Gauging How Well Colorado Supports Its Citizens with Developmental Disabilities

January 1, 2003

Submitted to:

Developmental Disabilities Services
Colorado Department of Human Services

Prepared by:

Gary Smith

Human Services Research Institute, 8100 SW Nyberg Rd., Suite 205,
Tualatin, OR 97062. (503) 885-1436/(503) 885-1536 (fax)

Table of Contents

I. Introduction 1

II. Performance Measures 3

A. Introduction 3

B. Performance Measurement: Essential Concepts 4

B. Performance Measurement and Appraisal in Developmental Disabilities 6

C. Current DDS Performance Measurement 9

D. National Core Indicators 15

E. Performance Measures Going Forward in Colorado 17

1. A Partnership for Quality 18

2. The Basis of Our Recommendations 19

3. Proposed Performance Measures 23

4. Data Acquisition 33

5. Sequence and Timelines 34

6. Costs 35

III. Tying CCB Funding to Performance 37

A. Background/Framing the Topic 37

B. Current Mechanisms Tying CCB Funding to Performance 38

C. Issues and Challenges 39

D. Strategy for Proceeding in Colorado 42

E. Alternatives 44

I. Introduction

As part of its evaluation of the Colorado Systems Change Project, HSRI was asked to make recommendations regarding a comprehensive set of performance measures for developmental disabilities services. In particular, HSRI was directed to address two specific topics, namely:

> The development of recommendations for the adoption of performance measures (both fiscal and programmatic) that encompass both outcomes for services for individuals and workload type measures. These measures must meet two criteria:
>
> - They must provide a benchmark for evaluating system quality, and
> - They must be sufficiently comprehensive to alert the Department to problems that may be related to the performance of CCBs, their oversight and case management.
>
> Second, the evaluation must identify and examine options that would allow the Department and the Joint Budget Committee to tie CCB funding to performance.

Colorado's interest in performance measures predates the Systems Change Project and reflects the recognition that the first step in improving service system performance is to measure it. As part of its implementation of the Systems Change Project, Developmental Disabilities Services (DDS) has tracked system performance against specified "key" performance indicators. It is worthwhile and timely for DDS and stakeholders to explore whether to adopt more robust performance measures going forward. During our interviews, many stakeholders commented that addressing the challenges associated with the implementation of the Systems Change Project caused attention to be diverted away from focusing on how effectively the system is carrying out its fundamental mission. Now that implementation of the Systems Change Project is past, there should be a renewed focus on gauging how well Colorado is supporting its citizens with developmental disabilities.

DDS Mission

The mission for Colorado Developmental Disabilities Services is to **join with others** to offer the necessary supports with which all people with developmental disabilities have their rightful chance to:

- **Be included** in Colorado community life.
- Make increasingly **responsible choices**.
- Exert greater **control** over their life circumstances.
- Establish and maintain **relationships** and a sense of **belonging**.
- Develop and exercise their **competencies** and **talents**.
- Experience personal **security** and **self-respect**

It is vital that Colorado continuously and vigorously appraise system quality along its many dimensions, especially including individual outcomes but others as well. The DDS mission should animate performance measurement and appraisal. In addition,

one of the main features of the Systems Change Project was to give CCBs more full-ranging authority over the management of dollars and services in their service areas. As a consequence, it is fair and appropriate for Colorado to assess how well CCBs conduct their various responsibilities and the performance of each in contributing to improved system performance overall. Benchmarking is an important tool for determining the extent to which service quality is holding its own, improving or eroding compared to the baseline. Benchmarking also can be used to compare performance among organizations to identify strong performers as well as possible opportunities for improvement.

The essential purpose of performance measurement is to provide the foundation for conducting quality improvement to achieve improved performance. In other words, if performance is falling short of expectations, attention should turn to identifying strategies to secure improvement.

The second topic of this report – options for tying CCB funding to performance – raises many complex issues. In an effort to ensure that dollars flow to purchase direct services on behalf of individuals and limit administrative expenses, Colorado already has taken steps to link funding of CCBs to their performance in managing dollars through the Systems Change Project. While alternative or additional ways to tying CCB performance to funding can be considered, they have their pitfalls and would be very challenging to design and implement.

This report is divided into two main sections. The next section concerns performance measures and includes our recommendations concerning systemwide and CCB-level performance measures going forward. We recommend that Colorado adopt and implement more robust performance measures. We recommend that these performance measures place greater emphasis on individual outcomes systemwide and at the CCB-level in support of quality improvement. Colorado already collects robust information about individual outcomes; this information can be exploited more fully. We also recommend that Colorado expand its current level of effort in acquiring performance information, especially including enlisting families and other advocates for individuals to obtain their perspectives concerning quality and performance. Stakeholders will best lead this effort.

The final section explores options for tying CCB funding to performance. For various reasons, we recommend that Colorado proceed very cautiously. While current mechanisms that tie CCB funding to performance might warrant re-appraisal, going beyond these mechanisms will hinge on Colorado's establishing a solid array of performance measures that appropriately and accurately portray CCB performance across multiple dimensions.

II. Performance Measures

A. Introduction

Performance measurement is a systematic process that an organization conducts in order to track its progress toward achieving its mission, goals and objectives. Its main purpose is to identify whether the organization is achieving acceptable or improved results. When performance does not meet expectations or appears to be declining, then the organization engages in focused quality improvement in order to increase the level of performance. Ongoing performance measurement permits appraising the extent to which these efforts are succeeding.

In publicly funded developmental disabilities services, it has been only recently that most states have begun to link systematic performance measurement to system appraisal and quality improvement. States have tended to concentrate their attention on quality assurance and program development activities but less on systematically measuring performance and employing the results to improve performance. This is changing gradually, due in part to the emergence of improved tools to measure individual outcomes but also as a result of increased scrutiny of developmental disabilities service systems from a number of quarters, including state policy makers and federal oversight agencies. Outcome measurement tools now enable measurement of the results that are being achieved on behalf of individuals and families and thereby permit tying performance to the achievement of fundamental mission goals. However, state efforts in this regard continue to be "works in progress" and have been slowed in many states by the lack of resources and information systems that are capable of capturing the data necessary for wide-ranging, robust performance measurement.

In conjunction with the implementation of the Systems Change Project, Developmental Disabilities Services (DDS) established a basic, compact set of top-level, key performance measures. The purpose of these measures was and remains to provide an overall view of performance systemwide along several dimensions, many of which were closely tied to specific features of the Systems Change Project. Going forward, the question is whether Colorado should adopt more robust measures in order to obtain more comprehensive information concerning system performance and the extent to which performance measurement can and should extend to measuring and benchmarking the performance of individual CCBs.

