#### Aleta Angelosante, Ph.D.

According to the Centers for Disease Control, nearly 20% of all youth in the United States have a mental, emotional, or behavioral disorder; yet only 1 in 5 of those receive treatment for those disorders. And of those who do receive care, only a small percentage receive evidence-based mental health care. Improving access to quality care, therefore, needs to take two paths: (1) improving the training in and implementation of evidence-based care for mental health clinicians and (2) increasing training of and access to resources for non-therapists (e.g., community leaders, mentors, teachers, school nurses, etc).

As someone who trains clinicians throughout the state of NY who serve the youth with greatest need, I have seen firsthand the wide variation in training that clinicians receive. Here is an excerpt of an email I received from one of my current trainees:

I haven't been working as a clinician for even 3 months yet, and I am struggling heavily to adapt to the workload of this field. In an effort to also be completely transparent, the [CBT] model is really antithetical to my education I received for mental health counseling, so I am struggling with time management and approaching this from a CBT lens...in all honesty, it feels like I am learning a second masters education on the fly and it is not easy.

This email highlights to me the importance of early and improved training of our mental health workforce in ensuring that all youth have access to high quality care. This early training could take various forms: (1) working with states to mandate evidence-based practices as part of the curricula of graduate programs in state-funded schools; (2) working directly with graduate programs to increase teaching and training in evidence-based practices; (3) increased free or low-cost training in evidence-based practices offered by state agencies.

Even if training increases within the current mental health system, it is not possible for the current mental health workforce of masters and doctoral level providers to reach all youth in need of services. As such, it is important that training in, or access to information about, evidence-based practices is made available to other important adults in the lives of youth. This can be those in more informal roles (school nurses, coaches, mentors) or finding roles in the

mental health workforce that can be filled by those with Bachelor or Associate level degrees in order to expand the scope of what is available to kids in need of care. While training would be ideal, even freely available, widely known, resource libraries could go a long way towards providing valuable information to those who are in contact with youth.

### Adam Bernstein, Ph.D & Heather Brennan, Ph.D.

Challenges Scaling Evidence-Based Interventions for Youth Behavioral Health: Scale, Fidelity and Funding

Omaha 2 Meeting

February 1-2, 2024

Ubiquitous examples of pain, suffering, tragedy, and misfortune in our society remind us of the importance of our goals of improving human functioning and yielding better lives for families and communities. Science offers a powerful strategy for managing the inevitable uncertainty in pursuit of these goals. However, the complexity of leveraging science to optimize or even just improve service has proven substantial.

#### Problem

Access to mental health services for youth has expanded in recent years with an abundance of mobile apps for therapy and support. In addition, with the sheer number of youth and young adults requiring behavioral health services, technology is also providing access to paraprofessionals or coaches to support the behavioral health journey. While services and service providers expand, so must our ability to bring science and evidence into the process of clinical care. There are key issues that exist with scaling evidence-based care, including but not limited to: 1. evidence-based treatments cannot exist for every child and context, 2. increasing reach requires multiple approaches to fidelity and how we package knowledge, and 3. long-term success likely requires significant technology considerations and investment. We discuss each of these issues below with recommended next steps and options.

#### Discussion

The below description of the MAP system comes from an edited version of the following peerreviewed paper:

Chorpita, B. F., & Daleiden, E. L. (2014). Structuring the collaboration of science and service in pursuit of a shared vision. Journal of Clinical Child & Adolescent Psychology, 43(2), 323-338.

And other material below similarly draws from published works from our team. This material thus should not be circulated beyond the group meeting in Omaha, NE in February 2024, organized by Bill Reay, without obtaining permission first.

1. Evidence-based treatments cannot exist for every child and context.

The evidence-based practice movement of the past several decades represents a revolution in the science of psychosocial treatment service quality. However, there has been a growing realization that evidence-based treatments (EBTs) do not -and simply cannot - exist for every child and context (cf. Kazdin, 2008). Our team's research demonstrates this issue empirically through a method called "relevance mapping" that tests all possible combinations of EBTs to see which are most relevant to a particular service population on dimensions such as problem, age, and gender. For example, in our investigation with youths from the Hawaii state public mental health system, even the optimal combinations of treatments applied to a maximum of only 71% of youths in the system (Chorpita, Bernstein, et al., 2011). Similarly, in our investigation with youths from a large California private mental health and child welfare service agency, the best possible sets of treatments served a maximum of 64% of youths (Bernstein et al., 2015). Yet the situation is likely even worse for most actual service systems. These estimates are quite optimistic in that they assume all of the relevant treatments from a comprehensive review of hundreds of RCTs to be available, that a sufficient workforce is trained in these treatments, that they are distributed geographically and organizationally so that all members of the community have access to them, and that all youths who receive them respond positively, such that they no longer need additional services for the same problem when their treatment episode is complete. For actual service systems, the problem is much more severe.

The PracticeWise Managing and Adapting Practice (MAP) system addresses the problems of coordinating multiple EBTs and provides a consistent framework to serve youths who are either not covered by or do not respond positively to the EBTs in a given service array. MAP is designed to preserve the strengths of the EBT approach as well as those of the other dominant paradigm influencing our service systems across recent decades: individualized care approaches such as Systems of Care, Comprehensive Planning, and Wraparound Service Models. MAP achieves this by offering personalized interfaces with the body of scientific knowledge, as described in the examples below.

The MAP approach is expansive, including direct service, supervision, consultation, professional development, and quality management components. MAP's direct service component is more like a treatment selection, design, implementation, and evaluation kit than a treatment itself. It is organized by sets of core concepts and decision models and uses specialized knowledge resources to inform key decisions in service delivery. For example:

- It employs a structured, searchable database of hundreds of randomized clinical trials (PracticeWise Evidence Based Services Database; PWEBS) to help develop an initial treatment plan and support ongoing decision making. The PWEBS application can return all treatments at a user-defined strength of evidence that match a given youth's characteristics. In other words, if a treatment team wishes to know what treatments meeting a commonly used definition of "evidence based" are suitable for a 9-year-old girl with disruptive behavior, PWEBS returns lists of all matching trials, all matching treatments, an aggregate summary showing the relative proportions of treatment types (e.g., parent management training, problem solving training), settings (e.g., clinic, school), and formats (e.g., individual, group). Thus, MAP's direct service component guides the user to select an existing EBT if it is available in the system.
- When a standard EBT is not available (or has been tried and failed), the MAP user can then design a treatment using procedures that are common to the matching treatments (in this example of the 9-year-old girl, 45 evidence-based protocols tested in 39 randomized trials). Practices distilled from the aggregate literature ("common elements"; Chorpita, Becker, & Daleiden, 2007) are listed and sorted according to the relative proportion of specific elements common across all of those protocols (e.g., 60% of all evidence-based treatments matching this 9-year-old girl used a rewards procedure). Providers can organize those elements into a plan according to common coordination rules derived from the treatment outcome knowledge base ("treatment pathways"), and specific therapeutic activity is then guided by a Practice Guide, a "how-to" knowledge resource that codifies the important steps of performing each practice element.
- Whether services are delivered through existing evidence-based programs or assembled from components, the MAP system also adds a unifying evaluation framework to track outcomes and practices. MAP uses Clinical Dashboards as a knowledge resource to organize and deliver messages from multiple evidence sources and multiple parties into a collaborative

workspace (cf. Chorpita et al., 2008). Clinical dashboards present case context, progress, and practice history on a single display. Essentially, dashboards are a telecommunication tool that support feedback, feed forward, exploration, and simulation.

