Implementation and Sustainability of Quality Improvement in Home and Community Settings

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Background

• Home and Community Based Services (HCBS) have expanded rapidly in the United States (US) since the 1980’s
  • Defined as support services in one’s own home or other community setting
  • Expansion promoted by Congress amending the Social Security Act to promote non-institutional services
• Growth and expansion has increased interest in HCBS quality
  • US government policies increasingly seeking to increase the “value” from monetary investment in services
Background

- Most quality improvement (QI) research in healthcare has focused on acute or institutional settings
- Little is known about implementation of QI in HCBS settings
- It remains unclear whether QI principles can be effective within the variable, diffuse and individual-focused organizations that comprise the HCBS delivery network
Objective

- To explore HCBS provider’s perspectives of organizational readiness for QI in regards to:
  - Motivation
  - Infrastructure
  - Capability
  - Experience

- Focused on providers early in the implementation of a state-sponsored QI project

- Follow-up data collected 6 months after project completion to explore provider perceptions of project impact and sustainability
Conceptual Framework

• Multiple models of innovation uptake note organizational readiness as a key component in the success of organizational change efforts (Weiner et al., 2008)
• The current study used the following constructs of organizational readiness (Lehman, Greener, & Simpson, 2002):
  • Motivational readiness (perceived need for improvement, pressure to change from internal or external forces)
  • Institutional readiness (adequacy of space, staffing, training, technology)
  • Staff attributes (efficacy, influence, adaptability, desire for growth among employees)
  • Organizational climate (clarity of mission, staff cohesiveness, autonomy, stress, openness to change, open communication)
Study Context

- The Minnesota Home and Community-based Services Performance-based Improvement Program (HCBS PIPP)
  - Funded 1-year QI projects developed, proposed and implemented by HCBS providers
  - Fifty-eight agencies applied for HCBS PIPP support
  - 27 projects were funded
    - Competitive funding based upon evidence-based approach, quality of project methods/measures and potential for project impact
  - Funded agencies varied considerably in terms of size, focus, and consumer population
  - 17/27 projects completed their project in 1 year
    - 10 received extensions of 3-12 months
  - A unique opportunity to examine provider perspectives within a diverse set of organizations, each completing a funded project within a consistent time-period
Sample

- 52 survey respondents from within 28 HCBS provider organizations
  - Organizations were participants in the 27 HCBS PIPP funded or collaborating organizations
- Number of respondents per organization was 1-4, mode of 2
- 52% members of QI committee/team, 34% QI leaders, 27% staff, 16% consultants
  - About 6 months after the start of the HCBS PIPP funded project
- Projects ranged from statewide home care organizations to small social service agencies with a narrowly defined population
  - For additional information see Abrahamson et al., 2016, *Home Health Services Quarterly*
Data

- Pencil and paper survey addressing 17 domains of QI capacity, readiness, implementation and impact
- Administered to attendees of HCBS PIPP conference
- About 6 months after project start
- Likert-style format
- Follow-up survey emailed to PIPP funded organizations at least 6 months after project completion
  - Likert-style format
  - Addressed project impact, sustainability, and barriers/facilitators to project success
Analysis

- Descriptive statistics and frequencies calculated for each survey item
- Independent t-tests used to determine significant differences in means based upon organizational characteristics
  - P-value < or = .05 considered significant
- Characteristics used for analysis:
  - Residential vs. non-residential service delivery
  - Older adult consumer population vs. age diverse consumer population
  - Multiple service settings vs. single setting
  - Greater than 100 consumers served vs. 100 or fewer consumers
- SPSS version 23
Findings: Motivational readiness to participate in QI

• Factors most frequently perceived as essential for QI participation
  • Support from top leadership
  • Having staff to write the HCBS PIPP proposal
  • Having an available project leader

• Top apprehensions surrounding participation in HCBS PIPP
  • Choosing the right area of focus
  • Coming up with a ‘really good’ project
  • Measuring quality outcomes
  • Meeting project goals
  • Sustainability
Findings: Perceptions of institutional readiness

At least half of respondents reported confidence in:
- Support from leadership (86%)
- Proposal writing experience (54%)
- Support from consumers (50%)
- Clarity of project requirements (50%)
- Ability to measure project outcomes (50%)

