Just Evaluating A Co-Response Program In Indianapolis

Intro [00:00:01] RTI International's Justice Practice Area presents Just Science.

Intro [00:00:10] Welcome to Just Science, a podcast for justice professionals and anyone interested in learning more about forensic science, innovative technology, current research, and actionable strategies to improve the criminal justice system. In this special release episode, Just Science sat down with Dr. Evan Marie Lowder, associate professor at George Mason University. Dr. Eric Grommon applied criminologist and associate professor at Indiana University, Indianapolis. And Dr. Brad Ray, senior researcher at RTI International, to discuss their evaluation of the Indianapolis Police and Mental Health Co-Response Team program, described in the previous episode. To evaluate the Indianapolis Co-Response program, a randomized controlled study of 911 calls for service was utilized to help ensure that any positive or negative outcomes were a direct result of the program, rather than other factors. When conducted outside of a laboratory setting, this type of study requires extensive planning, coordination, and trust building between researchers and practitioners. Listen along as Dr. Lowder. Dr. Grommon and Dr. Ray describe the moving parts that facilitate real world randomized control trials, the importance of directly comparing outcomes from Co-Response cases to outcomes from traditional policing cases, and the results from the Indianapolis Co-Response program evaluation. This episode is funded in part by RTI International's Justice Practice Area and the Mobile Crisis Assistance Team program, supported by Arnold Ventures. Some content in this podcast may be considered sensitive and may evoke motion responses or may not be appropriate for younger audiences. Here's your host, Katie Bailey.

Katie Bailey [00:01:37] Hello and welcome to Just Science. I'm your host, Katie Bailey, a researcher on the Indianapolis Co-Response Evaluation Project, a study funded by Arnold Ventures. On today's episode, we will discuss the evaluation of an alternative Policing Co-Response team in Indianapolis, Indiana. This program partners a police officer with a mental health clinician to respond jointly to behavioral health 911 calls for service. Our discussion today will cover a recently completed randomized controlled trial, or RCT, for short of this Co-Response program, and discuss how these multidisciplinary programs can be complex and challenging to evaluate. To guide us in this discussion, we have a panel of subject matter experts, including Dr. Eric Grommon, Dr. Brad Ray, and Dr. Evan Lowder. In order to understand this particular study and its challenges, I want to turn now to Dr. Eric Grommon, applied criminologist and Paul H. O'Neill professor at the O'Neill School of Public and Environmental Affairs at Indiana University, Indianapolis, and co-principal investigator for the MCAT evaluation to walk us through the evaluation design. Welcome, Eric.

Eric Grommon [00:02:40] Thanks, Katie.

Katie Bailey [00:02:41] Eric, you have a lot of experience in the rigorous evaluation of justice system programs like this one. As a professor, when you're teaching a research methods course, how do you describe what is meant by rigorous research?

Eric Grommon [00:02:53] Yeah. Good question. There's no one best way to define and measure rigor. When I think about rigor and I think about research methods, I'm trying to think about having the right design for the right question. And I think we're all working to try and find or produce causal evidence so that a policy or program will have some sort of direct effect on some type of outcome. So that's what I'm always thinking about. I think in this particular study, we are working hard to find a compelling point of comparison, to

interpret the results. So sometimes we can set up a design that's going to give us a compelling point of comparison. Sometimes we have to wait until all the data are collected, and then use some statistical adjustments to try to figure out if we have a compelling comparison group or not. So, what I usually try to take home for students is that we should always look for causal evidence. And that randomized controlled trials are what we accept in the social and behavioral sciences as being the gold standard to give us causal evidence. So, then the question is how do we get there? And my mentality is if we think that's the gold standard, let's try to adopt it. So, for this study I really embraced the idea of using mixed methods. So, blending that qualitative focus and the quantitative focus. And I feel like our policy and program evaluations are nested within all sorts of complex laws and existing policies and traditions and operations. So, I felt like for this study, we did that work through our pilot study, through our quasi-experimental studies, where we had a pretty solid understanding and foundation of what all these policies were and how they worked in practice, which then set us up nicely to pitch we should try and do a randomized controlled trial. That is the gold standard. Let's do it.

Katie Bailey [00:04:38] And Eric, I understand a lot of randomized controlled trials take place under really controlled settings. What kind of challenges do you encounter in doing this type of study within the context of real-world police programs?

