[Calling DIBS]

# Episode 67: "Laying the Groundwork for BI Projects"

*with Jennifer Parisi, Manager of Marketing and Communications with Michael Smith Health Research BC.*

*In her work across organizations in the health sector, Jen Parisi has come to appreciate the role that behaviours by patients, doctors, nurses, administrators, and others play in health outcomes. And, where there are behaviours, there are opportunities to use BI, from hand hygiene to program uptake to cultural safety and beyond. We discuss these opportunities and how initial BI projects can set the stage for future work by pinpointing the right questions to ask.*

*Transcript:*

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KIRSTIN APPELT, HOST: Welcome to this edition of Calling DIBS. I'm your host, Kirstin Appelt, Research Director with UBC Decision Insights for Business and Society or DIBS for short. Today, we're calling DIBS on Jennifer Parisi.

Jen is Manager of Marketing and Communications with Michael Smith Health Research BC, and she's a graduate of our Advanced Professional Certificate in Behavioural Insights, during which time she was the year's BIG Difference BC Scholar. Jen was such a wonderful addition to the program. She was a hard worker who brought so many incisive insights to the table, and I'm really thrilled to chat with her today and hear what's on her mind. So welcome to the podcast, Jen.

JENNIFER PARISI, GUEST: Thanks, Kirstin. Happy to be here.

APPELT: Why don't we start by just hearing a little bit about who you are?

PARISI: I would just like to acknowledge that I'm a white settler on the traditional territories of the Wsanec people, the salt water people, and the Lkwungen speaking people, which are the Esquimalt and Songhees Nations. And this is in Victoria. So, the area is now known as Victoria.

I'm a mum of two elementary school kids and a barky rescue pup, and my husband and I moved from Vancouver to Victoria about six years ago and we're just loving living here.

APPELT: Awesome. Between your pup and mine, maybe we'll see if we get any surprise interruptions during the podcast. Well, as regular listeners know, I'm always fascinated to hear people's paths to BI because it's rarely linear. So what was your journey to BI? How did you become interested in behavioural insights?

PARISI: I feel like it was a really long journey, starting with my interest in biology in high school and university. I quickly realized lab work was really not for me, but I really enjoyed communicating about science. And so I pursued a Master's in Media Studies. And since then I've worked in communications and like in academia, in health authorities and government communicating about health and health research.

But doing this work, I still felt that the communications lacked some rigour. Like, how did we know that the messages and images were landing right? Are we changing people's behaviour and are we measuring the outcomes of our work in a way that demonstrates our impact? And I felt that I needed more skills in my toolkit to really answer those questions.

So that's why I took the course from UBC. The Advanced Professional Certificate in Behavioural Insights, just really wanted it to be less of a black box around supporting people's health decisions and supporting positive behaviour change.

APPELT: I love that journey and how you were recognizing that, you know, communication is so crucial, but communicating alone and not measuring what your impacts are, or in some cases, folks just communicating and assuming that's enough and not the other pieces around the communication to support behaviour change.

I was curious because you're in the health field. I feel like in BC, it's a pretty exciting time for BI and health because I'm starting to see more and more opportunities. I think awareness about the BI toolkit is increasing. Different organizations, different jurisdictions, different groups are seeming to start to think about how they can use behavioural science for positive impact in the health sphere. Do you have a similar sense about the BC health community in terms of where they are in adopting behavioural insights?

PARISI: Yeah, I feel like there's a conversation really beginning now. There's definitely an awareness in the health system that what we're doing is not working. It's not meeting people's needs. And there's a real gap in what people need and what's really being delivered in many cases.

So, I think that helps create this awareness that behavioural insights could really be a place where they bring those pieces together. There's also a focus on patient experiences, Indigenous, cultural, cultural safety and anti-racism equity, diversity, inclusion. And those are really opening up conversations about how to do things better and how to change the default really with which we deliver care and services.

So, I think that's a perfect opportunity to bring in BI so these voices can be engaged in guiding the work and that we can also demonstrate what's working on the other side so we can continue to make improvement.

APPELT: Yeah, I think one of the things that's so interesting about health is that a lot of it is behaviour change, and that's the behaviour change of the people whose health we're trying to protect, but also the people doing the protecting the doctors, the nurses, etc. So, on all sides there's behaviour. So, it does seem like a prime candidate for behavioural insights. So, what are some of the opportunities that you see for BI in the health space?

