, and religious organizations; survivors; survivors' family members; and other interested community groups." The DEAC was involved in and guided the engagement of the PECaD in health promotion and education efforts to address "barriers to cancer screening, treatment, and research participation in the region." "The PECaD survey development team included research and DEAC community members: three PECaD investigators, the PECaD data manager, PECaD program coordinator, and the DEAC community co-chair." Input from the DEAC helped to shape the evaluation framework, the principles that should guide CER, levels of community member participation, and activities to ensure continuous community member participation. "The PECaD survey development team developed items (the Community Engagement Measure) aligned with the 11 [engagement principles] to assess the level of community engagement in PECaD projects and worked with DEAC in a cyclical and iterative community-engaged process."[2]

Additional information on populations engaged in instrument use

The Community Engagement Measure was tested by 47 participants in the Community Research Fellows Training (CRFT) program, a pilot project of the PECaD. Of those who completed the measure (46; 98%), the majority were female (85%), African American/Black (87%), earned a graduate degree (52%), and considered themselves to be a community member or affiliated with a community-based organization (54%).[2]

Notes

- **Potential limitations:** While the engagement principles are generalizable to other diseases and populations, the community engagement measure, as tested among the CRFT participants, a largely female and African American sample, "may not be generalizable to other populations."[2]
- **Important findings:** CRFT participants felt that academic partners adhered to the quality scale of the 11 engagement focus areas between "good" and "very good" and for the quantity scale between "sometimes" and "most of the time". The engagement focus area of "cyclical and interactive process in the pursuit of objectives" received the lowest rating on the quantity scale. The engagement focus area of "plan for a long-term process and commitment" received the lowest rating on the quality scale. The engagement focus area of "local relevance and social determinants of health" received high ratings on both quantity and quality scales. These results demonstrate where improvement in the partnership is needed.[2]
- **Future research needed:** Future research would benefit from testing the measure with different populations, including better understanding of "participants' reactions and thought processes when exposed to items measuring the quality and quantity of community engagement in research."[2]

Community Impacts of Research Oriented Partnerships Measure

Hamzeh, J., P. Pluye, P. L. Bush, C. Ruchon, I. Vedel, and C. Hudon. 2019. Towards an assessment for organizational participatory research health partnerships: A systematic mixed studies review with framework synthesis. *Evaluation and Program Planning* 73:116-128. https://doi.org/10.1016/j.evalprogplan.2018.12.003.[1]

King, G., M. Servais, M. Kertoy, J. Specht, M. Currie, P. Rosenbaum, M. Law, C. Forchuk, H. Chalmers, and T. Willoughby. 2009. A measure of community members' perceptions of the impacts of research partnerships in health and social services. *Evaluation and Program Planning* 32(3):289-299. https://doi.org/10.1016/j.evalprogplan.2009.02.002.[2]

ASSESSMENT INSTRUMENT OVERVIEW

The **Community Impacts of Research Oriented Partnerships (CIROP) Measure**[1,2] has 33 questions and is used by research partnerships addressing health or social issues. It allows partnerships to better understand the perspectives of community members and their expectations from research partnerships, as well as the implications for knowledge transfer and uptake.

KEY FEATURES

COMMUNITY/GEOGRAPHY
Research partnerships
End users of research
Ontario, Canada

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Partnerships + opportunities
Acknowledgment, visibility, recognition
Mutual value

Expanded knowledge
Broad alignment
New curricula, strategies + tools
Bi-directional learning
Community-ready information

Improved health + health care programs + policies
Actionable, implemented, recognized solutions

Thriving communities
Broad alignment
Community capacity + connectivity
Community power

PLACE(S) OF INSTRUMENT USE
Community/community based organization
Academic/research institution/university

LANGUAGE TRANSLATIONS
Not specified

PSYCHOMETRIC PROPERTIES
Construct validity
Convergent validity
Discriminant validity
Internal consistency reliability
Test–retest reliability

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions from CIROP were realigned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the CIROP with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

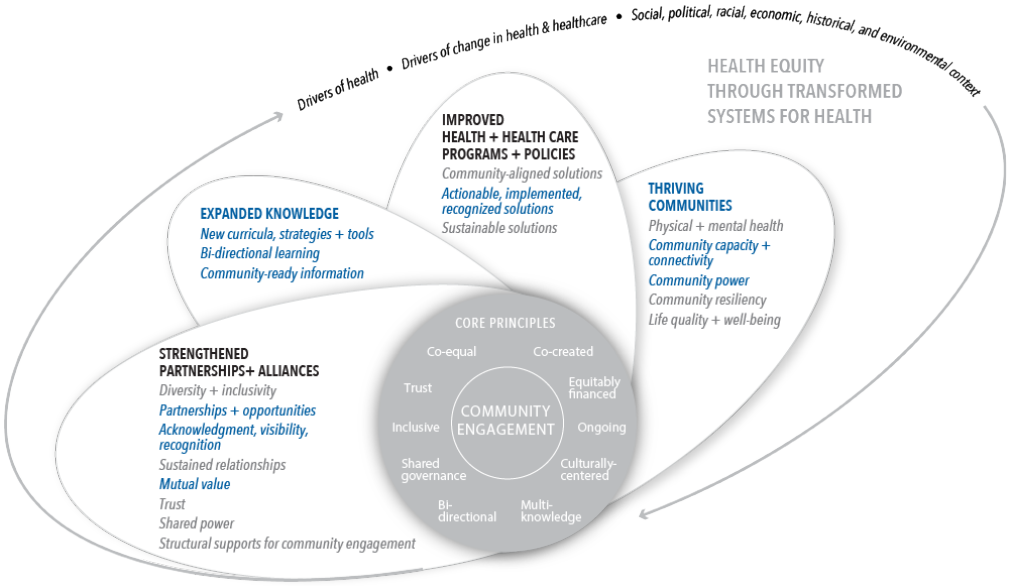

Figure 1 | Alignment of the Community Impacts of Research Oriented Partnerships with the Assessing Community Engagement Conceptual Model

YEAR OF USE/TIME FRAME
Not specified

Table 1 displays the alignment of CIROP's individual questions and validated focus areas with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s), the individual questions from CIROP transcribed as they appear in the instrument (with minor formatting changes for clarity), and the validated focus area(s) presented in the article.

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS	VALIDATED FOCUS AREA(S)
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	4. Over the past year, to what extent has your experience with the partnership… increased your confidence in your professional or daily practice or day-to-day activities?	Personal knowledge development
	Over the past year, to what extent has your experience with the partnership… • 6. helped you to become better at raising questions to be examined in research (e.g., led to more comfort and confidence in asking questions; fostered your desire to critically appraise what you're doing yourself)? • 8. improved your ability to know how to find or access relevant research information? • 9. enhanced your personal ability or confidence to conduct a research or program evaluation study? • 10. provided you with an opportunity for professional or personal development (e.g., building your research skills or enhancing your statistical ability)? • 11. led you to pursue different activities to develop your research skills (e.g., going back to school or attending a course)?	Personal research skill development
	Over the past year, to what extent • 22. has the partnership generated more research opportunities for members of your organization or group? • 26. has the partnership generated increased research opportunities for the community? • 32. has your community used information and materials provided by the partnership to promote interagency collaboration or strong cross agency working relationships (e.g., increase networking and the exchange of information about meetings, conferences, and training opportunities)?	Community and organizational development
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	14. Over the past year, to what extent has your organization's or group's experience with the partnership… confirmed your organization's or group's feelings about the importance of particular issues (i.e., provided information that what your organization or group is doing is effective)?	Organizational/ group access to and use of information
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Mutual value**	5. Over the past year, to what extent has your experience with the partnership… improved your access to up-to-date information (e.g., current research and thinking in the field)?	Personal knowledge development
EXPANDED KNOWLEDGE; **Broad alignment with all indicators in this domain**	24. Over the past year, to what extent has the partnership… increased the amount of research being conducted in your community?	Community and organizational development

EXPANDED KNOWLEDGE; **New curricula, strategies + tools**	16. Over the past year, to what extent has your organization's or group's experience with the partnership… improved your organization's or group's access to up-to-date information (e.g., current research and thinking in the field)?	Organizational/ group access to and use of information
EXPANDED KNOWLEDGE; **Bi-directional learning**	Over the past year, to what extent has your experience with the partnership… • 1. increased or changed your personal knowledge or understanding about a topic (e.g., exposed you to different areas of expertise and new knowledge about the current research and thinking in a field; raised awareness of different issues, perspectives, and needs)? • 2. changed your beliefs/understandings with respect to an intervention or approach, a topic, or a group of people (e.g., led to a new way of thinking or to a broader or new perspective, altered ideas about how to best deliver service or programs)?	Personal knowledge development
	7. Over the past year, to what extent has your experience with the partnership… increased your receptiveness to new ideas or evidence?	Personal research skill development
	Over the past year, to what extent has your organization's or group's experience with the partnership… • 12. increased or changed your organization's or group's knowledge or understanding about a topic (e.g., exposed your organization or group to different areas of expertise and new knowledge; raised awareness of different issues, perspectives, and needs)? • 13. changed your organization's or group's beliefs/understandings with respect to an intervention or approach, a topic, or a group of people (e.g., led to a new way of thinking or to a broader or new perspective, altered ideas about how to best deliver service or programs)? • 17. enhanced the importance of evidence in the eyes of people in your organization or group?	Organizational/ group access to and use of information
	25. Over the past year, to what extent has the partnership… enhanced the importance of evidence in the eyes of people in your community?*	Community and organizational development
EXPANDED KNOWLEDGE; **Community-ready information**	15. Over the past year, to what extent has your organization's or group's experience with the partnership… increased your organization's or group's confidence in being able to use the knowledge in practice or day-to-day activities? Over the past year, to what extent has your organization or group used information and materials provided by the partnership to… • 19. provide affirmation of the organization's or group's existence and purpose? • 20. provide information resources for people receiving services from your organization or group? • 21. provide a stronger platform for further growth and development (i.e., help your organization or group to jump start planning activities)?	Organizational/ group access to and use of information

	25. Over the past year, to what extent has the partnership… enhanced the importance of evidence in the eyes of people in your community?*	Community and organizational development
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Actionable, implemented, recognized solutions**	18. Over the past year, to what extent has your organization or group used information and materials provided by the partnership to… improve the types or nature of the activities, services, programs, or courses offered by your organization or group?	Organizational/ group access to and use of information
THRIVING COMMUNITIES; **Broad alignment with all indicators in this domain**	Over the past year, to what extent has your community used information and materials provided by the partnership to… • 30. generate a stronger local community (i.e., make it a better place to live)? • 31. enhance community awareness or more positive community attitudes?	Community and organizational development
THRIVING COMMUNITIES; **Community capacity + connectivity**	Over the past year, to what extent has the partnership… • 23. improved/developed your organization's or group's capacity to undertake research (e.g., provided money, resources, skills, tools, products, or knowledge about a particular topic area)? • 27. improved/developed your community's capacity to undertake research (e.g., provided money, resources, skills, tools, products, or knowledge in a particular topic area)? • 28. enhanced your community's ability to utilize outside knowledge more effectively? • 29. helped to generate stronger research connections within your community?	Community and organizational development
THRIVING COMMUNITIES; **Community power**	33. Over the past year, to what extent has your community used information and materials provided by the partnership to… strengthen or support community action or advocacy efforts (e.g., improve community willingness to tackle an issue)?	Community and organizational development
Not aligned with Conceptual Model	3. Over the past year, to what extent has your experience with the partnership…confirmed your feelings about the importance of particular issues (i.e., confirmed a viewpoint)?	Personal knowledge development
	In the space provided below, • please list 3 areas in which you think the partnership has had the most impact. • please list 3 areas in which you think the partnership has had relatively less impact. • please feel free to provide any general comments you have about this questionnaire and/or the impact of research partnerships.	General comments on partnership impact

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Community Impacts of Research Oriented Partnerships questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article indicates that CIROP "is intended for use by research partnerships addressing health or social issues, such as physical disability, mental health difficulties, disadvantaged communities, homelessness, health promotion, and the prevention of risky behavior." It was developed to capture a range of insights from community members on the benefits of research partnerships. Community members were defined as "individuals who are the intended beneficiaries of the research partnership's activities, including groups of individuals with shared interests and values (e.g., parents and teachers of children with physical disabilities) and groups of people living in the same geographical area."[2]

Instrument description/purpose

CIROP allows partnerships to have a better understanding of the perspectives of community members and their expectations from research partnerships, as well as the implications for knowledge transfer and uptake. CIROP measures the extent of and impact of research partnerships, allowing partnerships to have a better understanding of the perspectives of community members and their expectations from research partnerships and implications for knowledge transfer and uptake by using four validated (i.e., construct, convergent, discriminant) focus areas:

- Personal knowledge development
- Personal research skill development
- Organizational/group access to and use of information
- Community and organizational development

CIROP allows partnerships to show accountability to, for example, funding agencies, and can also be used to "assess the effectiveness of knowledge sharing approaches, determine the most influential activities of research partnerships, and determine structural characteristics of partnerships associated with various types of impact."[2]

CIROP consists of 33 questions that have response options on a seven-point Likert scale ranging from "not at all" to "to a very great extent." Options for "does not apply" and "don't know" were also available. Three additional open-ended questions are available at the end of the survey.[2]

CIROP can be accessed here: https://impactmeasure.org/about-the-research-study/.

Engagement involved in developing, implementing, or evaluating the instrument

CIROP was developed by researchers from five multidisciplinary community-university research partnerships in Ontario, Canada. The partnerships each received funding to support their research. The partnerships varied in the length of time they had been in existence (4-20 years) and the number (fewer than 10 and up to 19) and type of partners involved (universities, advocacy groups, community-based organizations, government agencies, school boards, social service agencies, health service agencies, and hospitals). During the item generation phase, a literature search was conducted to capture indicators of impact. A comprehensive set of items were then developed using the insights from the literature on "health promotion, community development, research utilization, and community-based participatory research" that aligned with the areas included in the impact model used by the group. Five focus group sessions with 29 university and community members who were part of the partnerships were also conducted. Through the focus groups, additional insights on "notions of tangible personal benefits, and opportunities for personal, organizational, and community development" were identified. During the piloting phase, community- and university-based members of research partnerships were invited to shape the development of the tool by evaluating the clarity and usefulness of the questions, providing feedback on the ease of responding to the tool, and identifying any problematic areas.[2]

Additional information on populations engaged in instrument use

CIROP was tested by 174 respondents. The majority of respondents had a university or graduate school degree (75.3%), "were employed at a health services organization or educational institution (57.5%), and worked in managerial or service provider roles (50%)."[2]

Notes

- **Potential limitations:** While CIROP was not developed to measure the quality of research partnerships or engagement with end-users, it was designed to assess the mid-term impact of research.[2]
- **Important findings:** The article states that based on the results from the 174 community members who tested the CIROP, community members focused on the benefits of research partnerships that aligned most with "personal

development; tangible resources, materials, and opportunities; and useful tools and ideas that contribute to organizational and community outcomes and capacities." Considerations for understanding community members' worldviews, priorities, and expectations has important implications for knowledge transfer and uptake. Additionally, "the knowledge created and shared by researchers is simply one part of the broader package of knowledge, information, beliefs, and values that community members use to create what is important to them—policy documents, new programs, revisions to existing services, and changes to ways of operating." Lastly, researchers planning to use CIROP and who include their plans in grant proposals "can assure funding bodies of their commitment to being accountable, and will be able to provide evidence of the value of their work to the community."[2]

- **Future research needed:** Conducting additional test-retest reliability would be beneficial and provide. "Future research should examine the responsiveness of the CIROP to change over time."[2]
- **Supplemental information:** Additional information on the original instrument used in this summary can be found at the following source.
    - Community-University Research Alliance (CURA). n.d. *CIROP Measure of Impact*. Available at: https://impactmeasure.org/ (accessed July 14, 2022).

Community Ownership and Preparedness Index

Thomas, T., P. Narayanan, T. Wheeler, U. Kiran, M. J. Joseph, and T. V. Ramanathan. 2012. Design of a Community Ownership and Preparedness Index: Using data to inform the capacity development of community-based groups. *Journal of Epidemiology and Community Health* 66(Suppl 2):26-33. http://dx.doi.org/10.1136/jech-2011-200590.

ASSESSMENT INSTRUMENT OVERVIEW

The **Community Ownership and Preparedness Index (COPI)** has 23 questions and is used by communities. It assesses progress in community organizational development and monitors the transition readiness of community-based groups.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Female sex workers
High-risk men who have sex with men
Transgender individuals
Injection drug users
HIV prevention
India

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Broad alignment
Diversity + inclusivity
Partnerships + opportunities
Acknowledgment, visibility, recognition
Trust
Shared power
Structural supports for community engagement

Improved health + health care programs + policies
Broad alignment
Actionable, implemented, recognized solutions

Thriving communities
Community capacity + connectivity
Community power
Community resiliency

PLACE(S) OF INSTRUMENT USE

Community/community-based organization
Non-governmental organizations

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Content validity
Predictive validity

YEAR OF USE/TIME FRAME

2009-2013

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in COPI were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of COPI with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

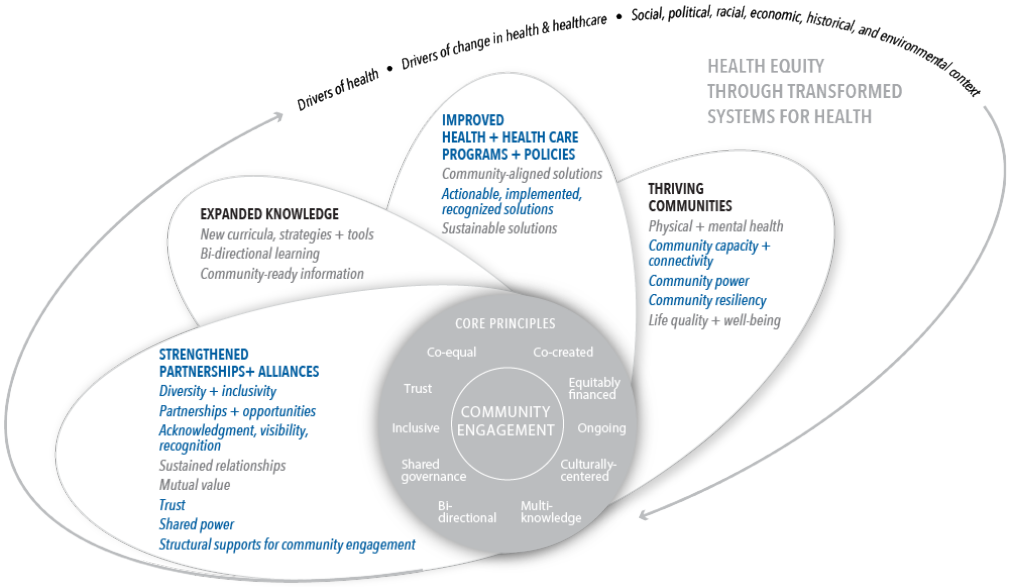

Figure 1 | Alignment of Community Ownership and Preparedness Index with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the questions of the COPI with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from the COPI transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Broad alignment with all indicators in this domain**	11.) Committees formed for crisis response and advocacy; committees are meeting regularly.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	8.) Inclusion of all groups in leadership team. 14.) Regular increase in outreach.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	15.) Networking with networks. 16.) Networking with other bodies.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	1.) Leadership team has demonstrated capacity to show solidarity during crises faced by community members.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	7.) System in place for leadership's accountability to community members. i. Leadership's accountability towards community members. ii. Committees' accountability to community members.*
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	3.) Leadership team (LT) is capable of setting its own agenda and of emerging from the shadow of the implementing partner. i. LT exists as an entity and meets regularly. ii. LT independently sets agenda for its meetings. iii. LT engages with the implementing partner over disagreements on a strong footing. 9.) Defined system for decision-making, with community-based group becoming the decision-maker.* 10.) System to promote community involvement in strategic decision-making.*
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	6.) Participatory selection process for the leadership. i. Participatory selection process for leadership team and office bearers. ii. Participatory selection process for committee members. 7.) System in place for leadership's accountability to community members. i. Leadership's accountability towards community members. ii. Committees' accountability to community members.* 9.) Defined system for decision-making, with community-based group becoming the decision-maker.* 10.) System to promote community involvement in strategic decision-making.*
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Broad alignment with all indicators in this domain**	18.) Leadership is competent and confident in contributing towards project processes. i. Awareness and implementation. ii. Monitoring and strategising.
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Actionable, implemented, recognized solutions**	17.) Leadership is aware of the requirements for managing organisations and can demonstrate its ability to do so. i. Awareness of compliance with statutory requirements as well as systems to minimise legal and financial risks and risks due to adverse publicity. ii. Demonstrated capacity to manage strong financial, accounting and administrative systems.
THRIVING COMMUNITIES; **Community capacity + connectivity**	5.) Leadership team has made efforts to develop second-line leadership. 12.) Strong, diversified resource base. i. Financial. ii. Non-financial. 13.) Entry into formal economy. Leadership team has demonstrated capacity to

	• 19.) deal with issues of violation of freedom.* • 20.) realise enabling rights.* • 21.) successfully realise entitlements for community members.*
THRIVING COMMUNITIES; **Community power**	Leadership team has demonstrated • 19.) capacity to deal with issues of violation of freedom.* • 20.) capacity to realise enabling rights.* • 21.) capacity to successfully realise entitlements for community members.* • 22.) collective actions in engaging with gatekeepers to assert the identity of community members. • 23.) collective actions in engaging with other organised groups and professionals and with opinion-makers to assert the identity of community members.
THRIVING COMMUNITIES; **Community resiliency**	Leadership team has • 2.) demonstrated strength in mobilising community members to assert their identity and to engage issues through collective action. • 4.) internalised the need for collective action for asserting the identity of the community members and realising their rights. • 19.) demonstrated capacity to deal with issues of violation of freedom.* • 20.) demonstrated capacity to realise enabling rights.* • 21.) demonstrated capacity to successfully realise entitlements for community members.*

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Community Ownership and Preparedness Index questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

This article discusses COPI, which was developed to inform communities about progress in community organizational development and monitor the transition readiness of community-based groups. COPI assessed Avahan, the India AIDS Initiative, which is a 10-year, large-scale HIV prevention intervention. The Avahan community includes high-risk individuals such as "female sex workers, high-risk men who have sex with men, transgender [individuals], and injecting drug users" who engage with the program through informal and formal meetings and engagement activities.

The objectives of COPI were to assess the implementation and effectiveness of community mobilization to ensure the transition of program management and funding to the government; assist partners in the process of community mobilization; advance large-scale implementation through replicating lessons learned from community mobilization; and make inferences regarding community mobilization using data collected through information systems and other surveys, as well as improved HIV prevention outcomes.

Instrument description/purpose

COPI focuses on four essential dimensions needed to understand the transition readiness of community-based groups: "(1) leadership, governance and decision-making; (2) sustainability through resource mobilisation and networking; (3) project management; and (4) engagement with the state and wider society."

The instrument assesses the dimensions above using eight broad parameters:

- Engagement with the state
- Engagement with other key influencers
- Project and risk management
- Resource mobilization
- Decision-making system
- Governance
- Leadership
- Community collective network

COPI has 23 questions that capture the essential eight dimensions and parameters above, as well as express practical and operational participatory concepts. The article states that "COPI assigns weights to different indicators and parameters reflecting their relative importance to transition readiness." Additional details on the response options were not presented in the article.

COPI can be accessed here: http://dx.doi.org/10.1136/jech-2011-200590.

Engagement involved in developing, implementing, or evaluating the instrument

COPI was developed using a participatory and iterative process. The process included the following stages: "a review of background material and theory as well as learning from the experiences of Indian [community-based groups] working in HIV prevention; design of the study framework and related indicators and parameters; weighting of indicators; and development and pilot testing of the survey tools." Facilitated discussions and focus groups were held with high-risk communities, and insights were supplemented with input from statisticians, sociologists, anthropologists, demographers, and gender experts. Additionally, a process for sharing data, including data collection and analysis across six Indian states with the community-based groups was built into the survey design. This allowed community-based groups to use the data to make decisions about their organizations and activities, empowering and serving these groups directly.

Additional information on populations engaged in instrument use

Not specified.

Notes

- **Potential limitations:** Further evaluation is needed to understand the predictive validity of COPI.
- **Important findings:** The COPI "methodology is intended to make the process of monitoring part of the community mobilisation programme itself." The instrument was also intended to empower the leaders of community-based groups. For example, through the use of intensive interviews with the members and leaders of community-based groups, the instrument content informed leaders of the "programme quality, rights and entitlements, and approaches to addressing stigma, and the survey process itself," ultimately making discussion of critical issues possible. Additionally, during facilitated discussions on the COPI scores, community-based groups often reflected on the operational implications. Notably, "these discussions were designed to challenge power dynamics, expand the vision of [community-based groups] to opportunities beyond the programme, and build collective agency. The experience of implementing the survey validated the design's effectiveness as a participatory action tool and demonstrated that monitoring can in effect be a useful intervention in itself." Additionally, COPI "could be measured and aggregated at the level of individual [community-based groups] as well as state and national levels."
- **Supplemental information:** Additional research has been conducted using COPI with other populations and HIV/AIDS programs. The findings from the research can be found in the following articles:
    - Narayanan, P., K. Moulasha, T. Wheeler, J. Baer, S. Bharadwaj, T. V. Ramanathan, and T. Thomas. 2012. Monitoring community mobilisation and organisational capacity among high-risk groups in a large-scale HIV prevention programme in India: selected findings using a Community Ownership and Preparedness Index. *Journal of Epidemiolgical Community Health* 66:ii34-eii41. https://doi.org/10.1136/jech-2012-201065.
    - Chakravarthy, J. B., S. V. Joseph, P. Pelto, and D. Kovvali. 2012. Community mobilisation programme for female sex workers in coastal Andhra Pradesh, India: processes and their effects. *Journal of Epidemiological Community Health* 66:ii78-86. https://doi.org/10.1136/jech-2011-200487.

- Sadhu, S., A. R. Manukonda, A. R. Yeruva, S. K. Patel, and N. Saggurti. 2014. Role of a community-to-community learning strategy in the institutionalization of community mobilization among female sex workers in India. *PLoS One* 9(3). https://doi.org/10.1371/journal.pone.0090592.

Community Ownership Scale

Flynn, B. S. 1995. Measuring community leaders' perceived ownership of health education programs: Initial tests of reliability and validity. *Health Education Research* 10(1):27-36. https://doi.org/10.1093/her/10.1.27.

ASSESSMENT INSTRUMENT OVERVIEW

The **Community Ownership Scale** has 14 questions and is used by community leaders. It monitors efforts that foster community ownership, defined as the amount of control community leaders have within a program. It also assesses the relationships between perceived ownership and program effectiveness and maintenance over time.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Community leaders
Health education programs focused on adult women
United States

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Diversity + inclusivity
Shared power
Structural supports for community engagement

Improved health + health care programs + policies
Community-aligned solutions

PLACE(S) OF INSTRUMENT USE

Community/community-based organization

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Construct validity
Content validity
Internal consistency reliability

YEAR OF USE/TIME FRAME

1991-1992

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in the Community Ownership Scale were realigned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the Community Ownership Scale with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

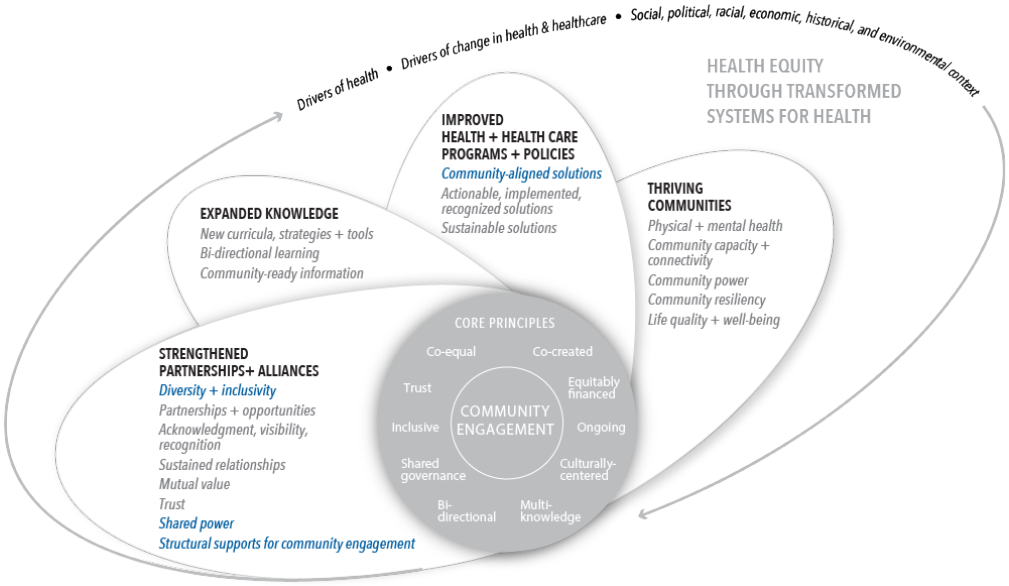

Figure 1 | Alignment of the Community Ownership Scale with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the Community Ownership Scale's individual questions and validated focus areas with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s), the individual questions from the Community Ownership Scale transcribed as they appear in the instrument (with minor formatting changes for clarity), and the validated focus area(s) presented in the article.

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS	VALIDATED FOCUS AREA(S)
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	(12) How much influence would you say that the (university staff/local program staff/community leadership) has on hiring and evaluating the professional staff of the [insert program name] program?*	Ownership
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	How much influence would you say that the (university staff/local program staff/community leadership) has on	Ownership

	• (1) defining the overall goals of the [insert program name] program? • (7) selecting the volunteer leadership of the Board and committees of the [insert program name] program? • (8) deciding on the structure of the Board and committees of the [insert program name] program? • (9) setting the schedule for meetings of the Board and committees of the [insert program name] program?* • (10) setting the agenda for meetings of the Board and committees of the [insert program name] program?* • (11) leading meetings of the Board and committees of the [insert program name] program? • (12) hiring and evaluating the professional staff of the [insert program name] program?* • (13) deciding how the professional staff is organized of the [insert program name] program?*	
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	How much influence would you say that the (university staff/local program staff/community leadership) has on • (9) setting the schedule for meetings of the Board and committees of the [insert program name] program?* • (10) setting the agenda for meetings of the Board and committees of the [insert program name] program?* • (13) has on deciding how the professional staff is organized of the [insert program name] program?*	Ownership
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Community-aligned solutions**	How much influence would you say that the (university staff/local program staff/community leadership) has on • (2) outlining the annual program plans of the [insert program name] program? • (3) deciding about long-range plans of the [insert program name] program? • (4) ways to measure the effect of the [insert program name] program? • (5) designing the educational programs of the [insert program name] program? • 6) deciding how educational programs are conducted of the [insert program name] program? • (14) developing the program budget of the [insert program name] program?	Ownership

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Community Ownership Scale questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article details the development and testing of the Community Ownership Scale to support partnerships between three community health education programs and a university research group. The community health education programs shared a common model for behavior change that predicted community leader reliance on the research group would decrease as the programs matured. Two programs supported county-wide efforts to reduce cigarette smoking among women and one county-wide program promoted breast cancer screening. The Community Ownership Scale was developed and tested in the early stages of the three programs. It identified key programmatic functions, at different stages in the program, for monitoring efforts to foster community ownership and assess the relationships between perceived ownership and program effectiveness and maintenance.

Instrument description/purpose

The Community Ownership scale emphasizes one validated (i.e., construct) focus area:

- Ownership

The Community Ownership Scale measures the amount of control the three parties involved in the programs - community leaders, the external sponsoring agency, and the local program staff - have in the areas of goal setting, planning, program design and implementation, personnel, and budget develop. The Community Ownership Scale consists of 14 questions with a four-point Likert response structure ranging from "none" to "a lot."

For each function, community leaders provide ratings for each of the three parties. Scores are averaged for each function and for each of the three parties separately. A higher aggregate score for a party means that community leaders perceived that party as having a greater degree of program ownership.

The Community Ownership Scale can be accessed through the link here: https://nam.edu/wp-content/uploads/2023/01/Community-Ownership-Scale-Title-Page-and-Instrument-v2_TL.pdf.

Engagement involved in developing, implementing, or evaluating the instrument

A preliminary list of key functions was developed using descriptions from the literature of similar health education programs, observations of the three programs, discussions with the university research staff members, and semi-structured interviews with three community leaders from the programs. A draft instrument was then developed and reviewed by a community organization specialist from another institution, six university research staff members with community organization experience, five local staff members from the three programs, and the community leaders interviewed previously to develop the key functions. Based on the reviews, the language in the instrument was revised or tailored to individual programs and several items were added to the instrument. Program leaders from the community health education programs were a part of the development process and tested the instrument.

Additional information on populations engaged in instrument use

Not specified.

Notes

- **Potential limitations**: The Community Ownership Scale was designed for programs where community leaders, an external agency, and local staff interact. The three programs included in the study were very similar (i.e., focused on health behavior issues for adult women, used comparable community organization models, and were initiated by the same university group). These factors, as well as the structure and content of the instrument, limit the generalizability of the results.
- **Important findings**: The study results indicated that leaders from two of the three programs (Program A and B) believed they had more influence compared to the external agency for 10 out of 14 of the same program functions. For the three other program functions, they felt they had less influence than the external agency. Leaders from Program C did not identify any program functions where they felt they had more influence than the external agency.
- **Future research needed:** Based on the results presented in this article, the Community Ownership Scale has shown preliminary evidence of validity. Additional steps to assess validity should be taken, such as administering the instrument in later stages of the programs and testing variations of the instrument in other programs.

- **Supplemental information:** Additional research has been conducted using the Community Ownership Scale on other populations (i.e., programs focused on low-income older adults). Information on this research and further modifications made to the instrument can be found in the following article:
    - Armbruster, C., B. Gale, J. Brady, and N. Thompson. 1999. Perceived Ownership in a Community Coalition. *Public Health Nursing* 16(1):17–22. https://doi.org/10.1046/j.1525-1446.1999.00017.x.

Community-based Participatory Practice Competencies Survey

Parker, E, H. Lewis. E. Margolis, and C. Henríquez-Roldán. 2003. Assessing the capacity of health departments to engage in community-based participatory public health. *American Journal of Public Health* 93(3):472-476. https://doi.org/10.2105/ajph.93.3.472.

ASSESSMENT INSTRUMENT OVERVIEW

The **Community-based Participatory Practice Competencies Survey** has 20 questions and is used by public health partnerships. It measures the influence of those partnerships on public health organizations and the competencies of each organization and its staff to engage in community-based participatory public health practice.

