"This has reinvigorated me": perceived impacts of an innovation training program on employee experience and innovation support

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Abstract

Purpose ——Innovation is widely desired within healthcare organizations, yet the efficacy of programs aimed at fostering it remain largely unassessed, with little consideration given to their effects on employee experience. The Veterans Health Administration (VA) innovators network (iNET) was established to provide organizational support to improve and reimagine patient care and processes across the VA. We evaluated participant perspectives on how iNET impacted workplace experience and fostered innovation.

Design/methodology/approach ——Semi-structured interviews were conducted using purposive sampling to maximize diversity for program roles and site characteristics, reviewed using a rapid matrixed approach, then analyzed using a hybrid inductive/deductive approach that applied a theoretical framework of innovation supportive domains.

Findings ——21 project investees, 16 innovation specialists and 13 leadership champions participated from 15 sites nationally. Most participants reported strongly positive impacts including feeling re-energized, appreciating new experiences and expanded opportunities for connecting with others, sense of renewed purpose, better relationships with leadership and personal recognition. Negative experiences included time constraints and logistical challenges. Participants' experiences mapped frequently onto theorized domains of supporting a curious culture, creating idea pathways and porous boundaries, fostering/supporting catalytic leadership and supporting (role) diverse teams. The program's delivery of ready resources was critically supportive though at times frustrating.

Originality/value ——Participants' experiences support the conclusion that iNET fosters innovation and positively impacts participating employees. In the post-pandemic context of unprecedented challenges of healthcare worker burnout and stress, effective innovation training programs should be considered as a tool to improve worker experience and retention as well as patient care.

Keywords

Workplace engagement; Innovation; Psychological safety; Employee well-being

Introduction

Advancing innovation is an ever-present goal within healthcare, both in the form of clinical breakthroughs and in organizational innovations that offer technical and operational

improvements in health care delivery. As others have noted, innovation is almost a prerequisite for a healthcare system's survival and is "high on the agenda" of most system administrators (Weintraub and McKee, 2019), yet little of the extensive current managerial literature on innovation focuses on how to stimulate innovation in healthcare organizations, or the impacts of such efforts. A 2021 literature review found only four small studies in the peer reviewed literature describing efforts to grow cultures of innovation in healthcare, with mixed and limited impacts and recommended that further research is needed to generate evidence on the impacts of organizational innovation on patient care and system outcomes (Mak, 2021). Literature specifically describing innovation training programs in healthcare settings is scant, and the impact of innovation initiatives on the workplace experiences of participating healthcare employees has been similarly overlooked. There is some evidence that intrapreneurship in public sector settings can be fostered when employees are more engaged in their workplace (Knox and Marin-Cadavid, 2023), but the authors of that study highlighted the need for nuanced qualitative research to identify *how* engagement is fostered in relation to innovation initiatives. While benefits of training might include acquiring new skills, greater opportunities for advancement and increased satisfaction, these outcomes are not intrinsically guaranteed, and challenges of additional workload or other unintended consequences could outweigh benefits. In the current post-pandemic context of severe challenges to healthcare worker retention and recruitment and extreme levels of burnout and exhaustion in the field (Nigam, 2023; OSG, 2022), understanding worker experiences with innovation takes on not only additional urgency but signals an important outcome of innovation efforts that often is not investigated. Burnout and turnover affect patient care, operating costs and clinician well-being (Han, 2019; Shanafelt, 2016; Wurm, 2016). With job satisfaction and employee engagement associated with positive impacts on retention as well as burnout (de Vries, 2023; Szilvassy, 2022), innovation training that improves employee experience may be an important contributing factor to organizational sustainability and success, independent of organizational gains accruing from innovations created.

The US Veterans Health Administration (VA) launched its innovators network (iNET) in 2015, which builds the innovation capacity of the VA by training VA employees on innovation-related competencies while providing resources and pathways to accelerate innovative ideas (Amrhein, 2021; Vashi, 2021). iNET also collaborates with the VA Diffusion of Excellence, a parallel program, by promoting promising practice identification and implementation (Cutrona, 2023; Elnahal, 2017; Jackson, 2024; Reardon, 2023; Vega, 2019). Each year, VA medical facilities competitively apply to join iNET. At each chosen site, one or more innovation specialists receive training to lead local innovation efforts including working with employees to develop innovative projects that aim to improve outcomes for veterans and staff. Coaching, facilitation and training on core competencies which include human-centered design, project management and lean methodologies are provided to local sites from the national iNET program.

