Chapter One

Where Are We in Understanding Implementation of Systems of Care?

State of the Science Plenary: Where are we in Understanding Implementation of Systems of Care?

Speakers
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Dr. Robert Friedman: I am very pleased to welcome you here this afternoon to our conference within a conference. As many of you know, the theme for our Research and Training Center this five-year grant cycle has been on developing a knowledge base for implementation of effective systems of care. We are very pleased to have a chance to share with you some of what we have been doing, along with some of our preliminary findings as a part of a State of the Science effort. I will speak first and then to my immediate left is Dr. Sharon Hodges, who will be followed by Dr. Karen Blase.

The purpose of our mini-conference is to review with you what is currently known about implementation of effective systems of care and to discuss some of the implications of this for practice and for research. I always like to start off by reminding us of our overriding goal. The overriding goal of the Research and Training Center—and perhaps also for you as researchers, advocates, family members and other stakeholders—is that all children with special mental health challenges and their families will have access to effective services and supports that are consistent with system of care values and principles.

Given this goal, why the focus on implementation of effective systems of care? We have chosen this focus for several reasons. First, because there is considerable research—some of it done by Macro International (a partner with the National Evaluation), and research done by others—which indicates that efforts to implement systems of care have been very challenging. Implementation is a very complex kind of endeavor and in many cases there have been significant problems involved with implementing systems of care effectively. The second reason is that services and supports will always be embedded in service delivery systems of one sort or another. In fact, the purpose of systems of care is to make available those effective services and supports. But given that they will always be embedded, it is important for us to understand those systems and to make them as effective as possible. The third reason is that there is clearly strong support in communities across the country and at the federal level, as reflected in the *President's New Freedom Commission on Mental Health report*, for the values and principles of systems of care. So, given the support for the values and principles, given the challenges involved in implementing them effectively, and given the fact that services and supports are always going to be embedded in systems of care, and such systems have a major role in making the services accessible, our focus is on how we implement them effectively.

The right question for us at this point in time, not just us at the Research and Training Center but I would suggest for us as a field, is: *how do we optimize and enhance the functioning of systems?* —as opposed to *how effective are systems of care overall?* We have spent much time talking about the overall effectiveness of systems of care in past years, and certainly there were appropriate and certainly useful questions, particularly when the field was in its early stages. This remains an important questions, but given the difficulty in implementing systems of care, given the fact that services will always have to be embedded in systems, and given the agreement with system of care values, I really believe that the key question for us as researchers at this point is, how do we optimize, how do we maximize, how do we *enhance the effectiveness* of systems of care? That is, how do we make them better? How do we learn, in this sense, from effective systems? For example, in an evaluation we might have 25 communities that are implementing systems of care, and it may be that half of them are not doing a very good job. Further, an outcome evaluation may reflect that this is the case; and as a result we may not find great differences between communities trying to implement systems of care and a comparison group. However, if half of them are doing a very good job at implementing an effective system, there is much that we can learn from that half—there is much that we can learn from going beyond the overall question of system of care effectiveness and instead studying communities that are doing it right! Gathering and applying that knowledge about how to do it right, from my perspective, is going to be much more valuable for moving

our field forward and serving kids more effectively in the long run than just focusing on outcomes and just doing an outcome evaluation.

So as we began to focus on this issue, what did we do as a Center? I have to say that what you hear from us, from me certainly, is constantly changing and evolving as we learn more, as we gather more data, and as we read more and consider new concepts. We wanted to develop a model and a framework for what it takes to implement systems of care effectively. And so we began by reviewing the research and the theory in children's mental health, by reviewing research and theory in related fields and by consulting with key stakeholders. For example, we held a concept mapping exercise with key stakeholders; we also had a survey that we sent out to many people to get their views on this, and then we tried to integrate those findings with our own experiences in working within communities across the country, and what we were learning from the literature. I will go through the model quickly because, as I said, the model is constantly changing and there are some parts of it that I think are probably more essential to our discussion than others.

The beginning point tends to be a clear statement of values and principles, but not *just* a statement of values and principles. Rather, a statement of values and principles that has developed in a participatory way with stakeholders, which becomes kind of a living document that is integrated into all that goes on within the system of care, and is also based on understanding the population of concern. Another key aspect is understanding who we are serving—typically those young people with the most serious, most challenging, most perplexing problems and needs, and their families. This is very important. The system that one might develop would be very different if we were designing it for a population that had less serious problems. We believe it is very important then for communities—through a process of being clear about their values, being clear about who they are serving and being clear about their goals, and also about how they believe they will achieve those goals, to develop their own theory of change.