KEY FEATURES

COMMUNITY/GEOGRAPHY
Health department employees
North Carolina counties
United States

COMMUNITY ENGAGEMENT OUTCOMES
Strengthened partnerships + alliances
Broad alignment
Diversity + inclusivity
Partnerships + opportunities
Acknowledgment, visibility, recognition
Sustained relationships
Shared power
Structural supports for community engagement

Improved health + health care programs + policies
Community-aligned solutions

PLACE(S) OF INSTRUMENT USE
Local health departments

LANGUAGE TRANSLATIONS
Not specified

PSYCHOMETRIC PROPERTIES
Internal consistency reliability
Factorial validity

YEAR OF USE/TIME FRAME
1992-1996

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions from the Community-based Participatory Practice Competencies Survey were realigned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the Community-based Participatory Practice Competencies Survey with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

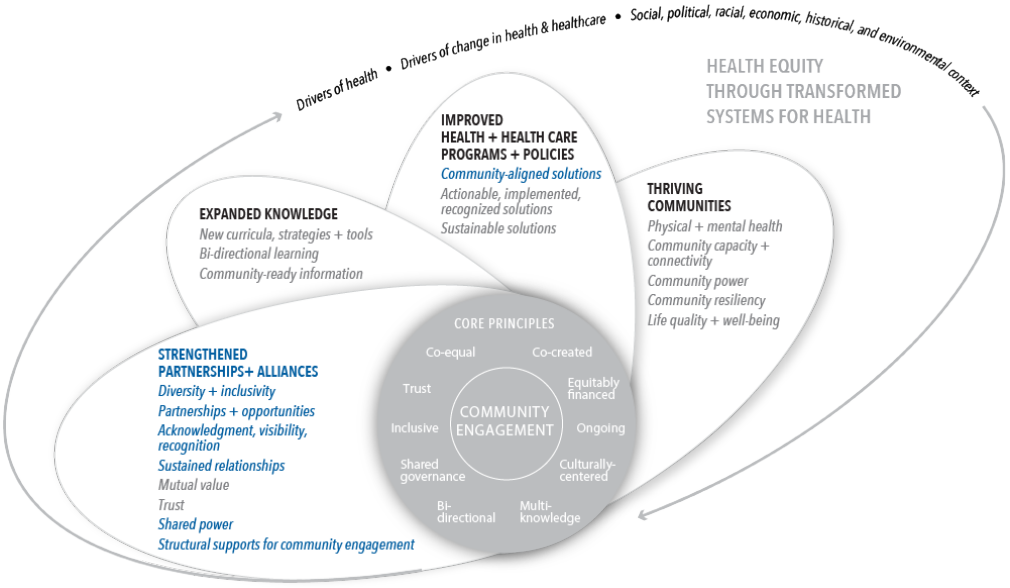

Figure 1 | Alignment of the Community-based Participatory Practice Competencies Survey with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of Community-based Participatory Practice Competencies Survey's individual questions and validated focus areas with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s), the individual questions from the Community-based Participatory Practice Competencies Survey transcribed as they appear in the instrument (with minor formatting changes for clarity), and the validated focus area(s) presented in the article.

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS	VALIDATED FOCUS AREA(S)
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Broad alignment with all indicators in this domain**	1. How would you rate the skills of your agency in the following areas? Working with community groups	Community-based skills of the health department as a whole

	8. How would you rate your own skills in the following areas? Working with community groups	Community-based skills of the individual respondent
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	How would you rate the skills of your agency in the following areas? • 2. Community assessment • 3. Community organizing • 6. Communicating with minority populations	Community-based skills of the health department as a whole
	How would you rate your own skills in the following areas? • 9. Community assessment • 10. Community organizing • 13. Communicating with minority populations	Community-based skills of the individual respondent
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	How often does your agency • 20. jointly plan program activities with other agencies/organizations? • 21. communicate or network about its activities in certain communities with other local agencies or organizations serving the same communities? • 22. exchange resources (subcontracts, personnel, equipment, etc.) with other agencies or organizations?	Health department's networking with other community agencies and groups
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	5. How would you rate the skills of your agency in the following areas? Advocating needs in the community	Community-based skills of the health department as a whole
	12. How would you rate your own skills in the following areas? Advocating needs in the community	Community-based skills of the individual respondent
	19. Were community members asked for their opinions or perceptions concerning the health status of their community in the latest assessment?	Community participation in health department planning
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Sustained relationships**	15. How often does your agency consult community members before new programs are introduced in their community?	Community participation in health department planning
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	16. How often do the programs you work with use feedback from the communities you are serving to make decisions on these programs?	Community participation in health department planning
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	18. Does your agency have a regular procedure for residents to give feedback on services and programs?	Community participation in health department planning
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Community-aligned solutions**	17. How often do the programs you work with address problems identified by the community, when public health statistics point to different problems?	Community participation in health

		department planning
Not aligned with Conceptual Model	How would you rate the skills of your agency in the following areas? • 4. Program planning • 7. Influencing public health policy	Community-based skills of the health department as a whole
	How would you rate your own skills in the following areas? • 11. Program planning • 14. Influencing public health policy	Community-based skills of the individual respondent

Table 1 | Community-based Participatory Practice Competencies Survey questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article states that for local health departments, little guidance is available on how to identify and monitor the necessary skills and competencies for integrating a community-based participatory approach into public health practice and research. The Community-based Participatory Practice Competencies Survey presents one approach to operationalize competencies and measure the capacity and performance of health departments and their staff.

Instrument description/purpose

The Community-based Participatory Practice Competencies Survey measures the influence of partnerships on the organizations and the competencies of each organization and its staff to engage in community-based participatory public health practice using four validated (i.e., factorial) focus areas:

- Community-based skills of the health department as a whole
- Community-based skills of the individual respondents
- Community participation in health department planning
- Health department's networking with other community agencies and groups

The Community-based Participatory Practice Competencies Survey contains 20 questions with three-point and five-point Likert scales with response options that range from "high" to "low" and "always" to "don't know."

The Community-based Participatory Practice Competencies Survey can be found here: https://doi.org/10.2105/ajph.93.3.472.

Engagement involved in developing, implementing, or evaluating the instrument

In 1992, a four-year, $16 million Community Based Public Health (CBPH) Initiative was launched by the W.K. Kellogg Foundation. The Initiative was designed to "strengthen linkages between public health education and public health practice by forming formal partnerships with people in communities." In North Carolina, a consortium comprising "community-based organizations in four counties, their county health departments, and faculty from the School of Public Health, University of North Carolina at Chapel Hill" came together to outline and address the issues identified by county residents. As part of this effort, the consortium developed coalitions with the health departments, community groups, and agency representatives, designed to emphasize a shared decision-making approach. The coalitions identified health problems and strategies to solve those problems. The University of North Carolina Center for Health Promotion and Disease Prevention conducted "a multiple case study participatory evaluation design" and developed and administered the Community-based Participatory Practice Competencies Survey. The first draft of the Community-based Participatory Practice Competencies Survey was developed by evaluation staff with prior experience in assessing community-oriented primary care programs in the United States. It was then shared with members of each coalition to elicit and incorporate their suggestions for additions or revisions to the instrument.

Additional information on populations engaged in instrument use

The Community-based Participatory Practice Competencies Survey was mailed to 429 employees in the health departments of the four counties in North Carolina whose positions required provision of public health services to community members. Employees included staff in "maternal and child health, adult health, health education, dentistry, and sanitation." The survey had a response rate of 66%, with 282 employees completing and returning the survey.

Notes

- **Potential limitations**: The items in the Community-based Participatory Practice Competencies Survey focused on a narrow view of assessing community-engaged research, and thus, one limitation of the study is that it was unable to identify "a factor associated with the core public health function of assessment." Additionally, the study had a 66% response rate from panelists and had to exclude respondents for whom data were missing, resulting in a reduced study sample. A third limitation is that the use of differently worded response categories for the questions to measure quality and quantity "may have affected the psychometric capabilities of the method."
- **Important findings:** The study findings highlight the ability of health agencies to operationalize community-based performance and to determine their capacity to be more "community based." Agencies can use these insights to assess employee skills, provide necessary training, and understand how policies may enhance or hinder community participation. Additionally, policy makers and professionals can "hold health agencies accountable" and ensure that they demonstrate "community basedness." In order to ensure that health agencies develop and implement programs to enhance the health of the community, "elected officials, community members, public and private funders, and others" should evaluate the community-based capacities, interventions, and other performance activities of these agencies.

Early Partnership Indicators

Hamzeh, J., P. Pluye, P. L. Bush, C. Ruchon, I. Vedel, and C. Hudon. 2019. Towards an assessment for organizational participatory research health partnerships: A systematic mixed studies review with framework synthesis. Evaluation and Program Planning 73:116-128. https://doi.org/10.1016/j.evalprogplan.2018.12.003.[1]

Kothari, A., L. MacLean, N. Edwards, and A. Hobbs. 2017. Indicators at the interface: managing policymaker-researcher collaboration. *Knowledge Management Research & Practice* 9(3):203-214. https://doi.org/10.1057/kmrp.2011.16.[2]

ASSESSMENT INSTRUMENT OVERVIEW

The **Early Partnership Indicators**[1,2] has 21 questions and should be used by policy makers and health researchers. It supports the management of collaborative knowledge generation and assesses the performance of a partnership, with focus on discussion of research findings, negotiation of partnership factors, and enhancement of the partnership itself**.** The Early Partnership Indicators is part of a set of three instruments that also includes the Common Partnership Indicators and the Mature Partnership Indicators.

KEY FEATURES

COMMUNITY/GEOGRAPHY
Policymakers
Researchers
Ontario, Canada

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Broad alignment
Diversity + inclusivity
Sustained relationships
Mutual value
Trust
Shared power
Structural supports for community engagement

Expanded knowledge
Community-ready information

Improved health + health care programs + policies
Broad alignment

PLACE(S) OF INSTRUMENT USE
Government agency
Academic/research institution/university

LANGUAGE TRANSLATIONS
Not specified

PSYCHOMETRIC PROPERTIES
Content validity
Face validity

YEAR OF USE/TIME FRAME
2000-2002

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in Early Partnership Indicators were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the Early Partnership Indicators with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

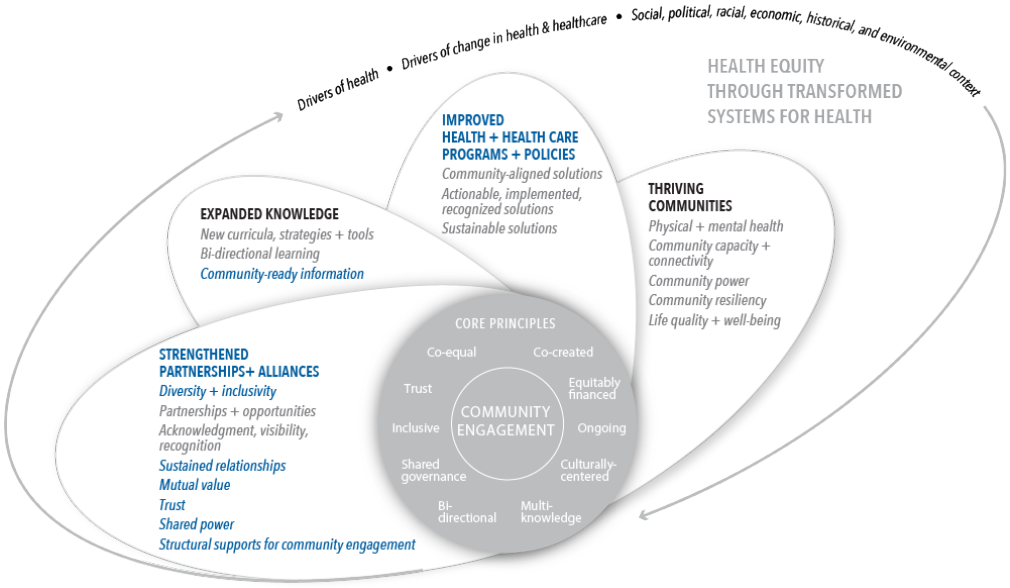

Figure 1 | Alignment of Early Partnership Indicators with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the Early Partnership Indicators with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from the Early Partnership Indicators transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Broad alignment with all indicators in this domain**	1.0. Clear leadership with respect to partnership management
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	1.1 Key players and senior management, where relevant, are visibly involved and supportive
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Sustained relationships**	2.1 Discussion of potential long-term plans or structure to ensure continuity of relationship 3.0. Early engagement of people 3.1 Staff with previous linkages with each other are incorporated into partnership
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Mutual value**	1.2 Written terms of reference for research project (or similar document)* 2.0. Development of team mentality
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	1.1 Roles and responsibilities are documented 2.1 Requirements for deliverables and timelines are documented 4.0 Exposure to team/organization structures of research partners 4.1 Discussion of respective organizational realities of research partners
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	1.0 Negotiation occurs at various stages of the research process 2.0 Negotiated items are clearly understood by all 2.2 Partners make their needs explicit (i.e., in terms of accountabilities, priorities, and long-term interest)
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	1.2 Written terms of reference for research project (or similar document)* 2.3 Partners document the above needs *[Note: In the original instrument, this question follows and relates to "2.2 Partners make their needs explicit (i.e., in terms of accountabilities, priorities, and long-term interest)"]*
EXPANDED KNOWLEDGE; **Community-ready information**	1.2 Implications of findings are understood by all
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Broad alignment with all indicators in this domain**	1.0 Research findings are discussed in policy deliberations 1.1 Research findings are presented in policy-related format and language 1.3 Documentation of feedback to researchers 1.4 Ministry senior staff are aware of research findings 1.5 Research findings are discussed or are reflected in government meeting material and research documents

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Early Partnership Indicators questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article describes a study to "examine research receptor capacity and research utilization needs within the Ontario Ministry of Health and Long Term Care (MOHLTC)."[1,2] The study explored the "abilities of Ministry staff to find, understand and use evidence-based research in policy development processes." The Health System-Linked Research Unit (HSLRU), which had experience engaging with Ministry partners and developing research directly intended for transfer into government decision-making, supported the development of instruments. The instruments reflect both processes and outcomes that can be used to "manage collaborative knowledge generation or assess the performance of a partnership between health researchers and policymakers." The study led to the development of a set of instruments: the Early Partnership Indicators (discussed here), as well as the Common Partnership Indicators and the Mature Partnership Indicators (discussed in other assessment instrument summaries).[2]

Instrument description/purpose

The Early Partnership Indicators instrument focuses on three key themes related to the early stages of partnerships:

- "Research findings are discussed in policy deliberations
- Negotiation occurs at various stages of the research process [and] negotiated items are clearly understood by all
- Partnership enhancement, [including] clear leadership with respect to partnership management, development of team mentality, early engagement of people, [and] exposure to team/organization structures of research partners"

The Early Partnership Indicators has 21 questions. The possible response options to the questions were not presented in the article.[2]

The Early Partnership Indicators instrument can be accessed here: https://doi.org/10.1057/kmrp.2011.16.

Engagement involved in developing, implementing, or evaluating the instrument

The Early Partnership Indicators were developed using a cross-sectional survey followed by qualitative interviews, which provided "detailed recommendations to improve access to research information, enhance use of the information once accessed, and promote an organizational culture supportive of research utilization." Study participants involved in developing and validating the instruments included "all eight of Ontario's HSLRUs and their designated partners at the Ministry of Health and Long Term Care." Semi-structured telephone interviews were conducted with eight Research Unit directors (or their designee) and their eight Ministry partners. Using the interview findings and findings from a literature review, the instruments were drafted and then tested with focus groups of HSLRU participants and one Ministry partner (the majority of whom also participated in the interviews) to examine "clarity, feasibility, credibility, relevance, level of specificity, and their ability to support each evaluation question."[2]

Additional information on populations engaged in instrument use

The study participants – the HSLRU researchers and Ministry partners – conduct health research in a wide range of areas with policy implications, including "community health, cancer, dental health, rehabilitation, child health, arthritis, mental health, health information." The partnerships often involved multiple projects, and included engagement with community, government, and research partners depending on the content area. Project activities were also wide-ranging and "included literature reviews, surveys, programme and service evaluation, costing estimates for policy initiatives, policy analysis, health system human resource analysis, intervention studies, knowledge dissemination to government and community, and knowledge transfer studies."[2]

Notes

- **Important findings:** The Early Partnership Indicators, as well as the Mature Partnership Indicators and the Common Partnership Indicators (discussed in other assessment instrument summaries), support improved understanding of knowledge translation partnerships, providing opportunities to measure success at each stage of partnership development. The authors maintain that the results of this study are applicable beyond the partners who tested the instruments, especially given the broad range of research content and type of research conducted by the participants.[2]

  The authors noted that having good partnerships allowed for overcoming "actual differences of values and ideologies that might have impeded the work." They suggested that a shared commitment to collaboration and to the work was critical and could lead to the development and maintenance of communication, rapport, and negotiation. Without these key success elements, difficulties in the partnerships ensued.[2]

Negotiation [one of the three dimensions in the Early Partnership Indicators instrument] "was an explicit dimension in the partnership" and marked by the need for continuous 'giving and taking' during the research process. The importance of negotiation, and the understanding of what is being negotiated, has "received minimal attention in the researcher-policymaker literature."[2]

When considering the maturity of partnerships, the length of time working as partners may influence the characteristics displayed or exhibited among partners. In addition to the Common Partnership Indicators, Early Partnership Indicators, and Mature Partnership Indicators being used to evaluate relationships, they could also be used to monitor partnership processes and guide a set of deliverables that could be included in negotiated agreements.[2]

- **Future research needed:** Future prospective studies could provide evidence on the applicability of the instrument in practice. "Other future studies using these indicators might focus on prioritizing them, determining optimal frequency of measurement, usefulness in modifying the partnership midway through the partnership, or determining the extent to which they predict the use of research by policymakers. Alternatively, one might study which indicators are better suited for partnerships with bureaucrats, and which are better for collaborations with elected officials. Validation and reliability work would be required to optimize issues of reliability, validity, and generalizability. Such a study would also want to consider whether there are instances in which the indicators may obstruct the partnership." Another area to study for the future would be the maturation of such partnerships, with considerations for the time frames needed to show a shift in early versus mature partnerships.[2]

Engage for Equity Community Engagement Survey

Sanchez-Youngman, S., B. Boursaw, J. Oetzel, S. Kastellic, C. Devia, M. Scarpetta, L. Belone, and N. Wallerstein. 2021. Structural Community Governance: Importance for Community-Academic Research Partnerships. *American Journal of Community Psychology* 67(3-4):271-283. https://doi.org/10.1002/ajcp.12505.[1]

Espinosa, P. R., A. Sussman, C. R. Pearson, J. G. Oetzel, N. Wallerstein, N. 2020. Personal Outcomes in Community-based Participatory Research Partnerships: A Cross-site Mixed Methods Study. *American Journal of Community Psychology* 66(3-4):439-449. https://doi.org/10.1002/ajcp.12446.[2]

Wallerstein, N., J. G. Oetzel, S. Sanchez-Youngman, B. Boursaw, E. Dickson, S. Kastelic, P. Koegel, J. E. Lucero, M. Magarati, K. Ortiz, M. Parker, J. Pena, A. Richmond, and B. Duran. 2020. Engage for Equity: A Long-Term Study of Community-Based Participatory Research and Community-Engaged Research Practices and Outcomes. *Health Education and Behavior* 47(3):380-390. https://doi.org/10.1177/1090198119897075.[3]

Lucero, J. E., B. Boursaw, M. M. Eder, E. Greene-Moton, N. Wallerstein, and J. G. Oetzel. 2020. Engage for Equity: The Role of Trust and Synergy in Community-Based Participatory Research. *Health Education and Behavior* 47(3):372-379. https://doi.org/10.1177/1090198120918838.[4]

Wallerstein, N., J. G. Oetzel, B. Duran, M. Magarati, C. Pearson, L. Belone, J. Davis, L. DeWindt, S. Kastelic, J. Lucero, C. Ruddock, E. Sutter, and M. J. Dutta. 2019. Culture-centeredness in community-based participatory research: contributions to health education intervention research. *Health Education Research* 34(4):372-388. https://doi.org/10.1093/her/cyz021.[5]

Oetzel, J. G., N. Wallerstein, B. Duran, S. Sanchez-Youngman, T. Nguyen, K. Woo, J. Wang, A. Schulz, J. K. Kaholokula, B. Israel, and M. Alegria. 2018. Impact of Participatory Health Research: A Test of the CBPR Conceptual Model: Pathways to Outcomes within Community-Academic Partnerships. *Biomedical Research International* 2018. https://doi.org/10.1155/2018/7281405.[6]

Oetzel, J. G., C. Zhou, B. Duran, C. Pearson, M. Magarati, J. Lucero, N. Wallerstein, and M. Villegas. 2015. Establishing the psychometric properties of constructs in a community-based participatory research conceptual model. *American Journal of Health Promotion* 29(5):e188-202. https://doi.org/10.4278/ajhp.130731-QUAN-398.[7]

Oetzel, J. G., M. Villegas, H. Zenone, E. R. White Hat, N. Wallerstein, and B. Duran. 2015. Enhancing stewardship of community-engaged research through governance. *American Journal of Public Health* 105(6):1161-1167. https://doi.org/10.2105/ajph.2014.302457.[8]

Hicks, S., B. Duran, N. Wallerstein, M. Avila, L. Belone, J. Lucero, M. Magarati, E. Mainer, D. Martin, M. Muhammad, J. Oetzel, C. Pearson, P. Sahota, V. Simonds, A. Sussman, G. Tafoya, E. W. Hat. 2012. Evaluating Community-Based Participatory Research to Improve Community-Partnered Science and Community Health. *Progress in Community Health Partnership* 6(3):289-299. https://doi.org/10.1353/cpr.2012.0049.[9]

ASSESSMENT INSTRUMENT OVERVIEW

The **Engage for Equity Community Engagement Survey (CES)**[1-9] is a 126-question instrument for use by academic and community partners. It assesses academic and community partner perceptions of partnership context, processes, and outcomes, including areas such as trust, community involvement and influence in research, partnership synergy, power relations in research, project sustainability, and health outcomes. The CES is part of a set of two instruments that also includes the Engage for Equity Key Informant Survey (KIS).

KEY FEATURES

COMMUNITY/GEOGRAPHY

Academic partners
Community partners
United States

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions from the CES were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the CES with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Broad alignment
Diversity + inclusivity
Partnerships + opportunities
Acknowledgment visibility, recognition
Sustained relationships
Mutual value
Trust
Shared power
Structural supports for community engagement

Expanded knowledge
Broad alignment
New curricula, strategies, + tools
Bi-directional learning
Community-ready information

Improved health + health care programs + policies
Broad alignment
Community-aligned solutions
Sustainable solutions

Thriving communities
Broad alignment
Physical + mental health
Community resiliency
Life quality + well-being

PLACE(S) OF INSTRUMENT USE
Community/community-based organization
Academic/research institution/university
Hospital, clinic, or health system
Local government agency; federal government

LANGUAGE TRANSLATIONS
Spanish

PSYCHOMETRIC PROPERTIES
Construct validity
Content validity
Discriminant validity
Face validity
Factorial validity
Internal consistency reliability

YEAR OF USE/TIME FRAME
2016 – 2018
2009 – 2013

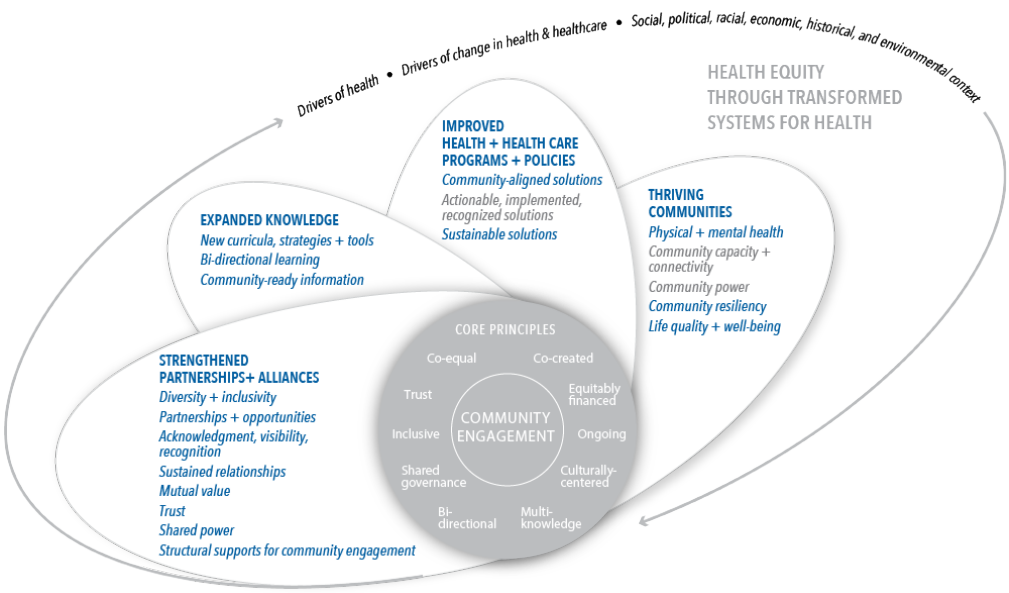

Figure 1 | Alignment of the Engage for Equity Community Engagement Survey with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the CES's individual questions and validated focus area(s) with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s), the individual questions transcribed from the CES as they appear in the instrument (with minor formatting changes for clarity), and the validated focus area(s) presented in the article(s).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS	VALIDATED FOCUS AREA(S)
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Broad alignment with all indicators in this domain**	Does this partnership have any of the following features to achieve the project aims?: Ability to bring people together for meetings/activities?	Partnership capacity
	How well does your project use the partners' time?	Resource use
	Does this project reflect the following Community Based Participatory Research (CBPR) principles?: This project communicates knowledge and findings to all partners and involves all partners in the dissemination process.*	Community engagement principles
	Do you and your partners: Work together well as a partnership?	Partnership synergy
	Do you experience the following difficulties related to participating in this partnership?: Frustration with the amount of time and resources spent for the outcomes achieved?	Personal challenges
	How much has this project produced improved academic ability to integrate community perspectives into research design and methods?	Current community-level, research, and policy outcomes
	What has been the most important outcome of this project?* Can you tell us anything else about positive or negative outcomes not captured in this survey?*	Other outcomes
	How satisfied are you with your partnering experience on this project?	Quality and satisfaction
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	In which language would you prefer to respond to these questions?	General
	In [project_name], do you primarily consider yourself a community partner or an academic partner?	Role and experience with this research project
	The community or communities participating in this project have a history of • organizing services or events. • advocating for social or health equity. By working together, people in the community or communities participating in this project have previously influenced decisions that affected their communities.	Community context and capacity
	Does this partnership have any of the following features to achieve the project aims?: • Skills and expertise • Diverse members	Partnership capacity
	The academic partners have members who are from a similar background as the community partners.	Bridging differences
	How much have community partners been involved in integrating community understandings into the following research steps? For steps that have not yet happened, how much will community members be involved?: Recruiting study participants	Community involvement in research

	Does this project reflect the following Community Based Participatory Research (CBPR) principles?: • This project builds on resources and strengths in the community. • This project emphasizes the factors that are important to the community (e.g., environmental and social factors) which affect well-being. • This project is responsive to community histories. • This project connects with the ways things are done in the community.	Community engagement principles
	Which of the following racial or ethnic groups are you a member of? Please check all that apply. Which of the following population groups are you a member of? Please check all that apply. Please describe the additional population group that you are a member of. What is your gender identity? Please describe your gender identity.	Demographic information
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	Does this partnership have any of the following features to achieve the project aims?: Connections to relevant stakeholders	Partnership capacity
	Do you or will you enjoy the following benefits from participating in this partnership?: • Increased use of your expertise or services by others* • Increased ability to seek formal or informal education	Personal advantages
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	Does this partnership have any of the following features to achieve the project aims?: Legitimacy and credibility in the community	Partnership capacity
	Do you and your partners: Respond to the needs and problems of your constituency or community as a whole?	Partnership synergy
	Do you experience the following difficulties related to participating in this partnership?: Negative views from outside of the partnership of your participation in the partnership	Personal challenges
	How much do you agree or disagree that community members: Can voice their opinions about research in front of researchers?*	Power relations in research
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Sustained relationships**	How many years have you been involved • in this research project? • in this research collaboration or partnership?	Role and experience with this research project
	How well does the leadership for the partnership: Communicate the goals of the project?*	Leadership
	Does this project reflect the following Community Based Participatory Research (CBPR) principles?: This project views CBPR or community engaged research as a long term process and a long term commitment.	Community engagement principles
	How much has this project produced better coordination between agencies, researchers, and community groups?	Current community-level, research,

		and policy outcomes
	How much will this project produce better coordination between agencies, researchers, and community groups?	Future community-level, research, and policy outcomes
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Mutual value**	How much do you agree or disagree that this partnership has conversations where: • We show positive attitudes towards one another. • We listen to each other.	Quality of dialogue
	How well does the leadership for the partnership: Foster respect between partners?*	Leadership
	Does this project reflect the following Community Based Participatory Research (CBPR) principles?: This project integrates the words and language of the community.	Community engagement principles
	How much do or will the community or clinical organizations in this partnership enjoy the following benefits?: • Enhanced reputation • Enhanced ability to affect public policy* • Increased use of the agency's expertise or services by others	Agency outcomes
	Do you or will you enjoy the following benefits from participating in this partnership?: • Enhanced reputation • Increased use of your expertise or services by others • Increased ability to acquire additional financial support	Personal advantages
	How much do you agree or disagree that: I am committed to sustaining the community-academic relationship with no or low funding.	Project sustainability
STRENGTHENED PARTNERSHIPS + ALLIANCES**; Trust**	How much do you agree or disagree with these statements about the level of trust between partnership members?: • I trust the decisions others make about issues that are important to our projects. • I can rely on the people that I work with on this project. • People in this partnership have a lot of confidence in one another.	Trust
	What primary type of trust do you think the partnership has now?	Type of trust
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	What is your primary role on this research project? Please describe your role on this research project.	Role and experience with this research project
	The community partners (such as patients, community members, or organizations) have the knowledge, skills, and confidence to interact effectively with the academic partners (such as individuals from universities).	Bridging differences

	The academic partners have the knowledge, skills, and confidence to interact effectively with the community partners.	
	Members of our partnership have a clear and shared understanding of the problems we are trying to address. Members can generally state the mission and goals of our partnership. There is general agreement • with respect to the priorities of our partnership. • on the strategies our partnership should use in pursuing its priorities.	Mission and strategies
	How much have community partners been involved in integrating community understandings into the following research steps? For steps that have not yet happened, how much will community members be involved?: • Integrating community understandings into the research question or approach • Background research • Developing sampling procedures • Designing data collection instruments (such as interviews or surveys) • Collecting primary data • Interpreting study findings • Informing the community about research progress and findings*	Community involvement in research
	Suggestions I make within this partnership are seriously considered. I have influence over decisions that this partnership makes. My involvement influences the partnership to be more responsive to the community. I am able to influence the work on this project.	Influence in the partnership
	How much do you agree or disagree that this partnership has conversations where: • Everyone in our partnership participates in our meetings. • When conflicts occur, we work together to resolve them. • Even when we don't have total agreement, we reach a kind of consensus that we all accept. • The dialogue is dominated by the perspectives of the academic partners.	Quality of dialogue
	Our partnership • has discussions about our role in promoting strategies to address social and health equity.	Reflexivity

	• evaluates together what we've done well and how we can improve our collaboration. • reflects on issues of power and privilege within our partnership.	
	How well does the leadership for the partnership: • Encourage active participation of academic and community partners in decision making? • Communicate the goals of the project?* • Resolve conflict among partners? • Foster respect between partners?* • Help the partners be creative and look at things differently?	Leadership
	How well does your project use the partnership's • financial resources? • in-kind resources?	Resource use
	Does this project reflect the following Community Based Participatory Research (CBPR) principles?: • This project facilitates equitable partnerships in all phases of the research. • This project balances research and social action for the mutual benefit of all partners.	Community engagement principles
	Do you and your partners: • Develop goals that are widely understood and supported in this partnership? • Recognize challenges and come up with good solutions? • Develop strategies that are most likely to work for the community or stakeholders as a whole?	Partnership synergy
	How much do or will the community or clinical organizations in this partnership enjoy the following benefits? Enhanced ability to affect public policy*	Agency outcomes
	Do you experience the following difficulties related to participating in this partnership?: Time or resources taken away from other activities you value	Personal challenges
	How much do you agree or disagree that community members: • Have increased participation in the research process? • Are able to talk about the project with groups or in other settings, such as community or political meetings? • Can voice their opinions about research in front of researchers?* • Have the capacity or power to promote research that will benefit the community?	Power relations in research
	What is the quality of the overall work of the partnership toward achieving the goals of the project?	Quality and satisfaction

STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	How much have community partners been involved in integrating community understandings into the following research steps? For steps that have not yet happened, how much will community members be involved?: • Grant proposal writing • Writing reports and journal articles • Giving presentations at meetings and conferences • Informing the community about research progress and findings* • Informing relevant policy makers about findings • Sharing findings with other communities	Community involvement in research
	Does this project reflect the following Community Based Participatory Research (CBPR) principles?: This project communicates knowledge and findings to all partners and involves all partners in the dissemination process.*	Community engagement principles
	How much do you agree or disagree that: Our partnership carefully evaluates funding opportunities to make sure they meet both community and academic partners' needs.	Project sustainability
	On average, how many hours per week do you dedicate to this project that • are covered by project funding or by your general job duties (including salary or stipends)? • are NOT covered by project funding or by your general job duties?	Time use: covered and not covered
EXPANDED KNOWLEDGE; **Broad alignment with all indicators in this domain**	Does this project reflect the following Community Based Participatory Research (CBPR) principles?: This project communicates knowledge and findings to all partners and involves all partners in the dissemination process.*	Community engagement principles
	How much has this project produced research better linked to community needs?	Current community-level, research, and policy outcomes
	How much will this project produce research better linked to community needs?	Future community-level, research, and policy outcomes
	What has been the most important outcome of this project?* Can you tell us anything else about positive or negative outcomes not captured in this survey?*	Other outcomes
EXPANDED KNOWLEDGE; **New curricula, strategies + tools**	How much will this project produce improved academic ability to integrate community perspectives into research design and methods?	Future community-level, research, and policy outcomes

EXPANDED KNOWLEDGE; **Bi-directional learning**	Does this project reflect the following Community Based Participatory Research (CBPR) principles?: This project helps all partners involved to grow and learn from one another.	Community engagement principles
	How much has this project produced changes in the nature of debates about important health issues in the community?	Current community-level, research, and policy outcomes
EXPANDED KNOWLEDGE; **Community-ready information**	How much have community partners been involved in integrating community understandings into the following research steps? For steps that have not yet happened, how much will community members be involved?: Producing useful findings for community action and benefit	Community involvement in research
	How much do you agree or disagree that community members: Can apply the findings of the research to practices and programs in the community?	Power relations in research
	How much has this project produced useful findings for the development of community practices, programs, or policies?	Current community-level, research, and policy outcomes
	How much will this project produce useful findings for the development of community practices, programs, or policies?	Future community-level, research, and policy outcomes
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Broad alignment with all indicators in this domain**	How much has this project produced changes in • policy? • clinical practices?	Current community-level, research, and policy outcomes
	How much will this project produce • changes in policy? • changes in clinical practices?	Future community-level, research, and policy outcomes
	What has been the most important outcome of this project?* Can you tell us anything else about positive or negative outcomes not captured in this survey?*	Other outcomes
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Community-aligned solutions**	How much have community partners been involved in integrating community understandings into the following research steps? For steps that have not yet happened, how much will community members be involved?: Designing and implementing the intervention	Community involvement in research
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Sustainable solutions**	How much do you agree or disagree that: This project is likely to continue forward after this funding is over?	Project sustainability
THRIVING COMMUNITIES; **Broad alignment with all indicators in this domain**	How much do you think this project will improve the health of the community?	Health outcomes
	How much has this project produced better overall environment in the community?	Current community-level, research, and policy outcomes

	How much will this project produce • better overall environment in the community? • broad social impacts?	Future community-level, research, and policy outcomes
	What has been the most important outcome of this project?* Can you tell us anything else about positive or negative outcomes not captured in this survey?*	Other outcomes
THRIVING COMMUNITIES; **Physical + mental health**	How much do you think this project will improve the health behaviors of community members?	Health outcomes
	How much will this project produce changes in the nature of debates about important health issues in the community?	Future community-level, research, and policy outcomes
THRIVING COMMUNITIES; **Community resiliency**	How much has this project produced reinforced cultural identity or pride?	Current community-level, research, and policy outcomes
	How much will this project produce reinforced cultural identity or pride?	Future community-level, research, and policy outcomes
THRIVING COMMUNITIES; **Life quality + well-being**	How much has this project produced broad social impacts?	Current community-level, research, and policy outcomes

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Engage for Equity Community Engagement Survey questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The articles discuss a range of academic-community collaborations and efforts across the country that have focused on understanding "which partnering practices, under which contexts and conditions, contribute to research, community, and health equity outcomes."[3,9] Efforts were aimed at developing actionable knowledge that improves CBPR, CEnR, and participatory action research science. Efforts also focused on translating data to support equity and recognizing the struggles and gifts within the community.[3] The articles discussed findings from three funding stages from the National Institutes of Health. Funding supported the development of the CBPR conceptual model, which contains four domains (i.e., context, equitable partnerships, research design/interventions, and outcomes). The model was refined through the development, testing, and implementation of two complementary assessment instruments – the CES and the KIS (described in another assessment instrument summary).[2,3,9] The instruments are for use by academic and community partners to assess and understand their own partnering processes/practices and outcomes.[3]

Instrument description/purpose

The CES, completed by academic and community partners, has 126 questions. The 26 validated (i.e., construct, factorial) focus areas include:

- Community context and capacity
- Partnership capacity

- Bridging differences
- Mission and strategies
- Community involvement in research
- Influence in the partnership
- Quality of dialogue
- Reflexivity
- Leadership
- Resource use
- Trust
- Type of trust
- Community engagement principles
- Partnership synergy
- Agency outcomes
- Personal advantages
- Personal challenges
- Power relations in research
- Project sustainability
- Health outcomes
- Current community-level, research, and policy outcomes
- Future community-level, research, and policy outcomes
- Other outcomes
- Quality and satisfaction
- Demographic information
- Time use: covered and not covered

CES presents questions with open-ended, yes/no, various Likert scale, and "check answer(s) that apply" response options.[2,4-6]

Other analyses have been conducted on the CES to, for example, identify best or promising practices and understand which community-engaged practices optimize effectiveness and predict favorable partnership or project outcomes. Analyses have also sought to understand the personal outcomes defined as individual growth and capacities influenced by direct engagement in the partnership that may lead to adherence to CBPR values, long-term partnership outcomes, and sustainability.[2] The CES instrument in English and Spanish can be accessed here: https://engageforequity.org/tool_kit/surveys/community-engagement-survey/.

