

Understanding Purveyor and Implementer Perceptions of Implementing Evidence-Based Programs

Karen Blase, Sandra Naoom, Frances Wallace, & Dean Fixsen
National Implementation Research Network

In the Fall of 2004, with funding from the Substance Abuse and Mental Health Services Administration (Grant No. 6H79TI16105-01-1, “Operationalizing Implementation Strategies and Methods”) the authors invited a select group of program developers (purveyors) and implementers of evidence-based programs and practices to a series of two working meeting to explore the “craft knowledge” related to the implementation of evidence-based programs and practices. The first of these meetings was conducted with the developers of evidence-based programs and practices; the second meeting was conducted with implementers of the same evidence-based programs and practices. A “purveyor” is a group of individuals representing a program or practice who actively work to implement that practice or program with fidelity and good effect. An “implementer” is a group of individuals employed by a provider organization to implement a particular program or practice with a group of consumers (see Fixsen, Naoom, Blase, Friedman, & Wallace, 2005 for further discussion). The data presented here are results from a concept mapping process used with the participants of these two working meetings. Concept mapping combines a group process (brainstorming, sorting, and rating of items generated in brainstorming) with multivariate statistical analyses (multidimensional scaling and hierarchical cluster analysis) to create conceptual maps that are then interpreted by the group(s) who generated the items (Trochim, 1994).

Participants

Overall there were 23 participants: fourteen implementers who participated in the entire concept mapping process and nine purveyors who participated in the sorting and rating process only.

Implementers: There were 14 participants at the implementer working meeting who contributed to the entire concept mapping process. Twelve of these participants were currently involved in program or practice implementation efforts across 12 different evidence-based programs or practices. The implementers were selected using a snowball approach in which a number of purveyors were asked to recommend “well performing” implementers of their specific program or practice. The participants represented current implementation efforts in individual and group therapy, services for older persons, adult mental health and supported employment programs, children’s school-based mental health, school-based substance abuse prevention, early intervention, child welfare services and services to youth involved in the juvenile justice system. In addition, a cultural competence expert knowledgeable about evidence-based program development and implementation and representing the National Alliance of Multicultural Behavioral Health Associations participated along with a representative from a family advocacy group, the Federation of Families for Children’s Mental Health.

Purveyors: Seven of the purveyors who participated in the concept mapping process represented five of the same evidence-based programs and practices as implementers. In addition, a cultural competence expert and government partner who had attended the purveyor meeting also participated in the concept mapping process. Unlike the implementers, the purveyors of evidence-based practices or programs did not participate in the entire concept mapping process, but rather sorted and rated all the items generated by the implementers in their working meeting.

EBP	Purveyor	Implementer
ACT	Deborah Allness	Celia Burke
CASELS	Manolya Tanyu Joseph Zins	Anne Kirkpatrick
DBT		JoAnn Marsden
FFT		Josephine Emilio
Incredible Years	Julie Jones-Anderson Jamila Reid	Margie MacLeod
MDTFC		Lisa Emmons
MST	Joe Boggs Dan Edwards	Alesia Brooks
Nurse-Family Partnership		Sara Klingner
Nutrition Model Program for Elderly	Sue Levkoff	Sandra Albright
PBIS	Lucille Eber Lori Newcomer	Martha Wally
School-based MH	Howard Adelman Linda Taylor	Jim Bierma
Supported Employment	David Lynde	Sitka Stueve
Family Representation	Trina Osher	Lisa Brown
Cultural Representation	Larke Huang	Mario Hernandez

The Concept Mapping Process

Concept mapping begins with a structured brainstorming process in which participants are given a focus statement and guided to generate statements in response to the prompt.

The focus statement was: “Thinking at the practice, agency, and system level, one specific factor that influences or impacts implementation of a new program or practice is...”

One hundred and twenty-four statements were generated as a result of the round-robin brainstorming session with implementers. Following the brainstorming, each participant was provided with a complete set of the statements and asked to sort the statements into piles in a “way that makes sense” to them. After the individuals created their piles of statements, they named each pile according to the type of statements included in that pile.

In addition to sorting the statements, each participant was given a list of all 124 statements and asked to rate them from 1 to 5 in terms of importance, feasibility and dependency dimensions. Each 5-point scale was structured with 1 being “Not at all” and 5 being “Extremely” with each point in between labeled.

The three rating questions were phrased as follows:

1. How important is this factor to implementation?
2. How feasible is it for program developers to impact this factor as they help sites implement an evidence-based program or practice?
3. To what degree is implementation of this factor dependent on change in state or federal policy (e.g. funding, regulations, policies, workforce issues, collaboration)?

Each purveyor was contacted and asked to participate in the sorting and rating portion of the concept mapping process. A total of 9 of the 15 participants in the purveyor meeting did the sorting and rating via a mail-out process.

Data analysis

The analysis of these data was conducted using the Concept Systems software package (Concept Systems, Inc.), which makes use of multivariate statistical techniques including multidimensional scaling and cluster analysis. This analysis was used to create a conceptual map of statements generated by the participants. On this map, statements perceived to be similar to one another based on the group's sorting are positioned close to each other and statements perceived to be dissimilar are located farther apart. Similar statements are grouped together in non-overlapping categories called clusters based on their proximity to one another.

The entire concept mapping process is described in detail by Trochim (1989). The analytic process was summarized by Jackson & Trochim (2002): "The final cluster solution is determined by using an analysis of statements. The analysis begins with each statement as its own cluster and tracks the merging of those statements into clusters up to a 20-cluster solution. The researchers then examine each cluster solution to determine how appropriate the merging or splitting of statement groups is and chooses the best number of clusters. The clusters are then labeled. Concept Systems uses centroid analysis to select labels for each cluster from the pile names generated by the sorters. A centroid is defined as 'the point whose coordinates are the means of all the observations in the cluster.' A centroid is first computed for each of the clusters on the map by taking the average x and average y values of the MDS coordinates for each point in the cluster. The centroid value is then computed for every sort-pile label for every sorter by taking the average x and average y values of the MDS coordinates for each statement point the sorter placed in that pile. Lastly, the Euclidean distance is computed between the cluster centroid and the centroid of each pile label and the pile with the smallest Euclidean distance is thought to be the best fitting label. Concept Systems provides a top ten list of pile labels from which researchers can choose the most fitting label for the content of each cluster."

Results

The following results are presented in four sections. Section A contains the results of those items that were generated and then sorted and rated by implementers. Section B is comprised of the purveyor sort and rate data. In Section C, the results of the purveyor and implementer sorting and rating data in sections A and B will be compared and contrasted. Finally, in Section D the combined purveyor and implementer sorting and rating data will be presented.

A. Implementer Concept Map Interpretation

Implementer sorts and subsequent analysis produced a ten-cluster solution concept map (see Appendix A). The conceptual domains for the implementer map are: Funding, Policy and Systems Issues, Recruitment and Retention of Staff, Creating an Agency Culture for Success, Operational Issues, Cultural/Racial/Consumer Concerns, Implementation Facilitators, Beginning Implementation, Purveyor/Implementer Relationship, and Quality Assurance and Evaluation. The conceptual domains for the implementer map are listed in Table 1 in order of the average “importance” rating for the items in each cluster (the importance, feasibility, and dependence ratings for each item by cluster are provided in Appendix B).

Table 1. Implementer Cluster and Rating Data

Cluster	<u>Importance</u>	Feasibility	Dependence
Purveyor/Implementer Relationship	4.36	4.33	2.14
Recruitment and Retention of Staff	4.35	3.05	2.57
Quality Assurance and Evaluation	4.29	4.27	2.60
Creating an Agency Culture for Success	4.24	3.32	2.29
Funding Issues	4.23	3.21	3.70

Beginning Implementation	4.03	3.92	2.35
Implementation Facilitators	4.02	3.61	2.17
Operational Issues	3.94	3.27	2.81
Cultural/Racial/Consumer Concerns	3.93	3.86	2.59
Policy and Systems Issues	3.93	3.01	3.11

Their respective purveyor groups nominated the implementers chosen to attend the meeting as being “good examples” of implementation. Generally, they were in year 2 or 3 of the implementation process within their provider agency: far enough along to have a good idea of implementation issues but still in the early stages of overall development as an implementation site.

Importance, Feasibility, and Dependence:

Nearly all of the average cluster ratings for Importance were at or near the 4.0 or better mark (range of 3.93 to 4.36), indicating they were seen as very important or extremely important to successful implementation. Recall that the focus statement asked the question, “Thinking at the practice, agency, and system level, one specific factor that influences or impacts implementation of a new program or practice is ...?” Thus, the implementers’ ratings of importance seem to confirm the validity of their generation of the items.

No average cluster rating fell below 3.00 on the feasibility scale implying that purveyors were "not let off the hook". On average the statements in all the clusters were rated as moderately feasible (3.01) to very feasible (4.33) for the program developers to impact. Implementers rated only the Funding Issues cluster (3.70) and the Policy and Systems Issues cluster (3.11) as being more dependent on state and federal policies, and even those were viewed as feasible for purveyors to influence (ratings of 3.21 and 3.01 respectively).

Participant Feedback:

The researchers presented the concept mapping data and maps to the implementers in the form of a report. The results were mailed to each participant and a conference call was scheduled to discuss the findings. Tight clustering in the Purveyor/Implementer

Relationship indicated that there was good agreement that the items in this cluster belonged together. Four of the ten most important statements fell into the Purveyor/Implementer Relationship cluster; six of which were most feasible for the purveyor to impact. In the discussion, the implementers did not think the high feasibility scores would be a surprise to the purveyors with whom they are associated. However, some did think that the developers/ researchers involved in other programs might be surprised by the degree of responsibility implementers assigned to the purveyors. General comments were to the effect that without the purveyor there would be a lot of “misfires” and implementation would be more diffuse with poorer fidelity outcomes. Implementers stated that active coaching and mentoring by purveyors is critical not only for learning how to use the *content* of the evidence-based practice but also for knowing how to deal with the *context*. Furthermore, implementer’s felt that purveyors needed to not only to give answers to program issues but also to normalize what is happening during the early stages of implementation. The implementers noted how important it was to have purveyors who were there to help get them through the early challenges by sharing what the purveyors had learned from previous site development efforts. The implementers noted that it is critical for purveyors and implementers to have a personal relationship characterized by honest dialogue and problem-solving. Without a strong, trusting relationship the hard work of implementation could not be accomplished.