We have been very excited to see communities across the country embrace the process of developing a theory of change and from that, a logic model to help them think through clearly what it is that they are trying to accomplish, what their goals are and how they think that they are going to accomplish them. And this is not to develop a road map that says, "this is how we think we are going to accomplish it, we are going to stay the course." To the contrary, we see the theory of change and the logic model as being the beginning of an effort to say, "this is how we think we are going to do it, but we are constantly open to change and we expect that changes will emerge as we go along." So this is a beginning statement, but what we have found is that communities find it very helpful to engage in an iterative process of looking at the whole picture and being clear about their goals, their values and their population right from the start.

We also find that it is very important then for a community to develop a performance measurement system that is consistent with its particular theory of change. In a sense, the key word that we will come back to later is *alignment*—a performance measurement system that is aligned with a community's values and principles, goals, and overall theory of change. Such a performance measurement system should provide community stakeholders with information that can be used to help you see how well the community is doing overall, as well as what areas the community is succeeding in and what areas need significant improvement. Such a performance measurement provides information to be used for a community to reflect, review, and make modifications and changes as it goes along with its implementation effort.

So these are core, foundational processes that we have built into our model for implementation of an effective system of care. Now we have a number of other features that we won't talk about today, including leadership, governance, family choice and access to care, particularly for underserved and underprivileged populations. We do this partly because of a limit of time but also because we really believe that if a community gets those foundational processes down right, then they are going to have success.

Now, as we looked at the literature and at our own experiences, what did we find? We found, first of all, that if you want to know how to build effective systems of care, there is no simple solution. We tend

to operate out of a scientific model that looks at very simple linear causal relationships. If you do X, you are going to get Y; it becomes almost a kind of recipe or prescription. What seems clear is that when we are talking about complex systems and complex organizations—for better or for worse—there is no such simple solution. In fact, our very basic research experimental model, the dominant paradigm—and Luis Vargas did a wonderful job talking about that yesterday—is a model that is really based on Newtonian concepts that don't very well fit complex adaptive systems. For example, the idea that we were all trained to think of in research is that you have a static, easy to measure and easy to manipulate independent variable; it doesn't change over time, and we can measure it and describe it. Well, all of us have learned that is not the case. Mike Agar talks about this in his work. It becomes very hard to apply traditional research methods to activities when there isn't a traditional independent variable. What we are talking about is a constantly evolving, emerging changing dynamic kind of a system. So as we look at our work and as we look at what we need to do, we offer to you the suggestion that we need to be more flexible in our own theory of science and in our own way of measurement and our own conceptualizing. Luis made the point yesterday that we need to not stick to one epistemology, and that we need to be much more flexible when we talk about systems. With open and complex systems like systems of care, I think that becomes essential.

What else did we find? Well, I don't want to leave you with the thought—because it is so complex, because it is constantly changing—that there is nothing that we have learned. What we have found is that there are a set of key concepts, a set of key ideas that are consistent with the data, and consistent with our experience. It is interesting for me that we have borrowed from fields that we didn't look at very much until recently. As a psychologist, I read the psychological literature, but really there is also much to learn from fields such as organizational development, leadership, complexity theory, and systems thinking. Very simply, systems thinking begins by saying that within a system the real power lies in the way that the parts come together and are interconnected to fulfill some purpose. In human organizations a clear sense of identity—of the values, traditions, aspirations, competencies and cultures that guide the operation—is really the foundational piece. I heard that point made yesterday in a presentation by Eric Bruns and I have to agree. Further, I think you will see that reflected in some of the work that Sharon will report on. Much of the organizational literature in the business world and elsewhere points to how critical it is to have that clear set of values and principles, and to be goal directed and to create the right kind of culture. When that happens, one never knows what the specific methods will be or what opportunities will come along or what challenges will come along, but good things are likely to happen as one moves ahead.

The field of public health has begun to look at embracing some new models. They had a special issue of the *American Journal of Public Health* exactly a year ago last March in which they looked at systems thinking and its applicability to public health. The journal focused on the importance of getting away from looking at things as individual parts, but looking instead at their interconnections. In fact, one thing we struggled with in devising our implementation framework model is that we do not want it to be seen as a list. That is, that you do A and B and then do C in separate, discreet parts. We tried to come up with a figure that would illustrate the fact that that these are not separate discreet parts, but that you have to look at the connections between them. But looking at the connections is a much more difficult methodological and conceptual challenge for us than looking at separate things. The journal suggests that we have to be non-reductionistic, we have to get away from trying to break things into the smallest part—as if that is necessarily going to be the answer when the answer may come in how the different parts come together rather than how they function separately. We have to look, and we have heard this over and over—Thomas Cook certainly mentioned this—we have to look at context.