PARISI: There's so much possibility. And like you said, there are exactly that. There is like the care staff and their decision making and they, you know, the decisions they make around referring someone, for example, or washing their hands. Just even something that simple could be a behavioural insight intervention on its own. And as you said, for the patients and clients, do people get their flu shot? How can we influence that kind of behaviour?

So, when I think about it, I think about program evaluation and improvement, public health campaigns, for example, to change behaviour again, about vaccination or safer drug use, for example. Think about reducing barriers to care by streamlining processes and really, really reducing that sludge that exists and yet again supporting staff to change practices and decision support for physicians and other care providers.

So there's just a ton of places where BI could be used. So yeah, I'm super excited. I could think of like ten projects right now that I'd like to do if I had the license to do it.

APPELT: Yeah, I think it's just so exciting when you start to break down kind of this "The Health Care System" into these discrete behaviours and you realize just how many opportunities there are. And some of them, like you said, just go down to just reminders about hand hygiene. It's like mind boggling how many opportunities there are. So spoiled for choice, which as we know, can be its own behavioural insights quagmire of choice overload.

But on the flip side of all the excitement, I think it can be a challenging space to work in. So, what do you think are some of the obstacles that make the health space particularly tricky to work in?

PARISI: As you were discussing, I mean, the health system is incredibly complex. There's so many layers. There's so many players from like unions and different organizations that are, you know, responsible for licensing. It's incredibly complicated. And it has a long history, too. So, you know, it's not a new system. It's one that we keep building and adapting. So, you get all these layers of like technology and bureaucracy along the way.

In health there's so many multiple competing priorities. I mean, the government provides a mandate letter every year that the health authorities, for example, follow. And there's so many different areas that the health authorities have to focus on and really make headway on. So, all of those really make the health space challenging to do change work in and do behavioural insights in.

Something we used to talk about a lot in communications is a tyranny of the urgent. So, a lot of times, particularly in communications, but also in the health authority, you're really driven by the emergent needs for health care and also media attention. So that often takes you away from doing these other kind of improvement processes and focus on whatever you know has to be done right now where the attention is. Those are some of the challenges.

And then there's this kind of like the system challenges, again, data can be trapped in systems that don't talk to each other. The change processes are really complex. And again, many partners. And I don't feel like health firms are always able to take advantage of the latest tools, mostly because of those silos sometimes in departments, and because of the many layers that exist. It's both exciting and challenging at the same time.

APPELT: I love that phrase tyranny of the urgent, and I hadn't heard that before, but that strikes me as being very, very relevant here. And just more generally in health, you know, all these things about how, you know, we forget to find time to exercise because there's something else that's more urgent. So, for patient behaviour, for doctor behaviour, for system behaviour, that strikes me as really true.

And another thing I just wanted to pull on from what you said was just this idea of the data. And I think that's a place where in five, ten years, as things go more online, and get more streamlined and have more cross talk, I think it'll be great.

But right now, there is a lot of these data silos where different information is tracked in different places or some things are tracked even still manually with someone literally answering a phone and then finding a paper and writing something down or faxing and some of these things where the data just gets lost, which, like we said, for program evaluation, that makes it really tough because it's hard to see what's working and what's not.

So, I sometimes think in these situations different BI approaches can be more useful. But before I go down that road, I think maybe we should just define some terms for folks who are less familiar. So, we often talk about two different types of BI undertakings, more of a BI trial, sometimes called a full BI project versus a BI lens, which we also call a BI audit or kind of just BI advice.

So, the BI trial is the more fulsome project. It goes through a full lifecycle of scoping where teams figure out the project and then conduct exploratory or background research to understand the problem and help develop behaviourally informed solutions. The team tests the solution with some kind of rigorous research design, such as a randomized controlled trial. Then they analyze the data, evaluate if and how the solution changed behaviour, and then produce evidence-based recommendations, which in an ideal world get scaled and used more broadly. So that's the more fulsome undertaking.

But there's also this BI lens, which is an abbreviated process that's providing behaviourally informed advice, but it doesn't go through a trial experiment. So, there's some limitations there in terms of our ability to measure impact, but it also has quite a few advantages. And I was wondering if you could walk us through what some of the advantages of a BI lens might be, especially when organizations are just starting their journeys?