This section begins with a brief discussion of essential performance measurement concepts. It then explores in more detail the present status of systematic performance measurement efforts in state developmental disabilities service systems. Next, the present DDS performance indicators are described along with other ongoing efforts by DDS to compile information that might play a role going forward in supporting revised and expanded performance measurement efforts in Colorado. Finally, we offer our recommendations for a revised and expanded set of performance measures going forward, including measures that will support appraising performance CCB-by-CCB. Stakeholders (individuals with disabilities, families, advocates, CCB managers, non-CCB provider organizations and DDS officials) should thoroughly review these recommendations and modify them

appropriately. This is crucial for achieving system-wide consensus that the measures reflect critical areas of performance. There are additional costs associated with implementing these recommendations. These costs include augmenting current performance data collection efforts, providing sufficient resources to DDS to support more robust performance measurement, and ensuring timely dissemination of results.

B. Performance Measurement: Essential Concepts

As previously noted, performance measurement is the systematic process of measuring a system's or organization's performance to track progress toward achieving specific goals or objectives. In other words, how well is an organization or system performing with respect to its mission? Performance measurement must be systematic – that is, conducted in a disciplined fashion period over period – in order to be successful. One application of performance measurement is trend analysis – how is performance changing over time? In addition, when overall system performance hinges on how well its components perform, then performance measurement is widened to include tracking performance at the component level.

Performance measurement requires the definition of performance ***indicators*** – namely, the specific tools or measures that are employed to monitor and evaluate progress toward a goal or objective. There are five main types of indicators: (a) **input** (resources expended); (b) **output** (the volume of services provided); (c) **efficiency** (cost to provide services); (d) **quality** (effectiveness in meeting customer expectations); and, (e) **outcome** (measures of success, program results, impact and effectiveness). A performance measurement system may employ several types of indicators concurrently to measure progress toward achieving a goal or objective.

While performance measurement is simple in concept, it nonetheless can pose many challenges. One of the main challenges lies in defining meaningful and reliable indicators or measures, especially with respect to quality and outcome indicators. In the case of outcome measures, it is often difficult to describe concisely and concretely the desired impact or result, and it becomes necessary to develop multiple indicators. In addition, it is important to select indicators where performance can be tied back directly to the provision of services or the efforts of an organization. While an outcome might be desired, it makes no sense to measure it if a program or organization cannot affect results one way or another. Lastly, sometimes outcomes are difficult to quantify or measure directly, and it is necessary to resort to "**intermediate outcomes**" – i.e., outcomes that, when present, are presumed to point toward the likely presence of the outcome itself.

Another significant challenge in performance measurement is data acquisition. Data acquisition problems include spelling out in operational terms: the data needed for the indicator, the most appropriate and effective strategy for acquiring the data, and data acquisition costs, especially when the desired data is not already otherwise available. Common data acquisition strategies include: (a) direct customer surveys; (b) the use of data collection protocols (e.g., instruments) to collect information about customers; (c) mining already available data; (d) other types of surveys; and, (e) when need be, requiring organizations to compile and report continuously or

periodically data not already available. The selection of a data acquisition strategy is linked to the specific indicator or measure of performance. For example, measuring customer satisfaction (a quality indicator) obviously requires the use of direct customer surveys because only the customer knows whether he or she is satisfied. In order to assure reliability, it is necessary to employ data collection protocols. Such protocols spell out data sources, data collection requirements, methods of collection and so forth. Data acquisition must be conducted in a disciplined fashion. There must be confidence in the underlying data that feeds into the performance indicators or measures in order for them to be regarded as credible, reliable descriptions of performance.

Once indicators or measures are defined and data is collected, performance measurement supports **performance appraisal**. Fundamentally, there are two main types of performance appraisal:

- **Change from Baseline**. At first blush, this type of appraisal is straightforward – the comparison of present to past performance – namely, is performance now better, worse or about the same as before? For this type of appraisal to be conducted, a baseline first must be established and performance must be measured in the same terms period-to-period. Appraising changes in performance can be complicated if between periods, major changes have occurred that impact performance (e.g., funding has been increased or decreased).

- **Benchmarking**. Classically, benchmarking has been defined as comparing an organization or program's performance to the level of performance attained by the highest performing organization or program, with the latter defining the current standard of excellence. However, there are other ways of benchmarking. One is the comparison of an organization or program's performance against the "**norm**" (namely, the level of performance that most organizations achieve). Norm-based benchmarking permits the identification of "outliers" – namely, organizations or programs that perform at significantly lower or higher levels than most). When this type of benchmarking is employed, it is possible to identify under-performers and focus attention on improving their performance. High performers can serve as a potential source of important information about best practices that can be shared with other organizations to assist their efforts to improve performance. In addition, information about where an organization stands with respect to the norm can assist the organization in pinpointing areas where its performance is sub par compared to the "industry", and thereby enable the organization to identify focus areas for quality improvement.

  When performance is measured at the organizational level, it also can reveal whether quality improvement efforts should be concentrated at the system or the organizational level. If, for example, performance across all organizations is about the same, then improving performance likely will entail taking steps to elevate performance across the overall system (e.g., modifying policies or conducting training systemwide).

Another type of benchmark is a **performance standard** – namely, the minimum or threshold level of acceptable performance. Performance standards may be set by policy (e.g., service vendors will meet 100% of basic health and safety requirements all the time) or be derived from actual performance (a data-based standard based on the level of performance achieved by the substantial majority of organizations in prior periods). The failure of an organization to achieve a performance standard may trigger corrective action or termination. Performance standards often are spelled out in regulations or contracts.

Benchmarking (regardless of the type) across organizations can hinge on the extent to which organizations are similarly situated. For example, if funding among organizations is substantially disparate, then often benchmarking should not be done because funding differences will make it difficult to properly ascribe differences in performance solely to organizational effectiveness. Benchmarking also can be problematic when there are appreciable differences among the customers served by organizations that might affect performance along some dimensions. In developmental disabilities, this especially can be the case with respect to individual outcomes. Sometimes, it is possible to adjust for these differences among organizations.

Appraising system or organization performance usually revolves around the measurement of change from the baseline. Appraising the performance of organizations within a system or program can include looking at change from the baseline (e.g., is a specific organization's performance improving? Is performance across all organizations improving or deteriorating?). Benchmarking among organizations sometimes can provide a more robust picture of performance and thereby assist in deciding whether to concentrate quality improvement activities on low performing organizations or systemwide quality improvement efforts.

Lastly, it also needs to be kept in mind that there are inherent limits to performance measurement. Sometimes it is difficult to define an "objective", "data-based" measure or set of measures that unambiguously describe performance along a dimension of interest. When this is the case, it frequently is necessary to resort to other methods for appraising performance.

B. Performance Measurement and Appraisal in Developmental Disabilities

Until recently, the focus in state developmental disabilities systems concerning performance has been on inputs (e.g., staffing), outputs (e.g., number of people served), efficiency (e.g., cost per unit of service) and the enforcement of regulatory performance standards (quality assurance). The concentration on inputs, outputs and efficiency ties directly to state budgeting and appropriation processes. The concentration on enforcement stems from fundamental quality assurance imperatives concerning health and safety as well as adherence to basic practice standards. There has been less attention paid to customer satisfaction and outcomes. Employing systematic performance measurement in support of performance appraisal and employing performance data proactively in quality improvement is a relatively recent development.