The American Journal of Public Health was very strong on the importance of understanding the community context as we go about doing things; it also emphasized the nature of causality, particularly non-linear relationships. That is, we can do something for a long while and then suddenly for some reason, a small intervention may have a large effect. We call that a non-linear relationship. When Mike Agar presented at our Plenary a couple of years ago, he described how simple rules sometimes can have an enormous effect on the system. The effect is not always in relationship to the strength of the intervention, and is often not predicted from the intervention itself. Thus we have to understand and

study and look for those rules and those non-linear relationships, which is a special challenge. In short, the relationship between cause and effect is not so clear and is not immediately proximal. Hence it is important that we have feedback loops, or that we build in mechanisms that tell us how we are doing and give us data so we can respond, adapt, and make change in an informed way. The dynamic nature of complex systems, their emergent properties, and their self-organizing nature ensure that change will be frequent and often unpredictable.

We all know how we operate within our organizations and systems. We help to bring about change and we see change emerge from groups. Somehow we have to be able to incorporate our understanding of complex systems and how they change into our system development and organizational development efforts, and also into our research. We have been pleased to be able to increasingly focus in our conference on complexity science and particularly on complex adaptive systems. Complexity science studies systems that are characterized by the kind of non-linear dynamics that I've been talking about. A kind of emergent property results from complex adaptive systems that is neither fixed nor predictable. It is also the study of patterns and relationships. People talk about research that can be particularistic (i.e., that looks at one particular thing), and there is value in that—we need that kind of research for certain purposes. But when you are dealing with complex systems, we are talking about looking at relationships and looking at patterns.

We are also looking at an approach that transcends any one discipline, and not just the traditional disciplines that we have focused on in mental health—rather, we have tried to look more broadly at a variety of disciplines. I have been intrigued by the writings of a woman named Donella Meadows and I would like to read you a little bit about what she says about systems. "Self organizing non-linear feedback systems are inherently unpredictable, they are not controllable. They are understandable only in the most general way. The goal of foreseeing the future exactly and preparing for it perfectly is unrealizable. The idea of making a complex system do just what you want it to do can be achieved only temporarily at best. It is a different way of thinking than a traditional Newtonian, linear way of thinking. We can never fully understand our world, not in the way reductionist science has led us to expect. A science itself from quantum theory to the mathematics of chaos leads us into irreducible uncertainty. We can't control systems or figure them out but we can dance with them." She says, "I already knew that in a way before we began to study those systems, I had learned about dancing with great poise, from whitewater kayaking, from gardening, from playing music, from skiing. All these endeavors require one to stay wide awake, pay close attention, participate flat out and respond to feedback. It had never occurred to me that these same requirements might apply to intellectual work—to management, to government, to getting along with people. Dancing with the systems, getting the beat, getting the rhythm, getting feedback, being in tune with it, observing what is going on, adapting and making change."

So where has this led us? Well, it certainly led us to emphasize the importance of integration factors and alignment of different levels. We have a habit of simplifying issues sometimes in a way that is not helpful. Do we do evidenced based practice, do we do wraparound? What do we do? What seems to be clear is that the important thing is not so much the individual things, but the connections, the integration between them and how well things are aligned at different levels—at the policy level, the organizational level, and at the practice level. If, in fact we have a set of values and principles, are they reflected in the types of services that we fund, are they reflected in our performance measurement system, are they reflected in the training we give to our provider network? We can develop the values and principles and set them aside, but it seems clear that we need to move to have a kind of integration of the factors and alignment. We may not always be sure about the best way to integrate them, but the fact that we must integrate them comes through loud and clear. Where has this led us in some of our research? It has led us to focus more on connections, and to focus more on interrelationships between different aspects of the system. It has led us to look holistically, to look at the whole and to not immediately break the whole into its individual parts.

