A Dissemination Strategy to Promote Relational Coordination in the Veterans Health Administration: A Case Study

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Abstract

**Background** Implementing new healthcare practices across large organizations can be difficult due to inefficient diffusion of information. Using social marketing theory and additional evidence-based dissemination strategies, we spread relational coordination, an empirically supported theory of organizational performance, throughout the large Veterans Health Administration (VA). Relational Coordination drives performance outcomes including quality, efficiency, client satisfaction, and worker well-being and engagement and proposes interdependent work is most effectively coordinated by workers with each other, their customers, and their leaders. We aimed to develop a best-practice dissemination plan to educate and motivate researchers and operational staff in the VA to study and implement relational coordination within their programs of research or areas of operation.

**Methods** In this observational case study, we followed the four Ps of social marketing theory to develop a strategy to disseminate relational coordination across the VA in two phases. In phase one, we created and distributed relational coordination information and invited VA staff to join the Relational Coordination Research Collaborative. In phase two dissemination efforts targeted researchers who were ready to study and implement relational coordination within existing programs of research. Primarily observational data were collected through both stages of the project and a final, post-project survey was administered after the second phase. The quantitative results were calculated using descriptive statistics and text responses in the survey were analyzed using deductive content analysis. A structured categorization matrix was developed to code the responses based on the survey questions.

**Results** The first phase saw instances of social media dissemination, presentations, as well as phone or email communication between project staff and the target audience. 47 members of VA staff joined the Relational Coordination Research Collaborative and 50% participated in online research seminars. 13 research projects applied for the second stage and 5 projects were ultimately chosen to access the Relational Coordination survey. Relational coordination-related trainings, presentations, and publications also occurred.

**Conclusions** Dissemination approaches that involved personalized, one-on-one efforts seemed to be more effective at spreading relational coordination compared to social media or other online presentations. Participants in the second phase overwhelmingly agreed to that relational coordination should be adopted in the VA but indicated the cost of the program would have been a barrier. Results reiterate the importance of an intentional dissemination plan, including addressing the costs and benefits of programs.

**Contributions To The Literature**

- Disseminating evidence-based strategies, like relational coordination, within a large healthcare setting, while crucial to the advancement of medical practice and operations, has historically be slow and ineffective.
This study utilized the four Ps of social marketing to develop innovative, multi-component dissemination approach to introduce relational coordination to VA researchers and staff.

This study led to successful adoption of relational coordination by five funded research and operational projects and identified important considerations around price, product, and promotion when designing and executing a dissemination plan.

Our dissemination efforts developed knowledge and understanding of relational coordination that have resulted in multiple Veteran-focused implementation projects that hold potential to positively impact patient and provider health and safety.

**Background**

Healthcare researchers develop new evidence-based practices and tools to improve clinical care and patient safety. However, only a fraction of these practices and tools are implemented in clinical settings.\(^1\) While multiple factors contribute to the research to practice gap, slow or improper diffusion of information is a known barrier to rapid adoption of evidence-based practices.\(^1\) Diffusion is the passive and natural spread of information to a broad audience, such as through word of mouth.\(^2\) Large healthcare organizations, such as the Veterans Health Administration (VA), use person to person diffusion of information with some benefit. An alternative to diffusion is dissemination, defined as planned efforts to spread practices through targeted, direct delivery of information to a particular audience, such as healthcare providers or patients.\(^1\) While no single diffusion or dissemination strategy is effective for every situation, diffusion has been shown to be less effective than dissemination when the aim is to consistently and rapidly spread best practices to improve patient care.\(^1\)