There were a number of statements that were rated as highly important (4.0 or better) but for which both the feasibility and the dependency ratings were relatively low, below 3.00. The ratings for these items indicated the participants thought they were important to implementation success, they were not especially dependent on state and federal policies or funding, yet they were not likely to be directly impacted by the purveyor. These items were:

- Stakeholder alignment with the values of the program
- Good agency support links with colleagues with open minds
- Whether the program or practice is on mission for the agency
- Administrative acknowledgement of efforts

- The program manager’s ability to operate effectively within the current system

When the implementers were asked why they thought these items had low feasibility and dependence ratings, participants indicated that these items seemed to be more systemic with a longer term, evolving timeline, and in some cases they could keep going despite the fact that these things weren’t yet in place, involved communication and collaboration, or were more dependent on the internal situation of the community or organization.

B. Purveyor Concept Map Interpretation

Purveyors were asked to sort and rate the items that had been generated by the implementers. Purveyor sorts and subsequent analysis produced a ten-cluster solution (See Appendix C). The conceptual domains for the purveyor map are: Barriers, Financial Facilitators, Quality Improvement and Evaluation, Bridging Statements, Workforce Competence and Capacity, Administrative Facilitators, Site Readiness, Consumer/Community Buy-in, Purveyor Role, and Establishing Community and Referral Fit. The conceptual domains for the purveyor map are listed in Table 2 in order of the average “importance” rating for the items in each cluster (the importance, feasibility, and dependence ratings for each item by cluster are provided in Appendix D).

Table 2. Purveyor Cluster and Rating Data

Cluster	Importance	Feasibility	Dependence
Purveyor Role	4.29	4.34	2.24
Site Readiness	4.29	3.64	2.60
Goal Statements	4.25	3.99	2.36
Administrative Facilitators	4.23	3.22	2.45

Quality Improvement and Evaluation	4.13	3.95	2.60
Establishing Community and Referral Fit	4.13	3.58	2.17
Workforce Competence and Capacity	4.07	3.72	2.41
Financial Facilitators	4.05	2.63	3.99
Consumer/Community Buy-in	4.04	3.62	2.44
Barriers	3.58	3.16	2.35

Compared to the implementers, determining the correct cluster solution and labels for the purveyor map was more difficult. Perhaps this was because the items were more difficult for the purveyors to understand and sort since they were not there for the discussion when the implementers generated the statements. In general, for the final ten-cluster solution each cluster had a relatively low bridging value implying the cluster was more cohesive and reflective of the content for that area of the map. Bridging values help us to interpret what content is associated with specific areas on the map. The highest cluster bridging value is .52 for the financial facilitators cluster, which makes sense since clusters with higher bridging values are more likely to bridge between other clusters on the map.

Importance, Feasibility, and Dependence:

As shown in Table 2, the purveyors sorted the items and labeled the clusters differently from the implementers (see Table 1). Like the implementers, the purveyors perceived everything as important to the success of implementation efforts and similarly saw that funding (“financial facilitators”) was more dependent on policy and funding issues (3.99) and less feasible (2.63) for them to impact directly. The conceptual area that was most similar included the items in the implementer’s “Purveyor/Implementer Relationship” cluster and the purveyor’s “Purveyor Role” cluster (see Section C for further information).

Participant Feedback:

After reviewing the results, one purveyor commented that there is variation in the degree to which funding for a program specifies what the program must look like in detail and noted that it might be worthwhile to understand more about informant perspectives. For example, are the implementers describing implementations that are mandated by the state or just generally supported by the state (is implementation encouraged or required). One component that a purveyor felt the implementers had left out was the whole idea of “creating a learning system” at each implementation site. Another purveyor posited that so few items generated were highly dependent on state and federal policies and funding because “it would be like stating the obvious”... rather he has come to think that “funding is not so much important in sustainability of implementation as is collaboration and having community partners.”

C. Comparing Implementer and Purveyor Ratings

Importance:

When looking at what implementers rated as the ten most important implementation factors, as compared to what purveyors rated as the top ten, 7 out of the 10 implementation factors were on both top ten lists. These common top-rated implementation factors are:

- evidence based interventions that can be taught, modeled, evaluated and replicated,
- major stakeholder and leadership buy-in and support of the new model,
- the commitment of staff to the program model,
- the availability of ongoing training and technical assistance,
- support from the developer in terms of ongoing training, evaluation, and constructive feedback,
- adequate funding to support implementation as well as ongoing operation of the program after implementation, and
- support from the agency.

Feasibility:

Implementers and purveyors agreed on 5 out of the 10 implementation factors that were rated as most feasible for purveyors to impact, these factors are:

- evidence-based interventions that can be taught, modeled, evaluated and replicated,
- the availability of ongoing training and technical assistance,
- support from the developer in terms of ongoing training, evaluation, and constructive feedback,
- clear information from the start about fidelity, and
- a link between the evaluation of fidelity and training.

Dependence:

Six of the ten implementation factors implementers and purveyors alike rated as most dependent on state/federal policy and funding were:

- adequate funding to support implementation as well as ongoing operation of the program after implementation,
- regulations at the county, state, federal, or agency level,
- state aid for programs that are struggling rather than imposing sanctions,
- flexibility of funding,
- funding methods that embrace quality of services versus quantity of services, and
- modification of state statutes to support interventions of the program.

Individual item analysis:

Starting with a common pool of 124 items generated by implementers of evidence-based practices and programs, concept mapping was done separately with implementers and with purveyors as described above. The analysis presented in this section compares the results of the two concept mapping processes. This analysis provides a unique opportunity to cross the views of the implementers with those of the purveyors simultaneously involved in the same implementation efforts.

Given that the same 124 items were independently sorted and rated by each group, it is possible to cross reference the sorting and concept labeling of each item. In the lists provided below, the primary concept label (e.g. “Purveyor/ Implementer Relationship”) emerged from the concept maps developed by the implementers. The secondary concept label (e.g. “Site Readiness”) emerged from the concept maps developed by the purveyors. Thus, the following lists provide two views of the same items: the implementers’ view and the purveyors’ view.

Table 3 shows the distribution of items among the implementer clusters and the purveyor clusters. Shaded cells show the greatest degrees of overlap between the two groups. As shown in Table 3, there were only two cluster groups with at least 50% overlap in the items. These are implementer “funding issues” and purveyor “financial facilitators” (6 of 11 items are the same) and “quality assurance and evaluation” and “quality improvement and evaluation” clusters (7 of 9 items are the same).

Table 3. A comparison of implementer and purveyor clusters.

	<i>Purveyor Clusters</i>										
	<i>Workforce</i>					<i>Consumer,</i>					
Implementer Cluster	<i>Site</i> <i>Readiness</i>	<i>Admin</i> <i>Facilitators</i>	<i>Comp. &</i> <i>Capacity</i>	<i>QI &</i> <i>Eval.</i>	<i>Goal</i> <i>Statements</i>	<i>Financial</i> <i>Facilitators</i>	<i>Barriers</i>	<i>Purveyor</i> <i>Role</i>	<i>Community</i> <i>Buy-in</i>	<i>Establish</i> <i>Fit</i>	# Items
Create Agency Culture	8	7	3	0	1	0	0	0	3	3	25
Recruit & Retain Staff	3	4	5	0	2	0	1	0	0	0	15
Funding Issues	1	0	0	2	0	6	0	0	1	1	11
Operational Issues	2	0	0	1	0	0	4	1	1	1	10
Policy & Systems Issues	0	0	2	0	0	3	1	0	0	5	11
Beginning Implementation	3	0	4	2	1	0	0	1	1	0	12
Implementation Facilitators	1	0	1	0	1	0	1	2	1	0	7
Purveyor - Implementer Relationship	2	0	1	3	2	0	0	5	0	3	16
QA & Evaluation	0	0	0	7	0	0	0	1	1	0	9
Cultural, Racial, & Consumer Concerns	0	0	0	0	1	0	3	1	3	0	8
# Items	20	11	16	15	8	9	10	11	11	13	124

The items in each of the cells are described in the following analysis.

The relationship between the purveyor and the implementer was seen as very important by the implementers. The purveyors put the same 16 items into concept areas they labeled as site readiness, establishing community and referral fit, purveyor role, workforce competence and capacity, quality improvement and evaluation, and goal statements. Thus, what the implementers' saw as their relationship with their purveyor group, purveyors saw as a series of activities with a wide range of people at the implementation site.

This analytic format applies to each of the remaining nine concept areas as well. In each case, the purveyors' interpretation of the implementer items gives insight into the activities in which a purveyor may be engaged in order to achieve the goals implied in the implementers' conceptual area.

1. Purveyor/ Implementer Relationship (16 implementer items)

a. Site Readiness

- i.that interventions are directly aligned with goals of the program
- ii.effective protocols for communication with the purveyors

b. Establishing Community and Referral Fit

- i.understanding the degrees of freedom for adapting the model without losing the effectiveness
- ii.forging a collaborative bond between the purveyor and the implementers
- iii.to be sure the purveyor understands the practice and agency at the ground level (e.g. context, daily operations, racial mix of clients)

c. Purveyor Role

- i.clear information from the start about fidelity

- ii. clarifying for implementers the communication loop for accessing resources about implementation
- iii. having a purveyor know what reasonable goals (e.g. utilization, number of units operational) are and help implementer set them
- iv. purveyors and implementers are partners
- v. the ability of the purveyor to anticipate and have the capacity to respond to cultural/linguistic/racial adaptations identified by implementers
- d. Workforce Competence and Capacity
 - i. support from the developer in terms of ongoing training, evaluation and constructive feedback
- e. Quality Improvement and Evaluation
 - i. a way to connect and problem solve with other implementers
 - ii. the availability of ongoing training and technical assistance
 - iii. a link between the evaluation of fidelity and training
- f. Goal Statements
 - i. evidence-based interventions that can be taught, modeled, evaluated and replicated
 - ii. the purveyor's ability to assess how normal the implementer's experience is at different stages (e.g. expectations)

A second area that emerged from the implementers' concept map was "creating an agency culture for success". The purveyors put the same 25 items in concept areas they labeled as site readiness, establishing community and referral fit, consumer and community buy-in, administrative facilitators, workforce competence and capacity, and goal statements.

