

If we can see into the universe 12-14 billion years ago, we can see into mental health systems today. But it requires commitment to using new methods and “leaving no data behind.”



The northern Hubble Deep Field (12-14 Billion Years Ago), (For more information, look on the Web at <http://www.stsci.edu/ftp/science/hdf/hdf.html>.)

Understanding mental health systems requires using data base and data synthesis technologies to bring together different types of data from clinical trials, quasi-experiments, administrative data sets, and expert judgment. It is like “herding cats.”



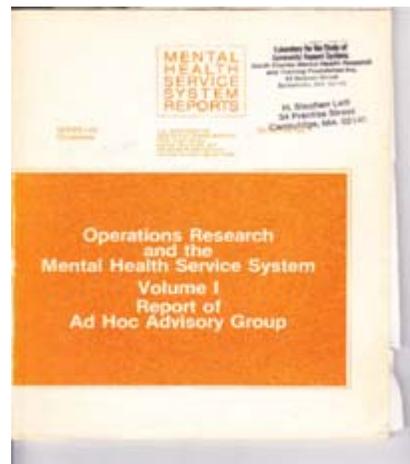
From EDS super bowl commercial

**Reforming and/or Improving Mental Health Systems Requires Employing
Mental Health System Planning Best Practices.**

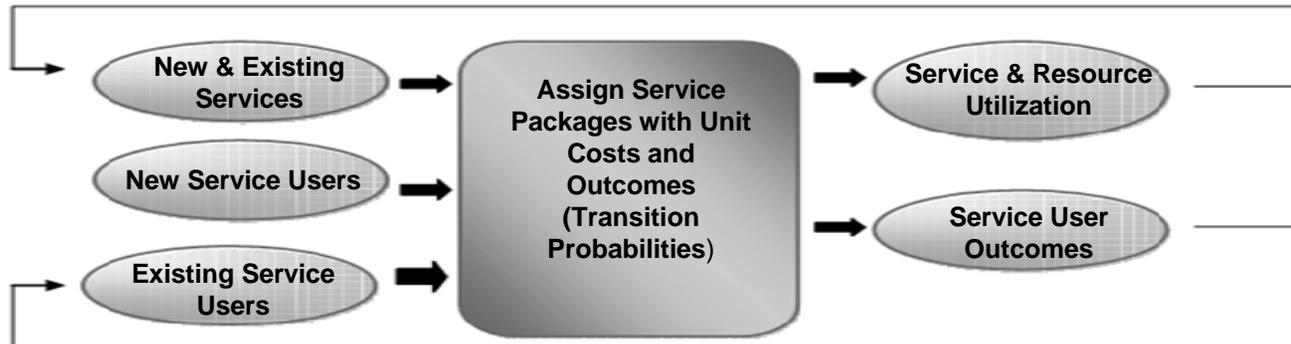
Hargreaves, W. A. (1986). "Theory of psychiatric treatment systems. An approach." *Arch Gen Psychiatry* 43(7): 701-705.

“To forecast, plan, implement, and manage public mental health systems under reform we need pragmatic theory of how “treatment systems interact with the life course of persons.”

- To optimize treatment system effectiveness within available resources, we need some logical tools to help us calculate the implications of knowledge gained.
- This logic should also tell us which of our gaps in knowledge are the most important to fill.
- This requires a theory of the way treatment systems interact with the life course of persons in major target groups. ***To be useful, such a theory of mental health services must be sufficiently detailed and valid to forecast an array of impacts of proposed system changes. Such theory would be a stimulus and guide to research, as well as a tool for program management. ...***
- “The methods sometimes recommended for theoretical work on treatment systems are a group of ***simulation and optimization techniques widely used in operations research in industry...***”
- In the 80’s NIMH supported work in this area. With a few exceptions, in mental health, support for these approaches has not continued.



Pragmatic Theory Of How Treatment Systems Interact With The Life Course Of Persons



Frank, R. G., T. G. McGuire, et al. (1999). "The value of mental health care at the system level: the case of treating depression." *Health Aff* 18(5): 71-88.

If [a] "system" [reflected] the substitution of one treatment for another as ... in a cost-effectiveness study, it would behave in a fashion described in the cost-effectiveness analysis.



But systems typically do not work like this. When a new treatment option is added, many actors will reconsider their decisions, and the overall value of spending in the system will be altered in ways that a cost-effectiveness analysis cannot foretell.



Public mental health system reform requires forecasting and planning for how systems will change as consumers and services change. Typically, you can't change the shape of one piece of a puzzle without altering the shape of others.

Pirkis, J., M. Harris, et al. (2007). "International Planning Directions for Provision of Mental Health Services." Administration and Policy in Mental Health and Mental Health Services Research 34(4): 377-387.

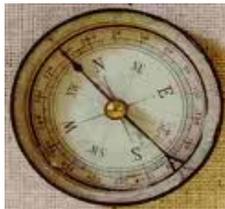
Since the 1980s we have known that mental health system reform would benefit from mental health system theory, forecasting tools (particularly operations research models) and data that allow for estimating system comparative effectiveness. However, mental health planning efforts typically have not moved in this direction.

