

**THE ANNIE E. CASEY FOUNDATION:
Children's Mental Health Benchmarking Project
First Year Report
September 28, 2000**

EXECUTIVE SUMMARY

This project has begun the process of systematically requesting, reviewing and comparing data on the performance of public mental health systems for children. Our goal in carrying out this work has been to start offering state and county systems the ability to benchmark, or compare, their performance. As an exploratory venture, the project has provided evidence of both the value and the challenges entailed in such an effort.

We collected data on a set of core indicators for children's mental health in each of four categories, access, utilization, financial performance and intersystem involvement. While we initially approached 38 state and local mental health agencies, and received responses expressing interest in the project from 22 of those, we ultimately received data from only 13 jurisdictions.

We asked each site about the availability of, and the feasibility of collecting, information from their data systems on the indicators in which we were interested. We then conducted a telephone interview with each person who responded to the feasibility questionnaire. Finally, we mailed a list of data elements to each person we had interviewed. Despite regular reminders and clarifications, we received responses from only about one-third of those we had initially approached, and only slightly more than half of those who had indicated that they were interested in the project and willing to participate in it. On average, fewer than five sites reported data on each variable.

We discuss our results in two categories, related to process and findings. With regard to process, we observe the difficulty that public agencies have in producing special reports for non-standard purposes. We also note that it is critically important to deal with the most appropriate agency and individual staff person within the agency and that it is vital to assure that measures are understood precisely as intended. With regard to our findings, we note, first, that intersystem data, which are especially crucial to an understanding of children's services, are sorely lacking. Secondly, we observe that on some variables the data points we are reporting cluster within similar ranges, but that in other cases the reported data vary widely and require further investigation. While we do not consider any of our results to be conclusive, in many instances they are suggestive. Given further work with this group of respondents, distribution of the report and continued support of the effort by the Casey Foundation, we believe that we can improve upon the data reporting, expand upon the number of respondents and begin to truly develop some national benchmarks for children's mental health services.

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INTRODUCTION

This project has sought to systematically review and compare data on the performance of public mental health systems for children in a variety of states and counties, thereby building a database that can be maintained and expanded as programs grow and new initiatives begin. Our project is helping to amplify the important work that individual state and local systems are doing to develop and implement measures that assess the performance of their systems of care. The local efforts have sought to improve the mental health care provided to children by increasing quality and cost effectiveness, measuring levels of access, and enhancing accountability. As such initiatives continue to grow, the benchmarking of performance data has the potential to become an increasingly useful way to evaluate varied public mental health systems for children.

Benchmarking, the practice of comparing the performance of one system against that of a similar system and developing standards for system performance, provides stakeholders with data that can help them evaluate the effectiveness of their systems of care for children. While programs differ significantly, we believe it is quite useful for state and county managers, policy makers, and other stakeholders to have some sense of where their programs fit within the range of all programs. We also believe it is critical to begin to develop the practice of measuring system performance by "plunging in" to the analysis. Even as we acknowledge the many reasons for variation, and the lack of consistency, in the data, we can be challenging publicly funded agencies both to improve their systems for collecting and reporting information, and to use statistics consistent with those that experts recommend and that others are using.

The categories of variables that are most frequently assessed to measure the performance of health systems are access, utilization and availability, financial performance, and what we refer to as intersystem involvement. We have collected data on a set of core indicators for children's mental health in each of these categories. We have had differing levels of success for the various indicators.

In the extensive work our company has done related to performance indicators and benchmarks, we have often found that both indicators and benchmarks are far more likely to be available for adults (or for all consumers, adults and children) than for children alone. Policy makers responsible for child mental health are therefore often frustrated in their efforts to find useful and relevant information that can guide them in their decision making. It is our hope and expectation that projects like this one will help change that situation.

METHODS

Initial letters introducing the project were mailed from the Foundation office to 38 state and local (primarily county) mental health agency contacts on October 1 and November 1, 1999. We chose States and counties for inclusion in this study on the basis of several characteristics: (1) they have a Casey funded Neighborhood Transformation/Family Development site; and/or (2) Dougherty Management Associates, Inc. (DMA) has had prior working knowledge of the state and its systems; (3) their Medicaid systems vary (i.e., some use fee-for-service and others use managed care methodologies); and (4) they are geographically and demographically diverse.

DMA compiled and sent a follow up mailing on November 15th to all 38 contacts. This mailing provided detailed descriptions of each indicator and requested information regarding the availability of, and the feasibility of collecting, the data. **Appendix A** provides a copy of this initial information request.

In early December, DMA staff made telephone calls to states and localities that had not yet responded to the feasibility questionnaire. By early February we had received responses from a total of 26 states and counties, four of which declined to participate further in the study. **Appendix B** provides a summary of the information the 22 remaining jurisdictions provided in their questionnaires.

Once DMA had received the questionnaire back from a given state we telephoned the respondent and arranged a time for a telephone interview. We completed telephone interviews with 21 respondents. The interviews lasted for approximately 30 to 60 minutes, depending on the depth of the respondent's knowledge, the details of the specific system and the availability of data. **Appendix C** offers a copy of the interview guide that DMA staff used internally to conduct the telephone interviews. As the guide indicates, the interviews served to collect specific information on characteristics of the state/county's system, such as population served and eligibility requirements. This information has allowed us to more appropriately compare and contrast data from different states/counties during the analysis phase of the project.

Information gleaned from telephone interviews, used in conjunction with the content of the initial survey forms, permitted us to develop a list of data elements that jurisdictions seemed most likely to have the capacity to provide. Only in one of our initial areas of inquiry -- the questions about data on school absenteeism among children receiving mental health services -- did we find that virtually no one could provide information. We therefore omitted the two questions related to this area from our final data collection instrument.

The telephone interviews also enabled us to clarify our questions so that we could be relatively certain that respondents would understand them as intended. A copy of the final data collection instructions and instrument, as mailed to respondents, is attached as **Appendix D**.

We mailed the final data collection instruments to most respondents in late March. As we learned about additional jurisdictions that might be able to respond to the survey, we mailed instruments to them as well. We followed up with telephone calls and sent e-mail messages with reminders and clarifications during April and May. In mid-May we re-mailed the entire original package to 11 jurisdictions that had not yet submitted responses. Once we received information from a given state

or county, we checked it for accuracy, and asked our respondents to clarify or modify their data as seemed appropriate. In early June we sent a memo to each jurisdiction that had responded probing for additional data; we also requested modifications of numbers that appeared incorrect according to the statistics we had calculated based on the data provided. In total, we sent respondents and potential respondents an average of four e-mail messages; some received as many as six or seven messages. In addition, we made several rounds of telephone reminder calls to each person who hadn't responded.

INDICATORS AND BENCHMARKS: DEFINITIONS

The terms “performance measure,” “performance indicator” and “quality indicator” are often used in the literature more or less interchangeably. Indeed, in many instances, those using one or more of the terms do not stop to define them, but rather assume that their definitions are known and agreed upon. In an attempt at clarity, however, we have specified working definitions of the key concepts with which we are dealing. We take our definition of an “indicator” from The American College of Mental Health Administration, which in turn took it from the standards developed by CARF...The Rehabilitation Accreditation Commission. An indicator is a *domain or variable used to point to quality or performance*. For example, one indicator in which we are interested is “penetration rate,” defined as the proportion of the population who use a particular service. A “measure,” as defined by the same sources, is *a specific instrument or data element used to quantify or calibrate an indicator*. For example, the measure of penetration rate (for Medicaid children) that we are using is the unduplicated number of Medicaid children who receive at least one unit of service within a year *divided by* the unduplicated number of children enrolled in Medicaid. Indicators reflect the values of those who establish them. For instance, many stakeholders are interested in penetration rate because it points to access, and belief is widespread that access to mental health care should be easy and rapid.

A benchmark, as noted above, is a means of comparing the performance of systems that are ostensibly similar. In order to create benchmarks one needs first to determine appropriate indicators, and measures of those indicators. Then one can conduct meaningful comparisons between systems.

INDICATORS AND BENCHMARKS SELECTED FOR THIS PROJECT: SOURCES

There are numerous recent and current projects, sponsored by a variety of public and private organizations that are attempting to define mental health indicators. The sources of performance measures that are most widely recognized and referenced, and that we reviewed for this project, include the following:

- ***American Managed Behavioral Healthcare Association (AMBHA)*** is a non-profit trade association representing managed behavioral healthcare organizations. Working with researchers from Harvard University, AMBHA developed a specifically targeted set of performance indicators known as Performance Measures for Managed Behavioral Healthcare Programs, or PERMS.¹
- ***The Mental Health Statistics Improvement Program (MHSIP)*** has been in process since the 1970s. Organized and funded by the Center for Mental Health Services of the

Substance Abuse and Mental Health Services Administration, the program has taken a consumer oriented approach to development of a “report card.”²

- The ***National Committee for Quality Assurance (NCQA)***, an independent, non-profit accrediting organization, developed the Health Plan Employer Data and Information Set (***HEDIS***) in order to help employers evaluate the performance of health plans. NCQA subsequently adapted HEDIS for use in evaluating Medicaid managed care plans. HEDIS includes general as well as mental health measures.³
- The President’s Task Force on Performance Indicators and Outcome Measures of the ***National Association of State Mental Health Program Directors (NASMHPD)*** reviewed a variety of performance measure initiatives in the attempt to consolidate measures and develop a standard framework for performance measures and outcome indicators. The framework NASMHPD endorsed in December 1997 incorporates an initial set of measures that were considered currently feasible as well as a developmental set of indicators that would require more time for states to implement.⁴
- The ***National Association of County Behavioral Health Directors (NACBHD)*** developed a set of performance measures with specific relevance to county level service delivery.⁵
- The National Leadership Council of the ***Institute for Behavioral Healthcare (IBH)*** surveyed its membership, over 170 behavioral healthcare organizations, regarding indicators in five domains, asking respondents whether each indicator was currently utilized, useful, valid and feasible to measure. The resulting report presents the most commonly used indicators in each domain, as well as those that were deemed most important.⁶
- The ***Center for Mental Health Services (CMHS)*** of the Substance Abuse and Mental Health Services Administration (SAMHSA) initiated and funded the Five-State Feasibility Study “to evaluate the potential for implementing standardized mental health performance measures” across states. It demonstrated that states can and do collect data for performance indicators, but that “considerable analysis and testing remains to be done” before they can be used for accountability purposes or for comparisons within and among states.⁷ The Five-State Study built on the efforts of NASMHPD and others, and CMHS subsequently moved on to work with 16 states through pilot grants.
- The ***American College of Mental Health Administration (ACMHA)*** and The Accreditation Organization Workgroup (which includes representatives from the National Committee on Quality Assurance, the Joint Commission on Accreditation of Healthcare Organizations, CARF...The Rehabilitation Accreditation Commission, the Council on Accreditation of Children and Family Services and The Council on Quality and Leadership in Support of Persons With Disabilities, along with several College members) met regularly beginning in June 1998 in an effort to reach consensus on a 'core set' of broadly applicable indicators and measures for the field. ACMHA convened and facilitated the group. The group reached agreement on approximately 35 indicators that address concerns about access to services, the quality of care, and outcomes. The majority of the indicators focus on the consumer perception of the experience of care. The group made public their *Proposed Set of Performance Indicators and Measures for*