In addition to providing support for local leadership development, iNET promotes ideas initiated by frontline employees using a Spark-Seed-Spread investment program which allows ideas to be developed, refined and tested using three tiers of financial support, based on idea maturation. "Spark" funding supports "proof of concept projects" to help innovators develop initial "prototypes," where there is a strong problem statement and

potentially some preliminary evidence or strong theory of action. "Seed" funding is to help further develop successful "spark" projects and perform pilot testing. "Spread" funding is for implementation and scaling of successful "seed" projects to other populations, clinics or sites in VA. Additionally, iNET provides centralized support and resources to all network sites to reduce barriers to innovation. For example, the network assists with administrative challenges including contracting and purchasing. Resources are also made available to market the program and facilitate an active network of employees across the healthcare system to support and learn from each other's experiences and to promote ongoing collaborations. This includes building connections to local, regional and national leadership, which helps sustain and promote innovation efforts across sites and provides opportunities for employees to receive both local and national recognition for their work.

This paper reports on a qualitative evaluation of iNET program, focused on answering two questions:

1. In what ways did employees feel the program impacted their work experience?

2. In what ways did the program deliver support for innovation?

In answering these questions, our analysis also explores whether program aspects that support innovation also supported more positive employee experience.

Materials and methods

A mixed methods evaluation of the iNET initiative was conducted from 2018–2020. The methods and scope of the overarching evaluation have been described in detail in a prior publication (Vashi, 2021); briefly, the embedded evaluation was designed using a collaborative approach with program administrators and with an emphasis on providing rapid, formative feedback that could support ongoing iterations in program content. Per regulations outlined in VHA Program Guide 1200.21, the evaluation presented here has been designated a non-research quality improvement activity.

The analysis reported in this paper draws on data from semi-structured qualitative interviews conducted in the first year of the evaluation. Interview guides were developed with input from iNET program participants and operational partners; questions asked about participants' experiences with the program, suggestions for improvement and perceptions of program impacts either for themselves or others. Given the capacity constraints of the evaluation team and timeline, a purposive sampling strategy was developed to ensure representation of three different types of program participants: innovation specialists (specialists), project investees (investees) and leadership champions (champions). See Table 1 for more details on each participant type.

The sampling strategy also maximized the diversity of site characteristics including facility size, geographic location, the year the site joined iNET and its prior experience with innovation efforts. Information on site characteristics was obtained from site applications to join the network, and all 30 (then) participating sites were considered for inclusion.

Interviews were conducted by three authors (SN, AT, BL) with advanced social science degrees and experience in qualitative health services research. An initial rapid analysis of interview data used a templated matrix to organize and extract key information from interviews (Hamilton, 2013) in order to provide feedback to operational partners and to stimulate initial discussion and development of a coding schema among the evaluation team. This schema served as the first draft of a codebook. Transcripts were then formally coded using a conventional thematic analysis approach (Hsieh and Shannon, 2005). Coding was conducted by one member of the team, a sociologist and health services researcher (SN), who met regularly with the senior author (AT) and other team members to review coding practices, iterations of the codebook, interpretation of the data and identification of themes.

We used both inductive and deductive approaches to coding, deductively applying six core components of non-profit innovation stimulation as developed by Sahni (2017):

1. *Curious culture*, defined as a workplace culture where employees are able to look beyond their usual obligations, question assumptions and challenges the status quo;

2. *Idea pathways,* or places where employees can go for support for new ideas;

3. *Porous boundaries* within the organization, allowing or facilitating ideas to be shared across work teams, roles and sites;

4. *Diverse teams* that include and empower people with a wide variety of backgrounds and experiences;

5. *Catalytic leadership* that supports change and empowers staff to feel they can solve problems; and

6. *Ready resources*, defined as when the necessary financial and administrative resources for innovation work are easily accessible.

Using these components as a theory-informed coding schema applied to participants' observations of the program's strengths and weaknesses, the evaluation team iteratively discussed and refined the findings. The analysis focused on findings that were supported by observations across the roles and the majority of sites: in other words, the emphasis is on widely shared experiences, although key divergent experiences are also reported.

