THE **TA** NETWORK

John Lyons, Ph.D.
Chapin Hall
University of Chicago

Considering Outcomes in the Children's System of Care

The past decade has seen increasing interest in measuring outcomes. There is growing pressure within the public sector to document demonstrable impact to justify tax payer expenditures on a range of social services; and the child serving system has not avoided this increased scrutiny. Unfortunately, while this pressure is real and likely to only increase, the broad child serving system often does not have a great deal of technical capacity to support the implementation of outcome measurement, let alone the capacity to analyze outcomes information to support program improvement activities. The system is facing an important and potentially challenging learning curve to ensure that it keeps up with the shifting pressures of an information culture. This document is intended to serve as a primer for programs and agencies that are considering initiating work towards the measurement and management of clinical and functional outcomes.

A key point of this brief is to differentiate and discuss the distinction between outcome measurement and outcomes management. *Outcomes measurement* refers to efforts to measure and report outcomes from programs. Outcomes measurement projects can best be understood as program evaluation activities. *Outcomes management* is a different type of enterprise that focuses on the *use* of information, not just the collection and reporting of data. An *outcomes management initiative* is a conscious effort to collect and use information at the child/family, program, and system levels, to inform key decisions. Relatively speaking, outcomes measurement is easy and outcomes management is more challenging, although in most circumstances more rewarding. While the number of agencies and systems pursuing outcomes management is increasing, the majority of current outcome initiatives would be classified as outcomes measurement. The challenge for the field is to move toward evaluation and quality improvement activities that are clearly related to *defining and meeting stakeholders' information needs* and *informing key decisions*.

Getting Started

The requisite first stage of any process to implement outcomes measurement and management within an existing program, initiative, or agency, is the development of a plan. Plan development requires an individual or group to *convene stakeholders and engage in planning activities*. The key to a successful planning process is to avoid pitfalls that many organizations or initiatives fall into, such as jumping straight to measure selection (without considering the purpose of the measures or decisions they will support), or recruiting a local researcher/evaluator to do the project, without engaging leaders and stakeholders in a discussion of the information needs and decisions to be informed. Regardless of who is convened or under what auspice, careful deliberation of the *decisions to be supported* and the *information necessary to effectively support these decisions* is a very useful starting point. Although it may be difficult to sustain such a stakeholder group over time, and the risk exists for such deliberations to begin to become influenced by individual agendas (e.g., looking good for funders, generating publishable research) rather than facilitating program improvement, some type of proactive planning process is desirable and will be beneficial to any outcomes management project.

In any effort to pursue an outcome management process, it is critical that leadership be involved in the planning and decision making process from the beginning. Establishing a role for the outcomes effort within the leadership structure of an agency is important. In addition, identifying a key champion who is responsible for managing the initiative – and assuring good data collection rates, strategic use of resulting information, etc. – is equally important. Developing a process for using collected information to inform key decisions in the program and agency is essential. For example, what reports will be produced? What will the format(s) be? Who will review them? At what junctures will information be reviewed? What decisions will be made based on the information produced? Defining and overseeing these *information use* issues is critical to outcomes management efforts, and represent why initiatives focused solely on outcomes measurement are both easier and less valuable.

In addition to leadership involvement, it can be quite useful to have key system partners involved. This includes staff that may be required to complete additional documentation, and youth and family who represent those most affected by these initiatives. A good two-fold organizational structure includes:

- A key person, with some staffing resources, who is responsible for the outcomes initiative and is clearly in a reporting position within the organizational structure of the agency that provides input into decision making; *__with__*

- An advisory group that is inclusive of staff, system partners, funders, youth and families, who have oversight responsibilities for the work and its products and the interpretation of any findings.

Defining Outcomes and Selecting Measures

After clarifying or defining information needs, the next important task in any outcomes management effort is defining the outcome(s). A common strategy for facilitating a planning project that helps define program goals is the use of program logic models. There are many resources available to support people interested in using this methodology. (See, for example, http://logicmodel.fmhi.usf.edu) The development of a program logic model involves establishing the inputs, activities, outputs, and outcomes of a program, and how they relate to one another, as a way of defining the purpose and proposed mechanisms of change for the program or initiative. Thinking through the program's logic to define its outcome goals is a necessary first step to selecting outcomes and measures, as it defines the activities and proposed effects of the program, facilitating clearer discussion around what needs to be measured. Clarity on what your program aims to accomplish is critical to defining what represents success or failure, which, in turn, facilitates the selection of outcomes and measures. The answer to the question, "what are our proposed outcomes?" is the key to how the program or agency's impact will be defined.

There is considerable debate in the field about what constitutes an outcome and whose perspectives should be included in selecting them. Such debates often feature two primary disagreements—objective vs. subjective, and multiple perspectives vs, consensus.

Objective measures: Many people involved with/working in human services advocate for the use of what are described as objective measures. These measures are not subject to human judgment. Things like age, sex, placement type, length of stay, and discharge placement are all seen as objective measures.

