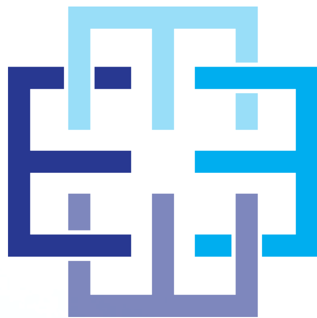

Specifying Implementation Strategies used by Seven Primary Care Regional Cooperatives: Real World Meets Theory

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Background: Implementation Support Strategies

- High quality health care relies on rapid dissemination and implementation of evidence into practice
  - Relies on strategies, which encapsulate the "how to"
- One of the highest priorities is to develop guidance for how to choose and tailor implementation strategies for context
  - Strategies must be described and operationalized
  - Frameworks and taxonomies have been developed to help with this

Proctor Implementation Specifications

Naming

Defining

Specifying

Actor

Action

Action Target

Temporality

Dose

Outcome Affected

Justification

Proctor, Powell & McMillen. Implementation strategies: Recommendations for specifying and reporting. implementation Science. 2013;8 (139)

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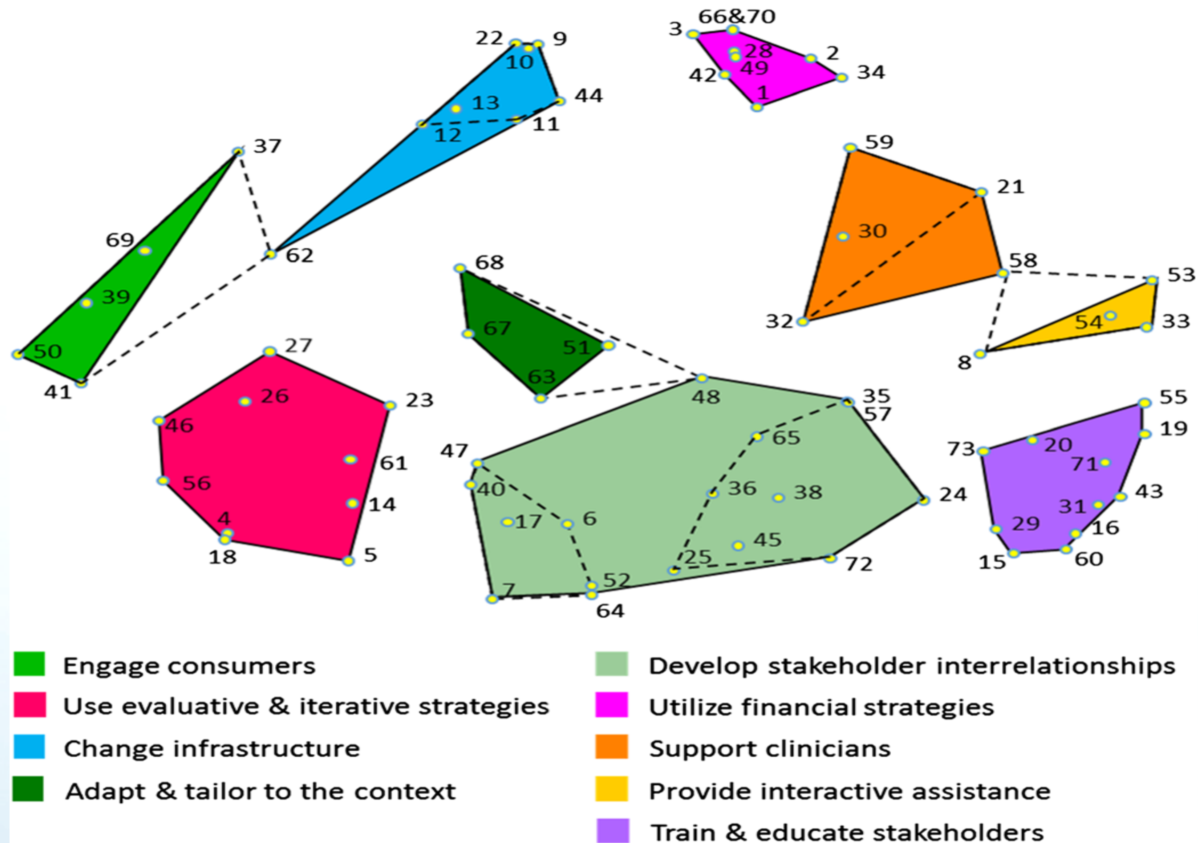
ERIC Taxonomy



Waltz TJ, Powell BJ, Matthieu MM, Damschroder LJ, Chinman MJ, Smith JL, et al. Use of concept mapping to characterize relationships among implementation strategies and assess their feasibility and importance: results from the Expert Recommendations for Implementing Change (ERIC) study. Implementation Science. 2015;10(109).