We have talked at other times about how Peter Singer and others made the observation that when we were young we were taught that when there is a complex problem, the way to approach it is to break it down into small units and to tackle a problem piece by piece, but in the process of doing that, we lose the essence of the whole. With systems of care, we are dealing with something very different, and we have concluded that we need to look holistically and longitudinally at systems. In our research we tend to look at a particular point in time and not appreciate the dynamic, evolving and emerging nature of our systems. We need to emphasize key processes that we think are essential, like developing and using values and principles and theories of change and having responsive feedback mechanisms; and we need to identify general principles and functions rather than specific structures and forms. This understanding has led us to look at and identify the explicit and implicit rules within a system and to study patterns. But in order to do what is best for your agency, we need to look at what the rules are and what the patterns are—to promote and study emergence, adaptation and self-organization.

The fact that we can't control what goes on is probably a positive. We have to have faith that our values and principles are strong, that we are goal directed, and that we are establishing a good culture. Then what is likely to emerge and what we adapt and what we support is going to strengthen the system. We need to be data based, to be transdisciplinary, and to be iterative, in an effort to understand and optimize system performance. We have to look at systems of care not as something we are going to do today and then come back a year or two years from now and evaluate, but instead we need to be prepared to be constantly engaged in an iterative process. This has led us to also open a dialog about the system of care definition and how that definition affects system implementation. For example, Sharon and her colleagues have proposed a definition of a system of care as an adaptive network of structures, processes and relationships grounded in system of care values that provide children with access to necessary services supports. So the emphasis there is on an adaptive network of structures, processes, and relationships.

Dr. Sharon Hodges: I am going to begin the presentation with a piece of artwork. I do this partly because I really love the aesthetic of this piece. It is a painting that is done in acrylic on bark cloth and is by an artist named, Ann McEwen. But I also show it to you because of the title, *Stuff Happens*. Its composition reminds me very much of the siloed and fragmented service delivery systems that systems of care are intended to have an impact on. So if you consider the painting for a moment and look at it more carefully, you can see that there is a lot going on there. There is a lot of haphazard movement, some components disconnect, others overlap in seemingly random ways—and if you look carefully, you will see there is even a pathway across the system that is pretty disconnected and full of stops and starts. In short, it is an environment in which stuff happens, but not with vision and not with the intent that we would hope from systems of care. So I think that the painting poses a question of implementation. How do we move from this seeming chaos to service systems that are more intentional and more value-based as systems of care are intended to be?

The implementation challenge for systems of care comes in part because local communities are so different from one another. They are different in terms of their geography, in terms of culture and ethnicity, in terms of population density, political context, local history among service systems—in the system itself and in local need as well. What works and what is needed in terms of system implementation varies across communities and it varies across time; there is just not a single checklist of interagency agreements, of governance structures, of funding mechanisms, or evidenced-based treatments that, if you put them into services with care and commitment, is going to yield you a system of care. Similarly, family and youth engagement in cultural competence can support system implementation and help sustain the system but they cannot, on their own, bring it about. So we are faced with questions about how systems are implemented—and that is actually the focus of our Research and Training Center Study in this five-year cycle. So my presentation is going to focus on cross-site findings from one of the Center's studies. I am going to talk about the critical factors of system implementation from the perspective of local stakeholders in established systems of care who have been working with us for the last two-and-a-half years.

Our study uses a multi-site case study design, and we rely on team-based data collection and analysis. Our team for this study includes Kathleen Ferreira, Nate Israel and Jessica Mazza; and of course the other important team members are the four systems of care that have participated with us so far. These systems were identified through a national nomination process and selected on the basis of some very specific criteria that we developed for what an established system of care is, and that is that definition that Bob shared with you. So they are Placer County, CA; Region 3 service area in Nebraska; the State of Hawaii; and Santa Cruz County, CA. Although we were only onsite with each of them for one week, they came under our scrutiny for about six months as we reviewed documents and were on the telephone with them. They have been very generous with their time and have shared their experience of system implementation with us. Our whole team has been very impressed with how self-reflective and self-critical they are about what has worked for them and what hasn't worked, and what they have accomplished and what they still hope to accomplish.

When we first start working with communities we get a core group of stakeholders together and they brainstorm with us about what they think their local factors have been that are critical to implementation. Then they define those for us and we go through a process where we later validate those definitions and factors with definitions from a broader group. What we think is significant across these four systems—and they are very, very different from one another—is that their experience of implementation is very similar. The things that they thought were critical to their successful implementation are very similar. So, as part of our analyses, we sorted through the 40-some odd factors that the four sites identified for us and looked at some patterns that we distilled into four lessons learned. I am going to go through those lessons with you.