The clear advantage of objective measurement is that people believe that they are more reliable than subjective measures. So there is a fairly immediate trust factor for external audiences when objective outcomes are reported. The reality is that these measures also suffer problems of unreliability and inaccuracy. In general though, there are a wealth of easily available and reasonably accurate measures that can be accessed, for example, from administrative records. The real disadvantage of

objective measurement is relevance. While objective measures tend to be easy to collect and report, their meaningfulness is often quite limited. For example, if you are looking at 'maintaining youth in the community' as your objective outcome, the best way to do that is to select youth into your program who are at little or no risk of placement outside of the community. This specific outcome focus then creates an adverse selection bias against taking on the care of youth actually at risk for out-of-community placement thereby defeating the original purpose of the program and ultimately eliminating its value to the system. Thus, limiting measurement to certain kinds of "objective" measures that are available from administrative data may come at a cost; specifically, that such measures are more reflections of system decisions than the outcomes ultimately being sought, such as improvements in the lives of children and families.

Subjective measures are open to human judgment. This type of measurement covers most of the kinds of constructs that are relevant to clinical and functional outcomes in the child serving system. All measures of well-being or symptoms or risk behaviors would be considered subjective. The disadvantage of this type of measurement is that the measures are often perceived by external audiences as unreliable. Adolescent self-report measures are notoriously suspect because young people often compete surveys from a completely different perspective than adults believe that they should (e.g., "I need to stay out of trouble by admitting nothing") Also, funders may worry, for example, that providers might fake subjective measures in order to retain a youth in services longer (to maximize revenue) or to terminate a family (to open a new slot or minimize costs associated with serving that family). The advantage of subjective measures, however, is that they are often more likely to capture constructs that represent the true intended outcome of system of care interventions.

Within the category of subjective measurements, there is a secondary debate about triangulation (Obeid & Lyons, 2011). The most common perspective is that if measures are subjective, then information must be collected for each relevant party independently. This perspective makes it necessary to get a youth self-report, a parent report, a case worker report, and a teacher report, after which, a data analyst must sort through and synthesize the various sources of information. This approach comes from the work of Campbell & Fiske (1959) on multi-trait/multi-methods. The Child Behavior Checklist (CBCL) was the first version of this approach widely used in the child serving system (Achenbach, McConaughy, Howell, 1987). Invariably this method results in reports that list outcomes separately for youth, parents, caseworkers, teachers and so forth; and it is statistically impossible to reasonably combine these into one overall outcome of any given child, youth, family or young adult. Further, sometimes youth are not replications of other youth and parents are not replications of other parents so a perspective based analysis of outcomes can be limiting or even misleading (Lyons, 2016).

As an alternative, the Communimetrics (Lyons, 2009) model of measurement proposes that triangulation should be done first and then the measurement applied. In other words, given the complex and multiple perspectives that abound in a child serving system, the various involved parties should talk through their perspectives and, with the youth and family's perspective prioritized, agree on a shared vision for the youth and family, as well as a shared perspective of progress that has been made. This measurement model comes directly out of the concept of child family teams creating a shared vision, which is the foundation of the wraparound process. The only substantive difference between communimetrics and wraparound philosophy is that wraparound emphasizes leaving the shared vision in the language of the youth, young adult and family, while communimetrics requests that a common language framework – and a standardized assessment approach – be applied consistently across all youth, young adults and families in order to create the possibility of comparability of different stories and experiences. In practice, however, communimetrics and wraparound espouse such similar priorities and values that using them in coordination is not difficult. By promoting comprehensive assessment of family needs and consistent, ongoing, measurement of outcomes, a standardized assessment of a youth and family's strengths and needs that allows comparability and benchmarking (e.g., the Child and Adolescent Needs and Strengths) can be valuable to wraparound planning and progress monitoring.

There are many outcome measures available, and numerous resources that review the pros and cons of each. Once an initiative has been started and the outcomes of the program defined, these resources should be used to select outcome measures along the considerations presented above.

Designing Business Rules / Procedures for Collecting Information

Once outcomes have been identified, and measures selected, the methods to be used to collect and store the information must be defined. If this were research it would be called *methods and procedures*. In outcomes management these are called *business rules*. The business rules must clearly establish:

1. Who collects the information?

2. What is collected by whom?

3. What is done with the information once it is collected?

4. At what point in the process of care are measures applied and by whom?

As described above, initial stakeholder convenings to specify information needs can also be used to brainstorm and get buy-in to these critical decisions. Regardless of how they are determined, making these four generic business rules specific, and holding people accountable for honoring them are fundamental tasks for any successful outcomes initiative - measurement or management. The more the initiative strives to achieve the goals of outcomes management, the greater the necessity of using an information system that allows for real time reports and feedback.

Analyzing and Reporting Outcome Information (a.k.a. Data Reporting and Analysis)

Data analytics is a broad and complex topic with an enormous knowledge base not covered in this resource. However, a few key principles to focus on are:

1. *Keep It Simple:* Simple frequencies (e.g., number of youth experiencing a type of problem or type of placement at baseline and follow-up), and simple change metrics (e.g., percent change) are always the easiest to complete and to communicate. The more complicated the statistical analysis, the harder it is to accomplish and explain. If a large amount of resources (funds, staff, or both) are available, using statistics to ensure that, for example, observed changes are reliable or between-group differences are significant, is ideal. However, reporting results in a simple, straightforward way is also ideal. Regardless of resource availability, it is best to keep reports as short and information as simple as possible.