Applications of the MAP service architecture have been promising in terms of youth outcomes (e.g., Daleiden et al., 2006), and provide a framework for providers to treat youth that do not fit in the sometimes narrow parameters of EBTs. The goal from here is to expand the reach of MAP applications. By extending reach, we believe MAP can serve as an example of new paradigms for leveraging science to meet our shared goals of improving human functioning and yielding better lives for families and communities.

2. Increasing reach requires multiple approaches to fidelity and how we package knowledge.

Today, more and more organizations are being created to increase access to evidence-based psychosocial interventions (EBIs). While there are many considerations for these implementation organizations (organizational/corporate structure, comfort with "marketing", "promoting" or "commercializing" treatments, Intellectual Property (IP), access to funding/capital, cost-effectiveness, financial feasibility), we propose that fidelity versus reach is an essential tradeoff to consider, and that transformative solutions require rethinking how we approach both fidelity and the packaging of scientific knowledge related to psychosocial intervention.

In traditionally packaged EBTs, fidelity primarily means delivering an intervention in the same way as done in a clinical trial. In our example of MAP, fidelity takes on additional meanings, with the foundation being that clinical reasoning be based on evidence (e.g., if decisions will be made about adaptations to treatment, outcome measures must be gathered frequently enough to precede those decision points).

In 2023, Crane et al. published on the question of implementation organization's role in scaling EBIs. We highlight below the questions from Crane et al. we believe are most important to answer to prepare a framework for successful scale of EBIs:

1. How much and what type of training and consultation is needed to maximize client outcomes?

- 2. What type and level of fidelity or program integrity is needed to maximize client outcomes?
- 3. Who are the most appropriate practitioners for training and why?
- 4. Are certifications /accreditations an effective way to increase EBI fidelity and in what timeframe?
- 5. What adult learning/training experiences are most effective and how can asynchronous training be more refined? How can technology (AI) be leveraged here?
- 6. How is successful implementation defined? What parameters of implementation are most important?

By researching these questions, we can begin to build a strong framework for the best approaches to EBI scale for optimum outcomes and community impact.

3. Long-term success likely requires significant technology considerations and investment.

Approximately 14M youth and young adults are treated for mental health and behavioral health services in the US each year, which represents less than 50% of those with mental health disorders (SAMHSA; N-MHSS Report, 2020). In recent years, a surge of behavioral health and wellness apps have popped up on the market in an attempt to meet children (and adults) where they are and offer wider access to support.

For many decades, the mental health industry saw very little attention from private equity and venture capital firms. This changed coming out of the pandemic. In 2021, \$3B of venture capital funding went to mental health companies and technologies, up 7x that of 2015 (Rock Health, 2021). Although 2023 saw a slow-down in funding, there is still strong momentum and excitement from funders. Based on market conditions, funders are simply becoming more selective in their investments and are looking for more data around return on investment. Areas that will take more of the focus for 2024 are apps and technologies focused on youth and LGBTQ, and technologies that leverage paraprofessionals or coaches to support behavioral health needs (APA, Trends Report 2023).

While the attention to the mental and behavioral health space by investors is exciting, and long overdue, there are bigger questions related to the quality of care and outcomes given the paucity of data on the long-term success of "treatment through app". These companies are leveraging technology and funding to achieve scale, but are they able to effectively treat the youth they are reaching? This is where the intersection of scale of appropriate EBIs, technology and investment can come together. As investors become more savvy regarding their funding of mental health service and technology, they are looking to ensure that treatments are, in fact, working. It isn't enough anymore to have a unique technology that enhances access, outcomes must be demonstrated.

The opportunity for EBI implementation organizations to partner with behavioral health technology companies (Electronic Health Record companies and mobile app companies) creates a natural channel for access of the EBI to a broad network of clients. By researching answers to the questions in #2 above, and designing business models that leverage channels for optimum reach (partnerships, technology, direct to consumer), EBIs – and the scientific knowledge behind those interventions – can be scaled into myriad new contexts for improving the lives of youths and families, and we believe investors would look favorably upon business models with this goal in mind.

#### References

American Psychological Association. As funding cools, venture capitalists shift investments in mental health. Trends Report, 2023.

Bernstein, A., Chorpita, B. F., Rosenblatt, A., Becker, K. D., Daleiden, E. L., & Ebesutani, C. K. (2015). Fit of evidence-based treatment components to youths served by wraparound process: a relevance mapping analysis. *Journal of Clinical Child & Adolescent Psychology*, *44*(1), 44-57.

Chorpita, B. F., Becker, K. D., & Daleiden, E. L. (2007). Understanding the common elements of evidence-based practice: Misconceptions and clinical examples. *Journal of the American Academy of Child & Adolescent Psychiatry*, *46*(5), 647-652.

Chorpita, B. F., Bernstein, A., & Daleiden, E. L. (2011). Empirically guided coordination of multiple evidence-based treatments: An illustration of relevance mapping in children's mental health services. *Journal of Consulting and Clinical Psychology*, *79*(4), 470-480.

Chorpita, B. F., & Daleiden, E. L. (2014). Structuring the collaboration of science and service in pursuit of a shared vision. *Journal of Clinical Child & Adolescent Psychology*, *43*(2), 323-338.

Crane, M.E., Kendall, P.C., Chorpita, B.F., Sanders, M.R., Miller, A.R., Webster-Stratton, C., McWilliam, J., Beck, J.S., Asen, C., Embry, D.D., Pickering, J.A., Daleiden, E.L. (2023) 18:24. The role of implementation organizations in scaling evidence-based psychosocial interventions. *Implementation Science*.

Kazdin, A. E. (2008). Evidence-based treatments and delivery of psychological services: shifting our emphases to increase impact. *Psychological Services*, 5, 201–215.

Rock Health. A defining moment for digital behavioral health: four market trends. March, 2021.

SAMSHA. National Mental Health Services Survey, Data on Mental Health Treatment Facilities. 2020.

TalkSpace, Inc. Q3 Earnings Report, Nov 2, 2023.

# Leonard Bickman, Ph.D.

# Response to questions for Omaha 2 meeting

My response focuses on the issues I have raised at the last Omaha meeting and the recommendation of the Center for Mental Health's National Advisory Committee (NAC) to the Center Director in August 2023. The recommendation to form a subcommittee of the NAC to help implement a new infrastructure to deliver mental health services has not been acted on as of this date.