Behavioral Health in April 2000. Consumer input and comment were sought through a variety of mechanisms.⁸

There is considerable similarity and even overlap among the indicators developed and/or recommended by these organizations, largely because the developers are aware of, and often consciously building on, one another's work (and in some cases because the same individuals have been involved in more than one project). For example, both AMBHA's PERMS and NCQA's Medicaid HEDIS include utilization-based indicators such as service utilization and penetration rates, as well as process indicators such as telephone call abandonment rate and average speed of telephone answer. AMBHA, Medicaid HEDIS and MHSIP all incorporate measures of access and of quality of care. On the other hand, Medicaid HEDIS does not include the consumer input that AMBHA and MHSIP do. Since the set of measures that NACBHD recommends draws on their review of the performance indicator literature, that set completely overlaps with the most widely known existing measures. NASMHPD also depends heavily on existing indicators. As noted above, the Center for Mental Health Services, in its five state and 16 state indicator projects, has integrated the work of several other organizations. Of all the sources of performance indicators included in this report, the IBH one is the most comprehensive. It is noteworthy that none of these sets of measures focuses on children, and few have more than a very small number of indicators related to children.

We have tried to cull from all of these sources the most useful and viable indicators related to children, of which there are relatively few over all. One rationale for relying on previously published indicators was the expectation that by doing so we would maximize the likelihood of receiving data from our respondents. That is, it seemed reasonable to assume that jurisdictions would be more likely to have the capacity to provide data related to indicators that were generally familiar to them than they were to be able to respond to new and different areas of inquiry. In addition, throughout the selection process our choice of indicators was guided substantially by our pre-existing knowledge of which data states would most likely be able to produce. **Appendix E** presents the sources for the indicators we chose as they appear in the list of data elements.

ADVANCING THE STATE OF THE ART

From the theoretical universe of data elements, we selected approximately 20 that would enable us to develop meaningful indicator statistics. Developing those statistics required the use of numerators and denominators. We found, however, that in many instances states could provide either the numerator or the denominator, but not both. For example, we used *the proportion of all ambulatory treatment encounters for children, which are associated with a family visit within the same time period* as an indicator of the degree to which children are treated in the context of their families. Such treatment is considered to be a significant component of high quality mental health care for children. In order to create this statistic, we needed to receive two pieces of data: first, *the number of ambulatory treatment encounters for children aged 12 or under*, and second, *the number of ambulatory treatment encounters for children aged 12 or under who also have a family visit claim within the same time period*. While half of jurisdictions (7 out of 14) could provide the former, very few (3 out of 14) could provide the latter, thus reducing our ability to develop meaningful comparisons across states and counties. A similar situation held for many variables.

This project is not the first to find that state level data are difficult to gather. For example, Pires et al., in their *Health Care Reform Tracking Project --1999 Impact Analysis*, report that

“interviews in all 10 states revealed that data on cost per child served or cost per eligible child remain unavailable.”⁹ As we will demonstrate below, we have in fact been able to calculate some statistics related to these indicators. The fact remains, however, that states have not been able to provide as much data for this project as we, or they, had hoped. Given the relatively small amount of data we have been able to gather, and the relatively few statistics we have therefore been able to calculate, one might ask whether a project such as this one is worth its effort and cost. We believe strongly that it is, for several reasons:

- It is important to begin the process of comparing performance across jurisdictions. States and counties are continuously accumulating vast quantities of information (on services provided, costs, population demographics and innumerable other issues); each jurisdiction gathers and uses its own information idiosyncratically. All stakeholders will benefit if comparisons can be made across systems. We see here a clear analogy to the process of developing the *Kids Count Data Book*¹⁰ over a number of years. Although, in most cases, states undoubtedly were already gathering the requisite data before the project began, it was still a considerable challenge to present the information so that it would be in the proper form and therefore comparable to the data from other states. Now, *Kids Count* is not only widely accepted but also depended upon by innumerable stakeholders.
- The process of benchmarking data is challenging at every step for all involved. Yet only by engaging in it will we learn how best to gather and use information. The sooner we begin, the sooner we will have valid and usable benchmarks.
- Mental health systems are in a state of flux, with variability and change perhaps their most commonly shared characteristic; for future system modifications to be made on a rational basis, they should be guided by data.
- If state mental health authorities had data permitting them to benchmark themselves against other states in their own regions, or nationally, they would be able to use the data in negotiating with other state agencies, and with additional stakeholders as well.¹¹
- As changes are made to delivery systems, it is critical that managers have the capacity to compare the “before” and the “after,” as well as the ability to compare their systems to others. Only then will they be able to determine whether new technologies and methods have actually led to the improvements anticipated.
- Providing care for children with mental health needs is astonishingly complex. There is no obvious way to conduct “scientific” experiments on systems of care to determine which ones work best. We can neither hold all of the important variables constant over time, nor randomly assign children to different states, nor give one child the “experimental” treatment and another the “placebo.” We do, however, have the option of gathering comparable data across systems (and over time within systems) and trying to determine, in a naturalistic way, which kinds of programs seem to lead to preferred outcomes. This project has taken some initial steps in that direction.
- Although there are other projects, particularly those cited above, that are attempting to gather data relevant to the development of indicators¹², few are focused on children, and in some cases those that do focus on children report data only in the aggregate for the

nation as a whole (rather than by state). Moreover, few projects are actually gathering data directly from states and counties. No other project of which we are aware is both focusing on children and asking states to provide data.

- Billions of dollars are spent each year, by the Federal government, states, private insurers and individuals, on providing mental health services for children. The 14 states and counties for which we have data reported Federal and state expenditures of over \$450 million on children's mental health care. We believe it is important that jurisdictions begin to examine where they are focusing their resources and how they compare to others.

RESULTS

NUMBER OF JURISDICTIONS REPORTING

As **Appendix F** reveals, DMA originally mailed letters and surveys to 37 states and counties. Of those, 26 returned feasibility questionnaires (in which four indicated that they were unable to participate further), and we completed telephone interviews with 21. We ultimately received data, albeit incomplete for many, from 13 states and counties: Arizona; San Diego County, California; Colorado; the District of Columbia; Florida; Louisiana; Massachusetts; Nebraska; New Jersey; Oregon; Vermont; and Clark and King Counties in Washington State.

REPORTING OF SPECIFIC DATA

As explained earlier, all of the indicators we selected have been proposed by significant national groups for the purpose of trying to compare mental health systems. Nevertheless, our state and county contacts were far less able to provide us with the data we requested than either they or we had expected. **Appendix G** displays the data that states and counties anticipated they would be able to provide as well as the data they ultimately did provide. The contrast is striking. There were no variables for which all respondents could give us data, and there was one variable for which no one could give us data. For example, while 15 jurisdictions had anticipated that they would be able to tell us their total number of Medicaid member months (a critical denominator for calculation of several statistics) in fact only seven were able to do so. Similarly, although 19 states and counties had expected to be able to provide the number of Medicaid enrollees who received at least one service within the year, only 11 actually did so.

On average, slightly fewer than five jurisdictions were able to provide data for each indicator. The number of sites reporting on each indicator ranged from three (on average length of stay for acute care inpatient treatment in non-state hospitals) to eight (on Medicaid penetration rate). The inability of so many jurisdictions to provide statistics made comparisons across sites less meaningful than we had hoped.

OBSTACLES FACED BY STATES AND COUNTIES IN REPORTING OF DATA

The results of this study suggest the problem inherent in trying to gather comparable data from numerous jurisdictions, especially without providing funding that is specifically intended to support the process. Our respondents confronted many obstacles in their efforts to provide us with data. They

pointed to the following challenges to the gathering of all requested data or of data on some variables:

- Changes in personnel at higher levels, leading to changes in priorities;
- A context of political change and uncertainty in which organizational leadership is unavailable to attend to the request;
- Changes in organizational structure affecting aggregation of data;
- Other, more important, demands taking priority (e.g., the need for staff to process data related to contracting for the new fiscal year, the need to prepare for a HCFA site visit);
- Difficulties of coordinating data production and reporting between states' departments of mental health and their Medicaid agencies when the two are separate;
- Difficulties in disaggregating mental health from behavioral health (i.e., mental health and substance abuse) data and in disaggregating child only data from data on adults and children together.¹³
- Problems in meeting externally set deadlines that conform neither to their own data requirements nor to the other requirements they must meet;
- Inability of states to give high priority to requests that entail special extractions of data;
- Failure of reporting sub-units to submit information in a timely way leading to lack of availability of data; and
- A general shortage of personnel within the agency.
- Finally, one overarching obstacle may be that some of the data we are seeking may not seem to have any obvious utility to managers on a day-to-day basis. Rather, these data would primarily be useful to policy makers when major decisions are being made, as a way of comparing themselves to other agencies, or when stakeholders ask detailed questions. Most managers take an *ad hoc* approach to data, requesting information only when and as they need it. While in some public and private organizations "managing by data" is part of the "culture," in many it is not. For example, we have asked for two pieces of data (i.e., the total number of Medicaid enrollees and the number of enrollees who received at least one mental health service) that would permit us to calculate a Medicaid penetration rate, a benchmark that researchers consider useful and important. Yet this statistic may not be one that state agencies care or think about on a regular basis. Rather, they may tend to focus purely on the actual number of service recipients.

FINDINGS: LIMITATIONS OF THE ANALYSIS

Although we have tried to make the best possible use of the data our respondents have provided, we also recognize the need for considerable caution in interpreting our findings and drawing conclusions. Four issues in particular have stood out as we have conducted our analysis: the systems we are representing are very different from one another; not only are we reporting on a small number of jurisdictions, but in some cases those localities are reporting on very small

numbers of cases; while we would like to develop comparisons of similar jurisdictions, we will need more data to do so; and many key pieces of data are missing from what we received.