Eric Grommon [00:04:51] Yeah, I think one of the hardest parts, with this line of work is I think folks who haven't done field experiments before think that you can just walk in and then run a randomized controlled trial, and that's it. This takes years of partnerships, with practitioners or community organizations or folks that are exposed to the justice system, to develop trust, to have a working relationship where you can be critical of your partner and your partner can be critical of you. It takes time. So, I think that's the biggest challenge, is building those relationships and having that trust. Once you get beyond developing those relationships, then the hardest puzzle with randomized controlled trials is thinking about how do you randomly assign units to different experimental conditions. So, you have to take people, places, things, and then have at least part of those people, places and things assigned to an intervention or a treatment condition. And you have to have the remainder assigned to a control or comparison condition. So that's usually the most difficult piece is answering that question of how do we randomly assign units to conditions, and how do we use random assignment in a way that reflects how this practice or this policy is actually working in the real world? Then we also have to think about sample sizes. So, we have to take these units essentially randomly assign them to at least two conditions. We have to think about how many units do we need within those two conditions, to be able to detect very small differences between those two groups that we constructed. And the final piece that I just want to reflect on is once we've come to an agreement about what the random assignment procedure should be, whether those are individuals, whether those are locations, whether those are days of the week, weeks of the year, months of the year. Once we get that process going, we have to monitor it to make sure that we're following the protocol that we established. Because what is key to randomized control trials is the random assignment process. So, I think in tandem all of these moving parts explains or kind of justifies why it's so difficult to carry out field experiments.

Katie Bailey [00:07:01] And in light of the challenges of conducting a rigorous study in this type of real-world situation. How important is it to do this type of research on alternative policing programs, specifically Co-Response teams?

Eric Grommon [00:07:13] Yeah, I think there's been a lot of studies about Co-Response teams, and we're making significant public investments in these types of models. And

these models are variable. They are all over the board in terms of what they look like. Most of what we know about the programs to this point are kind of just descriptive statistics, where we get an understanding of how the models were put together and what they're supposed to be doing, and we have some idea of what some outcomes are. We're just beginning to scratch the surface on developing compelling points of comparison that would allow us to determine whether or not these programs are associated with the outcomes that we see. And so, I think by taking this step to be one of the first sites to develop, implement and successfully complete a randomized controlled trial, we're able to speak to whether or not this specific model of Co-Response team does strongly relate to the outcomes that we expect to see.

Katie Bailey [00:08:07] Thanks, Eric, for providing us with context related to rigorous evaluations of alternative policing programs and the need to determine whether Co-Response teams are effective. Now that we understand the inception of this project and the challenges associated with this type of evaluation, let's cover the execution and results. We have invited the study Principal investigator, Dr. Brad Ray, to the conversation, as well as the co-investigator, Dr. Evan Lowder, who is responsible for analyzing study results. Welcome to the podcast.

Brad Ray [00:08:37] Thanks for having us.

Evan Marie Lowder [00:08:38] Thanks for having us.

Katie Bailey [00:08:39] Brad, you are a senior justice and behavioral health researcher at RTI and lead investigator of the randomized controlled trial of the Indianapolis, Co-Response Team program. Could you tell listeners how you got involved with studying the Co-Response team in Indianapolis?

Brad Ray [00:08:55] Yeah, I think there's two things that were going on at that time. One of them was I was a professor and a criminal justice department, and I was able to meet the chief of police. And in that role at the time, the chief of police had the major problem that he was facing was increasing overdose. So back in 2014, I worked with IMPD to train all the police officers and how to administer naloxone. And when Eric was talking about trust, I think that garnered a lot of trust with me and IMPD. And as, that process went on and as we studied the implementation of naloxone, I came to understand more about how police operate around overdose calls for service and other types of 911 calls for service. And ended up getting into some meetings with individuals from the mayor's office about trying to implement new programing around 911 dispatch. At the time in Indianapolis, there was actually a Co-Response police mental health follow up team. As time went on and they were looking for what they could do at the 911 intervention spot, they took that follow up team and they kind of moved it into an immediate response team. And so, I was there as they developed that program. I can remember sitting in a meeting room with a whiteboard and the trying to figure out how they would put everybody's hours together. How could they even do shifts where police and EMS and clinicians could be going at the same time. So as the program started to launch, the city offered us a very small amount of money to do a formative evaluation. So really, just how many events are they seeing? How are the teams going, doing some focus groups to see how the team was put together and how it was operating. Once we finished that and we had this statistic that it was around, you know, I think it was like 5% or less of the cases had resulted in an arrest. That was when everybody started to ask, well, how do we figure out what happens when MCAT doesn't go? How many people get arrested then? And that's when we started talking about various types of research designs and how we can study it. And we really would have

