Published in final edited form as:
Adm Policy Ment Health. 2013 January ; 40(1): 23–28. doi:10.1007/s10488-012-0451-7.

Beyond Context to the Skyline: Thinking in 3D

Kimberly Hoagwood,
New York University Medical Center – Child Study Center, New York, NY, USA

Serene Olin, and
New York University Medical Center – Child Study Center, New York, NY, USA

Andrew Cleek
New York University, New York, NY, USA

Kimberly Hoagwood: kimberly.hoagwood@nyumc.org

Abstract

Sweeping and profound structural, regulatory, and fiscal changes are rapidly reshaping the contours of health and mental health practice. The community-based practice contexts described in the excellent review by Garland and colleagues are being fundamentally altered with different business models, regional networks, accountability standards, and incentive structures. If community-based mental health services are to remain viable, the two-dimensional and flat research and practice paradigm has to be replaced with three-dimensional thinking. Failure to take seriously the changes that are happening to the larger healthcare context and respond actively through significant system redesign will lead to the demise of specialty mental health services.

Keywords

Children; Families; Mental health services; Community-based; Healthcare

Context: The Immediate Environment. Attendant Circumstances or Conditions

The review paper by Garland and colleagues is both an update and refinement of earlier reviews about the quality of mental health services typically available to children. It provides a beautiful summary of the status of research on quality practices within usual care and, importantly, of the practice contexts. This is important because contexts have often been ignored in research reviews of effective practices. Yet it is the immediate context within which services are delivered that sets boundaries on what kind of services can be provided. Much as iambic pentameter can unleash poetic ideas not possible without disciplined imagination, the contexts of services—the environment within which services are delivered–set limits on and open up possibilities for improving mental health care. What is unique about this review by Garland and colleagues is that it tacks back and forth between descriptions of the evidence-based treatments and practices themselves and the empirically-based contextual factors within specialty outpatient mental health agencies that have to be taken into account to fit higher quality services into systems.

Garland and colleagues write, “The potential effectiveness of care improvement interventions will be maximized if they are based on empirically-supported knowledge about the contexts within which they will be implemented and empirically-supported knowledge about intervention effectiveness.” We agree. We suggest however that this is still a two-dimensional view of the problem. We argue that there is a broader horizon line backlighting much larger social changes and these changes are shaping community-based outpatient

mental health agencies right now. These changes extend beyond the immediate practice context and they affect how, whether, and when mental health services will be delivered as well as their content. These more potent and far-reaching social, political and regulatory changes are shaping the immediate practice contexts described in the review (work attitudes, organizational culture/context) by restructuring the business practices, networks, billable services, accountability standards, modalities of information exchange, and incentive structures within which community-based agencies operate. We, in the mental health field, are already far behind the rest of the healthcare field in recognizing and responding to these changes. If we do not change our two-dimensional research and practice paradigms now, mental health services will be irrevocably changed and in some cases eliminated without our input.

History

A little background to see how we got here. In the early to mid 1990s, service system research focused on three core elements: interorganizational relationships (Morrissey 1992); financing and coordination models that included a single point of access and coordination across sectors (Bickman 1996) and on the efficacy to effectiveness debates. In the field of children's services, the ideology of the Systems Of Care (SOC) provided the core paradigm for community care (Hernandez et al. 2001; Pumariega et al. 2003; Stroul and Friedman, 1996). SOC included principles to increase family involvement, increase coordination, and reduce the restrictiveness of settings in which children were placed.

The key findings from the major studies of this period suggested that, first, interorganizational relationships among major administrative entities serving children (mental health, schools, welfare, justice, health) could be created and would improve access and even parent satisfaction, but they did not lead to improvements in clinical outcomes (Bickman 1996). Secondly, financing of coordinated care was expensive and led to use of more services and sometimes duplication of services rather than more efficient financing. Third, the research base on clinical therapies grew rapidly from 1996 to the present (a fivefold increase in clinical outcome studies—Hoagwood et al. in press) but that knowledge base remains decontextualized and largely irrelevant for community-based care (Connor-Smith and Weisz 2003; Weisz et al. 2006). This is particularly true of psychosocial therapies that have not (with few exceptions, see Chorpita et al. 2005; Kolko et al. 2009) been developed for use outside of specialty mental health.