2. Creating an Agency Culture for Success (25 implementer items)

a. Site Readiness

- i.major stakeholder and leadership buy-in and support of the new model
 - ii.willingness and ability to change
 - iii.good agency support links with colleagues with open minds
 - iv.whether the program or practice is on mission for the agency
 - v.motivation for change
 - vi.motivation of the agency to make the program work
 - vii.adaptation of the agency's culture in order to deliver the practice
 - viii.a sense of humor
- b. Establishing Community and Referral Fit
 - i.matching the model values to the practitioner's values
 - ii.buy-in from staff, consumers, and referral sources
 - iii.that open communication is fostered among stakeholders and implementers
- c. Consumer and Community Buy-in
 - i.stakeholder alignment with the values of the programs
 - ii.the degree of disruption of the new program in relation to current operations
 - iii.sensitivity to agency's limitations
- d. Administrative Facilitators
 - i.a culture of learning is needed in the program and in the system
 - ii.support from the agency
 - iii.work expectations that are reasonable
 - iv.the program manager's ability to advocate for the program both within the agency and outside the agency
 - v.administrative acknowledgement of efforts

- vi.the program manager's ability to operate effectively within the current system
- vii.bosses and agencies' understanding of the importance of fidelity to the model
- e. Workforce Competence and Capacity
 - i.practitioner understanding of the active ingredients/ "the why" of the program
 - ii.willingness of staff and purveyor to make it work at the agency
 - iii.implementation with newly hired staff is different than implementation with current staff
- f. Goal Statements
 - i.to identify naysayers and positively supervise and train them on the model

A third area that emerged from the implementers' concept map was "cultural/ racial/ consumer concerns". The purveyors put the same 8 items in concept areas they labeled as purveyor role, consumer and community buy-in, goal statements, and barriers.

3. Cultural/ Racial/ Consumer Concerns (8 implementer items)

- a. Purveyor Role
 - i.cultural/racial/linguistic competence of the program
- b. Consumer and Community Buy-in
 - i.that needs assessments are used for the population served by the program
 - ii.to take consumers input through entire implementation process and use it
 - iii.to be aware of whom the program may exclude (consumers)
- c. Goal Statements
 - i.development of culturally competent standards and a way to measure their effectiveness
- d. Barriers

- i.cultural differences from the original program to other replication sites
- ii.the pressure and expectation that the program will work for every child
- iii.inadvertent barriers created by evaluation protocols/requirements (e.g. informed consent, confidentiality, public embarrassment)

A fourth area that emerged from the implementers' concept map was "funding issues." The purveyors put the same 11 items in concept areas they labeled as site readiness, consumer and community buy-in, establishing community and referral fit, quality improvement and evaluation, and financial facilitators.

4. Funding Issues (11 implementer items)

- a. Site Readiness
 - i.educating outside community resources about the model's expectations
- b. Consumer and Community Buy-In
 - i.assurances of sustainability
- c. Establishing Community and Referral Fit
 - i.community support
- d. Quality Improvement and Evaluation
 - i.to have adequate funding for technical support and IT professionals taking feedback from implementers so that innovative technological solutions can be created (e.g. scheduling)
 - ii.the use of technology
- e. Financial Facilitators
 - i.money to ensure the program is successful

- ii. flexibility of funding
- iii. funding methods that embrace quality of services versus quantity of services
- iv. adequate funding to support implementation as well as ongoing operation of the program after implementation
- v. financial strain while the program is getting off the ground
- vi. to align billing and billing codes with evidence-based practices

A fifth area that emerged from the implementers' concept map was "policy and systems issues." The purveyors put the same 11 items in concept areas they labeled as establishing community and referral fit, workforce competence and capacity, financial facilitators, and barriers.

5. Policy and Systems Issues (11 implementer items)

- a. Establishing Community and Referral Fit
 - i. program alignment with values of the community
 - ii. system level planning of referrals and discharges
 - iii. the quality of the screening of referrals including client commitment to participate
 - iv. the local community context with its needs and strengths
 - v. making referrals for consumers whose needs can't be met by the implementer is a component
- b. Workforce Competence and Capacity
 - i. supportive and collaborative with referring agencies that allow for flow of information in the HIPPA climate
 - ii. to educate accrediting bodies about the new methods of treatment and documentation
- c. Financial Facilitators
 - i. modification of state statutes to support interventions of the program

- ii.regulations at the county state federal or agency level
- iii.state aid for programs that are struggling rather than imposing sanctions
- d. Barriers
 - i.cultural/racial/linguistic differences between staff and people served

A sixth area that emerged from the implementers' concept map was "operational issues." The purveyors put the same 10 items in concept areas they labeled as site readiness, consumer and community buy-in, establishing community and referral fit, purveyor role, quality improvement and evaluation, and barriers.

- 6. Operational Issues (10 implementer items)
 - a. Site Readiness
 - i.helping to support and create strong family and consumer involvement
 - ii.provider's understanding of and respect for consumer's needs
 - b. Consumer and Community Buy-in
 - i.a system that supports and encourages collaboration
 - c. Establishing Community and Referral Fit
 - i.referral sources for clients to the program
 - d. Purveyor Role
 - i.assistance with setting an initial budget that is accurate and adequate for initial implementation
 - e. Quality Improvement and Evaluation
 - i.computer and technical assistance
 - f. Barriers

- i. vying with other programs for time with the targeted audience
- ii. the amount of required paperwork
- iii. institutionalized racism
- iv. reimbursement requirements and duplicate paperwork

A seventh area that emerged from the implementers' concept map was "recruitment and retention of staff." The purveyors put the same 15 items in concept areas they labeled as site readiness, administrative facilitators, workforce competence and capacity, goal statements, and barriers.

7. Recruitment and Retention of Staff (15 implementer items)

- a. Site Readiness
 - i. adequate agency commitment to human resources and funding
 - ii. board or advisory board support
 - iii. dedicated focus of sufficient human resources
- b. Administrative Facilitators
 - i. hiring staff with a pre-determined set of criteria to maximize the likelihood of good outcomes
 - ii. positive relationships between management and staff providers
 - iii. to provide adequate and competitive compensation for staff to increase their longevity in their position which ultimately leads to better program outcomes
 - iv. creating an environment that is supportive of individual needs of staff to create a healthy working environment
- c. Workforce Competence and Capacity
 - i. staff participants agreement on goals

- ii.a recruitment and retention plan
 - iii. identification of key skills of staff and service providers to be used in selection processes
 - iv. qualified staff interested in doing this kind of work
 - v. adequate supervision and incentives to stay
- d. Goal Statements
 - i. the commitment of staff to the program model
 - ii. to celebrate success
- e. Barriers
 - i. staff turnover

An eighth area that emerged from the implementers' concept map was "beginning implementation." The purveyors put the same 12 items in concept areas they labeled as site readiness, consumer and community buy-in, purveyor role, workforce competence and capacity, quality improvement and evaluation, and goal statements.

8. Beginning Implementation (12 implementer items)

- a. Site Readiness
 - i. starting small
 - ii. having a realistic timeline for implementation
 - iii. research in your hands so you can promote evidence-based practice and buy-in
- b. Consumer and Community Buy-in
 - i. that legal or liability issues are addressed prior to implementation
- c. Purveyor Role

- i.preparation for controversies and common questions that arise
 - d. Workforce Competence and Capacity
 - i.initial staff training
 - ii.facilitate regular off-site leadership meetings to address the challenges and barriers which arise during implementation and beyond
 - iii.that success is shared and improvements needed are addressed throughout the program
 - iv.building from strengths and learning from mistakes
 - e. Quality Improvement and Evaluation
 - i.the understanding and application of appropriate learning theories (i.e. early childhood, adolescent and adult)
 - ii.to identify areas in which the smallest effort will create the greatest amount of change/impact on program goals
 - f. Goal Statements
 - i.the right set of tools (e.g. readiness assessments, decision-making trees)

A ninth area that emerged from the implementers' concept map was "implementation facilitators." The purveyors put the same 7 items in concept areas they labeled as site readiness, consumer and community buy-in, purveyor role, workforce competence and capacity, goal statements, and barriers.

9. Implementation Facilitators (7 implementer items)

- a. Site Readiness
 - i.the ability to respond to stakeholder and funder questions and concerns about cost
- b. Consumer and Community Buy-in
 - i.identifying champions at all systems levels
- c. Purveyor Role

- i. recognizing that implementation covers areas that the evidence-based intervention does not cover (e.g. marketing)
 - ii. to move from theory to practice
- d. Workforce Competence and Capacity
 - i. agenda driven team meetings which reinforce evidence-based practices and fidelity within case reviews
- e. Goal Statements
 - i. focused training that targets the key philosophy and mission
- f. Barriers
 - i. geographical location and differences from the original program

The final area that emerged from the implementers' concept map was "quality assurance and evaluation." The purveyors put the same 9 items in concept areas they labeled as quality improvement and evaluation, purveyor role, and consumer and community buy-in.

10. Quality Assurance and Evaluation (9 implementer items)

- a. Quality Improvement and Evaluation
 - i. data driven
 - ii. an evaluative tool that not only allows for course correction but leads to it
 - iii. setting up a system to collect process and outcome data to feed back into systems for quality improvement and implementation monitoring
 - iv. research instruments that are tailored to meet the unique needs of the population served
 - v. initial outcomes
 - vi. quality control and fidelity monitoring that is strength based and corrective rather than punitive
 - vii. establishing benchmarks for administrative review to track implementation progress
- b. Purveyor Role

- i.that fidelity needs to be emphasized
 - c. Consumer and Community Buy-in
 - i.implementing the appropriate program that produces the desired outcomes

D. Purveyor - Implementer Cluster Map Interpretation:

When we combined both implementer and purveyor sort data the result was an eleven-cluster solution (See Appendix E). The conceptual domains for the purveyor and implementer cluster solution are: Evaluation and Fidelity, Purveyor/Implementer Relationship, Culture and Access, Early Implementation Factors, Training and Ongoing Implementation Strategies, Client and Community Fit, Stakeholder Community Support, Motivation for Change, Funding and Policy Concerns, Agency Support, and Recruitment and Retention of Staff. The conceptual domains for the purveyor-implementer map are listed in Table 4 in order of the average “importance” rating for the items in each cluster (the importance, feasibility, and dependence ratings for each statement by cluster are provided in Appendix F).