never done anything this rigorous if it wouldn't have been for such a bold research team and bold practitioners who said to us, we don't want to randomize by days of the week or by different units, what's the most rigorous type of evaluation we could do? And we said each call that comes in, we could randomize them. And they said, let's do that. So that's what we ended up randomizing by calls for service, really, because the practitioners wanted to do whatever the most rigorous type of randomization would be.

Katie Bailey [00:11:19] Cool. Brad, it sounds like you guys had a really close working relationship before this randomized control trial started. And then Evan, you are now an assistant professor of criminology, law and society at George Mason University. Could you start by telling us about your role in the project in Indianapolis?

Evan Marie Lowder [00:11:36] Sure, absolutely. So as a co-investigator on the study, I was responsible for the data analysis, both for kind of the six-month outcomes as well as the 12-month primary outcomes that we were interested in.

Katie Bailey [00:11:49] Thanks, Evan. We'll talk a little bit more about those outcomes in a minute. Brad. Eric mentioned that this is the first ever randomized controlled trial of a Co-Response mental health team. Could you give us some insights on how you planned this cutting-edge study?

Eric Grommon [00:12:02] It might be good to just reflect on there was an opportunity where we know that there's way too many calls for service that MCAT can't handle, and that they were going to morph into a new district that they haven't been. So, for us, this was like the perfect opportunity to say, let's do the randomized control trial. We all had relationships to some extent with either IMPD or the city of Indianapolis.

Katie Bailey [00:12:26] Anything else that you think would be important to say about planning?

Brad Ray [00:12:29] Yeah, I mean, I will say that is the part of the study that people will never really see is how much planning went into it. I mean, when they gave us that radio, that was awesome. That was like an awesome act of trust that they had given to say, you know, we're going to allow you all to randomize these events and provide this information back to us. But it wasn't like we just started doing it right then. I mean, as you all know, we spent months first figuring out what types of calls we would be randomizing. And I think an important part of this MCAT program that makes it slightly different than some of the other Co-Response teams that are out there is that they are self-dispatched. So, for about a year this program had been running. The teams would sit around the radio, they would listen to the types of calls that would come in and they would say, this seems like a good call for us. Then a bunch of researchers came in with their leadership and said we're going to actually decide which calls you go to. And it would have been really difficult to do that with the team that had already been operating for that year. But fortunately, MCAT expanded after that formative evaluation into other districts. And so, we were able to start with a new team that was trained and put the randomization protocols in place with that new team. And also, again, to IMPD's acumen. I mean, they kept that team in that formation for the entire duration of this study, as other components of MCAT might have changed in other parts of the city. They kept the program running the same way throughout the duration of this study, so that we could continue to randomize those events.

Katie Bailey [00:13:50] In your planning of this study. What were some of the most important decisions that you had to make?

Brad Ray [00:13:55] I think that the outcome of choice was by far the most difficult decision, and that was really not something I did alone. It was really something we did with the stakeholders and the stakeholders here we're not just IMPD, and that's important to know. The stakeholders were at this point, IMPD and Eskenazi who were providing to clinicians as part of the team, and Eskenazi works closely with Indianapolis EMS and EMS events cost individuals a lot of money, they can cost the city a lot of money, and when they were looking at where they would see changes and where they were hoping to see an impact, it was in those 911 calls for service that they wanted to see a reduction there. So that became our primary outcome. But as you know, the two arms of the study, one being, you know, the MCAT Response, the Mobile Crisis team, which was a police officer and a mental health clinician, and the other being just a police's usual response going to those.

Katie Bailey [00:14:49] How did you work with the practitioners to determine what was a relevant call for service that could be randomized?