Results

49 people from 15 sites participated in interviews between the fall of 2018 and spring of 2019: 15 interviewees were innovation specialists, 13 were leadership champions and 21 were investees. Five participating sites had joined iNET in its first year (2015); four had joined in 2016 and six had joined in 2017. With one exception, all those invited to be interviewed agreed to participate. The evaluation team attempted to interview at least one person in each role for each participating site, however at two sites a leadership champion was either no longer at the site or could not be identified.

Our analysis grouped findings into those related to employee experience, and those related to support for innovation. In the following sections, we describe findings in greater detail

and with illustrative quotes. Quotes are identified by the participant's role and study ID number.

Program impacts on employee experience

There was high congruency across all participant types in reporting strongly positive overall experiences with the program. Many described feeling re-energized, appreciating new experiences and expanded opportunities for connecting with others or feeling satisfaction from being part of a larger purpose. Other experiences included enhanced pride in their organization, better relationships with organizational leaders and/or receiving personal recognition. Reported negative experiences were low with strong agreement across participant types, despite being probed about program challenges. When reported, negative experiences were mainly described as logistical or bureaucratic challenges rather than intrinsic dissatisfaction with the experience of learning and practicing innovation skills.

Participation in iNET was described as a strongly positive, at times transformative, workplace experience by most interviewees, across all roles. This was often the case regardless of the "success" or "failure" of the innovation project undertaken. As one long time employee noted:

> I personally feel that the Innovators Network, my project - and this is coming from somebody whose project didn't even pan out in the intended way - but I've been at the VA for 17 years, 17 years now and this is just something that I think was probably the most empowering experience that I've had. (Investee 29)

Innovation specialists, whose role brought them into frequent contact mentoring and supporting investees, observed positive effects in others:

> Last year I had a nurse manager who had a project and she said that before she got involved in this project, she had gotten to a point in her career where she was like, I could just drive straight by this VA and just be perfectly happy. But she said because I got involved in the Innovators Network and I'm getting to share what we've done here with other VAs, she's like, this has reinvigorated me. I actually get excited to come in to work and work on it. (Specialist 14)

Employees appreciated learning new skills that they applied beyond the one focal project. A social worker investee said:

> I think that is a, it's a huge gift, it's a huge opportunity that I'll be grateful for and I think, while I may never be an expert in pitching or … those kind of things, I get jazzed up now about that kind of stuff. So it's just exposure, it's a whole new world, it's just super cool things and people that's out there and so it's opened my eyes and kind of thinking about okay, well how can, how can I incorporate this into my practice as a social worker or how I can manage my group of social workers? … it's a perpetual morale booster being part of this group. And it's, you know, again, just the energy and the enthusiasm and just, it's the networking opportunities within the group … I never leave a training not just completely rejuvenated and ready to go back at it and feeling a positive in all of that. And I come back saying I wish I could bottle it up for everybody and give it out. (Specialist 1)

The fact that the program offered ways for employees to receive financial support and recognition not just at their facility but also nationally was seen as positive, perhaps especially for employees at smaller facilities. Some participants noted that funding had impacts on morale as well as on actual program capacity.

> They [the iNET grants] weren't a lot of money, but just … show people, "hey, if you come up with a good idea, we're going to back you. (Investee 37)

> I get great pleasure from seeing what happens with the innovators, well because, when you think about, you can do it [provide funding for projects] just in [our facility], and that's great … but when it comes from an outside entity and … they're getting the recognition for that, that is probably what eclipses most people's expectations about the rewarding part of their job. (Champion 20)

Feeling supported in taking risks was often cited as an important piece of why employees enjoyed participating in iNET.

> I mean I think, what it makes me feel like is my hands aren't tied as an employee. Like I have somebody that's out there above and beyond my site and facility that's working for us and supporting change for Veterans … they made me feel like, think out of the box and we're here to support you and we want these ideas to flow and whether you fail or you don't, you're not successful doesn't mean that you've failed. You know, we want you to do this and try it and see what we can do to make it better … So I liked that a lot. (Investee 43)

Innovation specialists, given their roles of coordinating innovation efforts among leadership and staff, sometimes provided a "bird's-eye view" of why they felt there were broader impacts on employee experience:

> I think it has a direct positive reflection on things like the All Employee Survey scores and the Best Place to Work scores and all of that, because these are happy people that are being allowed to do good work. Because it's a retention [issue] that they're not going to leave when they're happy and they have the opportunity to do great things … happy employees are better employees. Better employees perform better, then we get a better performing VA. (Specialist 8)

Negative employee experiences resulting from the program were rarely mentioned. Protected time to participate was mentioned as a constraint by several participants, especially those without designated funding or protected time for the work. Interviewees reported that not having supported time dampened, but did not diminish, their enthusiasm for applying for additional projects through iNET.