One major problem is that the findings from these blocks of research provided almost no guidance to the policies and practices that are currently shaping community-based services. New interorganizational relationships are being created out of necessity as fee for service approaches die out and are replaced with managed care. The evidence-base on psychosocial treatments has almost without exception excluded consideration of the business models and staffing patterns needed to install them in community health practices. Moreover, research based findings about efficacious treatments are receding in significance as agencies struggle to serve increasing numbers of patients and provide front-end preventive services. Payment mechanisms do not map onto efficacy-based treatments or practices.

Another Paradigm

If we look outside the narrow lens of children's specialty mental health services, however, three decades of health services research identify models and components of a comprehensive and coordinated health system approach. Importantly and unfortunately, this approach was never incorporated substantively into SOC thinking. Population-based health system research however has demonstrated that embedding a coordinated and accountable care monitoring system that addresses all levels of healthcare (from preventive to acute

treatment to chronic care) and is held responsible for producing outcomes can in fact improve those outcomes (Coleman et al. 2009; Epping-Jordan 2004; Unutzer et al. 2012).

Garland and colleagues acknowledge that a public health framework and accompanying infrastructure is on the horizon. We believe attention to this fundamental paradigmatic shift is overdue and a failure to respond seriously to these changes is threatening the viability of the specialty mental health system. Population health management strategies, based upon public health frameworks, are part of this new paradigm (Angstman et al. 2009; Lin and Moutsiakis 2009; US Preventive Services Task Force 2008). Mental health has been slow to respond perhaps because of perceived differences between mental health and other types of medical care. Medical care is typically seen as focused on procedures or acute care whereas mental health has been seen as focused on chronic conditions. However, an increasing amount of medical care is focused on chronic medical services such as diabetes and hypertension; these require many of the same elements as mental health care—motivated patients, shared decision making, ongoing screening and assessment, as well as case management services.

The value of a broader public health framework for mental health is not new. It has been described in several influential reports (Committee on Science, Engineering, Public Policy, National Academy of Sciences, National Academy of Engineering, Institute of Medicine 2009; Institute of Medicine 2006; Kohn et al. 2000) as well as by advocates for mental health reform (e.g., SAMHSA, MHA). Yet the restructuring of community-based mental health services that is needed to respond to this new healthcare framework is largely happening *to* mental health agencies rather than being driven *by* them.

One implication is that the traditional model of a separate specialty mental health system operating in isolation from the rest of healthcare will no longer exist. Mental health services will be linked to a broader network of healthcare providers. This entails expanding the role of other professionals in providing mental health services—a new workforce that can include parent partners and community healthcare workers (see Schoenwald et al. 2010), in addition to traditional mental health specialists who would be primarily responsible for caring for the most severely ill children. Services can be organized around specialized functions rather than around separate systems. In other medical fields, high-end specialists care for the most severely ill while primary care clinicians and other support healthcare staff manage early stage disease and prevention in the community, functions that were once the domain of specialists.

For example, the organization of early intervention services for premature infants is an example relevant to mental health services: infants born prematurely often have many medical and developmental problems that are compounded by high risk family stressors known to adversely affect outcomes. The system response is to provide developmental follow-up services for premature infants and facilitate availability to a wide variety of specialists (e.g., occupational and physical therapists, education specialists, case management, etc.). This is not different from the kinds of services that are often recommended for families of children with serious psychiatric needs. The difference is that the services available to these families most often are not integrated or coordinated.