1. Identify sustainable innovation pathways with clear value propositions for mental health/behavioral health organizations.

I identified the limited real-world effectiveness of current treatments as the major problem. It is not productive to primarily focus on access without assuring that the treatments provided are effective. Despite preventive and treatment services for child mental health, a disturbing surge in youth depression, anxiety, suicide rates, psychiatric admissions, and risky behaviors is evident (Hoagwood et al., 2020), which may reflect not only the limited access to services but their insufficient effectiveness.

- Establish an initial "use case" library of goals, relevant contextual information, steps to take, and resources needed, tasks pre-conditions, postconditions, and desired results.
  Overcoming the barriers to effectiveness can include the following goals:
  - Adopt value-based healthcare.
  - Enhance the use of measurement-based care.
  - Include measurement feedback systems in mental healthcare systems.
  - Employ task shifting and practical evidence-based treatments.
  - Increase the use of precision mental health and AI integration.
  - Employ causal data sciences and decision support systems in intervention development. The **steps** to take to accomplish these goals start with developing and implementing a robust infrastructure to support these goals. The steps required include:
    - Support the development of a comprehensive consumer-centered data collection process and depository freely available to researchers, providers, and consumers.
    - Install modern operational processes and software.

• Provide providers with ongoing training and assistance.

The Tasks include:

- Leveraging Existing Resources: work with Certified Community Behavioral Health Clinics (CCBHCs)
- Engage the Center for Mental Health Services to implement the NAC's recommendations in this domain.
- 3. Explore policy relevant to funding supportive technology to improve and extend the current youth behavioral health workforce.

The limited effectiveness and the number of workers needed to deliver effective treatment is a significant but not necessarily the most important problem and is included in the above.

## Bruce Chorpita, Ph.D.

This material was adapted from a peer-reviewed paper as well as a brief summary composed for the first Omaha Summit in August, 2023.

Chorpita, B. F. (2019). Metaknowledge is power: Models to address unmet mental health needs. *Journal of Child Psychology and Psychiatry, 60,* 473-476.

The crisis in mental healthcare is longstanding, unambiguous, and uncontested, and we should be deeply concerned. Human suffering due to mental health concerns is extensive, and only a fraction of it is addressed, despite decades of public and private investments in solutions. On a global scale, most people with needs still get nothing at all, and the rest often get something that has little chance of helping. There are incentives for researchers and policy makers to come up with quick and simple answers to this complex problem ("everything should be free and open source," "simpler solutions will be scalable"), which are a distraction from the core strategy failure of how humans have built organizations and infrastructure to take care of their mental health concerns.

In a position paper in 2019, Kazdin eloquently described multiple factors contributing to this failure, all of which are widely recognized, including cost, stigma, policy, service accessibility, and an insufficient workforce. In a critique of current psychotherapy delivery models, Kazdin also challenged three major cornerstones of traditional psychotherapy: how it is delivered, who can deliver it, and where it is delivered. I responded at the time saying that we need to take the challenge one step further (Chorpita, 2019), noting that these limitations of treatment delivery models are fundamentally linked to a deeper problem with the knowledge architecture in clinical science. Simply put, we package what we know from research in ways that serve the needs of researchers and publishers, but the stored knowledge is fragmented, difficult or impossible to retrieve, exceedingly complex to aggregate, and nearly impossible to use for those in the service world who are concerned with helping others—I am waiting for someone to disprove my claim that at least 99% of children's mental health service systems are unprepared to use 99% of the clinical trial literature in children's mental health.

#### **The Problem**

We have packaged what we learned about improving human functioning into discrete 'treatments,' reifying them into highly specified products or procedures. This model was created through decades of research, with an emphasis on randomized trials, manualized treatments, and replication with fidelity. Yes, it moved the field from a worrisome practice climate with few guideposts, but it is time to reconsider these models and their utility for maximizing health impact. Ironically, the tools and conventions that built our research evidence base may now limit the application of that very same evidence base. How is that possible? It is because conceptualizations of evidence-based treatment that have prevailed for roughly 30 years have focused practice and research policy far more on the products of research than on the emergent knowledge behind them, transforming an industry of knowledge discovery (e.g., academic research) into an industry of product development and validation. We are now limited by its implicit assumption that only the products are useful (e.g., specific manuals, as recognized on registries) and not the generalized knowledge they represent (e.g., rewards can increase the probability of future behavior). The problem is compounded by academic incentive structures for innovation, which means that the field's most capable minds are encouraged not to collaborate or coordinate their discoveries, but instead to reinvent the wheel, with a different name or brand for treatments with almost entirely the same procedures (see Okamura et al, 2019). We now have 1,004 manualized evidence-based treatments for youth, which are primarily reassemblies of the same clinical procedures that have existed since the 1980s. Consequently, we have also wasted almost two decades investing in fidelity measurement and protocol hyper-specification, when evidence overwhelmingly suggests that there are many different effective ways to reduce anxiety through exposure, to reinforce positive behaviors, or to boost mood using pleasant activities. The current paradigm carries an insurmountable burden of testing, replication, and selection. Randomized trials for all interventions in new and diverse formats, in all contexts, with every workforce, with every culture, in every setting for every age group cannot be achieved, even if all research shifted from developing treatments to testing their contextual extensions. The problem is similar with respect to choosing among treatments already found to be effective. For example, picking only five evidence-based youth treatment programs to be available in a mental health system from an evidence base of 1,004 yields over 8.4 trillion possible treatment arrays. Administrators cannot make these choices without consequential errors. The paradigm grows

even more troubling where it intersects with implementation science, which would mean that nearly limitless validations are then multiplied by the burden of replicating specific implementation methods. We should therefore move away from thinking about highly specified 'treatments' and begin to think about therapeutic action in an entirely new way.

#### A Knowledge Management Perspective

Addressing unmet mental health needs thus requires moving the knowledge behind the evergrowing list of treatments into as many relevant decision-making contexts as possible. A concrete illustration of this difference is that maintaining a 'treatment' perspective might suggest that a version of parent management training should be offered through an online social media platform, where it will reach more people, more cheaply, with less stigma. However, a knowledge management perspective would propose that all actionable elements and principles of parent management training should be distributed beyond formal treatment contexts. For example, the utility of labeled praise to increase desired behavior should be shared through social media, promotoras, or mobile apps not only with parents in need, but also with school bus drivers, teachers, soccer coaches, store clerks, custodians, and librarians, because they all encounter the very same children those treatments are intended to support. If you can ask your phone where to get a cheeseburger, then you should be able to ask how to help your child fall asleep, how to approach making friends, or how to improve low mood. The internet is often used this way already, but because the underlying architecture is not there for mental health, the quality of information is unknown and often risky (King et al., 2021). We should all be able to ask questions to the evidence base and get trusted, scientifically grounded answers.