> I have to be quite honest with you … I have a full time job to do. And I actually had to do this project within my limits and timeframes of my job which meant my lunch, before work, after lunch. Get a phone call, break for the webinar, figure out how I'm going to do my workload and I didn't feel there was any like, like I didn't have any wiggle room. And I wasn't supported that way at my local level. So that's where I felt that sometimes that reduces your passion, reduces your drive, you get burned out and you're doing your full-time job plus the project. (Investee 42)

I mean it just, again, the most difficult thing for me is finding the time. As a provider in an inpatient setting I really can't set aside time, so it's difficult sometimes for me to say okay, well I'm going to spend two hours this afternoon working on this, because I never know what's going to happen. (Investee 47)

Some participants suggested the training materials could be better tailored to the specific context or size of the site. Many participants experienced frustrations with aspects of timing and dispersal of funds; these experiences are discussed more fully below in relation to the program's delivery of ready resources.

Program support for innovation

Participants' observations suggest that, as intended, iNET fostered innovation through theorized mechanisms. Participants' reported program experiences mapped frequently onto the concepts of supporting curious cultures, creating idea pathways and porous boundaries, fostering catalytic leadership and supporting (role) diverse teams. Delivery of ready resources was critically supportive but often delayed which was at times frustrating. Participants also described positive impacts of these program features on their own experience, suggesting that program elements designed to support innovation also improved employee experience. To highlight this intersection, text is bolded in the quotes below where employees describe the impact the program had on their general experience.

Interviewees' observations strongly suggest that the program supported and stimulated a curious workplace culture. Participants expressed divergent opinions about whether the VA and/or their facility more broadly possessed a curious culture, but found iNET to be beneficially stimulating and supportive of a curious workplace culture regardless. Those who felt they were in a larger context that was not curious felt iNET provided an oasis of creativity and safety for risk-taking. One specialist saw iNET as actively in conflict with the larger culture, noting "*I don't care if they don't change. It's just as long as they don't impede changes that we want to see done. You know what I mean? We will change in spite of them.*" (Specialist 8).

Others felt their site's culture already supported curiosity and risk-taking, though sometimes in hidden ways, but were appreciative of how iNET formalized and gave structure to this culture.

… that's where our culture comes into play. Because we [at this facility] are a culture that encourages people to question the norm, question the status quo … and I think that's what makes us right for, like I said, people going out there and saying I'm not really worried if it succeeds or not … (Champion 21).

Other participants reflected on the relationship between iNET efforts and the larger organizational culture and practices of VA, not tied to any one site:

I think the VA historically has been not open to innovation, and I think the reasons for that are many … true innovation often requires big changes and in the past there's been a lot of fear about being wrong or having something go wrong and being held accountable and everything falling apart because you do something wrong one day and somebody gets hurt or worse. Until the last several years, I

would say that the VA was not an innovation-friendly place. But I feel like that culture is changing in large part because of things like the Innovation Network and I think the human-centered design or the iterative process, like the "fail early and often" mentality, is not one that I think has been a central guide for the VA, historically. So I think that the fact that they have that, that the Innovators Network has that as their expectation, that **the whole point of these things is to give you space and time to iterate on your ideas and get them right, so you can roll them out, is good**. (Investee 44)

Some interviewees saw the larger workplace culture as creative at an informal level, but describe numerous formal barriers to creativity that iNET was helpful in addressing. iNET provided a way out of "the box" as described below.