SYSTEMS DIFFER AND DATA MAY NOT BE COMPARABLE

While we believe the information presented in this report will contribute to an increased understanding of the functioning of children’s mental health systems, we also recognize that comparisons among those systems cannot easily be made. We are displaying the state of the art and offering a “work in progress” rather than presenting data that are in all cases precisely comparable. We have attempted to describe and/or account for the major differences among jurisdictions by offering brief descriptions of each state’s and county’s system for providing and funding care, as well as its total population and its population under the age of 18 as of 1990 (see **Appendix H**). In addition, we present footnotes to the figures that point out variations in time, in populations included and in other significant attributes. Nevertheless, we are well aware that this material is neither complete nor conclusive.

Each state’s system for managing, paying for and delivering mental health services is unique. Some states use managed care plans, but no two of those are alike; some jurisdictions operate under capitated systems, while others, even within overall managed care systems, use fee-for-service payment mechanisms. In some jurisdictions public entities provide services directly, while in others private organizations provide most or all services.

The agencies that submitted data to us varied as well. In some cases we received our information from the state or county department of mental health, in other cases from the department responsible for Medicaid and in one instance from a managed behavioral healthcare carve-out company. There is no reason to believe that the source of the data constitutes a systematic source of bias, but it does suggest the complexity of our nation’s “system” of mental healthcare. This variation also points to one of the challenges associated with collecting this kind of data: an outsider to the state may not know which agency or which individual can best provide the information.

SMALL NUMBER OF PARTICIPATING STATES AND SMALL NUMBER OF CASES IN SOME JURISDICTIONS

Because of the small number of states and counties reporting on any given indicator, it is not possible to determine the level of significance of differences between and among them, or to examine the reasons for those differences. For example, we would be especially interested in knowing what effect the imposition of managed care (and even different types of managed care plans) has on access and expenditures. With a larger number of states participating, we might be able to draw some conclusions about the impact of structural differences on the indicators we are examining.

Also, the jurisdictions from which we have received data have dramatically different numbers of children on whom they are reporting, and some of those numbers are quite small. The small size can obviously lead to instability in numbers.

UNCERTAINTY ABOUT ALGORITHMS USED

Although we made every effort to be precise in identifying the data we were seeking, we were unable at this stage of our work to specify the precise algorithms jurisdictions should use in extracting data from their systems. Thus we cannot be certain that every site was using the most appropriate algorithms to extract the information we wanted. We expect that through further work with respondents, we will be able to assure the correct algorithms are being used.

INABILITY TO COMPARE “PEER” JURISDICTIONS

One especially valuable use of the results of this kind of benchmarking study would be to enable counties within a state, or neighboring states, or states with similar systems, to compare their data. The ability to do so might help policy makers better understand the implications of the choices they are making. As is evident from the findings presented in this section, we have not yet reached a level of data quality that will support such comparisons. It is, however, a goal to which we might aspire.

ABSENCE OF KEY DATA ELEMENTS

As is evident throughout this report, there are innumerable situations in which the absence of one or two key data elements from a given jurisdiction limits the usefulness of the remainder of their data. For example, when a state could not provide the unduplicated number of children enrolled in Medicaid, or the unduplicated number of children who received services, we were unable to calculate most rates.

EXTREME OUTLIERS

Despite requests to respondents that they review and correct their information, there appear to be errors (and/or differences in algorithms used to extract data) in the data reported for this study. We have chosen to report all the data we received, rather than establish arbitrary criteria by which to exclude any. For that reason, some of our charts are difficult to interpret. Note also that in each chart the jurisdictions are presented in the same (alphabetical) order, rather than in ascending or descending order, in the belief that this method of presentation enables the reader to make easier comparisons among them.

FINDINGS

MEDICAID PENETRATION RATE

The unduplicated number of Medicaid enrollees who received at least one mental health service in a year divided by the total unduplicated number of children enrolled in Medicaid during the same year.

Penetration rate, the percentage of covered individuals who have received at least one mental health service during a specified period of time, is a global indicator of access to healthcare. It is one of the measures most frequently collected and reported for both general and behavioral healthcare. As Figure 1 indicates, the Medicaid penetration rates among seven of the sites range from 5.6 percent

for San Diego County, California, to 11.7 percent for Clark County, Washington. For the remaining state (Louisiana), the penetration rate we were able to calculate is significantly outside the expected range (1.5 percent). The average penetration rate for the seven sites within the “normal” range is 9.0 percent.

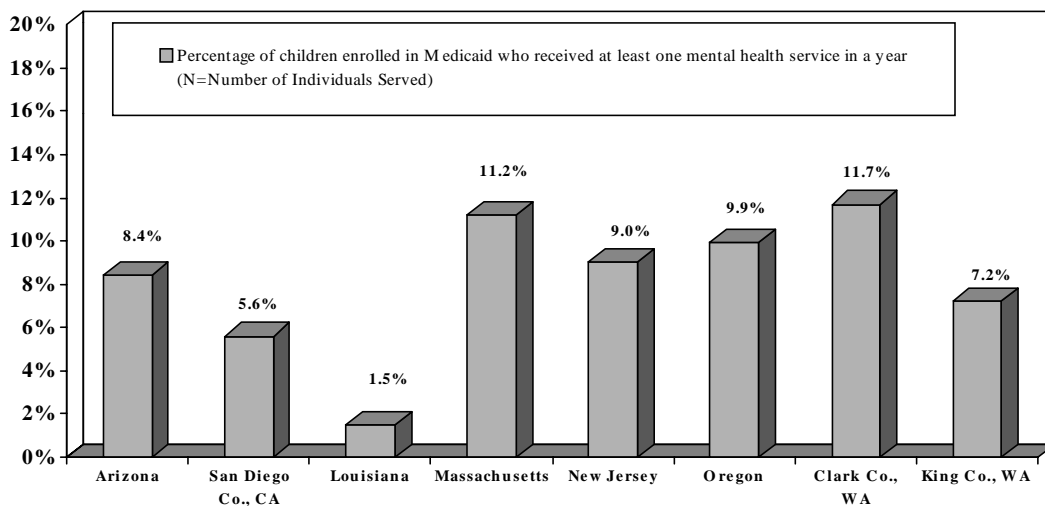
We have worked with our Louisiana respondent to try to understand the meaning of this variation from the norm. He has pointed out two factors that may be at work to reduce the state’s penetration rate – by increasing the denominator for the statistic without being able to influence the numerator. One is that, as the Urban Institute notes in *CHIP: A Look at Emerging State Programs*¹⁴, a report in the Series, “New Federalism: Issues and Options for States,” “poorer states . . . may end up extending coverage to many more children [than wealthier states] because they are drawing from a larger pool of uninsured children.” This may hold true even when eligibility is expanded, in terms of the Federal Poverty Level, less than it is in wealthier states. They are thus substantially increasing the denominator. Secondly, penetration rate may be influenced by speed of program implementation. A poorer state, with a less robust system of care, may take longer to put services in place; thus the numerator remains relatively unchanged. In Louisiana’s case, the number of Medicaid enrolled children stood at 355,632 as of May 2000, which represented a 12.8 percent increase over the 1997 pre-CHIP number. But the state has continued to lose healthcare providers (entry points for mental health services) because of low reimbursement rates.

Unfortunately, there is no available standard that would suggest what an ideal or appropriate penetration rate should be. The only research that has been done in a related area and that is relevant to our work is the effort by Friedman, Katz-Leavy, Manderscheid and Sondheimer to estimate the prevalence by state of serious emotional disturbance (SED) in children and adolescents¹⁵. In their work, Friedman et al. identified two levels of SED for children aged 9 to 17. They estimate the prevalence rate of “serious emotional disturbance and substantial functional impairment” to be in the range of 9 to 13 percent. They estimate a prevalence rate of 5 to 9 percent for those with “serious emotional disturbance and extreme functional impairment.” They also determined that “the prevalence rate is higher for youngsters living in low socioeconomic circumstances than for youngsters living in high socioeconomic circumstances.” Based on these assumptions, they estimate numbers of children with SED by state, with states ranked according to the percentage of their children living in poverty. Thus, for example, to estimate the number of SED children in New Jersey, they rank order the state (it has the third lowest percentage of children in poverty of all states) and estimate that the prevalence ranges from 9 to 11 percent, with 5 to 7 percent having extreme impairment. They therefore estimate that there were between 46,634 and 102,594 youngsters with SED (including both levels of functioning) in New Jersey in 1995.

The data gathered for the current study indicate that in calendar year 1998 there were 464,228 children (aged 0 to 17) enrolled in Medicaid in New Jersey, of whom 41,625 received mental health services, yielding a penetration rate of 9 percent. Comparing the two sets of statistics, we cannot draw any meaningful conclusion as to whether the New Jersey Medicaid program is serving an appropriate number of children. We do not know, for example, what proportion of *all* children aged 0 through 17 (as opposed to those between 9 and 17) fall into the SED category. Nor do we know what proportion of those receiving services through Medicaid in New Jersey are actually SED, and what proportion are less severely disturbed. Indeed, some of the children counted in the penetration rate as receiving “at least one service” undoubtedly did receive only one or two treatment sessions, thus raising the rate substantially; yet those receiving only a few sessions, or only outpatient

services, are unlikely to be SED. Finally, Friedman et al. suggest that a larger proportion of the Medicaid (i.e., poor) population than of all children would fall into the SED category, but we do not know what that proportion would be.

Figure 1
Medicaid Penetration Rate



Arizona: CY 1999. N=18,807

CA, San Diego County: FY July 1996 - June 1997. N=8,945

Louisiana: FY July 1998 - June 1999. N=5,238

Massachusetts: Youth aged 0-18, PCC (carve-out) plan only.