One way to think about this issue involves how we might classify what is known. For example, researchers have the job of addressing the "known unknowns," i.e., asking the questions that we know are at the edge of discovery and to move the boundary outward (e.g., how can we make CBT for depression work faster?). But there is no comparable institution or workforce to attend to the issue of the "unknown knowns" (e.g., Is there an effective behavioral treatment for OCD? Yes there is, but not everyone is aware of it). With respect to technology, robust tools already exist for search, aggregation, and visualization—for converting the "unknown knowns" into "known knowns." Although knowledge sharing is only part of the equation (getting informed

people to act on what they know is another problem to solve), I would argue knowledge is a precondition for promising goal-directed action, and it is worthy of pursuit in its own right.

#### A Caveat

Removing the specific requirements of thinking solely in terms of treatments risks painting a vague picture in which any approach to helping people is as good as any other—a chaotic lack of conventions and standards. To be clear, a vision of therapeutic activity that is not limited to or bound by 'treatments' is certainly still limited to and bound by evidence. This is not a call for lack of order—quite to the contrary, it is a loud call for an ordered framework, a defined knowledge architecture, complete with semantic representations and formal knowledge provenance, for how to make best use of what we know, whether through defined treatments or otherwise. It is a call for metaknowledge. To that end, Eric Daleiden and I recently articulated principles of Coordinated Strategic Action (CSA; <u>Chorpita & Daleiden, 2018</u>), which involves the purposeful arrangement and management of resources (e.g., people, technology, knowledge or evidence) and activities (e.g., training, coaching, delivering therapy) in pursuit of established therapeutic goals.

This reorganization will not be simple, and it will not be free. But it could finally create an enduring infrastructure that is cumulative and actionable. Sophisticated practices for managing large evidence bases exist throughout other industries (e.g., streaming movie recommenders, faceted searches for retail items), but they are largely absent in mental health (see our 2022 National Academies of Science report on the need for ontologies in behavioral science). We need to organize what we know around specific use cases in clinical service contexts and in all contexts in which youth mental health functioning is potentially modifiable. Robust models for this approach exist, and they have the potential to enable new workforces, new tools, as well as the many new delivery formats called for by Kazdin in 2019. We can achieve a vision of *therapeutic intelligence*, in which we have tools that make everyone work smarter, regardless of their credentials, and that can answer the basic questions from professionals, parents, teachers, and community members about what to do when for children in need.

I look forward to working together on a plan for aligning individual and organizational interests to creating the technological infrastructure for us all to collaborate better. Because it will take work and effort and change, I also hope we have clear eyes about how this infrastructure will need to be incentivized and durably supported, given that urgent calls to solve the children's mental health crisis are now in their 6<sup>th</sup> decade (Joint Commission on Mental Health of Children, 1969).

# Eric Daleiden, Ph.D.

# Cumulative Information, Coherent Knowledge, and Coordinated Action

Kismetrics, LLC

## Statement of Problem

Despite four decades of the system of care and evidence-based services movements, significant investment of resources and human action, the generation of a voluminous scientific literature, and scores of system reform implementations throughout the country, the prevailing sentiment drawing us to gather in Omaha today is that the United States is in a mental health crisis. We've been working hard, trying new things, holding ourselves to account against a standard of empirical evaluation, and achieving pockets of success in reducing stigma and raising public awareness, identifying sets of actions that have a better than not chance of helping people make progress on their goals, and in "seeing" our successes and failures on more devices in more diverse environments. In this context of rapidly accumulating data and information, we are faced with the "problem" that knowledge is individual.

In other words, knowledge exists as the percepts and concepts of the knower. To share one's knowledge, that knowledge must become action, perceivable as an experience by another individual to potentially participate in that other's knowing. As such, we may organize individuals, communicate signals that imperfectly represent aspects of knowledge, and create conventions to facilitate interpretation of perceived signals into coherent knowledge by another individual.

## **Consideration of Solutions**

With this conceptualization, we may see opportunity to improve our systems and mechanisms for achieving cumulative progress and coordinated action through social technologies that enhance the organization and participation of individual knowers, conceptual technologies that improve the representation, reasoning, and specification of action and convention, and communication technologies that improve interoperability and tooling to implement complex action.

To name such a grand solution, we might say we could use an accumulative collaboration environment for behavioral health. Such a solution would consist of social and artificial components. The social aspects would include a facilitating/governing structure, a network of participating entities (organizations and individuals), and mechanisms for interaction among network participants. One might also hope for environmental values of dynamism (i.e., embrace of change), diversity (i.e., freedom for local differentiation), and development (i.e., change and differentiation are not isolated, but coordinated with the environment in a cumulative, maturational process [c.f., Werner's orthogenetic principle that development proceeds through increasing differentiation and hierarchic integration]).

Imagine a network that is cross-disciplinary (logico-bio-psycho-social), cross-functional (service, science, administration), supports multiple ownership and licensing frameworks (open, proprietary, and hybrid), and transacts in multiple currencies (dollars, citation tokens, etc.) using a distributed ledger. Individual agents work in a "standards-plus" model to connect with the environmental conventions (standards) but systematically construct novel components that need not be constrained by those conventions. Novel components would be "mapped" to the conventions to support interoperability where possible and to clearly communicate the novel additions to other network entities so those other entities may develop understanding and build upon the innovation. In addition to current goods and services (e.g., storage, compute, applications, and labor), *Concepts* (or more properly the specification of conceptual conventions), and *Observations* (the description of events and objects using concepts) would play important key roles as resources for storing value and as the goods of exchange.

The artificial, mechaniistic component of the environment might include coordinating marketplaces and libraries for discovery and transaction of value. The prevailing conventions of the environment could be used to organize such coordinating mechanisms, but given current frameworks, imagine seeing exchanges for semantics (e.g., ontologies, terminologies), transducers (instruments and indicator sets), and logics (algorithms, analytics, and reasoners) in the conceptual space, and exchanges for information sourcing and interoperability, appliances and tools (search, aggregation, accumulation, decision-support, direct action, etc.), and natural language and multisensory messaging in the communication space.

Historically, we have had strategies serving similar functions, such as institutions of public funding for service and science; university centers for research and training; incentive systems favoring quantity of communication and differentiation of low-risk knowledge production; and communication through units of research papers, manualized protocols, and some emerging taxonomies of pathology and services. Our transactional economy involved buying a dictionary of concepts and their definitions, an instrument for assessment, a treatment manual for procedural instructions, a textbook for theories of pathology, a training workshop or college course for social discussion, interpretation, practice, and feedback.

Advances in information and communication technologies have yielded remarkable tools for the formalization, packaging, and delivery of resources at large-scale. Imagine if each *Concept* is objectively referenceable, each *Algorithm* and *Observation* are coded and linked based on the *Concepts* they entail. The use cases are massive. If given an object (e.g., a child performing some behavior), we could find a name for it, find references to associated concepts (e.g., other behaviors that may be part of a syndrome), use known relations to perform functional analyses, reason to candidate substitute behaviors, list known instructions for regulating the behavior, generate indicators for measuring change, and simulate the likelihood of success of following known instruction sets. Each resource transaction in the production chain would be monitorable and provide a potential mechanism for the distribution of value to the resource creator and provider.