I think that we talk the talk of VA as a whole, and I think that there is just a ton of grassroots innovation, and I think that's the beauty of VA, that's how it works, that's how it's always worked. But I think the infrastructure not being there and the roadblocks can also serve just to crush those with innovation. Right? So we can get bogged down so bad in the bureaucracy, you think, why did they even tell me to think outside the box, when the box is so rigid and there's no way out of it …. I think to do innovation in VA, you have to be resilient and patient. (Champion 17)

Participants also talked about how iNET provided and identified idea pathways, with new structures and spaces for them to submit and receive feedback on their ideas. This was often linked with organizational culture, and the ways in which iNET participation gave employees a positive experience of their own ability to make change.

It was not a specific project that stands out but it's really **the excitement and the energy** around it, right? … the Innovators Network really just continu[es] to build a culture of innovation and that's what I saw, that spark of: "oh, there's a place we can go with our ideas." because there was previously no place to go with those ideas. (Specialist 15).

I think that this [iNET] really made me feel, I mean I'm a physical therapist, I'm not a supervisor in anyway, I'm frontline employee and it felt like, "oh I have some ideas that can maybe help out with various different situations.**" Just really made me feel like "oh I have some voice here or some opportunity to at least try these different things" and that's something that I felt was not existent before**. So I mean, if we're excluding the Innovators Network I don't think there's anything else inherent to the VA that I've experienced that really tries to encourage innovation or promotes innovation, but it seems like it was a need and this definitely seems to address that. (Investee 29)

Many participants also highlighted how iNET created porous boundaries that facilitated spaces for sharing and learning from each other, with positive impacts for innovation and personal experience.

So the stuff that I know worked really well for me in terms of training was face-to-face trainings … It's the chance to talk to other facility level Innovation Specialists that have thriving programs and learn what they did at the outset …

you know, compare and contrast their situations in terms of facility size, executive leadership engagement level, all that kind of stuff, there's different dynamics and learn how they navigated those dynamics and built successful programs. That is the single most valuable part of the training that I have, that I have gone through. (Specialist 11).

These collaborative spaces may have been especially beneficial for rural-based employees.

I think it's helped my staff to get outside their small-city box and really grow because they're just exposed to so much more. And it helps, it helps them change because I think when you're dealing with a more rural facility I think, what people considered normal may not be normal but they have no other frame of reference. So this increased exposure has given people a much broader world view. (Champion 26)

iNET also supported relationship building between staff and leadership.

A big part of it that I found helpful was **getting to meet key decision makers** in this higher central office and higher part of VA administration. (Specialist 12)

Although our sample often lauded the potential for the structure of iNET to support dissemination of ideas, challenges to sharing between sites were still encountered.

I think as large as we are, it's somewhat difficult to disseminate information effectively and sometimes I think, I think people need to think outside of the box, for lack of a better term, on when they're thinking of, we've got this really successful program in [medium-sized city] how do we get that word out to other facilities that have geriatric programs? You know, what are the, what are the stages we really need to hit to get that information out there? (Champion 18)

Participants offered a variety of perspectives related to the concept of catalytic leadership. Some participants described key moments of being exposed to leaders that encouraged them to take new risks. Others described how the program helped change the attitudes of (facility) leaders, in essence growing greater catalytic leadership capacity.

You leave there [iNET Demo Days] feeling really confident and supported, **that the VA supports innovation and supports good risk taking …** it's okay to maybe do things differently than what we've done in the past. And there's people at a very high level in the VA … they're advocating for this; that sort of gives you the green light to say okay, well, our senior leadership launched this. We should go back and see what else we can do or what else we can think of. (Investee 38)

When I very first got into this role, my director … looked at the Innovators Network as a resource of money for a very small facility. He said, "I expect you to bring in, you know, two to three times your salary in project money." Which was a huge goal. And I met it my very first year, but because I also had [other grant funding] as well. But this past time he was like, "you know what, I think telling you to look at monetary was very short-sighted of me." He's like, "I look at you and the value that you're bringing in as helping our employee engagement and giving people the platform to bring their ideas." He's like, "somehow that value cannot be

measured." And he said, "I just don't want to satisfy a dollar figure anymore when we look at value." (Specialist 14)

Additionally, participants from several sites appreciated that iNET provided a structure and template for innovative ideas to be reviewed by local leadership. This often resulted in projects not funded by the national program being funded by local leadership (especially at larger sites, with more funds available), with one investee viewing this as a strategy to maintain employees.