Table 4. Purveyor-Implementer Cluster and Rating Data

Cluster	Importance	Feasibility	Dependence
Purveyor/Implementer Relationship	4.30	4.30	2.07
Recruitment and Retention of Staff	4.29	3.13	2.49
Evaluation and Fidelity	4.29	4.21	2.68
Stakeholder/Community Support	4.29	3.38	2.63
Motivation for Change	4.19	3.65	2.22

Agency Support	4.18	3.14	2.53
Early Implementation Factors	4.17	3.98	2.24
Training and Ongoing Implementation Strategies	4.08	3.81	2.02
Funding and Policy Concerns	4.07	2.93	3.86
Client and Community Fit	3.83	3.17	2.50
Cultural and Access	3.80	3.67	2.36

Importance:

The correlation between purveyor and implementer ratings of importance is 0.79. Overall, cluster ratings fell between 3.73 to 4.4 for purveyors and 3.84 to 4.37 for implementers on a 5-point scale of importance. When we look at cluster ratings relative to one another, purveyors rated the Purveyor/Implementer Relationship cluster as relatively more important (4.40) than implementers rated the same cluster (4.20). Whereas, implementers (4.37) rated the Recruitment and Retention of Staff cluster as relatively more important than purveyors (4.15). Both implementers and purveyors rated Client and Community Staff (purveyor=3.73; implementer=3.89) and Culture and Access (purveyor=3.73; implementer=3.84) clusters as the least important of the ten clusters.

Feasibility:

The correlation between implementer and purveyor ratings of feasibility of purveyors to impact implementation factors as they help sites implement evidence based programs and practices is .90. Overall there was greater agreement between implementers and purveyors on the work of purveyors in implementation. Cluster ratings fell between 4.29 and 3.00 for implementers and 4.37 to 2.76 for purveyors.

When we look at the statements individually, although implementers thought the following factors were most feasible for purveyors to impact, purveyors thought they had less impact on these same factors (i.e. the implementers have high expectations of the purveyors but the purveyors are not so sure they can deliver):

- the program managers ability to advocate for the program both within the agency and outside the agency
- motivation for change
- a system that supports and encourages collaboration
- to take consumer input through the entire implementation process and use it
- computer and technical assistance
- the use of technology
- that legal or liability issues are addressed prior to implementation
- a sense of humor

Conversely, purveyors thought it was most feasible for them to impact the following factors, while implementers thought the purveyors might have less of an impact (i.e. the purveyors are pretty sure they can deliver but the implementers are not so sure):

- work expectations that are reasonable
- to identify naysayers and positively supervise and train them on the model
- recognizing that implementation covers areas that the evidence-based intervention does not cover (e.g. marketing)
- facilitate regular off-site leadership meetings to address the challenges and barriers, which arise during implementation and beyond
- the quality of the screening of referrals including client commitment to participate
- identification of key skills of staff and service providers to be used in selection processes
- the understanding and application of appropriate learning theories (i.e. early childhood, adolescent and adult)

- implementation with newly hired staff is different than implementation with current staff

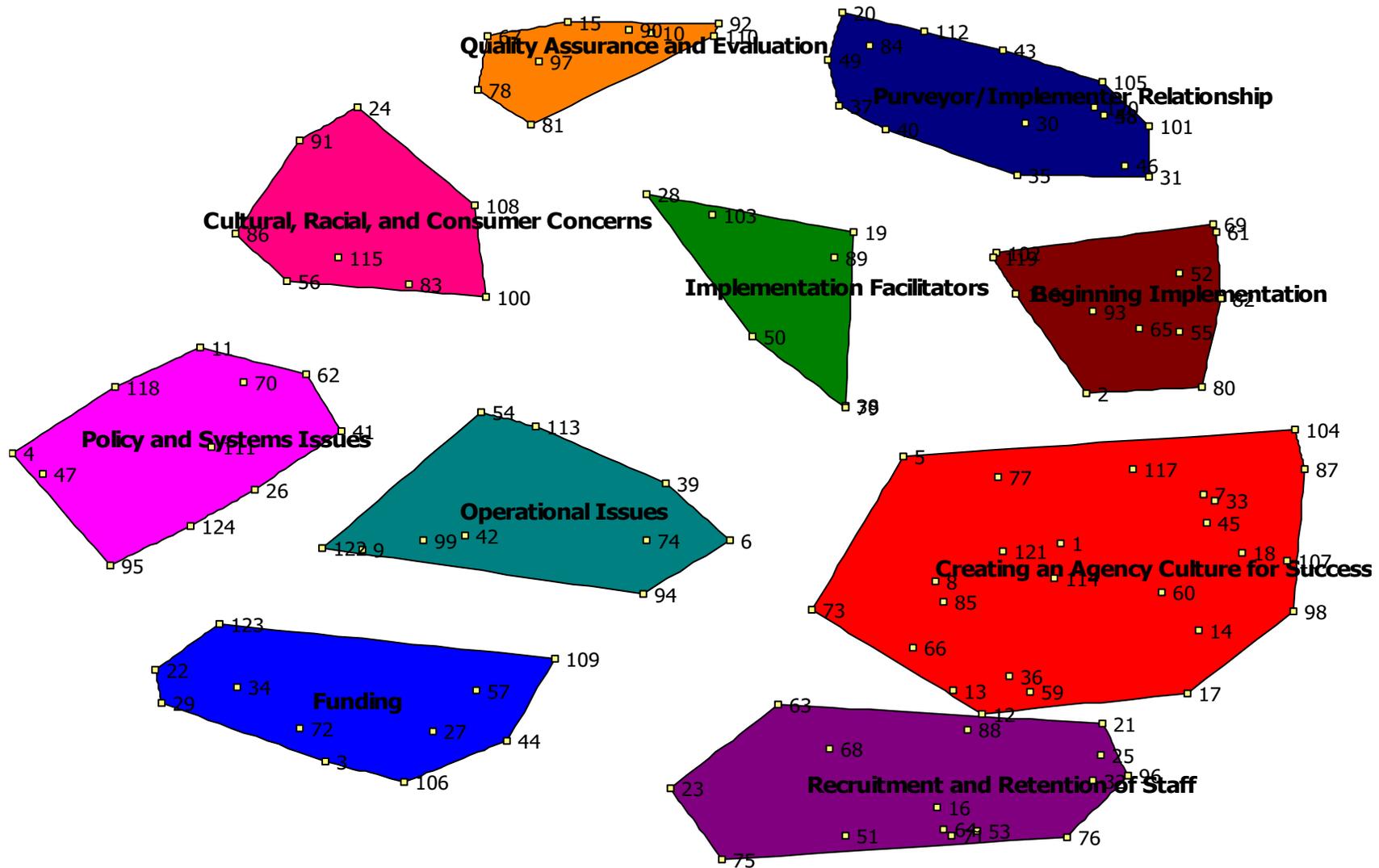
Dependence:

Implementers and purveyors agreed that Purveyor/Implementer Relationship, Evaluation and Fidelity, Early Implementation Factors, and Training and Ongoing Implementation Strategies clusters were the four most feasible domains for purveyors to impact relative to the remaining clusters.

Limitations

While the results of this exploratory study are interesting, the results may not be generalizable. The participants in the meetings of purveyors and implementers were selected based on their excellent results and do not represent “implementation-as-usual” in human services. The study attempted to begin to operationalize best practices that may have occurred under unusual or favorable conditions. The two samples are small and have unequal numbers of participants that may further bias the data presented. The implementers spent 2 days together while generating the 124 items, discussing the items and their meaning, and carrying out the sorting and rating tasks within the allotted time. Purveyors were not present at that meeting and were not part of the generation or discussion of items. Purveyors received oral and written instructions and did the sorting and rating without time constraints. Finally, as an introduction to each meeting, purveyors and implementers heard presentations of the findings from the authors’ review of the implementation evaluation literature (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). The findings and conceptual frameworks presented may have influenced the items generated as well as the sorting and ratings.

Appendix A. Implementer's 10 Cluster Solution



Appendix B. Statements by Cluster and Average Importance, Feasibility, and Dependence Ratings

<u>Cluster: Creating an Agency Culture for Success</u>	Importance	Feasibility	Dependence
1. Major stakeholder and leadership buy-in and support of the new model	4.86	3.79	3.14
5. A culture of learning is needed in the program and in the system	4.14	3.50	2.36
7. Willingness and ability to change	4.14	3.21	2.86
8. Stakeholder alignment with the values of the program	4.36	2.93	2.93
12. Good agency support links with colleagues with open minds	3.93	2.71	1.93
13. Support from the agency	4.71	3.07	3.00
14. Matching the model values to the practitioner's values	4.50	3.50	1.93
17. Work expectations that are reasonable	4.29	3.21	2.71
18. Whether the program or practice is on mission for the agency	4.07	2.93	2.00
33. To identify naysayers and positively supervise and train them on the model	4.14	3.21	1.64
36. The program manager's ability to advocate for the program both within the agency and outside the agency	4.50	3.57	2.00
45. Motivation for change	4.43	3.79	3.07
59. Motivation of the agency to make the program work	4.64	3.00	2.79
60. Administrative acknowledgement of efforts	3.64	2.36	1.57
66. The program manager's ability to operate effectively within the current system	4.21	2.71	2.29
73. Adaptation of the agency's culture in order to deliver the practice	3.62	2.46	2.08

77. The degree of disruption of the new program in relation to current operations	3.57	2.14	2.29
85. Bosses and agencies' understanding of the importance of fidelity to the model	4.36	3.79	2.14
87. Sensitivity to agency's limitations	3.86	3.57	1.86
98. Practitioner understanding of the active ingredients/ "the why" of the program	4.43	4.79	1.93
104. Willingness of staff and purveyor to make it work at the agency	4.43	3.93	2.00
107. Implementation with newly hired staff is different than implementation with current staff	3.57	3.21	2.00
114. Buy in from staff, consumers and referral sources	4.57	3.71	2.43
117. A sense of humor	4.64	3.93	2.29
121. That open communication is fostered among stakeholders and implementers	4.43	4.00	1.93
<i>Average Rating:</i>	4.24	3.32	2.29

Cluster: Recruitment and Retention of Staff	Importance	Feasibility	Dependence
16. Hiring staff with a predetermined set of criteria to maximize the likelihood of good outcomes	4.43	3.07	2.00
21. Positive relationships between management and staff providers	4.36	2.71	1.71