FY Jul. 98 - Jun. 1999. N=46,655

New Jersey: CY 1998. N=41,625

Oregon: FY July 1998 - June 1999. N=22,395

WA, Clark County: CY 1999. N=2,937

WA, King County: CY 1998. N=6,064

EXPENDITURES

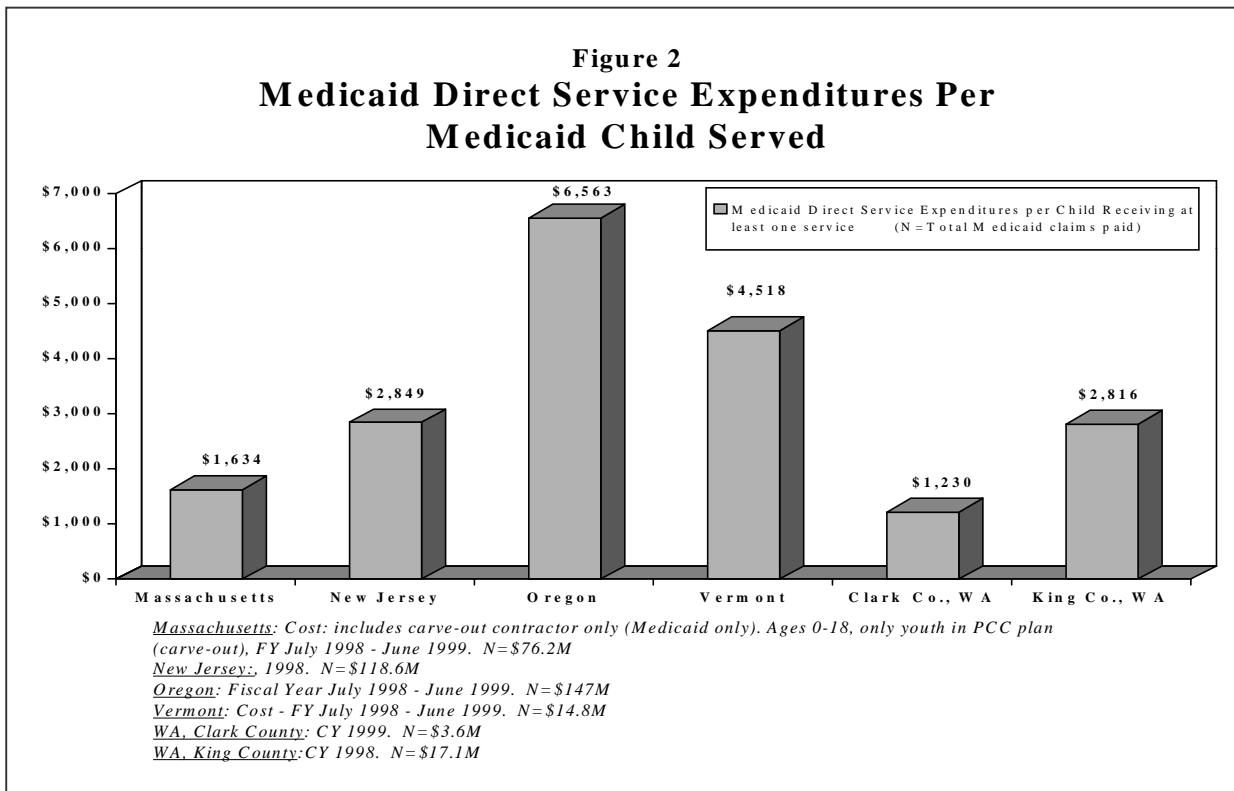
Medicaid Direct Service Expenditures Per Medicaid Child Served

Direct service expenditures for Medicaid mental health services divided by the number of children enrolled in Medicaid who received at least one mental health service.

The amount of money spent per child served is an obvious measure of the intensity of services dedicated to each child who receives any treatment. As Figure 2 shows, average expenditures range widely, from \$1,230 in Clark County, Washington, to \$6,563 in Oregon, with a mean of \$3,268. These expenditure values may vary so widely for any of a number of reasons. One explanation might

be that although managed care contracts are structured very differently from one another, in some cases our data include only children covered by such contracts. For example, only acute care is covered within the Massachusetts managed care carve-out contract (our sole source of expenditure data from that state); the exclusion of all long term care expenses obviously drives down the average expenditures per child. Conversely, children in Oregon and Vermont receive their initial mental health services from HMOs. But since youth receiving services only from HMOs are not reported here, these data reflect only children with relatively serious mental healthcare needs.

Most obviously, though, not only do system structures differ from state to state, but benefit coverage differs as well. While it would be easy to identify differences in benefits as the primary reason for the wide variation in expenditures per child that we found, in separate work we have seen very similar differences occurring among counties or regions of the same state. Thus, even with similar benefits, different localities have quite different expenditure rates. These may be the result of different socioeconomic factors, the availability and effectiveness of area providers, past allocations of resources, and/or the availability of other community services.

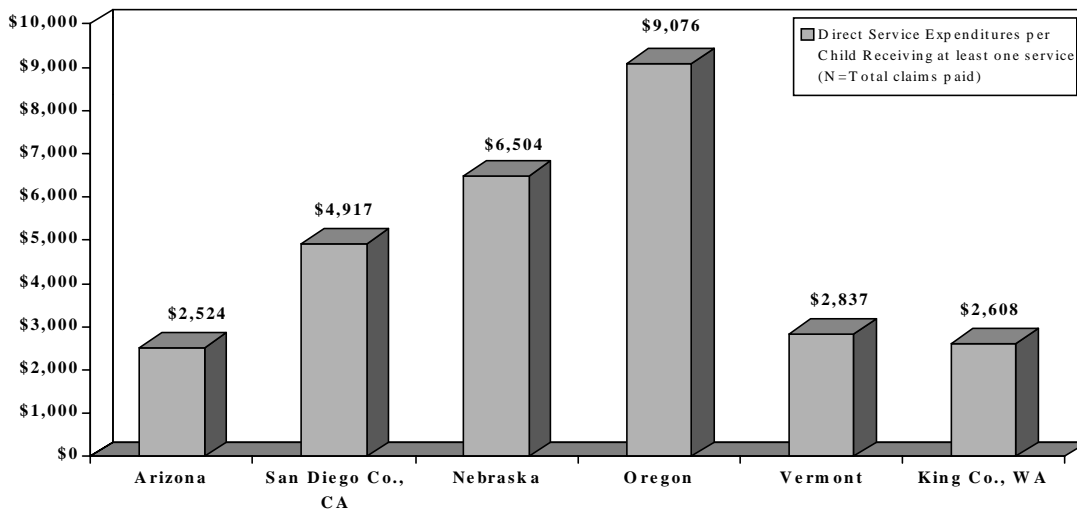


Total Direct Service Expenditures Per Child Served (Medicaid and Non-Medicaid Expenditures)

Direct service expenditures for Medicaid and non-Medicaid mental health services divided by the number of children, both Medicaid and non-Medicaid, who received at least one mental health service.

Generally, one would expect that the typical child served with non-Medicaid funds has relatively serious problems (in most, but not all, states, including 12 out of the 16 states for which we have information, serious emotional disturbance is an eligibility requirement for state funding). Within the Medicaid program, however, children are eligible to receive mental health services whatever the severity of their need, and it is likely that many Medicaid funded children receive just one or two outpatient services. One might therefore hypothesize that total expenditures per child served, including both Medicaid and non-Medicaid, would be higher than Medicaid expenditures alone. As shown in Figure 3, and in a comparison of Figures 2 and 3, however, we can not confirm this hypothesis for our respondents. There were only three jurisdictions for which we received enough data to calculate both statistics. In only one of them was the “total” number higher than the “Medicaid only” number. The average across the six jurisdictions reporting data on total expenditures was \$4,744 per child, distinctly higher than the \$3,268 per child average for Medicaid only expenditures (but with only about a fifty percent overlap of reporting jurisdictions). That average becomes \$3,876 if we exclude Oregon, which reported expenditures nearly 50 percent higher than the next highest state, and more than twice the average of the remaining sites. Thus, while the average expenditures we show are indeed higher for all served than for Medicaid only, we do not have enough data to confirm or deny our hypothesis.

Figure 3
Total Direct Service Expenditures Per Child Served
 (Medicaid and Non-Medicaid Expenditures)



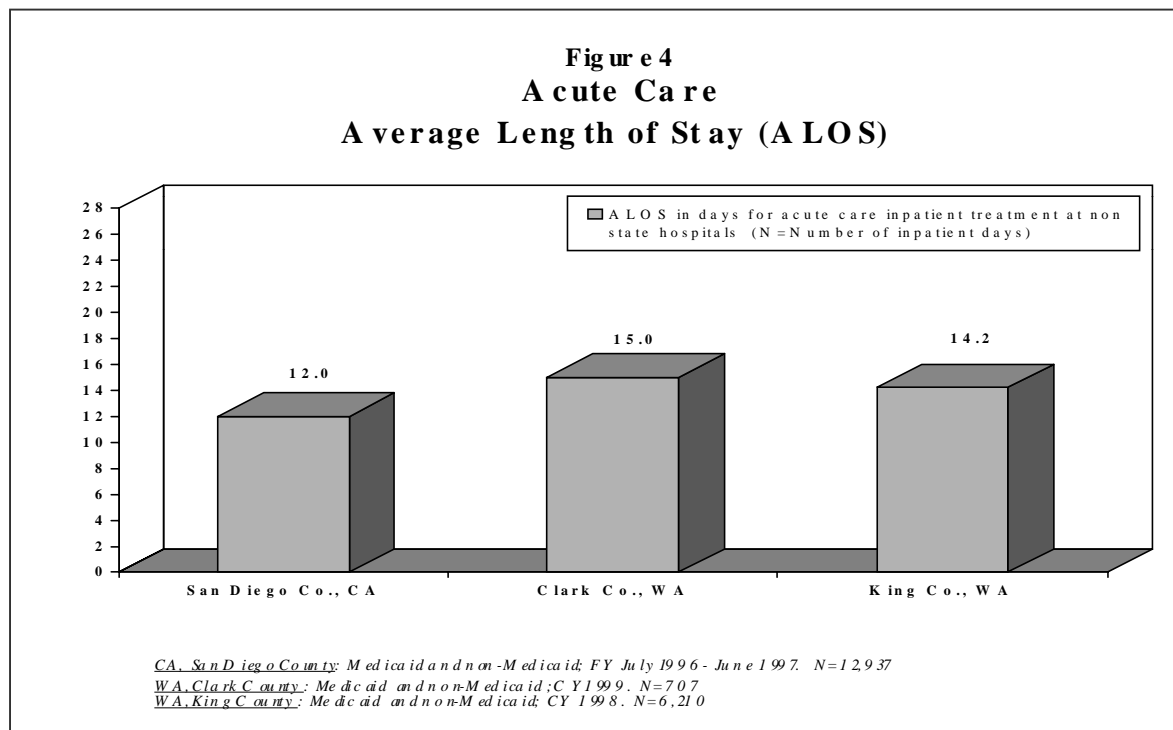
Arizona: Expenditures from FY July 1998 - June 1999, number of children served from CY 1999. N=\$57.2M
CA, San Diego: FY July 1996 - July 1997. N=\$65.8M
Nebraska: Professional Partners Program only, youth 0-21, Cost includes both Medicaid and non-Medicaid \$s, FY July 1998 - June 1999. N=\$2.4M
Oregon: Fiscal Year July 1998 - June 1999. N=\$203.3M
Vermont: Cost - FY July 1998 - June 1999. N=\$21.1M
WA, King County: CY 1998. N=\$21.6M

LENGTH OF STAY AND READMISSIONS

Acute Care Average Length of Stay (ALOS)

The number of days of acute care inpatient treatment at non-state hospitals divided by the number of discharges from acute care inpatient treatment at non-state hospitals.