Brad Ray [00:14:56] We spent about a month listening to the types of calls that came in, to hear the types of terms that they used, and the types of calls that they would respond to. We created a list with them of the types of terms that would come through that they think that they would respond to. And we created a list of call types that we presented to them and went back and forth on what would be an MCAT worthy call as part of doing that work as well, and looking at the types of calls that they were going to. I think that that was a benefit to us as researchers coming out of that formative evaluation and having done focus groups with the teams, one of the questions concerns that came up very often is what type of calls do we go to? So, the research team kind of push that conversation forward for them and sort of deciding this would be an MCAT call. You know, we had the radio so that we could listen to the calls that were coming through. Then we created a two-way system where we could have a researcher who would communicate directly with the team to say whether or not they should or should not be going to these particular calls. And really, you know, this was another thing where we had to develop protocols along the way. What if the team said, we have to go? What if there's nobody else to go? What were the conditions under which they could violate the protocol and let us know? So, we did a lot of testing there, testing to see how frequently we could identify the same calls that they would say that they would go to. And I believe we achieved about 90% there, where 90% of the calls we would said this is an MCAT worthy call. They agree that was an MCAT where the call as well.

Eric Grommon [00:16:20] Just to echo Brad's point is that all of this was done upfront, and this was a lot of trial and error before we even started with any type of lottery as that we practiced over and over again, and this became mutually beneficial for everybody. The research team learned about policy and procedures. We also then helped both IMPD and Eskenazi create policy and procedures about what are eligible calls to go to. So, it is kind of this mutually beneficial relationship. But again, just to echo the point, tons of lead in time before we could even say let's start randomizing calls for service.

Brad Ray [00:16:53] Unfortunately that policies and procedures document was actually one of the requirements before we could do the randomization. Arnold Ventures as that we developed as policies and procedures document, which we were glad to do. And one of the reasons we wanted to do it was for the team internally, but the other was if this was a super successful program, we wanted to have documentation to help other jurisdictions replicate this, to say, here's the exact types of costs. Here's the exact types of hours, the

exact types of practices that this team does. So, it was a benefit to us. But also, I really helped move that team forward and what they would become.

Katie Bailey [00:17:24] That, again, speaks to the importance of having an in-depth relationship between researchers and practitioners leading up to a study in ways that can be mutually beneficial. What role did funding play in this project?

Brad Ray [00:17:38] Arnold Ventures is who funded this project. And really this would we would not even be here having this conversation if it wasn't for them. In a lot of other federal competitive grant mechanisms, we would have spent at this point after, you know, several years of studying this program, we would probably have very good documentation about what the program's doing, and we still wouldn't even be to our randomization point. But Arnold is genuinely worked with us on a timely, important opportunity. MCAT was about to expand from one district to the city. They knew that was happening, and they gave us the funding to say, hey, we're going to give you the time to figure out the randomization procedures and to conduct this randomization and to see what the outcomes are, and we just would not have been able to do such a timely study if it wouldn't have been for Arnold Ventures. But also, when Covid happened, they were flexible and allowing us to extend our time period out, moving from various institutions to keep the same team together and continue to work with us until the very end on this. So huge thanks to them for supporting this study.

Katie Bailey [00:18:40] Brad, you mentioned the study outcomes. What were the outcomes that you focused on for this evaluation of the Co-Response team, and where did the data come from?

Brad Ray [00:18:48] Good question. The primary outcome was EMS events. And those came from, IMS, which served, the district where the MCAT randomization occurred. And that was the count of any EMS event within the 12 months following the initial MCAT events. So, when MCAT responded, however, we looked at a couple of other outcomes as well. One of them was arrest so that the individual get booked into the Marion County Jail. And for that, we obtain those records from, the Marion County Sheriff's Office. But then we also obtained Ed records, treatment records and mortality from Regenstrief Institute. So, for that, they provided us, that information back on the individuals who received the MCAT arm or the police, as usual response.

Katie Bailey [00:19:31] Okay. Sounds like there might have been a process of gathering important data. Thanks for explaining those predetermined outcome measures, Brad. So, Evan, what did you find about these outcomes in your analyzes?

Evan Marie Lowder [00:19:43] Well, it's not completely a happy story. We found that, you know, for our primary outcome time period, which is one year following the 911 behavioral health call for service, that there was no difference on any of the outcomes. We had two measures of outcomes. We looked at both the, you know, likelihood that an event would occur, as well as the total number of events that occurred between the individuals that received a Co-Response team and those individuals that received a police as usual response. We also looked at shorter term outcomes within kind of a six month follow up period. Similarly, found null results. So pretty much null results across the board.