Our institutions, incentive systems, professional behaviors, and transactional economy have not sufficiently evolved to capitalize on these new technologies for production and exchange in the interest of mental health and well-being. Culturally, the "great generation" notion of 'progress' gave way to the value of 'disruptive innovation' for the past several decades, and not surprisingly, we find ourselves in a disrupted, fragmented society with remarkable technological potential. Grandiose by request, this "solution" of renovating our infrastructure and aiming our technology at cumulative and collaborative endeavor might foster a maturational process that yields systematic progress in the field of mental health.

## Kimberly Eaton Hoagwood, Ph.D.

Policy Options for Promoting Youth Peer Leadership, Advocacy and Support

January 22, 2024

For Omaha 2 Meeting Jan 31-Feb 2, 2024

#### Premise

Youth peer support and leadership has been the focus of national and state policy development since 2007, when Youth Move National was founded. It has now expanded to 60 chapters across the country. Other national organizations, such as Mental Health America, are promoting youth mental health advocacy through policy and leadership academies. There are also hundreds of grassroots organizations that are supporting young people in helping each other deal with the challenges of living a productive and meaningful life and managing their mental and other health-related issues.

The lens by which the youth movement supports youth mental health differs from the adult peer support/consumer movement in several important ways. First, the principles of its foundation align with resilience, strength-based services, cross-system experiences, social impact, and entrepreneurialship. They are less focused on issues of psychopathology and psychiatric diagnoses. Second, the youth movement draws its power from grassroots and community-based networking, not from traditional service sectors. Thus it tends to be community-oriented and cross systems. Third, the focus of youth-supported peer services importantly attends to social issues, employment options, technology innovations, along with healthy functioning. As one of the youth leaders stated when describing the plethora of youth-led organizations, "These are all organizations that are "consolidating" mental health/ social impact youth innovators in one place."

To advance policy options that will promote youth mental health, we need to focus on facilitated access to evidence-informed resources (such as PracticeWise ©), use of technologies and social media platforms led by youth leaders, improved access to community-based youth peer support services (in schools, FQHCs, churches), and facilitation of socially meaningful employment opportunities. Rather than promoting a 1960's mental health system (largely clinic-based), we

should be strengthening the capacity of youth leaders to provide peer-support services in every community. This requires research funding prioritization, community-development policy expansion, and broadening of funding opportunities.

# Recommendations

1. NIMH and NICHD should create targeted research funding opportunities directed at strengthening scientific understanding of the efficacy, effectiveness, and implementation of peerled services. Additional scientific foci should include examination of the mechanisms of action whereby peer-led services exert their impact, as well as focusing on health promotion within peer-led services and suicide prevention.

2. Americorps Program under its Healthy Futures core should prioritize funding of youth peerled services, to include training and credentialing, which should be locally deployed. The current proposed expansion of funding for this program should target young people in delivering peerled services to massively expand access to health promotion and mental health supports for them.

3. CMMS should explore expansion of rehabilitation options within Medicaid to support provision of youth peer-led services by trained and credentialed youth peers, modeled after the credentialing process for family peer support services.

4. Mental Health America, YouthMove, and the credentialing bodies for nursing should codevelop a national credential to expand the workforce of youth peer leaders and to provide consistency in delivery of youth peer-led services.

# Resources

- Impact Playground: Impact Playground: Social Justice Education platform for youth.
- Education, mentorship, community engagement, advocacy, career development.
- Based on lived experiences and a focus on social justice causes that are meaningful to each youth (racial injustice, LGBTQIA+, climate, women's reproductive health, etc.)
- Education, certification, and pathway to employment in social impact field of their choice through internships, employment, advocacy, etc.
- Prameelaboorada@gmail.com

- LookUp and Live: This remote program is for exceptional youth advocates, storytellers, and innovators (18-25) with bold ideas - those willing to create campaigns and design solutions to address the youth mental health crisis through digital wellbeing and youth led movements.
  - <u>2023 Innovator cohort</u>: my org was part of their 2023 cohort :)
  - They have an incoming 2024 Innovator cohort
- Young Innovators in Behavioral Health 2023
  - Created in partnership with <u>Hopelab</u> and <u>Meadows Mental Health Policy Institute</u>, the Young Innovators in Behavioral Health awards program recognizes young leaders who have made significant contributions to the access, awareness and advancement of digital mental health care in the U.S.
- <u>Responsible Tech Youth Power Fund</u>: The Responsible Technology Youth Power Fund is a first of its kind philanthropic initiative aimed at supporting youth and intergenerationally led organizations shaping the responsible technology movement. Here are some of the youth-led organizations that focus on mental health:
  - o <u>Seattle Student Union</u>
  - Our Subscription to Addiction
  - <u>Rethink Words</u>
  - <u>Good for Media</u>
  - <u>GenZ for Change</u>
  - <u>Young People's Alliance</u>
  - Encode Justice
  - The rest of their <u>2023 cohort</u>
- HeadStream Innovations
  - <u>Youth Collective</u>
  - <u>Innovators in their Incubator</u>: \*Not all the innovations are youth-led but they are youth-centered
- Mental Health America's Youth Mental Health Leaders Council
  - Most are advocates but some started their own organizations
  - o <u>2023-2024 Cohort</u>
  - <u>2022-2023 Cohort</u>

- o <u>2021-2022 Cohort</u>
- Mental Health America's Youth Policy Accelerator

# Acknowledgements

Huge thanks and gratitude to Prameela Boorada, Robbie Lettieri and Kelly Davis for educating me and providing these suggestions.



#### **Problem/Solution Statement 2024**

# Vanessa Holm, LMFT

Number 1 – Identify sustainable innovation pathways with clear value propositions for mental health/behavioral health organizations.

Number 3 – Explore policy relevant to funding supportive technology to improve and extend the current youth behavioral health workforce.

Pacific Clinics is California's largest non-profit behavioral health provider, with over 2,100 employees serving over 51,000 clients of all ages with behavioral health, social services, substance use treatment, and wellness programs across most geographic regions of the state.

Our Clinical Foundations Skills Development Program (CFSDP) for children was developed in collaboration with PracticeWise and is our Managing & Adapting Practices (MAP) Model of training for direct service providers, evidenced informed clinical decision-making, and direct service tools. Clinical Foundations (CF) Trainings have a total of six, day-long modules, including two introductory modules on agency service philosophies and general evidence-based treatment processes (e.g., treatment planning, routine outcome monitoring) and four modules covering evidence-based practice elements for the top presenting problems for children served at the agency: Disruptive Behavior, Depression, Anxiety, and Trauma. The CF modules are spaced two to three weeks apart to provide a framework of scaffolding of learning to occur.