New York State's Response to Healthcare System Change

New York State has embarked on a series of system changes to respond to the new demands for healthcare restructuring. While the country prepares for full implementation of the Accountable Care Act, New York State has been undergoing an equally transformative process within its publically funded health and behavioral health systems. For many years

most New Yorkers enrolled in Medicaid have received their physical healthcare services in Medicaid Managed Care Plans. However, a 'carve-out' has been in place for those with either a "serious mental illness" (adults) or a "serious emotional disturbance" (children), and behavioral health services have instead been offered via traditional fee for service Medicaid administrated by New York State. This 'carve-out' facilitated the development of a robust behavioral healthcare system for at-risk children and families. Additionally, for those with commercial insurance or without healthcare, providers were subsidized through a separate mechanism.

In 2008 the New York State Office of Mental Health (NYSOMH) eliminated these subsidies and raised the average rates clinics received to provide care. Almost immediately following that policy decision, NYSOMH began a more drastic change in its Medicaid payments to address significant budget shortfalls brought on by the financial crisis. While the carve-out has been maintained thus far, it is anticipated that all children in New York's publically funded system will soon be placed in managed care for the full range of health and behavioral health treatment. This will have an unpredictable impact on service funding and delivery.

With respect to EBP implementation, NYSOMH has taken an active stance by funding an Evidence-based Treatment Dissemination Center since 2004 and a Children's Technical Assistance Center since 2011 for all 350 licensed child-serving clinics. With the changing regulatory and practice environment, the instantiation of EBPs has also had to evolve. Each of the EBPs for which training and intensive consultation is provided incorporates fiscal implications—how to bill for these services; how to modify staffing patterns; how to change supervisory structures, etc. There is recognition that in order for children's mental health services to be delivered with quality and in a fiscally viable manner, consideration of all of these factors is necessary.

In order to adapt to the changing business environment, behavioral health agencies are making substantial shifts in the way that they provide clinic-based services. In its broadest sense it is a transition from a model where the clinician is responsible for all interactions with a family, and all accompanying documentation and scheduling activities, towards a model where clinicians are treated more like medical doctors, i.e., they have back to back appointments booked from the moment they arrive with little time for paperwork, consultation, or other activities. Concurrent documentation and centralized scheduling are becoming the norm. Accordingly, agencies are increasing billable visits and clinician productivity, resulting in significantly higher caseloads for clinical staff with caseload sizes increasing from 30 to 40 up to 70–80. New demands exist to help clinician's match treatments and treatment intensity to client need. We anticipate that short-term and flexibly delivered (i.e., individual or group) therapies will become more prevalent and eventually become the norm. With these changes, simple and sensitive assessment measures will be needed to accurately determine initial diagnosis, response to treatment, and guide discharge planning.

As noted above, agencies have begun to implement several strategies that are assumed to lead to greater business efficiencies, most prominently: open access, centralized scheduling; and concurrent documentation (Lloyd 1998).

Open Access refers to a business procedure that enables a client seeking an intake to be seen either immediately upon presenting for care or within 24 h. Centralized Scheduling refers to a process wherein administrative staff within the clinic complete all scheduling. This not only frees up additional time for clinicians to engage in billable hours of treatment, but can also facilitate "back filling" appointments as cancelations are made. Concurrent

documentation is a process by which all paperwork associated with an individual or family client is completed collaboratively *within* each treatment session. This includes case notes, treatment plans, and assessments.

Health Information Technology

Health Information Technology (HIT) is differentially being adopted by healthcare and mental health agencies in New York and elsewhere. The adoption rates of mental health programs using an electronic health record (EHR) have increased substantially in NYS, and NYS has spent 400 million dollars in the development of Regional Health Information Organizations (RHIO) to allow providers to electronically share information across electronic platforms and practice settings. Unfortunately, these funds and the efforts around information sharing currently apply only to adult systems, not to child, in large part due to the complexity of consent issues for children.

A second factor impacting child mental health providers is that federal and state funding around electronic systems has only recently expanded to include behavioral health. Specifically, federal meaningful use incentives, put in place under the Accountable Care Act, provide funding only for medical staff and do not cover the use of EHR's by behavioral health staff such as social workers and psychologists. Both of these issues have put behavioral health agencies in general and child providers in particular at a marked disadvantage in the implementation of EHR's.