Katie Bailey [00:20:22] Okay, interesting. We'll come back to these in just a minute. But I think it might be helpful to describe first the process of randomizing behavioral health calls for service, so that the study ended up with one group of people that received the Co-

Response team or the MCAT response, and one group that received a typical police response without the MCAT. Brad, could you tell us how that went down on a day-to-day basis?

Brad Ray [00:20:43] Yeah, when you talk about difficult decisions and doing a study like this, probably one of the ones that people don't talk about is having a strong research team. And we would not have been able to do this, without having, Emily Sykes. Emily's a lead role for the entire duration of this study was randomizing 911 calls. And for those of you that worked with her during that period will remember, you know, you'd get on a call with her, and you'd hear that radio in the background popping off sometimes. Emily had a backup along the way. Who would help her when she took time off and when she took vacation. But Emily would sit there and listen to calls as they came in. And then if it was an MCAT eligible call, she would use a randomization app to say whether or not MCAT would go or not. Then she would relay that message to MCAT that this is a call that they should go to, or that this is a call that they would not go to. And then from there would collect information on that call type and then collect information on the individual that folks responded to. And for that data collection, we actually had the MCAT teams collecting it.

Katie Bailey [00:21:42] Brad and how long did this randomization process occur? How long was Emily carrying around this radio every day?

Brad Ray [00:21:48] It was supposed to be a year, but we extended it out to 18 months. Because our study, the randomization started. And as we've mentioned, months and months of planning started literally a month before the stay-at-home pandemic orders. And in Indianapolis, within a couple like a month and a half of that happening. We extended it out to try and get more cases to increase our sample size, to 18 months. But for 18 months, this was Emily's full-time job randomizing those events to MCAT or treatment, as usual.

Katie Bailey [00:22:18] Okay, so back to the results. Findings were null. Evan, what are the implications of these results?

Evan Marie Lowder [00:22:23] Well, I think we can talk about a few things. The first thing is that we know that we were slightly underpowered to detect significant effects across all of our outcomes. And one of the things we know from research is that it is notoriously more difficult to detect significant results when you do not have nice kind of continuous outcomes, which is, frankly, the situation that we were dealing with our dichotomous think, our outcomes. The other, kind of related challenge with that is that, you know, as, as Brad stated, we were doing this data collection during the Covid period. So not only were we overlapping, you know, with that period, but we had to face the additional challenge of the MCAT team, reducing their hours from being a 24/7 response team to a, basically Monday through Friday, you know, daytime hours, response team. And so those were kind of two pieces that reduced just the sample size that we were working with even with an additional six months of randomization, that's one thing that, you know, we're thinking about when we're thinking about contextualizing these results. Another thing is, you know, for the outcomes that we chose to focus on, there was not a significant effect in the kind of magnitude of effect that we found for this study. And, even looking at the effect size relative to kind of what we calculated for the power analysis, like we're finding much smaller effects. So, you know, we know we were underpowered even to begin with, but then we're also finding much smaller effects, and inconsistent effects, right, in terms of the direction. So, I think we can say for, you know, this program like the evidence is not super promising for the long-term outcomes that we were looking at. However, and this is

something we talk a little bit about in our report and in the publication that we have under review right now, is that it is possible that these programs could affect other types of more short-term outcomes. Maybe it's not realistic to expect that Co-Response teams in a single encounter at the time of a behavioral health crisis is going to have these kind of long term, six-month, 12-month effects on individuals' engagement with other systems. But it is possible that the way that individuals are treated in that encounter, their ability to kind of get immediately, you know, diverted into quality behavioral health treatment services, maybe those measures would produce, you know, more promising results. Unfortunately, that's not what we looked at here, but definitely, areas that are ripe for further research.

Katie Bailey [00:24:56] Thanks, Evan. It sounds like it'll be important to get feedback from people who end up receiving a Co-Response when they're in a mental health emergency. Brad or Eric, do you have any more thoughts on. The implications of no results for the study.

Eric Grommon [00:25:10] I think it's really important to keep in mind that this is one jurisdiction and one program model. And so, one thing I tried to mention in my remarks earlier is that these Co-Response teams are all sorts of different program models, so it's important to interpret our findings relative to the setting where the model was implemented. So, we definitely need more research. Hopefully we've given enough proof that other researchers and other practitioners themselves can carry out randomized control trials. I think we left folks with a nice pathway to follow to replicate. So, subjecting some of these other corresponding team models and other jurisdictions, would help us to better understand what could be the effect of these programs.