Progression of employees' learning is monitored through their Learning Record, a self-report tool that tracks their proficiency with CF tools and practices, which is taken to supervision for further learning and skill development after attending the trainings. Employees are provided with opportunities to observe, practice, and rehearse the skills in the trainings, during supervision, through consultation groups (in some regions), through watching direct learning videos, and with the clients and families they serve. A separate training for supervisors exists to prepare them to



support employees with the model. It is important to have a structure in place to support and sustain the skills learned outside of the classroom setting.

For cost-effective, quality sustainability of CFSDP within the agency, we have a train-the-trainer model in which our agency CF Developers (expert trainers who have completed the highest levels of the trainer development process) work collaboratively with leaders and managers throughout the state to identify and

develop internal trainers within clinical programs. The Developers coach skills and provide constructive feedback to trainers so that they can maintain fidelity to the model. There are three levels in the trainer development process – observer, co-trainer, and independent trainer – each with set criteria for promotion. To assist with smooth implementation, the CF Developers established a CFSDP Resource Guide which includes an overview of the program, training protocol and curriculum, strategies for regional implementation, resources, and trainer materials.

The broader problem that Clinical Foundations solves for Pacific Clinics is giving all of our direct service employees a common toolkit for implementing evidence-informed practices across treatment protocols and problem areas, for children up to 18 years of age. It also creates a common language and service delivery system across the state of California. Although our training modules are focused on four problem areas, through MAP and CFSDP, our providers have access to a constantly updated database of Randomized Controlled Trials (RCT) and practice guides for many other problem areas, ensuring that they have the resources to support effective treatment for any child they see.

As part of MAP's routine outcome monitoring procedures, our providers are trained to use clinical dashboards. These are an excellent tool to track practices used and progress on idiographic and standardized measures for individual clients, which thereby informs treatment decisions. Currently, our clinical dashboards are maintained outside of our Electronic Health Record (EHR) in Excel spreadsheets, and this is cumbersome and time-consuming for our employees. A potential technological solution to address this challenge is to find funding to



integrate information tracked in the dashboard with existing documentation procedures in the EHR.

In reviewing our agency curriculum, we have noticed that there was an area of need in developing a similar program for the adult population that we serve. Although a build-your-own evidence-based-practice toolkit similar to MAP does not yet exist for adult clients, currently we are collaborating with the Judge Baker Center to develop a CF for Adults curriculum based on review of RCT literature and interviews with experts. We plan to replicate some of the structures utilized in CF for Children such as the CFSDP Resource Guide, train-the-trainer model, and scaffolding of learning.

#### Pat Hunt

#### Problem Statement for Omaha II

Though families of children and youth with mental health needs are facing a plethora of challenges in 2024, core issues relate to the workforce; the availability of treatment options that are proven to yield positive outcomes, and; access to information to support their treatment decisions.

To further complicate things, many families report that their primary care physicians, pediatricians, and 'case workers' are inadequately informed about pathways to mental health care for them. A December 2023 national focus group facilitated by FREDLA revealed that the majority of participants have had a negative experience when seeking information. They described now relying first on google, second on the lived experience of other families, and lastly on caseworkers and providers. They described their experience with the latter as leading them to inaccurate and unreliable information, saying, "Just because you work in a system does not mean you know that system". Another quote that received support was "Caseworkers and providers who do not understand us or our child's experience make it worse for us".

Workforce issues include not only staff recruitment and retention but also the loss of agencies that provide services over the past few years. Social workers have insufficient training in the application of their knowledge to the real-life experiences of the people they will be serving. They do not know their marketspace. Some agencies have closed their doors because reimbursement strategies have left them little choice – they have been unwilling to adapt their fiscal models, or undue burden has been placed upon them, leaving them unable to compete. Many providers are neither viewed nor rewarded as having specialized talents - or for their willingness to take a risk. I can only suspect there is a race to 'treat' children and youth with the least complex needs because the 'rate is the rate', leaving others to experience the 'fail first' systems that have been established. At the most intensive 'level of non-service', families are losing their children to institutions. Child welfare, juvenile justice, and residential programs are causing bricks and mortar to burst at the seams. This neglect of our children's mental health leaves families feeling like grist for the mill, as the engagement of one system and another validates their failure as parents. Additionally, the policies regulating residential care for mental

health treatment were generated and enforced by systems other than mental health – systems with principles that conflict with the Child & Adolescent Service System Program (CASSP).

Families need to know what treatment will work for their child, where to find it, what to expect of it, and to be served when and where they need it. They currently have little resource upon which to make informed treatment decisions. They watch glitzy ads promising results for their child, or listen to what worked for someone else. They, and their health care providers need a way to access crucial information and identify resources. Politics has no role in identifying best practices, or defining what constitutes evidence - that task is best left to researchers and the families who have participated. Those practices must be available without financial burden on providers. Without that, we are putting a lifelong burden on children, youth, and families.

<sup>i</sup>Thirty-five years ago, the United Nations held the historic Convention on the Rights of the Child. "Out of this convention came a pivotal idea that is both simple and profound:

All children in all countries have the same fundamental rights. From the wealthiest to the poorest, these rights do not change, including the right to proper nutrition, education, healthcare, safety and more. At the center of this document is a critical component upon which most of the other rights are built: That every child has the right to live with a family who loves and cares for them. It was and is a powerful statement that flies in the face of orphanage culture that still exists in many parts of the world today"

"In December of 2019, the UN met again to review progress on these rights and took it a step further, stating that we—as nations of the world—*are no longer going to tolerate our children being raised in institutions. The time has come for change.*" Though we have dedicated the second Sunday in June as National Children's Day, in 2024 the United States still does not have a children's Bill of Rights. Our reliance on residential and judicial settings for youth with mental health needs flies in the face of the UN's 2019 declaration.

So the question remains --- what are we prepared to do about these problems?

<sup>&</sup>lt;sup>1</sup> <u>https://www.miraclefoundation.org/our-work/rights-of-the-child/</u>

# John LaNear, J.D., Ph.D.

# Is Higher Education prepared and/or structured to help solve mental health challenges?

I am a relative newcomer to the challenges identified in the Omaha Meetings. I have, however, worked to develop academic programming at the undergrad and graduate levels for most of my career. Frankly, I'm not sure our institutions of higher education are consistently effective at connecting curriculum development, teaching, and training (and the funding of these endeavors) to intractable 'human' problems. The overwhelming majority of institutions remain committed to traditional methods (or mired in them, depending on your perspective). But, entrepreneurial institutions and individual entrepreneurs in tradition-bound settings can effectively promote alternative approaches. I do believe innovation and entrepreneurial solutions developed by colleges and universities offer some hope.

#### **Problem Statement**

As these features of higher education institutions relate to the Omaha project, I offer two problems for consideration:

- Colleges and Universities are not fully capable of making changes in programming to address the challenges identified by the Omaha group. Neither are they capable (yet) of producing students who are capable of employing emerging sources of data/information in a meaningful way to effect meaningful change.
- 2. Educators are not sufficiently able to integrate with their practitioner/advocate/community colleagues to address problems in a collective fashion.