23. Adequate agency commitment to human resources and funding	4.57	2.79	3.57
25. Staff participant agreement on goals	4.57	3.71	1.86
32. The commitment of staff to the program model	4.86	3.71	2.07
51. Staff turnover	4.36	2.86	3.00
53. A recruitment and retention plan	3.93	3.07	2.50
63. Board or advisory board support	3.79	2.50	2.21
64. Identification of key skills of staff and service providers to be used in selection processes	4.36	3.21	1.71
68. Dedicated focus of sufficient human resources	4.36	3.14	3.14
71. Qualified staff interested in doing this kind of work	4.71	3.00	2.50
75. To provide adequate and competitive compensation for staff to increase their longevity in their position which ultimately leads to better program outcomes	4.21	2.64	4.36
76. Adequate supervision and incentives to stay	4.29	2.79	3.29
88. To celebrate success	4.29	3.57	2.00
96. Creating an environment that is supportive of individual needs of staff to create a healthy working environment	4.14	2.93	2.57
<i>Average Rating:</i>	4.35	3.05	2.57

Cluster: Funding Issues	Importance	Feasibility	Dependence
3. Money to ensure the program is successful	4.64	3.07	4.64
22. Flexibility of funding	4.14	2.86	4.29
27. Community support	4.29	3.21	2.14
29. Funding methods that embrace quality of services versus quantity of services	4.64	3.29	4.21
34. Adequate funding to support implementation as well as ongoing operation of the program after implementation	4.71	3.29	4.79
44. Educating outside community resources about the model's expectations	3.79	3.50	2.14
57. Assurances of sustainability	4.29	3.36	3.79
72. Financial strain while program is getting off the ground	4.43	3.00	4.14
106. To have adequate funding for technical support and IT professionals taking feedback from implementers so that innovative technological solutions can be created (e.g. scheduling)	4.00	3.29	3.64
109. The use of technology	3.86	3.64	3.14
123. To align billing and billing codes with evidence-based practices	3.71	2.86	3.79
<i>Average Rating:</i>	4.23	3.21	3.70

Cluster: Operational Issues	Importance	Feasibility	Dependence
6. Vying with other programs for time with the targeted audience	3.00	2.50	1.79
9. Helping to support and create strong family and consumer involvement	4.43	3.21	2.07
39. The amount of required paperwork	3.36	2.93	3.79
42. Referral sources for clients to the program	4.14	3.07	2.36
54. Institutionalized racism	4.07	3.21	3.43
74. A system that supports and encourages collaboration	4.29	3.64	2.50
94. Provider's understanding of and respect for consumer's needs	4.29	3.64	2.36
99. Computer and technical assistance	4.00	3.64	3.07
113. Assistance with setting an initial budget that is accurate and adequate for initial implementation	4.21	4.14	2.93
122. Reimbursement requirements and duplicate paperwork	3.64	2.71	3.79
<i>Average Rating:</i>	3.94	3.27	2.81

Cluster: Policy and Systems Issues	Importance	Feasibility	Dependence
4. Modification of state statutes to support interventions of the program	3.29	2.36	3.86
11. Program alignment with the values of the community	4.15	3.15	2.38

26. System level planning of referrals and discharges	4.07	3.29	2.50
41. Cultural/racial/linguistic differences between staff and people served	4.43	3.57	2.79
47. Regulations at the county, state, federal, or agency level	4.29	2.93	4.71
62. The quality of the screening of referrals including client commitment to participate	4.00	3.29	1.86
70. The local community context with its needs and strengths	3.79	2.43	2.36
95. State aid for programs that are struggling rather than imposing sanctions	4.00	2.86	4.64
111. Making referrals for consumers whose needs can't be met by the implementer is a component	3.79	2.64	2.21
118. Supportive and collaborative with referring agencies that allow for flow of information in the HIPAA climate	4.00	3.07	3.57
124. To educate accrediting bodies about the new methods of treatment and documentation	3.43	3.50	3.29
<i>Average Rating:</i>	3.93	3.01	3.11

Cluster: Beginning Implementation	Importance	Feasibility	Dependence
2. Initial staff training	4.93	4.57	2.43
52. The right set of tools (e.g. readiness assessments, decision-making trees)	3.93	4.21	2.00

55. Starting small	3.93	3.86	2.57
61. Facilitate regular offsite leadership meetings to address the challenges and barriers which arise during implementation and beyond	3.50	3.07	2.00
65. Having a realistic timeline for implementation	4.50	4.29	2.93
69. That success is shared and improvements needed are addressed throughout the program	4.21	3.57	2.71
80. The understanding and application of appropriate learning theories (i.e. early childhood, adolescent and adult)	3.36	3.43	1.64
82. Building from strengths and learning from mistakes	4.07	3.85	2.07
93. Preparation for controversies and common questions that arise	4.00	4.14	1.86
102. To identify areas in which the smallest effort will create the greatest amount of change/impact on program goals	3.79	3.93	2.14
116. That legal or liability issues are addressed prior to implementation	4.29	3.93	3.50
119. Research in your hands so you can promote evidence-based practice and buy-in	3.86	4.21	2.29
<i>Average Rating:</i>	4.03	3.92	2.35
<hr/>			
Cluster: Implementation Facilitators	Importance	Feasibility	Dependence
19. Focused training that targets the key philosophy and mission	4.57	4.14	1.93
28. Geographical location and differences from the original program	3.50	3.21	2.00

38. Identifying champions at all system levels	3.64	2.64	1.86
50. Recognizing that implementation covers areas that the evidence based intervention does not cover (e.g. marketing)	3.64	3.36	1.86
79. The ability to respond to stakeholder and funder questions and concerns about cost	4.00	3.64	3.64
89. To move from theory to practice	4.57	4.36	2.14
103. Agenda driven team meetings which reinforce evidence-based practices and fidelity within case reviews	4.21	3.93	1.79
<i>Average Rating:</i>	4.02	3.61	2.17

Cluster: Purveyor/Implementer Relationship	Importance	Feasibility	Dependence
20. Clear information from the start about fidelity	4.50	4.57	1.64
30. A way to connect and problem solve with other implementers	3.86	4.14	1.79
31. Clarifying for implementers the communication loops for accessing resources about implementation	3.93	4.21	1.64
35. Understanding the degrees of freedom for adapting the model without losing the effectiveness	4.50	4.21	2.21
37. The availability of ongoing training and technical assistance	4.79	4.71	3.14
40. That interventions are directly aligned with goals of the program	4.50	3.93	2.00
43. Support from the developer in terms of ongoing training, evaluation, and constructive feedback	4.64	4.71	2.36

46. Forging a collaborative bond between the purveyor and the implementers	4.64	4.57	2.29
48. To be sure the purveyor understands the practice and agency at the ground level (e.g. context, daily operations, racial mix of clients)	4.21	3.93	2.00
49. Evidence based interventions that can be taught, modeled, evaluated, and replicated	4.64	4.71	2.64
58. Having a purveyor know what reasonable goals (e.g. utilization, number of units operational) are and help implementer set them	4.21	4.00	2.43
84. A link between the evaluation of fidelity and training	4.43	4.57	2.29
101. Effective protocols for communication with the purveyors	4.36	4.50	2.07
105. Purveyors and implementers are partners	4.43	4.43	1.86
112. The ability of the purveyor to anticipate and have the capacity to respond to cultural/linguistic/racial adaptations identified by implementers	4.36	4.00	2.43
120. The purveyor's ability to assess how normal the implementer's experience is at different stages (e.g. expectations)	3.79	4.14	1.50
<i>Average Rating:</i>	4.36	4.33	2.14

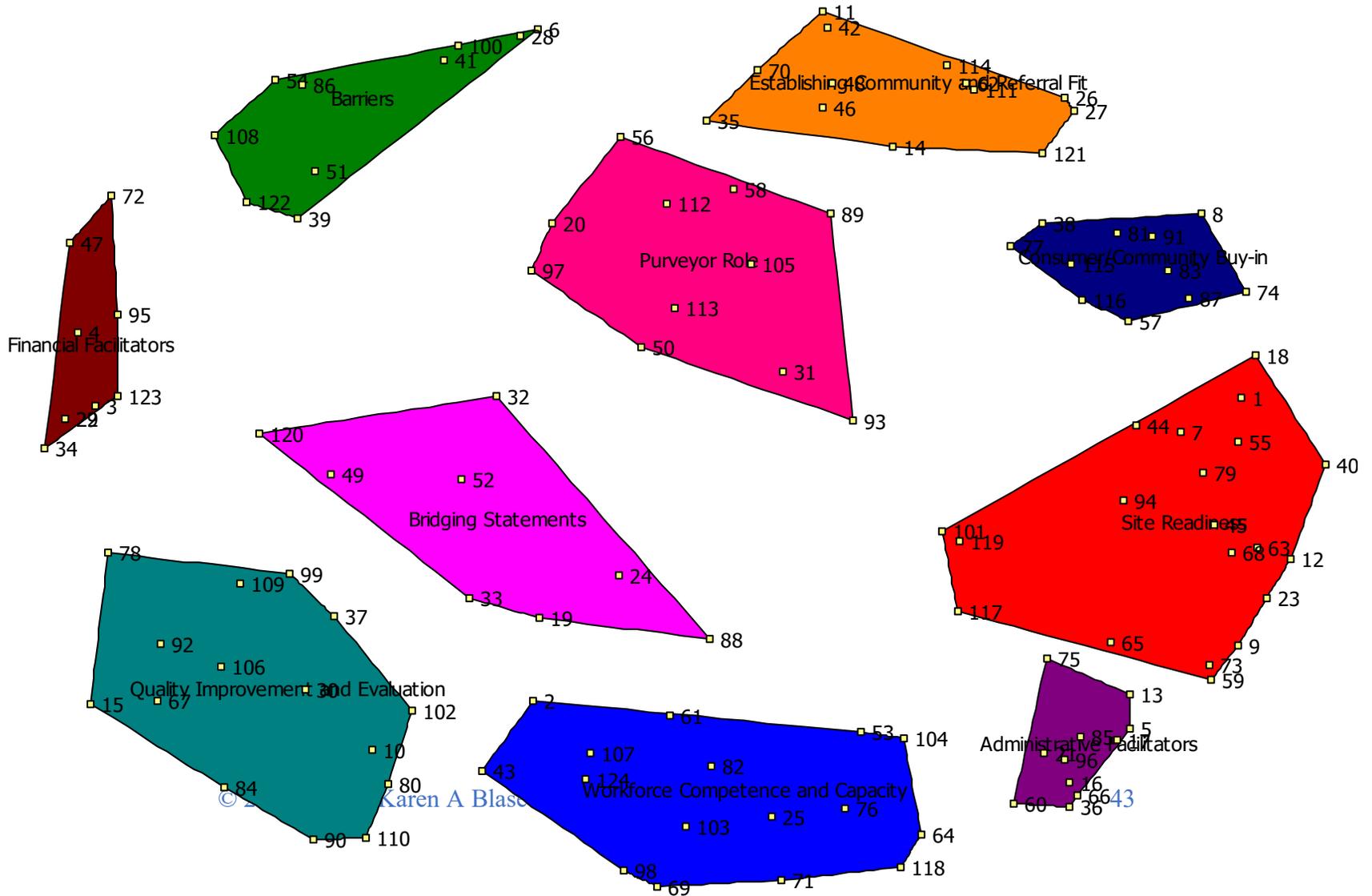
Cluster: Quality Assurance and Evaluation	Importance	Feasibility	Dependence
10. Data driven	4.36	4.29	3.21
15. An evaluative tool that not only allows for course correction but leads to it	4.00	4.07	1.93