Engagement involved in developing, implementing, or evaluating the instrument

While the research that formed the foundation for the KIS took place over three funding stages, the entire research trajectory grew to be called, "Engage for Equity." Across these stages, academic and community collaborations took place between a range of partners including: Community-Campus Partnerships for Health, the National Indian Child Welfare Association, the Rand Corporation, the University of Waikato (New Zealand), the National Congress of Americans Indians (NCAI) Policy Research Center (PRC), the University of New Mexico Center for Participatory Research (UNM-CPR), the University of Washington's Indigenous Wellness Research Institute (UW-IWRI), and a think tank of academic and community CBPR experts.[3,9] These partnerships, along with extensive community consultations and assessment of its pragmatic use, supported the development, refinement, and pretesting of CES, including its "readability, length, content, sequence, and usability."[3]

In 2009, CES was tested and validated with 200 federally-funded CBPR and CEnR projects of diverse populations in the United States. In this analysis, in the Research for Improved Health study, NCAI served as the lead institution and a representative "Indian organization" for a unified American Indian and Alaska Native (AI/AN) tribal government voice. NCAI received 30% of the research budget and had responsibility for overseeing project operations and convening advisory council and research participants, while the university partners took on other roles.[9] Together, the partners worked on a study to determine promising partnership practices, partnership assessment tools, and other resources. They collaborated on data analyses and translated findings into practice and policy, with a particular focus on dissemination in AI/AN communities.[9]

The instrument was refined with more community input and statistical analyses were conducted to determine which questions were valid. In 2015, the second test and validation of the refined instrument took place with 179 federally funded partnerships and 36 pilot projects. CES was also used in a longitudinal intervention with 68 partnerships in the Engage for Equity project to evaluate collective-reflection tools to strengthen partnership capacity to achieve outcomes.[3]

A separate article detailed the creation and validation of focus areas of the CES related to the culture-centered approach (CCA) within the context of CBPR and CEnR. During the planning of the CES, the authors worked with the original theorist of CCA, with oversight from a community and academic advisory board. "Qualitative data were collected in parallel with the surveys" providing "in-depth historical and contemporary knowledge through seven case studies to uncover how the CCA is reflected in context, partnership processes, intervention design and outcomes." The case studies included projects with long-term partnerships and were purposefully diverse with respect to geography (i.e., urban/rural), health issue, and racial/ethnic and other identity subpopulations.[5] The partnerships for the case studies included: "Healing of the Canoe, a substance abuse prevention partnership between the University of Washington and two rural American Indian communities; a Lay Health Worker Colorectal Cancer Screening project among the University of California San Francisco, San Francisco State University and partners in Chinatown; Men on the Move, an economic development and cardiovascular disease prevention project between St. Louis University and a rural African-American community in the Bootheel of Missouri; cancer research projects between the Black Hills Center for American Indian Health and a northern plains tribe; the South Valley Partners for Environmental Justice, a partnership among Bernalillo County, the University of New Mexico, and community partners; the Bronx Health REACH faith-based initiative in New York City, addressing nutrition/diabetes and access to care; and the University of Rochester Center for Deaf Health partnership."[2,5,9]

A shortened pragmatic version of the CES and KIS called Partnership for Health Improvement and Research Equity (PHIRE), with 30 questions (also available in Spanish) was developed based on extensive statistical analyses and expert feedback from communities and academic partners. PHIRE represents the same focus areas as the longer instruments, with emphasis on a few core questions from the KIS and the CES. PHIRE has been piloted in multiple research, coalition, and engagement settings, and can be used for annual reflection and evaluation for partners who want to assess their strengths and areas to grow (please contact nwallerstein@salud.unm.edu to obtain PHIRE).

Additional information on populations engaged in instrument use

Two sets of internet surveys were conducted in 2009 and 2015. In the first round of CES surveys in 2009, PIs along with identified academic and community partners completed CES.[3,8] "Of these projects, 47 were located in Native communities (single or intertribal communities) and 153 were located in other communities (including 24 Hispanic, 21 multiple ethnicities, 20 African American, 7 Asian American, and 87 no specific ethnicity)."[8] In 2009, the questions were refined and translated into Spanish.

In the second round of CES surveys in 2015, a total of 179 federally funded CBPR and CEnR projects of diverse populations across the United States participated in an analysis of CES. Among the funded projects, 189 PIs were asked to complete CES. PIs nominated up to six partners (two academic and four community) to also participate in completing CES. A total of 381 responses for the CES were analyzed (greater than 75% completion rate for those who consented to complete the instrument). "Gift cards of $20.00 were sent as incentives in advance of participants receiving their … CES Internet links."[3] The CES questions for this second round were refined based on the psychometric analyses of the first round of CES surveys in 2009, as well as information from the seven case studies.

Notes

- **Potential Limitations:** Several articles referenced in this summary self-reported response bias and selection/sampling biases. The articles indicated that bias may have been introduced since only projects identified as CBPR or CEnR in the federal RePORTER register were included. They also noted that results may not be applicable to other research projects with more limited community engagement.[1-3,5,7] Further, PIs nominated community and academic partners to complete the CES, which may have introduced bias into responses and outcomes.[8] One article noted that analyses conducted were not longitudinal and the evaluation of processes and outcomes over time (e.g., trust) were not explored,[4] and therefore "results do not support causal/temporal inferences particularly as they relate to health improvement or reduced inequities."[2,5]

- **Important findings:** One article on the Engage for Equity effort noted "that the theoretical grounding and extant literature supports CEnR projects to engage in collective reflection to reap the full benefits of community engagement." The effort supported understanding of the role of power within partnerships, including CBPR and CEnR projects. The Engage for Equity study design also allowed for the opportunity to conduct a randomized controlled trial of delivery of Engage for Equity tools and resources through workshops or through the web, collect longitudinal data from 68 partnerships of the full sample, and analyze approaches to "building empowerment through collective-reflection" and action. The authors believe that "other tools and trainings, such as resources to help partnerships choose an equitable decision-making model or combatting racism, may be needed after partners identify areas of strength or concern."[3]

  Another article discussed the analysis involving a "rigorous three-stage random sampling of CBPR or CEnR projects across the United States" and use of the CES. The study offered evidence of "internal consistency and factorial validity (exploratory factor analysis) for 10 measures of processes and outcomes, including the following: perceived community/policy-level outcomes, capacity building, partnership synergy, influence in decision making, leadership, and managing partnership activities." "This study provided evidence of the factorial, convergent, and discriminant validity and internal consistency of 22 measures related to the CBPR conceptual model." The authors noted that the findings are generalizable to the CBPR and CEnR community.[7]

  One article on person outcomes within teams involved in partnerships from the CES found that the majority of the partnership processes and practices explored - specifically respect in the partnership, perceptions of voice through dialogue and mutual learning, degree of influence in decision-making among partners, stewardship, and perceived effectiveness in the use of various resources - had a positive and significant impact on personal outcomes. Specific personal outcomes included "new degrees or jobs, increased knowledge around health equity and social justice issues, changes in attitudes and biases, … [and] personal engagement in health-enhancing behaviors."[2] "Becoming leaders for certain portions of the project, collaborating on grant writing, or developing new community-driven governance structures" were also mentioned in the article. "Written formal agreements (e.g., [memorandum of understanding]), academic partners deciding on how financial resources are shared among partners, and a measure of respect in the partnership" were not associated with personal outcomes. The article identified that relationship dynamics were a predictor of "respect in the partnership, voice and influence in decision-making among partners, and stewardship." The qualitative findings based on seven in-depth case studies emphasized the impact of engagement, with and beyond the partnership to include "individual, partnership and community-level impacts." Implications exist for long-term outcomes, new funding, and sustainability.[2]

  The two structural equation model articles have confirmed the role of two pathways of best partnering practices associated with outcomes: relationships of trust and respect between partners and structural governance agreements and community approvals. A key driver of these pathways is "Collective Empowerment," which consists of four best practices (partners believing they have influence or voice, adopting shared partnering principles, engaging in collective reflection on equity, and ongoing evaluation and the project fitting with community history and knowledge) and is associated with intermediate and more distal health equity outcomes.[6]

  The focus areas of CES have "strong measurement validity and yet are straightforward," a key feature for the type of measures that community and academic partners want to use. The authors suggest that others using CES may use an approach where focus is "placed on outcomes that the project is interested in achieving and exploring other measures that are most strongly correlated with those outcomes. Ideally, all of the items in a measure would be used, and yet space constraints may limit how many can be selected." "These steps strongly support the use of the measures by academic and community partners to evaluate and advance their own CBPR practice as a promising strategy for engaging in health promotion to address health disparities in underserved and minority communities."[7]

  One analysis of trust questions within the CES found that partners who reported their "partnership had reflective trust reported much higher values on CBPR processes/outcome scales…Despite showing significantly higher levels of trust, partners who reported proxy trust did report substantially higher levels of synergy, principles, participation, or influence than partners reporting functional trust with all these differences being small effect size and only participation and trust showing statistical significance." Processes that were associated with different types of trust can be evaluated using the CES and used to deliberately and routinely monitor and improve trust within a partnership.[4]

The concepts underlying CCA (i.e., community voice/agency – "participation and listening to community wisdom and knowledge;" reflexivity – "questioning the taken-for-granted positions of power of researchers in communities;" structural transformation and resources – "having resources and changing structures contributing to health problems and inequities") can be found in the CES and were examined in another analysis. The field of health education and promotion and public health scholars and practitioners can assess the concepts of CCA to understand cultural agency and fit in an intervention. CES can serve as a self-reflection tool and for outcome evaluation.[5]

In one article, the authors discussed lessons learned in support of other partnerships, funders and partners in community-engaged research. Lessons included: effective use of advisory committees as collaborative partners to guide important decisions and challenged academic partners to be scientifically rigorous; "practice the art of diplomacy," especially when there are disagreements and develop and implement structural agreements in support of honoring each other (e.g., negotiating authorship considerations); intentionally developing the capacity of community PIs and partners; work to overcome challenges based on issues on historical trust within community research partnership by generating trust through action (e.g., memorandums of understanding, expectations for data ownership and community benefit; and telling the story behind the activities taking place in a way that aligns with and explains community benefit.[9]

- **Future research needed:** Future research should further examine psychometric properties for CES.[7] Research exploring multi-method approaches to measuring trust in the short term and longitudinally are needed. This would allow CBPR researchers and practitioners to explore trust as a "dynamic process" with outcomes "critical for achieving partnership synergy and other intermediate and long-term CBPR outcomes."[4] "Future research will be needed to establish the direct impact on these outcomes," though the structural equation analysis provides evidence of both relational and structural governance pathways between partnering practices and outcomes.[5] Continued research should include evaluating promising and best practices among CBPR partnerships that influence personal outcomes, as well as "investigate pathways and correlates that facilitate, hinder, or maintain these and other outcomes (e.g., health) among research partners." Longitudinal study designs were also referenced as an area of further research.[2]

  The CES has been shortened to a 30-item instrument which is currently being piloted in research and community engagement efforts to be a more pragmatic tool for regular evaluations of CBPR partnerships, coalitions, or other engagement efforts (contact nwallerstein@salud.unm.edu for more information).
- **Supplemental information:** Additional research has been conducted using the CES on multiple types of partnerships, including beyond the two internet survey sets in 2009 and 2015 (i.e., projects involving healthcare and government partners, analyses of power dynamics and critical importance of challenging power hierarchies for racial and social justice within partnerships) and on the validation of the instrument. The findings and use from the research, the most complete version of the CES (see Boursaw, 2021 below), and other information on the development of this instrument can be found in the following articles:
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  - Boursaw, B., J. G. Oetzel, E. Dickson, T. S. Thein, S. Sanchez-Youngman, J. Pena, M. Parker, M. Magarati, L. Littledeer, B. Duran, and N. Wallerstein. 2021. Scales of Practices and Outcomes for Community-Engaged Research. *American Journal of Community Psychology* 67(3-4):256-270. https://doi.org/10.1002/ajcp.12503.
  - Hanza, M., A. L. Reese, A. Abbenyi, C. Formea, J. W. Njeru, J. A. Nigon, S. J. Meiers, J. A. Weis, A. L. Sussman, B. Boursaw, N. B. Wallerstein, M. L. Wieland, and I. G. Sia. 2021. Outcomes of a Community-Based Participatory Research Partnership Self-Evaluation: The Rochester Healthy Community Partnership Experience. *Progress in Community Health Partnerships* 15(2):161-175. https://doi.org/10.1353/cpr.2021.0019.
  - Parker, M., N. Wallerstein, B. Duran, M. Magarati, E. Burgess, S. Sanchez-Youngman, B. Boursaw, A. Heffernan, J. Garoutte, J. and P. Koegel. 2020. Engage for Equity; Development of Community-based Participatory Research Tools. *Health Education and Behavior* 47(3): 359-372. https://doi.org/10.1177/1090198120921188.
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Wallerstein, N., J. G. Oetzel, B. Duran, M. Magarati, C. Pearson, L. Belone, J. Davis, L. DeWindt, S. Kastelic, J. Lucero, C. Ruddock, E. Sutter, and M. J. Dutta. 2019. Culture-centeredness in community-based participatory research: contributions to health education intervention research. *Health Education Research* 34(4):372-388. https://doi.org/10.1093/her/cyz021.[5]

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Oetzel, J. G., M. Villegas, H. Zenone, E. R. White Hat, N. Wallerstein, and B. Duran. 2015. Enhancing stewardship of community-engaged research through governance. *American Journal of Public Health* 105(6):1161-1167. https://doi.org/10.2105/ajph.2014.302457.[8]

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ASSESSMENT INSTRUMENT OVERVIEW

The **Engage for Equity Key Informant Survey (KIS)**[1-9] has 97 questions for use by academic partners, mainly principal investigators (PIs) or project directors. It assesses project-level characteristics of a project or partnership and provides factual information on perceptions of community, academic, and other partners on processes and practices in their community-based participatory research (CBPR) and community-engaged research projects (CEnR), and their perceived intermediate and long-term outcomes. The KIS is part of a set of two instruments that also includes the Engage for Equity Community Engagement Survey (CES).

KEY FEATURES

COMMUNITY/GEOGRAPHY

Academic/research partners
United States

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions from the KIS were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the KIS with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

LANGUAGE TRANSLATIONS

Spanish

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances

Broad alignment
Diversity + inclusivity
Partnerships + opportunities
Acknowledgment visibility, recognition
Mutual value
Shared power
Structural supports for community engagement

Expanded knowledge

New curricula, strategies, + tools

Improved health + health care programs + policies

Actionable, implemented, recognized solutions

PLACE(S) OF INSTRUMENT USE

Community/community-based organization
Academic/research institution/university
Hospital, clinic, or health system
Local government agency; federal government

PSYCHOMETRIC PROPERTIES

Construct validity
Content validity
Face validity
Factorial validity
Internal consistency reliability

YEAR OF USE/TIME FRAME

2016 – 2018
2009 – 2013

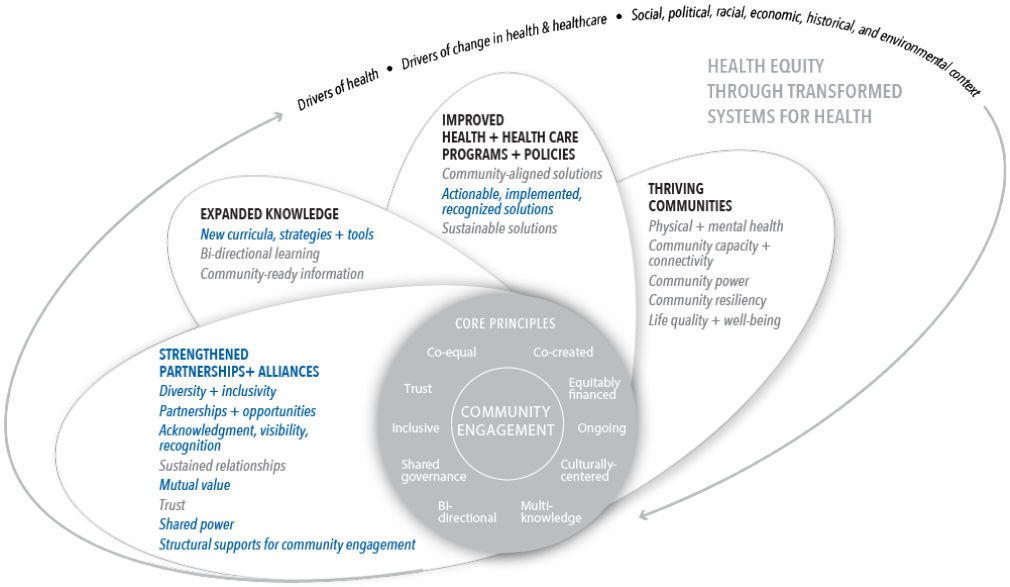

Figure 1 | Alignment of the Engage for Equity Key Informant Survey with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the KIS's individual questions and validated focus areas with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s), the individual questions from the KIS transcribed as they appear in the instrument (with minor formatting changes for clarity), and the validated focus area(s) presented in the article(s).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS	VALIDATED FOCUS AREA(S)
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Broad alignment with all indicators in this domain**	Does this project have at least one community partner who might be interested in participating in a workshop focused on partnership self-evaluation?	General
	To what extent does your partnership engage in regular self-evaluation assessment, collective reflection, or quality improvement strategies? Does this partnership engage in annual self-evaluations or reflection?	Reflective practices
	In which language would you prefer to respond these questions?	General

STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	Does this project have community partners from the community of interest (e.g., patients or community members from affected communities) who have or will be engaged across multiple stages of its research processes?*	
	Who initiated this study? Please describe who initiated this study. What types of community partners are involved in this project? Check all that apply. Please describe the other community partners involved in this project. For any in-person meetings, where are these in-person meetings held? On average, how many academic partners attend these in-person meetings? Please give a whole number value, even if it is approximate. On average, how many community partners attend these in-person meetings? Please give a whole number value, even if it is approximate.	Project features
	How many people are currently core members of the community partnership (include members from all relevant agencies and independent community members)? Please give a whole number value, even if it is approximate. Over the course of this partnership, how many people, in total, have participated as community partners? Please give a whole number value, even if it is approximate.	Length and size of project and partnership
	What social, economic, or structural issue most strongly impacts the health of the communities engaged in this project?	Community challenges
	Does this project have community advisory board(s) or group(s) separate from the research partnership? Please give a whole number value, even if it is approximate. How many people, in total, are members of the community advisory group(s)? Please give a whole number value, even if it is approximate.	Advisory boards or groups
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	Has this project had any trainings or formal discussions that focus on • Community Based Participatory Research (CBPR)? • research methodologies? • research ethics and IRB?	Training topics
	Have community partners received human subjects training?	Research integrity and governance practices
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	Who approved participation in this research project on behalf of the community? Check all that apply. How important was it to the guidance and development of this project for it to receive approval from	Research integrity and governance practices

	• local community agency leadership?* • tribal government?* • local government? • the health board or public health department? • the community IRB or research review board?* • the tribal IRB or research review board?*	
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Mutual value**	Has this project had any trainings or formal discussions that focus on • racism, sexism, and/or other forms of oppression? • cultural sensitivity or cultural humility? • conflict resolution?	Training topics
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	Does this project have community partners • who have or will be engaged across multiple stages of its research processes (e.g., across research design, methods, implementation, and dissemination and not just providing general input through a single focus group)? • from the community of interest (e.g., patients or community members from affected communities) who have or will be engaged across multiple stages of its research processes?*	General
	Which partner (academic, community, or both) hires personnel on the project? Who decides how the financial resources are shared? Please describe who decides how financial resources are shared. Who decides how the in-kind resources are shared? Please describe who decides how in-kind resources are shared. Think of the overall budget and how project financial resources are divided among community partners and academic partners. Please enter the percentage of financial resources shared with community partners.	Hiring and resource sharing
	How important was it to the guidance and development of this project for it to receive approval from • local community agency leadership?* • tribal government?* • the community IRB or research review board?* • the tribal IRB or research review board?*	Research integrity and governance practices
	To what extent does or will the community advisory group(s) play the following roles?: • Identifies research needs and priorities • Consults on cultural issues	Roles of advisory boards or groups

	• Strengthens collaborations between academic and community partners • Develops plans for using findings to benefit the community • Assists with sustainability planning	
	Do the formal agreements for the partnership include provisions or language about clear decision-making process (e.g., consensus vs. voting)?*	Formal agreements
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	Is this project associated with a research consortium, network, or infrastructure (e.g., a practice-based research network (PBRN), a clinical trials network (CTN), a clinical and translational science award (CTSA), or another type of established research consortium) with a community engaged component? Does this research consortium have a community advisory board?	General
	How would you describe this partnership?	Project features
	To what extent do the bodies who approve the participation of the community in the research ensure the following?: • Research ethics are followed • The research/intervention is grounded in the cultural perspectives of the community • The community's voice is part of the research • The research will benefit the community • The research is communicated to the community and other stakeholders	Approvals
	Does your partnership have written formal agreements such as a Memorandum of Agreement/Understanding or Tribal or Agency Resolution? Do the formal agreements for the partnership include provisions or language about • the distribution of funds? • a written mission statement? • written objectives? • community benefit? • clear expectation for partners' roles? • clear decision-making process (e.g., consensus vs. voting)?* • conflict resolution? • data use or sharing? • publication or authorship? • where the results will be presented or published? • how authorship will be determined?	Formal agreements

	• who will have the final authority to approve presentations or publications?	
	To what extent • does your institution's IRB support community engaged research projects? • are community engagement research practices (e.g. policy briefs, reports to community organizations, non-profits, or government agencies, etc.) incorporated into your institution's tenure or promotion guidelines?	Institutional practices
EXPANDED KNOWLEDGE; **New curricula, strategies + tools**	Has this project developed any of its own evaluation instruments (formative, process, or outcome) or measures?	Project outcomes
IMPROVED HEALTH + HEALTH CARE POLICIES + PROGRAMS; **Actionable, implemented, recognized solutions**	As a result of this partnership, have any IRB policies, procedures, or practices been developed or revised? Check all that apply. Were there other institutional policies or practices that were changed as a result of this study or partnership? Please describe the institutional policies or practices that were changed as a result of this study or partnership.	Project outcomes
Not aligned with Conceptual Model	This survey refers specifically to a research project that received federal funding in 2015: No [project name]. Are you the Principal Investigator (PI) on this research project? Please describe your role in this research project. On average, how often does the consortium community advisory board meet per year? Please give a whole number value, even if it is approximate. How many people are members of the consortium community advisory board? Please give a whole number value, even if it is approximate.	General
	On average, how often do community and academic research partners meet together over the course of a year?	Project features
	Approximately how many years has this currently funded project been in existence? Approximately how many years has this partnership been in existence? Please include total time, even when the partnership was not funded.	Length and size of project and partnership
	Is this study primarily a pilot, descriptive, intervention, policy, or dissemination implementation study? What terms do you use to describe the type of study you are conducting? Does your study have a policy component? Do you consider this project to be a multi-level intervention study? Which of the following levels do your study aims address? Check all that apply. (Response options: Individual, Family, Organization or Systems, Community, Policy)	Type of study

	Which of the following racial or ethnic groups are a major focus of this project? Please check all that apply. Which of the following population groups are a major focus of this project? Please check all that apply. (Response options: LGBTQ, low socioeconomic status, persons with disabilities, immigrants, refugees, additional population group[s]) Please describe the additional population group (s) that are a major focus of this project?	Populations and communities involved in project
	To the best of your knowledge, is the Principal Investigator (PI) of this project a member of the following racial or ethnic groups? (Response options: American Indian/Alaska Native. Asian. Native Hawaiian or Other Pacific Islander. Black or African American. White Hispanic or Latino.)	PI racial or ethnic groups
	To the best of your knowledge, is the Principal Investigator (PI) of this project a member of the following population groups? (Response options: LGBTQ. Low socio-economic status. Persons with disabilities. Immigrants Refugees. Additional population group. Please describe the additional population group that the PI is a member of.	PI population groups
	To the best of your knowledge, what is the gender identity of the Principal Investigator (PI) of this project? Please describe, to the best of your knowledge, the gender identity of the Principal Investigator (PI) of this project.	PI gender identity
	On average, how often does the research partnership meet with its community advisory group(s) per year?	Advisory boards or groups
	Are there any papers in press or published about this project? How many papers are published or in press about this project? Please give a whole number value, even if it is approximate. Has this project led to additional funding? Which of the following were sources of additional funding for this project? Check all that apply. Please briefly describe the other source(s) of funding. Are you willing to be contacted by this research team regarding sharing the evaluation instruments or measures that have been developed as part of this project?	Project outcomes

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Engage for Equity Key Informant Survey questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The articles discuss a range of academic-community collaborations and efforts across the United States that have focused on understanding "which partnering practices, under which contexts and conditions, contribute to research, community, and health equity outcomes."[3,9] Efforts were aimed at developing actionable knowledge that improves CBPR, CEnR, and participatory action research science. Efforts also focused on translating data to support equity and recognizing the struggles

and gifts within the community.[3] The articles discuss findings from three funding stages from the National Institutes of Health. Funding supported the development of the CBPR conceptual model, which contains four domains (context, equitable partnerships, research design/interventions, and outcomes). The model was refined through the development, testing, and implementation of two complementary assessment instruments – the KIS (described here) and the CES (described in another assessment instrument summary).[2,3,9] The instruments are for use by academic and community partners to assess and understand their perceptions of the partnering process and outcomes.[3]

Instrument description/purpose

The KIS is completed mainly by the PIs or project director(s) of academic-community partnerships to describe project-level features. The 97 questions in the instrument assess the following 18 validated (i.e., construct, factorial) focus areas:

- Project features
- Length and size of project and partnership
- Type of study
- Populations and communities involved in project
- PI racial or ethnic groups
- PI population groups
- PI gender identity
- Community challenges
- Reflective practices
- Training topics
- Hiring and resource sharing
- Research integrity and governance practices
- Approvals
- Advisory boards or groups
- Roles of advisory boards or groups
- Formal agreements
- Institutional practices
- Project outcomes[1,3,5,7]

Studies have also used the KIS to explore the relationship between the type of final approval used in CEnR projects (e.g., no community approval, agency staff approval) with governance processes (e.g., control of resources and agreements), productivity measures, and perceived outcomes.[1,6,8]

KIS presents questions with open-ended, yes/no, various Likert scales, and "check the answers that apply" response options.

The KIS instrument in English and Spanish can be accessed here: https://engageforequity.org/tool_kit/surveys/key-informant-survey-introduction/.

Engagement involved in developing, implementing, or evaluating the instrument

While the research that formed the foundation for the KIS took place over three funding stages, the entire research trajectory grew to be called "Engage for Equity". Across these stages, academic and community collaborations took place between a range of partners including: Community-Campus Partnerships for Health, the National Indian Child Welfare Association, the Rand Corporation, the University of Waikato (New Zealand), the National Congress of Americans Indians (NCAI) Policy Research Center (PRC), the University of New Mexico Center for Participatory Research (UNM-CPR), the University of Washington's Indigenous Wellness Research Institute (UW-IWRI), and a think tank of academic and community CBPR experts.[3,9] These partnerships supported the development, refinement, and pretesting of the KIS, including its "readability, length, content, sequence, and usability."[3]

A shortened pragmatic version of the KIS and CES, called Partnership for Health Improvement and Research Equity (PHIRE), with 30 questions (also available in Spanish) was developed based on extensive statistical analyses and expert feedback from communities and academic partners. PHIRE represents the same focus areas as the longer instruments, with emphasis on a

few core questions from the KIS and the CES. PHIRE has been piloted in multiple research, coalition, and engagement settings, and can be used for annual reflection and evaluation for partners who want to assess their strengths and areas to grow (please contact nwallerstein@salud.unm.edu to obtain use of the PHIRE).

Additional information on populations engaged in instrument use

Two sets of internet surveys were conducted in 2009 and 2015. The first set of surveys were included in the mixed-methods research project Research for Improved Health.[3,8] PIs with research-focused funding and a minimum of two years of remaining in projects completed KIS. "Of these projects, 47 were located in Native communities (single or intertribal communities) and 153 were located in other communities (including 24 Hispanic, 21 multiple ethnicities, 20 African American, 7 Asian American, and 87 no specific ethnicity)."[8] In 2009, the questions were refined and translated into Spanish.