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What's Needed to Move Field Forward

- Little is known about what kinds of ground-level strategies are being used in primary care extensions to help practices make rapid change
- Theoretical frameworks need to be tested and refined using empirical data
  - Some studies have applied ERIC framework and some have used specifications as outlined by Proctor and colleagues

Study Objectives

1. Identify implementation strategies used by seven regional cooperatives or extensions
2. Use data from these regional cooperatives to empirically test the Expert Recommendations for Implementing Change (ERIC) taxonomy AND guidelines for specifying and reporting implementation strategies recommended by Proctor and colleagues

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Study Setting | ESCALATES

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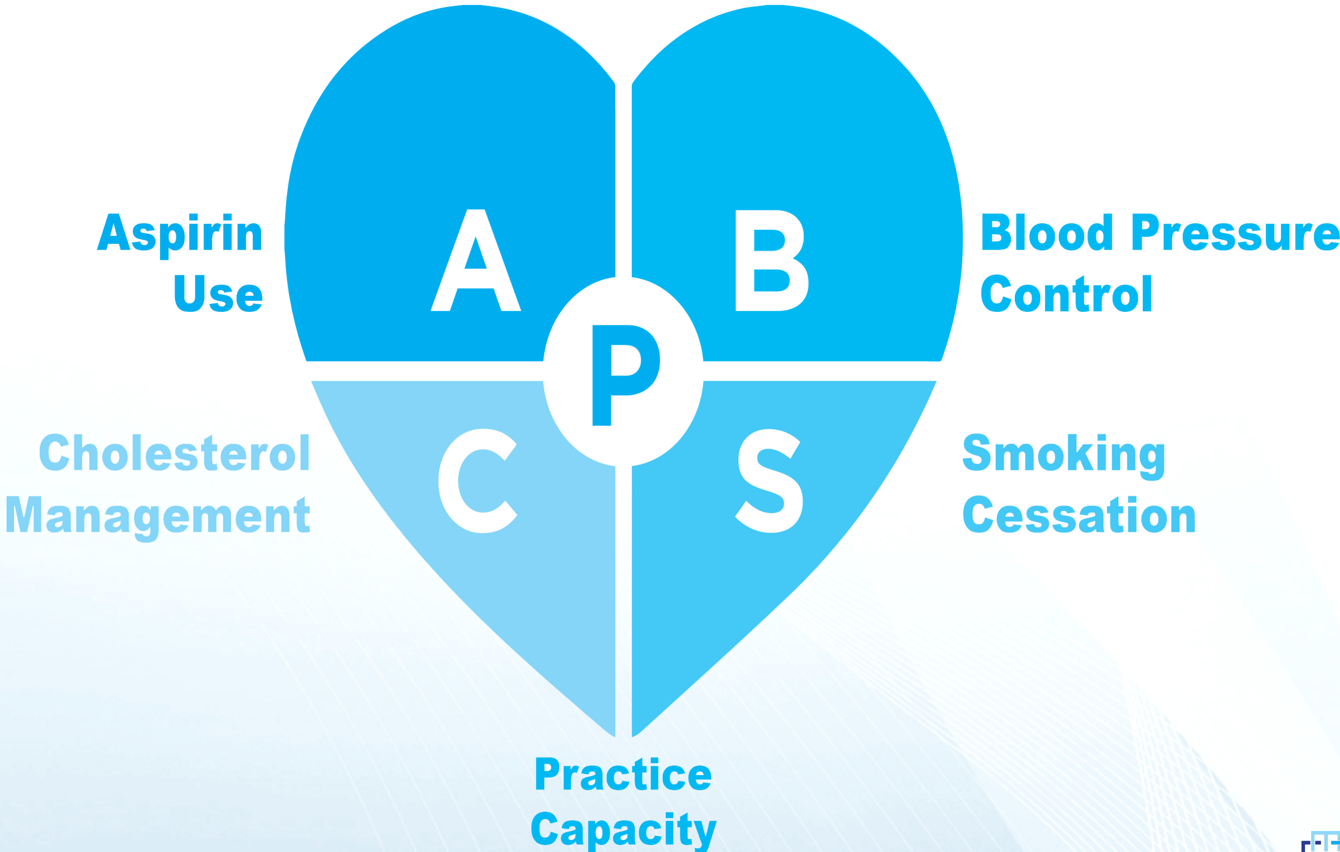
Study Setting | AHRQ EvidenceNOW Initiative