Dissemination strategies selected and crafted to reach a specific audience can positively impact the adoption of best practices.\(^3,4\) Marketing theory offers a valuable framework to select dissemination strategies for large healthcare organizations. Marketing is the management process responsible for identifying, anticipating, and satisfying customer requirements profitably.\(^5\) Social marketing applies marketing principles to societal objectives, such as improving the health and welfare of individuals and society, rather than corporate ones.\(^6\) Social marketing is an active process that induces behavior change through deliberate influence and persuasion by leaders, compared to more passive marketing approaches that aim to influence behavior change by bringing awareness to a topic.\(^5\) In healthcare, social marketing theory offers a strategy to focus on influencing voluntary, socially beneficial behaviors and harnessing those behaviors to enact social change.\(^6\) The social marketing approach provides dissemination guidance, including identification of the four Ps of marketing, product, price, place, and promotion, the target audience and objective setting, and the creation, testing, and circulation of materials.\(^6\)

The four Ps of marketing can inform decision making around dissemination of evidence-based practices in healthcare.\(^6\) Product refers to the practice, process or innovation being disseminated. The product should be designed for and by end-users who know their local context, be they an individual provider, a
clinical team, a community, or an organization. Price refers to the cost in time and money to end-users for adopting and implementing the product. Price is a driving factor in implementation of evidence-based practices for human and financial resources are limited in healthcare settings. Place is how a target audience receives and accesses product information. The ideal is for audiences to invest minimal effort to retrieve product information. This is achieved when the product is pushed to end users through established and frequently visited communication forums (e.g. publications, meetings). Promotion considers the different methods of communication. These range from low touch methods such as social media, radio and television, and internet messages which subliminally promote products through low involvement processing.\(^7\) High touch methods include distribution of branded promotional materials such as pens, folders, and toolkit binders or academic detailing, which allows face-to-face interaction and discussion.\(^8\) Identification and optimization of the four Ps can inform healthcare dissemination plans and may increase the uptake of evidence-based strategies.\(^6\)

This paper details the dissemination strategy for The Relational Coordination in the Veterans Health Administration (RC in VA) program, a national project designed to educate and motivate VA research and operational staff to study and implement relational coordination\(^9\) within their programs of research or areas of operation. The VA Health Services Research & Development (HSR&D) program funded the RC in VA as a one-year pilot with hopes of understanding the impact of team communication and relationships on organizational performance. Given the size and geographic dispersion of VA healthcare facilities, the RC in VA program prioritized bringing together VA researchers and operational leaders to establish processes to study relational coordination across settings, conditions, and populations. The goals of the RC in VA program were to develop knowledge and understanding of relational coordination that results in implementation projects that positively impact patient and provider health and safety. The work supports current VA priorities including a focus on patient centered care, learning healthcare systems and high reliability organizing.\(^10,11,12\)

Relational coordination is an empirically supported theory of organizational performance that proposes interdependent work is most effectively coordinated by workers with each other, their customers, and their leaders.\(^13\) Relational coordination drives performance outcomes including quality, efficiency, client satisfaction, worker well-being and engagement.\(^14\) In healthcare, relational coordination is a salient component of delivering an effective, reliable, highly coordinated experience of care as well as a key aspect of patient centered care and high reliability organizing.\(^15\) The state of relational coordination within teams is captured using the Relational Coordination Survey (RC Survey), a validated measure of coordination and team performance. The RC Survey assesses the quality of communication and relationships among roles and can be used for research or to support organizational change.\(^16\)

In line with social marketing theory described above, dissemination of the RC in VA program involved multi-component strategies. This was important given, the unique needs of individual VA research and operational teams, the institutional structure of the VA, and the fact that relational coordination is novel and a less well understood approach to study team relationships and communication. Once the
objectives for the RC in VA program were identified, the question remained as to optimal dissemination products, price, placement and promotion techniques. To determine best practices for dissemination, we considered many factors, including the available resources within the VA, the ideal target audience, and the variable involvement of VA researchers and operational staff in team focused assessment and improvement.

This paper describes dissemination of the RC in VA program, including the successful dissemination efforts that led to adoption of relational coordination into currently funded VA research and operational projects. We also present the dissemination strategies that failed to garner lasting engagement. The value of understanding dissemination of the RC in VA program is not exclusive to this project. Rather this paper highlights the useful lessons and strategies that may be applied to the broad dissemination of a theoretically driven team communication and relationship theory and assessment tool through a large healthcare organization.