In 2015, a total of 179 federally funded CBPR and CEnR projects of diverse populations across the United States participated in an analysis of KIS. Among the funded projects, 189 PIs (53% response rate) completed KIS. "Gift cards of $20.00 were sent as incentives in advance of participants receiving their KIS … Internet links."[3]

Notes

- **Potential Limitations:** Several articles in this summary referenced self-reported response bias and selection/sampling biases. The articles indicated that bias may have been introduced due to the fact that only projects identified as CBPR or CEnR in the federal RePORTER register were included. These results may not be applicable to other research projects with limited community engagement.[1-3,5,7] The cross sectional analysis of internet survey and cases studies of only NIH-funded partnerships noted that the results do not support "causal/temporal inferences particularly as they relate to health improvement or reduced inequities."[2,5] Lastly, one article noted that considerations of survey length prevented thorough exploration of all aspects of structural governance.[1]
- **Important findings:** One article on the Engage for Equity effort noted "that the theoretical grounding and extant literature supports CEnR projects to engage in collective reflection to reap the full benefits of community engagement." The effort supported understanding of the role of power within partnerships, including CBPR and CEnR projects. The Engage for Equity study design allowed for the opportunity to also conduct a randomized control trial of delivery of tools and resources developed in the effort through workshops or through the web, collect longitudinal data from 68 partnerships of the total sample, and analyze approaches to "building empowerment through collective-reflection" and action. The authors believe that "other tools and trainings, such as resources to help partnerships choose an equitable decision-making model or combatting racism, may be needed after partners identify areas of strength or concern."[3]

  Further analysis of the KIS among CEnR projects in Native communities found that involving tribal governments or health boards (TB/HG) resulted in "greater community control of resources, greater data ownership, greater authority on publishing, greater share of financial resources for the community partner, and an increased likelihood of developing or revising IRB policies." The results provided evidence that supports the need for strong governance in communities (i.e., "regulation as the focus is on balancing the needs of protection of individuals from harm while trying to foster scientific innovation"), and stewardship over projects, benefit, and control over research. Strong governance could take place through "community-driven agreements, access to resources, and development or revision of IRB policies."[8]

  Analysis of the 2015 surveys of the KIS found that counter to principles of CBPR, where shared decision-making and co-administration of the research are expected, among funded CEnR projects examined, decisions tended to be made more by academic partners than community members. However, shared decision-making related to financial resources and hiring personnel did take place in approximately 30–40% of projects.[1] Additionally, budget sharing between academic and community partners seemed relatively low for these kinds of collaborative projects (an average of 28.5% of projects), though higher for Native projects. "Approval on behalf of the community, community-based advisors as co-leadership, joint decision-making, and resource-sharing practices can help identify potential areas for partners to strengthen along their CBPR journey."[1]
- **Future research needed:** Research exploring all aspects of structural governance is needed.[1] Longitudinal study designs were also referenced as an area of further research.[2]
- **Supplemental information:** Additional analysis has been conducted using KIS on multiple kinds of partnerships, beyond the two internet survey sets in 2009 and 2015 (i.e., projects involving healthcare and government partners). The findings

from the research, the most complete version of the KIS (see Dickson, 2020 below), and other information on the development and use of this instrument can be found in the following articles:

- Oetzel, J. G., B. Boursaw, M. Magarati, E. Dickson, S. Sanchez-Youngman, L. Morales, S. Kastelic, M. M. Eder, and N. Wallerstein. 2022. Exploring theoretical mechanisms of community-engaged research: a multilevel cross-sectional national study of structural and relational practices in community-academic partnerships. *International Journal for Equity in Health* 21(1). https://doi.org/10.1186/s12939-022-01663-y.
- Boursaw, B., J. G. Oetzel, E. Dickson, T. S. Thein, S. Sanchez-Youngman, J. Pena, M. Parker, M. Magarati, L. Littledeer, B. Duran, and N. Wallerstein. 2021. Scales of Practices and Outcomes for Community-Engaged Research. *American Journal of Community Psychology* 67(3-4):256-270. https://doi.org/10.1002/ajcp.12503.
- Hanza, M., A. L. Reese, A. Abbenyi, C. Formea, J. W. Njeru, J. A. Nigon, S. J. Meiers, J. A. Weis, A. L. Sussman, B. Boursaw, N. B. Wallerstein, M. L. Wieland, and I. G. Sia. 2021. Outcomes of a Community-Based Participatory Research Partnership Self-Evaluation: The Rochester Healthy Community Partnership Experience. *Progress in Community Health Partnerships* 15(2):161-175. https://doi.org/10.1353/cpr.2021.0019.
- Dickson, E., M. Magarati, B. Boursaw, J. Oetzel, C. Devia, K. Ortiz, and N. Wallerstein. 2020. Characteristics and Practices Within Research Partnerships for Health and Social Equity. *Nursing Research* 69(1):51-61. https://doi.org/10.1097/NNR.0000000000000399.
- Duran, B., J. Oetzel, M. Magarati, M. Parker, C. Zhou, Y. Roubideaux, M. Muhammad, C. Pearson, L. Belone, S. H. Kastelic, and N. Wallerstein. 2019. Toward Health Equity: A National Study of Promising Practices in Community-Based Participatory Research. *Progress in Community Health Partnerships* 13(4):337-352. https://doi.org/10.1353/cpr.2019.0067.
- Reese, A. L., M. H. Marcelo, A. Abbenyi, C. Formea, S. J. Meiers, J. A. Nigon, A. Osman, M. Goodson, J. W. Njeru, B. Boursaw, E. Dickson, M. L. Wieland, I. G. Sia, and N. Wallerstein. 2019. The Development of a Collaborative Self-Evaluation Process for Community-Based Participatory Research Partnerships Using the Community-Based Participatory Research Conceptual Model and Other Adaptable Tools. *Progress in Community Health Partnerships* 13(3):225-235. https://doi.org/10.1353/cpr.2019.0050.
- Lucero, J., N. Wallerstein, B. Duran, M. Alegria, E. Greene-Moton, B. Israel, S. Kastelic, M. Magarati, J. Oetzel, C. Pearson, A. Schulz, M. Villegas, and E. R. White Hat. 2018. Development of a Mixed Methods Investigation of Process and Outcomes of Community-Based Participatory Research. *Journal of Mixed Methods Research* 12(1):55-74. https://doi.org/10.1177/1558689816633309.

Five Factor Scale for Nonleaders

Lempa, M., R. M. Goodman, J. Rice, and A. B. Becker. 2008. Development of scales measuring the capacity of community-based initiatives. *Health Education and Behavior* 35(3):298-315. https://doi.org/10.1177/1090198106293525.

ASSESSMENT INSTRUMENT OVERVIEW

The **Five Factor Scale for Nonleaders** has 38 questions for use by communities and public health practitioners. It assesses participant perceptions of community capacity to support and address local public health initiatives. The Five Factor Scale for Nonleaders is part of a set of two instruments that also includes the Six Factor Scale for Leaders.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Local, community-based initiatives for community improvement
Grassroots citizen ventures
Various health concerns
United States

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Broad alignment
Diversity + inclusivity
Partnerships + opportunities
Acknowledgment, visibility, recognition
Sustained relationships
Mutual value
Trust
Shared power

PLACE(S) OF INSTRUMENT USE

Community/community-based organization

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Factorial validity
Internal consistency reliability

YEAR OF USE/TIME FRAME

2000-2003

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in the Five Factor Scale for Nonleaders were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the Five Factor Scale for Nonleaders with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

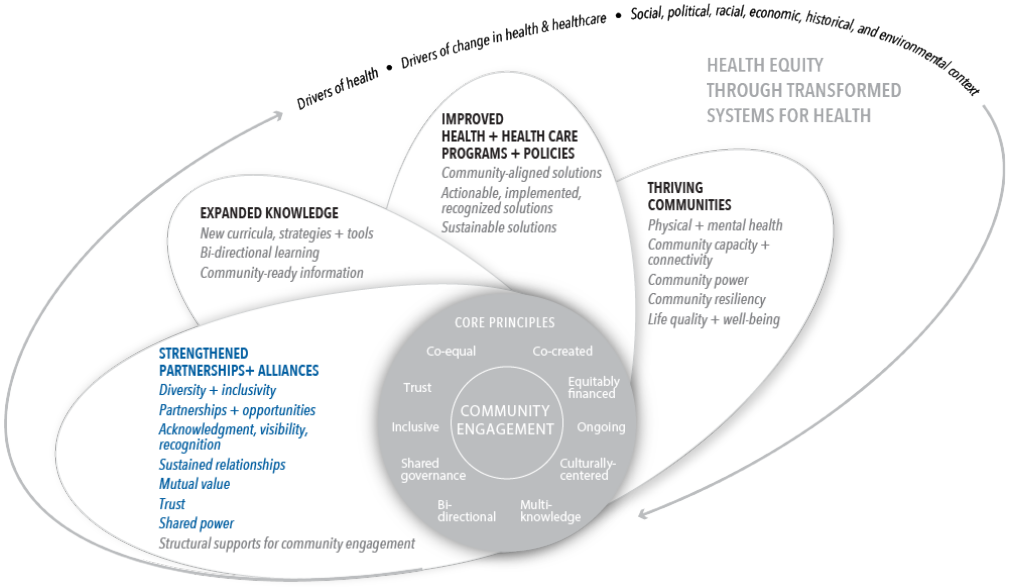

Figure 1 | Alignment of Five Factor Scale for Nonleaders with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the questions of the Five Factor Scale for Nonleaders and validated focus areas with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s), the individual questions from the Five Factor Scale for Nonleaders transcribed as they appear in the instrument (with minor formatting changes for clarity), and the validated focus areas presented in the article.

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS	VALIDATED FOCUS AREA(S)
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Broad alignment with all indicators in this domain**	The project is effective in getting information to community members.	Communication with community members
	Project members do not give up when the project faces challenges.	Ability and commitment to organize action

	The leadership works appropriately with influential community residents.	Relationship with influential others
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	Community members get involved in the project's activities.	Communication with community members
	Project members can work with diverse groups with different interests.	Ability and commitment to organize action
	The leadership has relationships with diverse groups that can help the project.	Relationship with influential others
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	The leadership has relationships with public officials who can help the project. The project can gain support from political figures when needed. The project has access to powerful people.	Relationship with influential others
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	The leadership • listens to the ideas and opinions of project members. • shows compassion for people. • is motivated by helping others.	Leadership
	People in the community • know the name of the project. • are knowledgeable about what the project does. • know who the project's leaders are.	Communication with community members
	The project is addressing important community concerns.	Ability and commitment to organize action
	Public officials listen to the ideas and opinions of the leadership.	Relationship with influential others
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Sustained relationships**	The leadership communicates the project's concerns to community members.	Communication with community members
	The community has access to project members.	Ability and commitment to organize action
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Mutual value**	Project members treat • people outside the community with respect. • community members with respect.	Ability and commitment to organize action
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	People involved with the project trust the leadership. The leadership is • consistent in its principles and values. • follows through on their commitments.	Leadership

	People in the community listen to the opinion/position taken by the project.	Communication with community members
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	Project members support the leadership's principles or values The leadership knows when to compromise.	Leadership
	The leadership gets community members to participate actively in the project	Communication with community members
	Project members have or can obtain information the project needs to succeed. The project uses a team approach in its day-to-day operations. Project members help establish the project's day-to-day operations.	Ability and commitment to organize action
Not aligned with Conceptual Model	The leadership • does everything it can to accomplish project goals. • keeps the project running smoothly.	Leadership
	The project has • the supplies it needs (e.g., paper, postage). • adequate space or has access to adequate space to conduct its business. • adequate space or has access to adequate space for meetings. • the equipment it needs (e.g., computer, fax machine, copier).	Resources
	Project members put in extra time when necessary.	Ability and commitment to organize action

Table 1 | Five Factor Scale for Nonleaders questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

This article discussed a multiple-case study which took place in a predominantly African-American city in the southern United States and conducted testing with 291 nationwide initiatives representing local initiatives or grassroots citizen ventures. Two quantitative instruments, the Five Factor Scale for Nonleaders (described here) and the Six Factor Scale for Leaders (described in another assessment instrument summary), were developed to assess community capacity. Community capacity often includes "the characteristics of communities that affect their ability to identify, mobilize, and address social and public health problems," and requires elements such as leadership, networks, resources, and community power.

Instrument description/purpose

The Five Factor Scale for Nonleaders assesses the capacity of participants in local health initiatives, but who do not have a leadership role in the initiative or those who are more intermittently involved as compared to leaders or active members. The instrument assesses the following validated (i.e., factorial) focus areas:

- Leadership
- Resources

- Ability and commitment to organizing action
- Communication with community members
- Relationship with influential others

The Five Factor Scale for Nonleaders includes 38 questions with response options using a 10-point Likert scale ranging from "not at all" to "completely."

The Five Factor Scale for Nonleaders can be accessed here: https://nam.edu/wp-content/uploads/2023/01/Five-Factor-Scale-Title-Page-and-Instrument-v2.pdf.

Engagement involved in developing, implementing, or evaluating the instrument

The survey development process that produced the Five Factor Scale for Nonleaders was preceded by a qualitative multi-case study that took place in a large and predominantly African American city in the southern United States. The qualitative study conducted in-depth interviews with core members of eight community initiatives representing "faith-based or other well-established community organizations or in grassroots voluntary associations." Three to eight participants from each initiative were engaged. The members were 20-80 years of age and the initiatives ranged from "public health or social issues such as HIV/AIDS, housing quality, violence, and neighborhood improvement." The findings were verified with the participants and used to develop and refine a 160-item instrument that was reviewed by a panel of "four community-based representatives, seven university-based academicians, and one local advisory board member… [for] clarity, appropriateness, and wording." The instrument was pilot tested by leaders and nonleaders from communities across the U.S. representing 291 community-based initiatives.

Additional information on populations engaged in instrument use

420 organizations verbally agreed to participate in the pilot test. The final sample included 702 responses from 291 community-based initiatives. "Respondents represented all three levels of participation (Level 1: leaders, n = 251; Level 2: core participants, n = 264; Level 3: peripheral initiative participant, n = 187)."

Notes

- **Potential limitations:** There are likely several community initiatives that operate through volunteer efforts or are understaffed, which may have limited their time and ability to participate in the survey. Additionally, the number of initial items tested, the request for three respondents per initiative, and the lack of incentives provided to participate may have been prohibitive. These challenges may have influenced participation in the pilot testing or influenced the responses (i.e., respondent fatigue resulting in missing items).
- **Important findings:** The article highlights that leadership is central to community capacity. "As both [leader and nonleader instruments] indicate unequivocally, competent leadership drives initiative success in achieving a desired vision…It is the leading factor in both [instruments] and contributes more to the variance than all other factors combined." Additionally, other elements being measured in the instruments (e.g., networking both within the community and externally to the community) reflect the influence that leadership has. Given the complexity of community capacity, triangulation of perspectives may be needed to ensure that the results are holistic and valid.

  There is a high degree of congruence across leaders and nonleaders. This is reflected in the fact that 50% (22 out of 44) of the questions for the Six Factor Scale for Leaders and 58% (22 out of 38) of the questions for the Five Factor Scale for Nonleaders are identical**.** It is important to note that leaders and nonleaders represent and bring distinct perspectives into the initiatives. As a result, they may focus on different aspects of "capacity." For example, leaders may be more interested in networking with people external to the community, while nonleaders prefer to network with the most influential community members. This reflects the need for "similar but separate measurement instruments."

  Moreover, while instruments such as these provide rich information and data to support the measurement of capacity, they cannot fully describe the elements that result in protected or improved community health. End users such as community members, public health practitioners, and consultants should note that a combination of qualitative and quantitative measures are necessary. Scaled instruments can be used as a diagnostic tool and to begin a dialogue with communities about their assets and opportunities to use multilevel and multimethod approaches to "build on those

assets for the improvement of communities." The authors also cautioned foundations against inappropriately using the instruments to determine if a community should receive funding based on the capacities demonstrated by the instruments.

- **Future research needed:** "Capacity is not solely an internal construct and should be examined from various points of view and at different levels of the socioecologic framework. Exploring external forces on community initiatives will offer another angle from which to view the same socioecologic level as in the current study." In-depth exploration of community capacity among various community-based organizations is critical, as is continued research on the best measures to assess various dimensions of capacity to allow community-based organizations to identify their strengths and increase their capacity to promote change for their communities.

Guidelines for Participatory Research in Health

Sandoval, J. A., J. Lucero, J. Oetzel, M. Avila, L. Belone, M. Mau, C. Pearson, G. Tafoya, B. Duran, L I. Rios, N. Wallerstein. 2012. Process and outcome constructs for evaluating community-based participatory research projects: a matrix of existing measures. Health Education Research 27(4):680-690. https://doi.org/10.1093/her/cyr087.[1]

Frankish, C. J., R. Gold, L. W. Green, M. W. Kreuter, M. W. Kreuter, S. Mercer, D. Morisky, S. Nair, J. Ottoson, B. Poland, and I. Rootman. 1995. Guidelines and Categories for Classifying Participatory Research Projects in Health. Available at: http://www.lgreen.net/guidelines.html (accessed September 1, 2020).[2]

ASSESSMENT INSTRUMENT OVERVIEW

Guidelines for Participatory Research in Health[1,2] has 25 questions for use by academic and community researchers and research funding agencies. It assesses grant applications and evaluates participatory research proposals.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Academic researchers
Community researchers
Canada

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Diversity + inclusivity
Partnerships + opportunities
Acknowledgment, visibility, recognition
Mutual value
Trust
Shared Power
Structural supports for community engagement

Expanded knowledge
Bi-directional learning

Thriving communities
Community capacity + connectivity
Community power

PLACE(S) OF INSTRUMENT USE

Funder, philanthropy, and other investors
Community/community-based organization
Academic/research institution/university

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Content validity
Inter-rater reliability

YEAR OF USE/TIME FRAME

Not specified

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in the Guidelines for Participatory Research in Health were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the Guidelines for Participatory Research in Health with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

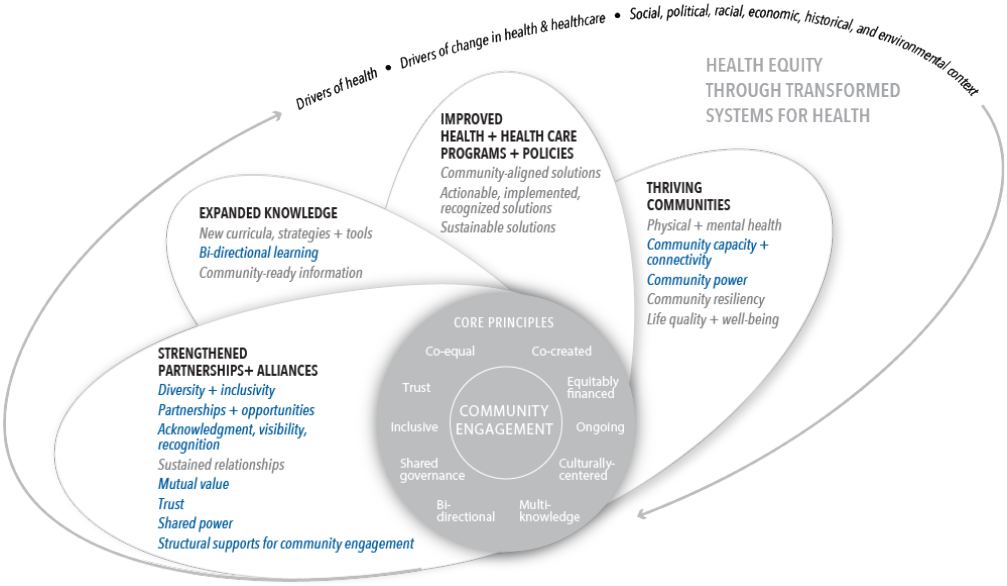

Figure 1 | Alignment of Guidelines for Participatory Research in Health with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the Guidelines for Participatory Research in Health's individual questions with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s)

and indicator(s) and the individual questions from the Guidelines for Participatory Research in Health transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	1a) Is the community of interest clearly described or defined? 1b) Do members of the defined community participating in the research have concern or experience with the issue? 1d) Is attention given to barriers to participation, with consideration of those who have been under-represented in the past? 3d) Does the scope of the research encompass some combination of political, social and economic determinants of health? 5b) Is the potential of the defined community for action reflected by the research process?*
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	4b) For community participants, does the process allow for learning about research methods? 5a) Is the potential of the defined community for individual and collective learning reflected by the research process?
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	5b) Is the potential of the defined community for action reflected by the research process?*
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Mutual value**	5c) Does the process reflect a commitment by researchers and community participants to social, individual or cultural actions consequent to the learning acquired through research? 6a) Do community participants benefit from the research outcomes?
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	1e) Has attention been given to establishing within the community an understanding of the researchers' commitment to the issue?
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	1c) Are interested members of the defined community provided opportunities to participate in the research process? 1f) Are community participants enabled to contribute their physical and/or intellectual resources to the research process? 2a) Did the impetus for the research come from the defined community? 2b) Is an effort to research the issue supported by members of the defined community? 4a) Does the research process apply the knowledge of community participants in the phases of planning, implementation and evaluation? 4f) Are community participants involved in analytic issues: interpretation, synthesis and the verification of conclusions? Is there attention to or an explicit agreement • 6b) for acknowledging and resolving in a fair and open way any differences between researchers and community participants in the interpretation of the results?* • 6c) between researchers and community participants with respect to ownership of the research data?*

	• 6d) between researchers and community participants with respect to the dissemination of the research results?*
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	4d) Does the process allow for flexibility or change in research methods and focus, as necessary? 4e) Are procedures in place for appraising experiences during implementation of the research? Is there attention to or an explicit agreement • 6b) for acknowledging and resolving in a fair and open way any differences between researchers and community participants in the interpretation of the results?* • 6c) between researchers and community participants with respect to ownership of the research data?* • 6d) between researchers and community participants with respect to the dissemination of the research results?*
EXPANDED KNOWLEDGE; **Bi-directional learning**	3a) Can the research facilitate learning among community participants about individual and collective resources for self-determination? 4c) For researchers, does the process allow for learning about the community health issue?
THRIVING COMMUNITIES; **Community capacity and connectivity**	3b) Can the research facilitate collaboration between community participants and resources external to the community?
THRIVING COMMUNITIES; **Community power**	3c) Is the purpose of the research to empower the community to address determinants of health?

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Guidelines for Participatory Research in Health questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article notes that health research funding agencies and reviewers who appraise proposals could use questions to "evaluate grant applications proposing participatory research." The Guidelines for Participatory Research in Health instrument represents a systematic attempt to make explicit and measure the principles and defining characteristics of participatory research. "Participatory research is defined as systematic inquiry, with the collaboration of those affected by the issue being studied, for purposes of education and taking action or effecting change." Health promotion researchers, including academic and community researchers, could use the instrument in planning their participatory projects, making explicit the essential components of the process. The instrument could be used alongside other methods to evaluate the merits of any research proposal; however, it is not intended to be used in the absence of other pertinent procedures.[2]

Instrument description/purpose

The Guidelines for Participatory Research in Health instrument presents a generic set of questions "that define participatory research." The instrument and its 25 questions measure six focus areas:

- Participants and the nature of their involvement
- Origin of the research question
- Purpose of the research
- Process and contextómethodological implications (or implications of the process and context of engaging community participants on the research methodology)
- Opportunities to address the issue of interest

- Nature of the research outcomes

Each question in the instrument has five response option categories. The response option category differs depending on the question; however, the authors note that the option categories "increase in appropriateness to participatory research from left to right." Projects or grant applications can be reviewed for the distribution trends of responses, where, for example, a greater frequency of responses on the left may "indicate a lesser alignment with the principles of participatory research." The authors highlighted avoiding using a single summative total score to assess responses and cautioned users that "some of the classification categories do not follow a simple hierarchy from weak to strong participatory research." Of note, "the most appropriate level for some projects on some questions might be more toward the middle or even to the response options toward the left."[2]

A link for this instrument is currently unavailable, but **Table 1** provides the specific questions.

Engagement involved in developing, implementing, or evaluating the instrument

External experts, who represented most regions of Canada, reviewed the instrument during 2 eight-hour workshops that took place six months apart. 29 out of 41 individuals who were involved in unique participatory research projects in Canada completed the instrument. The results from the assessment instrument were used to make iterative content and readability revisions to the guidelines.[2]

Additional information on populations engaged in instrument use

Not specified.

Notes

- **Potential limitations:** While attempting to ensure specificity and concreteness to the evaluation of participatory research practices, the guidelines may prevent the opportunity for adaptation of the research agenda to suit local needs.[2]
- **Important findings:** The instrument and the classifications allow users to create a participatory profile of a funding proposal or project. The project or proposal will determine which guidelines in the instrument are applicable or the degree to which the guidelines should be applied. "Variability between project profiles may reflect differences in alignment with principles of participatory research but such differences may not necessarily reflect differences in the appropriate application of participatory research principles."[2]
- **Future research needed:** Further "development, testing and application of the guidelines will strengthen their utility in supporting participatory research and its contribution to knowledge development in health promotion." While content validity for this instrument has been established, appraisal of other forms of validity would support the evaluation.[2]

Health Democracy Index

Boivin, A., A. L'Espérance, F. Gauvin, V. Dumez, A. C. Macaulay, P. Lehoux, and J. Abelson. 2018. Patient and public engagement in research and health system decision making: A systematic review of evaluation tools. *Health Expect* 21(6):1075-1084. http://doi.org/10.1111/hex.12804.[1]

Souliotis, K., E. Agapidaki, L. E. Peppou, C. Tzavara, G. Samoutis, and M. Theodorou. 2016. Assessing Patient Participation in Health Policy Decision-Making in Cyprus. *International Journal of Health Policy and Management* 5(8):461-466. http://dx.doi.org/10.15171/ijhpm.2016.78.[2]

ASSESSMENT INSTRUMENT OVERVIEW

The **Health Democracy Index (HDI)**[1,2] has eight questions and is used in health policy. It measures the extent of patient participation in the health policy decision-making process.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Members of patient associations
People with various chronic health conditions
Cyprus, Greece

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Diversity + inclusivity
Partnerships + opportunities
Shared power

Improved health + health care programs + policies
Community-aligned solutions

PLACE(S) OF INSTRUMENT USE

Community/community-based organization

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Construct validity
Convergent validity
Internal consistency reliability
Test-retest reliability

YEAR OF USE/TIME FRAME

Not specified

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in HDI were realigned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of HDI with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

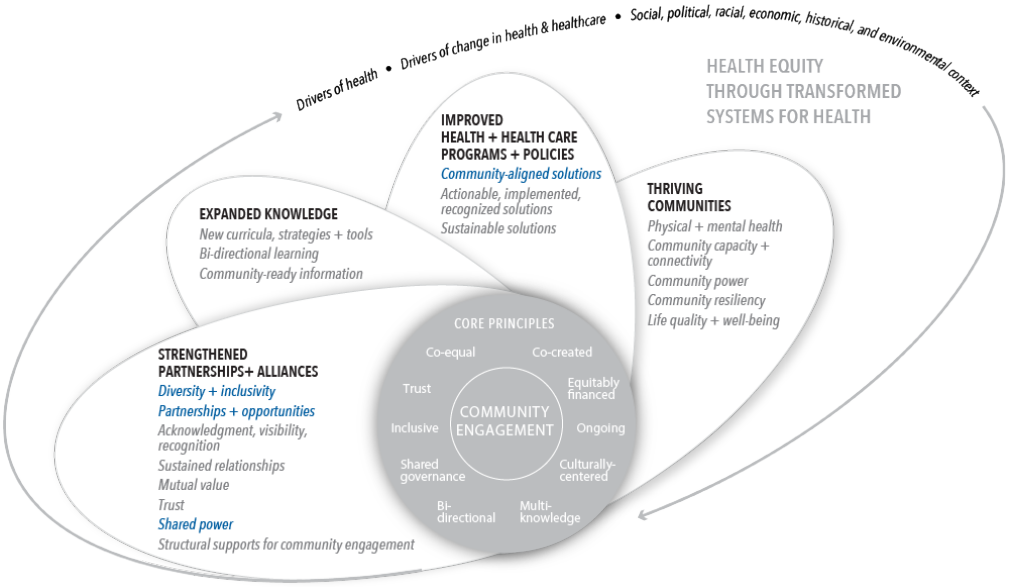

Figure 1 | Alignment of the Health Democracy Index with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of HDI's individual questions and validated focus area with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s), the individual questions from the HDI transcribed as they appear in the instrument (with minor formatting changes for clarity), and the validated focus area(s) presented in the article.

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS	VALIDATED FOCUS AREA(S)
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	Does your patient organization take part in • boards of hospitals? • ethics committees for clinical trials? • health technology assessment (HTA) procedures?	PA participation

STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	Does your patient organization take part in workshops or panels • held at the Ministry of Health (MoH)? • in other important organizations, pertinent to health?	PA participation
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	Does your patient organization take part in reforms or crucial decisions in health policy?	PA participation
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Community-aligned solutions**	Does your patient organization take part in the national parliament during decision-making for important health policies/issues? How often do you observe a substantial change in the content of a health policy decision as a result of interference from a patient organization? (yours or another's)	PA participation

Table 1 | Health Democracy Index questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article discusses increasing patient awareness concerning participation in health policy decision-making. Patient associations (PAs), defined as not-for profit organizations that are patient-focused with a majority of patients or caregivers represented in the governing bodies,[i] can serve a critical role in "facilitating democracy, promoting patients' interests, and influencing health policies." The HDI is a research assessment instrument used to measure patient involvement in the process of health policy decision-making.[2]

Instrument description/purpose

HDI assesses organizational design, governance, and policy-making using one validated (i.e., construct, convergent) focus area:

- PA participation

HDI has eight questions and uses six-point Likert scales ranging from "absent" to "very high" and "never" to "very often," as well as a seven-point Likert scale that ranges from "it is not a legal requirement and it never happens" to "it is a legal requirement and it always happens."[2]

The HDI instrument can be found here: http://dx.doi.org/10.15171/ijhpm.2016.78.

Engagement involved in developing, implementing, or evaluating the instrument

Once the construct of PA participation in health policy processes were defined, it was reviewed by a panel of 34 stakeholders representing knowledgeable and experienced PA patient members and representatives, health policy makers, health care providers, and researchers. Questions for the HDI were drafted using questions identified in the literature. A focus group on PA participation in health policy processes with 12 PA patient members was conducted, resulting in the development of 10 questions. The initial panel of stakeholder experts who reviewed the construct definition also reviewed and provided comments on the questions. Their input reduced the list of questions to eight. The panel also identified that participation in different aspects of health policy were not of equal importance. These comments led to the assignment of weights to each question in the HDI.[2]

Additional information on populations engaged in instrument use

[i] European Patients Forum. n.d. What is a patient organization? Available at: https://www.eu-patient.eu/members/what-is-a-patient-organisation/ (accessed August 27, 2022).

Of the 114 participants who completed the survey 19% were men, 80% were women, 64% were married, 72% had high educational level, and 64% were married.[2]

Notes

- **Potential limitations**: HDI does not identify or provide context for the barriers PAs may experience or how these barriers may prevent PAs from being effectively involved in health policy decision-making. Understanding these barriers is necessary to improving the "quality and performance of health systems and services as well as the health outcomes of the population."[2]
- **Important findings**: This study of a convenience sample of 114 PA patient members revealed that there was more PA participation in consultations in health-related organizations, the Ministry of Health, and in reforms or crucial decisions in health policy. PA participation was less documented "in hospital boards, Ethics committees for clinical trials, and health technology assessment procedures," potentially due to a lack of resources, tools, or skills preventing PAs from effectively participating and advocating for the health needs of members.[2]
- **Future research needed:** The study and the small number of participants may not be representative of the Cyprus patient population. Future research should explore the type of chronic disease patients have and the influence it may have on PA participation.[2]
- **Supplemental information:** Additional research has been conducted using the Health Democracy Index on other populations (i.e., other patient organizations in Greece, France, and Italy; patients with cancer) and to further validate of the scale. The findings from the research can be found in the following articles:
    - Souliotis, K., E. Agapidaki, L. E. Peppou, C. Tzavara, D. Varvaras, O. C. Buonomo, D. Debiais, S. Hasurdjiev, and F. Sarkozy. 2018. Assessing Patient Organization Participation in Health Policy: A Comparative Study in France and Italy. *International Journal of Health Policy Management* 7(1):48-58. https://doi.org/10.15171/ijhpm.2017.44.
    - Souliotis, K., L. E. Peppou, E. Agapidaki, C. Tzavara, D. Debiais, S. Hasurdjiev, and F. Sarkozy. 2018. Health democracy in Europe: Cancer patient organization participation in health policy. *Health Expectations* 21(2):474-484. https://doi.org/10.1111/hex.12638.
    - Souliotis, K., L. E. Peppou, E. Agapidaki, and C. Tzavara. 2018. Health Democracy Index: Development and Validation of a Self-Reported Instrument for Measuring Patient Participation in Health Policy. *Frontiers of Public Health*. https://doi.org/10.3389/fpubh.2018.00194.

Internal Coalition Effectiveness Instrument

Sandoval, J. A., J. Lucero, J. Oetzel, M. Avila, L. Belone, M. Mau, C. Pearson, G. Tafoya, B. Duran, L I. Rios, and N. Wallerstein. 2012. Process and outcome constructs for evaluating community-based participatory research projects: a matrix of existing measures. *Health Education Research* 27(4):680-690. https://doi.org/10.1093/her/cyr087.[1]

Cramer, M. E., J. R. Atwood, and J. A. Stoner. 2006. Measuring Community Coalition Effectiveness Using the ICE Instrument. *Public Health Nursing* 23(1):74-87. https://doi.org/10.1111/j.0737-1209.2006.230111.x.[2]

ASSESSMENT INSTRUMENT OVERVIEW

The **Internal Coalition Effectiveness (ICE)**[1,2] instrument has 30 questions and is used by public health nurses. It evaluates the strengths and areas of improvement in community coalitions.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Youth
Community coalition
Tobacco prevention
Reducing secondhand smoke in public
Midwest
United States

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances

Diversity + inclusivity
Partnership + opportunities
Acknowledgment, visibility, recognition
Sustained relationships
Mutual value
Trust
Shared power

Expanded knowledge

Bi-directional learning

PLACE(S) OF INSTRUMENT USE

Community/community-based organization

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Construct validity
Content validity
Internal consistency reliability

YEAR OF USE/TIME FRAME

Not specified

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in ICE were realigned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of ICE with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

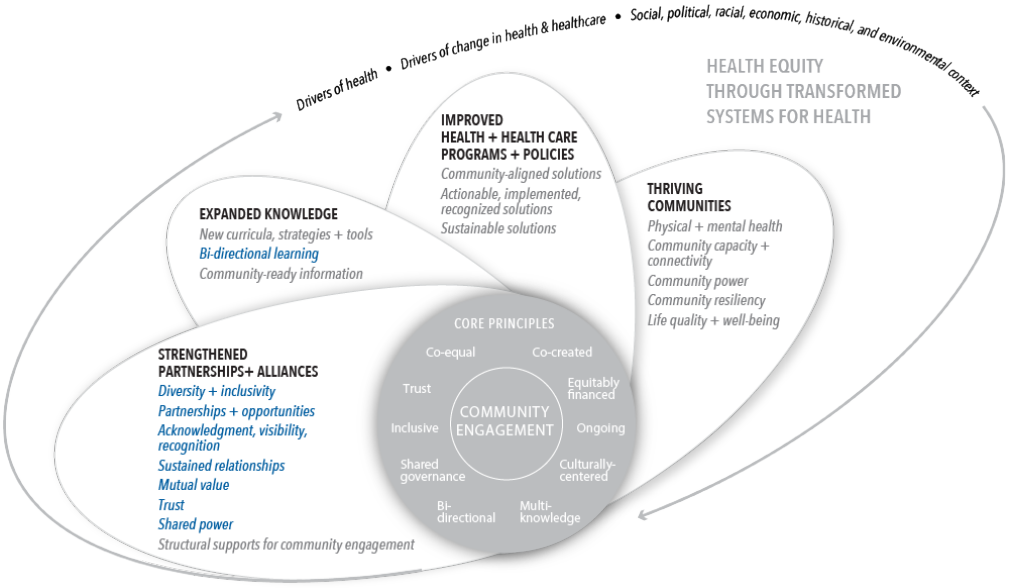

Figure 1 | Alignment of the Internal Coalition Effectiveness instrument with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of ICE's individual questions and validated focus areas with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s), the individual questions from ICE transcribed as they appear in the instrument (with minor formatting changes for clarity), and the validated focus area(s) presented in the article.