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Qualitative
Data Collection

Grant Proposals &
Other Documents

Online Diaries

Practice
Site Visits

Observation &
Interviews

Cooperative
Site Visits

Context
Assessment

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Integrated Framework | ERIC Taxonomy

Orig ESCALATES Topic	Action	Consensus Strategy	ERIC Cluster
3. Audit and Feedback	Monitor improvement over time	**Audit and provide feedback**	**Use evaluative and iterative strategies**
3. Audit and Feedback	Report of ABCS data is reviewed with practice members	**Audit and provide feedback**	**Use evaluative and iterative strategies**

Consensus Building

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Integrated Framework |

ERIC Taxonomy + Specification Recommendations

…ategy | ERI… | Target | Tem… | Outcome | Justification

…vide | Use and iterative … | Facilit… | Clinici…linical Team | Quar… audits (some… | Documentation of ABCS | Practices need to… data to…

Orig ESCALATES Topic	Action	Consensus St…							…tification
3. Audit and Feedback	Monitor improvement over time								…the
3. Audit and Feedback	Report of ABCS data is reviewed with practice members	A… feedba…				vendors; data may be available from HVH Evaluation Team depending on timing			…see the …to motivate them t… improve
3. Audit and Feedback	Monitor improvement over time	**Audit and provide feedback**	**Use evaluative and iterative strategies**	Practice Facilitators	Clinicians and Clinical Team	Varies depending on Practice Facilitator's ability to get data from EHR/IT system or EHR vendors; data may be available from HVH Evaluation Team depending on timing	Varies by availability of reports; during visits	Delivery of ABCS	Practice need to see the data to motivate them t… improve
3. Audit and Feedback	Report of ABCS data is generated with practice members	**Audit and provide feedback**		Practice Facilitators	Clinicians and Clinical Team	Varies depending on Practice Facilitator's ability to get data from EHR/IT system or EHR vendors; data may be available from HVH Evaluation Team depending on timing	Varies by availability of reports; during visits	Delivery of ABCS	Practice need to see the data to motivate them t… improve
3. Audit and Feedback	Review ABCS data from dashboard or EHR	**Audit and provide feedback**		Practice Facilitators	Clinician and Clinical Team	Quarterly moving to monthly (Spring 2017) ABCS feedback from EHR; dashboards updated monthly	Reviewed at visit	ABCS Improvement Efficient use of dashboards Use of data for QI ABCS Documentation	Data drives change, and practices need to see th… data to motivate them t… improve
3. Audit and Feedback	Monitor improvement over time	**Audit and provide feedback**		Practice Facilitators	Clinician and Clinical Team	Quarterly moving to monthly (Spring 2017) ABCS feedback from EHR; dashboards updated	Reviewed at visit	ABCS Improvement Efficient use of dashboards	Data drives change, and practices need to see th… data to motivate them t…