The first lesson is *Values and Beliefs Shift the Mindset of the System*. Our findings tell us that the first and perhaps most critical feature of system implementation is to establish a shared stakeholder understanding of what a system of care is and why it is being developed. So in each system there was a core group of stakeholders that used values and beliefs to leverage change in the philosophy and some of the fundamental beliefs of other system stakeholders. We found three characteristics that were common to the values and beliefs across our four systems. First, there was the notion—across agencies' values and beliefs—that if they followed the system of care values and principles the results were going to benefit children and families. Second, there was the idea that systems were infused with a sense of trust and commitment and shared responsibility across mental health, child welfare, juvenile justice, education, sometimes other service systems, and certainly families—and increasingly community based organizations. Then thirdly, there was cross-agency commitment to the idea that change is actually possible and, interestingly, every one of our systems identified a factor that was related to willingness to change, or commitment to change; they had different names for it, but it was there for all of them. Here is a quote about the idea of shared vision, interagency collaboration and how they came together around that idea: "We learned from our systems that values and beliefs have great power for change because they guide all the other actions taken within the system."

Lesson number two, *Goals Enable Action*. Our system implementers used goals to make stakeholder values and beliefs concrete and they used them to orient stakeholder action toward very specific actions and goals. Our analyses indicate that as system of care values and beliefs began to permeate the system, partners set in motion the use of goals and the use of shared expectations for outcomes to really shape the kind of action that took place in terms of system implementation. So again we looked at the kinds of goals and actions that the systems used and they fell into three categories. The first were outcome goals—and there were a lot of different outcome goals mentioned by these systems. I highlight here the reduction of out of home, out of county, and sometimes out of state placements because this was where all four of our systems started their activity—every one of them. They expanded their system work beyond that, but that is where they began. They also were focused on process goals that had to do with how services were delivered, and planning goals, which were related to how they could be strategic across the actions that they took. There was always this kind of pragmatic sense that resources were scarce, that they couldn't do it all at once, and so they staged implementation strategically to get the most impact

from what it was that they were doing. I think the important thing is that their goals did not remain fixed over time and so each of the systems showed considerable evidence that they allowed their goals to evolve within the framework of system of care values and beliefs.

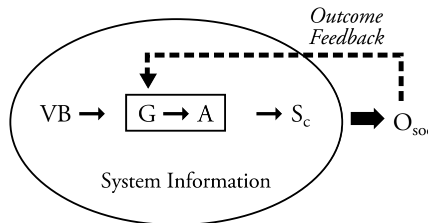
Lesson three, *Collaborative Structures Support Local Development*. One of the things the data are showing us is that these communities, these systems, develop local collaborative structures to support their system implementation—and these structures were related to changes in specific roles and responsibilities and decision-making authorities within the system. There were a number of different kinds of collaborative structures that seemed to arise and these were a little harder to categorize because they looked so different across the communities, but one is that they all made changes in the physical arrangement of their services. So I think that in all four of the systems they changed the location of service and also co-located interagency staff, so that was a considerable shift in terms of the arrangement of services. They made changes in the rules and regulations around service delivery as well, and a lot of times the most obvious feature of that was changes in the availability of flexible funds or braided funding, to support interagency decision-making. All of the systems had the sense of an egoless interagency participation. That was the standard they shot for—and I know they would tell you, "oh well, it doesn't always happen that way," but that was definitely what they were moving toward, and they all had some variation of how you don't get your ego or agency power involved in the decisions. Our favorite one came from Santa Cruz where they were saying—tons of people said this to us—"Oh, in Santa Cruz County you leave your ego at the door and bring your wallet to the table." The third type of collaborative structure that each of these systems came up with were interagency decision bodies and these varied across levels of the system—so they weren't just at administrative levels, they were at supervisory levels, they were at direct service levels—and this had a huge impact on how children transitioned across service environments and then how they transitioned in terms of levels of intensity of service. There was a lot of discussion about structural change in our systems. We heard about factors that make interagency work difficult—territorial thinking, language, fears of incompetence, and fear of change. Fear of loss of professional identity was part of it as well.