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS	VALIDATED FOCUS AREA(S)

STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	Section 2: 16. Leaders of my coalition work for coalition success by…promoting the involvement of a broad base of members in the work of the coalition.	Efficient practices
	Section 1: 8. Members of my coalition…work together to establish positive relationships with community members whom the coalition wants to engage and mobilize. Section 2: 22. Leaders of my coalition work for coalition success by…establishing positive relationships with community members that the coalitions want to engage and mobilize.	Relationships
	Section 1: 11. Members of my coalition…have a sense of inclusivity that engages a variety of public and private individuals from the community in the coalition – from elected officials to community leaders and residents. Leaders of my coalition work for coalition success by… • Section 2: 27. facilitating a sense of inclusivity that engages a variety of public and private individuals from the community in the coalition – from elected officials to community leaders and residents. • Section 2: 28. working to engage a broad cross section of the community to participate in the coalition's work.	Participation
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	Section 2: 18. Leaders of my coalition work for coalition success by…" developing other leaders within the coalition.*	Efficient practices
	Section 2: 21. Leaders of my coalition work for coalition success by…providing resources to develop leadership skills among coalition members.*	Knowledge and training
	Section 2: 23. Leaders of my coalition work for coalition success by…facilitating positive community relationships with other local key players and stakeholders involved in the issues.	Relationships
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	Section 2: 24. Leaders of my coalition work for coalition success by…building respectful relationships between the coalition and the community.	Relationships
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Sustained relationships**	Section 1: 4. Members of my coalition…work together to coordinate coalition activities to avoid duplication of services and efforts.	Efficient practices
	Section 1: 13. Members of my coalition…take the necessary corrective action when problems arise regarding lack of activity implementation by other coalition members.* Section 2: 30. Leaders of my coalition work for coalition success by…taking the necessary corrective action when problems arise regarding lack of activity implementation by individual coalition members.*	Activities
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Mutual value**	Section 1: 5. Members of my coalition…work together to strengthen each other's advocacy efforts.	Efficient practices
	Section 1: 13. Members of my coalition…take the necessary corrective action when problems arise regarding lack of activity implementation by other coalition members.* Section 2: 30. Leaders of my coalition work for coalition success by…taking the necessary corrective action when problems arise regarding lack of activity implementation by individual coalition members.*	Activities

STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	Section 2: 26. Leaders of my coalition work for coalition success by…facilitating open communication within the coalition and with the coalition leaders.	Participation
	Section 1: 13. Members of my coalition…take the necessary corrective action when problems arise regarding lack of activity implementation by other coalition members.* Section 2: 30. Leaders of my coalition work for coalition success by…taking the necessary corrective action when problems arise regarding lack of activity implementation by individual coalition members.*	Activities
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	Members of my coalition… • Section 1: 1. have a shared social vision. • Section 1: 2. agree with our coalition's mission and purpose. Leaders of my coalition work for coalition success by… • Section 2: 14. facilitating a shared social vision among coalition members. • Section 2: 15. facilitating the process of developing agreement among coalition members about the mission and purpose.	Social vision
	Section 1: 3.Members of my coalition…work together to make the coalition's financial resources go substantially further. Section 2: 18. Leaders of my coalition work for coalition success by…" developing other leaders within the coalition.*	Efficient practices
	Leaders of my coalition work for coalition success by… • Section 2: 19. providing resources to keep coalition members current on issue- related legislation. • Section 2: 21. providing resources to develop leadership skills among coalition members.*	Knowledge and training
	Members of my coalition… • Section 1: 9. encourage each other to actively participate in the coalition's decision-making process. • Section 1: 10. encourage each other to identify issues, analyze problems, select interventions and evaluate interventions. Section 2: 25. Leaders of my coalition work for coalition success by…encouraging members' active participation in the coalition's decision-making processes.	Participation
EXPANDED KNOWLEDGE; **Bi-directional learning**	Members of my coalition… • Section 1: 6. work together to expand each member's knowledge and potential for addressing the issues. • Section 1: 7. enrich each other's abilities and skills in the issues. Section 2: 20. Leaders of my coalition work for coalition success by…providing resources to keep coalition members informed about best practices on the issues.	Knowledge and training

Not aligned with Conceptual Model	Section 2: 17. Leaders of my coalition work for coalition success by…repositioning coalition assets, competencies, and resources to address changing needs and priorities.	Efficient practices
	Section 1: 12. Members of my coalition…successfully implement the vast majority of coalition's work plan on a timely basis. Section 2: 29. Leaders of my coalition work for coalition success by…providing necessary organizational oversight to the coalition based on evaluation data to ensure that the vast majority of the work plan is implemented on a timely basis.	Activities

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Internal Coalition Effectiveness Instrument questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article identifies a critical role for public health nurses and faculty in "evaluation, program planning, communications, relationship development, and community development." These professionals are often asked to serve as evaluators for coalitions engaged in developing health programs for communities. ICE was developed to be used by public health nurses who participate in and evaluate community coalitions.[2]

Instrument description/purpose

ICE is based on the Internal Coalition Outcome Hierarch (ICOH) conceptual model and assesses strengths and areas of improvement for community coalitions using seven validated (i.e., construct) focus areas:

- Social vision
- Efficient practices
- Knowledge and training
- Relationships
- Participation
- Activities
- Resources

ICE consists of 30 questions. The scoring information indicates that ICE is organized into two sections that first ask the respondent "to consider how well members work together to achieve common goals and objectives" and second, "to consider how well collation leaders are effective in facilitating the work of the coalition." Each focus area question is scored using a five-point Likert scale ranging from "strongly disagree" to "strongly agree."

Individual scores for each validated focus area are obtained by calculating the mean of the focus area responses and calculating the mean of the responses to all 30 items provides a score of the overall coalition effectiveness.

ICE can be accessed here: https://nam.edu/wp-content/uploads/2023/01/ICE-Title-Page-and-Instrument-v2.pdf.

Engagement involved in developing, implementing, or evaluating the instrument

ICOH represented a three-year long effort that was seeking two years of continuation funding. The initial step to developing ICE was a thorough literature review that identified dimensions of effective coalitions. Content validity testing took place by matching the 61 items generated from the literature and "their corresponding theoretical constructs." Next, an eight-person panel consisting of seven faculty from universities with experience working with coalitions in the areas of cooperative extension, tobacco, and substance abuse and one expert from a state health department working with local community coalitions were assembled. The panel reviewed the constructs and rated the degree of relevance between the item and the corresponding construct. The panel also considered if there were missing components for each theoretical construct. The 61 items from the literature analysis were reduced to 41 items, and the final instrument with 30 items was found to be psychometrically sound. Members and leaders of a large Midwest coalition focused on "tobacco prevention among youth and

exposure reduction to second hand some in public places" participated in assessing the internal consistency and construct validity of ICE.[2]

Additional information on populations engaged in instrument use

ICE was mailed to 61 coalition members and leaders and had a 77% response rate. All the leaders and 67% of the members completed the instrument.[2]

Notes

- **Potential limitations**: The study demonstrates that the ICE can be applicable for use among "public health nurses working as evaluators for coalitions engaged in community health programing." The limited sample size of this study may impact the ability to detect differences in responses from either members or leaders. Additionally, since the study focused its analysis on the individual coalition, it may be reasonable to expect that members and leaders from the same coalition would respond more similarly than those from different coalitions. Ultimately, the study and the ICE illustrate the importance of measuring perceptions of both members and leaders.[2]
- **Important findings**: The study findings demonstrate that the 30-item ICE is psychometrically sound. If there is a lack of congruence between the views of the members and leaders in each of the constructs, it could indicate a problem within a coalition. "The ICE provided coalition members and leaders with useful information for understanding various aspects of their internal effectiveness," as well as "promoting coalition sustainability by identifying internal strengths and areas for improvement."[2]
- **Supplemental information:** Additional research on tobacco control and on other topics (i.e., childhood injury, youth agricultural safety) has been conducted using the ICE. The findings from the research can be found in the following articles:
    - Cooper, T. V., J. A. Cabriales, T. Taylor, N. Hernandez, J. Law, and M. Kelly. 2015. Internal Structure Analysis of a Tobacco Control Network on the U.S.-Mexico Border. *Health Promotion Practices* 16(5):707-714. https://doi.org/10.1177/1524839914558513.
    - Cramer, M. E., and M. J. Wendl. 2015. Children's Agricultural Safety Network: Evaluating Organizational Effectiveness and Impacts. *Journal of Agromedicine* 20(2):105-115. https://doi.org/10.1080/1059924X.2015.1010067.
    - Wendl, M. J., and M. E. Cramer. 2018. Evaluating Effective Leadership and Governance in a Midwestern Agricultural Safety and Health Coalition. *Workplace Health Safety* 66(2):84-94. https://doi.org/10.1177/2165079917729172.

Kapazitätsentwicklung im Quartier (Capacity Building in Small Areas/Neighbourhoods Instrument)

Nickel, S., W. Süß, C. Lorentz, and A. Trojan. 2018. Long-term evaluation of community health promotion: using capacity building as an intermediate outcome measure. *Public Health* 162:9-15. https://doi.org/10.1016/j.puhe.2018.05.008.

ASSESSMENT INSTRUMENT OVERVIEW

The **Kapazitatsentwicklung im Quartier /(Capacity Building in Small Areas/Neighbourhoods Instrument) (KEQ)** has 51 questions and is used by practitioners and researchers of health programs. It measures community capacity, changes that may occur during the program, and the maintenance of capacity building processes.

KEY FEATURES

COMMUNITY/GEOGRAPHY
Community members
Experienced professional stakeholders from health, educational, and social services
Disadvantaged neighborhood
Health promotion
Hamburg, Germany

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Broad alignment
Diversity + inclusivity
Partnerships + opportunities
Acknowledgment, visibility, recognition
Sustained relationships
Shared power

Expanded knowledge
Broad alignment
Bi-directional learning
Community-ready information

Improved health + health care programs + policies
Broad alignment
Community-aligned solutions
Actionable, implemented, recognized solutions

Thriving communities
Broad alignment
Physical + mental health
Community capacity + connectivity
Community power
Community resiliency
Life quality + well-being

PLACE(S) OF INSTRUMENT USE
Community/community-based organization

LANGUAGE TRANSLATIONS
German

PSYCHOMETRIC PROPERTIES
Internal consistency reliability

YEAR OF USE/TIME FRAME

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions from the KEQ were realigned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the KEQ with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

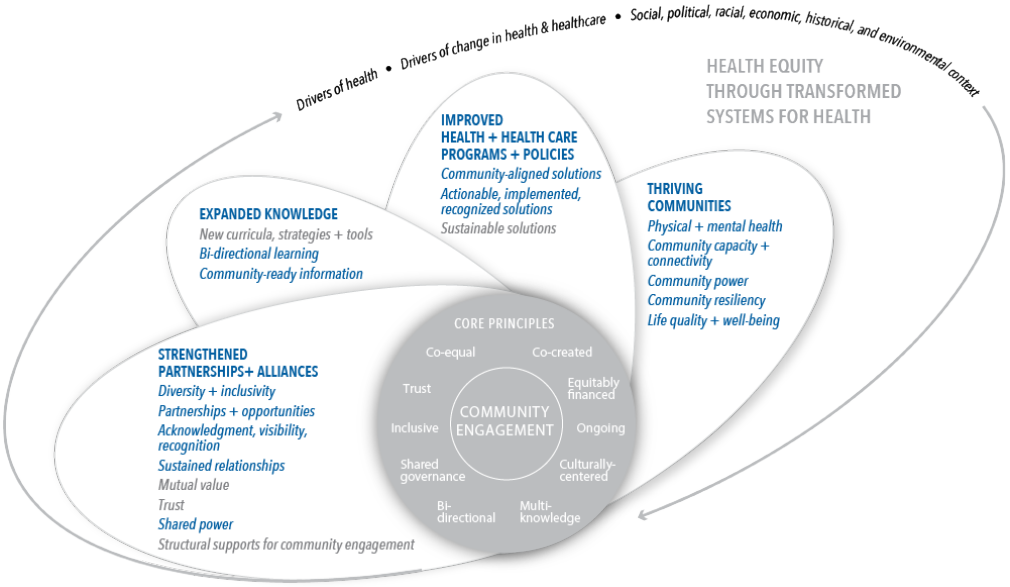

Figure 1 | Alignment of the Kapazitätsentwicklung im Quartier with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of KEQ's individual questions with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from the KEQ transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Broad alignment with all indicators in this domain**	37. Local partners possess the necessary competence for cooperation (e.g., communication skills, ability to resolve conflicts). 38. Local cooperating partners work together efficiently and target oriented.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	33. Local players of the alliances in the area cooperate with other players of the city or borough.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	18. Local leaders organize necessary qualification and training offers. 30. Local players (i.e., persons and/or institutions working for the area) form alliances and partnerships. 31. Relevant offices and authorities cooperate with local alliances
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	10. Individuals from the relevant offices and institutions (kindergarten, community work etc. support the development of the area. 11. Medical doctors and individuals from other health-related services are committed to the development of the area. 39. Local cooperating partners are perceived positively in public/in the media.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Sustained relationships**	32. Networks and cooperation between local players are stable. 35. Translocal networking and cooperation between different players is stable.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	12. Local leaders have the abilities to promote processes of change. 13. Local leaders motivate the area's residents to implement their ideas and projects. 14. Leadership of local stakeholders is democratic and integrative.
EXPANDED KNOWLEDGE; **Broad alignment with all indicators in this domain**	36. Local cooperation partners use available information in order to overcome problems or to release potential.
EXPANDED KNOWLEDGE; **Bi-directional learning**	34. There is a translocal exchange and comparison of experiences between local players in the area and other players (e.g., symposium, networks).
EXPANDED KNOWLEDGE; **Community-ready information**	22. There are enough information and analyses about the area (e.g., about health and social aspects). 23. Different media (e.g., advertising paper, newspaper, internet, etc. are used to disseminate information on area-related activities and offers. 24. Information on area-related activities and offers are conveyed to the residents in different languages. 25. The residents of the area are reached by the information media used.

IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Broad alignment with all indicators in this domain**	48. There are sufficient offers promoting and protecting the health of children and adolescents. 49. There are sufficient offers promoting and protecting the health of women. 50. There are sufficient offers promoting and protecting the health of men 51. There are sufficient offers promoting and protecting the health of people with migrant backgrounds.
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Community-aligned solutions**	17. Activities are adapted to local conditions (e.g., focusing on specific target groups). 47. Medical practices and other healthcare services try to remove language and cultural barriers.
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Actionable, implemented, recognized solutions**	41. Other health services (e.g., midwives, physiotherapy) offer sufficient health promotion. 42. The health authority and other public administration departments offer sufficient health promotion services (e.g., vaccination days, dental hygiene training). 43. Social services and educational institutions (e.g., kindergarten, schools) provide sufficient health promotion services.
THRIVING COMMUNITIES; **Broad alignment with all indicators in this domain**	29. People, who do not live here, have a good image of the area.
THRIVING COMMUNITIES; **Physical + mental health**	40. Medical care for residents (e.g., number of general practitioners, pediatrics, gynecologists and dentists) is adequate.
THRIVING COMMUNITIES; **Community capacity + connectivity**	19. Funding of various projects in the area is sufficient. 44. The area`s residents are sufficiently informed about healthcare offers (e.g., general practitioners, pediatrics, gynecologists and dentists).  45. The area`s residents are sufficiently informed about health promotion services of other health services, the health authority as well as social services and educational institutions. 46. Bridging structures (e.g., neighborhood office, counseling or information centers) promote the use of medical practices and other healthcare facilities.
THRIVING COMMUNITIES; **Community power**	1. Residents participate in social, political and cultural life of the area (e.g., membership in associations, self-help groups, neighborhood groups, citizen initiatives). 2. Residents participate in community activities in the area (e.g., neighborhood parties or events). 3. The active residents stem from all social groups of the population. 4. Residents proactively take the initiative to solve perceived problems. 5. Residents actively contribute to the planning and implementation of projects in the area. 6. Residents adopt projects in the area, i.e., they increasingly take more responsibility. 7. Public participation is fostered by effective activation techniques (e.g., providing information, activating surveys).

	8. The opportunities for involvement of citizens and their spokesmen are sufficient (e.g., hearings, advisory boards, working groups). 9. Civic involvement in the area is accepted and appreciated.
THRIVING COMMUNITIES; **Community resiliency**	26. The residents of the area know their neighbors and aid one another.
THRIVING COMMUNITIES; **Life quality + well-being**	20. The living environment in the area (e.g., green and playing areas, public places) meets the residents` needs.  21. The buildings in the area are in a good condition.  27. The residents like living in the area.  28. The residents` needs (e.g., conviviality, celebrations) can be satisfied in the area.
Not aligned with Conceptual Model	15. Activities in the area are documented regularly (e.g., in form of an annual report). 16. Target achievement of activities in the area is reviewed systematically.

Table 1 | Kapazitätsentwicklung im Quartier questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article discussed the health promotional program conducted by the health authority of Hamburg-Eimsbuttel, Germany, which focused on children and their parents in a disadvantaged neighborhood. The program was aimed at sustaining community capacities around advice during pregnancy; providing services to underage, pregnant parents; postnatal support during the first year of a child's life; vaccination; early childhood care and language training; dental care; diet; exercise; and addiction. The KEQ instrument assesses community capacities in these programs.

Instrument description/purpose

For use by practitioners and researchers, the KEQ measures community capacity, changes that may occur during the program, and the maintenance of capacity building processes. KEQ assesses the following areas:

- Health care
- Networking and cooperation
- Local leadership
- Participation
- Available resources

KEQ consists of 51 questions across five areas, and response options use a five-point Likert scale that ranges from "(nearly) not achieved" to "(nearly) completely achieved." "Cannot assess" was also available as a response option.

The KEQ can be accessed through the link here: https://nam.edu/wp-content/uploads/2023/01/KEQ-Title-Page-and-Instrument-v2_final.pdf.

Engagement involved in developing, implementing, or evaluating the instrument

The local health authority and practitioners in the community collaborated closely to develop the health promotion program and the evaluation instrument. The KEQ was initially tested in 2006, and then, using recommendations from the respondents, the instrument was revised to include additional criteria focused on the health domain, as well as modifications to support improved understanding. Two additional surveys on community capacity were conducted in June 2008 and November 2011.

Additional information on populations engaged in instrument use

Across the three time periods that the instrument was distributed, 71 out of 144 responses were received. The average response rate was 49%. Eleven respondents were professionals from the public health services or other local authorities (28%); 12 were social and educational workers (31%); and 8 were from 'other' institutions (21%). Most respondents were female (76%) and living neither in nor near the neighborhood (76%).

Notes

- **Potential limitations:** The challenges of identifying professionals with experience and expertise on the neighborhood and capacity building resulted in a low response rate (50%), limiting the ability to make causal inferences. Additionally, a program on social urban development was happening concurrently, which included a focus on collaboration and health promotion, made it difficult to understand which effort influenced community capacity and stability over time.[2]
- **Important findings:** The study contributes to the assessment of community-based approaches to advance health promotion. The research demonstrated an increase in community capacity in the first few years, as well as an overall positive trend since 2001, highlighting the ability of the health promotion program to sustain and maintain capacity building over 10 years.[2]

Mature Partnership Indicators

Hamzeh, J., P. Pluye, P. L. Bush, C. Ruchon, I. Vedel, and C. Hudon. 2019. Towards an assessment for organizational participatory research health partnerships: A systematic mixed studies review with framework synthesis. Evaluation and Program Planning 73:116-128. https://doi.org/10.1016/j.evalprogplan.2018.12.003.[1]

Kothari, A., L. MacLean, N. Edwards, and A. Hobbs. 2017. Indicators at the interface: managing policymaker-researcher collaboration. *Knowledge Management Research & Practice* 9(3):203-214. https://doi.org/10.1057/kmrp.2011.16.[2]

ASSESSMENT INSTRUMENT OVERVIEW

The **Mature Partnership Indicators**[1,2] has 30 questions and is intended for use by policy makers and health researchers. It supports the management of collaborative knowledge generation and assesses the performance of a partnership, with focus on meeting information needs, level of rapport, and commitment to the partnership. The Mature Partnership Indicators is part of a set of three instruments that also includes the Common Partnership Indicators and the Early Partnership Indicators.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Policymakers
Researchers
Ontario, Canada

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Broad alignment
Partnerships + opportunities
Acknowledgment, visibility, recognition
Sustained relationships
Mutual value
Trust
Shared power
Structural supports for community engagement

Expanded knowledge
Broad alignment

PLACE(S) OF INSTRUMENT USE

Government agency
Academic/research institution/university

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Content validity
Face validity

YEAR OF USE/TIME FRAME

2000-2002

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in Mature Partnership Indicators were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the Mature Partnership Indicators with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

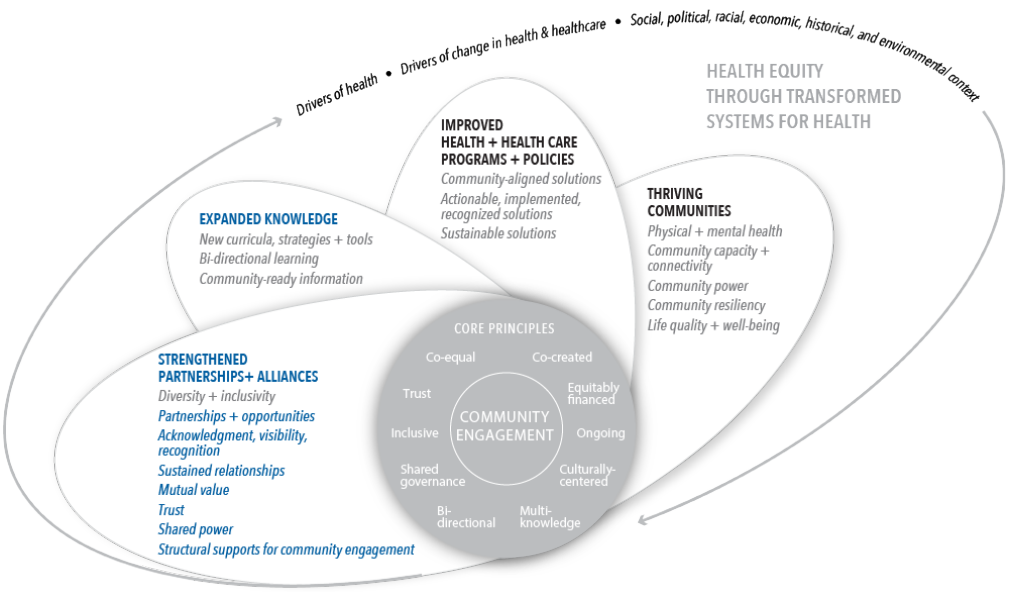

Figure 1 | Alignment of Mature Partnership Indicators with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the Mature Partnership Indicators with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from the Mature Partnership Indicators transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Broad alignment with all indicators in this domain**	2.0 There is an increase in joint activity around the project
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	7.0 Linkage with partner enhances partner linkage with community/other stakeholders 7.1 Linkage with partner does not detract from previously established linkages with other partners 3.1 Partners introduce each other to new networks
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	3.1 Partners support each other publicly 3.0 Partners are perceived as experts in the research/ policy area and are referred to as such to others
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Sustained relationships**	1.3 Research purpose and objectives have been defined, documented, and referred to in an on-going fashion as the research progresses 1.1 More informal communication occurs, though formal meetings and communication continues 4.1 Partners provide advance notice of surprising or potentially contentious research findings or government decisions 1.2 Partners willingly provide 'extras', such as extra time or staff, to the project 2.2 On-going dialogue moves a research programme forward over a series of projects 3.2 Partners think of each other in relation to projects, committees, etc., outside of the research project relationship
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Mutual value**	1.0 Partners are flexible about meeting partner's changing needs and revising research plans and timelines 2.0 Partners understand the limits of each other's flexibility 2.1 Appreciation is shown of each other's efforts 5.0 Partners begin speaking a common language regarding research 6.0 Partners facilitate removal of barriers for each other's work 1.0 There is joint commitment to the research project
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	1.2 Roles and responsibilities have been defined up front 3.0 Partners understand research findings, their limits, and their implications for Ministry work 1.0 Conflict is dealt with openly, informally, and promptly 2.0 Trust has increased between partners 3.0 Comfort has increased between partners 4.0 Openness has increased between partners 6.1 Partners understand: *how things are communicated within the partner organization; *how senior level people work and what their concerns are; agendas, priorities, expectations, and limits; dissemination opportunities within the partner organization; opportunities for research

	use and impact within the partner organization; costs of monitoring, influencing, and incorporating research into decision-making
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	1.1 The partners contribute more resources, material and otherwise to the research project 2.1 Partners take on new roles with each other
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	1.1 Project timelines and changes have been tracked through documentation 4.0 An informal or formal infrastructure exists for linking and transferring research between partners
EXPANDED KNOWLEDGE; **Broad alignment with all indicators in this domain**	4.1 The partnership's work becomes integrated with work associated with other stakeholders

Table 1 | Mature Partnership Indicators questions and alignment with the domains and indicators of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article describes a study to "examine research receptor capacity and research utilization needs within the Ontario Ministry of Health and Long Term Care (MOHLTC)." The study explored the "abilities of Ministry staff to find, understand and use evidence-based research in policy development processes." The Health System-Linked Research Unit (HSLRU), which had experience engaging with Ministry partners and developing research directly intended for transfer into government decision-making, supported the development of instruments. The instruments reflect both processes and outcomes that can be used to "manage collaborative knowledge generation or assess the performance of a partnership between health researchers and policymakers." The study led to the development of the Mature Partnership Indicators (discussed here), as well as the Early Partnership Indicators and the Common Partnership Indicators (discussed in other assessment instrument summaries), which use quantitative and qualitative approaches.[2]

Instrument description/purpose

The Mature Partnership Indicators instrument focuses on the three areas of:

- "Meeting information needs [including] partners are flexible about meeting partner's changing needs and revising research plans and timelines; partners understand the limits of each other's flexibility; [and] partners understand research findings, their limits and their implications for Ministry work"
- "Level of rapport [including] conflict is dealt with openly, informally, and promptly; trust…, comfort…, and openness has increased between partners; partners begin speaking a common language regarding research [and] facilitate removal of barriers for each other's work; [and] linkage with partner enhances partner linkage with community/other stakeholders"
- "Commitment [including] joint commitment to the research project, an increase in joint activity around the project, partners are perceived as experts in the research/policy area and are referred to as such to others, [and] an informal or formal infrastructure exists for linking and transferring research between partners"

The Mature Partnership Indicators has 30 questions. The possible response options to the questions were not presented in the article.[2]

The Mature Partnership Indicators instrument can be accessed here: https://doi.org/10.1057/kmrp.2011.16.

Engagement involved in developing, implementing, or evaluating the instrument

The Mature Partnership Indicators were developed using a cross-sectional survey followed next by qualitative interviews, which provided "detailed recommendations to improve access to research information, enhance use of the information once accessed, and promote an organizational culture supportive of research utilization." Study participants involved in developing and validating the instruments included "all eight of Ontario's HSLRUs, and their designated partners at the Ministry of Health

and Long Term Care." Semi-structured telephone interviews were conducted with eight Research Unit directors (or their designee) and their eight Ministry partners. Using the interview findings and findings from a literature review, the instruments were drafted and then tested with focus groups of HSLRU participants and one Ministry partner (the majority of whom were also participated in the interviews) to examine "clarity, feasibility, credibility, relevance, level of specificity, and their ability to support each evaluation question."[2]

Additional information on populations engaged in instrument use

The study participants – HSLRU researchers and Ministry partners – conduct health research in a wide range of areas with policy implications, including "community health, cancer, dental health, rehabilitation, child health, arthritis, mental health, health information." The partnerships often involved multiple projects, and included engagement with community, government, and research partners depending on the content area. Project activities were also wide-ranging and "included literature reviews, surveys, programme and service evaluation, costing estimates for policy initiatives, policy analysis, health system human resource analysis, intervention studies, knowledge dissemination to government and community, and knowledge transfer studies."[2]

Notes

- **Important findings:** The Mature Partnership Indicators, as well as the Early Partnership Indicators and the Common Partnership Indicators (discussed in other assessment instrument summaries), support an improved understanding of knowledge translation partnerships, providing opportunities to measure success at each stage of partnership development. The authors maintain that the results of this study are applicable beyond the partners who tested the instruments, especially given the broad range of research content and type of research conducted by the study participants. Of note, a new partnership may be "unfairly judged if measured against, for example, the ideal standards of effective, informal communication channels that develop with more mature partnerships."[2]

  The authors indicate that participants identified the Level of Rapport (one of the three dimensions in the Mature Partnership Indicators instrument) as a critical dimension of partnerships. It was "associated with a number of possible indicators revolving around conflict, trust, comfort, openness, and common language between partners. Rapport was also linked to the removal of barriers for each other's work (e.g., easing the way for appropriate communication of research results)."[2]

  The article indicated that where partnerships were successful "participants reported an acknowledgement of each other's needs, time lines, and limits of each other's flexibility." Participants also reported "mutual understanding of the implications of the research results for each other's worlds." Additionally, when considering the maturity of partnerships, the length of time working as partners may influence the characteristics displayed or exhibited among partners. In addition to the Common Partnership Indicators, Early Partnership Indicators, and Mature Partnership Indicators being used to evaluate relationships, they could also be used to monitor partnership processes and guide a set of deliverables that could be included in negotiated agreements.[2]
- **Future research needed:** "A future prospective pilot study could help generate evidence on the applicability of the tool in practice. Other future studies using these indicators might focus on prioritizing them, determining optimal frequency of measurement, usefulness in modifying the partnership midway through the partnership, or determining the extent to which they predict the use of research by policymakers. Alternatively, one might study which indicators are better suited for partnerships with bureaucrats, and which are better for collaborations with elected officials. Validation and reliability work would be required to optimize issues of reliability, validity, and generalizability. Such a study would also want to consider whether there are instances in which the indicators may obstruct the partnership." Another area for future study would be the maturation of such partnerships, with considerations for the time frames needed to show a shift in early versus mature partnerships.[2]

Organization Questionnaire for the Public and Patient Engagement Evaluation Tool

Abelson, J., A. Humphrey, A. Syrowatka, J. Bidonde, and M. Judd. 2018. Evaluating Patient, Family and Public Engagement in Health Services Improvement and System Redesign. *Healthcare Quarterly* 21(Sp):61-67. https://doi.org/10.12927/hcq.2018.25636.[1]

Dukhanin, V., R. Topazian, and M. DeCamp. 2018. Metrics and Evaluation Tools for Patient Engagement in Healthcare Organization- and System-Level Decision-Making: A Systematic Review. International Journal of Health Policy and Management 7(10):889-903. https://doi.org/10.15171/ijhpm.2018.43.[2]

Boivin, A., A. L'Espérance, F. Gauvin, V. Dumez, A. C. Macaulay, P. Lehoux, and J. Abelson. 2018. Patient and public engagement in research and health system decision making: A systematic review of evaluation tools. Health Expect 21(6):1075-1084. http://doi.org/10.1111/hex.12804.[3]

Abelson, J., K. Li, G. Wilson, K. Shields, C. Schneider, and S. Boesveld. 2016. Supporting quality public and patient engagement in health system organizations: development and usability testing of the Public and Patient Engagement Evaluation Tool. *Health Expectations* 19(4):817-827. https://doi.org/10.1111/hex.12378.[4]

ASSESSMENT INSTRUMENT OVERVIEW

The **Organization Questionnaire for the Public and Patient Engagement Evaluation Tool (PPEET)**[1-4] has 32 questions for use by organizational leaders responsible for engagement activities in health system organizations. It assesses the quality and impacts of engagement. The Organization Questionnaire is part of a set of three instruments that also includes the Participant Questionnaire and the Project Questionnaire for the PPEET.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Community advisory councils, patients, family members, citizens
Health system staff
Patient partner representatives
Health system organizations
Ontario, Canada

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Broad alignment
Diversity + inclusivity
Partnerships + opportunities
Acknowledgment, visibility, recognition
Trust
Shared power
Structural supports for community engagement

PLACE(S) OF INSTRUMENT USE

Community/community-based organization
Hospital, clinic, or health system

LANGUAGE TRANSLATIONS

Dutch (unavailable publicly)
German (unavailable publicly)
Italian (unavailable publicly)
French

PSYCHOMETRIC PROPERTIES

Content validity

YEAR OF USE/TIME FRAME

2018
2012-2014

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in the Organization Questionnaire for the PPEET were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the Organization Questionnaire for the PPEET with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

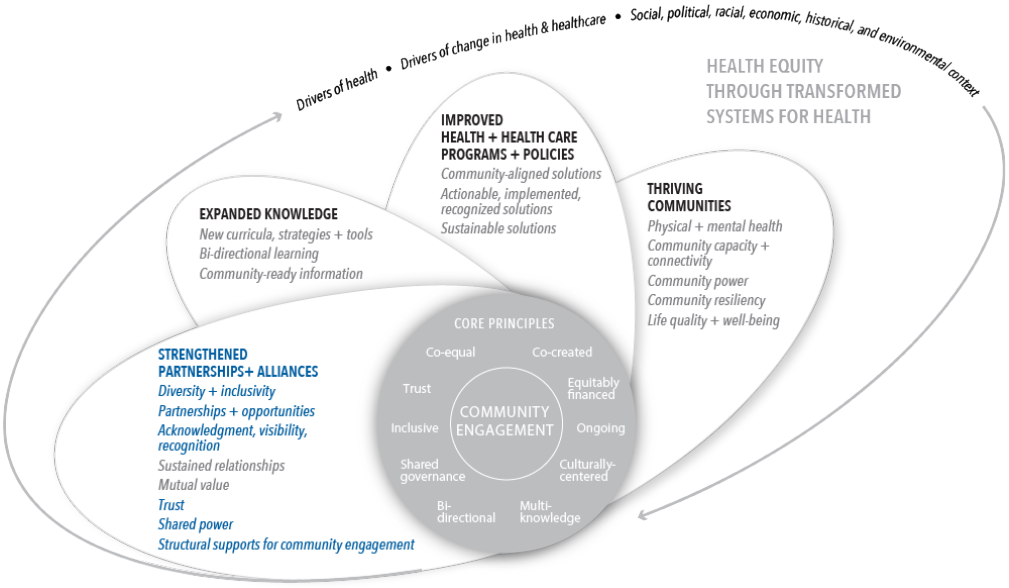

Figure 1 | Alignment of Organization Questionnaire for the Public and Patient Engagement Evaluation Tool with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the Organization Questionnaire for the PPEET's individual questions with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from the Organization Questionnaire for the PPEET's transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Broad alignment with all indicators in this domain**	Overall, I believe our organization has an appropriate level of engagement activity. I am confident participating in opportunities where public and patient engagement takes place.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	I have adequate training in public and patient engagement to support me in my role. The organization has explicit strategies for identifying and recruiting relevant public and patient participants depending on the engagement activity.*

STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	As a result of our public and patient engagement work, we have developed collaborative relationships with our stakeholders (e.g., public, funders, community organizations, government departments). The organization actively participates with provincial/ national/international public and patient engagement organizations.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	Organizational leaders/program areas report using input from public and patient engagement activities. The organization seeks public and patient input when • doing financial planning.* • planning capital projects.* • considering patient safety and quality of care.*
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	As a result of our public and patient engagement work, we have built trust with our stakeholders (e.g., public, funders, community organizations, government departments). The organization is committed to providing summary reports of public and patient engagement activities to participants and stakeholders.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	As a result of our public and patient engagement work, we have identified shared goals with our partners (public, funders, stakeholders). I am aware of public and patient engagement activities that have • influenced relevant decisions at the program level. • influenced relevant Board decisions. Organizational leaders ensure that • public and patient input is used in service planning and decision making. • processes are in place to engage the community when planning services. The organization seeks public and patient input when • doing financial planning.* • planning capital projects.* • considering patient safety and quality of care.*
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	Overall, I believe our organization devotes an appropriate level of resources to support engagement activities. A commitment to public and patient engagement values and principles is • found in key organizational documents (e.g., mission and vision, strategy, etc.). • demonstrated through the structure of the organization (e.g., dedicated public and patient engagement leadership positions). Public and patient engagement is articulated in job descriptions for staff who are leading and supporting these activities. Comprehensive public and patient engagement training and materials are available to support staff.