For private insurers, inpatient admissions and lengths of stay have been declining for both general health diagnoses and behavioral health diagnoses over the past decade, although they have been falling far faster for behavioral health than for all diagnoses (a 61.9 percent drop for behavioral health versus a 19.4 percent decline for all).¹⁶ Comparable data on Medicaid lengths of stay are not available, but there is every reason to assume that they have declined in a similar fashion. The Hay Group report includes data from annual surveys conducted by the National Association of Psychiatric Health Systems of its members (which include delivery systems providing a broad spectrum of treatment services, including inpatient, residential, partial hospitalization, and outpatient programs). These data indicate that the average length of stay for children in psychiatric settings declined from 21 days in 1993 to 14.1 days in 1996; for adolescents the decline was from 19.2 days in 1993 to 11.4 days in 1996. As Figure 4 indicates, the average lengths of stay for acute care among the Medicaid and non-Medicaid populations that we were able to calculate for three of our respondents (using data for time periods ranging from fiscal 1997 to calendar 1999) ranged from 12 days to 15 days. (Note that one respondent had originally submitted data for this indicator, but subsequently could not verify that the data were correct, and asked that we withdraw them from the analysis.)



30 and 90 Day Readmission Rates

The number of children readmitted to any inpatient facility within 30 or 90 days divided by the number of children discharged from any inpatient facility.

Readmission rates, the proportion of individuals who are discharged from and readmitted to inpatient care within a specified time period, can offer insight into the appropriateness of discharge and level of care decisions. Most inpatient psychiatric facilities continually strive to reduce their readmission rates, on the assumption that lower readmission rates indicate more appropriate level of care decisions. In some cases, lower readmission rates may also indicate the availability of community supports and/or less restrictive levels of care in a particular area. Figures 5 and 6 indicate that only four states could provide readmission rate data. (Note that one respondent had originally submitted data on readmissions, but subsequently determined that the data were incorrect, and asked that we withdraw them from the analysis.) Footnotes to the charts indicate whether the data represent Medicaid and/or non-Medicaid patients, and whether they reflect state hospital and/or non-state hospital facilities.

Thirty-day readmission rates range from a low of 4.8 percent in Louisiana to a high of 10.9 percent in King County, Washington, with 7.4 percent as the average. Ninety-day rates range from 8.2 percent in Clark County, Washington, to 14.6 percent in King County, and have a mean of 10.2 percent. These statistics probably need to be read with a note of caution in mind: statistics for the two states and the District of Columbia include only acute discharges, while for the two Washington counties both acute and long term discharges are included. Clearly, including an additional source of discharge data will tend to increase the numerator and therefore the percentage. We cannot be certain whether, for example, a patient who is transferred from an acute bed to a long-term care bed is counted as a readmission.

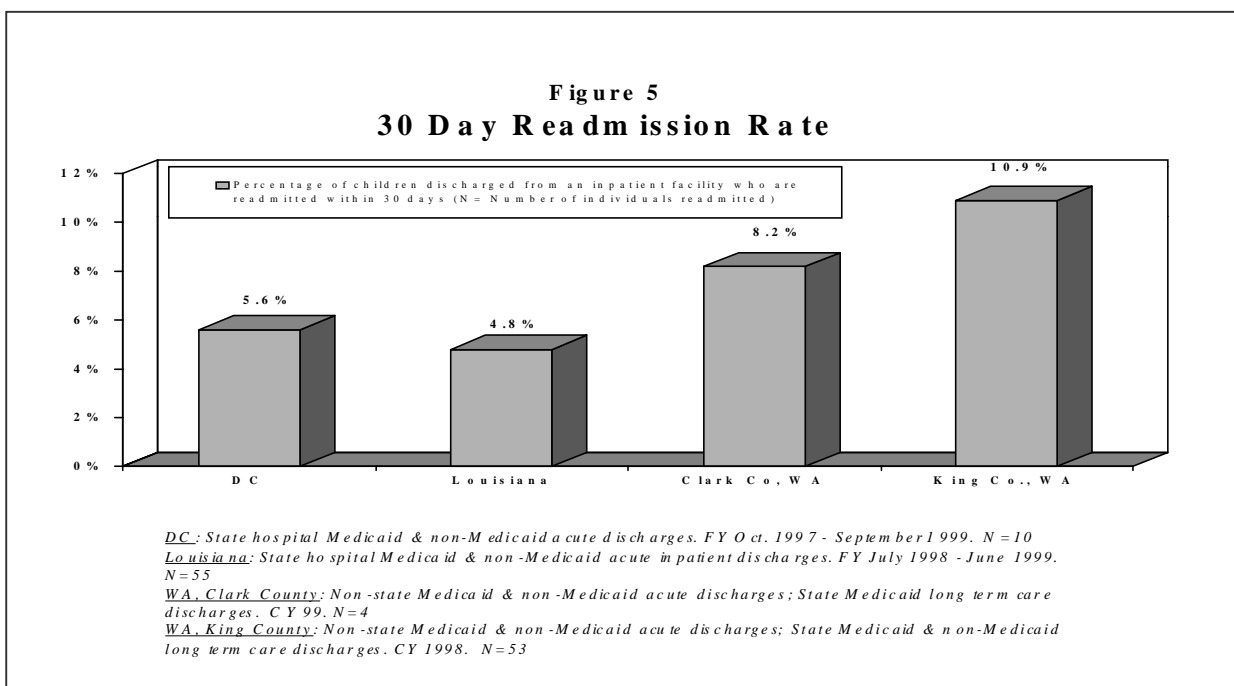
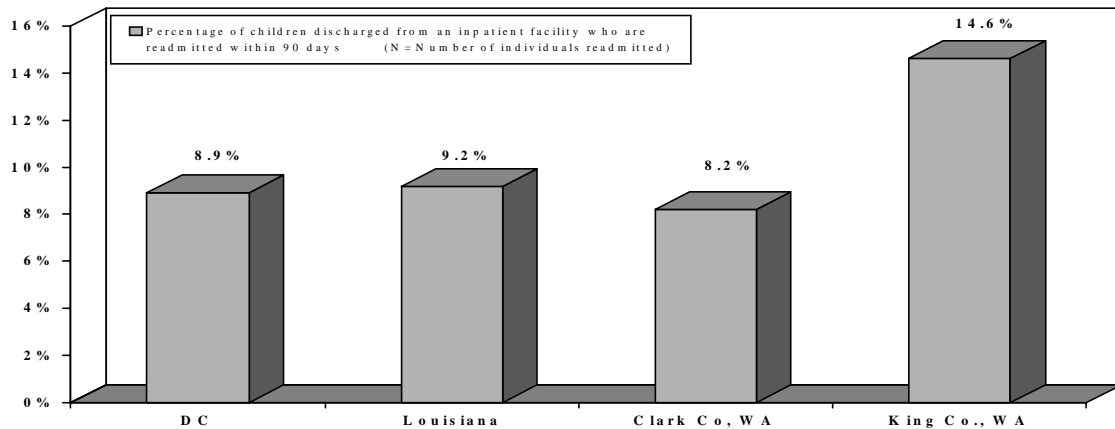


Figure 6
90 Day Readmission Rate



DC: State hospital Medicaid & non-Medicaid acute discharges. FY Oct. 1997 - September 1999. N=16
Louisiana: State hospital Medicaid & non-Medicaid acute inpatient discharges. FY July 1998 - June 1999. N=10
WA, Clark County: Non-state Medicaid & non-Medicaid acute discharges; State Medicaid long term care discharges. CY 99. N=4
WA, King County: Non-state Medicaid & non-Medicaid acute discharges; State Medicaid & non-Medicaid long term care discharges. CY 1998. N=71

FAMILY INVOLVEMENT

The number of ambulatory treatment encounters for children less than or equal to 12 years of age who also have a family visit claim within the same 12 month period divided by the number of ambulatory treatment encounters for children less than or equal to 12 years of age.

The involvement of the family in treatment of children with emotional disorders has long been seen as significant both in theory and in practice. The type of involvement and its meaning, however, have changed over time. In the early days of professional treatment of children, clinicians typically assumed that parents were responsible for the deviant behavior of their children, and that the child could only recover if the parent's psychological problems were treated. Later, the emphasis was on training parents to alter their behavior so that they could avoid "reinforcing" the child's deviance. Currently, the phrase "family involvement" often refers to the involvement of parents at the levels of service and system planning, while assuming that parents should be seen and treated as partners with professionals in the treatment of their own children.¹⁷ We have attempted to gather data on family involvement at a very basic level by asking what proportion of children 12 years of age and under had claims for both ambulatory treatment encounters and family visits during the same year. That is, we are trying to learn what proportion of children are being served in a family context and have tried to measure this indicator by using claims data (as recommended by AMBHA, NASMHPD and ACMHA). Disappointingly, while seven jurisdictions could provide the number of ambulatory treatment encounters for children 12 and under, only two counties were able to provide usable data