> And so even people who don't get funding, a fair number of them do what they had planned on doing because they planned it and the grant application gets them going and it's as a retention strategy for the VA to give people who want to be innovative some, a little bit of time and money to be innovative I think that that's, not a, it wasn't explicitly ever stated but I think that that's a key value of this whole innovation system and network … **And so even if stuff doesn't get done you keep good employees**. (Investee 39)

While culture, leadership and ways to share ideas were frequently talked about as valuable, the value of diverse teams was less frequently brought up by participants. When it was named, it was primarily in reference to the fact that iNET participation was open to any VA employee in any role and that applications from "frontline" employees were encouraged. This was seen as a strongly positive aspect of the program.

> To me whether you're a doctor or a housekeeper or it doesn't matter … I want someone that's passionate about their project and their idea and that's who I want to work with. (Specialist 5)

> I thought this is an opportunity to expand the portfolio of people and work types that get included in this. So I think it's really to expand who thinks of themselves as an innovator and who thinks of themselves as having creative ideas. **I think it was also to expand, to kind of people who don't traditionally think of themselves as having really great ideas** but so that made it much more accessible to people. (Champion 22)

> I think prior to the Innovators Network, most everything that's implemented is from the top down, and it's just—"sit down and these programs, we're going to implement them, you figure out a way to do it." This model is a little different where it's from the bottom up …. And I think that's impactful that a lot of these ideas—they're coming from front line staff. And so other front line staff are going to be like, "yeah, this has been an issue for us for years. I'm so glad someone's finally addressing it." (Specialist 14)

Some participants noted that staff with less autonomy or control over their schedules still faced barriers to participating, despite encouragement.

> I had a really hard time getting like, MSAs [Medical Support Assistants] to apply, and I think they have some great ideas. I had one that I worked with, we had their application ready, and he backed out at the last minute. He just wasn't comfortable with it. (Specialist 9).

Finally, the domain where participants had the most mixed experiences was related to the delivery of ready resources. The provision of funds was critical not just for being able to purchase the supplies and staff time needed to carry out innovations, it also sent an important message to participants that their work was valued. This was frequently noted by champions in leadership positions.

> I guess it's [iNET] given me like a real tool, how can I say that? I didn't have the resources to do it and having this innovation at the VA level **it gives me the opportunity to get more tools to do things.** And some things that are innovative I just can't do at my facility because I don't have the resources to do it. And having even the hope of getting … VA to give me the funds is very positive. It makes the program stronger. I believe if we weren't part of the innovation network … I would still be promoting people, "give me your ideas" and everything but they wouldn't, I probably wouldn't get as much participation because a lot more ideas would be turned down at my level. With this, people get to submit their ideas and it goes up to a higher level … people are seeing, wow, we are getting things done. So that helps. (Champion 27)

> I can't say enough that attaching money to something, it doesn't need to be a ton of money. They don't need $50,000. But when you tell someone like we're giving you $5,000 to buy the supplies [you need] … **I think people underestimate how powerful that is to just say yes to someone "here is money for you to go do your thing."** Because what they hear more often than not is: "no I'm sorry, VA directive, fill in the blank, prohibits us from. And the way that we've looked at the Innovators Network is how do we say yes to something that we wouldn't otherwise be able to do given these constraints of people's time or other things that are in place and how can we say yes to this stuff which gives staff that professional satisfaction. They're doing something that they've always wanted to do within their scope, with their population of patients and again**, [it] sort of legitimizes their work and their idea** by having them formalize it into a project and sort of compete and just that process of it really boosts people in their sort of feeling about their project. (Champion 28)

> I think the Innovators Network has provided resources that couldn't be provided through the other avenues … those who are engaged and involved with the improvements really seem to understand what being a part of that Innovators Network means: that there are resources available to us that may not available at other sites. That **there's an energy and a support that's available to the employee[s] who raise their hand and say, "you know what? I have this idea." So I think, I think that in and of itself and that enhancing our culture I think that's been a huge benefit of the network**. (Champion 21)

Not everything related to resources went smoothly, however, and participants reported significant barriers stemming from complicated or inefficient infrastructure within the local site, as well as within the broader VA context, most significantly in purchasing, human resources and technology. Since individual projects were funded for only one year, delays significantly impacted their ability to be tested.