67. Setting up a system to collect process and outcome data to feed back into systems for quality improvement and implementation monitoring	4.57	4.57	3.00
78. Research instruments that are tailored to meet the unique needs of the population served	4.07	4.21	2.86
81. Implementing the appropriate program that produces the desired outcomes	4.50	4.36	2.79
90. Initial outcomes	4.14	4.00	2.64
92. Quality control and fidelity monitoring that is strength based and corrective rather than punitive	4.29	4.14	2.50
97. That fidelity needs to be emphasized	4.57	4.64	2.07
110. Establishing benchmarks for administrative review to track implementation progress	4.14	4.14	2.43
<i>Average Rating:</i>	4.29	4.27	2.60

Cluster: Cultural/Racial/Consumer Concerns	Importance	Feasibility	Dependence
24. Development of culturally competent standards and a way to measure their effectiveness	4.36	4.36	3.43
56. Cultural/racial/linguistic competence of the program	4.57	4.07	3.00
83. That needs assessments are used for the population served by the program	4.00	3.79	2.07
86. Cultural differences from the original program to other replication sites	4.00	4.00	2.07

91. To take consumers input through entire implementation process and use it	4.00	3.79	2.14
100. The pressure and expectation that the program will work for every child	3.29	3.86	2.57
108. Inadvertent barriers created by evaluation protocols/requirements (e.g. informed consent, confidentiality, public embarrassment)	3.50	3.07	3.36
115. To be aware of whom the program may exclude (consumers)	3.71	3.93	2.07
<i>Average Rating:</i>	3.93	3.86	2.59

Appendix C. Purveyors' 10 Cluster Solution



Appendix D. Statements by Cluster and Average Importance, Feasibility, and Dependence Ratings for Purveyors

<u>Cluster: Site Readiness</u>	Importance	Feasibility	Dependence
1 major stakeholder and leadership buy-in and support of the new model	4.89	3.67	3.11
7 willingness and ability to change	4.56	3.33	2.78
9 helping to support and create strong family and consumer involvement	4.11	3.50	2.89
12 good agency support links with colleagues with open minds	3.67	2.88	2.22
18 whether the program or practice is on mission for the agency	4.56	3.22	2.67
23 adequate agency commitment to human resources and funding	4.44	2.78	3.56
40 that interventions are directly aligned with goals of the program	4.44	4.00	2.25
44 educating outside community resources about the model's expectations	4.33	3.56	2.56
45 motivation for change	4.11	3.33	3.11
55 starting small	3.89	3.89	2.56
59 motivation of the agency to make the program work	4.67	3.44	2.78
63 board or advisory board support	4.00	3.33	2.67
65 having a realistic timeline for implementation	4.89	4.78	2.89
68 dedicated focus of sufficient human resources	4.56	3.33	3.67
73 adaptation of the agency's culture in order to deliver the practice	3.78	3.67	2.33
79 the ability to respond to stakeholder and funder questions and concerns about cost	4.44	4.33	2.67
94 provider's understanding of and respect for consumer's needs	4.33	3.67	1.89

101 effective protocols for communication with the purveyors	4.44	4.56	1.67
117 a sense of humor	3.78	3.00	1.44
119 research in your hands so you can promote evidence-based practice and buy-in	4.44	4.67	2.22
<i>Average Rating:</i>	4.29	3.64	2.60

Cluster: Administrative Facilitators	Importance	Feasibility	Dependence
5 a culture of learning is needed in the program and in the system	4.11	3.00	2.44
13 support from the agency	4.78	3.50	2.67
16 hiring staff with a pre-determined set of criteria to maximize the likelihood of good outcomes	3.89	3.00	2.56
17 work expectations that are reasonable	4.33	3.67	2.33
21 positive relationships between management and staff providers	4.11	2.78	1.89
36 the program manager's ability to advocate for the program both within the agency and outside the agency	4.44	3.56	2.22
60 administrative acknowledgement of efforts	3.89	2.89	2.00
66 the program manager's ability to operate effectively within the current system	4.22	3.56	2.11
75 to provide adequate and competitive compensation for staff to increase their longevity in their position which ultimately leads to better program outcomes	4.11	2.33	3.56

85 bosses and agencies' understanding of the importance of fidelity to the model	4.67	4.11	3.00
96 creating an environment that is supportive of individual needs of staff to create a healthy working environment	4.00	3.00	2.22
<i>Average Rating:</i>	4.23	3.22	2.45

Cluster: Workforce Competence and Capacity	Importance	Feasibility	Dependence
2 initial staff training	4.33	4.44	2.56
25 staff participants agreement on goals	4.00	3.67	2.11
43 support from the developer in terms of ongoing training, evaluation and constructive feedback	4.89	4.67	2.89
53 a recruitment and retention plan	3.78	3.00	2.44
61 facilitate regular off-site leadership meetings to address the challenges and barriers which arise during implementation and beyond	3.56	3.78	2.22
64 identification of key skills of staff and service providers to be used in selection processes	3.89	3.78	2.11
69 that success is shared and improvements needed are addressed throughout the program	4.11	4.00	2.11
71 qualified staff interested in doing this kind of work	4.33	3.00	3.33
76 adequate supervision and incentives to stay	4.00	3.11	2.89
82 building from strengths and learning from mistakes	4.11	3.89	1.78

98 practitioner understanding of the active ingredients/ "the why" of the program	4.11	4.44	1.89
103 agenda driven team meetings which reinforce evidence-based practices and fidelity within case reviews	4.11	4.00	1.78
104 willingness of staff and purveyor to make it work at the agency	4.67	3.89	2.00
107 implementation with newly hired staff is different than implementation with current staff	3.00	3.88	1.88
118 supportive and collaborative with referring agencies that allow for flow of information in the HIPPA climate	3.75	2.75	2.88
124 to educate accrediting bodies about the new methods of treatment and documentation	4.44	3.22	3.78
<i>Average Rating:</i>	4.07	3.72	2.41

Cluster: Quality Improvement and Evaluation	Importance	Feasibility	Dependence
10 data driven	4.44	3.88	3.44
15 an evaluative tool that not only allows for course correction but leads to it	4.22	4.44	2.56
30 a way to connect and problem solve with other implementers	4.00	4.33	2.44
37 the availability of ongoing training and technical assistance	4.89	4.67	3.00

67 setting up a system to collect process and outcome data to feed back into systems for quality improvement and implementation monitoring	4.33	4.22	2.88
78 research instruments that are tailored to meet the unique needs of the population served	3.33	3.89	2.22
80 the understanding and application of appropriate learning theories (i.e. early childhood, adolescent and adult)	3.56	4.00	1.67
84 a link between the evaluation of fidelity and training	4.44	4.56	2.44
90 initial outcomes	3.67	4.00	2.78
92 quality control and fidelity monitoring that is strength based and corrective rather than punitive	4.89	4.22	3.00
99 computer and technical assistance	4.22	3.33	2.33
102 to identify areas in which the smallest effort will create the greatest amount of change/impact on program goals	3.78	4.00	1.56
106 to have adequate funding for technical support and IT professionals taking feedback from implementers so that innovative technological solutions can be created (e.g. scheduling)	4.22	2.89	3.89
109 the use of technology	3.56	2.89	2.33
110 establishing benchmarks for administrative review to track implementation progress	4.33	3.89	2.44
<i>Average Rating:</i>	4.13	3.95	2.60

Cluster: Bridging Statements	Importance	Feasibility	Dependence
19 focused training that targets the key philosophy and mission	4.33	4.00	1.89
24 development of culturally competent standards and a way to measure their effectiveness	3.89	3.67	2.78
32 the commitment of staff to the program model	4.67	3.67	3.00
33 to identify naysayers and positively supervise and train them on the model	3.89	3.56	2.00
49 evidence-based interventions that can be taught, modeled, evaluated and replicated	4.78	4.67	3.33
52 the right set of tools (e.g. readiness assessments, decision-making trees)	4.00	4.22	2.56
88 to celebrate success	3.78	3.67	1.56
120 the purveyor's ability to assess how normal the implementer's experience is at different stages (e.g. expectations)	4.67	4.44	1.78
<i>Average Rating:</i>	4.25	3.99	2.36
Cluster: Financial Facilitators	Importance	Feasibility	Dependence
3 money to ensure the program is successful	4.22	2.67	3.44

4 modification of state statutes to support interventions of the program	3.67	2.67	4.00
22 flexibility of funding	3.78	2.56	4.11
29 funding methods that embrace quality of services versus quantity of services	3.89	2.67	4.00
34 adequate funding to support implementation as well as ongoing operation of the program after implementation	4.78	2.89	4.00
47 regulations at the county state federal or agency level	4.22	2.56	4.33
72 financial strain while the program is getting off the ground	4.00	2.56	3.13
95 state aid for programs that are struggling rather than imposing sanctions	3.67	2.22	4.56
123 to align billing and billing codes with evidence-based practices	4.25	2.88	4.38
<i>Average Rating:</i>	4.05	2.63	3.99