Cross Cooperative Data Matrix

	Name it (using ERIC+)			Key	Specify It						
ESCALATES TOPIC	**ERIC Cluster**	**ERIC Discrete Strategy**	**Define it (ERIC+)**	**Yes**	**Actor**	**Specific Action(s)**	**Target**	**Temporality**	**Dose**	**Outcomes**	**Justification**
Audit & Feedback, Faciltitation	Use evaluative and iterative strategies	Audit and Provide Feedback	Collect and summarize clinical performance data over a specified time period and use it to monitor, evaluate, and modify provider behavior	MW	PF	Share ABCS data for feedback and monitor improvement over time. Most used ABCS data for A&F, however NW and OK included survey items and other sources of data for feedback.	Practices, but especially clinician and QI team	quarterly to more continuous use for those Cooperatives with dashboards/	during visit: time as needed	Improved ABCS measures	Practices need to see their own data to be motivated to change;
				NC	PF						
				NYC	PF						
				NW	PF; HIT-PF						
				OK	PF; HIT-PF						
				SW	PF; HIT-PF						
				VA	PF						
Learning Collaborative/Peer-to-Peer, Online Learning, Community Engagment,	Develop stakeholder interrelations	Promote Network Weaving	Identify and build relationships and networks to promote info sharing, collaborative problem solving, and a shared vision/goal related to implementing the innovation.	MW		Encourage networking between practices to build a clinical community for best practices; NYC and VA also have online sites for networking.	Attending practices	Varies by events	Varies by type of event; an hour to a full day.	Peer learning and support, knowledge of evidence-based guidelines and best practices	Increase engagement and learning through interaction with peers
				NC	practices, facilitated by Cooperative						
				NYC	practices, facilitated by Cooperative						
				NW							
				OK							
				SW							
				VA	practices, facilitated by Cooperative						
		Community Resource Engagement		MW	practices, community orgs, facilitated by PF	Build links between practices and health resources embedded in those communities; varies in formality from meetings with community organizations to referral programs.	Practices and community orgs	Varies	Varies -- could be mention to an hour meeting	Improved care delivery and referrals to resources patients can access	Use of local resources by practices and patients help improve ABCS and patient care
				NC							
				NYC	practices, community orgs, facilitated by PF						
				NW							
				OK	practices, community orgs, facilitated by PF and extension agent						
				SW	practices, community orgs, facilitated by extension agent						
				VA							

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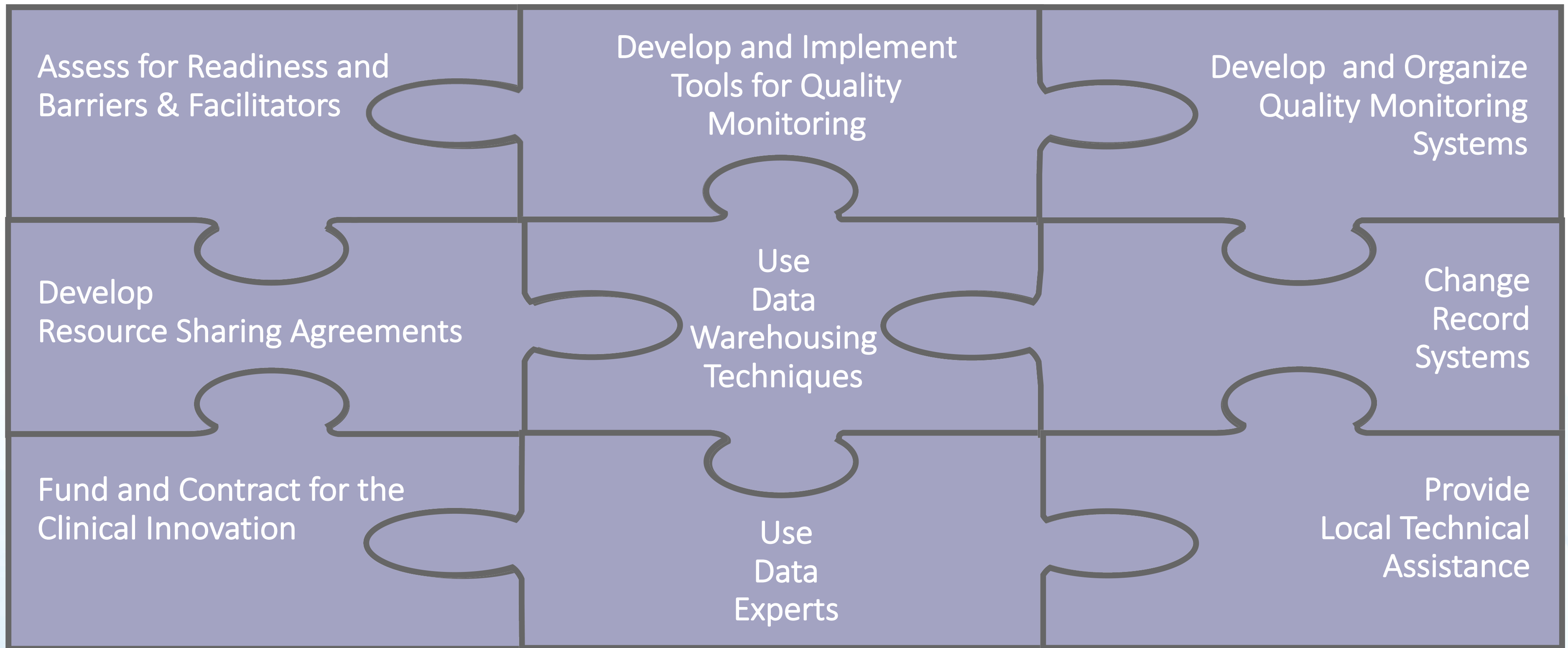
Strategies used by Cooperatives