Evan Marie Lowder [00:25:51] And just to echo what Eric said, I mean, if randomized control trials are kind of the gold standard of research designs, we can consider meta analyzes of randomized control trials to be like the platinum standard. That just goes to show that we do need more randomized controlled trials so we can make sense of this broader area of research.

Katie Bailey [00:26:11] Based on your experiences evaluating the impact program and conducting a randomized controlled trial in this type of alternative police response program. What other advice would you give to researcher practitioner partnerships who might want to consider conducting a rigorous evaluation of an alternative policing program? Given your comments about how important this will be?

Brad Ray [00:26:33] There are a couple of pieces of advice for future researchers in this space. One would be work closely with your community partners in designing the study, but also really spending a good amount of time asking yourself, what is the intended outcome from this program? What do we want to see happen? And be honest about that, because if your design is not focused on that outcome, then the answers will not be as appealing or useful to your jurisdiction. So, I think that's one thing, is to work with your community stakeholders to find an outcome that will be of interest to them and to the field. I think another important thing to remember in doing this type of research is disseminating this information back to the stakeholders. So, we over the years have had many meetings with IMPD, with Eskenazi, with the teams to talk about here's what we're finding, here's what we're seeing. And the reason is because as we conducted this study in Indianapolis, they developed a corresponding police mental health team in 2016, I believe, or 2017, which was way ahead of so much of the rest of the country. But in the process of us doing this RCT, a whole bunch of sites did something even different, which is they stopped sending police to some of these calls and they just sent the clinicians. And so that

happened as we were doing this study. So, I think it's difficult, you know, we didn't want to stop our study and adjust it along the way. But I think it's important to know that the field is moving on and that our information to Indianapolis helped them move in that direction. When we were able to get on there and say our preliminary results at six month follow up are not showing any changes, not showing any effectiveness between these, they were able to modify that program and other parts of the city to hopefully achieve better outcomes. So, I think that communication back and forth to the stakeholders is something that should be done. And then the last piece of advice I'd give to other researchers is really be bold in this space. Alternative police programs at their core are saying there's already a standard of response, and we're trying to do something better. There's already a standard of care, and now we're trying to improve that standard of care. So, evaluate whether or not that has an impact that alternative programing through rigorous analysis.

Eric Grommon [00:28:34] The MCAT model that was subject to our randomized control trial is not the same model that's in practice today. So, I think that's always an important consideration, is that sometimes we see this rigorous evidence and we think, well, that is the program model that exists today. I'm going to referee the program based upon a study that's concluded. As Brad mentioned, we've got close partnerships with our practitioner partners, and they have listened to our feedback and our suggestions. And they have they themselves have made changes to policy and programing to try to improve the MCAT model as it exists in Indianapolis.

Brad Ray [00:29:08] There's one other thing that I feel like we should add to, and it's Paul Babcock. We don't talk enough about how important he was to getting this study off the ground. So, you know, you had, we had IMPD support and doing a really rigorous study. We had Eskenazi support, but we also had a support from the mayor's office. And this program was developed as part of the mayor's agenda. And to have a mayor's office that says we have a program that we're going to try, and we're going to expose it to the most rigorous research design that's out there. That was very bold of them to do, and we could have never done this study without that support from them as well so.

Katie Bailey [00:29:42] Can we speak to any insights we had on how the MCAT team experienced the randomized controlled trial?

Brad Ray [00:29:47] Yeah, that's a great question. So as other researchers started to learn that we were conducting this study and other practitioners in other cities, learned about it, one of the questions that we would get asked is, what does the team think? Is it something that they're having a difficult time doing? And so, one of the things that we decided to do towards the end of the study was do focus groups with the MCAT team that we had been randomizing for those 18 months, and their the leadership of that team to ask them, how has this worked out for you? And not only did they think it was easy, they thought it was impactful. It was important that the results were impactful, but also that we were informing them about things that they often didn't even consider. So, for example, one of the things that I would say to any researchers who consider this type of randomization at the call event is you have one MCAT team, but then you have all of the police in this district. And so, when a 911 call comes in and you randomize it to the MCAT team, then the randomizer would listen to all of these other potential calls that would come through and go to police as usual. And those were calls that we couldn't randomize because the team was actually out on an event. And so, when we explain that to the teams, this was knowledge that they didn't know about. They hadn't even considered how many calls were coming through that they might not be able to respond to. So again, not

only did the teams not see this as a difficult study, they didn't perceive burden in having to do randomization, but they found it to be very informative to their processes as well.