These changes in regulatory structures, billing and accountability standards, and use of electronic platforms for information sharing are shaping in not so subtle ways the larger context within which the smaller contexts of community agencies (i.e., their social-organizational culture, climate, morale) function.

Usual Care and the Limits of "Evidence"

The promise of EBPs for improving clinical effectiveness has yet to be realized for a variety of reasons: (a) the work-force is largely unlicensed (40 %) and untrained in EBTs/Ps; (b) the policies/incentives supporting use of EBPs/Ts are not aligned with use of such practices, (c) our knowledge on effective training models that can help sustain use of EBPs in clinic settings is limited. While States have articulated efforts to support EBTs and improve care quality, such mandates are often unfunded or only partially funded. New York State is a prime example. The state has spent approximately three million dollars to provide training and consultation to ~ 1300 front-line therapists and supervisors on specific treatment manuals (Gleacher et al. 2011; Gionfriddo 2012; McHugh and Barlow, 2010). However accountability for change has focused on the number of providers trained, not on whether these changes have resulted in improved outcomes. Initiatives to roll out EBPs in the absence of data documenting actual adoption of new practices with fidelity and more importantly improvements in outcomes enables dishonest albeit well-meaning claims to be made about quality improvement. Just as pilots review very specific checklists for pre-flight, take off, pre-landing and after landing, we should be documenting, monitoring, and making transparent to families all aspects of service delivery for the populations we serve—screening, assessment and delivery of therapies with fidelity, and outcomes. We should not assume anything.

Nationally, the emphasis on evidence-based practices and accountability has increased the need for tracking and reporting among health-care providers (Torrey et al. 2003). However, existing data tracking efforts within usual care service settings has been predominantly non-electronic and restricted to performance data required for regulatory requirements; the use of data to inform program practice, planning and policy is limited (Garland et al. 2003;

McLellan et al. 2003; Wisdom et al. 2006). While such systems have been developed and used (Bickman et al. 2011; Daleiden and Chorpita, 2005) in usual care services, their impact on service delivery and practice is limited, if at all.

The opportunity for using evidence/data to guide usual care services and hence integrate evidence-based strategies cannot be realized in the absence of a trained workforce and an adequate infrastructure to support data-driven decisions. Such disconnects must be aligned or addressed in the new climate of "usual services."

Closing Thoughts: The 3D Perspective

A question that continues to nag at us as we approach three decades of work in children's services: Why do mental health services continue to fail families and children? While the clinical knowledge base has grown rapidly over the past 30 years, the system has not. The system has remained inveterately unchanged. We believe that the system paradigm has been two-dimensional and flat: research funders and academic institutions have incentivized the development of treatment interventions that target diagnostically narrow problems, have overlapping therapeutic elements, have unrealistic staffing and duration requirements, and do not map onto sound business practices for community care. Additionally these therapies have not been developed for the new world order where mental health is one among many integrated components of a healthcare system. States, schools, and mental health systems are trying to adopt evidence-based psychosocial therapies and retrain the workforce to deliver them, without using data to see whether these changes are making any difference, or how they can be better integrated into usual care. Perhaps we have to think in 3D.

Data-driven Decision-making

We will have made progress when we stop talking about evidence-based treatments and practices, and focus instead on the use of data to inform services. When my daughter (KH) was deathly ill and in the critical care unit, I asked the attending physician what were our choices. If he had said, "We can use an evidence-based practice to try to save her life or we can use this other practice that we're not sure about," I would have fired him on the spot. It makes no sense to separate out evidence-based practices as one among other options rather than insist on always using data to drive practice. All care always should be driven by data. We need data monitoring and feedback systems in all parts of the mental health system and all providers should be taught how to use them, share the data with parents, and use the data to drive decisions. We have the instruments and the technologies to make this happen.