Spurred by the emergence of total quality management, legislative directive, and other factors, state developmental disabilities systems have begun to piece together increasingly comprehensive approaches to measuring how well the system is performing in achieving its stated mission, goals and objectives. Another development that is spurring states to step up their efforts in this arena is increased emphasis on quality management and improvement in the provision of Medicaid-funded home and community-based waiver services by the federal Centers for Medicare and Medicaid Services (CMS, formerly the Health Care Financing Administration). CMS has been ramping up its expectations concerning the scope of state HCBS waiver program quality management and improvement systems. For example, it is clear that CMS now expects states to operate incident management systems that not only capture information about the types of serious incidents that are occurring but also support trend analysis, root cause analysis and focused quality improvement projects to reduce or prevent serious incidents. In its HCBS Quality Framework (included in our report evaluating the Systems Change Project), CMS has outlined the dimensions of HCBS quality management and improvement that states should address. The Framework speaks to a wide range of topics, including satisfaction and outcomes. While in part this CMS emphasis on HCBS waiver quality management and improvement stems from concerns about whether states have been adequately assuring the health and welfare of individuals, it also reflects a shift in CMS' focus from compliance to working in concert with states to improve the quality of waiver services.

State efforts in measuring developmental disabilities system performance have been facilitated by the emergence of more widely accepted tools (e.g., the Personal Outcomes tool developed by the Council on Leadership and Quality) that permit acquiring reliable and meaningful information about individual outcomes. The emergence of such tools reflects the convergence of opinion nationwide about the individual outcomes people with developmental disabilities should experience in their lives. These tools also have aided in solving measurement and data acquisition challenges with respect to individual outcomes. While there are appreciable differences among these tools in terms of their scope, content and methods of administration, they all more or less encompass the same set of central or core individual outcomes. In addition, it is becoming increasingly common for states to collect quality indicator data, especially individual and family satisfaction with services.

Less well developed in the states are performance measures that address such critical dimensions as health and safety (e.g., crime victimization and health status), financial health, and efficiency. Along these performance dimensions, problems in measuring performance often include the lack of data, the costs of the retrieval of data that exists only in paper records, data reliability, and a host of other factors, including technical issues in the development of reliable measures. Sometimes states compile certain types of data but have failed to take the next step to develop meaningful performance measures. For example, it is not uncommon for states to require that providers record medication errors and for quality assurance personnel to review such errors during quality reviews. It is less common for states to systematically compile this information in order to measure performance period over

period and use such information to identify systematic strategies for preventing or reducing such errors.

Focused systematic measurement and appraisal of the contribution of component organizations (e.g., local authorities or other provider organizations) in achieving the system's mission has been and largely remains relatively rare. Instead, the focus with respect to organizations has been on quality assurance and compliance. One reason for less emphasis on component organization performance lies in the makeup of many state systems. Oftentimes, multiple organizations may serve an individual but no organization is singularly responsible for the full array of services a person receives. Alternatively, organizations themselves have distinctly different lines of business (e.g., some organizations furnish a comprehensive array or services while others specialize in one type of service or another). In these instances, it still is feasible to measure outcomes at an individual level (and thereby gauge performance overall) but can be difficult to link these outcomes to efforts of individual organizations.

So far, only a few states have developed especially comprehensive, well-structured performance measurement systems (i.e., systems that measure performance systematically across a broad number of dimensions). One of these states is New Hampshire. In New Hampshire, area developmental services agencies have much the same scope of responsibilities as Colorado CCBs. They are responsible for case management, providing or buying services on behalf of individuals and families, and quality management within their service areas. The *New Hampshire Quality Outcomes Partnership* (NHQOP) has developed and is putting into operation more than 70 performance indicators. This project is a collaborative effort of the state and its area agency network, aided by other advisors including individuals and families, to continuously appraise how well the New Hampshire developmental services system is meeting its mission and achieving critical goals. The NHQOP performance indicators cut across the following broad domains:

- Community Inclusion/Relationships
- Choice, Control and Communications
- Access to Quality Supports and Services
- Personal Growth and Accomplishments
- Health and Safety
- Family Support
- Agency Strength

The indicators include individual outcomes and customer satisfaction, including satisfaction with service coordination. The data necessary for these performance indicators comes from individual and family surveys, data furnished by area agencies and other providers, and other sources. This project has been facilitated by an extensive redesign of the state's data systems. NHQOP is the most comprehensive performance measurement system presently in operation in the states and thereby suggests a benchmark against which Colorado might gauge its own efforts in this arena. Partnership and collaboration are vital to NHQOP achieving its purpose of supporting quality improvement.

NHQOP focuses on the measurement of systemwide performance in order to inform quality improvement rather than explicitly rating individual area agency performance, although the information produced by NHQOP is available to and used by area agencies to guide their quality improvement efforts. The most recent 2002 NHQOP report (describing its scope (including its performance indicators) and results) is located at http://www.nhdds.org/nhddsit/nhqop/nhqop02/DOMAINS02.pdf. NHQOP continues to evolve. Some of the original performance indicators that were selected have been discarded, others added or modified, and some suspended until data acquisition problems can be solved. NHQOP is a solid approach to comprehensive performance measurement.

Pennsylvania also is at work on developing a comprehensive performance measurement system. As part of its efforts, the state is compiling National Core Indicators (NCI; formerly the Core Indicators Project) and additional performance and outcome data on a county-by-county and provider-by-provider basis through its Independent Monitoring for Quality (IM4Q) initiative. In addition to furnishing the state with information regarding performance, this information is fed back to counties and service agencies to support their performance appraisal and quality improvement activities. Data are collected on a sample basis but sample sizes are sufficient to permit reasonably statistically significant comparisons across counties. The IM4Q project began with establishing a performance baseline across all counties. After that, about one-third of the counties participate each year in the IM4Q project on a rotating basis. More broadly, Pennsylvania also is engaged in a "Transformation Project" that is designed to completely redo its information systems into a single state-county IT system in order to integrate and mine data to probe performance across multiple-dimensions at both the state and county levels.

In South Dakota, the state and its provider network are collaborating to collect NCI consumer and family data. The purpose of this collaboration is to acquire performance and outcome data that will enable the state to compare the performance of its community system to other states and permit providers to compare their own performance to identify strengths and potential opportunities for improvement. This effort stresses quality improvement.

Fundamentally, however, most state developmental disabilities system performance measurement efforts remain oriented to measuring overall system performance rather than organization-level performance. At this stage, most are not comprehensive (e.g., they address some dimensions of performance but not others). In addition, states by and large have only recently begun to link performance measurement to systematic performance appraisal in support of focused quality improvement.