Lesson four, *Information Facilitates System Responsiveness*. Our cross-site data tell us that systems used information strategically to support system development and to figure out whether they were actually reaching those agreed-upon goals. The form and the format of the information varied tremendously within these systems and across the systems. There was certainly the use of formal reports at formal meetings, but there was a lot of informal use of information that happened because they had co-located their agencies or co-located service delivery. But what I think is important to note is that the systems worked very hard to facilitate direct contact between their line workers, their supervisors, and their senior administrators across agencies. What this did for them was to flatten their communication hierarchy and allow for more rapid decision-making in terms of how they were allocating resources. For each of the systems the structure and availability of information created informed responsiveness to local conditions.

So four lessons, and as you can see none of them are a checklist; that is kind of the bad news—we kept hoping we would come up with something simple and easy out of this—but certainly these broad guidelines came out of the study, all of which have local variations to them. So our team tried to draw what this would look like and what these relationships would look like. One of the team members (who will go unnamed) called our office the "war room" recently because we were arguing so much about what these diagrams would look like, but we were trying to draw something that would put these relationships into context. One of the things that the systems talked to us about was that their implementation efforts very much connected up to outcomes. So they saw a lot of impact from their system implementation in terms of the outcomes that they were actually achieving and the net effect of them—which is what we were trying to illustrate here. That is, that there was a shift away from the traditional structure-driven systems that they all started with, with the old business as usual kind of thing, and they moved toward systems that were more directed by these explicit values and beliefs. So their outcomes became very much shaped by their values and beliefs. And there was this constant feedback between system outcomes that allowed for adjustments and for goals, and that is that arrow that you see that moves from outcomes back to goals.

Figure 1

Established Systems of Care
Values and Beliefs Drive Outcomes



Now, however, our team was really frustrated with the whole idea of trying to draw this and we had all kinds of colors on the whiteboard because no matter how hard we tried to draw these relationships, the oval representing our system was just too neatly bounded, too clean the way it looks, and our arrows were always too straight—and it makes it look like that arrow between outcomes and back to goals is a really clear and easy relationship all of the time. And there was just nothing that our participating systems told us about this process of implementing and running a system of care that looked this straightforward and neat and clean.

So I am going to offer up another piece of artwork, also by Ann McEwen, this one is acrylic on handmade paper and I love the title, *Light at the End of the Tunnel*. This, I think, is a much better illustration of what system implementation looks like than anything our team could come up with. And if you look at it, you can see that at the core in there, that there is a system emerging there. There is still chaos around the edges; the system is uneven in its development, depending upon what community needs have been addressed and where the strongest partnerships were formed and what opportunities became available—and the painting gives off a sense of motion to it. That is, things aren't stable—because they are not—and they are not static, either; rather, the configuration of the system is going to change over time.

So finally I would like to suggest some ways that those four lessons might be used to maximize system implementation. First, create a focus on values and beliefs and translate that focus into action. Recognize that opportunities for change are not linear and take advantage of opportunities when they arise because sometimes they arise unexpectedly—and I have to say our systems were able to notice those and move on them when the opportunities arose. Know that "concrete" doesn't mean being "static." One of the things our systems taught us was that being concrete in intent gave each system a lot of flexibility and response; so there was actually more creative flow in the systems because they were so concrete about their intent. Be very realistic about the impact of structural change. One of the things that we have learned is that it comes along a little later; it is certainly not the first thing that they initiate, and structure by itself is pretty ineffective as a factor of system implementation. If it sin the service of values of beliefs, then it has got a lot of power to it, but by itself, moving those structures falls into a no man's land. And finally, remember that the only way that system change emerges is from stakeholder choices and actions.

Dr. Karen Blase: I am going to talk to you a little bit about what we actually mean when we say the word, "implementation." Sharon started with some wonderful artwork, so I will start with some wonderful artwork too (see Figure 1). So there is this challenge, there is a great research coming out of the RTC and out of the field and we need to take that and we need to move it to service. But there is always this research to service gap, and as you have heard, it is just not an easy journey to get there; however we think that the science and practice of implementation will help get us there.

Now for some more artwork—I owe this little story about the life of the research-to-service journey to my friends in California. We were doing some work out there and people were telling their stories and it seemed to fit. I think the idea of research to service for many years was the fairy tale we told ourselves. That is, that once upon a time there were research articles published in journals and then out of that there were good services. Well, that is really a "Once-upon-a-time" fairy tale.