> Yeah, I think the, one of the biggest things that we keep butting up against are IT related innovations … we spent so much time and energy and human hours trying to track down is there a VA approved software that would interface with [the innovation being tested] … months and months and months go by where you hear, "hey it's made it up to this level of national approval and for some reason we can't pull it down into our local [site]. (Investee 48)

> It's not realistic to expect somebody new to be hired to do your job when the innovation deadline is in October and the project starts in December … you find out that you're funded and suddenly you have to do the work and it's a very short timeframe … given the HR problems that are VA-wide. (Investee 44)

Projects that were funded by the iNET sometimes did not align with local purchasing and contracting rules. Some participants suggested that more support from iNET to navigate bureaucratic hurdles at their local site could have increased their likelihood of success.

> So almost all projects need people. Well you can't hire anybody, you can't contract for anybody. You can't get any IT stuff done. So the three things you could spend money on you actually can't spend money on. And so what's left to use the money for? There's not much else. Like you take away staff, IT, and contracts there's really nothing else you can spend money on that you're going to say you're going to solve a problem on. (Champion 22).

> I would have liked help from somebody but we were unsuccessful. In our proposal I had included money for contracts and our facility could not do that. So you could have said, early on, somebody could have said oh you shouldn't, you shouldn't even include anything that requires a contract or could have, should have, kind of helped me earlier figure out how it could be done. (Investee 39)

Discussion

Our evaluation is novel in its dual focus on employee's perceptions of the impact of innovation training on their work experience in addition to whether and how the program stimulated innovation. Healthcare systems are actively searching for actions they can take to improve employee experience and reduce burnout, especially now that the field is dealing with the pandemic's "long tail" of higher burnout, lowered retention and staffing shortages throughout healthcare (Park, 2020). While others have documented how to better engage employees into intrapreneurship efforts (Knox and Marin-Cadavid, 2023), our findings are novel in highlighting that increased employee engagement and job satisfaction may result from participating in structured innovation training programs.

We found the program had diverse and strongly positive perceived impacts on the work experience of participants, with little perception of negative impacts. Although our study was not designed to measure or investigate this directly, participants' reported experiences suggest that iNET programs had a positive impact on reducing burnout and turnover among participants, and also potentially among others at iNET sites who experience "spillover" benefits from the program's presence and impact on local culture, which aligns with Schultz et al. (2017) work that innovation training can "be contagious" in the workplace. Future

work investigating this hypothesis by looking at administrative data for rates of turnover and/or burnout at participating and non-participating facilities would be valuable, although there is a need for caution, since the effect may be too small for the signal to be seen among the many factors that shape employee decisions to stay or leave.

The model of factors supporting innovation which we applied as a coding schema to guide our analysis has not been widely applied in the peer reviewed literature, yet at least partially maps on to other models of innovation in public sector settings (Knox and Marin-Cadavid, 2023). We found it to be a useful tool that mapped closely with participants' observations and own language. Use of the model stimulated several lines of thought for further discussion and enquiry. While psychological safety is not named explicitly in the model, our participants' comments suggest that catalytic leadership in particular may help promote a "safe to fail" attitude often cited as part of innovation culture and is closely aligned with the concept of psychological safety, which has been linked to positive employee outcomes including improved work engagement and organizational commitment (Newman, 2017) as well as improved patient safety practices and reporting (Appelbaum, 2016; Brimhall et al., 2023). Another finding with implications for the model was that ready resources impact how participants perceived their organizational culture, suggesting the line between resources and culture may be more porous than a simple model suggests. Porous boundaries and idea pathways are also often intertwined.

In our participants' observations, the most commonly discussed element of team diversity related to the importance of people from a wide variety of professional backgrounds being able to participate. While this may point to a lack of dialogue on race and gender within VA (at least, prior to 2020), it also highlights the hierarchical nature of healthcare teams. Our participants' experiences suggest that there may be particular value in innovation programs in healthcare that intentionally promote and support "frontline" non-MD employees to participate and be developed as innovators and leaders. The role of innovation specialists intentionally seeks to facilitate collaboration between individuals in different roles and positions within team/facility hierarchies, and may be a notable feature for overcoming the "involvement gap" (Busch-Casler et al., 2021) in quality improvement and innovation efforts sometimes observed in hierarchical organizations.