C. Current DDS Performance Measurement

Colorado's interest in performance measurement is not new. In advance of the implementation of the Systems Change Project, DDS explored a wide range of

possibilities concerning potential performance measures.[1] In 1996, DDS recommended: (a) piloting a minimum set of interim performance indicators; (b) evaluating the applicability of NCI for Colorado; (c) participating in the NCI project; (d) obtaining system input; and, (e) underwriting the costs for the development, collection and analysis of performance measures. In 1997, DDS conducted focus groups around the state to obtain input concerning performance measures from stakeholder groups. DDS then recommended the adoption of the following "key interim performance measures":

- **Effectiveness** – The proposed measures were broken down to the extent that individuals realize desired outcomes along four dimensions: (a) employment; (b) integration; (c) family connections; and, (d) personal growth;
- **Satisfaction and Responsiveness** – Here, the measures would gauge individual satisfaction with: (a) their services; (b) providers; and, (c) choice making. They also would measure family satisfaction with services and providers. Finally, these measures would gauge the extent to which providers were paid on a timely basis by CCBs and whether CCBs were treating them fairly;
- **Efficiency** – Measures were recommended concerning: (a) average expenditures per individual and by program service types; (b) the extent to which non-governmental sources of revenue were maximized; and, (c) CCB administrative overhead expenses;
- **Stability** – Measures were recommended concerning staff stability and CCB financial health (e.g., whether CCB balance sheets indicate that they are financially stable when benchmarked against key ratios);
- **Accessibility** – Measures in this arena would include: (a) the number of persons wait-listed for services; (b) change in the number of people served; and, (c) the distribution of resources across CCBs;
- **Standards of Care** – The measures would focus on the extent to which programs/providers meet critical requirements.

The data necessary to put these indicators into operation would be obtained from the DDS Community and Contract Management System (CCMS), CCB audit results, DDS quality assurance surveys, and periodic surveys of individuals, families, providers and CCBs. DDS would obtain individual outcome data by conducting its Consumer Progress Assessment Review (COPAR) survey, modified as appropriate. Once initially collected, the measures would establish a baseline against which future performance could be gauged. Ultimately, the measures were expected to permit comparisons across CCBs and inform quality improvement efforts.

[1] DDS (1997). "Response to Footnote 83 of the 1997 Appropriations Long Bill: Recommendation for Interim Performance Measures for Developmental Disabilities Services."

In conjunction with the implementation of the Systems Change Project, DDS committed to implement key performance measures in accordance with Memorandum of Understanding Element G that directed DDS to establish a set of measures and continuously report performance against them. The current DDS key performance indicators are displayed below.

Current DDS Key Performance Indicators

Effectiveness and Outcomes - Are key outcomes occurring for consumers?

- **Employment** - % of adults who are employed & average number of hours worked
- **Integration** - % of adults receiving services in integrated settings
- **Satisfaction** - % of adults and families who are satisfied with services
- **Choice** - % of adults making choices on key service areas
- **Stability** - Frequency of changes in residential settings.

Standard of Care - Are programs meeting critical requirements established for health and safety purposes? Do services conform to standards of care regarding health, safety, and accepted practices?

- **Appeals** – number of appeals filed at the Department level
- **Health/Safety Requirements** - Number and % of programs meeting critical health/safety requirements

Contract Performance Standards and Efficiency - Are CCBs meeting or exceeding their service level obligations? Are funds being spent efficiently?

- **Minimum Number Served** – number of persons served compared to contract requirements.
- **Member Month** - number of months (or days) of service provided compared to contract requirements.
- **Fund Utilization** - Are funds being fully utilized to deliver services? Are reversions occurring?
- **Overhead** - Adherence to overhead limits (% of revenues spent on overhead)

Accessibility - Are people able to access services? Is service accessibility comparable across the state?

- **Waiting list** - % of demand met.
- **Growth in Services** - Number of additional persons served.
- **Equitability** - Number of service types and levels provided are similar proportionally to those in other service regions. Number of resources per CCB region relative to general population in that region.

Organizational Stability - Do service organizations have stable staff? Are they financially stable?

- **Staff Stability** - Low turnover rate
- **Wage Equity** - How do wages compare between CCBs, Regional Centers (RCs) and other employers?

The key performance indicators that were adopted and remain in effect are somewhat less wide-ranging than the 1997 proposed interim measures although many of those measures are included. Discarded were measures of CCB financial

health and some of the efficiency indicators. These were replaced by measures (minimum number of people served and member months) that are keyed to the performance contract between DDS and CCBs and the problems that arose concerning large dollar reversions in the face of unmet needs. Also discarded was the proposed measure concerning whether CCBs treated service providers fairly.

The present key performance measures are tersely stated. However, they are tracked and reported more robustly. For example, all measures are reported by individual CCB and statewide (with the exception of wages and turnover, which are reported by total by CCB, CCB provider and Regional Center groups). In addition, the satisfaction of adults is tracked with respect to: (a) their overall satisfaction with their comprehensive services, their day activity, and support staff) and (b) satisfaction concerning Supported Living Services (SLS) waiver day activities. Similarly, choice is measured discretely with respect to comprehensive and supported living services. The health/safety requirements indicator is measured for: (a) residential services (by type), (b) day services; and, (c) SLS programs.

So far, the principal use of these measures has been to track broad system performance rather than use them as the basis of a quality improvement program. Some of the measures (e.g., accessibility and stability) concern topics where better performance hinges almost entirely on acquiring additional resources. Performance in these areas cannot be significantly affected by either DDS or CCBs. The contract standards measures concerning people served and member months are threshold performance standards that describe minimum acceptable performance. The effectiveness and outcomes indicators address important topics that are amenable to quality improvement. The health/safety requirements measure speaks to the minimum level of performance that providers are expected to meet; consequently, it too measures performance at the threshold level.

With respect to the interests expressed in the RFP, the present performance measure set includes fiscal and programmatic measures. It includes important outcomes for individuals as commonly understood, both systemwide and by CCB. The workload measures are limited to individuals served and, arguably, the waiting list. The present indicator set does not include measures of CCB performance along some dimensions, including provider network management and case management.

In addition, the present key performance indicator set does not represent the full extent of the information available in Colorado to support more robust performance measurement. For example, DDS has available CCB audit information that can be mined for indicators of financial health. Via the CCMS billing system, additional information also is available concerning service utilization. DDS quality assurance survey information might also potentially be tapped for additional information concerning performance.

There is especially wide-ranging information available concerning individual outcomes. In particular, DDS conducts the Core Indicators Outcomes Survey (CIOS) that compiles relatively robust information concerning the outcomes that adults with developmental disabilities are experiencing. Some of the information obtained via

CIOS administration feeds directly into the key performance measures (e.g., satisfaction and choice). However, most of it does not.