Demystification and De-guilding

The guild-based associations that protect the disciplines (and livelihood) of those who practice psychology, child psychiatry, and pediatrics also unfortunately set up walls around the knowledge base. We treat our knowledge about mental health as something that only a precious few can really understand. Gionfriddo (2012) points out how these decisions have kept this knowledge out of the hands of the very adults who are in a position to help children get help sooner: pediatricians, teachers, counselors, social workers. There are data-informed measures, instruments, and technologies to enable all of these providers to recognize, screen and manage mental health problems early, consistently, and continuously. Full training and re-education of front-line health and educational professionals on how to recognize and help children with mental health needs is essential. Demystify mental health.

Democratization

A population-based approach to mental health implies a fundamental reorganization of it away from a separate specialty system into one component of a continuum of health

services. This paradigm includes population-based approaches to service delivery and public health models including the continuum of preventive, acute and chronic services. Our community-based specialty mental health system cannot survive as a separate and isolated system any longer. The rest of healthcare has created regional networks that distribute healthcare services according to principles of democratizing access to quality care, making it available at the right time for the right reason to the right segment of the population. We know enough about mental health prevention, treatment, and service delivery to reorganize our services to be part of this new paradigm. But it requires letting go of single office-based fee for service models that dominate usual care in community based agencies and taking flight towards a bigger horizon.

Failure to take seriously the changes that are happening to the larger healthcare context and respond actively through significant system redesign will lead to the demise of specialty mental health services.

References

Angstman KB, DeJesus RS, Williams MD. Initial implementation of a depression care manager model: an observation study of outpatient utilization in primary care clinics. Population Health Management. 2009; 12:227–230. [PubMed: 19848564]

Bickman L. A continuum of care: more is not always better. American Psychologist. 1996; 51:689–701. [PubMed: 8694389]

Bickman L, Kelley S, Breda C, De Andrade A, Riemer M. Effects of routine feedback to clinicians on youth mental health outcomes: a randomized cluster design. Psychiatric Services. 2011; 62(12): 1423–1429. [PubMed: 22193788]

Chorpita BF, Daleiden EL, Weisz JR. Identifying and selecting the common elements of evidence based interventions: a distillation and matching model. Mental Health Services Research. 2005; 7(1):5–20. [PubMed: 15832690]

Coleman K, Austin BT, Brach C, Wagner EH. Evidence on the chronic care model in the new millennium. Health Affairs (Project Hope). 2009; 28(1):75–85. [PubMed: 19124857]

Committee on Science, Engineering, Public Policy, National Academy of Sciences, National Academy of Engineering, Institute of Medicine. On being a scientist: a guide to responsible conduct in research. 3. Washington, DC: National Academies Press; 2009.

Connor-Smith JK, Weisz JR. Applying treatment outcome research in clinical practice: techniques for adapting interventions to the real world. Child and Adolescent Mental Health. 2003; 8:3–10.

Daleiden E, Chorpita BF. From data to wisdom: quality improvement strategies supporting large-scale implementation of evidence based services. Child and Adolescent Psychiatric Clinics of North America. 2005; 14:329–349. [PubMed: 15694789]

Epping-Jordan JE. Research to practice: international dissemination of evidence-based behavioral medicine. Annals of Behavioral Medicine. 2004; 28(2):81–87. [PubMed: 15454354]

Garland AF, Kruse M, Aarons GA. Clinicians and outcomes measurement: what's the use? Journal of Behavioral Health Services and Research. 2003; 30(4):393–405. [PubMed: 14593663]

Gionfriddo P. How i helped create a flawed mental health system that's failed millions—and my son. Health Affairs. 2012; 31(9):2138–2142. [PubMed: 22949462]

Gleacher AA, Nadeem E, Moy AJ, Whited AL, Albano AM, Radigan M, et al. Statewide CBT training for clinicians and supervisors treating youth: the New York State Evidence Based Treatment Dissemination Center. Journal of Emotional and Behavioral Disorders. 2011; 19(3):182–192.