Methods

The RC in VA program was disseminated and implemented over two phases. The dissemination phase focused on creating and distributing relational coordination informational materials to all VA researchers and operational staff and inviting participants to join the Relational Coordination Research Collaborative (RCRC). The RCRC is an international community of leaders, researchers, and change agents who apply relational coordination across diverse settings. The RCRC provides monthly educational seminars and extensive resources to partners. The implementation phase focused on engaging VA researchers and staff to establish processes to study relational coordination in healthcare teams through use of the RC Survey in their currently funded research or operations programs. Methods for the two phases are described separately.

Planning and Dissemination Phase

The target audience for the initial phase was VA researchers and operational staff from across the United States. The objective was to introduce relational coordination concepts and research to a broad audience. Informational materials were created by the PhD-trained VA study researcher (HG) and tested on RCRC leadership and local researchers. The group identified the need for creativity in these materials and suggested the inclusion of infographics and logos on all products. Active dissemination occurred by the study leads (HG) who scheduled time to speak on cyberseminars hosted by VA HSR&D and operational programs (e.g. VA Office of Nursing Services) and distribution of informational materials via email or phone to VA change agents. Passive dissemination occurred through sharing of content via VA and RCRC twitter feeds and posting RC in the VA information on the RCRC webpage. Interested colleagues were to follow instructions included in social media messaging to contact the study leads and/or join the RCRC. Active and passive dissemination of RC in VA content and membership in the RCRC partnership was paid by the RC in VA program funds and delivered through existing VA communication channels. A promotion calendar was established to deliver social media content weekly, virtual presentations monthly,
and newsletters quarterly. Data from the dissemination phase were captured as invitations to present RC in VA content, number of email and phone contacts by study leads, social media impressions and engagements, and new VA members to the RCRC.

**Implementation Phase**

This phase involved partnering with interested VA researchers and operational staff to establish processes to study RC in VA. Initial efforts required the creation of relational coordination language and RC Survey information for regulatory bodies such as local research review committees and institutional review boards. Subsequent efforts focused on garnering support from executive leadership within VA facilities to approve RC in VA research focused on Veterans and employees. The target audience for the implementation phase included researchers and operational staff who were VA employees (as noted by a va.gov email address), were current members of the RCRC and could incorporate relational coordination into current projects. Trainings were planned for VA staff to learn about relational coordination assessment and interventions and apply them to current projects. Trainings were provided through attendance at a relational coordination workshop at the VA HSR&D annual meeting and the 9th Annual Relational Coordination Roundtable. In addition, these conferences provided VA researchers and staff opportunities to network and present their relational coordination work.

The objective of phase two was to support teams to study relational coordination in their research or operational projects using the RC Survey. The RC Survey is a proprietary instrument administered through RC Analytics. The survey was available to five VA teams. Administrative and copyright costs were paid by RC in VA program funds. Implementation products shifted to individual support for researchers and operational staff submitting a RC in VA application and RC Survey measurement, analytic and reporting support for selected projects. An RC in VA application was placed on the RCRC website and shared via email with interested parties. Promotion of the RC in VA application occurred using the methods described in the dissemination phase. Data from the implementation phase included the number of applications requested, submitted and funded, as well as training attendance.

A survey was sent to the five RC in VA research project leads 1 year after program implementation to understand the impact of the dissemination efforts, how participants heard about the RC in VA and reasons for participating. The survey requested suggestions on how to build a community of relational coordination work in the VA, information on the early findings from their RC in VA studies, as well as additional application of relational coordination in the VA. Eighteen months after the RC in VA pilot program was launched, we gathered information on current and future VA projects that are or will be using relational coordination.

**Analysis**

Two researchers (BC and HG) collected quantitative and qualitative data from VA researchers and operational staff during both phases of the project. The quantitative results were calculated using
Results

Dissemination Phase

During the initial dissemination phase, 51 instances of email and phone communication were exchanged between study leads and VA researchers and operational staff. Fifteen separate relational coordination presentations were conducted. Content was shared via Twitter 47 times, receiving 62,139 impressions and 398 instances of engagement. Four articles were written for VA newsletters. In total, 47 VA staff members signed up for the RCRC and 27 (55%) participated in monthly RCRC educational webinars. Table 1 presents the dissemination methods and outcomes of phase one, while Fig. 1 shows the geographic spread of the dissemination efforts.