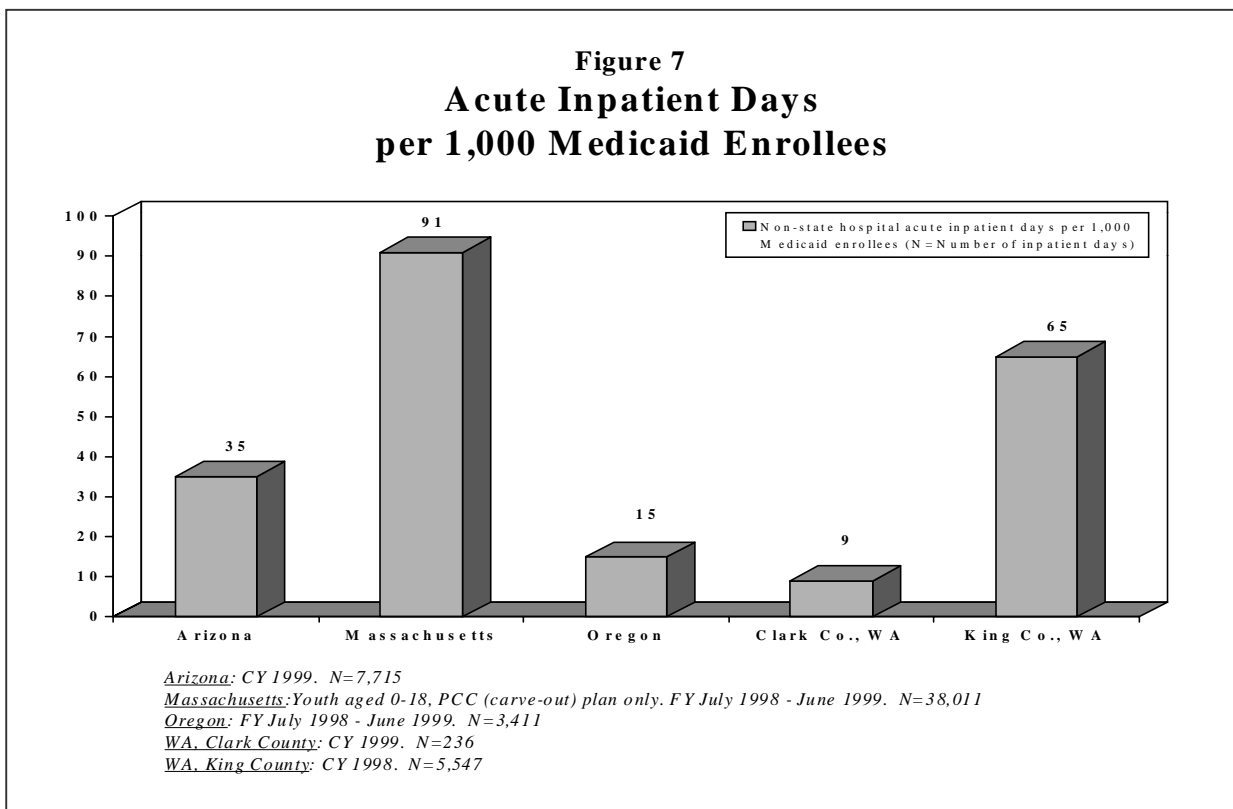
on those who also had family visit claims. In Clark County nearly 85 percent of children receiving services also had a family visit claim, while in King County 76 percent did.

RATES FOR SPECIFIC LEVELS OF CARE

Acute Inpatient Days per 1,000 Medicaid Enrollees

The number of Medicaid acute inpatient days divided by the number of Medicaid enrollees, multiplied by 1,000.

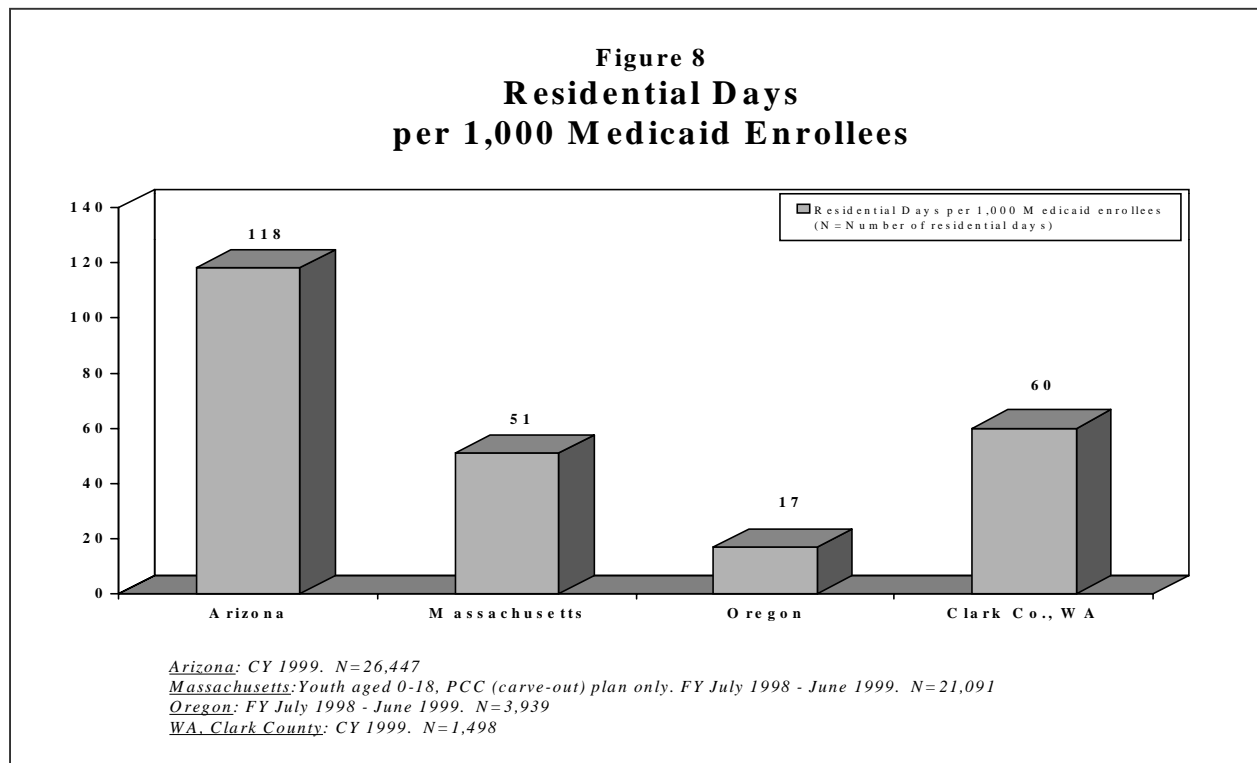
Figure 7 shows the number of non-state hospital acute inpatient days per 1,000 Medicaid enrollees as reported by three states and two counties. The range of rates is quite dramatic - from 9 to 91. It is perhaps puzzling that one of the highest rates is reported by Massachusetts, whose managed care carve-out program has been seeking to reduce inpatient usage since 1992 and yet which also has no state operated inpatient facility for children. While the tremendous variability in rates results in a chart that establishes no viable benchmark, we believe the data are worth displaying. This is so principally because inpatient usage is an area in which jurisdictions seem especially likely to seek benchmarks, because it is the most expensive and most restrictive level of care. If the variability is due to differing definitions or exclusions, we need to work with respondents to eliminate or reduce those differences so that we can make the data as valuable as possible. If the variability is real, we need to work to understand why it should be so.



Residential Days per 1,000 Medicaid Enrollees

The number of days spent in 24-hour non-hospital based mental health treatment facilities divided by the number of Medicaid enrollees, multiplied by 1,000.

As Figure 8 shows, the situation regarding data on residential days per thousand Medicaid enrollees is similar to that regarding acute inpatient days. Of the four jurisdictions reporting, one has reported numbers that are dramatically different from all the others, Arizona with 118 days. For the remaining three sites, the rates range from a low of 17 in Oregon to a high of 60 in Clark County, Washington. As with Figure 7, although we can see no particular trend, and the data do not lend themselves to calculation of a mean or development of a viable benchmark, we believe the information we have is worth reporting because of the restrictiveness and cost of this level of care.

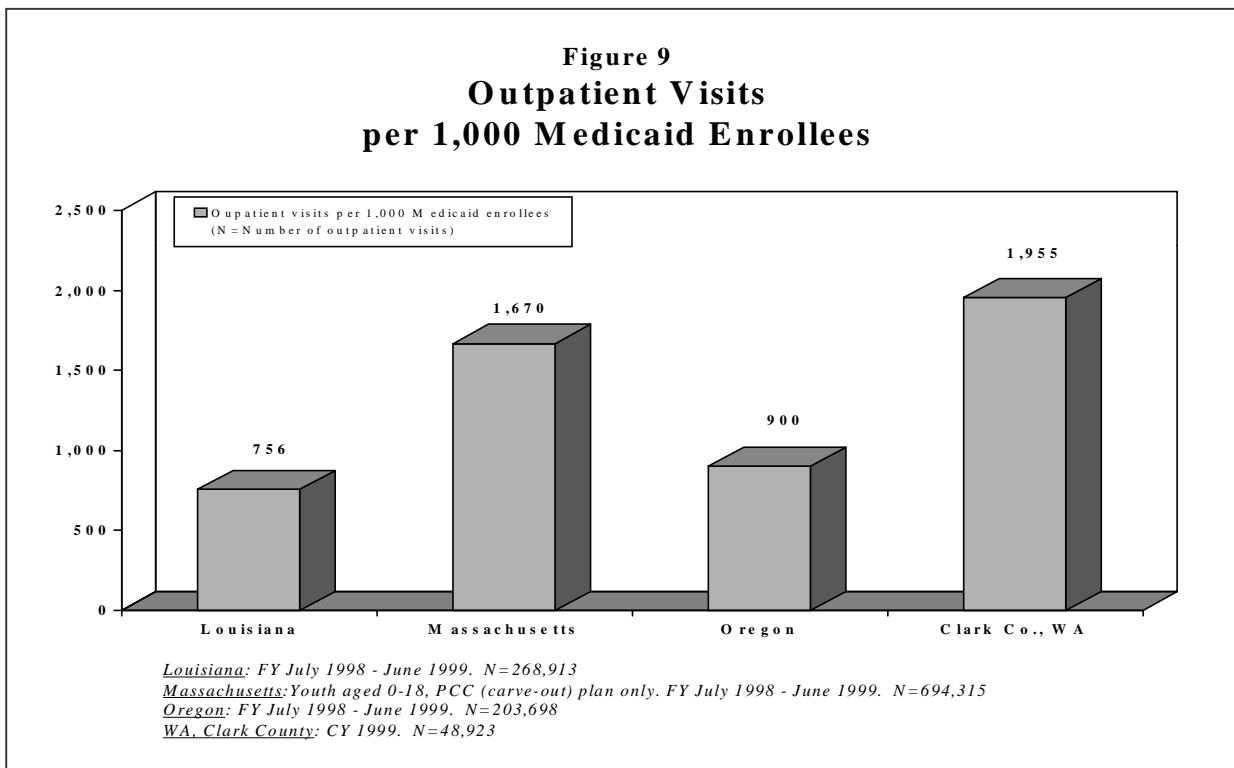


Outpatient Visits per 1,000 Medicaid Enrollees

The number of outpatient visits with a mental health worker divided by the number of Medicaid enrollees, multiplied by 1,000.