Cluster: Barriers	Importance	Feasibility	Dependence
6 vying with other programs for time with the targeted audience	3.44	2.89	2.44
28 geographical location and differences from the original program	2.67	3.50	1.63
39 the amount of required paperwork	3.22	3.44	2.63
41 cultural/racial/linguistic differences between staff and people served	3.44	2.88	2.00
51 staff turnover	4.33	2.78	2.67
54 institutionalized racism	4.00	2.63	2.50
86 cultural differences from the original program to other replication sites	3.75	3.63	2.00

100 the pressure and expectation that the program will work for every child	3.33	3.78	1.89
108 inadvertent barriers created by evaluation protocols/requirements (e.g. informed consent, confidentiality, public embarrassment)	4.00	3.50	2.50
122 reimbursement requirements and duplicate paperwork	3.56	2.56	3.22
Average Rating:	3.58	3.16	2.35

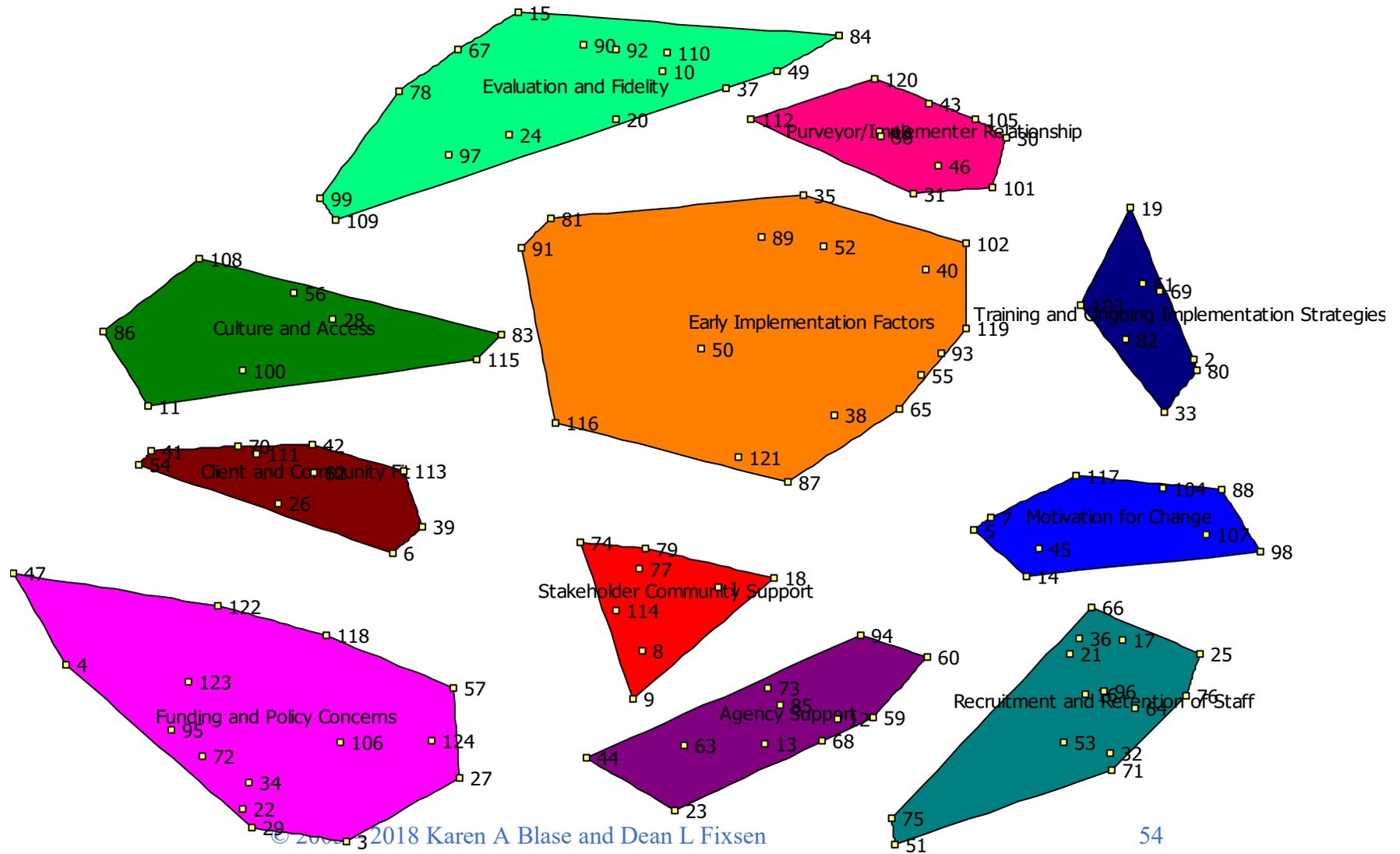
Cluster: Purveyor Role	Importance	Feasibility	Dependence
20 clear information from the start about fidelity	4.33	4.67	2.33
31 clarifying for implementers the communication loop for accessing resources about implementation	4.00	4.33	2.00
50 recognizing that implementation covers areas that the evidence-based intervention does not cover (e.g. marketing)	3.89	3.89	2.11
56 cultural/racial/linguistic competence of the program	4.22	4.11	2.78
58 having a purveyor know what reasonable goals (e.g. utilization, number of units operational) are and help implementer set them	4.33	4.67	2.22
89 to move from theory to practice	4.11	4.33	2.11
93 preparation for controversies and common questions that arise	4.56	4.67	1.78
97 that fidelity needs to be emphasized	4.56	4.33	2.56
105 purveyors and implementers are partners	4.44	4.22	2.11
112 the ability of the purveyor to anticipate and have the capacity to respond to cultural/linguistic/racial adaptations identified by implementers	4.22	4.11	2.11

113 assistance with setting an initial budget that is accurate and adequate for initial implementation	4.56	4.44	2.56
<i>Average Rating:</i>	4.29	4.34	2.24

Cluster: Consumer/Community Buy-in	Importance	Feasibility	Dependence
8 stakeholder alignment with the values of the programs	4.33	3.22	2.22
38 identifying champions at all systems levels	4.22	3.44	2.11
57 assurances of sustainability	4.00	3.22	3.56
74 a system that supports and encourages collaboration	4.11	3.44	2.89
77 the degree of disruption of the new program in relation to current operations	3.67	3.56	2.33
81 implementing the appropriate program that produces the desired outcomes	4.44	4.22	2.78
83 that needs assessments are used for the population served by the program	3.89	3.89	2.44
87 sensitivity to agency's limitations	3.89	3.78	1.89
91 to take consumers input through entire implementation process and use it	4.00	3.56	2.33
115 to be aware of whom the program may exclude (consumers)	4.00	4.11	2.00
116 that legal or liability issues are addressed prior to implementation	3.89	3.33	2.33
<i>Average Rating:</i>	4.04	3.62	2.44

Cluster: Establishing Community and Referral Fit	Importance	Feasibility	Dependence
11 program alignment with values of the community	4.00	3.25	2.44
14 matching the model values to the practitioner's values	4.22	3.50	2.22
26 system level planning of referrals and discharges	3.88	3.38	2.75
27 community support	4.00	3.13	2.25
35 understanding the degrees of freedom for adapting the model without losing the effectiveness	4.67	4.33	2.22
42 referral sources for clients to the program	3.75	3.25	2.25
46 forging a collaborative bond between the purveyor and the implementers	4.67	4.11	2.22
48 to be sure the purveyor understands the practice and agency at the ground level (e.g. context, daily operations, racial mix of clients)	4.33	4.22	1.78
62 the quality of the screening of referrals including client commitment to participate	3.75	3.75	2.25
70 the local community context with its needs and strengths	4.00	2.89	2.22
111 making referrals for consumers whose needs can't be met by the implementer is a component	3.25	3.00	1.63
114 buy-in from staff, consumers, and referral sources	4.44	3.78	2.33
121 that open communication is fostered among stakeholders and implementers	4.67	4.00	1.67
	<i>Average</i>		
Rating:	4.13	3.58	2.17

Appendix E. Purveyor plus Implementer 11 Cluster Solution



Appendix F. Statements by Cluster and Average Importance, Feasibility, and Dependence Ratings for Purveyor-Implementer Map

<u>Cluster: Stakeholder Community Support</u>	Importance	Feasibility	Dependence
1 major stakeholder and leadership buy-in and support of the new model	4.87	3.74	3.13
114 buy-in from staff, consumers, and referral sources	4.52	3.74	2.39
8 stakeholder alignment with the values of the programs	4.35	3.04	2.65
9 helping to support and create strong family and consumer involvement	4.30	3.32	2.39
18 whether the program or practice is on mission for the agency	4.26	3.04	2.26
74 a system that supports and encourages collaboration	4.22	3.57	2.65
79 the ability to respond to stakeholder and funder questions and concerns about cost	4.17	3.91	3.26
77 the degree of disruption of the new program in relation to current operations	3.61	2.70	2.30
<i>Average Rating:</i>	4.29	3.38	2.63

Cluster: Agency Support	Importance	Feasibility	Dependence
13 support from the agency	4.74	3.23	2.87
59 motivation of the agency to make the program work	4.65	3.17	2.78
23 adequate agency commitment to human resources and funding	4.52	2.78	3.57

85 bosses and agencies' understanding of the importance of fidelity to the model	4.48	3.91	2.48
68 dedicated focus of sufficient human resources	4.43	3.22	3.35
94 provider's understanding of and respect for consumer's needs	4.30	3.65	2.17
63 board or advisory board support	3.87	2.83	2.39
12 good agency support links with colleagues with open minds	3.83	2.77	2.04
44 educating outside community resources about the model's expectations	3.78	3.52	2.30
60 administrative acknowledgement of efforts	3.74	2.57	1.74
73 adaptation of the agency's culture in order to deliver the practice	3.68	2.91	2.18
<i>Average Rating:</i>	4.18	3.14	2.53

Cluster: Motivation for Change	Importance	Feasibility	Dependence
104 willingness of staff and purveyor to make it work at the agency	4.52	3.91	2.00
14 matching the model values to the practitioner's values	4.39	3.50	2.04
98 willingness and ability to change	4.30	4.65	1.91
7 motivation for change	4.30	3.26	2.83
45 practitioner understanding of the active ingredients/ "the why" of the program	4.30	3.61	3.09
117 a sense of humor	4.30	3.57	1.96
5 a culture of learning is needed in the program and in the system	4.13	3.30	2.39
88 to celebrate success	4.09	3.61	1.83