Implementation Phase Two

The implementation phase resulted in 13 requests for RC in VA applications; six (46%) applications were submitted, and five (38%) submissions were selected. Fifteen VA researchers and staff were trained in relational coordination assessment and interventions through workshop attendance. Information on the RC in VA programs were shared at five conference presentations and in two recent publications. Five projects submitted additional grants to continue their work. Table 2 provides details of each of these outcome measures. As of April 2020, 14 VA studies are currently using relational coordination as a guiding framework and 15 projects have written relational coordination assessment into future research proposals.

Survey findings from the five RC in VA projects (n = 9) indicated the majority of participants (n = 5; 56%) learned about the RC in VA project through word of mouth. One participant read about it on Twitter while three found the program through a VA presentation. Three participants heard about the project through other means. Reasons participants applied for the RC in VA project were to assess how current teams were working together and how relational coordination might affect future work (n = 3; 34%), assess for relationships between relational coordination and implementation and evaluation of projects (n = 3; 34%), and relational coordination's ability to support complex and large-scale studies and assist in organizational transformation (n = 2; 22%).

Participants saw additional applications of relational coordination assessment and interventions in VA operations (n = 8; 88%). Specifically, participants felt relational coordination could help understand team
dynamics, help implement VA initiatives, and improve workflow (n = 5; 56%). Two participants felt, given the large, siloed nature of VA hospitals, relational coordination could increase communication and introduce new initiatives or transformations throughout the VA. All participants indicated they saw additional application of relational coordination assessment and interventions in their own programs of research. This included using relational coordination to evaluate implementation of programs with operational or frontline staff and to assess and improve staff engagement. (Fig. 2 – appendix).

Participants were asked if the price of the RCRC annual partnership ($125/year) and administrative costs to use the RC Survey ($500 + per project) would have influenced their plans to use relational coordination. The respondents were split in that 45% (n = 4) indicated they would not have used the RC Survey if there was a cost, while 56% (n = 5) indicated they would have used the RC Survey and support from RC Analytics had there been a cost. They added it would have depended on the price and if they could have written the funding into existing grants. The majority (89%; n = 8) indicated they would not continue with the RCRC partnership for the VA does not reimburse staff for memberships, meaning individuals would be required to pay for membership in the RCRC themselves.

**Discussion**

This paper described dissemination of the RC in VA program to researchers and operational staff across the United States. Guided by social marketing theory, we presented the dissemination efforts that led to adoption of relational coordination into five currently funded VA research and operational projects. Using the social marketing elements of product, price, place, promotion, we highlighted lessons and strategies that can be applied to the broad dissemination of a theoretically driven team communication and relationship theory and assessment tool through a large healthcare organization.

The products created for the RC in VA program were designed for and by end-users who knew the VA context. These included informational content that could be delivered during phone calls, in-person meetings, over cyberseminars, and via social media. We offered VA researchers and staff membership into a worldwide community of relational coordination researchers, access to ongoing education, use of a validated survey tool and analytic support. These products were designed to fit the diverse needs of VA researchers, giving them flexibility in the level of engagement with relational coordination. The success of this approach is supported by the results of our project.