	An explicit strategy exists to guide the planning of public and patient engagement activities. Explicit organizational documents articulate the approach and values that will inform public and patient engagement planning. The organization has explicit strategies for identifying and recruiting relevant public and patient participants depending on the engagement activity.* There is direct resourcing for public and patient engagement within the organization (i.e., through dedicated public and patient engagement unit and/or staff). There are resources available for public and patient engagement within departments.
Not aligned with Conceptual Model	Public and patient engagement reports are sent to relevant predetermined users in the organization (e.g., program manager, senior management, board members). Additional comments.

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Organization Questionnaire for the Public and Patient Engagement Evaluation Tool questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The articles highlight the importance of public and patient engagement (PPE) in quality improvement efforts and that evaluating PPE often requires a balance between "relevance to practitioner needs" and "application of rigorous methods."[4] The articles discuss the development of PPEET, which leverages a 3-year collaboration between Canadian researchers and practitioners.[1,4] PPEET "was launched as a simple-to-administer tool intended for use by a wide range of health system organizations to assess the quality and impacts of engagement, with the goal of contributing to both the practice and the science of public and patient engagement."[1] PPEET consists of three questionnaires to evaluate public and patient engagement: the Organization Questionnaire (described here), the Participant Questionnaire (described in another assessment instrument summary), and the Project Questionnaire (described in another assessment instrument summary).

Instrument description/purpose

The Organization Questionnaire of the PPEET assesses how organizations are conducting engagement as an organizational activity and responsibility. It is completed by "those providing the leadership and capacity for public and patient engagement within their organizations (organizational leadership)," including health board members, senior management team members, and directors.[1] The Organization Questionnaire assesses:

- Collaboration and common purpose
- Influence and impact
- Participatory culture
- Policies and practices that support planning and implementation

The Organization Questionnaire contains 32 questions and uses a combination of open-ended, yes/no, and various five-point Likert scales with response options ranging from "strongly agree" to "strongly disagree" and "all of the time" to "don't know."[4]

The guidance for administering the instruments and the English and the French translations for the three questionnaires in the PPEET, including the Organization Questionnaire, can be accessed here: https://ppe.mcmaster.ca/resources/public-and-patient-engagement-evaluation-tool/. Please contact ppec@mcmaster.ca to request the other language translations.

Engagement involved in developing, implementing, or evaluating the instrument

"A pan-Canadian partnership of PPE practitioners and researchers" with the shared goal of developing a common evaluation tool formed through two consecutive research grants from the Canadian Institutes of Health Research. This research–practice collaborative "included representation from seven provinces, six regional health authorities and two provincial and local health organizations."[4]

The development of the tool took place over a 3-year period. After a review of the literature, collaborative members engaged using structured e-mail, telephone, and face-to-face exchanges at workshops. A process with iterative rounds of review, also known as a modified Delphi process, was also used to review and prioritize insights. These activities contributed to the "identification of a set of overarching principles for carrying out high quality PPE activities that would serve as the foundation for the evaluation tool." The workshops used break-out sessions and reporting back to the larger group, as well as larger group discussions, to identify and agree on a core set of outcomes. The core principles were mapped to outcomes and prioritized for inclusion in the tool. After developing "three discrete evaluation questionnaires for three different respondent groups," the collaborative "tested the usability of the questionnaires preceding final revisions to the tool."[4]

Patients and members of the public were only directly involved in the usability-testing phase. Participants, project managers and senior organizational personnel in two health regions tested the usability of the questionnaires.[4] The tool underwent "additional feasibility testing in seven health system organizations in Ontario in collaboration with staff and patient partner representatives from each organization." The PPEET was modified based on the results and the revised instruments, which launched in August 2018, were tailored to the specific respondent groups, had separate modules for different types and stages of engagement "(e.g., one time versus ongoing and planning versus implementation)," and included an increased balance in response options with opportunities for more in-depth follow up.[1]

Additional information on populations engaged in instrument use

Usability testing for the questionnaires took place with practice partners from two health regions and provinces. The Organization Questionnaire "was distributed to 75 health board member and senior management team members and directors across the two organizations with 28 responses received."[4]

Notes

- **Potential limitations:** The authors suggest that the focus throughout the process of developing the tool was on user needs (i.e., usability) rather than on psychometric properties, which may have led to a less robust evaluation tool. Since the tool development process was influenced by having short and easy to administer questionnaires, this may have "compromised the tool's validity (e.g., number and specificity of statements used to assess a particular domain of practice, use of a 5-point vs. a 7-point scale)." Additionally, patient and citizen perspectives were not directly included in the development process for the PPEET beyond the usability testing phase. The PPEET's focus on the health-care context of Canada may limit its generalizability and applicability to "non-Canadian settings and to health-care organizations that focus on smaller and more specialized populations;" however, the extensive international literature review and participating partner organizations from major urban and regional referral centers that informed the tool included large and highly diverse populations.[4]
- **Important findings:** The authors indicate that to their knowledge, "this is the first collaboration of researchers and practitioners in the co-design of a comprehensive evaluation tool aimed at assessing the quality and impact of episodic and on-going PPE activities in health system organizations from three distinct perspectives – public and patient participants, sponsors and managers of PPE projects and organizational leaders responsible for PPE." The tool strikes a balance between "the application of rigorous methods and relevance to practitioner needs." Based on usability testing results, revisions were made to the Organization Questionnaire to improve accessibility (e.g., clarity, layout).[4]
- **Future research needed:** Additional research and testing of the questionnaires is needed to understand if any weaknesses exist in the PPEET's validity. Further testing is also needed on the feasibility of applying the tool to every type, level, and degree of PPE.[4]
- **Supplemental information:** The modified version of the PPEET, including the Organization Questionnaire, released in 2018, can be accessed here: https://healthsci.mcmaster.ca/docs/librariesprovider61/default-document-library/ppeet-complete-set-final.pdf?sfvrsn=d1617fe6_2. Additional information on other settings this assessment instrument has

been used in (i.e., emergency settings), populations in which the instrument has been tested (i.e., children with developmental delays, women with heart diseases) and modifications made can be found in the following articles:

- Ogourtsova, T., M. E. O'Donnell, J. H. Filliter, K. Wittmeier, Bright Coaching Group, and A. Majnemer. 2021. Patient engagement in an online coaching intervention for parents of children with suspected developmental delays. *Developmental Medicine & Child Neurology* 63 (6):668-674. https://doi.org/10.1111/dmcn.14810.
- Teed, M., J. Ianiro, C. Culhane, J. Monaghan, J. Takacs, G. Arthur, and A. Nash. 2021. Engaging Women With Lived Experience: A Novel Cross- Canada Approach. *Journal of Patient Experience* 8:1-7. https://doi.org/10.1177/23743735211008300.
- Bhati, D. K., M. Fitzgerald, C. Kendall, and S. Dahrouge. 2020. Patients' engagement in primary care research: a case study in a Canadian context. *Research Involvement and Engagement* 6:1-12. https://doi.org/10.1186/s40900-020-00238-x.
- Drebit, S., K. Eggers, C. Archibald, R. Abu-Laban, K. Ho, A. Khazei, R. Lindstrom, J. Marsden, E. Martin, and J. Christenson. 2020. Evaluation of Patient Engagement in a Clinical Emergency Care Network: Findings From the BC Emergency Medicine Network. *Journal of Patient Experience* 7(6):937-940. https://doi.org/10.1177/2374373520925721.
- Thompson, A. P., S. E. MacDonald, E. Wine, and S. D. Scott. 2020. An Evaluation of Parents' Experiences of Patient Engagement in Research to Develop a Digital Knowledge Translation Tool: Protocol for a Multi-Method Study. *JMIR Research Protocols* 9(8). https://doi.org/10.2196/19108.

Participant Questionnaire for the Public and Patient Engagement Evaluation Tool

Abelson, J., A. Humphrey, A. Syrowatka, J. Bidonde, and M. Judd. 2018. Evaluating Patient, Family and Public Engagement in Health Services Improvement and System Redesign. *Healthcare Quarterly* 21(Sp):61-67. https://doi.org/10.12927/hcq.2018.25636.[1]

Dukhanin, V., R. Topazian, and M. DeCamp. 2018. Metrics and Evaluation Tools for Patient Engagement in Healthcare Organization- and System-Level Decision-Making: A Systematic Review. International Journal of Health Policy and Management 7(10):889-903. https://doi.org/10.15171/ijhpm.2018.43.[2]

Boivin, A., A. L'Espérance, F. Gauvin, V. Dumez, A. C. Macaulay, P. Lehoux, and J. Abelson. 2018. Patient and public engagement in research and health system decision making: A systematic review of evaluation tools. Health Expect 21(6):1075-1084. http://doi.org/10.1111/hex.12804.[3]

Abelson, J., K. Li, G. Wilson, K. Shields, C. Schneider, and S. Boesveld. 2016. Supporting quality public and patient engagement in health system organizations: development and usability testing of the Public and Patient Engagement Evaluation Tool. *Health Expectations* 19(4):817-827. https://doi.org/10.1111/hex.12378.[4]

ASSESSMENT INSTRUMENT OVERVIEW

The **Participant Questionnaire for the Public and Patient Engagement Evaluation Tool (PPEET)**[1-4] has 26 questions for use by citizen and patient participants in health system engagement activities. It assesses the quality and impact of engagement. The Participant Questionnaire is part of a set of three instruments that also includes the Organization Questionnaire and the Project Questionnaire for the PPEET.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Community advisory councils, patients, family members, citizens
Health system staff
Patient partner representatives
Health system organizations
Ontario, Canada

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Broad alignment
Diversity + inclusivity
Trust
Shared power
Structural supports for community engagement

Expanded knowledge
New curricula, strategies + tools

PLACE(S) OF INSTRUMENT USE

Community/community-based organization
Hospital, clinic, or health system

LANGUAGE TRANSLATIONS

Dutch (unavailable publicly)
French
German (unavailable publicly)
Italian (unavailable publicly)

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in the Participant Questionnaire for the PPEET were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of Participant Questionnaire for the PPEET with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

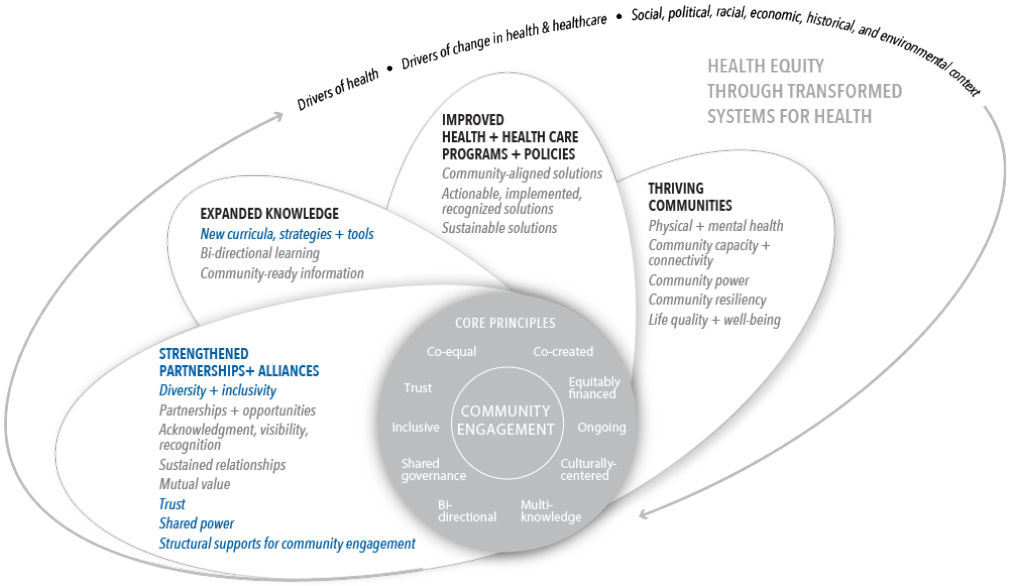

Figure 1 | Alignment of Participant Questionnaire for the Public and Patient Engagement Evaluation Tool with the Assessing Community Engagement Conceptual Model

PSYCHOMETRIC PROPERTIES
Content validity

YEAR OF USE/TIME FRAME
2018
2012-2014

Table 1 displays the alignment of the Participant Questionnaire for the PPEET's individual questions with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from the Participant Questionnaire for the PPEET's transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Broad alignment with all indicators in this domain**	I think this activity will make a difference. Overall, I was satisfied with this activity. This activity was a good use of my time. How do you think the results of your participation will be used? What was the best thing about this engagement activity? Please identify at least one improvement we could make for future engagement activities.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	A wide range of views on the topic were expressed.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	The purpose of the activity was clearly explained. I understand how the input from this activity will be used. As a result of my participation in this activity, I have greater trust in [administering organization to insert relevant term, e.g., providers, public and patient engagement staff, organization as a whole, health system, personal competency].
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	I had enough information to contribute to the topic being discussed. I was able to express my views freely. I feel that my views were heard. I feel that the input provided through this activity will be considered by the organizers.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	The supports I needed to participate were available (e.g., travel, child care, etc).
EXPANDED KNOWLEDGE; **New curricula, strategies + tools**	As a result of my participation in this activity, I am better informed about [administering organization to insert relevant term here, e.g., public and patient engagement issue, organization, health system, other topic of focus].
Not aligned with Conceptual Model	Title of engagement activity. The activity achieved its stated objectives. Additional comments. 1. What year were you born?

	2. What is your sex? 3. Are you a member of any of the following groups? (Please check all that apply) 4. What is the highest level of education that you have completed? 5. What is your current work status? 6. To which of the following income category do you belong, before taxes and deductions. 7. Have you ever worked for pay in a healthcare profession?

Table 1 | Participant Questionnaire for the Public and Patient Engagement Evaluation Tool questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The articles highlight the importance of public and patient engagement (PPE) in quality improvement efforts and that evaluating PPE often requires a balance between "relevance to practitioner needs" and "application of rigorous methods."[4] The articles discuss the development of PPEET, which leverages a three-year collaboration between Canadian researchers and practitioners.[1,4] PPEET "was launched as a simple-to-administer tool intended for use by a wide range of health system organizations to assess the quality and impacts of engagement, with the goal of contributing to both the practice and the science of public and patient engagement."[1] PPEET consists of three questionnaires to evaluate public and patient engagement: the Participant Questionnaire (described here), the Organization Questionnaire (described in another assessment instrument summary), and the Project Questionnaire (described in another assessment instrument summary).

Instrument description/purpose

The Participant Questionnaire of the PPEET allows for capturing participants' assessment of the key features of the PPE initiative. It evaluates the perspectives of "those participating or partnering in engagement activities and processes," including patient contributors and partners.[1] The Participant Questionnaire focuses on integrity of design and process and assesses two areas:

- Engagement activity
- Satisfaction

The Participant Questionnaire contains 26 questions. It uses a combination of open-ended response options and a five-point Likert scale ranging from "strongly agree" to "strongly disagree."[4]

The guidance for administering the instruments and the English and the French translations for the three questionnaires in the PPEET, including the Participant Questionnaire, can be accessed here: https://ppe.mcmaster.ca/resources/public-and-patient-engagement-evaluation-tool/. Please contact ppec@mcmaster.ca to request the other language translations.

Engagement involved in developing, implementing, or evaluating the instrument

"A pan-Canadian partnership of PPE practitioners and researchers" with the shared goal of developing a common evaluation tool formed through two consecutive research grants from the Canadian Institutes of Health Research. This research–practice collaborative "included representation from seven provinces, six regional health authorities and two provincial and local health organizations."[4]

The development of the tool took place over a three-year period. After a review of the literature, collaborative members engaged using structured e-mail, telephone, and face-to-face exchanges at workshops. A process with iterative rounds of review, also known as a modified Delphi process, was also used to review and prioritize insights. These activities contributed to the "identification of a set of overarching principles for carrying out high quality PPE activities that would serve as the foundation for the evaluation tool." The workshops used breakout sessions and reporting back to the larger group, as well as larger group discussions, to identify and agree on a core set of outcomes. The core principles were mapped to outcomes and

prioritized for inclusion in the tool. After developing "three discrete evaluation questionnaires for three different respondent groups," the collaborative "tested the usability of the questionnaires preceding final revisions to the tool."[4]

Patients and members of the public were only directly involved in the usability-testing phase. Participants, project managers and senior organizational personnel in two health regions tested the usability of the questionnaires.[4] The tool underwent "additional feasibility testing in seven health system organizations in Ontario in collaboration with staff and patient partner representatives from each organization." The PPEET was modified based on the results and the revised instruments, which launched in August 2018, were tailored to the specific respondent groups, had separate modules for different types and stages of engagement "(e.g., one time versus ongoing and planning versus implementation)," and included an increased balance in response options with opportunities for more in-depth follow up.[1]

Additional information on populations engaged in instrument use

Usability testing for the questionnaires took place with practice partners from two health regions and provinces. "The Participant Questionnaire was distributed to 145 public participants in total including members of community advisory councils, patients, family members and citizens who had participated in various engagement activities; 23 responses were received."[4]

Notes

- **Area(s) of opportunity:** The authors suggest that the focus throughout the process of developing the tool was on user needs (i.e., usability) rather than on psychometric properties, which may have led to a less robust evaluation tool. Since the tool development process was influenced by having short and easy to administer questionnaires, this may have "compromised the tool's validity (e.g., number and specificity of statements used to assess a particular domain of practice, use of a 5-point vs. a 7-point scale)." Additionally, patient and citizen perspectives were not directly included in the development process for the PPEET beyond the usability testing phase. The PPEET's focus on the health care context of Canada may limit its generalizability and applicability to "non-Canadian settings and to health-care organizations that focus on smaller and more specialized populations;" however, the extensive international literature review and participating partner organizations from major urban and regional referral centers that informed the tool included large and highly diverse populations.[4]
- **Important findings:** The authors indicate that to their knowledge, "this is the first collaboration of researchers and practitioners in the co-design of a comprehensive evaluation tool aimed at assessing the quality and impact of episodic and on-going PPE activities in health system organizations from three distinct perspectives – public and patient participants, sponsors and managers of PPE projects and organizational leaders responsible for PPE." The tool strikes a balance between "the application of rigorous methods and relevance to practitioner needs," and the results of the usability testing of the Participant Questionnaire were positive.[4]
- **Future research needed:** Additional research and testing of the questionnaires is needed to understand if any weaknesses exist in the PPEET's validity. Further testing is also needed on the feasibility of applying the tool to every type, level, and degree of PPE.[4]
- **Supplemental information:** The modified version of the PPEET, including the Participant Questionnaire, released in 2018, can be accessed here: https://healthsci.mcmaster.ca/docs/librariesprovider61/default-document-library/ppeet-complete-set-final.pdf?sfvrsn=d1617fe6_2. Additional information on other settings this assessment instrument has been used in (i.e., emergency settings), populations in which the instrument has been tested (i.e., children with developmental delays, women with heart diseases) and modifications made can be found in the following articles:
    - Ogourtsova, T., M. E. O'Donnell, J. H. Filliter, K. Wittmeier, Bright Coaching Group, and A. Majnemer. 2021. Patient engagement in an online coaching intervention for parents of children with suspected developmental delays. Developmental Medicine & Child Neurology 63 (6):668-674. https://doi.org/10.1111/dmcn.14810.
    - Teed, M., J. Ianiro, C. Culhane, J. Monaghan, J. Takacs, G. Arthur, and A. Nash. 2021. Engaging Women With Lived Experience: A Novel Cross- Canada Approach. *Journal of Patient Experience* 8:1-7. https://doi.org/10.1177/23743735211008300.
    - Bhati, D. K., M. Fitzgerald, C. Kendall, and S. Dahrouge. 2020. Patients' engagement in primary care research: a case study in a Canadian context. *Research Involvement and Engagement* 6:1-12. https://doi.org/10.1186/s40900-020-00238-x.
    - Drebit, S., K. Eggers, C. Archibald, R. Abu-Laban, K. Ho, A. Khazei, R. Lindstrom, J. Marsden, E. Martin, and J. Christenson. 2020. Evaluation of Patient Engagement in a Clinical Emergency Care Network: Findings From the

BC Emergency Medicine Network. *Journal of Patient Experience* 7(6):937-940. https://doi.org/10.1177/2374373520925721.

- Thompson, A. P., S. E. MacDonald, E. Wine, and S. D. Scott. 2020. An Evaluation of Parents' Experiences of Patient Engagement in Research to Develop a Digital Knowledge Translation Tool: Protocol for a Multi-Method Study. *JMIR Research Protocols* 9(8). https://doi.org/10.2196/19108.

Participatory Evaluation Measurement Instrument

Daigneault, P. M. 2014. Taking stock of four decades of quantitative research on stakeholder participation and evaluation use: A systematic map. *Evaluation and Program Planning* 45:171-181. https://doi.org/10.1016/j.evalprogplan.2014.04.003.[1]

Daigneault, P. M., and S. Jacob. 2014. Unexpected but most welcome: Mixed methods for the validation and revision of the Participatory Evaluation Measurement Instrument. *Journal of Mixed Methods Research* 8(1):6-24. http://dx.doi.org/10.1177/1558689813486190.[2]

Daigneault, P. M., S. Jacob, and J. Tremblay. 2012. Measuring Stakeholder Participation in Evaluation: An Empirical Validation of the Participatory Evaluation Measurement Instrument (PEMI). *Evaluation Review* 36(4):243-271. http://dx.doi.org/10.1177/0193841X12458103.[3]

ASSESSMENT INSTRUMENT OVERVIEW

The **Participatory Evaluation Measure Instrument (PEMI)**[1-3] has three questions for use by evaluation experts. It assesses stakeholder participation in the evaluation process and can be used to frame discussions about stakeholder participation.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Academic researchers
Authors of journal articles focused on evaluation
Various policy domains

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Diversity + inclusivity
Shared power

PLACE(S) OF INSTRUMENT USE

Academic/research institution/university

LANGUAGE TRANSLATIONS

French (unavailable publicly)

PSYCHOMETRIC PROPERTIES

Convergent validity
Discriminant validity
Inter-coder reliability

YEAR OF USE/TIME FRAME

2011 – 2012

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions from PEMI were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of PEMI with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

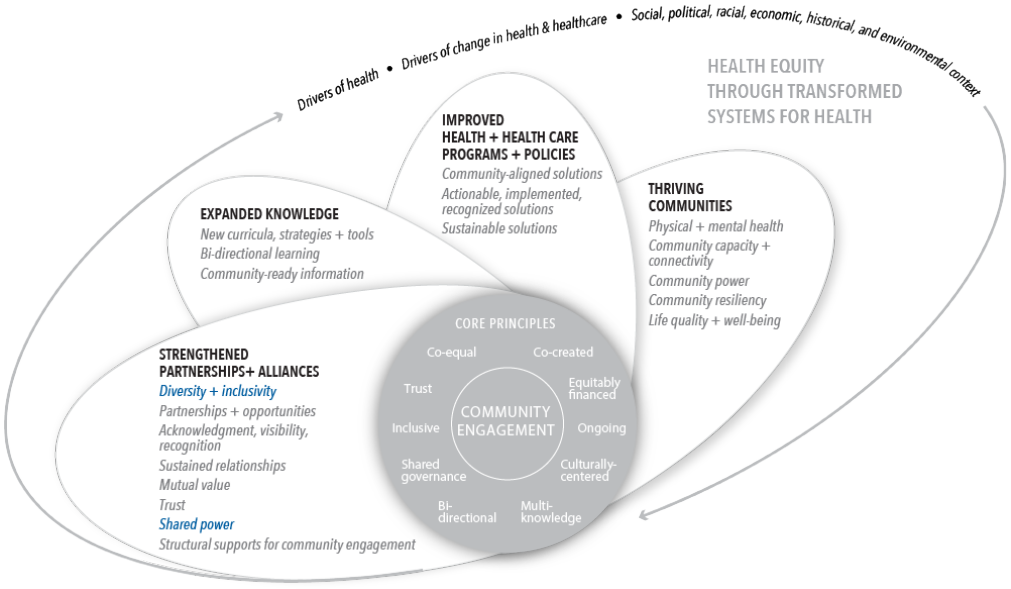

Figure 1 | Alignment of Participatory Evaluation Measure Instrument with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the PEMI's individual questions and validated focus areas with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s), the individual questions from the PEMI transcribed as they appear in the instrument (with minor formatting changes for clarity), and the validated focus areas presented in the article.

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS	VALIDATED FOCUS AREA(S)
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	Diversity of participants	Diversity of participants

STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	Extent of involvement for nonevaluative stakeholders	Extent of involvement
	Control for evaluators vs. participants	Control of the evaluation process

Table 1 | Participatory Evaluation Measure Instrument questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The articles noted that participatory evaluation (PE) approaches aiming to measure stakeholder participation in evaluation are increasing. The articles also emphasized that instruments are needed to understand the "necessary conditions for distinguishing participatory evaluation from nonparticipatory evaluation."[1-3]

Instrument description/purpose

PEMI was developed to measure the participation level taking place in the program evaluation process.[1] PEMI is intended to be used to frame discussions about and assess stakeholder participation in evaluation using the following three validated (i.e., convergent, discriminant) focus areas:

- Extent of involvement
- Diversity of participants
- Control of the evaluation process

PEMI consists of three questions which are measured on a five-point ordinal scale ranging from .00 (absence of this instance of PE) to 1.00 (full presence of this instance of PE).[3] In the original version of the PEMI, stakeholder participation was the minimum or lowest score of the three focus areas. In the revised version, the overall participation score is calculated by determining the average on the three focus areas.[2]

This instrument can be accessed here: https://nam.edu/wp-content/uploads/2023/01/PEMI-Title-Page-and-Instrument-v2.pdf.

Engagement involved in developing, implementing, or evaluating the instrument

PEMI "was pilot-tested for clarity and readability by two university professors with significant expertise in program evaluation in general and stakeholder participation in particular." After slight modification to the instrument, PEMI was sent to authors representing 40 case studies published between 1985 and 2010.[3] Case studies were selected based on consideration for "diversity in terms of policy domains, origins of authors, and journals." Case studies were diverse with respect to evaluation and stakeholder involvement approaches (e.g., collaborative, empowerment, stakeholder-based, utilization-focused, democratic-deliberative, community-based).[2] Case studies addressed "many policy domains, mainly education, health and human services, but also agriculture, local governance, environment, and international development."[3] The majority of author respondents (91.6%) completed a qualitative open-ended question of "why" to allow for "elaboration, enhancement, illustration, [and] clarification" of the quantitative score. The responses were analyzed and generated evidence for using "a less conservative concept structure for the revised version of the instrument."[2]

Additional information on populations engaged in instrument use

The majority of study authors responding to the instrument had institutional affiliations in the United States (76.5%), with Canada (14.7%), Australia (5.9%) and South Korea (2.9%) also represented. 76.5% of study authors had university/academic affiliations, and 20.6% and 2.9% had non-academic and mixed affiliations, respectively.[1]

Notes

- **Potential limitations:** The small, purposive sample of 40 cases, the limited qualitative data, and recall bias associated with cases published more than 25 years ago represented limitations. In addition, it was the "inferences derived from the

instrument for this particular sample that were validated, not the instrument itself." The last limitation cited was the "lack of sensitivity of the three-point quantitative scale to measure agreement."[2]

- **Important findings: "**PEMI is a nonnormative measurement instrument in the sense that it does not assume that stakeholder participation is desirable (or undesirable). Yet it seems that respondents have high expectations toward their score for overall participation that cannot only be explained by a conservative bias in the PEMI." During the completion of PEMI, respondents were asked to complete open-ended questions and participate in informal email exchanges about their responses to the instrument. The unexpected qualitative data (authors only expected a few responses to the open-ended questions, but received an abundant amount of qualitative data) were reviewed, underwent thematic analysis, and were used to revise the instrument and collect additional quantitative data for analysis. PEMI, with the inclusion of a modest quantitative component, addresses concepts of participation and aligns with respondents' beliefs about the level of participation of their project evaluations.[2] The study results demonstrate that PEMI scores are both reliable and valid.[2,3]

  Three overarching themes emerged from the data: 1) there appeared to be positive alignment between PEMI case scores and respondent opinions of the level of stakeholder participation that took place during the evaluation; 2) where there was disagreement of the participation score, respondents unanimously believed the score was too low; 3) "many respondents explicitly mentioned or alluded to the normative power of stakeholder participation, either to embrace or criticize it." Ultimately, respondents suggested that PEMI underrepresented stakeholder participation. PEMI was therefore revised to support a less conservative concept structure.[2]
- **Future research needed:** "Further empirical studies are certainly needed to establish the robustness of the findings presented. This is especially so with respect to the validation of the revised version of the instrument. The quantitative evidence reported here—although going in the expected direction—remains quite modest."[2]

Partnership Self-Assessment Tool Questionnaire

Brown, Q. L., A. Elmi, L. Bone, F. Stillman, O. Mbah, J. V. Bowie, J. Wenzel, A. Gray, J. G. Ford, J. L. Slade, and A. Dobs. 2019. Community Engagement to Address Cancer Health Disparities: A Process EVALUATION using the Partnership Self-Assessment Tool. *Programming Community Health Partnerships* 13(1):97-104. https://doi.org/10.1353/cpr.2019.0012.

ASSESSMENT INSTRUMENT OVERVIEW

The **Partnership Self-Assessment Tool Questionnaire (PSAT)** has 63 questions for use by community and academic stakeholders. It evaluates partnership processes within community-academic partnerships.