Pirkis et al. study:

- **In total, 32 current mental health plans were identified from 32 jurisdictions:**
- Australian states/territories
- New Zealand
- England (Department of Health, 1998, 1999, 2000)
- Canadian provinces
- **Nineteen US states (2002-2006)**

Only four of the identified mental health plans cited **specific resource targets** regarding 'core' components. **None of the US plans** did.

This situation would appear to be less than ideal... **Until [plans] begin to routinely set resource targets it is difficult to see how...mental health service reform can occur in a strategic manner.**



**A New Roadmap
for Louisiana's
Health Care Delivery System**



Grob, G. N. (2008). "Mental health policy in the liberal state: The example of the United States." International Journal of Law and Psychiatry 31(2): 89-100.

The failure to adequately plan puts consumers and the public at risk. “The concept of community care and treatment and the corresponding attack on institutional care - all of which played significant policy roles during the last half century were not inherently defective...But states, communities, and policy advocates lacked the foresight or commitment to ensure [plan] adequate financing and to provide adequate services. ...”

To dismiss rhetoric and ideology [incomplete plans] as simply forms of public posturing is to ignore their consequences... Rhetoric and ideology [incomplete plans] shape agendas and debates; they create expectations that in turn mold policies; and they inform the socialization, training, and education of those in professional occupations.



If There Were An FDA For Mental Health System Plans, It Would Find Very Few Safe And Effective

So why don't we have more adequate mental health planning?

Pirkis, J., M. Harris, et al. (2007). "International Planning Directions for Provision of Mental Health Services." Administration and Policy in Mental Health and Mental Health Services Research 34(4): 377-387.

The lack is “related to contextual factors associated with political will and accountability. There is a clear risk for governments in identifying ‘core’ services and their associated resource targets, because it ‘locks them in’ to delivering services at a certain level and leaves them open to scrutiny by setting benchmarks against which they can be held accountable

Campbell, D. T. (1969). "Reforms as experiments." American Psychologist 24(4): 409-429.

“Given the inherent difficulty of making significant improvements by the means usually provided and given the discrepancy between promise and possibility, most administrators wisely prefer [ambiguity]. Ambiguity, lack of truly comparable comparison bases, and lack of concrete evidence all work to increase the administrator's control over what gets said, or at least to reduce the bite of criticism in the case of actual failure. **There is safety under the cloak of ignorance...The public availability of such facts reduces the privacy and security of at least some administrators Campbell,, 1969).”**

CONCLUSIONS:

So for mental health system policy and planning reform we need more than just more pragmatic data from clinical trials research. We need a culture of safe and effective mental health systems planning. To create this culture, we need:

- **Federal mental health agencies to return to supporting the development and use of operations research** forecasting and planning tools tailored to mental health system applications
- **The Federal Government, especially in its capacity as customer for State Mental Health Block Grant and other plans, to require accountable plans** that are not just “aspirational.” These plans should be required to forecast and take into account resource needs for safe and effective reform.
- **State, county, and local administrators and planners who are willing to be accountable and deliberative leaders** making plans that can be safely and effectively implemented. This means going beyond aspirational (sometimes referred to as “transformational”) planning
- **Deliberative planning methods for involving stakeholders** in even highly technical planning
- And, of course, **data, including and especially administrative data systems that support monitoring and managing plan implementation.**

James, G. M., C. A. Sugar, et al. (2006). "A comparison of outcomes among patients with schizophrenia in two mental health systems: A health state approach." Schizophrenia Research 86(1): 309-320.

“[Outcomes expressed as transition probabilities between mental health states] allow one to make objective long-term health policy decisions by balancing treatment effectiveness against societal costs on a quantitative basis.” ... at least three reasons why this “provides distinct advantages over traditional univariate approaches to analyzing data for complex diseases such as schizophrenia.”



- 1. A convenient framework for performing longitudinal analyses.** One can estimate the long-run fraction of people in each health state in addition to the cross-sectional distributions of patients during the study period...
- 2. Partitioning of the population into health states leads to a more richly informative analysis of the differences between populations than simply examining mean differences...**
- 3. Stationary distributions can be combined with a wide variety of outcome variables such as costs or QALYS, to calculate long-run financial or utility differences between populations...**

Note by SL: the number of published studies with transition probability data for mental health systems has grown. In 1986, Hargreaves was the only one of which I was aware. Currently, we are attempting a meta-analysis of studies expressing mental health outcomes as transition probabilities. We have identified 20-30 candidate studies, the James (2006) being an example. If you know of any unpublished analyses or reports that might be helpful to us, we would appreciate hearing about them. Please email: sleff@hsri.org.

And We Need Monitoring Systems To Track Whether Plan Implementation Is On Course
And To Make Course Corrections And Changes When Necessary

The best-laid schemes o' mice an' men
Gang aft agley,
And lea'e us nought but grief an' pain
For promised joy!

Robert Burns

No battle plan ever survives contact with
the enemy

Murphy's Military Law #2

Plans will go awry.

We need plans and data that can assist us in charting an initial course and making **course corrections** along the way: GPSs rather than compasses, maps, or blueprints.



Recalculating