Once again, the data our respondents reported show great variation, with one state that is an extreme outlier. The data range from a low of 756 in Louisiana to a high of 1,955 in Clark County, Washington. (Our Louisiana respondent notes that the rate of outpatient visits has virtually the same sensitivity to disproportionate CHIP enrollment and service implementation as does the penetration

rate. See page 11, above, for a more detailed explanation of this issue.) One major reason for reporting these numbers even though we cannot draw any conclusions from them is to help policy makers think about the relationships among various indicators. One would expect, for instance, that a state with a high rate of outpatient visits might have a lower rate of inpatient usage, and vice versa. Indeed, the primary impetus for the creation of managed care programs is often the wish to save money, which translates into reducing use of the most expensive forms of care, most notably inpatient care. One might therefore expect that when a jurisdiction imposes a managed care program its rate of inpatient usage will decline and its rate of outpatient usage will rise. Although we cannot determine such relationships for the limited data we have received, with additional data points we might be able to begin exploring them.



INTERSYSTEM VARIABLES

Proportion of Children Served Who Were in Out-of-Home Placements During the Year

The number of children who received at least one mental health service and were in foster care or other out-of-home placement - under the purview of the child welfare agency - at any time during the year divided by the total number of children served.

Among the indicators on which we had originally hoped to collect data from our respondents were several that we denoted as “inter-system indicators.” These included:

- the number of eligible children receiving at least one service who also had at least one encounter with the juvenile justice system over the last year;
- the number of eligibles who were absent from school and received at least one service;
- the total number of days absent from school for eligibles who received at least one service; and
- the number of eligibles who were in foster care or out-of-home placement and received at least one mental health service.

As we discussed earlier, our initial feasibility survey revealed that virtually no jurisdiction could provide data related to school absenteeism, and we therefore omitted that question from our final data collection instrument. On the other hand, ten sites had expected to be able to report on children served who also were involved with the juvenile justice system, but only three of those respondents actually did so (San Diego County, the fourth site represented in Figure 11, had not responded to our initial survey, but was able to report these data). Similarly, while 14 sites had expected to be able to provide data on children served who were in out of home placements during the year, only five actually did provide such data (again, with the addition of San Diego County).

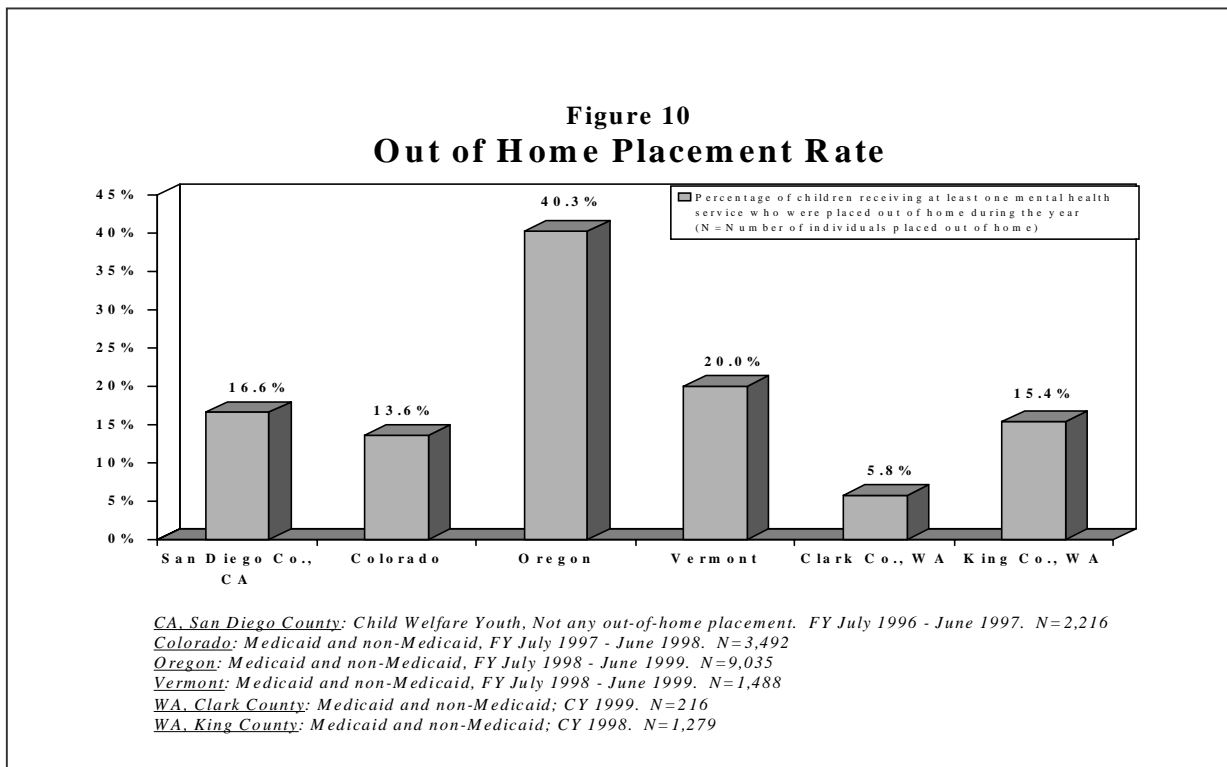


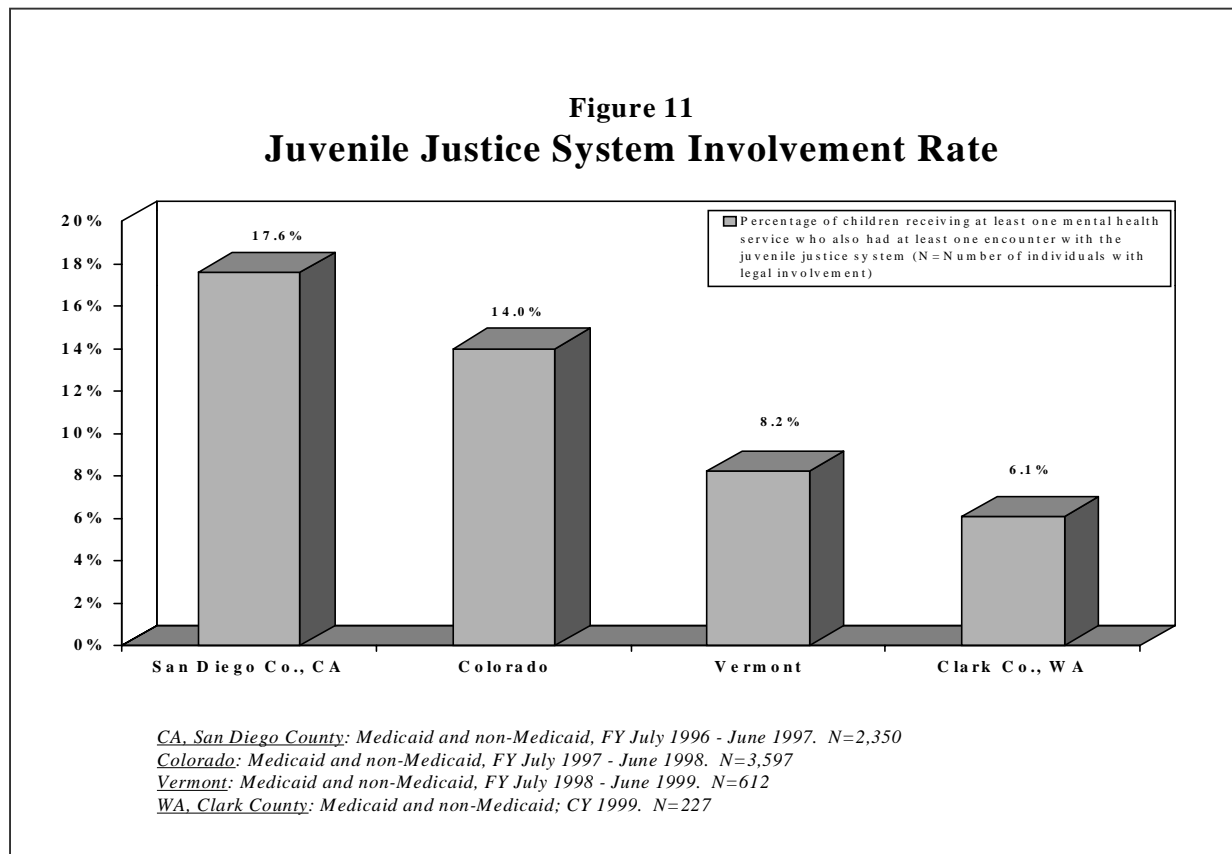
Figure 10 displays the data we received from six sites regarding out of home placement. The rates of out of home placement range from a low of 5.8 percent in Clark County, Washington, to 20 percent in Vermont and a reported 40.3 percent in Oregon. Our Oregon respondent, when we questioned the data, reexamined them and concluded that “the number is accurate given your definition. By way of explanation, he pointed out that since Oregon’s system is for the most part

one of crisis management, it would not be uncommon for 40% of the children served to be in an out of home placement at some point during the year. Nevertheless, the variability in responses is sufficiently large that it does not seem appropriate to calculate averages.

Juvenile Justice System Involvement

The number of children who received at least one mental health service and also had at least one encounter with the juvenile justice system at any time during the year divided by the total number of children served.

The only other intersystem indicator on which we have enough data to compare localities is the rate of involvement with the juvenile justice system. Four jurisdictions (two states and two counties) were able to report data on the percentage of children who received at least one mental health service and in the same year also had at least one encounter with the juvenile justice system. Their rates range from a low of 6.1 percent in Clark County, Washington, to a high of 17.6 percent in San Diego County, California. Interestingly, but perhaps by coincidence, the lowest rates appear in the more rural sites, while the highest rate is from the most urban of the jurisdictions reporting. With only four sites reporting data for this statistic, it was not appropriate to calculate a mean.



Communication among child serving agencies is generally assumed to lead to improvement in policies and services. CASSP, the Child and Adolescent Service System Program, which is the most widely emulated service improvement initiative, includes among its “guiding principles” that “Children with emotional disturbances should receive services that are integrated, with linkages between child-serving agencies and programs and mechanisms for planning, developing, and coordinating services.”¹⁸ It is therefore worthy of note that we received so little intersystem data from our respondents. A state’s inability to provide data may not necessarily reflect the extent to which its public agencies coordinate their efforts, since the challenge involved in gathering such data is always substantial. Problems may include, for example, issues of confidentiality between agencies, “turf” concerns and/or incompatibility of database architecture, among others. Nevertheless, access to data would clearly enhance agencies’ capacity to effectively coordinate care for shared cases, and its absence may constitute a gap in information that prevents or limits coordination.

DISCUSSION: PROCESS

This project has been exploratory in two senses, first in terms of the process of conducting such research and secondly in terms of the actual findings. We will therefore separate our discussion section into two parts.