107 implementation with newly hired staff is different than implementation with current staff	3.36	3.45	1.95
<i>Average Rating:</i>	4.19	3.65	2.22

Cluster: Recruitment and Retention	Importance	Feasibility	Dependence
32 the commitment of staff to the program model	4.78	3.70	2.43
71 qualified staff interested in doing this kind of work	4.57	3.00	2.83
36 the program manager's ability to advocate for the program both within the agency and outside the agency	4.48	3.57	2.09
51 staff participants agreement on goals	4.35	3.70	2.87
25 staff turnover	4.35	3.70	1.96
17 work expectations that are reasonable	4.30	3.39	2.57
21 positive relationships between management and staff providers	4.26	2.74	1.78
16 hiring staff with a pre-determined set of criteria to maximize the likelihood of good outcomes	4.22	3.04	2.22
66 the program manager's ability to operate effectively within the current system	4.22	3.04	2.22
64 identification of key skills of staff and service providers to be used in selection processes	4.17	3.43	1.87

76 to provide adequate and competitive compensation for staff to increase their longevity in their position which ultimately leads to better program outcomes	4.17	2.91	3.13
75 adequate supervision and incentives to stay	4.17	2.52	4.04
96 creating an environment that is supportive of individual needs of staff to create a healthy working environment	4.09	2.96	2.43
53 a recruitment and retention plan	3.87	3.04	2.48
Average Rating:	4.29	3.13	2.49

Cluster: Funding and Policy Concerns		<u>Importance</u>	Feasibility	Dependence
34	adequate funding to support implementation as well as ongoing operation of the program after implementation	4.74	3.13	4.48
3	money to ensure the program is successful	4.48	2.91	4.17
29	funding methods that embrace quality of services versus quantity of services	4.35	3.04	4.13
72	financial strain while the program is getting off the ground	4.27	2.83	3.77
47	regulations at the county state federal or agency level	4.26	2.78	4.57
27	community support	4.18	3.18	2.18
57	assurances of sustainability	4.17	3.30	3.70
106	to have adequate funding for technical support and IT professionals taking feedback from implementers so that innovative technological solutions can be created (e.g. scheduling)	4.09	3.13	3.74

22	flexibility of funding	4.00	2.74	4.22
118	supportive and collaborative with referring agencies that allow for flow of information in the HIPPA climate	3.91	2.95	3.32
123	to align billing and billing codes with evidence-based practices	3.91	2.86	4.00
95	state aid for programs that are struggling rather than imposing sanctions	3.87	2.61	4.61
124	to educate accrediting bodies about the new methods of treatment and documentation	3.83	3.39	3.48
122	reimbursement requirements and duplicate paperwork	3.61	2.65	3.57
4	modification of state statutes to support interventions of the program	3.43	2.48	3.91
<i>Average Rating:</i>		4.07	2.93	3.86

Cluster: Client and Community Fit		Importance	Feasibility	Dependence
113	assistance with setting an initial budget that is accurate and adequate for initial implementation	4.35	4.26	2.78
54	institutionalized racism	4.05	3.00	3.09
41	cultural/racial/linguistic differences between staff and people served	4.04	3.32	2.50
26	system level planning of referrals and discharges	4.00	3.32	2.59
42	referral sources for clients to the program	4.00	3.14	2.32
62	the quality of the screening of referrals including client commitment to participate	3.91	3.45	2.00

70	the local community context with its needs and strengths	3.87	2.61	2.30
111	making referrals for consumers whose needs can't be met by the implementer is a component	3.59	2.77	2.00
39	the amount of required paperwork	3.30	3.13	3.36
6	vying with other programs for time with the targeted audience	3.17	2.65	2.04
<i>Average Rating:</i>		3.83	3.17	2.50

Cluster: Cultural Access		Importance	Feasibility	Dependence
56	cultural/racial/linguistic competence of the program	4.43	4.09	2.91
11	program alignment with values of the community	4.09	3.19	2.41
83	that needs assessments are used for the population served by the program	3.96	3.83	2.22
86	cultural differences from the original program to other replication sites	3.91	3.86	2.05
115	to be aware of whom the program may exclude (consumers)	3.83	4.00	2.04
108	inadvertent barriers created by evaluation protocols/requirements (e.g. informed consent, confidentiality, public embarrassment)	3.68	3.23	3.05
100	the pressure and expectation that the program will work for every child	3.30	3.83	2.30
28	geographical location and differences from the original program	3.17	3.32	1.86
<i>Average Rating:</i>		3.80	3.67	2.36

Cluster: Training and Ongoing Implementation Strategies		Importance	Feasibility	Dependence
2	initial staff training	4.70	4.52	2.48
19	focused training that targets the key philosophy and mission	4.48	4.09	1.91
69	that success is shared and improvements needed are addressed throughout the program	4.17	3.74	2.48
103	agenda driven team meetings which reinforce evidence-based practices and fidelity within case reviews	4.17	3.96	1.78
82	building from strengths and learning from mistakes	4.09	3.86	1.96
33	to identify naysayers and positively supervise and train them on the model	4.04	3.35	1.78
61	facilitate regular off-site leadership meetings to address the challenges and barriers which arise during implementation and beyond	3.52	3.35	2.09
80	the understanding and application of appropriate learning theories (i.e. early childhood, adolescent and adult)	3.43	3.65	1.65
2	initial staff training	4.08	4.52	2.48
19	focused training that targets the key philosophy and mission	4.70	4.09	1.91
<i>Average Rating:</i>		4.48	3.81	2.02
Cluster: Early Implementation Factors		Importance	Feasibility	Dependence
65	having a realistic timeline for implementation	4.65	4.48	2.91
35	understanding the degrees of freedom for adapting the model without losing the effectiveness	4.57	4.26	2.22

121	that open communication is fostered among stakeholders and implementers	4.52	4.00	1.83
40	that interventions are directly aligned with goals of the program	4.48	3.95	2.09
81	implementing the appropriate program that produces the desired outcomes	4.48	4.30	2.78
89	to move from theory to practice	4.39	4.35	2.13
93	preparation for controversies and common questions that arise	4.22	4.35	1.83
116	that legal or liability issues are addressed prior to implementation	4.13	3.70	3.04
119	research in your hands so you can promote evidence-based practice and buy-in	4.09	4.39	2.26
91	to take consumers input through entire implementation process and use it	4.00	3.70	2.22
52	the right set of tools (e.g. readiness assessments, decision-making trees)	3.96	4.22	2.22
55	starting small	3.91	3.87	2.57
38	identifying champions at all systems levels	3.87	2.96	1.96
87	sensitivity to agency's limitations	3.87	3.65	1.87
102	to identify areas in which the smallest effort will create the greatest amount of change/impact on program goals	3.78	3.96	1.91
50	recognizing that implementation covers areas that the evidence-based intervention does not cover (e.g. marketing)	3.74	3.57	1.96
<i>Average Rating:</i>		4.17	3.98	2.24

	Cluster: Purveyor/Implementer Relationship	Importance	Feasibility	Dependence
43	support from the developer in terms of ongoing training, evaluation and constructive feedback	4.74	4.70	2.57
46	forging a collaborative bond between the purveyor and the implementers	4.65	4.39	2.26
105	purveyors and implementers are partners	4.43	4.35	1.96
101	effective protocols for communication with the purveyors	4.39	4.52	1.91
112	the ability of the purveyor to anticipate and have the capacity to respond to cultural/linguistic/racial adaptations identified by implementers	4.30	4.04	2.30
48	to be sure the purveyor understands the practice and agency at the ground level (e.g. context, daily operations, racial mix of clients)	4.26	4.04	1.91
58	having a purveyor know what reasonable goals (e.g. utilization, number of units operational) are and help implementer set them	4.26	4.26	2.35
120	the purveyor's ability to assess how normal the implementer's experience is at different stages (e.g. expectations)	4.13	4.26	1.61
31	clarifying for implementers the communication loop for accessing resources about implementation	3.96	4.26	1.78
30	a way to connect and problem solve with other implementers	3.91	4.22	2.04
	<i>Average</i>	4.30	4.30	2.07
	Rating:			

	Cluster: Evaluation and Fidelity	Importance	Feasibility	Dependence
37	the availability of ongoing training and technical assistance	4.83	4.70	3.09
49	evidence-based interventions that can be taught, modeled, evaluated and replicated	4.70	4.70	2.91
97	that fidelity needs to be emphasized	4.57	4.52	2.26
92	quality control and fidelity monitoring that is strength based and corrective rather than punitive	4.52	4.17	2.70
67	setting up a system to collect process and outcome data to feed back into systems for quality improvement and implementation monitoring	4.48	4.43	2.95
20	clear information from the start about fidelity	4.43	4.61	1.91
84	a link between the evaluation of fidelity and training	4.43	4.57	2.35
10	data driven	4.39	4.14	3.30
110	establishing benchmarks for administrative review to track implementation progress	4.22	4.04	2.43
24	development of culturally competent standards and a way to measure their effectiveness	4.17	4.09	3.17
15	an evaluative tool that not only allows for course correction but leads to it	4.09	4.22	2.17
99	computer and technical assistance	4.09	3.52	2.78

90	initial outcomes	3.96	4.00	2.70
78	research instruments that are tailored to meet the unique needs of the population served	3.78	4.09	2.61
109	the use of technology	3.74	3.35	2.83
	<i>Average</i>	4.29	4.21	2.68
	<i>Rating:</i>			

References

Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M. & Wallace, F. (2005). *Implementation Research: A Synthesis of the Literature*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, The National Implementation Research Network (FMHI Publication #231).

Naoom, S. F., Wallace, F., Blase, K. A., Haines, M., & Fixsen, D. L. (2004). *Implementation in the Real World-Taking Programs and Practices to Scale: Concept Mapping Report*. Tampa, FL: National Implementation Research Network, Louis de la Parte Florida Mental Health Institute, University of South Florida.

Trochim, W. M. K. (1989). An Introduction to Concept Mapping for Planning and Evaluation. *Evaluation and Program Planning*, 12, 1-16.

Trochim, W. M. K., Cook, J. A., & Setze, R. J. (1994). Using Concept Mapping to Develop a Conceptual Framework for Staff's Views of a Supported Employment Program for Individuals With Severe Mental Illness. *Journal of Consulting and Clinical Psychology*, 62(4), 766-775.