Figure 1
Research to Service

I think the real story starts as the sailor story: "There we were, in the middle of this ocean with sharks and everything going on in the middle of it!" So the question really is, how can implementation be that bridge, that safe bridge in the storm to get you where you want to go? So what do we mean by implementation? I am going to talk about it and will refer to it as a specified set of activities that are really designed to put into practice an activity program, a way of working with guidelines, or a way to operationalize values and principles in a system of care. Effective implementation processes are purposeful—which is a nice reflection off of some of the things Sharon was talking about—and can be described to others and can be observed and measured. This whole area of implementation is very interesting because, while you have spent so much scientific time on better interventions and better approaches, I think we need to come to understand that there are two parts to the equation. There are *effective intervention practices and programs*, but they have to be married with *effective implementation practices*. And those two things together will get us the kind of outcomes we are looking for.

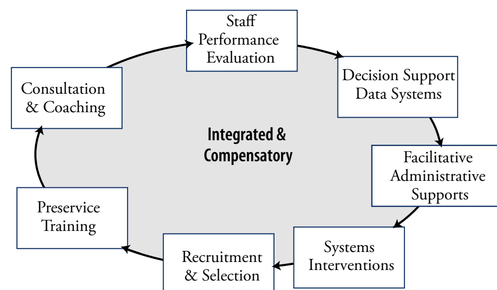
I ask that you think about the word "interventions" broadly, including a system of care perspective. Think about it also as the values and principles of a system of care. Think about it as cultural competence, think about it as family driven, think about it as you guide it, etc. So you need those things, they are part of what you want to change in the system. But you also have to have a set of implementation strategies and practices that are also effective for making those come alive in the environment. Primarily the importance is in part that they are trying to change the behavior of well meaning adults, human service system adults, finance managers, state legislators, family advocates, youths in the youth movement—and all of our behavior has to change. I am now going to speak anathema and Bob may chase me off the stage. But I am going to quote my friend, Jim Wotring, in that "systems don't change," Jim says, "people do." So part of what I am going to talk about is how we can help people change that will result in system change. Additionally, the science of implementation is thin, it is new, it is just beginning, and we have a hard time looking at our own behavior.

We had the privilege through a WT Grant Foundation grant to look at implementation literature across domains. We learned a lot from the 377 significant articles that represented everything from case studies, etc.—but there were really only 22 that reported the results of experimental analyses or meta-analyses—and this was across business, medicine, cancer studies, mental health, and substance abuse. So the science of implementation is just beginning and when you are at the beginning of a science, I think it behooves you to both continue to learn from the science, but also to learn from practice. So from the scientific piece we looked at program development and replication data, and we had meetings with researchers. We are just in the analysis stage of a qualitative study of 64 program developers and how they help other agencies—but we also learned from practice; we have done concept mapping with different groups, and we have a wonderful network of people to learn from. And we need to learn from best practices. So—what do we know from both the science and the practice of implementation? Well, the good news is, implementation issues are very common across diverse domains, whether it is bridge maintenance, weed control, forestry, mental health, substance abuse, or hotel management. So that is good news. And the other good news is that implementation solutions seem common across widely diverse domains. That gives us a lot of hope; that means that we can learn very quickly as science comes on board about the factors that are important to implementation. Well, what have we learned? Well, sadly we always get to learn about things that are ineffective, so there is excellent experimental evidence for what does not work.

Implementation, diffusion and dissemination of information by itself does not lead to successful implementation; we can write all the manuals we want, publish all the briefs, and all the research findings that we develop, but that will not get us to implementation. And training alone, no matter how well we do it, no matter how skillful we are, will not lead to successful implementation. Now—I have learned to modify this speech at this point—it does not mean that these are not important, it just means that you won't get to implementation with these tactics. How many of you are familiar with the Prochaska & DiClemete's theoretical model of change? The "Reader's Digest version" of their model is that when people don't know something exists or haven't really thought about changing, they are in what is called pre-contemplation or contemplation, and in that stage they need a lot of information about the "why" and the "what" to get interested and motivated in making a change. So these kinds of strategies are very important for motivating change, for getting people interested in finding information about the "what" and the "why." Beyond that though, you have to move to get people to action. These are all good strategies for getting action in the field.

The other things that we have learned from business—this is from 400 business case studies by a man named Paul Nutt in *Why Decisions Fail*—and this has some messages for our federal and state partners about how they do legislation and grant writing. That is, implementation by edict or by persuasion means that "we have decided that we are going to spend X amount of money on evidenced based programs and you all figure it out." According to Nutt, implementation by following the money does not work. "Okay, we got us a grant writer, let's go after this money and then what did we promise to do?" Implementation without changing supporting roles and functions also doesn't work—as if you could try to keep shoving it into the existing framework. Thus, I would like to spend most of my time, my little remaining time with you, talking about these implementation drivers (see Figure 2), because I think they fit well with some of what Sharon and Bob talked about in terms of leverage points, to actually translate values and principles and beliefs of system of care into action.