PARISI: Maybe I'll just reiterate how I understand a BI lens and you can interject and tell me if I've got this sort of right. So my understanding is that the BI lens will use primary research like surveys or interviews and secondary research, like peer reviewed studies to make evidence informed changes. But we don't actually conduct an experiment.

APPELT: Absolutely.

PARISI: This is a really great way to bring the behavioural insights lens into scope with some of these really complex systems that are really difficult to do this kind of research approach. And I will say, from my experience, health authorities don't generally have a big appetite for research.

It's perceived and sometimes is, a really long process. There's complicated ethics approvals and research departments are, from my understanding, are not hard funded, like in the health authority. They're not hard funded. So that means these teams really rely on grants to keep team members employed. And I think that makes it really challenging for these folks to do that work and provide support.

Health authorities also have quick turnaround times for work, so you may not have the time to do an RCT because the products got to be out the door quickly. So, a BI lens can really offer a way to bring evidence into the conversation and begin that process of asking the right questions. The lens helps you kind of do that beginning part of the journey.

Start asking you about the user experience, start asking what evidence exists to inform your change. Just asking the right questions often sets you up for future success, where you may be able to do more work down the line. That's more like a full project. By starting to ask those questions, teams automatically start asking about data, what exists and how to use it. And I think at least in the health authority space, there probably is a ton of data, but I don't think teams know what's being collected or how to access it. That is a big gap.

And so, if you start at least with the lens component, you'll start asking questions that will help you get better information and be in a better space. I mean, you may not do a project in the end, but at least you'll have a better sense of what to do and what kind of information and questions are required.

APPELT: Yeah, and I feel like I see your comms background coming in a bit there. Just the idea of socializing people to the ideas of BI and, and the ideas around data and the ideas around doing the exploratory research. And the more people are familiar with those ideas and see the value, then you build up the support for potentially doing a more fulsome BI project.

Something else I wanted to point out there that I think I've run into in a few cases too, is just the idea that BI has its own set of terminology. And then every field you work in has its own terminology and sometimes the same terms have different meanings in different places. So, I think that's also a place where doing this initial work together helps get people used to different terms and you learn if there's any, sometimes certain fields just have taboo words where a word means something that then triggers a whole process.

Like in some cases the word experiment has a very negative connotation or a very, you know, risk management connotation. And so sometimes just starting to learn the lay of the land before fully diving in gets you aware of the minefields and how to work together in a way that's going to smooth the process as much as possible.

PARISI: Yeah, I think we did encounter that in our project as well. I think the team we were working with was quite reluctant when they heard the word research and experiment, because I think, I mean, especially thinking about the health space too, and about the Truth and Reconciliation Commission, and some of the calls to action, there research and health care really have a lot of work to do to gain trust there. So, I can see why there might be some resistance.

In addition to that other you know, all the other stuff we talked about, like not being enough time and that thing. So, understanding what words are trigger words is really helpful.

APPELT: Yeah, that's a really good point too, about the history of the terminology and difference because words are used differently in different contexts. They come with these different loaded histories. Well, so pulling on that idea of things you learned from your own experience, what are some other lessons that have come out of your work on a BI project in the health space?

PARISI: So, I'll I'm just going to discuss our project that we did during the course. And so, we did work on the Regional Health Authority and I had team members that worked with me with this health authority. The goal of our project was to increase physician referrals to community virtual care, which was a remote care service for people over 65 with chronic health conditions. We understood that virtual care would save health system costs, support patients to manage their own care, and it improved health outcomes. So, it kind of seemed like a real win to expand the program.

But physicians were not referring patients in the way that the program had hoped and really wanted to know how to improve the referral rate. So, we started by looking at the existing evidence around physician behaviours. We mapped out our map of all the different players and tried to figure out which route would be the best match.

Using those misfit criteria, we did some primary research, so we did two in-depth interviews with physicians, and we also did a survey that was distributed to the divisions of family practice locally and also through the health authority to their teams. What we found was that physicians who responded to the survey really had limited knowledge of the program. They did respond well to the framing of the program as a way to improve patient self-management. So, we tested a bunch of different kind of like messaging frames, and that was the preferred one.