With regard to process issues, our report offers important lessons for public mental health authorities and stakeholders as well as for future efforts at benchmarking system performance. Among the key lessons derived from this experience are:

- Many state agencies have significant difficulties in producing special reports for non-standard purposes,
- It is critically important to deal with the most appropriate agency and individual staff person within the agency and
- It is vital to assure that measures are understood precisely as intended and that respondents are using identical algorithms.

INABILITY OF RESPONDENTS TO PRODUCE DATA IN A TIMELY WAY

As we have reported, in general our state respondents were overly optimistic about what data they would be able to produce within a reasonable time frame (i.e., more than three months). By early July states had been able to submit to us only about 38 percent of the total number of variables that they had expected to provide, including variables they indicated they produced regularly and those they thought they could produce specifically for this project. Indeed, they only provided about 51 percent of the data they had previously indicated their systems *currently* report on. By no means do we consider this an indictment of our respondents. Rather, we consider it a commentary on the challenges most of them face in managing their data systems and in using data to guide key decisions. We hope that this project, and others like it, can help to identify some of the problems state agencies face and provide incentives for them to routinely collect these kinds of data for management reporting. In summary, then, while many different

groups have worked on standardizing the indicators and measures we used, little of the requisite information is actually being collected (or is available) at the state level.

IMPORTANCE OF TALKING TO THE RIGHT PERSON

The differences in the roles of our specific contacts in each state contributed to, or perhaps even determined, significant variations in the responses we were able to elicit. We initially addressed most of our requests to the director of the state mental health authority, unless we had direct knowledge of another responsible individual within the state. The director then referred the request to a staff person within the agency. When we heard back from that person, however, he or she usually needed to consult with others in order to respond to our inquiries, and almost certainly needed to ask someone else to actually prepare the necessary reports. Some staff responded quickly to our requests while others had less of a sense of urgency. Competing demands upon their time, familiarity with the data requested and the degree to which the staff perceived that there were incentives for their participation are all likely factors in the responsiveness of the staff. There was, of course, the additional complication of our requesting data both from the Medicaid system and the mental health system. In states where the agencies are separate, the information we requested was generally not routinely shared between the agencies.

NEED TO DEFINE TERMS ADEQUATELY

While we drew our indicators and measures from industry standards, and provided contextual information and a series of definitions, it is clear from the responses we received that everyone did not understand our questions exactly as intended and/or that all respondents did not use identical algorithms for extracting data. Although we did make numerous follow-up calls to try to be sure the data we received were those we were seeking, it is apparent that we did not always succeed. In addition, as we have discussed, many respondents expected to be able to provide information that they were not, in the end, able to provide. It is possible that in some cases their inability was related to an initial misunderstanding of the questions we were asking. Lengthier discussions, preferably face-to-face, would greatly assist in facilitating the communication process.

DISCUSSION: FINDINGS

With regard to our findings, we have learned that:

- Intersystem data, which are especially crucial to an understanding of children's services, are sorely lacking;
- On some variables, the data points we are reporting cluster within similar ranges, which we might be able to consider standards if we had some additional, confirming data; and
- In other cases the reported data vary widely and require further investigation in order to assure the similarity of responses.

DEARTH OF INTERSYSTEM DATA

As noted above, states were able to report on fewer of the intersystem variables than had been hoped for. High quality mental health services for children should include active coordination among as many service systems and agencies as are appropriate for the individual. Clearly, for nearly all children, coordination with the school system is especially crucial. School enrollment and attendance are therefore extremely important indicators of child well being, as suggested by Ganju and Lutterman in their article on the five-state feasibility study for *Mental Health, United States, 1998*. They note that “The important aspects of school behavior (academic performance, attendance, antisocial behavior, etc.) need to be identified and a standardized measure reflecting these aspects needs to be developed.”¹⁹ However, since virtually no jurisdiction expected to be able to report on school absenteeism, we decided not even to ask about it in our final questionnaire. We agree that as a matter of public policy it is vital for mental health agencies to have information on the educational status of the children in their systems. The fact that so few jurisdictions can report on absenteeism among children receiving mental health services is therefore, in itself, an important finding. We should also track key juvenile justice, health care and child welfare indicators for children in the mental health system.

ABILITY TO DEVELOP STANDARDS

On some variables, the data points we are reporting cluster within similar ranges, which we might be able to consider standards if we had some additional, confirming data. For example, as shown in Figure 1, the rates for seven of the eight sites (three counties and four states) for which we were able to develop Medicaid penetration rates range from 5.6 percent to 11.7 percent, with a mean of 9.0 percent. While this average would appear to fall within expected parameters, we need additional data points in order to feel confident in suggesting it as a standard.

WIDELY DISPERSED DATA

In other cases the reported data vary widely and further investigation is necessary in order to assure that all respondents have provided comparable information. For example, in Figure 9 we present rates that we calculated from the data we received on outpatient visits for Medicaid enrollees. The rates per thousand enrollees range from 756 to 1,955. We are unable to determine the meaning of this finding without more extensive discussion with our respondents. Similarly, for six jurisdictions we have Medicaid expenditure data that permit us to calculate service expenditures per Medicaid child who received at least one service. These dollar figures range from a low of \$1,230 in Clark County, Washington, to a high of \$6,536 in Oregon. Clearly, different sites are including and excluding different kinds of expenditures or different categories of children (such as those enrolled in HMOs), or both, in their data. Without further discussions with respondents, we cannot determine the meaning of the numbers.

NEXT STEPS

DMA hopes to continue gathering data and expanding the database for these indicators for subsequent years. We believe that the participants in the study, and the field in general, would benefit significantly from a continuing dialogue about the data, the findings and their implica-

tions. Through such a process we might find ways to improve upon the measures and identify other relevant indicators. We believe such an endeavor would also help us to encourage both more complete submissions from current respondents and the participation of additional respondents.

We look forward to a continuing dialogue with the Annie E. Casey Foundation and other leaders in the children's mental health field and our respondents concerning this study and future measurement and benchmarking efforts.

End Notes

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- ¹ John Bartlett, K. Hoover, C. Marques, P. Panzarino, "Performance Measures for Managed Behavioral Healthcare Programs," in *The 1996 Behavioral Outcomes and Guidelines Sourcebook*, S. Vibbert, Ed., Faulkner and Gray, Inc., 1995.
- ² *The MHSIP Consumer-Oriented Mental Health Report Card*, The Final Report of the Mental Health Statistics Improvement Program (MHSIP) Task Force on a Consumer-Oriented Mental Health Report Card, April, 1996.
- ³ *Mental health Measures in Medicaid HEDIS*. US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services. (no date)
- ⁴ *Performance Measures for Mental Health Systems*. Adams et al., December 4, 1998.
- ⁵ *County Behavioral Health Performance Measures*, Draft Version 2.0. The National Association of County Behavioral Health Directors. Technical Assistance Provided by The Evaluation Center @ HSRI, July 13, 1996.
- ⁶ National Leadership Council Task Force Report, *Performance Indicators in Behavioral Healthcare: Measures of Access, Appropriateness, Quality, Outcomes, and Prevention*. 1995 Survey Results and Future Implications. Institute for Behavioral Healthcare. 1996.
- ⁷ *Mental Health: United States, 1998*. Op. Cit. Chapter 4. V. Ganju and T. Lutterman, p. 45 and p.51.
- ⁸ "A Proposed Set of Performance Indicators and Measures for Behavioral Health," Prepared by The American College of Mental Health Administration and The Accreditation Organization Workgroup. April 2000. See www.acmha.org/work.htm.
- ⁹ Pires S.A., Stroul, B.A., Armstrong, M.I., (2000). *Health Care Reform Tracking Project: Tracking State Managed Care Reforms as They Affect Children and Adolescents with Behavioral Health Disorders and Their Families -- 1999 Impact Analysis*. Tampa, FL: Research and Training Center for children's Mental Health, Department of Child and Family Studies, Division of State and Local Support, Louis de la Parte Florida Mental Health Institute, University of South Florida, p. 210.
- ¹⁰ See, for example, *1999 Kids Count Data Book: State Profiles of Child Well-Being*, published by the Annie E. Casey Foundation. This was the tenth annual edition of the report.
- ¹¹ This point is made in N.A. Mazade, R.W. Glover and G. P. Hutchings, "Environmental Scan 2000: Issues Facing State Mental Health Agencies," in *Administration and Policy in Mental Health*, 27,4, March 2000, p. 177.
- ¹² Most notably, work by Pires *et al.*
- ¹³ This issue is substantiated by Pires *et al.* They found the data supported their hypothesis that "In most states, managed care systems will not disaggregate data on adolescent substance abuse treatment utilization from either children's mental health or adult substance abuse service data." *Ibid.*, p. 138.
- ¹⁴ CHIP: A Look at Emerging State Programs, by Frank Ullman, I. Hill and R. Almeida. Number A-35 in the Series "New Federalism: Issues and Options for States," Web site of the Urban Institute, September 5, 2000.
- ¹⁵ R. M. Friedman, J. W. Katz-Leavy, R. Manderscheid and D. Sondheimer, "Prevalence of Serious Emotional Disturbance: An Update," in Center for Mental Health Services. *Mental Health, United States, 1998, op.cit.*
- ¹⁶ For example, see the report *Health Care Plan Design and Cost Trends: 1988 through 1998*, prepared by the Benefits Practice of the Hay Group's Arlington, VA, office and commissioned by the National Association of Psychiatric Health Systems and the Association of Behavioral Group Practices. (at www.naphs.org) .
- ¹⁷ See, for example, Bergin, A. and S. Garfield, Editors, *Handbook of Psychotherapy and Behavior Change: An Empirical Analysis*, New York: Wiley, 1971, p. 753, and Pires et al., *Health Care Reform Tracking Project: 1999 Impact Analysis* (op. cit.), pp. 82-85 and 224-225.
- ¹⁸ See *Managed Care and Children's Mental Health: Summary of the May 1995 State Managed Care Meeting*, Beth A. Stroul, Georgetown University Child Development Center: National Technical Assistance Center for Children's Mental Health, January 1996, Appendix B, "Values and Principles for the System of Care."
- ¹⁹ Center for Mental Health Services. *Mental Health: United States, 1998*. Manderscheid, R.W., and Henderson, M.J., eds. DHHS Pub. No. (SMA) 99-3285. Washington, D.C.: Supt. Of Docs., U.S. Govt. Print. Off., 1998. Chapter 4. "The Five-State Feasibility Study: Implementing Performance measures Across State Mental Health Systems," Vijay Ganju and Ted Lutterman, p. 48.