Katie Bailey [00:31:10] Do we know what they thought about the fact that they couldn't respond to certain calls because they were randomized to police, as usual?

Brad Ray [00:31:17] We have a sense that when they first started the program, one of the things that would happen on the scene sometimes is they would be at a 911 call dealing with the events at that scene, and their radios would be on, and they would hear other calls coming through. And, this was before the randomization study had occurred, but they would hear these calls coming through. And there was a team. And at the time it was a team of EMS, a mental health clinician and law enforcement. And the clinician would do the work of talking to the person at the scene, seeing what type of services they would need. And sometimes the police and the EMS wouldn't have a role on scene to do there. Yet they would be hearing these other mental health crises coming through their radio. And so, it was very difficult for them to stay on scene, knowing right down the road that they might be able to help somebody. So, along the way, one of the things they did is they shut off their radios so that when they were on scene that they could concentrate on what was happening at that scene so that the team didn't get dispersed along the way. But yeah, there was some difficulty there early on with the team knowing that other events were going on that they weren't able to help out in.

Katie Bailey [00:32:19] Eric, were there any ethical dilemmas associated with randomizing the specialized team to respond or not respond to certain mental health emergencies?

Eric Grommon [00:32:29] One of the main challenges, and one of the reasons why we don't see a lot of randomized control trials, in this space. And then just in general, is there's always ethical dilemmas, because researchers have some control over how units are assigned to experimental conditions, either to the intervention or treatment versus the control unit. So, I think we receive some feedback from our focus groups that leadership was a little bit concerned that they weren't allowed to go on some runs, because they were assigned to either a go- or no-go condition. So, we received some feedback there. Then I just remember when we were first starting to kick off this project where we're thinking about, let's pitch an RCT, with leadership and MCAT units and see how there's a reaction there. I think one of the first things I picked up on that could have been an issue, that didn't really translate to the focus groups, but was something that I'll probably never forget about of this project is that some of the MCAT units were just saying, does this mean I can't go see, Eric Grommon at 1221 Main Street every Tuesday like I usually do.? And we had to explain that unfortunately, because we want to carry through this RCT and we want to have strong evidence about the efficacy of this model, we can't do that anymore. We have to take the calls as they're fielded and then follow the protocol. So, I think there was probably some tension there. I think we picked up on some information that the units themselves were having some dilemmas here, that leadership was thinking about the calls that were missed. But I think that's another part of RCT is that we are telling our practitioner partners about all of the calls, or all the units that they're unable to reach, and giving them details about that which, if we weren't doing this pilot, we wouldn't really be thinking about, what calls are missed or what calls are unable to be served by the MCAT unit.

Brad Ray [00:34:18] And I remember when we were having those conversations, and they would talk about the specific types of calls that they might want to go to. And it was like,

right in that moment when I thought, this is why we need to randomize this by calls, because that would take that ability away to select certain types of events.

Evan Marie Lowder [00:34:33] Yep. You're absolutely right, Brad. So, when we talk about issues of selection bias in quasi experimental designs, this is exactly what we're talking about, right? The ability to, you know, self-select who gets, you know, an MCAT response. The person who, you know, they see regularly that they know how to get connected to services that they know is likely to go engage in those services. This is, you know, 100% the reason why we need RCTs.

Katie Bailey [00:34:57] Since we covered so much in this episode, I wanted to leave listeners with a few key takeaways. First, it's important to conduct rigorous evaluations of alternative police programs because we want to make sure our tax dollars that fund these efforts are actually making a difference on the outcomes that we consider to be most important. Second, in order to conduct rigorous program evaluations, it's important for researchers and practitioners to build working relationships and mutual trust to carefully work out the necessary details and logistics associated with randomizing an intervention in a real world setting in real time. My last takeaway is that alternative policing programs developed to react in emergency situations may not alone be enough to overcome our fragmented healthcare and social services systems. As Jennifer mentioned, perhaps the solutions are more coordinated services. However, as always, more research is needed, so it will be important to do a lot of rigorous studies to understand what works and what does not.

Outro [00:35:55] Stay tuned for our next season of Just Science. Community based solutions for substance use challenges. Opinions or points of views expressed in this podcast represent a consensus of the authors, and do not necessarily represent the official position or policies of its funding.