KEY FEATURES

COMMUNITY/GEOGRAPHY

African Americans
Community-academic partnership
Cancer disparities reduction
Baltimore City, MD
Prince George's County, MD
United States

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Broad alignment
Diversity + inclusivity
Partnerships + opportunities
Acknowledgment, visibility, recognition
Sustained relationships
Mutual value
Trust
Shared power
Structural supports for community engagement

Expanded knowledge
New curricula, strategies + tools
Bi-directional learning

Improved health + health care programs + policies
Broad alignment
Community-aligned solutions
Actionable, implemented, recognized solutions
Sustainable solutions

Thriving communities
Community capacity + connectivity

PLACE(S) OF INSTRUMENT USE

Community/community-based organization
Academic/research institution/university

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Validity
Reliability

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions from PSAT were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of PSAT with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

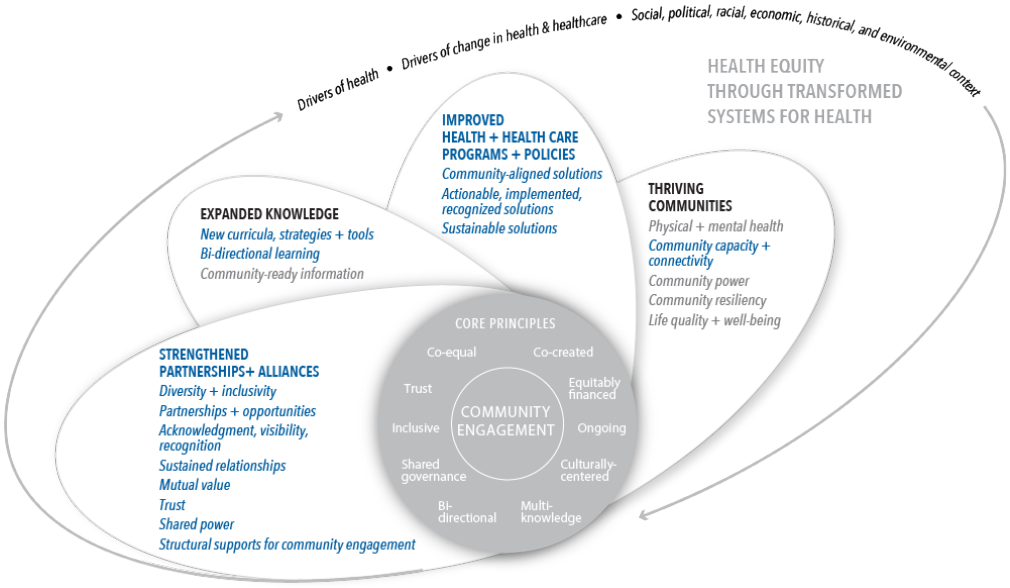

Figure 1 | Alignment of Partnership Self-Assessment Tool with the Assessing Community Engagement Conceptual Model

YEAR OF USE/TIME FRAME
2013

Table 1 displays the alignment of the PSAT's individual questions with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from the PSAT transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Broad alignment with all indicators in this domain**	Please rate the total effectiveness of your partnership's leadership in each of the following areas: Leadership-A. Taking responsibility for the partnership Please rate the effectiveness of your partnership in carrying out each of the following activities: • Administration and management-C. Organizing partnership activities, including meetings and projects • Administration and management-D. Applying for and managing grants and funds For the following types of resources, to what extent does your partnership have what it needs to work effectively? Non-financial resources-E. Legitimacy and credibility For each of the following drawbacks, please indicate whether or not you have or have not experienced the drawback: • Drawbacks of participation-D. Frustration or aggravation • Drawbacks of participation-F. Conflict between my job and the partnership's work Satisfaction with participation-A. How satisfied are you with the way the people and organizations in the partnership work together?
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	Please rate the total effectiveness of your partnership's leadership in each of the following areas: • Leadership-I. Combining the perspectives, resources, and skills of partners • Leadership-K. Recruiting diverse people and organizations into the partnership Please rate the effectiveness of your partnership in carrying out each of the following activities: Administration and management-I. Minimizing the barriers to participation in the partnership's meetings and activities (e.g., by holding them at convenient places and times, and by providing transportation and childcare)* For the following types of resources, to what extent does your partnership have what it needs to work effectively? • Non-financial resources-A. Skills and expertise (e.g., leadership, administration, evaluation, law, public policy, cultural competency, training, community organizing) • Non-financial resources-C. Connections to target populations For each of the following drawbacks, please indicate whether or not you have or have not experienced the drawback as a result of participating in

	this partnership: Drawbacks of participation-A. Diversion of time and resources away from other priorities or obligations.*
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	For the following types of resources, to what extent does your partnership have what it needs to work effectively? Non-financial resources-D. Connections to political decision-makers, government agencies, other organizations/groups
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	Synergy-G. By working together, how well are these partners able to obtain support from individuals and organizations in the community that can either block the partnership's plans or help move them forward? Please rate the total effectiveness of your partnership's leadership in each of the following areas: • Leadership-G. Creating an environment where differences of opinion can be voiced • Leadership-H. Resolving conflict among partners* For each of the following drawbacks, please indicate whether or not you have or have not experienced the drawback as a result of participating in this partnership: • Drawbacks of participation-A. Diversion of time and resources away from other priorities or obligations.* • Drawbacks of participation-E. Insufficient credit given to me for contributing to the accomplishments of the partnership For each of the following benefits, please indicate whether you have or have not received the benefit as a result of participating in the partnership: Benefits of participation-C. Heightened public profile
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Sustained relationships**	Please rate the total effectiveness of your partnership's leadership in each of the following areas: • Leadership-B. Inspiring or motivating people involved in the partnership* • Leadership-D. Communicating the vision of the partnership Please rate the effectiveness of your partnership in carrying out each of the following activities: • Administration and management-A. Coordinating communication among peers • Administration and management-B. Coordinating communication with people and organizations outside the partnership • Administration and management-E. Preparing materials that inform partners and help them make timely decisions • Administration and management-G. Providing orientation to new partners as they join the partnership For the following types of resources, to what extent does your partnership have what it needs to work effectively? Non-financial resources-F. Influence and ability to bring people together for meetings and activities For each of the following drawbacks, please indicate whether or not you have or have not experienced the drawback as a result of participating in this partnership: Drawbacks of participation-A. Diversion of time and resources away from other priorities or obligations.*

STRENGTHENED PARTNERSHIPS + ALLIANCES; **Mutual value**	Synergy-C. By working together, how well are these partners able to develop goals that are widely understood and supported among partners?* Please rate the total effectiveness of your partnership's leadership in each of the following areas: Leadership-E. Working to develop a common language within the partnership For each of the following drawbacks, please indicate whether or not you have or have not experienced the drawback as a result of participating in this partnership: • Drawbacks of participation-A. Diversion of time and resources away from other priorities or obligations.* • Drawbacks of participation-C. Viewed negatively due to association with other partners or the partnership For each of the following benefits, please indicate whether you have or have not received the benefit as a result of participating in the partnership: Benefits of participation-K. Acquisition of additional financial support
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	Please rate the total effectiveness of your partnership's leadership in: Leadership-F. Fostering respect, trust, inclusiveness, and openness in the partnership For each of the following drawbacks, please indicate whether or not you have or have not experienced the drawback as a result of participating in this partnership: Drawbacks of Participation-A. Diversion of time and resources away from other priorities or obligations.*
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	Synergy-B. By working together, how well are these partners able to include the views and priorities of the people affected by the partnership's work? Synergy-C. By working together, how well are these partners able to develop goals that are widely understood and supported among partners?* Please rate the total effectiveness of your partnership's leadership in each of the following areas: • Leadership-B. Inspiring or motivating people involved in the partnership* • Leadership-C. Empowering people involved in the partnership • Leadership-H. Resolving conflict among partners* • Leadership-J. Helping the partnership be creative and look at things differently Efficiency-1. Please choose the statement that best describes how well your partnership uses the partners' financial resources Efficiency-2. Please choose the statement that best describes how well your partnership uses the partners' in-kind resources (e.g., skills, expertise, information, data, connections, influence, space, equipment, goods). Efficiency-3. Please choose the statement that best describes how well your partnership uses the partners' time. For the following types of resources, to what extent does your partnership have what it needs to work effectively? Non-financial

	resources-B. Data and information (e.g., statistical data, information and community perceptions, values, resources, and politics) Decision making-A. How comfortable are you with the way decisions are made in the partnership? Decision making-B. How often do you support the decisions made by partnership? Decision making-C. How often do you feel that you have been left out of the decision making process? For each of the following drawbacks, please indicate whether or not you have or have not experienced the drawback as a result of participating in this partnership: • Drawbacks of participation-A. Diversion of time and resources away from other priorities or obligations.* • Drawbacks of participation-B. Insufficient influence in partnership activities For each of the following benefits, please indicate whether you have or have not received the benefit as a result of participating in the partnership: Benefits of participation-D. Increased utilization of my expertise or services. Satisfaction with participation-B. How satisfied are you with your influence in the partnership? Satisfaction with participation-C. How satisfied are you with your role in the partnership? Satisfaction with participation-D. How satisfied are you with the partnership's plans for achieving its goals?
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	Please rate the effectiveness of your partnership in carrying out each of the following activities: Administration and management-I. Minimizing the barriers to participation in the partnership's meetings and activities (e.g., by holding them at convenient places and times, and by providing transportation and childcare)*
EXPANDED KNOWLEDGE; **New curricula, strategies + tools**	For each of the following benefits, please indicate whether you have or have not received the benefit as a result of participating in the partnership. Benefits of participation-B. Development of new skills
EXPANDED KNOWLEDGE; **Bi-directional learning**	Synergy-A. By working together, how well are these partners able to identify new and creative ways to solve problems? Synergy-D. By working together, how well are these partners able to identify how different services and programs in the community relate to the problems the partnership is trying to address? For each of the following benefits, please indicate whether you have or have not received the benefit as a result of participating in the partnership: Benefits of participation-E. Acquisition of useful knowledge about services, program, or people in the community
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Broad alignment with all indicators in this domain**	Please rate the effectiveness of your partnership in carrying out each of the following activities: Administration and management-H. Evaluating the progress and impact of the partnership
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Community-aligned solutions**	Synergy-E. By working together, how well are these partners able to respond to the needs and problems of the community?

	Synergy-I. By working together, how well are these partners able to clearly communicate to people in the community how the partnership's actions will address problems that are important to them? Satisfaction with participation-E. How satisfied are you with the way the partnership is implementing its plans?*
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Actionable, implemented, recognized solutions**	Synergy-F. By working together, how well are these partners able to implement strategies that are most likely to work in the community? Satisfaction with participation-E. How satisfied are you with the way the partnership is implementing its plans?*
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Sustainable solutions**	Synergy-H. By working together, how well are these partnership able to carry out comprehensive activities that connect multiple services, programs, or systems?
THRIVING COMMUNITIES; **Community capacity and connectivity**	For each of the following benefits, please indicate whether you have or have not received the benefit as a result of participating in the partnership: • Benefits of participation-A. Enhanced ability to address an important issue • Benefits of participation-F. Enhanced ability affect public policy • Benefits of participation-G. Development of valuable relationships • Benefits of participation-H. Enhanced ability to meet the needs of my constituency or clients • Benefits of participation-I. Ability to have a greater impact than I could have on my own • Benefits of participation-J. Ability to make a contribution to the community
Not aligned with Conceptual Model	Please rate the effectiveness of your partnership in carrying out each of the following activities: Administration and management-F. Performing secretarial duties

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Partnership Self-Assessment Tool questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article focuses on the Center to Reduce Cancer Disparities (CRCD), a community-academic partnership working to reduce racial disparities in cancer mortality in Baltimore City and Prince George's County, Maryland. The partnership was established in September 2010 and used the Partnership Self-Assessment Tool Questionnaire (PSAT) to conduct a process evaluation.

Instrument description/purpose

The original PSAT was reviewed and modified by CRCD for use in a process evaluation to assess a community-academic partnership. The original PSAT included the following 10 validated focus areas:

- Leadership
- Efficiency
- Administration and management
- Nonfinancial resources
- Decision making

- Benefits of participation
- Satisfaction with partnership
- Synergy/teamwork
- Comparing benefits and drawbacks
- Financial and other capital resources

The original PSAT consists of 63 questions and uses several five-point Likert scale ranging from "excellent" to "don't know," "extremely well" to "not well at all," "excellent" to "poor," "all of the time" to "none of the time," "completely satisfied" to "not at all satisfied,", and a six-point Likert scale ranging from "all of what it needs" to "don't know", and yes/no options. The modified version consists of 28 questions.

This original instrument can be accessed here: https://atrium.lib.uoguelph.ca/xmlui/bitstream/handle/10214/3129/Partnership_Self-Assessment_Tool-Questionnaire_complete.pdf?sequence=1&isAllowed=y. The modified PSAT described in the above referenced article contains eight focus areas and is not publicly available. According to correspondence with the author, the modified PSAT excluded focus areas on comparing benefits and drawbacks and financial and other capital resources based on discussions with community advisory groups. Psychometric testing was conducted only on the original PSAT, not the modified PSAT.

Engagement involved in developing, implementing, or evaluating the instrument

Two community advisory groups (CAGs) were engaged in the modification of the PSAT — one in Baltimore City, Maryland, and one in Prince George's County, Maryland to support two research projects funded by the National Institutes of Health. "Each CAG was chaired by a community leader, and membership represented community-based organizations, faith-based organizations, provider organizations/hospitals, professional organizations, universities, community members/cancer survivors, and a senior housing complex." The CAGs were diverse and allowed for new members to join throughout the year, ensuring inclusiveness and a membership of over 50 people in each group. The CAGs were instrumental in all CRCD's activities, ranging from developing the research program, training of students and fellows, developing outreach and educational materials, and identifying and modifying the PSAT. "This instrument was reviewed by the CAG chairpersons and the CRCD's faculty and staff" who agreed to a shorter version of the instrument and the omission of items deemed irrelevant by the CAGs. "Financial and other capital resources, and comparing benefits and drawbacks of participating in the partnership were removed; and benefits of participation and drawbacks of participation were combined into one domain."

Additional information on populations engaged in instrument use

All CAG members from both groups who attended the meetings when the instrument was distributed were invited to respond. A total of 21 out of 24 (87.5%) participants from Baltimore City responded, and 62% of respondents were from community organizations or community members; 33% were affiliated with Johns Hopkins, but not CRCD staff or faculty; and one participant did not provide their affiliation. In Prince George's County, 13 out of 14 (93%) CAG members completed the instrument, and all "represented community organizations, programs, or were community residents."

High proportions of African Americans (63% and 65%, respectively) reside in Baltimore City and Prince George's County Maryland. "Hispanic ethnicity is higher in Prince George's County (17%) compared with Baltimore City (5%)." The median household income ($41,819 versus $73,856) is lower in Baltimore City compared to Prince George's County. The percentage of people living in poverty is higher in Baltimore City compared to Prince George's County (23% versus 10%). For all cancers, these two counties have higher than the Maryland and United States population age-adjusted cancer mortality rates. The authors note that the CAGs were representative of the populations of focus.

Notes

- **Potential limitations:** This study was limited by its small sample size, "which precluded the assessment of potential confounders or important predictors of survey responses." Additionally, the instrument was taken only at one point in time, and does not allow for monitoring changes in community-academic partnership function and synergy over time.
- **Important findings:** PSAT provides a comprehensive understanding of the partnership process taking place in CRCD. Given the PSAT's favorable focus area ratings, CRCD's community-academic partnership appears to be synergistic and functional. This indicates clear benefits and potential for the partnership to meet their long-term goal of reducing cancer

health disparities. While there were similarities in mean scores for the PSAT focus areas between the CAGs, "Baltimore City's CAG's mean scores for both partnership decision making and benefits of participating in the partnership were lower than those for Prince George's County." The Baltimore City CAG suggested "creating a group calendar to notify members of upcoming important decisions or discussions and using social media to increase connectivity and involve all members in the decision-making process" as a way of improving decision-making.

The authors identified several steps to improve community-academic partnerships including: 1) "involve the CAGs in the selection of the evaluation instrument as well as modifications to the instrument;" 2) future partnerships to address state-level disparities should have multiple CAGs with similar missions that are representative of different counties in the state as a way of facilitating cross-county process evaluations and revealing important differences that may not be identified when data are aggregated; 3) have "committed CAG leaders who are well-regarded and respected in the community, and have the principal investigators representing research studies and academic partners attend the CAG meetings;" and 4) "CAGs should be representative of the target communities."

- **Future research needed:** Future research should explore whether and how factors such as neighborhood, census-level demographic differences, and distance to Johns Hopkins institutions influence partnership processes. Additionally, process evaluations should be conducted over multiple time points to examine partnership functions over time. Lastly, focus groups or in-depth interviews with instrument respondents, as well as use of a mixed methods approach to understanding partnership process, "may help provide additional insight and context to survey findings."
- **Supplemental Information:** Additional information on other settings in which PSAT has been used (i.e., chronic care, primary care, the Netherlands, Canada, Australia), populations in which the instrument has been tested (i.e., older adults, patients with diabetes, people experiencing homelessness), psychometric testing, and modifications made over time and in another languages (i.e., Dutch) can be found in the following articles:
    - Loban, E., C. Scott, V. Lewis, and J. Haggerty. 2021. Measuring partnership synergy and functioning: Multi-stakeholder collaboration in primary health care. *PLoS One* 16(5):e0252299. https://doi.org/10.1371/journal.pone.0252299.
    - Loban, E., C. Scott, V. Lewis, S. Law, and J. Haggerty. 2021. Activating Partnership Assets to Produce Synergy in Primary Health Care: A Mixed Methods Study. *Healthcare (Basel)* 9(8). https://doi.org/10.3390/healthcare9081060.
    - Valaitis, R. K., S. T. Wong, M. MacDonald, R. Martin-Misener, L. O'Mara, D. Meagher-Stewart, S. Isaacs, N. Murray, A. Baumann, F. Burge, M. Green, J. Kaczorowski, and R. Savage. 2020. Addressing quadruple aims through primary care and public health collaboration: ten Canadian case studies. *BMC Public Health* 20(1). https://doi.org/10.1186/s12889-020-08610-y.
    - Gutmanis, I., and L. M. Hillier. 2017. Geriatric Cooperatives in Southwestern Ontario: A novel way of increasing inter-sectoral partnerships in the care of older adults with responsive behaviours. *Health & Social Care in the Community* 26(1):e111-e121. https://doi.org/10.1111/hsc.12484.
    - Tsou, C., E. Haynes, W. D. Warner, G. Gray, and S. C. Thompson. 2015. An exploration of inter-organisational partnership assessment tools in the context of Australian Aboriginal-mainstream partnerships: a scoping review of the literature. *BMC Public Health* 15(416). https://doi.org/10.1186/s12889-015-1537-4.
    - Cramm, J. M., M. MH. Strating, and A. P. Nieboer. 2011. Development and validation of a short version of the Partnership Self-Assessment Tool (PSAT) among professionals in Dutch disease management partnerships. *BMC Research Notes* 4(224). https://doi.org/10.1186/1756-0500-4-224.

Project Questionnaire for the Public and Patient Engagement Evaluation Tool

Abelson, J., A. Humphrey, A. Syrowatka, J. Bidonde, and M. Judd. 2018. Evaluating Patient, Family and Public Engagement in Health Services Improvement and System Redesign. *Healthcare Quarterly* 21(Sp):61-67. https://doi.org/10.12927/hcq.2018.25636.[1]

Dukhanin, V., R. Topazian, and M. DeCamp. 2018. Metrics and Evaluation Tools for Patient Engagement in Healthcare Organization- and System-Level Decision-Making: A Systematic Review. *International Journal of Health Policy and Management* 7(10):889-903. https://doi.org/10.15171/ijhpm.2018.43.[2]

Boivin, A., A. L'Espérance, F. Gauvin, V. Dumez, A. C. Macaulay, P. Lehoux, and J. Abelson. 2018. Patient and public engagement in research and health system decision making: A systematic review of evaluation tools. *Health Expectations* 21(6):1075-1084. http://doi.org/10.1111/hex.12804.[3]

Abelson, J., K. Li, G. Wilson, K. Shields, C. Schneider, and S. Boesveld. 2016. Supporting quality public and patient engagement in health system organizations: development and usability testing of the Public and Patient Engagement Evaluation Tool. *Health Expectations* 19(4):817-827. https://doi.org/10.1111/hex.12378.[4]

ASSESSMENT INSTRUMENT OVERVIEW

The **Project Questionnaire for the Public and Patient Engagement Evaluation Tool (PPEET)**[1-4] has 28 questions for use by managers and sponsors of health system engagement activities. It assesses the quality and impacts of engagement. The Project Questionnaire is part of a set of three instruments that also includes the Participant Questionnaire and Organization Questionnaire for the PPEET.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Community advisory councils, patients, family members, citizens
Health system staff
Patient partner representatives
Health system organizations
Ontario, Canada

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Broad alignment
Diversity + inclusivity
Partnerships + opportunities
Acknowledgment, visibility, recognition
Sustained relationships
Trust
Shared power
Structural supports for community engagement

Expanded knowledge
Broad alignment

Improved health + health care programs + policies
Broad alignment

PLACE(S) OF INSTRUMENT USE

Community/community-based

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in the Project Questionnaire for the PPEET were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the Project Questionnaire for the PPEET with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

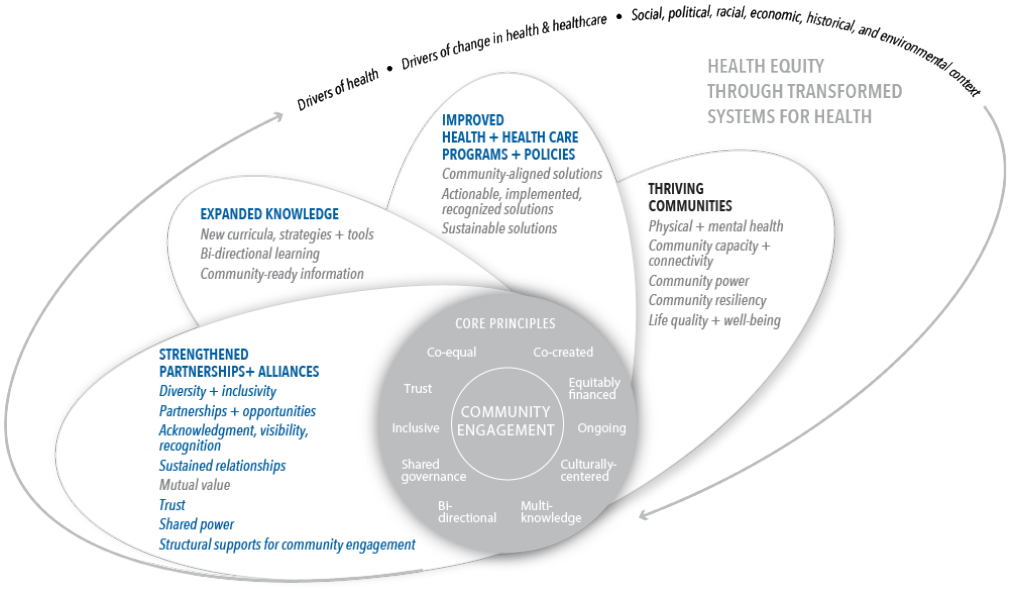

Figure 1 | Alignment of Project Questionnaire for the Public and Patient Engagement Evaluation Tool with the Assessing Community Engagement Conceptual Model

organization
Hospital, clinic, or health system

LANGUAGE TRANSLATIONS

Dutch (unavailable publicly)
French
German (unavailable publicly)
Italian (unavailable publicly)

PSYCHOMETRIC PROPERTIES

Content validity

YEAR OF USE/TIME FRAME

2018
2012-2014

Table 1 displays the alignment of the Project Questionnaire for the PPEET's individual questions with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from the Project Questionnaire for the PPEET's transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Broad alignment with all indicators in this domain**	Overall, I was satisfied with this public and patient engagement activity. This public and patient engagement activity was a good use of our program resources. The output from this public and patient engagement activity enhanced decision making in this area.* Adequate time was allocated to plan and implement the public and patient engagement activity.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	The project plan had a clear strategy to • identify and recruit those most affected by the decision. • involve an appropriate and relevant population that matches the characteristics of those most affected by the decision (e.g., sociodemographic profile, geographic profile, etc). Those most affected by the decision were appropriately represented in the engagement activity.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	As a result of our involvement in this initiative, our organization has a greater intention to collaborate with other organizations in the future. I would like to participate in public and patient engagement training to build my capacity to do more of this work. I will be more comfortable leading a public and patient engagement activity in the future.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	Members of the organization's leadership considered the public and patient engagement input.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Sustained relationships**	All communications with participants throughout the engagement activity were well executed. Please list the names of the organizations that you collaborated with during the engagement activity and what plans, if any, you have for future collaborations with these organizations.

STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	The project plan • included a clear statement of public and patient engagement objectives. • included a clear statement about how goals and expectations for the public and patient engagement activity would be shared with participants. • clearly described strategies for communicating with participants. • indicated how public and patient engagement input would be used. • included a clearly detailed process for communicating with participants about how public and patient engagement input would be used. Please describe how the participant input summary report that was prepared was used and shared with participants. If no summary report was prepared, is there a plan to do so? If not, explain why. As a result of our involvement in this initiative, our organization has developed a greater trust in other organizations.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	Members of the organization's leadership used the public and patient engagement input to influence decisions related to healthcare improvement. Please describe how and at what stages the public and patient engagement input was considered in organizational decisions (list relevant sources of evidence for your response). If the input was not considered, explain why you think this was the case. We were able to identify shared goals with other organizations through the public and patient engagement activity initiated. We were able to achieve these shared goals through the public and patient engagement activity.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	The project plan included clear documentation of how the financial, logistical, and informational needs of participants (e.g., travel, dietary, interpretive, childcare, etc) would be accommodated.
EXPANDED KNOWLEDGE; **Broad alignment with all indicators in this domain**	The output from this public and patient engagement activity enhanced decision making in this area.*
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Broad alignment with all indicators in this domain**	The output from this public and patient engagement activity enhanced decision making in this area.*
Not aligned with Conceptual Model	Members of the organization's leadership received a summary report of the public and patient engagement input (e.g., program manager, senior management). The results of the public and patient engagement activity were shared directly with the senior leadership or the Board (through presentations or consultations). Additional comments.

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Project Questionnaire for the Public and Patient Engagement Evaluation Tool questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The articles highlight the importance of public and patient engagement (PPE) in quality improvement efforts and that evaluating PPE often requires a balance between "relevance to practitioner needs" and "application of rigorous methods."[4] The articles discuss the development of PPEET, which leverages a 3-year collaboration between Canadian researchers and practitioners.[1,4] PPEET "was launched as a simple-to-administer tool intended for use by a wide range of health system organizations to assess the quality and impacts of engagement, with the goal of contributing to both the practice and the science of public and patient engagement."[1] PPEET consists of three questionnaires to evaluate public and patient engagement: the Project Questionnaire (described here), the Organization Questionnaire (described in another assessment instrument summary), and the Participant Questionnaire (described in another assessment instrument summary).

Instrument description/purpose

The Project Questionnaire of the PPEET allows for capturing insights from those responsible for "planning, execution or sponsoring of engagement activities within organizations."[1] The instrument is for engagement practitioners and users, such as directors and managers of organizations or sponsors. The Project Questionnaire assess three areas:

- Integrity of design and process
- Influence and impact
- Collaboration and common purpose

The Project Questionnaire contains 28 questions that use a combination of open-ended, yes/no/don't know, and five-point Likert scale responses. The Likert scale ranges from "strongly agree" to "strongly disagree."[4]

The guidance for administering the instruments and the English and the French translations for the three questionnaires in the PPEET, including the Participant Questionnaire, can be accessed here: https://ppe.mcmaster.ca/resources/public-and-patient-engagement-evaluation-tool/. Please contact ppec@mcmaster.ca to request the other language translations.

Engagement involved in developing, implementing, or evaluating the instrument

"A pan-Canadian partnership of PPE practitioners and researchers" with the shared goal of developing a common evaluation tool formed through two consecutive research grants from the Canadian Institutes of Health Research. This research–practice collaborative "included representation from seven provinces, six regional health authorities and two provincial and local health organizations."[4]

The development of the tool took place over a 3-year period. After a review of the literature, collaborative members engaged using structured e-mail, telephone, and face-to-face exchanges at workshops. A process with iterative rounds of review, also known as a modified Delphi process, was also used to review and prioritize insights. These activities contributed to the "identification of a set of overarching principles for carrying out high quality PPE activities that would serve as the foundation for the evaluation tool." The workshops used break-out sessions and reporting back to the larger group, as well as larger group discussions, to identify and agree on a core set of outcomes. The core principles were mapped to outcomes and prioritized for inclusion in the tool. After developing "three discrete evaluation questionnaires for three different respondent groups," the collaborative "tested the usability of the questionnaires preceding final revisions to the tool."[4]

Patients and members of the public were only directly involved in the usability-testing phase. Participants, project managers and senior organizational personnel in two health regions tested the usability of the questionnaires.[4] The tool underwent "additional feasibility testing in seven health system organizations in Ontario in collaboration with staff and patient partner representatives from each organization." The PPEET was modified based on the results and the revised instruments, which launched in August 2018, were tailored to the specific respondent groups, had separate modules for different types and stages of engagement "(e.g., one time versus ongoing and planning versus implementation)," and included an increased balance in response options with opportunities for more in-depth follow up.[1]

Additional information on populations engaged in instrument use

Usability testing for the questionnaires took place with practice partners from two health regions and provinces. The Project Questionnaire "was distributed to 28 directors and managers across both organizations with 14 responses received."[4]

Notes

- **Potential limitations:** The authors suggest that the focus throughout the process of developing the tool was on user needs (i.e., usability) rather than on psychometric properties, which may have led to a less robust evaluation tool. Since the tool development process was influenced by having short and easy to administer questionnaires, this may have "compromised the tool's validity (e.g., number and specificity of statements used to assess a particular domain of practice, use of a 5-point vs. a 7-point scale)." Additionally, patient and citizen perspectives were not directly included in the development process for the PPEET beyond the usability testing phase. The PPEET's focus on the health-care context of Canada may limit its generalizability and applicability to "non-Canadian settings and to health-care organizations that focus on smaller and more specialized populations;" however, the extensive international literature review and participating partner organizations from major urban and regional referral centers that informed the tool included large and highly diverse populations.[4]
- **Important findings:** The authors indicate that to their knowledge, "this is the first collaboration of researchers and practitioners in the co-design of a comprehensive evaluation tool aimed at assessing the quality and impact of episodic and on-going PPE activities in health system organizations from three distinct perspectives – public and patient participants, sponsors and managers of PPE projects and organizational leaders responsible for PPE." The tool strikes a balance between "the application of rigorous methods and relevance to practitioner needs." Based on usability testing results, revisions were made to the Project Questionnaire to improve accessibility (e.g., clarity, layout).[4]
- **Future research needed:** Additional research and testing of the questionnaires is needed to understand if any weaknesses exist in the PPEET's validity. Further testing is also needed on the feasibility of applying the tool to every type, level, and degree of PPE.[4]
- **Supplemental information:** The modified version of the PPEET, including the Project Questionnaire, released in 2018, can be accessed here: https://healthsci.mcmaster.ca/docs/librariesprovider61/default-document-library/ppeet-complete-set-final.pdf?sfvrsn=d1617fe6_2. Additional information on other settings this assessment instrument has been used in (i.e., emergency settings), populations in which the instrument has been tested (i.e., children with developmental delays, women with heart diseases) and modifications made can be found in the following articles:
    - Ogourtsova, T., M. E. O'Donnell, J. H. Filliter, K. Wittmeier, Bright Coaching Group, and A. Majnemer. 2021. Patient engagement in an online coaching intervention for parents of children with suspected developmental delays. *Developmental Medicine & Child Neurology* 63 (6):668-674. https://doi.org/10.1111/dmcn.14810.
    - Teed, M., J. Ianiro, C. Culhane, J. Monaghan, J. Takacs, G. Arthur, and A. Nash. 2021. Engaging Women With Lived Experience: A Novel Cross- Canada Approach. *Journal of Patient Experience* 8:1-7. https://doi.org/10.1177/23743735211008300.
    - Bhati, D. K., M. Fitzgerald, C. Kendall, and S. Dahrouge. 2020. Patients' engagement in primary care research: a case study in a Canadian context. *Research Involvement and Engagement* 6:1-12. https://doi.org/10.1186/s40900-020-00238-x.
    - Drebit, S., K. Eggers, C. Archibald, R. Abu-Laban, K. Ho, A. Khazei, R. Lindstrom, J. Marsden, E. Martin, and J. Christenson. 2020. Evaluation of Patient Engagement in a Clinical Emergency Care Network: Findings From the BC Emergency Medicine Network. *Journal of Patient Experience* 7(6):937-940. https://doi.org/10.1177/2374373520925721.
    - Thompson, A. P., S. E. MacDonald, E. Wine, and S. D. Scott. 2020. An Evaluation of Parents' Experiences of Patient Engagement in Research to Develop a Digital Knowledge Translation Tool: Protocol for a Multi-Method Study. *JMIR Research Protocols* 9(8). https://doi.org/10.2196/19108.

Research Engagement Survey Tool

Goodman, M. S., N. Ackermann, D. J. Bowen, and V. Thompson. 2019. Content validation of a quantitative stakeholder engagement measure. *Journal of Community Psychology* 47(8): 1937-1951. https://dx.doi.org/10.1002/jcop.22239.

ASSESSMENT INSTRUMENT OVERVIEW

The **Research Engagement Survey Tool (REST)** has 32 questions and is used by community health stakeholders. It evaluates the quality and quantity of stakeholder engagement in research. REST was modified from another instrument: the Community Engagement Measure.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Stakeholders in community-engaged research
United States

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Diversity + inclusivity
Acknowledgment, visibility, recognition
Sustained relationships
Mutual value
Trust
Shared power
Structural supports for community engagement

Expanded knowledge
New curricula, strategies + tools
Bi-directional learning
Community-ready information

Improved health + health care programs + policies
Community-aligned solutions
Sustainable solutions

PLACE(S) OF INSTRUMENT USE

Community/community-based organization (intended)

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Content validity

YEAR OF USE/TIME FRAME

2017-2019

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in REST were realigned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of REST with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

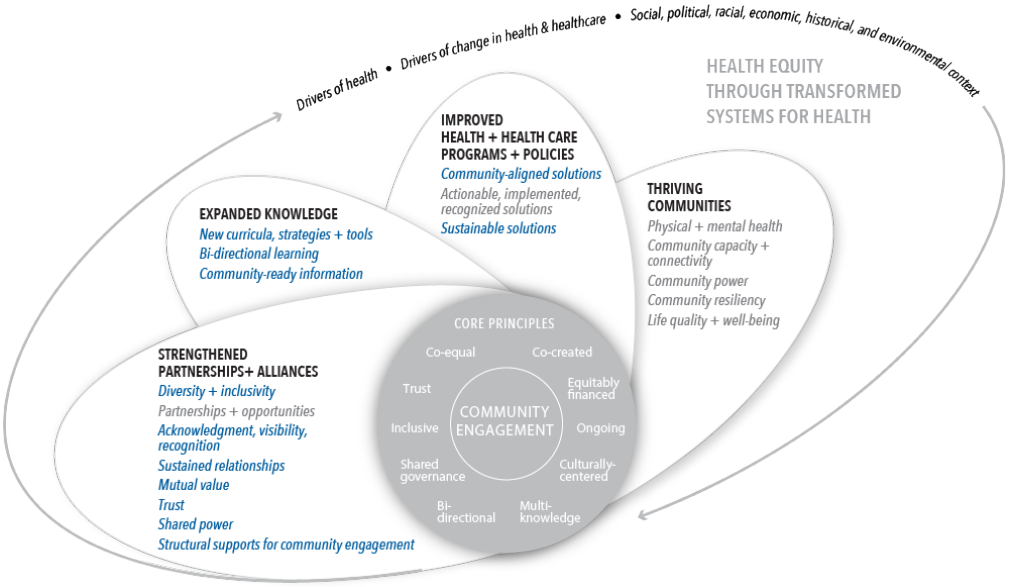

Figure 1 | Alignment of the Research Engagement Survey Tool with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of REST's individual questions with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from REST transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	1.1: Focus on issues important to the community.

	1.3: Incorporate factors (for example—housing, transportation, food access, education, employment) that influence health status, as appropriate. 1.4: Focus on cultural factors that influence health behaviors. 5.1: Build on strengths and resources within the community or patient population. 5.2: Work with existing community coalitions and organizations. 5.3: Team includes representation from the local community or patient population.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	6.4: Treat all partners' ideas with openness and respect. 8.2: Partners are confident that they will receive credit for their contributions to the partnership.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Sustained relationships**	3.3: All partners share updates, progress, strategies, and new ideas regularly.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Mutual value**	4.3: The partnership adds value to the work of all partners. 8.3: Mutual respect exists among all partners. 8.4: All partners respect the population being served. 8.5: Partners understand the culture of the organizations and community(ies) involved in the partnership.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	8.1: The environment fosters trust among partners.
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	1.2: Examine data together to determine the health problems that most people in the community think are important. 2.1: all partners assist in establishing roles and responsibilities for the collaboration. 2.2: All partners have the opportunity to share ideas, input, leadership responsibilities, and governance (for example—memorandum of understanding, bylaws, organizational structure) as appropriate for the project. 2.4: Through mutual agreement, partners take on specific tasks according to their comfort, capacity, and expertise. 3.4: Plan for ongoing problem solving. 3.5: Involve all partners in determining next steps. 4.4: Partners share resources to build capacity. 6.1: Establish fair and equitable processes to manage conflict or disagreements. 6.2: All partners are comfortable with the agreed-upon timeline to make collaborative decisions about the project. 6.3: Partners agree on ownership and management responsibility of data and intellectual property. 7.1: All partners have the opportunity to be coauthors when the work is published.* 7.3: Involve interested partners in dissemination activities.*

STRENGTHENED PARTNERSHIPS + ALLIANCES; **Structural supports for community engagement**	7.1: All partners have the opportunity to be coauthors when the work is published.* 7.3: Involve interested partners in dissemination activities.*
EXPANDED KNOWLEDGE; **New curricula, strategies + tools**	4.1: All partners have a variety of opportunities to gain new skills or knowledge from their involvement.
EXPANDED KNOWLEDGE; **Bi-directional learning**	4.2: Encourage all partners to learn from each other.
EXPANDED KNOWLEDGE; **Community-ready information**	7.2: The partners can use knowledge generated from the partnership.
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Community-aligned solutions**	2.3: Plans are developed and adjusted to meet the needs and concerns of the community or patient population. 3.1: Continue community-engaged activities until mutually agreed-upon goals are achieved.
IMPROVED HEALTH + HEALTH CARE PROGRAMS + POLICIES; **Sustainable solutions**	3.2: Partners continue community-engaged activities beyond an initial project, activity, or study.

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Research Engagement Survey Tool questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

Using a stakeholder-engaged approach, this study validated content to ensure that the tool is testing what it is intended to evaluate, as well as item reduction to determine which items should be removed or reduced from the quantitative measure of research engagement. "A broad range of stakeholders (e.g., patients, caregivers, advocacy groups, clinicians, researchers) who have experience with and knowledge about community-engaged research" participated in an iterative approach to identify what matters most to them. The stakeholders also included one community member who was new to community-engaged research and could provide the perspective of someone who did not have prior research experience.