We also tried to find out who a preferred messenger would be and their preferred touchpoint. We found contrary to what the program had been doing, they'd been trying to reach physicians through fax, and we found out that the physicians who responded to our survey preferred emails. So we thought, you know, trying that approach would be helpful if this was their preferred touchpoint.

So, we developed a behaviourally informed email that included multiple approaches from the EAST framework, easy, attractive, social and timely. So, we use checklists to itemize the criteria for referring someone to the program.

Personalization: we requested a database of physicians and their name and preferred email so that we could address each email to the person and the messenger effect. So, we use one of the preferred messengers, an executive who was well known. Some of the key outcomes we measured were the number of physician referrals by health service delivery area.

We also measured click through rates to referral form and website, and we sent emails to only the physicians in the most popular health service delivery area, and we were not able to do a randomized control trial. How we designed it was using a quasi-experimental design difference-in-differences design, which you may not encounter in your project. And it seemed like it was fairly, you know, rigorous but also complex versus maybe an RCT.

So, our analysis showed that emails did not have a statistically significant effect on referrals though the regional differences were really significant and that was not something we knew ahead of time because they didn't look at the data that way. They only looked at it sort of at a very high level and on a monthly basis, all physicians and they didn't break it down by geography.

So, we didn't know that in advance. Again, we were kind of discovering the baseline data with the team as we did it. The region that we chose already had a very low referral rate, and the other regions we didn't send an email to, had quite a lot higher referral rates. That was quite interesting. And so now you're hearing about a study that did not have any real outcome like of significance.

Just so you listeners know, you may have a product just like mine. What we did in the end was recommended really exploring additional solutions. So co-design solutions by engaging physicians, compensating physicians for their time so they'd have the time and space to provide an explanation and like walk us through what would have been helpful to increase referrals.

We didn't have that opportunity, and I think it would have been helpful and also exploring more about the regional differences and referrals. So those are all things that we recommended to our project sponsor to explore a little bit more. And we also wanted to recommend that they address some of the limitations around data collection and touchpoints because those were things that we discovered together.

APPELT: Yeah, I think this one was such an interesting one. There were so many different obstacles along the way that the team so ably navigated. And I think, yeah, just going to some of what you're saying, this is one of those cases where the different data sets didn't talk to each other.

Also, there's kind of a black box around what happens to the emails. We don't know how many people even open the emails. So it could be that people aren't checking their inboxes or they're reading the email and then not taking further action. So, I think this was one of those examples. Like you said, it wasn't a statistically significant outcome, but it opened up so many areas for recommendations and was just so full of learnings of things that I think you said this earlier in the podcast, of now the group knows the right questions to ask. So, if

the health authority chooses to work further in the space, they know some of the things that they can do in future to set them up for success.

And then also I just wanted to weave in your comms background again, I keep coming back to that, but just the idea that this was testing out a new communication channel which, you know, you have to build communication channels, they don't just work from the get go. And so, this was an initial trial of that communication channel and over time it could be something that builds.

So just kind of reiterating the point of the outcome of the rigorous research design in this case, the difference-in-difference design is just such a small fraction of the overall learnings from the project. I think, you know, if you were to map it out or weigh it somehow it would just be, you know, it's important, but it's just like very much one piece of all of these amazing insights that come out of the project.

Well, moving on from that project, what are other ways you hope to use BI in your work in the health sector?

PARISI: Yeah, I'm really excited to continue the conversation with teams who are incorporating behavioural insights. I'm hoping that that health authority might reach out again to UBC to bring on a new group of students. I'm hoping that experience was positive for them and that they recognize the value that we really brought to them in terms of like opening up the Pandora's box of all of these, like gifts that are inside of all the, like insights that we had for them.

I'd love to continue to support behaviour change that increases wellness for like care providers, patients and the public. So, I want to keep doing that work. And as a communicator, I think my work will more likely align with campaigns to change behavior. And I'm looking to bring in the user experience perspective and the data analysis piece to really support real, measurable changes in the health space.

APPELT: That also just reminds me of something you said earlier that I had wanted to reiterate and hadn't as much is just this idea that we don't traditionally think of health care as a user experience situation, but that's absolutely the experience of the patient is so important.