While participants were very positive about the program, challenges were noted. The identification of consistent and sometimes serious challenges with ready resources, for example, highlight that these can create not only barriers to innovation implementation and spread, but also frustrate employees and undermine the sense of possibility and support that iNET otherwise engendered. In particular, slow hiring practices in the VA were often incompatible with iNET project timelines.

Some of the most divergent and (to us) intriguing observations shared by participants related to perceptions of VA institutional culture. Running through our data were two contrasting narratives of VA culture as either highly risk-averse, with iNET as an oasis of creativity in a desert of bureaucracy or secretly strongly innovative at the "grassroots" level but lacking formal mechanisms to support that innovation. One factor may be that a national organization of VA's size is too large to have one consistent culture (there is an adage

familiar to VA employees: "if you've seen one VA, you've seen one VA.") The thread of innovation within VA was strongly emphasized in the 1990s (Kizer, 2000) and may now be resurgent. While VA as a government agency is particularly susceptible to the trope of slow and staid bureaucracy, health care as a field (as opposed to medical research) is often characterized as risk averse for safety reasons while also being extremely innovative/ adaptable in moments of crisis (Farrugia, 2020; Hodgins, 2022; Sampat, 2021) Notably for our findings, however, iNET was perceived to incubate meaningful institutional change by participants regardless of how they viewed the surrounding organizational culture. This represents an important component of a broader effort in the VA to take advantage of a wide range of expertise within the organization as it expands structures of a learning health system (Atkins, 2017; Jackson, 2022; Kilbourne, 2022).

Both individual employees and facilities apply to be part of iNET. Thus one question our evaluation cannot answer is: can a self-selecting program transform organizational culture more broadly? Highly creative, change-seeking employees may be the ones most at risk of leaving if their workplace does not provide with this stimulus; it is possible that innovation training programs that provide this stimulus would, in being self-selecting, target the employees where they are most likely to have the largest impact on preventing burnout and turnover. On the other hand, programs limited only to willing participants may face significant barriers to changing system-wide practices. This could create new frustrations coupled with higher expectations and might ultimately lead to increased burnout if organizational change does not keep pace with localized efforts.

Our study has limitations. We interviewed only a subset of program participants, due to limits on evaluation capacity, although we selected a geographically and professionally diverse sample that we believe is representative of program participants overall. Congruence of participant experiences across 15 diverse iNET sites supports that our sample is representative, yet employees with positive experiences of iNET may have been more inclined to agree to an interview with our team. We evaluated only one innovation training program; our findings may not apply to other training programs. The VA is the largest integrated healthcare system in the United States and the program evaluated is national in scope, so our findings may be most relevant for large-scale efforts in similar contexts. This analysis relies only on qualitative data and thus by design cannot quantitatively measure the impacts participants perceived.

Conclusions

Participants in VA's iNET program reported positive impacts on their employee experience resulting from program participation. Additionally, participants reported experiences suggesting the program effectively supported innovation through multiple domains including idea pathways, porous boundaries and catalytic leadership. Our findings suggest that structured innovation training can contribute to more positive employee experience and engagement. We would argue employee experience should be considered a key outcome when evaluating the success of innovation initiatives. Healthcare organizations may benefit from implementing innovation networks, which the evidence from our study suggests will increase employee engagement, job satisfaction and may improve perceptions of the

organization's culture and values. Barriers to innovation efforts such as lack of ready resources and slow hiring practices negatively impact employee experience and should be addressed. An innovators network functions as a channel for employee-led change that has positive implications for program innovation and employee experience. Given that employee experience within healthcare is a critical concern, the case for innovation training, we argue, is strengthened by considering not just outcomes of patient care but employee experience and the resulting impact on organizational sustainability and success.

Further reading

Acknowledgments

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Table 1.

Interviewee role description

Innovation Specialists (Specialist)	Main points of contact and facilitation of efforts across services lines. Receives training from iNET, and subsequently provides technical and grantsmanship support, engages leadership in innovation, supports and troubleshoots investee teams as ideas are tested, provides instruction and iNET program content delivery. Program content includes human centered design (HCD), lean methodology, pitching and storytelling
Leadership champions (Champion)	C-suite advocates for their site's participation in the program and who were involved to varying degrees in on-the-ground iNET activities
Investees (Investee)	VA employees who received training in relevant skills as well as funding of their innovation's development

Source(s): VA Innovation Ecosystem (n.d.)