Instrument description/purpose

REST is intended for community health stakeholders participating in research and assesses the quality and quantity of stakeholder engagement in research using nine areas of focus:

- Partner input is vital
- Partnership sustainability to meet goals and objectives
- Build on strengths and resources within the community or patient population
- Foster co-learning, capacity building, and co-benefit for all partners
- Facilitate collaborative
- Equitable partnerships
- Involve all partners in the dissemination process
- Build and maintain trust in the partnership
- Focus on community perspectives and determinants of health.

REST has 32 questions to measure "how well the partners leading the research" conduct certain activities and "how often the partners leading the research" conduct certain activities. The five-point Likert scales range from "poor" to "excellent" and "never" to "always," respectively.

REST can be accessed here: https://wp.nyu.edu/collegeofglobalpublichealth-goodman_mle_lab/rest/.

Engagement involved in developing, implementing, or evaluating the instrument

A 19-person panel composed of a broad range of stakeholders was recruited. The panel comprised patients, caregivers, advocacy groups, clinicians, and researchers with experience with and knowledge about community-engaged research, as well as one community stakeholder with no prior research experience. They were identified by email based on the networks of the project team members and served as a convenience sample for the project. Additionally, while the initial panel included a majority of academics, the final panel included additional community partners who were recommended by the academics. Using an iterative process to capture the interests of panel members that included online surveys, in-person meetings, and webinars, the panel arrived at a consensus on the items corresponding to eight areas to be used in REST to measure community engagement in research. Each item in the tool had greater than 80% agreement among group members during the process.

Additional information on populations engaged in instrument use

After the first round of the iterative process, one panelist was not able to continue to participate. "The remaining 18 panelists remained engaged in the process. …The resulting panel sample was majority female (90%), non-Hispanic (95%), African-American or Black (63%), with some college or higher education (100%) and resided in the Midwest or Southern region of the United States (72%)."

Notes

- **Potential limitations**: The panel was recruited using a convenience snowball sampling approach based on the networks of the project team members. The panel's views do not represent all ethnic groups or gender identities (e.g., Asian, Native American, and transgender), which may influence the content validation process. Further, other identities (e.g., health professions and disciplines not included; limited English proficiency; nationality; sexual orientation; health status) were not involved in the development of REST and "the impact of their presence or absence is unknown."
- **Important findings:** REST has undergone comprehensive validation and identifies "common standardized evaluation metrics." It can be used across and within projects and over time to track progress on engagement and to ensure that all aspects across the project's translational continuum are grounded in engagement.
- **Supplemental information:** Additional information on REST and additional populations in which the instrument was tested can be found in the following articles and reports:
    - NYU School of Public Health. n.d. *REST: Research Engagement Survey Tool (REST).* Available at: https://wp.nyu.edu/collegeofglobalpublichealth-goodman_mle_lab/rest/ (accessed July 14, 2022).
    - Goodman, M. S., N. Ackermann, K. A. Pierce, D. J. Bowen, and V. S. Thompson. 2021. Development and Validation of a Brief Version of the Research Engagement Survey Tool. *International Journal of Environmental Research and Public Health* 18(19). https://doi.org/10.3390/ijerph181910020.

Scoresheet for Tangible Effects of Patient Participation

Boivin, A., A. L'Espérance, F. Gauvin, V. Dumez, A. C. Macaulay, P. Lehoux, and J. Abelson. 2018. Patient and public engagement in research and health system decision making: A systematic review of evaluation tools. Health Expect 21(6):1075-1084. http://doi.org/10.1111/hex.12804.[1]

Kreindler, S. A., and A. Struthers. 2016. Assessing the organizational impact of patient involvement: a first STEPP. *International Journal of Health Care Quality Assurance* 29:441-453. https://doi.org/10.1108/IJHCQA-01-2015-0013.[2]

ASSESSMENT INSTRUMENT OVERVIEW

The **Scoresheet for Tangible Effects of Patient Participation (STEPP)**[1,2] has three questions and is used in community and health care settings. It measures the impact of patient input by assessing the magnitude of the patient recommendation, the response of the organization, and the extent of patient influence.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Acute, community, and long-term care

Canada

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances

Shared power

PLACE(S) OF INSTRUMENT USE

Community/community-based organization

Hospital, clinic, or health system

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Face validity

Inter-rater reliability

YEAR OF USE/TIME FRAME

Not specified

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in STEPP were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the STEPP with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

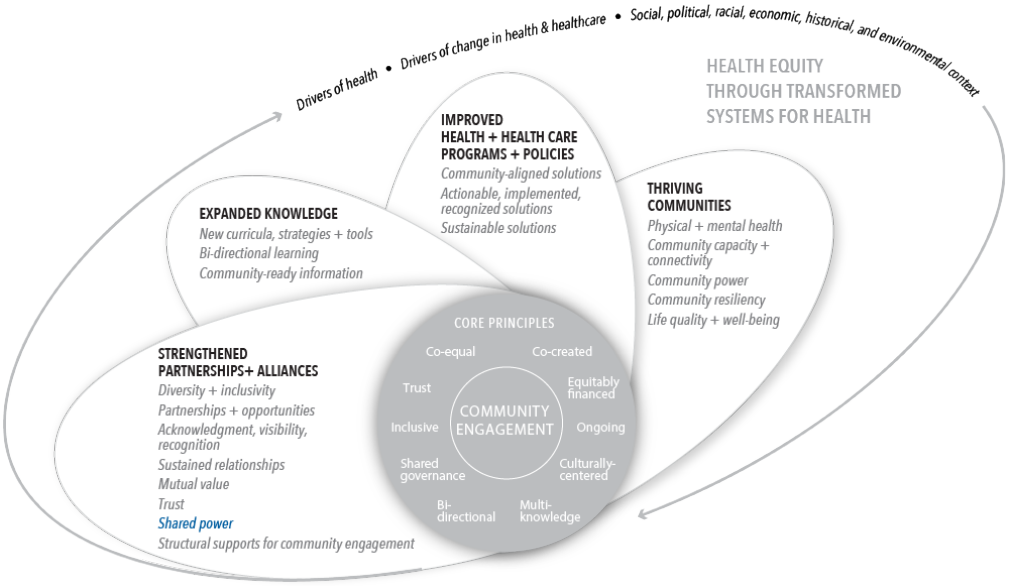

Figure 1 | Alignment of Scoresheet for Tangible Effects of Patient Participation with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of STEPP's individual questions with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from STEPP transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	How fully did the organization adopt the recommendation or address the issue? Was it one reason why an action was taken? Was it the only reason?
Not aligned with Conceptual Model	How great is the potential impact on patients?

Table 1 | Scoresheet for Tangible Effects of Patient Participation questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article discusses the involvement of patients in designing and improving health services as a critical and essential aspect of patient-centered care. Within the context of health services, patient involvement is defined "as any organized effort to gather input from actual or potential service users and/or their families, or to include them in a decision-making body or process." STEPP was developed to measure the impact of patient input on health services organizations.[2]

Instrument description/purpose

STEPP measures "the instrumental use of patient input" by assessing three focus areas:

- Magnitude of each recommendation or issue brought forward by patients
- Organization's response
- Apparent degree of patient influence on this response

Every recommendation or issue statement brought forward by patients is evaluated in the following areas using the following rating scales:

- Magnitude of recommended change or issue raised: 1 (small) – 3 (large)
- Organization's response: -1 (opposition) – 3 (full adoption)
- Influence that patient input appears to have had on the organization's response: 0 (none) – 3 (high)

The scores for each recommendation in each of the three areas are multiplied, ultimately providing a recommendation's total score.[2]

The STEPP instrument and scoring guide can be accessed here: https://nam.edu/wp-content/uploads/2023/01/STEPP-Title-Page-and-Instrument-v2.pdf.

Engagement involved in developing, implementing, or evaluating the instrument

STEPP was developed using an iterative and flexible approach. After the initial prototype instrument was developed, it was tested by five diverse patient involvement initiatives (PIIs). Four of the PIIs were advanced in their work and engagement of patients involved in acute, community, and long-term care. One initiative focused on community advisory councils that provided feedback on broad-ranging policy issues. The PII teams completed STEPP and worked with the authors to independently and then jointly score the instrument. Each round of scoring allowed for discussion of discrepancies. Challenges and feedback were logged and used to revise the instrument and the scoring guide.[2]

Additional information on populations engaged in instrument use

Not specified.

Notes

- **Potential Limitations:** STEPP only assesses one potential outcome of involvement: instrumental use. While important, there are other outcomes that could be evaluated. Quantitative and qualitative assessments are needed to evaluate processes used to generate input and non-instrumental uses of input.[2]
- **Important findings:** PII teams indicated that STEPP was straightforward and intuitive to use and complete, and teams were willing to use the full range of available scores. STEPP also appears to be highly feasible, as the process of training on use and scoring of the instrument took less than an hour and a half. PII team, patient, and researcher participation in scoring is essential for appropriate use of STEPP. The instrument appears to be best suited for initiatives where patients provide novel and concrete recommendations rather than broad public consultations. The authors also note the importance of assessing the influence of patient recommendations in a timely fashion.[2]
- **Future research needed:** Future research is needed to understand STEPP's convergent validity. The authors recommended "comparing scores to the findings of other evaluation methods, such as global assessments of impact

from project insiders or knowledgeable outsiders, and qualitative or survey data on the perceived extent of various types of impact/use."[2]

Six Factor Scale for Leaders

Lempa, M., R. M. Goodman, J. Rice, and A. B. Becker. 2008. Development of scales measuring the capacity of community-based initiatives. *Health Education and Behavior* 35(3):298-315. https://doi.org/10.1177/1090198106293525.

ASSESSMENT INSTRUMENT OVERVIEW

The **Six Factor Scale for Leaders** has 44 questions for use by communities and public health practitioners. It assesses leaders' perception of community capacity in local public health initiatives. The Six Factor Scale for Leaders is part of a set of two instruments that also includes the Five Factor Scale for Nonleaders.

KEY FEATURES

COMMUNITY/GEOGRAPHY

Local, community-based initiatives for community improvement
Grassroots citizen ventures
Various health concerns
United States

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Broad alignment
Diversity + inclusivity
Partnerships + opportunities
Acknowledgment, visibility, recognition
Sustained relationships
Trust
Shared Power

Thriving communities
Community power
Community resiliency

PLACE(S) OF INSTRUMENT USE

Community/community-based organization

LANGUAGE TRANSLATIONS

Not specified

PSYCHOMETRIC PROPERTIES

Factorial validity
Internal consistency reliability

YEAR OF USE/TIME FRAME

2000-2003

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in the Six Factor Scale for Leaders were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the Six Factor Scale for Leaders with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

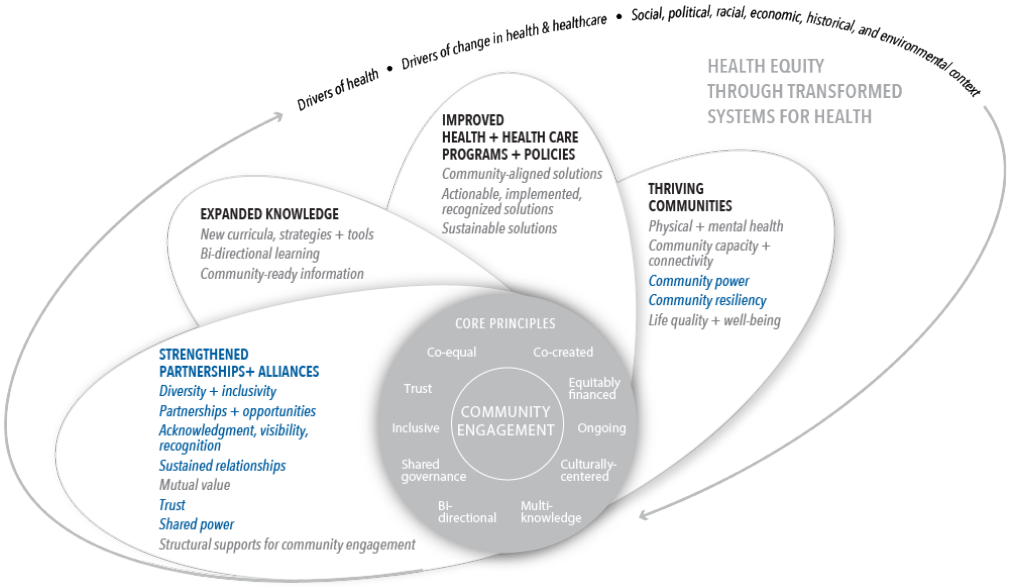

Figure 1 | Alignment of Six Factor Scale for Leaders with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the Six Factor Scale for Leaders' individual questions and validated focus areas with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s), the individual questions transcribed from the Six Factor Scale for Leaders as they appear in the instrument (with minor formatting changes for clarity), and the validated focus areas presented in the article.

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS	VALIDATED FOCUS AREA(S)
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Broad alignment with all indicators in this domain**	People involved with the project do not give up when the project faces challenges.	Ability and commitment to organizing action

	The project has a process for self-assessment.	Personnel sustainability
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Diversity + inclusivity**	People involved with the project can work with diverse groups with different interests (e.g., racial/ethnic, incomes, religious). Project members have the skills necessary for the project to succeed.	Ability and commitment to organizing action
	The project recruits staff and/or volunteers effectively. People in the community get involved in the project's activities.	Personnel sustainability
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Partnerships + opportunities**	The project • can gain support from political figures when needed. • has access to powerful people. • gets people outside the community to participate in activities when necessary. The leadership has relationships with public officials who can help the project.	External networking
	The leadership develops new leaders for the project. Staff and/or volunteers are adequately trained.	Personnel sustainability
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	The leadership • is motivated by helping others. • shows compassion for people. • tries to develop agreement in group decision making.*	Leadership
	People outside the community know • who the project's leaders are. • the name of the project. People in the community know • who the project's leaders are. • the name.	Visibility/ recognition
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Sustained relationships**	The community has access to people involved with the project.	Ability and commitment to organizing action
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	People involved with the project trust the leadership. The leadership's vision is clear to people involved with the project. The leadership • communicates its principles or values to the people involved with the project when necessary. • spells out its principles or values clearly. • follows through on their commitments.	Leadership

	People in the community listen to the opinion/position taken by the project.	Visibility/ recognition
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	The people involved with the project • support the principles or values of the leadership. • agree with the leadership's vision. The leadership tries to develop agreement in group decision making.*	Leadership
	People involved with the project have or can obtain information the project needs to succeed. Project members • help establish the project's day-to-day operations. • influence the direction that the project takes.	Ability and commitment to organizing action
	If the key leaders were to leave today, others would be able to lead effectively.	Personnel sustainability
THRIVING COMMUNITIES; **Community power**	The project helps people in the community • identify shared goals. • work together.	External networking
THRIVING COMMUNITIES; **Community resiliency**	The project helps to increase a sense of community.	External networking
Not aligned with Conceptual Model	The project • has adequate space or has access to adequate space to conduct its business. • has adequate space or access to adequate space for meetings. • has the supplies it needs (e.g., paper, postings). • has the equipment it needs (e.g., computer, fax machine, copier). • knows where to go to find funding.	Resources
	The project • can obtain information necessary for its work. • has a core group that organizes its efforts. Project members put in extra time when necessary.	Ability and commitment to organizing action
	The project has people who provide clear direction for staff and/or volunteers.	Personnel sustainability

*Note that these questions are duplicated to reflect their alignment with multiple domains and/or indicators in the Conceptual Model.

Table 1 | Six Factor Scale for Leaders questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

This article discussed a multiple-case study which took place in a predominantly African American city in the southern United States and conducted testing with 291 nationwide initiatives representing local initiatives or grassroots citizen ventures. Two quantitative instruments, the Six Factor Scale for Leaders (described here) and the Five Factor Scale for Nonleaders (described in another assessment instrument summary), were developed to assess community capacity. Community capacity often includes "the characteristics of communities that affect their ability to identify, mobilize, and address social and public health problems," and requires elements such as leadership, networks, resources, and community power.

Instrument description/purpose

The Six Factor Scale for Leaders assesses the capacity of local public health initiatives for leaders. Leaders were considered to be those who were "central to the initiative's leadership." The Six Factor Scale focuses on the following six validated (i.e., factorial) focus areas:

- Leadership
- Resources
- Visibility/recognition
- External networking
- Ability and commitment to organizing action
- Personnel sustainability

The Six Factor Scale for Leaders includes 44 questions with response options using a 10-point Likert scale ranging from "not at all" to "completely."

The Six Factor Scale for Leaders can be accessed here: https://nam.edu/wp-content/uploads/2023/01/Six-Factor-Scale-Title-Page-and-Instrument-v2.pdf.

Engagement involved in developing, implementing, or evaluating the instrument

The survey development process that produced the Six Factor Scale for Leaders was preceded by a qualitative multi-case study that took place in a large and predominantly African American city in the southern United States. The qualitative study conducted in-depth interviews with core members of eight community initiatives representing "faith-based or other well-established community organizations or in grassroots voluntary associations." Three to eight participants from each initiative were engaged. The members were 20-80 years of age and the initiatives ranged from "public health or social issues such as HIV/AIDS, housing quality, violence, and neighborhood improvement." The findings were verified with the participants and used to develop and refine a 160-item instrument that was reviewed by a panel of "four community-based representatives, seven university-based academicians, and one local advisory board member… [for] clarity, appropriateness, and wording." The instrument was pilot tested by leaders and nonleaders from communities across the U.S. representing 291 community-based initiatives.

Additional information on populations engaged in instrument use

420 organizations verbally agreed to participate in the pilot test. The final sample included 702 responses from 291 community-based initiatives. "Respondents represented all three levels of participation (Level 1: leaders, n = 251; Level 2: core participants, n = 264; Level 3: peripheral initiative participant, n = 187)."

Notes

- **Potential limitations:** There are likely a number of community initiatives that operate through volunteer efforts or are understaffed, which may have limited their time and ability to participate in the survey. Additionally, the initial number of items, the request for three respondents per initiative, and the lack of incentives provided to participate may have been prohibitive. These challenges may have influenced participation in the pilot testing or influenced the responses (i.e., respondent fatigue resulting in missing items).
- **Important findings:** The article highlights that leadership is central to community capacity, "as both [leader and nonleader instruments] indicate unequivocally, competent leadership drives initiative success in achieving a desired vision…It is the leading factor in both [instruments] and contributes more to the variance than all other factors

combined." Additionally, other elements being measured in the instruments (e.g., networking both within the community and externally to the community) reflect the influence that leadership has. Given the complexity of community capacity, triangulation of perspectives may be needed to ensure that the results are holistic and valid.

There is a high degree of congruence across leaders and nonleaders. This is reflected in the fact that 50% (22 out of 44) of the questions for the Six Factor Scale for Leaders and 58% (22 out of 38) of the questions for the Five Factor Scale for Nonleaders are identical.

It is important to note that leaders and nonleaders represent and bring distinct perspectives into the initiatives. As a result, they may focus on different aspects of "capacity." For example, leaders may be more interested in networking with people external to the community, while nonleaders prefer to network with community members who are most influential. This reflects the need for "similar but separate measurement instruments."

Moreover, while instruments such as these provide rich information and data to support the measurement of capacity, they cannot fully describe the elements that result in protected or improved community health. End users such as community members, public health practitioners, and consultants should note that a combination of qualitative and quantitative measures are necessary. Scaled instruments can be used as a diagnostic tool and to begin a dialogue with communities about their assets and opportunities to use multilevel and multimethod approaches to "build on those assets for the improvement of communities." The authors also cautioned foundations against inappropriately using the instruments to determine if a community should receive funding based on the capacities demonstrated by the instruments.

- **Future research needed:** "Capacity is not solely an internal construct and should be examined from various points of view and at different levels of the socioecologic framework. Exploring external forces on community initiatives will offer another angle from which to view the same socioecologic level as in the current study." In-depth exploration of community capacity among various community-based organizations is critical, as is continued research on the best measures to assess various dimensions of capacity to allow community-based organizations to identify their strengths and increase their capacity to promote change for their communities.

Three-Model Approach

Khodyakov, D., S. Stockdale, A. Jones, J. Mango, F. Jones, and E. Lizaola. 2012. On measuring community participation in research. *Health Education & Behavior* 40(3):346-354. https://doi.org/10.1177/1090198112459050.

ASSESSMENT INSTRUMENT OVERVIEW

The **Three-Model Approach** has two questions and is used in community partnered research. It presents three different models of partnership for use by community partners to describe their participation in the research process. The Three-Model Approach is part of a set of two instruments that also includes the Community Engagement in Research Index (CERI).

KEY FEATURES

COMMUNITY/GEOGRAPHY
Academic partners
Community partners
Mental health
Substance abuse
Behavioral health
United States

COMMUNITY ENGAGEMENT OUTCOMES
Strengthened partnerships + alliances
Shared power

PLACE(S) OF INSTRUMENT USE
Community/community-based organization
Academic/research institution/university

LANGUAGE TRANSLATIONS
Not specified

PSYCHOMETRIC PROPERTIES
Content validity
Face validity

YEAR OF USE/TIME FRAME
2010

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions in Three-Model Approach were aligned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the Three-Model Approach with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

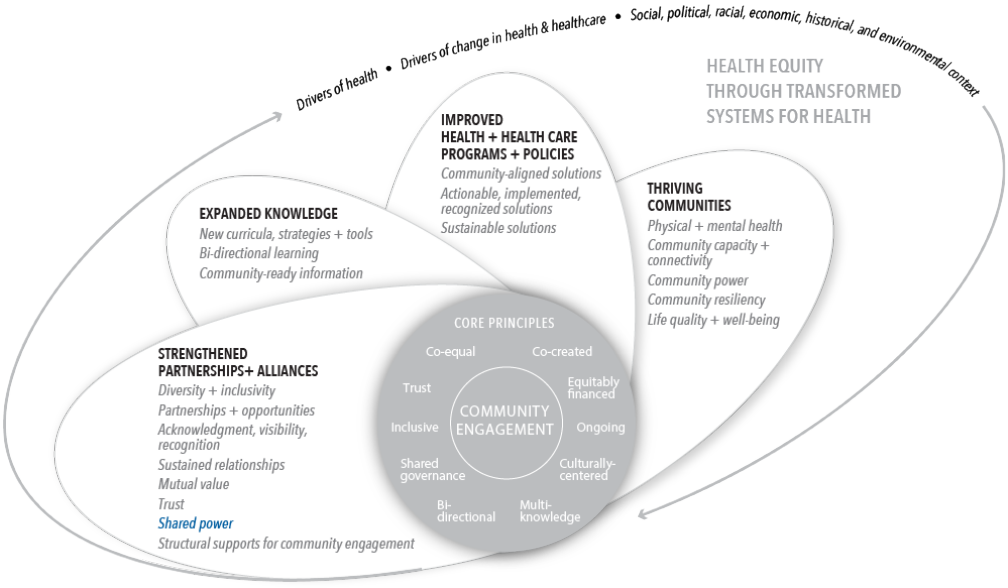

Figure 1 | Alignment of Three-Model Approach with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of the Three-Model Approach with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s) and the individual questions from the Three-Model Approach transcribed as they appear in the instrument (with minor formatting changes for clarity).

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	As you may know, there are different models of conducting partnered research projects. for example: in model A, community partners only provide access to study subjects and are not engaged in the research aspects of the project. In model B, community partners are consulted and act as advisors, but do not make any research-related decisions. In model C, community partners engage in the research activities, i.e., study design, data collection, and/or data analysis. Which of the three models best describes this partnership?

	Could you please describe what your community partners did and what role they played on this project?

Table 1 | Three-Model Approach questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The article discusses the Partnership Evaluation Study (PES), which used a mixed-methods approach to evaluate partnered research projects. Two assessment instruments were developed for the study: the Three-Model Approach to look at "levels of community participation" (discussed here) and the CERI (discussed in another assessment instrument summary) to assess the "multidimensional view of community participation in the research process." The Three-Model Approach allowed those participating in PES to differentiate between levels of participation among community partners in research projects using closed-ended questions. The development of the Three-Model Approach was a precursor to the development of CERI.

Instrument description/purpose

The Three-Model Approach identifies three different partnership models and distinguishes between "academic-led projects with community partners assisting in defining the research question and truly partnered projects with academics and community members jointly working on all research-related tasks." It reflects a straightforward way for community partners to describe their participation in the research process. The three different partnership models include:

- "Model A = community partners only provide access to study subjects and are not engaged in the research aspects of the project.
- Model B = community partners are consulted and act as advisors, but do not make any research related decisions.
- Model C = community partners engage in the research activities, that is, study design, data collection and/or data analysis."

The Three-Model Approach can be accessed here: https://doi.org/10.1177/1090198112459050. The last question of the instrument on the role of community partners in the project, noted in **Table 1**, was identified through personal communication with the article's first author.

Engagement involved in developing, implementing, or evaluating the instrument

PES "was co-developed and co-led by an academic investigator and a community partner and included both academic and community personnel as staff." The projects evaluated in PES "focused on pressing mental health and substance abuse issues, and partner organizations included research and educational institutions, faith-based and community-based organizations, homelessness agencies, health insurance companies, and various state agencies." Principal investigators were interviewed using a semi-structured guide. Online surveys were conducted with academic and community partners that were working on the projects. This helped to gain a better understanding of the aspects in which communities partners participate, as well as to assess the perceived influence that community participation had on the project and on outcomes.

Additional information on populations engaged in instrument use

Not specified.

Notes

- **Potential limitations:** The findings "are based on a limited sample of projects, all of which dealt with a behavioral health issue and were affiliated with an [National Institute of Mental Health]-funded center." Additionally, terms such as "consulted on" and "were actively engaged in," used in the evaluation, may have been defined and interpreted differently by participants. Further, not all participants who were invited to join the study participated.
- **Important findings:** The results from the interviews "suggested that a multidimensional approach to measuring community participation in research was necessary to address the challenges associated with the evolution of partnerships and to capture the wide variation in community participation in research activities." Additionally, the Three-Model Approach, which has high face validity, provides a simple framework that supports follow-up with open-ended questions about the engagement of community partners in research. Of note, the findings from the study indicate

differences in responses between academic and community partners within the same project and that consensus typically took place when projects were classified as either Model A or Model C. "Although useful for uncovering complexity of community participation in research, such as identifying the difference in community and academic perspectives and illustrating how community partners' roles change as the project evolves, the [Three-Model Approach] may not be the best choice for capturing, and assigning numeric values to, multiple dimensions of community engagement, which suggests that it may suffer from low level of content validity. …While additional research is needed to validate these measures, [the] study makes a significant contribution by illustrating the complexity of measuring community participation in research and the lack of reliability in simple scores offered by the Three-Model Approach. Researchers and community partners may also find [the instrument] useful for formative evaluation, tracking the extent and type of community engagement over time."

- **Future research needed:** The authors have proposed further research on "advancing the science of measuring community engagement in research," including:
    1. To what degree do these … measures operate in a theoretically expected way?
    2. How does perception of community participation in research vary depending on the project's substantive focus or goals?
    3. Is there a consistent response bias on either the community or the academic side in responding to questions about community engagement in research?

Youth-Adult Partnership Assessment Tool

Zeldin, S., S. E. Krauss, J. Collura, M. Lucchesi, and A. H. Sulaiman. 2014. Conceptualizing and measuring youth-adult partnership in community programs: A cross national study. *American Journal of Community Psychology* 54(3-4):337-347. https://doi.org/10.1007/s10464-014-9676-9.

ASSESSMENT INSTRUMENT OVERVIEW

The **Youth-Adult Partnership (Y-AP) Assessment Tool** has nine questions and is used in community settings. It measures the ability of youth and adults to collaborate in decision making and youth having supportive adult relationships.

KEY FEATURES

COMMUNITY/GEOGRAPHY

African-American youth
Malay youth
Chinese youth
Urban cities
Small to mid-sized cities
Large cities
Malaysia
Portugal
United States

COMMUNITY ENGAGEMENT OUTCOMES

Strengthened partnerships + alliances
Acknowledgment, visibility, recognition
Mutual value
Trust
Shared power

PLACE(S) OF INSTRUMENT USE

Community/community-based organization

LANGUAGE TRANSLATIONS

Malay (unavailable publicly)
Portuguese (unavailable publicly)

PSYCHOMETRIC PROPERTIES

Concurrent validity
Discriminant validity
Factorial validity

YEAR OF USE/TIME FRAME

Not specified

ALIGNMENT WITH ASSESSING COMMUNITY ENGAGEMENT CONCEPTUAL MODEL

The questions from the Y-AP were realigned to the Assessing Community Engagement Conceptual Model. **Figure 1** displays the alignment of the Y-AP with the Conceptual Model domain(s) and indicator(s). Where an instrument is mapped broadly with a domain or with a specific indicator, the figure shows the alignment in blue font.

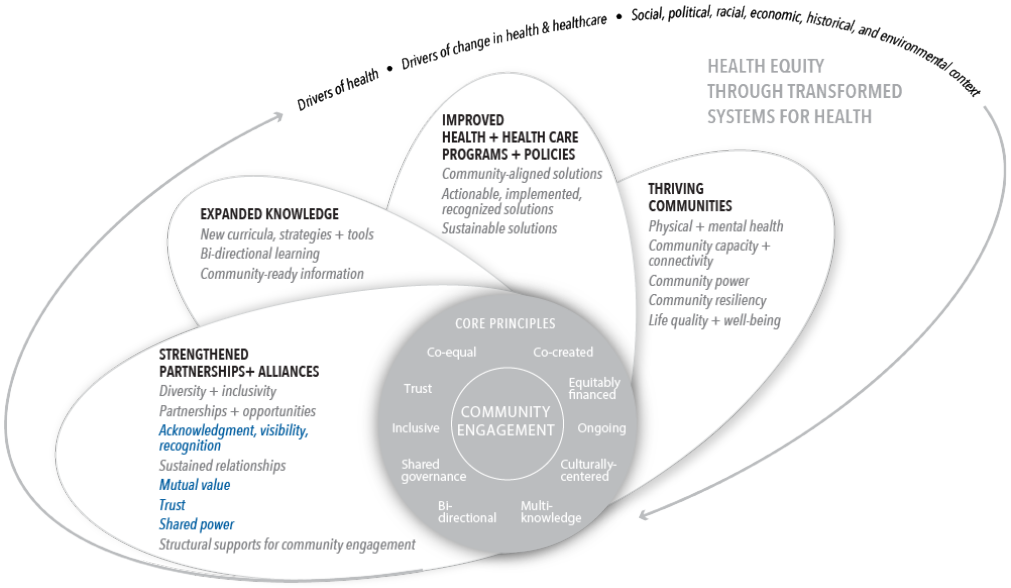

Figure 1 | Alignment of the Youth-Adult Partnership Assessment Tool with the Assessing Community Engagement Conceptual Model

Table 1 displays the alignment of Y-AP's individual questions and validated focus areas with the Conceptual Model domain(s) and indicator(s). The table shows, from left to right, the aligned Conceptual Model domain(s) and indicator(s), the individual questions from the Y-AP transcribed as they appear in the instrument (with minor formatting changes for clarity), and the validated focus area(s) presented in the article.

CONCEPTUAL MODEL DOMAIN(S) AND INDICATOR(S)	ASSESSMENT INSTRUMENT QUESTIONS	VALIDATED FOCUS AREA(S)
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Acknowledgment, visibility, recognition**	The staff/Adults in this program take my ideas seriously	
	I am expected to voice my concerns when I have them	Youth voice in decision making
	[In this center,] I am encouraged to express my ideas and opinions	

STRENGTHENED PARTNERSHIPS + ALLIANCES; **Mutual value**	Youth and adults learn a lot from working together in this center/program	
	In this center/program, it is clear that youth and staff/adults respect each other	Supportive adult relationships
	Staff/adults learn a lot from youth at this center/program	
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Trust**	Youth and staff trust each other in this center/program	Supportive adult relationships
STRENGTHENED PARTNERSHIPS + ALLIANCES; **Shared power**	There is a good balance of power between youth and adults in this center/program	Supportive adult relationships
	I have a say in planning programs/the activities at this center/program.	Youth voice in decision making

Table 1 | Youth-Adult Partnership Assessment Tool questions and alignment with the domain(s) and indicator(s) of the Assessing Community Engagement Conceptual Model

ASSESSMENT INSTRUMENT BACKGROUND

Context of instrument development/use

The study investigated the quality of community programs that self-identified as emphasizing positive youth development, effective citizenry participation, and cultivating youth voice. Services provided in the programs addressed social, recreation, health, and academic support. The article focuses on the importance of measuring one effective type of youth participation, youth-adult partnership, which is characterized by youth voice in decision making and supportive adult relationships. "Y–AP is characterized by the explicit expectation that youth and adults will collaborate in all aspects of group decision making from visioning, to program planning, to evaluation and continuous improvement."

Instrument description/purpose

Y-AP measures youth-adult partnerships using two validated (i.e., concurrent, discriminant, factorial) focus areas:

- Youth voice in decision making
- Supportive adult relationships

The instrument has nine questions that use a five-point Likert-type scale ranging from "strongly disagree" to "strongly agree."

This instrument can be accessed online here: https://fyi.extension.wisc.edu/youthadultpartnership-training/y-ap-tools/.

Engagement involved in developing, implementing, or evaluating the instrument

The initial version of the Y-AP was shared with research teams from the United States, Malaysia, and Portugal for feedback. Modifications regarding "cultural relevancy" and appropriate questions were added to the instrument. The instrument also underwent translation and reverse translation processes to ensure accuracy. Y-AP was then piloted with young people in each country and final modifications were made.

Additional information on populations engaged in instrument use

Participants in the programs were African-American youth from across a wide catchment area of urban neighborhoods in the United States; from four state registered after-school programs in a large city in Malaysia serving Malay youth and Chinese young people; and from small to mid-sized cities participating as members of a national youth development organization attending a regional retreat outside of a large city in Portugal.

Notes

- **Potential limitations**: The identified measures of Y–AP were assessed in the context of youth programs that meet regularly during after-school hours. However, youth-adult partnerships are also implemented in less ''structured'' settings such as local governance bodies, policy-oriented community coalitions, and advocacy-oriented voluntary associations. It is unknown if the identified measures would generalize to these settings.

- **Important findings**: While this study focused on measurement, the results replicate qualitative inquiries on the positive associations between agency, empowerment, and strong youth relationships and partnerships with adults in community programs.
- **Future research needed**: The authors emphasized the need for future research to examine issues of age, given that a conceptual and methodological challenge in all cross-national studies of youth is that in many nations ''youth'' are officially designated as persons up to the age of 24, 30, or even 40 years.
- **Supplemental information**: Additional resources on the development and use of this tool can be found on the following page:
    - University of Wisconsin-Madison. n.d. *Y-AP Tools for Creating Quality*. Available at: https://fyi.extension.wisc.edu/youthadultpartnership-training/y-ap-tools/ (accessed July 14, 2022).