And going back to some of the other things you said, like trust and adherence and just building up mutual respect and then the health outcomes. So, I think that, like you said, that opens up a lot of opportunities. Our Pandora's box of good rather than ill, like you said, as our metaphor.

Well, moving from specific projects to ways of working, how can health authorities or other health organizations integrate the BI into their work? What do you think are models or processes that could be successful?

PARISI: I will say I think that a lot of health authorities are beginning this journey through pilot projects. There's a growing number of practitioners in this space, so I think sort of this critical mass will begin where there are people who are familiar with, have awareness and/or are educated in doing this.

I don't know if this will happen, but I imagine some kind of a like community of practice where people can learn from each other to really build capacity and facilitate that support from working in the health system. Health authorities in particular, I know a lot of those pilot projects that come up from departments, they have success to a certain point, but there still has to be this support from senior levels of leadership to ensure that those are sustainable programs or projects. So, I think this pilot project work is good, but then there also has to be some, I guess, advocacy done with leadership to kind of get that embedded within the health systems.

I don't think that's an easy process, but I think the more successful projects that are out there will build the kind of evidence base for doing that and having it supported more broadly.

APPELT: Yeah, that's a great point. And going back to what you were saying about the yearly mandate, if it could be integrated into something like that. So, it's part of just we need to take human behaviour more into account in more different ways or I think some of the health authorities have their like pillars or values. So having an integrated into that culture would be fantastic.

And then you can think of having BI specialists in the organization similar to the change management specialists that I know exists in some of the programs. So, it seems like there are lots of opportunities, but like you said, there's a lot of groundwork laying that's having to happen first. So rosy future, but maybe some obstacles along the way.

Well, as we start to move towards the end of the podcast, do you have a message for our new BI practitioners in training?

PARISI: Yes, I had to think about this and I have two comments. Some of them are meant to be encouraging. The first one is to keep asking questions, so project sponsors don't always know which questions to ask. And as you're learning what it takes to run a BI experiment, your questions will change and it'll be so important in helping your project sponsor learn along with you. I don't know if people always see them as a member of your team, but they are. You're learning together about this process, so yeah, keep asking questions.

The second comment is build bridges. So, in some ways your team is really an ambassador for the BI approach for your sponsor. So even if there's barriers to working together, like I said, you know, they're kind of part of your team and seeing them that way will support your success in the program and also in the broader community.

APPELT: Those are fantastic. And I think the asking questions one I mean, both super important but asking questions just really resonated with me because every project I've done, I've been surprised about some questions that I hadn't thought to ask, and you're just constantly learning as you go. And so, over time your questions get better, but then there's always still new ones, because I think part of being is that you're not usually doing the same exact project over and over again.

Even if it's in the same health sphere going from hand-washing to use of certain anesthetics, they're so different. Like each one is its own little microcosm, its own universe. And so you have to learn who are the right people to have in the room, what's the data, what are the barriers? And things come out of left field. So doing questions and your other point about bridges, like just making sure you have those bridges and that you're a bridge and that you're working collaboratively.

So, it is a safe space to ask those questions and you find out the answers together in some cases, because sometimes you asking the question, it's the first time anyone's asked the question. And so then it opens up barriers that you didn't realize existed. So those are amazing messages. I love that. My traditional last question, any last thoughts or questions I should have asked?

PARISI: I don't think so. But I would like to say as a last thought to anyone who's in the program right now doing the project is keep persevering. It was challenging, but totally so worth it in the end. I'm so pleased to have, you know, completed the program and just so excited to bring what I've learned into my work.

APPELT: Well, that's a good message to hear. Definitely wouldn't want the opposite. I think the program, especially because it's the first BI project, but even with every other BI project, there's always wrinkles along the way. So, perseverance is key, I think partly because you're like we said, it's always a bit of a new project and often new teams. So definitely a good closing message.

Well, thank you so much for joining us today. It was really exciting to chat about some of the opportunities our Pandora's Box of good, which I love, and I know you're going to be a leading light in the space of health and BI and BC, that intersection. So, I'm so excited to see how we can all work together to improve health outcomes in BC, So thanks for joining us today and sharing your insights.

PARISI: Thanks so much, Kristin.

APPELT: And thanks to our listeners for joining another episode of Calling DIBS.

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