Interdependence Among Strategies



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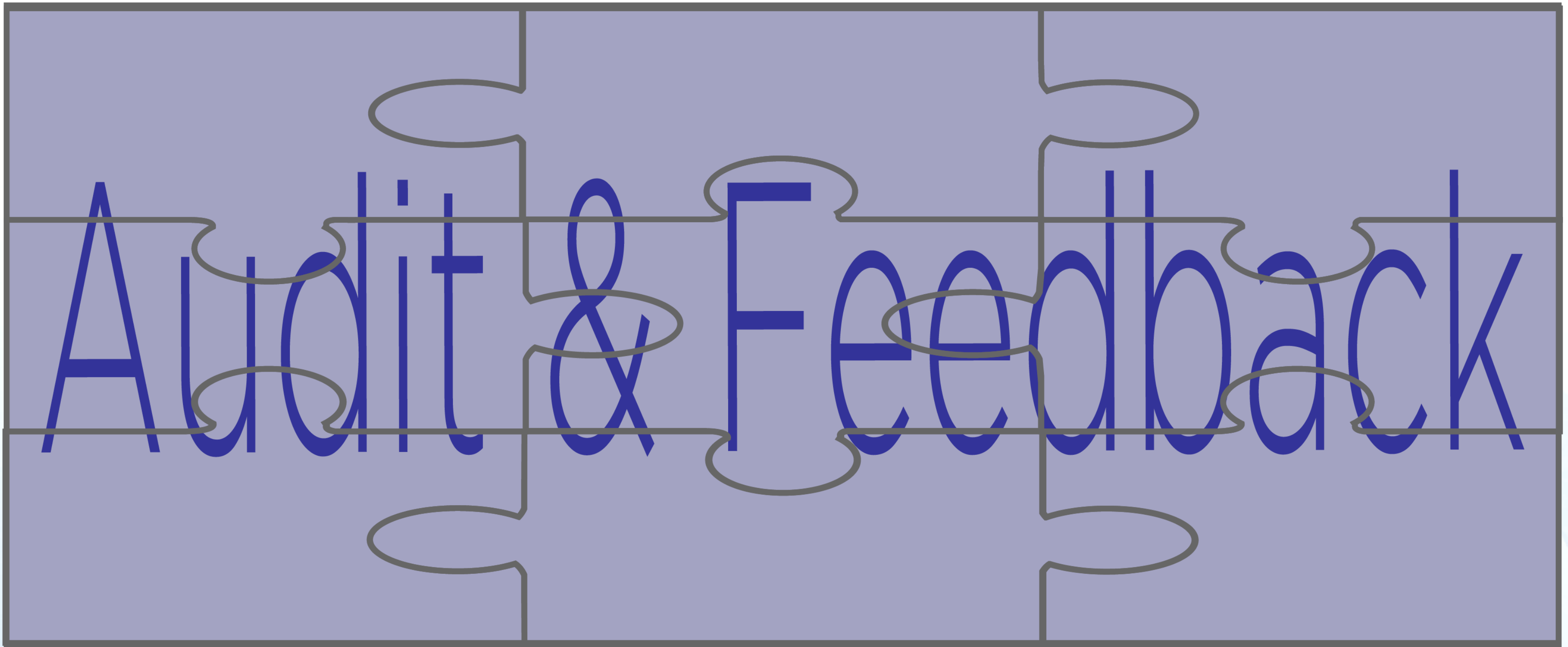
Interdependence Among Strategies