2. *Keep It Relevant to the Program:* Building internal capacity within organizations and convening groups of stakeholders to pursue this type of work is not just critical to designing an outcomes monitoring/management effort, but to managing it over time as well. On too many occasions, external researchers or statisticians hired to analyze outcomes data do not understand the program/initiative or the information needs of stakeholders. Left to their own devices, such individuals or teams can take over analyses to do things interesting to the statistician, leaving primary decision makers with results that are not useful. As described above, data must be analyzed and reports formatted in ways that are organized by information needs. Moreover, such reports must be produced at times when such decisions are made, and formatted in ways that such decision makers can easily access and understand them.

3. *Avoid Mean Changes:* Means are difficult to interpret. The problem with averaging data across individuals is two-fold. First, no one is ever actually the mean so they represent

nothing real. Second, combining youth, young adults and families into averages over time awkwardly combines youth, young adults and families who benefit, with those who have new needs identified, or actually get worse. For this reason, means invariably underestimate the clinical impact of programs. It is better to use a reliable change metric (e.g., Jacobsen & Truax, 1991) instead, to determine what percentage of youth, young adults and families achieve real benefit from the program or intervention.

Embedding Outcome information in the CQI Process

A large body of literature exists around designing and supporting Continuous Quality Improvement (CQI) processes. Put simply, CQI is a philosophy that encourages all health care team members to continuously ask: "How are we doing?" and "Can we do it better? https://www.healthit.gov/sites/default/files/tools/nlc_continuousqualityimprovementprimer.pdf

More specifically, can we do it more efficiently? Can we be more effective? Can we do it faster? Can we do it in a more timely way? As for outcomes management, CQI requires a structured planning approach to evaluate the current practice processes and improve systems and processes to achieve the desired outcome and vision for the desired future state. Tools commonly used in CQI include strategies that enable team members to assess and improve health care delivery and services. (See https://www.healthit.gov/sites/default/files/nlc_continuousqualityimprovementprimer.pdf for more on CQI). As suggested above, CQI has historically focused on the process of care. While that can be helpful, sometimes it is more helpful to programs than it is to the children, youth, young adults and families that these programs serve. Clinical and functional outcomes initiatives can be embedded successfully within the broader scope of CQI. In fact, it could be argued that CQI initiatives are not generally relevant to improved practice unless clinical and functional outcomes are successfully embedded in them. At minimum, a CQI process for example, should be clear that cost efficiencies do not come at a sacrifice to the wellbeing of the children and families served.

Sustaining the Work

Outcome measurement processes are comparatively easy to sustain as they generally have limited costs, unless an agency is purchasing measures which can get expensive even when their results are not fully utilized. All too often they are abandoned or unhelpful because, as described above, simply measuring things (without the requisite thoughtfulness about *how* the information will be used), also has limited utility. Outcomes management initiatives require an investment by the agency in resources necessary to support the analysis of information, and the internal technical capacity required to interpret this information to guide key decisions regarding policy and practice.

Currently, many agency leaders/administrators still see outcomes as a necessary and often unfunded mandate, rather than what they actually are: A fundamental component of good business and clinical practice. Child-serving systems need to understand that our 'business' is not about purchasing time spent with children, youth, young adults and families, but rather it is about helping them to change their lives in some important way (Gilmore & Pine, 1997, Lyons, 2016). Maintaining such a perspective can help agencies and stakeholders see the value of investment in an outcomes management approach. So, too, can adopting the principles described above – whereby information needs are clearly defined and measures and measurement strategies based on such needs, rather than arbitrary choices. It remains to be seen whether outcomes management will take hold and become a core business and clinical practice in child-serving systems, or the current approaches that have challenged the utility of the outcomes movement will remain in place.

References

Achenbach, TM, McConaughy, SH, & Howell, CT (1987). Child and adolescent behavioral and emotional problems: Implications of cross-informant correlations for situation specificity. *Psychological Bulletin*, 101, 213-232.

Campbell, D. and Fiske, D. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. Psychological Bulletin 56, 2, 81-105

Gilmore, J. H., & Pine B. J. (1997). Beyond goods and services. Strategies & Leadership, 25(3), 10-17.

Jacobson, N. S. & Truax, P. (1991). "Clinical significance: a statistical approach to defining meaningful change in psychotherapy research." Journal of Consulting and Clinical Psychology 59(1): 12-19

Lyons, JS (2009). *Communimetrics. A communication theory of measurement for human services.* Springer, New York.

Lyons, JS (2016). The myths of outcomes management. Implications for residential treatment. *Residential Treatment for Children and Youth*, 32(3); 184-194.

Obeid, N. Lyons, JS (2011). Post triangulation measurement. *Canadian Journal of Program Evaluation*. 25, 59-82

John Lyons, PhD is developer of the Child and Adolescent Needs and Strengths and author of The myths of outcomes management: Implications for residential treatment and Communimetrics A communication theory of measurement for human services.