The present CIOS has its roots in the 1980s when DDS developed its COPAR instrument, one of the earliest efforts among the states to systematically compile outcome and other performance-related information about individuals across the service system, including people served in the community and the state-operated Regional Centers. CIOS built on and replaced COPAR. NCI and its outcome indicators have influenced the design and content of the current CIOS tool (and, COPAR influenced the design of the parallel NCI individual survey tool). There are differences between CIOS and the present National Core Indicators consumer survey instruments in terms of their scope, topics probed and administration. However, there are more similarities than differences between the two instruments. Both are designed to obtain information directly from and about individuals in order to measure the extent to which they are experiencing valued outcomes and how well the system is performing in supporting them (measured by satisfaction and responsiveness). Via CIOS, DDS has taken the additional step of comparing the outcomes experienced by adults with developmental disabilities to the Colorado population at large, an innovative step that yields important benchmark information for appraising outcomes.

As will be discussed below, an important consideration going forward concerning performance measurement will be more aggressively exploiting the information that is captured via CIOS. During our stakeholder interviews, we learned that by-and-large, most stakeholders are not aware of the information compiled via CIOS.

CIOS presently operates on a two-year cycle.[2] The survey is administered during the first year and then the results analyzed and reported in the second year. CIOS employs stratified random sampling to select a cross-section of individuals receiving services. Using this method holds down costs and produces results about which there is a high statistical confidence (i.e., it is highly likely that the results accurately describe the entire service population). The sample is structured to reflect the overall composition of people receiving services in Colorado, including their distribution by level of functioning and, in the case of persons in the community, whether they are in the Supports or the Comprehensive Block. The sample design also includes the selection of a minimum number of individuals (at least 30 or 10%, whichever is greater) served by each CCB.[3] Also included in the sample are persons served by the Regional Centers. DDS employs a private firm to conduct CIOS interviews directly with individuals and others who know the person. This method of administration ensures the integrity of CIOS data.[4] Some background information about individuals is obtained from CCB records. In addition, one part of CIOS asks

---

[2] During the 1997 – 2000 Systems Change Project implementation period, it was conducted annually.

[3] This sample size is sufficient to detect relatively large differences in CIOS results among CCBs. An expanded sample would be necessary in order to determine whether smaller differences in results are meaningful.

[4] By employing a disinterested third-party to conduct interviews and record responses by informants, the potential for "gaming" by parties who serve the person in order to make it appear that positive outcomes are being achieved is eliminated. NCI has a similar requirement that states employ disinterested third-parties to conduct its consumer interview/survey.

an individual's advocates (e.g., a parent or guardian) to identify problems and challenges that affect individuals and rank how big the problem is. CIOS also includes probes concerning case management.

In its design and administration, CIOS is methodologically very solid. CIOS does not purport to address every possible dimension of what individuals with developmental disabilities are experiencing in the community or all possible outcomes. In reporting CIOS results[5], DDS officials are careful in presenting them – explaining their limitations and presenting the results in neutral terms that do not draw conclusions beyond those supported by the results themselves. Since the CIOS instrument has been relatively stable in recent years, it supports examining change over baseline in the outcomes that individuals experience as well as other topics addressed in the survey.

However, there are certain limitations with respect to CIOS. These include:

- As presently administered, CIOS does not support statistically reliable outcomes and performance measurement at the provider level. In order to obtain valid provider-by-provider results, the number of individual interviews/surveys would have to be greatly increased from the 700 or so conducted during each CIOS cycle. This would have substantial financial and logistical implications.
- The survey presently is conducted every two years rather than annually. As a consequence, the utility of the CIOS results as a measurement of <u>current</u> performance diminishes over time until they can be refreshed during the next cycle. In practical terms, this can affect the uses of the results. The current two-year cycle does not detract appreciably from employing the results for quality improvement purposes, because quality improvement programs take time to design and implement as well as to secure measurable improvements in outcomes. If, however, the planned use is to tie performance to funding, then problems arise absent a method to update the information between funding periods. Conducting CIOS annually would require additional funding. The current cost of collecting data via CIOS field activities through the private contractor is $90,000 per cycle (about $100 per individual included in the sample).
- The more serious problem with the current administration cycle is the gap in time between survey administration and when it is analyzed and disseminated. The most recent CIOS results for 2000 were reported by DDS in June 2002. This poses serious problems with respect to the currency of the results and, consequently, their use in nearly any application. At present, DDS lacks sufficient staff to turn the results around quickly. Limits on DDS resources also prevent exploring CIOS to produce and analyze detailed results for each CCB.. Until these problems are resolved, conducting CIOS more frequently is not possible in any case and the value of CIOS is diminished.

[5] DDS (2002). "Accountability Focus Series: Outcomes of Services and Supports."

Despite these limitations, the fact remains that CIOS is a robust and highly exploitable source of information about performance and outcomes in Colorado's community service system.

D. National Core Indicators

As part of its evaluation, HSRI committed to compare Colorado's indicators to those developed in conjunction with NCI. By way of background, NCI is an endeavor sponsored by HSRI and the National Association of State Directors of Developmental Disabilities Services (NASDDDS). NCI was launched in 1997 in order to facilitate collaboration among states in the development and implementation of a set of nationally recognized performance and outcome measures that could be employed by states to gauge how well their systems perform along several dimensions and thereby inform their quality improvement activities. The project began with six states; now about two dozen participate, including Nebraska, Wyoming and South Dakota.

The project's performance and outcome indicators are selected by a participating state Steering Committee and span individual outcomes, satisfaction and other dimensions of system performance. NCI is structured so that each participating state is able to compare its performance against the performance achieved in the other participating states and, consequently, NCI embodies a norm-based benchmarking approach. A state also can employ NCI data to appraise change over its own baseline from period to period. NCI was not designed to support intrastate performance measurement, although as noted previously, Pennsylvania and South Dakota have elected to measure individual and family outcomes on a sub-state or provider level using NCI instruments.

In order to assure that performance indicator data is comparable state-to-state, NCI has developed standardized individual (adult) and family survey instruments. Participating states agree to use these instruments; however, each state also is free to add to the instruments to include items over and above those addressed in NCI. Several states have done this in order to measure additional performance and outcome elements or gather information about other critical concerns. NCI requires that a state administer at least 400 individual surveys/interviews in order to validly compare its results to other participating states.[6] The individuals interviewed are selected randomly from among all individuals served in a state. The interviews must be conducted by a disinterested third-party to ensure that the results have high integrity. The three NCI family surveys are administered by mail. States are required to mail a survey to a minimum of 1,000 families, randomly selected, in order to assure that 400 responses will be received.