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Meta-Strategy | Practice Facilitation

Practice Facilitation

Table 3 ERIC discrete implementation strategy compilation (n = 73)

Strategy	Definitions
Access new funding	Access new or existing money to facilitate the implementation
Alter incentive/allowance structures	Work to incentivize the adoption and implementation of the clinical innovation
Alter patient/consumer fees	Create fee structures where patients/consumers pay less for preferred treatments (the clinical innovation) and more for less-preferred treatments
Assess for readiness and identify barriers and facilitators	Assess various aspects of an organization to determine its degree of readiness to implement, barriers that may impede implementation, and strengths that can be used in the implementation effort
Audit and provide feedback	Collect and summarize clinical performance data over a specified time period and give it to clinicians and administrators to monitor, evaluate, and modify provider behavior
Build a coalition	Recruit and cultivate relationships with partners in the implementation effort
Capture and share local knowledge	Capture local knowledge from implementation sites on how implementers and clinicians made something work in their setting and then share it with other sites
Centralize technical assistance	Develop and use a centralized system to deliver technical assistance focused on implementation issues
Change accreditation or membership requirements	Strive to alter accreditation standards so that they require or encourage use of the clinical innovation. Work to alter membership organization requirements so that those who want to affiliate with the organization are encouraged or required to use the clinical innovation
Change liability laws	Participate in liability reform efforts that make clinicians more willing to deliver the clinical innovation
Change physical structure and equipment	Evaluate current configurations and adapt, as needed, the physical structure and/or equipment (*e.g.*, changing the layout of a room, adding equipment) to best accommodate the targeted innovation
Change record systems	Change records systems to allow better assessment of implementation or clinical outcomes
Change service sites	Change the location of clinical service sites to increase access
Conduct cyclical small tests of change	Implement changes in a cyclical fashion using small tests of change before taking changes system-wide. Tests of change benefit from systematic measurement, and results of the tests of change are studied for insights on how to do better. This process continues serially over time, and refinement is added with each cycle
Conduct educational meetings	Hold meetings targeted toward different stakeholder groups (*e.g.*, providers, administrators, other organizational stakeholders, and community, patient/consumer, and family stakeholders) to teach them about the clinical innovation
Conduct educational outreach visits	Have a trained person meet with providers in their practice settings to educate providers about the clinical innovation with the intent of changing the provider's practice
Conduct local consensus discussions	Include local providers and other stakeholders in discussions that address whether the chosen problem is important and whether the clinical innovation to address it is appropriate
Conduct local needs assessment	Collect and analyze data related to the need for the innovation
Conduct ongoing training	Plan for and conduct training in the clinical innovation in an ongoing way
Create a learning collaborative	Facilitate the formation of groups of providers or provider organizations and foster a collaborative learning environment to improve implementation of the clinical innovation
Create new clinical teams	Change who serves on the clinical team, adding different disciplines and different skills to make it more likely that the clinical innovation is delivered (or is more successfully delivered)
Create or change credentialing and/or licensure standards	Create an organization that certifies clinicians in the innovation or encourage an existing organization to do so. Change governmental professional certification or licensure requirements to include delivering the innovation. Work to alter continuing education requirements to shape professional practice toward the innovation
Develop a formal implementation blueprint	Develop a formal implementation blueprint that includes all goals and strategies. The blueprint should include the following: 1) aim/purpose of the implementation; 2) scope of the change (*e.g.*, what organizational units are affected); 3) timeframe and milestones; and 4) appropriate performance/progress measures. Use and update this plan to guide the implementation effort over time