Literature on healthcare interventions suggests that tailoring evidence-based practices or interventions to an individual’s preference or need is likely to improve professional practice or patient outcomes. This is in contrast to the “one size fits all” approach, which has been found to be inconsistent with goals of maximizing patient outcomes, quality of care, and intervention adherence. In the RC in VA program, we split the work into dissemination and implementation phases, which allowed people to ease into the relational coordination work and stop at their level of interest. Some stopped at learning and information collection or engaged in RCRC, while others studied the concept and continued to use it in their research.
A useful lesson from our experience was the price of participation in the RC in VA program was a significant factor that influenced both the dissemination and implementation phases. While perception of price fluctuates depending on the value and need of an intervention, price is a significant consideration in the overall determination of whether to implement an evidence-based practice.\textsuperscript{26} High prices for any product has been reported as a major barrier to implementation and adoption.\textsuperscript{27} We proactively obtained grant funding to support the RCRC partnership and use of the RC survey, so price was not a barrier. This was a successful dissemination strategy, as noted by respondents’ hesitancy to continue as a RCRC partner and use the RC Survey in future work due to cost. However, one respondent indicated they would consider ongoing RCRC membership and others reported they would continue to use the RC Survey if it could be covered by grant funds. Suggesting the initial no-cost option was necessary to draw researchers to relational coordination and allow them to experiment with the concept and assessment tools at minimal risk. Of the four Ps, addressing the price of a product is the most useful dissemination and implementation strategy. However, even for a low price product, one must attract an audience through consideration of the place and promotion of materials.

The strategic placement of RC in VA products using established communication channels for this population was another useful dissemination strategy. RC in VA products were pushed to researchers and operational staff during the workday, in meetings they already attended, and through VA communication newsletters and social media they routinely reference. We housed all content on the RCRC website, so participants could find all program materials in one place.\textsuperscript{28,29} The push marketing approach was effective for it targeted new customers who hadn’t heard about the RC in VA product.\textsuperscript{30} This dissemination approach focused on piquing researchers’ interest in a manner that took very little effort on their part. Push marketing as a dissemination strategy can apply in any setting and should utilize multiple platforms (e.g. social media, newsletters, presentations) to ensure communication saturation is achieved and the target audience is reached.

Lessons learned during promotion of RC in the VA suggested that low-effort promotion via social media and newsletters was effective in reminding the target audience of the program. However, the most impactful promotional effort was active outreach through personal contact via email, phone calls, presentations, and discussion with change agents. Though time consuming and more effortful, these promotional methods built off existing relationships and created new ones. They facilitated dialogue and moved many from inquiry to action. Our finding is in alignment with previous studies that found that information spreads more rapidly and more accurately through high-trust individuals and many are only willing to distribute online information coming from trusted peers.\textsuperscript{31,32,33} We encourage both low and high touch promotional efforts in any large scale dissemination effort, for in our case study the two approaches were complementary.

While our case study contributes to the understanding of successful dissemination strategies across a large healthcare organization, the study design was observational with no control group. Due to this, our conclusions are based on the opinion of researchers who utilized the RC in VA resource. We did not
engage researchers or operational staff who did not participate in the RC in VA program. Additionally, some of these researchers had been exposed to relational coordination in their research prior to our dissemination efforts.

**Conclusion**

Dissemination focuses on spreading information widely. Our findings, which align with Social Marketing Theory, suggest dissemination within healthcare settings should consider product design and price, in addition to placement and promotion. Dissemination of the RC in VA program was successful for we proactively designed the product and pricing to our target audience and local context. Our products were flexible, adaptable and available at no-cost. Placement of products on established communication channels and promotion using low-effort and relationship-based methods were effective. Our dissemination efforts developed knowledge and understanding of relational coordination that have resulted in multiple Veteran-focused implementation projects that hold potential to positively impact patient and provider health and safety.

**Abbreviations**

HSR&D  
VA Health Services Research & Development; RCRC: Relational Coordination Research Collaborative; RC in VA: Relational Coordination in the Veterans Health Administration; RC Survey: Relational Coordination Survey; VA: Veterans Health Administration;

**Declarations**

**Ethics approval and consent to participate:** In accordance with VA institutional review board this study is a designated program evaluation, thus no institutional review board approval was needed.

**Consent for publication:** Not applicable

**Availability of data and material:** The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

**Competing interests:** None declared

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**Authors' contributions:** BC, HG jointly designed the study, conducted all analyses and drafted the paper. CB assisted in data collection and manuscript revisions.
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**Tables**

Due to technical limitations, table 1,2 is only available as a download in the Supplemental Files section.