QI experience (scale from 1=first project, 5=expert)
- 36% first project
- 61% ranked themselves at 3-4
- 2% experts
Findings: Perception of available institutional resources

- 59% had someone within their organization designated to lead QI efforts
- 49% had an identified set of areas they wanted to monitor for QI purposes
- 40% had a QI committee that met regularly
- Progress in areas reported as not yet fully established, but working towards after project start date:
  - Written description of a QI program (46%)
  - Means to obtain consumer input (47%)
  - Developed evaluation plan for project (23%)
  - Using an established model such as PDSA or LEAN (17%)
Findings: Staff attributes (strengths)

- Most frequently noted strengths:
  - Support from top leadership (47%)
  - Choosing the right project focus (45%)
  - Understanding data to measure quality (43%)
- Most commonly reported weakness was finding time for QI (9%)
  - Less than 2% reported an area as a weakness in most categories
  - Over 80% of respondents noted that trouble measuring quality, lack of QI experience, limited leadership support, lack of clarity surrounding HCBS PIPP requirements, and making changes to the project along the way were minor challenges to implementation or not a challenge at all.
Perceived project impact (at approximately 6 months)

- Most frequently noted areas of high impact
  - Stimulating new QI ideas
  - Encouraging collaboration within the organization
  - Getting staff involved in QI
  - Improving services in the area of project focus
- Most frequently noted areas of low impact
  - Improving quality in areas other than project focus
  - Improving staff morale
  - Changing organizational culture
Comparisons of organizations

- Respondents from organizations providing residential services reported:
  - Less experience with QI implementation
  - Greater use of root cause analysis
  - Greater use of internally generated data reports than respondents from organizations providing non-residential services

- Respondents from organizations serving primarily older adults reported:
  - More experience with QI implementation
  - Greater use of root cause analysis
  - More frequent designation of someone designated to do QI
  - Less established identification of quality aspects to monitor than respondents from organizations serving younger consumers
Comparisons of organizations

• Respondents from organizations serving more than 100 consumers reported:
  • More experience with QI
  • More frequent designation of someone to do QI
  • Noted meeting basic needs so there is time for QI as a strength more frequently
  • noted connecting with other organizations to share QI ideas as a weakness more frequently than small organizations

• Respondents from multi-site organizations reported:
  • Less use of a QI model
  • More use of methods to obtain staff input
  • More willingness to take financial and organizational risks
  • More trouble measuring outcomes in the project area than single site organizations
Sustainability (at least 6 months after project completion)

- Most projects had used project funds to hire a project coordinator, hire additional staff members, or purchase/rent equipment
- Most perceived sustained improvements in the following areas:
  - Quality in the area of project focus
  - Consumer quality of life
  - Consumer satisfaction
Sustainability

• Reported challenges to sustainability:
  • Funding QI coordinator or staff
  • Staff turnover and training new staff

• Facilitators to sustainability:
  • Budgetary support from top leadership
  • Redirection of resources toward project area

• Strategies used:
  • Communication with staff
  • Planning for sustainability from the beginning
  • Selecting a project that fit well with current workflow
  • Marketing project services to community members
Conclusions

• Internal resources to support QI varied considerably between organizations
• Project funds were often used to support additional staff or services, as opposed to supporting development of QI capacity
  • A challenge to project sustainability
  • Developing the knowledge and skills needed for organizations to engage in ongoing improvement activities may be a more effective long-term public policy approach than funding specific small-scale time-limited QI “projects.”
• Projects noted time to implement as a QI weakness
  • Reporting of weakness/challenges low, perhaps due to social desirability effect
  • Lack of challenges not consistent with case-study findings from separate study component
Conclusions

• Support from top leadership key for implementation and sustainability
  • Ability to allocate or move resources toward area of focus
  • Limitation to study is a sample that had external resources for project implementation and motivated leadership to develop proposal
    • Future research would benefit from wider sample of providers
• Many organizations did not have fully developed evaluation plans for their projects despite being over halfway through the funded project period at the time the survey was implemented.
  • Ideally, such plans would have been in place prior to QI project initiation.
  • This may point to an area where further education and resources could be developed and targeted specifically toward community-based agencies.