Table 3 ERIC discrete implementation strategy compilation (n = 73) *(Continued)*

Strategy	Definitions
Develop academic partnerships	Partner with a university or academic unit for the purposes of shared training and bringing research skills to an implementation project
Develop an implementation glossary	Develop and distribute a list of terms describing the innovation, implementation, and stakeholders in the organizational change
Develop and implement tools for quality monitoring	Develop, test, and introduce into quality-monitoring systems the right input—the appropriate language, protocols, algorithms, standards, and measures (of processes, patient/consumer outcomes, and implementation outcomes) that are often specific to the innovation being implemented
Develop and organize quality monitoring systems	Develop and organize systems and procedures that monitor clinical processes and/or outcomes for the purpose of quality assurance and improvement
Develop disincentives	Provide financial disincentives for failure to implement or use the clinical innovations
Develop educational materials	Develop and format manuals, toolkits, and other supporting materials in ways that make it easier for stakeholders to learn about the innovation and for clinicians to learn how to deliver the clinical innovation
Develop resource sharing agreements	Develop partnerships with organizations that have resources needed to implement the innovation
Distribute educational materials	Distribute educational materials (including guidelines, manuals, and toolkits) in person, by mail, and/or electronically
Facilitate relay of clinical data to providers	Provide as close to real-time data as possible about key measures of process/outcomes using integrated modes/channels of communication in a way that promotes use of the targeted innovation
Facilitation	A process of interactive problem solving and support that occurs in a context of a recognized need for improvement and a supportive interpersonal relationship
Fund and contract for the clinical innovation	Governments and other payers of services issue requests for proposals to deliver the innovation, use contracting processes to motivate providers to deliver the clinical innovation, and develop new funding formulas that make it more likely that providers will deliver the innovation
Identify and prepare champions	Identify and prepare individuals who dedicate themselves to supporting, marketing, and driving through an implementation, overcoming indifference or resistance that the intervention may provoke in an organization
Identify early adopters	Identify early adopters at the local site to learn from their experiences with the practice innovation
Increase demand	Attempt to influence the market for the clinical innovation to increase competition intensity and to increase the maturity of the market for the clinical innovation
Inform local opinion leaders	Inform providers identified by colleagues as opinion leaders or "educationally influential" about the clinical innovation in the hopes that they will influence colleagues to adopt it
Intervene with patients/consumers to enhance uptake and adherence	Develop strategies with patients to encourage and problem solve around adherence
Involve executive boards	Involve existing governing structures (e.g., boards of directors, medical staff boards of governance) in the implementation effort, including the review of data on implementation processes
Involve patients/consumers and family members	Engage or include patients/consumers and families in the implementation effort
Make billing easier	Make it easier to bill for the clinical innovation
Make training dynamic	Vary the information delivery methods to cater to different learning styles and work contexts, and shape the training in the innovation to be interactive
Mandate change	Have leadership declare the priority of the innovation and their determination to have it implemented
Model and simulate change	Model or simulate the change that will be implemented prior to implementation
Obtain and use patients/consumers and family feedback	Develop strategies to increase patient/consumer and family feedback on the implementation effort
Obtain formal commitments	Obtain written commitments from key partners that state what they will do to implement the innovation
Organize clinician implementation team meetings	Develop and support teams of clinicians who are implementing the innovation and give them protected time to reflect on the implementation effort, share lessons learned, and support one another's learning

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Recommended Refinements to ERIC Taxonomy

- Refining definition and/or name for 8 strategies
  - Develop implementation tools for quality monitoring; develop and organize quality monitoring systems; audit and feedback; change record systems; fund, contract for clinical innovation; **organize clinician implementation teams meetings**; develop and distribute implementation toolkit; conduct ongoing training
- Adding 3 strategies
  - **Community resource engagement**, create online learning communities, redesign workflow

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Conclusions & Future Directions

- Some Strategies are not mutually exclusive
  - Meta-strategies are comprised of discrete strategies
  - Discrete strategies may be sequenced or tailored

- Some ERIC terms did not completely describe EvidenceNOW implementation activities
  - Some definitions needed to be expanded

Conclusions & Future Directions

- Integration of ERIC taxonomy and Specification Recommendations
  - Valuable to harmonize language across multiple settings/studies
  - Useful for prospective planning and retrospective reporting
- Refine theory with use empirical data creates more robust theory
  - Apply in large scale and diverse studies

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