## **Proposed Solutions for consideration:**

 Colleges and Universities are not fully capable of making changes in programming to address the challenges identified by the Omaha group. Neither are they capable (yet) of producing students who are capable of employing emerging sources of data/information in a meaningful way to effect meaningful change. "Research based institutions are not sufficiently addressing practical problems of measurement" (Bickman, Omaha 2023). Similarly, current public funding models perpetuate that challenge, seeming to focus on a continuation of the status quo and eschewing 'new' approaches.

Invite or incentivize universities to explore new models of education and training. Is the apprentice model working? Does the licensing infrastructure limit innovation? Is there a role for AI or virtual reality that is limited by the licensing infrastructure or pedagogical models? Is the classroom a dead concept? Are research-focused faculty adequately prepared (or incentivized) as 'teachers' or trainers?

Promote and support better cross-disciplinary training by incorporating it into graduate (and undergraduate) programming (Hoagwood, Omaha 2023). Include meaningful use and application of technology and data in this training. Strengthen the

practitioner/faculty/policymaking/advocacy/legal connection – especially in the context of specific challenges. Add a significant public relations component (and professionals) to this collaboration to promote public awareness and action.

Promote and fund practical/useful research, incorporating community, healthcare providers, family, relevant agencies, and mental health practitioners in the research and analysis process. Explore research methods and models that are more flexible and open to more nuanced outcomes/solutions (Reay, Omaha 2023)

Explore degree programs (and perhaps even the licensing structure) that produce greater numbers of practitioners. Are current programs and licensing models structured in a way that promotes sufficient/capable practitioners with proper training to effectively meet current challenges?

2. Educators are not sufficiently able to integrate with their practitioner/advocate/community colleagues to address problems in a collective fashion.

Identify and employ cross-collaboration/training at the post-graduate level. Introduce more robust professional school interaction and programming (i.e. Law School and Behavioral Sciences schools) and promote their shared preparation and engagement in the context of specific challenges.

Address the 'litigation' gap: I have worked with many attorneys who represent educational institutions (both k-12 and higher ed). When litigation occurs, there is a consistent challenge for these attorneys, even those who specialize as "education attorneys." They may fully understand legislation or caselaw, but they often struggle to fully appreciate educational (or behavioral) practice as it exists in schools. This struggle seems more pronounced when behavioral issues are involved (discipline, special education, etc). This limitation can negatively impact representation, particularly when a jury is involved.

Attorneys also often struggle to interpret, understand, or employ academic/scientific research, which often underpins institutional policy or decision-making. I've called this challenge the 'litigation gap' – which frequently affects (often negatively) the ability of counsel to fully represent institutional clients. Law schools should be encouraged to include programming that introduces or strengthens student ability to engage, interpret, employ (or critique) scholarly research.

Lack of EBP for New Clinicians

#### Deb Latzke, MS, LPCC, LADC (Counseling Services of Southern MN)

As a supervisor and director of school-linked services in Minnesota I am frequently working with new clinicians who are working towards their professional hours to become licensed. Several of them enter the workforce feeling unprepared to provide therapy to children (ages 6-11), those with a trauma history, or co-occurring SUD diagnoses. In turn, this creates a delay in services starting for these clients while the clinician gains more confidence in working with these age groups or diagnoses.

What we have seen when therapy is delayed is an increase in behaviors at home, school, and in the community that may lead to truancy or legal charges, a drop in academic performance, an increase or start of substance use, decrease in social interactions, increase in suicidality etc. These effects from a delay in therapy are concerning and indicate the need to increase the training new clinicians are receiving and provide them with evidence-based practices which can boost their level of expertise and confidence so clients in need of services receive them quicker.

In looking at solutions to increase when and how newer clinicians to the field can obtain EBP trainings my thoughts go to, "Could Managing and Adapting Practices (MAP) be part of the curriculum taught within the academic requirements of graduating from a master level program in mental health?" This could be taught during their internship class in which the focus is implementation of skills and knowledge acquired in their academic studies. When I have trained new clinicians, and most recently our clinical interns, they have stated an increase in confidence to work with a variety of diagnoses because they have a framework based on research to utilize. This confidence will in turn increase the likelihood of them feeling prepared to work with younger aged clients and different diagnoses quicker thus getting young people into therapy faster. This plan would require professors or adjunct professors to be trained as Training Professionals with PracticeWise and for universities to see the benefit of adding this training to their curriculum.

In Minnesota our DHS pays for the ongoing subscription to PracticeWise so everyone who is trained can continue to utilize the resources and additional training offered. This is truly a

benefit our state has, and I believe it would be beneficial for more states to establish a similar arrangement with PracticeWise so new clinicians have ongoing access to evidence-based resources while they work towards their licensure. Several EBP training courses do not offer certification until a clinician is licensed which on average takes two years to obtain. That is a long time for new clinicians to not have the resources necessary to provide evidence-based therapy. Where if they can be trained and have the resources available upon graduating, with their degree, the benefit to the clinician, client and the hiring agency is impactful.

# Michael A. Lindsey, Ph.D.

Dean and Paulette Goddard Professor NYU Silver School of Social Work

# **Problem Statement:**

Children and adolescents (hereafter referred to as "Youth") are increasingly facing mental health challenges, and the existing workforce is struggling to meet the growing demand for support and intervention. To address this issue effectively, it is essential to explore policy solutions related to funding supportive technology that can enhance and expand the capabilities of the current youth behavioral health workforce.

# **Problem Description:**

1. **Rising Youth Mental Health Issues:** In recent years, there has been a concerning increase in mental health challenges among youth, including anxiety, depression, and suicidal behaviors. ALL are on the rise! The COVID-19 pandemic has exacerbated these challenges, creating an even more urgent need for accessible and effective mental health services for youth.

2. Limited Workforce Capacity: The existing youth behavioral health workforce is facing limitations in terms of capacity and resources. There is a shortage of qualified professionals, resulting in long wait times for youth seeking help and inadequate support for those in need. There has been investment in school behavioral health in some states (see California), but this service sector—the largest provider of child mental health services—is hemorrhaging in terms of requisite support to meet mental health needs and youth are being left behind in myriad ways.

3. **Needs of Diverse Youth Remain, Largely, Unresolved:** Youth who identify as racial/ethnic minorities, sexual minorities, and those who have a disability remain are among the most impacted with respect to our country's youth mental health crisis. For myriad reasons, there remains a disconnection from need and access to service.

4. **Technology's Untapped Potential:** Technology, including telehealth, mobile applications, and online resources, has the potential to significantly augment the capabilities of the youth behavioral health workforce to meet the mental health needs of youth. However, the

adoption and integration of these technologies into the field have been inconsistent, often due to financial barriers.

# **Proposed Solutions:**

1. **Policy Development**: Government agencies, healthcare institutions, and policymakers should collaboratively develop and implement policies that prioritize the funding of supportive technology for the youth behavioral health workforce. These policies should include financial incentives, grants, and subsidies to encourage the adoption and integration of technology-based solutions to the workforce challenge.