Figure 2
Implementation Drivers



You saw how important it was that you act from a position of values and beliefs related to systems of care, but how do you actually create them? What do you actually do to create those values and action? Having goals enables action, but what are the actions you take to achieve those goals? So these ideas are from the literature—and some of these have some best practice literature underneath them that we won't go into—but if you are making a change and these are the leverage points that you have, really there should be arrows, those feedback loops running between all of them, it should not be this nice little circle—I just have very limited artistic abilities and this is as good as it gets—[draws picture] so let's take the example of "family driven" in your community. If in fact you want a family driven, family respectful system, that would probably tell you something about what your interview instruments look like and who you recruit and how you recruit them so they are a good fit for you. We had a family based program and sometimes we interviewed people who believed that families were toxic, and we had a good enough protocol that would find out that, well, they were not a good fit for what we wanted to do.

So then, *training*: if you believe family driven is important, what do you do in your community to train people about what family driven means, how it goes on, and what are the actions that you want taken in your community? Then *coaching*: how often do you sit and debrief after something and coach yourselves about, how did we do today on family driven? Staff performance evaluations: are they evaluated by families about how respectful they are and how well they work with families? Decision support data systems: what percentage of our treatment team meetings or wraparound meetings had a family member present and during what percentage of those meetings did that family member speak independently and comfortably? These would be some examples of data about family driven services. Facilitative administrative supports: these are designed to make the work of the system easy. So what are we doing to make it easy for families to participate? Do we need to change the time of our meetings, or what do we need to do about transportation? *Systems interventions*: what kind of rules and regulations do we have in our community that are preventing families from participating with us and how do we feed information back up to policymakers about that?

I believe we can take each value and principle of a system of care and say that these are ways that work to operationalize and make those values and principles come alive. These are also the same drivers that we find in effect for evidence based practices that make them work well. They are also the same drivers that can make a very smooth running and effective intervention program as well. The feedback loops here are multiple and evolving; you take time out from your work to look at what you are doing and to inform each other. So your trainers might say, “I don’t know who you have been picking but wow, you mispicked these folks, here is some feedback for you on the recruiting end.” Coaching: you might have feedback from both the training and the selection people who say “Wow, this is a great group to coach, they get it, they get it fast, you did a great job training them.” I think what is important is the feedback here, and the good news for us is that it is not linear; it is integrated and compensatory. What do we mean by that? We mean—and I think Sharon talked about this in her studies of those sites—that there was a real consistency among philosophy, goals, knowledge and skills inside each of those processes. So, I interview you and say, “Gee, we are really all about families and family inclusion” and then you go over into your office and your supervisor says, “Oh I know what they told you in training, but really that is not how we do things here.“ But no—instead there is real integration, they all play off of one another in a way that works.

The other good news is that they are compensatory. If we didn’t get quite where we wanted to be with a value or principle in training, we got there more fully with coaching—and coaching that looked back again and again. Or maybe we didn’t quite get there, but maybe we will get some motivation through our staff evaluation procedures. So if we don’t have very much money to invest in training, well then we know we better be investing in selection and investing in our evaluation system. So these factors can compensate for one another and are not linear and can improve how we think over time. We see from reading the literature that lots of research still needs to be done on implementation. Further, the literature indicates that organizational change really requires an analysis of all the factors that can hinder and facilitate work at the community level. The work that families do, that the youth driven movement does, or that practitioners do for example, can be seriously inhibited by how the setting is established, by what is going on in the system of care. State policies are a big problem. Sometimes, federal policies and coordination are a big problem—so you are really looking for very active alignment and, very importantly (like we heard from Humbolt County yesterday) very active processes to hear from the practice level and a commitment then to have that drive policy change. And policy changes, so that kind of backward policy mapping—where you are really taking the information that is going on in the field and feeding it back up to the policy level and having a committed partner at that policy level say what changes need to be made in order to get rid of those particular barriers as well.

So this alignment business is no small matter; it takes a number of years and a lot of work, but again the trust that needs to be there, the commitment, the clear communication, the frequent feedback loops, are all absolutely key to that. And finally, out of all this we have a clear view about what we want to do. But some Grand Canyon hiking advice is, “Don’t mistake that clear view for a short hike.”

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