While NCI has a large indicator set (especially with respect to individual outcomes and system effectiveness in supporting families), it is not a comprehensive set of indicators nor was it ever intended to be. The inclusion of an indicator in NCI hinges on the extent of interest in a performance topic among participating states and the

[6] Conducting 400 interviews is the number necessary in order to compare results among states with reasonable statistical reliability. In order to compare results across localities or providers within a state, a state would need to boost the number of interviews.

feasibility of most states obtaining the necessary data. With respect to some dimensions of performance, there are differences among the participating states in terms of their system's structure, the types of data they collect and capabilities. For example, while many states collect information about serious injuries, the exact data they collect often varies. Since NCI is geared to comparing performance state-to-state, all states must be able to procure compatible data. The use of standard survey tools overcomes this problem with respect to individual and family outcomes. But, NCI has encountered problems with states being able to collect and report compatible data with respect to some NCI indicators, especially in the health and safety arena.

At present, NCI's strengths lie in its individual and family surveys and their ability to support both systemwide performance measurement and interstate performance comparisons concerning individual outcomes and family support. In other performance areas, NCI has adopted indicators but encountered problems in assuring compatibility of the results state-to-state. In these areas, participating states are developing their own performance measurement systems, guided by the NCI indicators and, frequently, dialogue with the other participating states.

Comparing the NCI indicators with the present DDS key performance measures, the DDS effectiveness and outcomes indicators parallel some of the NCI indicators. However, NCI has adopted several more indicators in this arena (many of which could be readily added to the current DDS key indicators because most of the data that supports these indicators are derived from NCI individual surveys and counterpart data are available from CIOS).

The NCI indicator set also contains a relatively large number of indicators that are derived from its family surveys. As previously noted, NCI presently has three family survey instruments: (a) one for families with an adult family member with developmental disabilities who lives at home; (b) another for families where the adult family member lives outside the family home and is receiving residential support; and, (c) a third for families who have a child with a developmental disability. With respect to adults who live with their families, NCI has adopted a "family support" framework for gathering information concerning whether the public system is furnishing appropriate and effective supports to both the family and the family member with a developmental disability. In addition, it also was decided that families could offer additional important perspectives about service system effectiveness over and above the information captured via the individual survey. The same interest in tapping families to get feedback about residential services furnished to adults sparked the second family survey. These surveys are administered by mail in order to hold down costs. Some of the topics addressed in the NCI family surveys have parallels in the CIOS advocate probes. In CIOS, an advocate may include the person's Supported Living Consultant. In NCI, surveys are sent only to families and/or guardians. However, the NCI family surveys are more robust sources of information about other dimensions of performance. The NCI emphasis on families is

a point of difference with Colorado where similar surveys are not presently conducted.[7]

With respect to "standard of care," NCI does not have an indicator concerning programs/providers meeting minimum health and safety standards. However, NCI does have indicators concerning the incidence of serious injuries, criminal victimization, psychoactive medication utilization, and restraints. NCI's access indicators include a waiting list indicator and capture information about the number of people receiving services. NCI also has developed indicators to support interstate comparisons of system capacity as well as how the individuals served in a state compare in their racial and ethnic makeup to the population overall. The NCI financial indicators include measures of state outlays for developmental disabilities services, calibrated in various ways to remove potential sources of variance among the states. NCI does not have performance measures that address the contract performance standards and efficiency topics that are included in the DDS key performance measures. These indicators concern topics unique to Colorado. At one time, NCI had indicators to measure the financial health of service providers but these were dropped due to problems in securing compatible data across states and provider type. New Hampshire (which does not participate in NCI), however, has adopted provider financial health indicators in the NHQOP "agency strength" domain. NCI has stability indicators based on measures of direct support professional turnover and retention; however, it does not include indicators concerning wages.

In a nutshell, there are differences and similarities between the DDS key performance measures and the NCI indicators. Some of these differences are due to Colorado's interest in measuring performance along dimensions that are unique to the state. Other differences are more apparent than real because DDS captures more robust information via CIOS than is reflected in the current key indicator set. The main differences lie in the health and safety arena and indicators that revolve around families.

There would be no appreciable gain from Colorado's participating in NCI except in so far as there is interest in comparing CIOS individual outcome results to states elsewhere. However, participation in NCI might cause Colorado to have to modify CIOS somewhat (so that it conformed more closely to the NCI instrument) and this could pose problems in terms of assessing outcomes from a change from baseline perspective. NCI's efforts may be useful in informing Colorado's own efforts in performance and outcome measurement; information concerning these efforts has been and continues to be available to Colorado in any case.

E. Performance Measures Going Forward in Colorado

Our main task is to recommend a comprehensive set of performance measures for Colorado that will enable gauging system quality and appraising CCB performance. In this section, we spell out important considerations for ensuring that performance measures enjoy broad stakeholder support. We then discuss the basis of our

[7] In the past, DDS conducted surveys of families with children who receive family support or CES. Responsibility for these services has been relocated elsewhere in CDHS.

recommendations. Next, we present the recommended measures and then describe the ways that information would be obtained to support these measures. We also offer our suggestions concerning how Colorado might proceed in implementing these recommendations. Lastly, we estimate the resources necessary to implement the recommendations.

1. A Partnership for Quality

Performance measurement is a means to end. Performance measurement is a way to determine whether the service system is achieving the goals described by its mission and supporting quality improvement going forward. It is vital that stakeholders agree that the selected performance measures address areas of performance that are mission-critical. Absent stakeholder buy-in, performance measurement has little utility and rapidly becomes a detached data collection exercise. Stakeholder buy-in also is important because quality improvement must be animated by a shared commitment to developing and implementing strategies that improve performance. Performance measurement is an effective tool only to the extent that it is based on a partnership among stakeholders in pursuit of quality improvement. In particular:

- First, our recommendations should be thoroughly discussed by stakeholders and their input solicited before proceeding with implementation. As we discussed in our report concerning the evaluation of the Systems Change Project, it is imperative that Colorado stakeholders play an active role in system performance appraisal and quality improvement. This extends to decision-making concerning performance measures. Stakeholder buy-in is vital concerning the critical elements of performance that will be tracked and appraised.

- We also noted in the same project report that there is a strong need in Colorado to develop and adopt a "quality framework" that reflects stakeholder areas of critical interest and desired outcomes. We believe the development of such a quality framework will go a long way toward clarifying system directions. Once that framework is developed, it might well suggest additional areas for performance measurement and focus. Our recommendations here are not meant to pre-empt what should or should not be in that framework.

- Also in that report we advocated for the creation of the Colorado Quality Improvement Council composed of stakeholders. If such a Council is created, it should play a central role in selecting the performance measures that the state ultimately elects to implement and linking performance measurement to quality improvement.

- We also stress that the best use of performance measures is to support quality improvement as opposed to policing the system. A culture of stakeholder collaboration in pursuit of quality improvement will serve Colorado better over the long haul than employing performance measures as a punitive device.