2. **Telehealth Expansion:** Invest in telehealth infrastructure and regulations to enable mental health professionals to provide remote counseling and mental health support to youth. This will increase access to care, particularly in underserved areas.

3. **Digital Mental Health Tools:** Allocate resources to research and develop evidencebased digital mental health tools, including mobile apps, online therapy platforms, and chatbots. These tools can provide early intervention, self-help resources, and ongoing mental health support for youth in need.

4. **Training and Education:** Invest in training programs to equip youth behavioral health professionals with the skills and knowledge necessary to effectively utilize supportive technology. This will ensure that technology is integrated seamlessly into their practice.

5. **Community Collaboration:** Foster collaboration between mental health organizations, technology developers, and community stakeholders to create a holistic approach to youth behavioral health. This will help tailor technology solutions to specific community needs.

6. **Evaluation and Research:** Continuously evaluate (via prospective research designs) the impact of technology-based interventions on youth mental health outcomes. This research can guide future policy decisions and ensure that funding is allocated towards effective solutions.

In closing, exploring policy options to fund supportive technology for the youth behavioral health workforce is a crucial step in addressing the mental health challenges faced by young individuals. I look forward to discussing these perspectives with my esteemed colleagues. My deepest gratitude for the opportunity.

#### William (Bill) Reay, Ph.D.

# Problem Statement Omaha2 (January 20th, 2024)-The End User is Becoming Irrelevant

Over the past 35 years, I have performed in very different roles within the behavioral health industry. My comments will be focused on the difficulties I have had as an organizational leader responsible for hiring adequately trained or prepared professionals and paraprofessionals to address the very real pressures associated with behavioral health practice. Similarly, once hired, it is extremely challenging to keep those employees trained to the latest advancements in treatment and patient management.

Young graduate students tend to be inadequately trained to assess, evaluate, or treat many of the mental health or behavioral health conditions regardless of setting of service, i.e., office-based; home-based; or any variation of congregate care. To some notable measure, this has been created and perpetuated by the migration of "managed care concepts" such as level-of-care, medical necessity, maximum therapeutic benefit, failure to accept the Milieu Therapy into the public mental health space. Professionally trained and public persons tend to attribute "levels of care" with meaningful fluctuations in treatment dosing, thereby confabulating restrictiveness of setting with higher doses of "treatment." Consequently, my ability to rehabilitate mis-trained or ill-trained psychologists, psychiatrists, nurses and therapists is made exceptionally difficult by the restrictive policies and practices of publishing companies and evidence-based cottage industries who have profited by the intellectual property of publicly funded applied scientists. Through the use of a "one off" *pharmaceutical business model*, behavioral science mega-knowledge has become a commodity; one that needs to be purchased by those responsible for implementation, i.e., the end user.

As an end user, one that provides <u>some</u> commodifized services through a managed care arrangement, my services, regardless of outcome of the commodifized services, are valued the same as any other end-user of those same services, e.g., office-based therapy for a variety of clinical presentations. Unless I can differentiate my services from someone else, and demonstrate superior **outcomes** and get differentially reimbursed for those outcomes, I can't afford to purchase "knowledge" from a recognized *knowledge distributor*.

# Solution: End Users to Demonstrate Treatment Differentiation and Outcome Superiority across Clinical Presentations: The Rise of the Best Science End User.

Until there is a mega management information system that also allows for a decision support system, *End Users* must develop and implement their own *data systems* and *knowledge systems* to improve their products (services, patient management, and treatment accommodations) across clinical presentations; setting of treatment delivery; which includes identifying and managing multiple implementation variables.

For example, Ph.D. and M.A./M.S./M.S.W. professionals within each organization <u>must</u> be affiliated and hold a position with a college or university. This relationship allows these professionals access to Mega Knowledge that can be harvested for the purposes of informing clinical care, patient management, and staff member training and development; all designed to promote the possibility of differentiating. This benefit can't be over-estimated.

#### **James H Sorrell MD**

#### January 23,2024

#### **Problem statement**

Mental health disorders are widespread in youth in the juvenile justice system. Studies and recent meta-analyses indicate as many as 70% have an active psychiatric illness. Adjudication and rehabilitation is greatly hindered by the complexity of these youth who frequently emerge from impoverished backgrounds with generational trauma, poor academic attainment and inadequately addressed or treated mental health concerns including substance abuse. Another factor frequently overlooked but in my experience of paramount importance is the presence of Neurodevelopmental disorders such as intellectual disability or autism spectrum disorder and ADHD. Furthermore, contact with the juvenile justice system itself, especially detainment in detention centers worsens mental health outcomes. Confinement in dentition centers can crush the spirits of youth with internalizing disorders such as anxiety and depression and harden the dysfunctional and impulsive responses of those with externalizing disorders such as conduct disorder or antisocial traits.

Magnifying the problem of overrepresentation of mental health problems in this population is that many have multiple diagnoses. This reflects the fluid and poorly understood relationship between mental illness and delinquency. But more salient to our discussion this week is the role that inadequate diagnosis and treatment of mental health issues plays in recidivism and ultimately poor adult outcomes that often lead to adult reoffending and incarcerations.

Contact with law enforcement and the judicial system can worsen mental health outcomes especially if there are not adequate screening procedures and assessment opportunities to identify these at risk youth. Furthermore, referrals to treatment are haphazard and treatment delivery in the facilities or community is poor due to underutilization of evidence-based treatment and best practices and the fragmentation of the care delivered. Silo-ing between families, child protective services, the schools, community providers and the justice system precludes collaboration and inhibit positive outcomes.

It is important to note that not all mentally ill youth offend and not all offenders have a clear psychiatric diagnosis. And of course, not all youth reoffend and efforts to avoid incarceration

may be path forward to avoiding jail as an adult and completing high school education. Continuity of offending is correlated with early age of onset (ages 12-14), violent behavior especially with the use of a weapon, and the presence of substance and other mental health disorders. As they age, these youth are more likely to be the ones diverted to adult courts for adjudication as well.

Efforts to reduce reliance on lengthy detainment have been made. Between 2000-2020 the numbers of youth in facilities fell from 109,000 to approximately 20,000. Unfortunately, those remaining in custody are disproportionately African American or Native. In Nebraska 145/100,000 youth are detained. This compares favorably to Alaska (330/100,000) but sharply contrasts with New Hampshire (20/100,000).

Community placement and home services are available but suffer from underfunding, poor staffing and incoherent treatment planning and a lack of soundly prepared clinical work force. In Nebraska we have recently seen the havoc and lack of accountability for large numbers of youth sent out of state to residential treatment facilities that are largely unregulated and perpetuated many of the same inhumane practices such as solitary confinement that are currently being rooted out of public detention facilities.

The problems above are hexing to be sure, but my hope for our conference is we can discuss possible solutions to alleviating the impact of mental illness and improve outcomes for youth presenting to the juvenile justice system.

<sup>&</sup>lt;sup>i</sup> https://www.miraclefoundation.org/our-work/rights-of-the-child/