Hernandez M, Gomez A, Lipien L, Greenbaum P, Armstrong K, Gonzales P. Use of the system of care practice review in the national evaluation: evaluating the fidelity of practice to system-of-care principles. Journal of Emotional and Behavioral Disorders. 2001; 9:43–52.

Hoagwood KE, Jensen P, Acri M, Olin SS, Lewandowski E, Herman R. Outcome domains in child mental health research since 1996: Have they changed and why does it matter? Journal of the American Academy of Child & Adolescent Psychiatry. 2012; 51(12):1241–1260. [PubMed: 23200282]

Institute of Medicine. Improving the quality of health care for mental and substance-use condition. Washington, DC: The National Academies Press; 2006.

Kohn, LT.; Corrigan, JM.; Donaldson, MS. To err is human: building a safer health system. Washington, D.C: The National Academies Press; 2000.

Kolko DJ, Dorn LD, Bukstein OG, Pardini D, Holden EA, Hart J. Community vs. clinic-based modular treatment of children with early-onset ODD or CD: a clinical trial with 3-year follow up. Journal of Abnormal Child Psychology. 2009; 37:591–609. [PubMed: 19221871]

Lin KW, Moutsiakis D. Screening for high blood pressure. American Family Physician. 2009; 79:1093–1094. [PubMed: 19530641]

Lloyd, DR. How to maximize service capacity: nuts and bolts solutions for implementing change in behavioral health-care organizations below the senior management level. Fayetteville: National Council for Community Behavioral Healthcare; 1998.

McHugh RK, Barlow DH. Dissemination and implementation of evidence-based psychological interventions: a review of current efforts. American Psychologist. 2010; 65(2):73–84. [PubMed: 20141263]

McLellan AT, Carise D, Kleber HD. The national addiction treatment infrastructure: can it support the public's demand for quality care? Journal of Substance Abuse Treatment. 2003; 25:117–121. [PubMed: 14680015]

Morrissey JP. An interorganizational network approach to evaluating children's mental health service systems. New Directions for Program Evaluation. 1992; 1992(54):85–98.

Pumariega AJ, Winters NC, Huffine C. The evolution of systems of care for children's mental health: forty years of community child and adolescent psychiatry. Community Mental Health Journal. 2003; 39(5):399425.

Schoenwald SK, Hoagwood KE, Atkins MS, Evans ME, Ringeisen H. Workforce development and the organization of work: the science we need. Administration and Policy In Mental Health. 2010; 37:71–80. [PubMed: 20145990]

Stroul, B.; Friedman, R. The system of care concept and philosophy. In: Stroul, B., editor. Children's mental health. Creating systems of care in a changing society. Baltimore: Paul H. Brookes; 1996. p. 1-22.

Torrey WC, Finnerty M, Evans A, Wyzik P. Strategies for leading the implementation of evidence-based practices. Psychiatric Clinics of North America. 2003; 26:883–897. [PubMed: 14711126]

Unutzer J, Chan Y, Hafer E, Knaster J, Shields A, Powers D, et al. Quality improvement with pay-for-performance incentives in integrated behavioral health care. American Journal of Public Health. 2012; 102:e41–e45. [PubMed: 22515849]

US Preventive Services Task Force. Universal screening for hearing loss in newborns: uS Preventive Services Task Force. Pediatrics. 2008; 122:143–148. [PubMed: 18595997]

Weisz JR, Jensen-Doss A, Hawley KM. Evidence-based youth psychotherapies versus usual clinical care: a meta-analysis of direct comparisons. American Psychologist. 2006; 61(7):671–689. [PubMed: 17032068]

Wisdom JP, Ford JH, Hayes RA, Hoffman K, Edmundson E, McCarty D. Addiction treatment agencies' use of data: a qualitative assessment. Journal of Behavioral Health Services and Research. 2006; 33:394–407. [PubMed: 17082981]