2. The Basis of Our Recommendations

The present key indicators were selected to provide legislators and others a compact, "top level" view of system performance along several dimensions. As previously noted, DDS possesses other information that can support a wider array of performance measures than those reflected in the present key indicators. Our recommendations would increase the number of measures that are actively tracked beyond those contained in the key performance indicators in order to provide a more complete picture of performance across several dimensions and thereby serve as a foundation to support quality improvement efforts by stakeholders. From among this broader set of measures, indicators can be selected to continue to provide a succinct, "top-level" view of overall performance to legislators and others.

We recommend that the performance measures that span six broad domains:

a. Personal Outcomes. The performance measures must embody and reflect the DDS mission statement. The mission statement describes the outcomes that the community system is striving to attain for individuals. The extent to which valued personal outcomes are achieved thereby must be a central focus of performance measurement.

b. Satisfaction. A fundamental gauge of performance is satisfaction from the customer's standpoint – namely, are people satisfied with their services and supports and the performance of the organizations that furnish these services?

c. Quality, Health and Safety. Performance hinges on service providers meeting at least threshold levels of quality. In the case of vulnerable individuals, a central concern is that they be free from harm and feel safe in their homes and community. As we have defined it, this domain is broader than the present "health and safety" performance measure.

d. Accessibility. It also is important to measure the extent to which the system is serving individuals who need services. In the case of people receiving services, it also is important to measure whether individuals need services but are not getting them.

e. Efficiency. In a taxpayer-supported system, a critical measure of performance is that organizations are deploying dollars to the benefit of individuals and families and overhead costs do not claim a disproportionate share of dollars.

f. Agency Strength. Finally, performance hinges on organizations functioning effectively in support of individuals and families. Important areas of concern include case management, service planning and rights. Another concern is the stability of organizations and the extent to which the marketplace is expanding or contracting. The stability of the community workforce continues to be an important topic because of its ramifications for quality and effectiveness.

In each of these domains, we recommend specific measures or indicators. Included are all but four of the current key performance indicators. The full set of measures includes many for which DDS already collects or possesses information. Some are new and would require additional data collection. The four current indicators that we recommend dropping are:

- **Integration**. This indicator is based on the type of service that people receive. Service type is not an entirely reliable indicator of integration. It only describes whether the service is furnished in a non-facility setting. The delivery of a service outside a facility does not necessary mean that the individual is experiencing community integration.
- **Stability**. This indicator concerns the frequency of changes in residential settings. While it is important that individuals have a stable living arrangement, a change in living arrangement is not necessarily an indicator of poor performance. A change in living arrangement can be positive (e.g., the change accommodates the individual's preference). Hence, the indicator is difficult to interpret.
- **Appeals**. This indicator concerns the number of disputes that are not resolved locally and then taken to the department level. Presumably, if the volume of disputes that reach the department level is high, then potentially local dispute resolution is not working well. Also, the volume of appeals might indicate other problems at the local level. However, the indicator is problematic from several standpoints. In particular, a dispute may not be carried to the department level even though an individual or family is unhappy with the local decision because the appeal process is burdensome. A more direct measure would consider the number of formal disputes filed locally and the percentage that are resolved to the satisfaction of the individual or family.
- **Fund Utilization**. This measure concerns the amount of appropriation that is reverted. A volume of reversions indicates that the system is not functioning effectively in deploying resources. In the past, reversions were a problem in Colorado and, hence, it was considered important to keep a close eye on them. However, currently, reversions are not a problem and this indicator should be deleted in the interest of parsimony.

The deletion of these indicators would not lead to an appreciable loss of information concerning system performance.

With respect especially to the measurement of CCB performance, we recommend the following:

- **Personal Outcomes**. The achievement of personal outcomes should be measured at the CCB level. In the Colorado system, CCBs are responsible for local service provision. As a consequence, it is fair and appropriate to appraise their performance by the extent to which their efforts yield valued outcomes on behalf of individuals in their service areas. The CIOS sample method supports the generation of outcome results that are statistically reliable at the CCB level. These results should be employed to establish a

performance baseline for each CCB and CCB performance against this baseline should be measured going forward. Personal outcomes also should serve as the basis for CCB quality improvement with CCBs working with their stakeholders and provider network to identify areas of strength and opportunities for improvement. Local quality improvement efforts would be aided if it were feasible to conduct outcome measurement at the provider level as well. However, in the near-term, it would be cost-prohibitive to take this step. CCB performance in achieving personal outcomes should be measured against the overall statewide norm to identify high and low performing CCBs (with high and low performance measured by tests of statistical significance); it also should be measured on the change from baseline basis. As previously noted, if it turns out that there are no appreciable differences in performance CCB-to-CCB, then it may be appropriate to focus quality improvement efforts at the systemwide level.

- **Satisfaction**. Similarly, we believe that it is appropriate and useful to measure satisfaction at the CCB level for the same reasons as measuring personal outcomes by CCB.
- **Case Management**. Case management is a central CCB responsibility. In Colorado, only CCBs may furnish case management. CCB performance in conducting case management should be measured; hence, we have included measures that are tied directly to case management.
- **CCB Provider Network Management**. In their MSO role, CCBs are responsible for managing the local provider network. Their management should be even-handed and not favor their own "service arm" over other providers. CCBs should operate in partnership with their provider networks. In order to measure CCB provider network management, we believe it appropriate to solicit the opinions of non-CCB providers in the appraisal of CCB performance. There are many problems in measuring CCB performance along these lines. Some CCBs have relatively large provider networks, but more rural CCBs do not. In addition, providers may hesitate to voice their opinions unless they are assured anonymity. Despite these problems, we believe that it is fair and appropriate to measure CCB provider network management performance. We believe that such feedback would be valuable for CCBs as well. We also believe that performance appraisal will benefit from enlisting the provider community more generally to identify areas of strength and opportunities for improvement in supporting people with developmental disabilities. We have avoided recommending indicators in this arena that, while potentially offering a hard, objective measure of CCB performance, would not be especially reliable.[8]

[8] A possible measure of CCB performance in this arena is CCB "market share", namely the dollar volume of services furnished by a CCB compared to the total dollar volume in the CCB service region. An increase in CCB market share might be an indicator that a CCB is not managing the market place appropriately. However, changes in CCB market share can stem from other reasons. For example, some CCBs are located in rural areas where there are problems in diversifying the market place,

- **Quality, Health and Safety**. We have suggested additional indicators in this domain. Arguably, good or poor performance concerning these indicators could be laid at the doorstep of CCBs. For example, if there is an appreciable deterioration in the number of providers operating in a CCB service area that meet fundamental minimum health and safety standards, then it might indicate that the CCB itself is not exercising appropriate oversight of its provider network. However, in this arena, there are various technical problems in performance measurement. For example, a performance measure in this regard could be affected by the sequence in which the state conducts its provider quality reviews. Therefore, it may be better to track performance at the "system-level" and then consider examining whether the decline in performance is systemic or appears to be occurring as a result of an especially high number of problems in a particular service area.
- **Efficiency**. The current performance indicators in this area speak directly to CCB management of resources. They should be continued but potentially might be supplemented.
- **Other Aspects of CCB Performance**. We also believe that other aspects of CCB performance should be measured. These include the extent to which individuals and families believe that they are provided sufficient information by CCBs to permit them to make informed selections of services and service providers. Another element of performance is how well individuals and families know their rights and how to file a grievance or complaint. In the case of a grievance or complaint about a CCB, it also is important to know whether individuals and families believe that the grievance or complaint was handled fairly and appropriately. In addition, the extent to which CCBs on their own are actively soliciting feedback and input from individuals, families and other local stakeholders is an important measure of CCB performance.

By and large, with respect to CCB performance we have not recommended workload measures except in the area of case management services.

Lastly, even though our list of recommended performance measures is lengthy, we also were conscious of the need to keep it is compact as possible and have avoided predicating these recommendations on the implementation of very costly new data acquisition requirements. Much of the information necessary for many of these measures can be obtained via CIOS, although CIOS might need to be modified somewhat. The measures make extensive use of third party (family and guardian) survey data. This would require a new data collection effort. However, this survey can be administered economically via mail. In addition, a provider survey would need

---

especially with respect to comprehensive services. In addition, CCB market share may increase because individuals and families have decided that the services a particular CCB offers are superior – for whatever reason – to the services offered by other vendors. There are other problems in calculating this measure, especially in the case of CCBs that are accommodating the employment of consumer-selected workers. An increase in CCB market share possibly might indicate problems in how it conducts its MSO role but not unambiguously. Hence, this "objective" measure may only point to problems and is insufficient to conclude one way or another that there are problems.

to be conducted. Again, this can be accomplished economically. We have kept additional information collection requirements to a minimum in the case of CCBs and avoided identifying any measures that would cause the redesign of CCMS.

3. Proposed Performance Measures

The proposed performance measures begin on the next page. The table identifies the measure, describes its rationale and discusses other aspects. It also identifies whether the measure is among the current key performance indicators. If the measure is not included among those indicators, we also note whether the necessary information already is collected as part of DDS ongoing performance measurement efforts or whether new data collection would be required.

Again, we urge Colorado to use a partnership approach for reviewing these recommendations – such as establishing a state Quality Improvement Council – in order to assure that the proposed measures speak to dimensions of performance about which stakeholders are most concerned.

Recommended Performance Measures

Measures	Rationale/Discussion
Domain: Personal Outcomes	
1. Choice/Empowerment (current key indicator plus additional) % of individuals receiving comprehensive services who express satisfaction that they were given enough choices in their lives (current key indicator) % of individuals receiving SLS who express satisfaction that they were given enough choices in their lives (current key indicator) % of individuals who make choices about their everyday lives, including: housing, roommates, daily routines, jobs, support staff or providers and social activities (additional indicators; information available via CIOS) % of individuals who report satisfaction with the amount of privacy they have (additional indicator; information available via CIOS) % of individuals who participate in self-advocacy groups (additional indicator; information available via CIOS) % of individuals who report that they make decisions about how they spend their money (additional indicator; information available via CIOS)	The present key indicator concerning choice would continue. It would be supplemented with additional indicators concerning choice making and personal empowerment. The information necessary for the additional indicators is captured in CIOS. These measures parallel indicators adopted by NCI and also reflect in New Hampshire NHQOP. The indicator concerning individuals making choices about their everyday lives encompasses six distinct elements of choice, each of which would be tracked separately.

Measures	Rationale/Discussion
2. Employment (current key indicators plus additional measures) % of individuals receiving employment services (current key indicator) % of individuals receiving employment services who are employed (current key indicator) Average hours worked per week (current key indicator) Average hourly wage compared to state minimum wage (additional indicator; information available) % of individuals receiving employment services who have held the same job for six months or more (additional indicator; information available) % of individuals who receive employment services who want to work more (additional indicator; information not currently collected) % of individuals who receive employment services who express satisfaction with their job (additional indicator; information not currently collected) % of individuals who express the desire to work but are not receiving employment services (additional indicator; information not currently collected)	Employment remains a critical personal outcome for adults. Attention should continue in Colorado to this outcome. The expanded indicators/measures would provide a more robust view of performance in securing employment for adults. The necessary information for most of these measures already is captured through CIOS. Where information is not presently collected, CIOS could be modified to obtain it.
3. Inclusion (new) % of individuals who report that they participate in everyday activities in the community of their own choosing (additional; information not currently collected % of individuals who report that they receive the support they need to participate in everyday activities in the community (additional; information not currently collected) The extent to which individuals participate in everyday activities in the community (additional; information available)	These inclusion indicators would replace the current "integration" indicator. Information can be drawn from CIOS or a modified version of CIOS.

Measures	Rationale/Discussion
4. **Relationships** (additional; information concerning each of these measures/indicators already collected via CIOS) % of individuals who have friends and caring relationships with people other than support staff and family members % of people who have a close friend and someone that they can talk to about personal things % of people who are able to see their families and friends when they want % of people who report feeling lonely	These additional indicators/measures address the extent to which individuals are connected to other community members. These indicators are included in the NCI indicator set.
5. Personal Growth and Attainment (additional) % of individuals who report being able to do things that are important to them % of individuals who report that they receive support to learn how to do new things	These indicators are drawn from NCI. These topics are not currently addressed in CIOS but could be.
Domain: Satisfaction	
1.Individual satisfaction (current key indicator) % of individuals who express satisfaction with their comprehensive services (current key indicator) % of individuals who express satisfaction with their comprehensive day activity (current key indicator) % of individuals who express satisfaction with their SLS day activity (current key indicator) % of individuals who express satisfaction with their SLS in-home services (additional; information available)	It is recommended that the present indicators continue but be expanded to include an additional SLS dimension.
2. Third-party satisfaction (additional)	Third parties would rate their satisfaction with the services furnished to the individual along parallel lines to individual satisfaction. Third party satisfaction will add another dimension to appraising performance in this domain. This would require new data collection via the third-party survey described below

Measures	Rationale/Discussion
Domain: Quality, Health and Safety	
1. Health & Safety Requirements (Current key indicator) % of providers that meet critical requirements at time of survey by type of provider	This indicator should continue. It measures performance against threshold standards. Going forward, consideration should be given to including more robust information concerning the types of requirements that are not met.
2. Major and serious incidents (Additional; information not currently compiled at the DDS-level) **Measure**: Number of verified major and serious incidents by major type (e.g., serious injury, criminal victimization) compared to number of people served	Major and serious incidents clearly are a high profile concern and, hence, should be included as a measure of performance. Presently, DDS does not have a means of tracking the volume and types of major and serious incidents. Incidents are reviewed during DDS quality reviews. DDS, however, is exploring revisions to incident management, including instituting a system to track incidents at the state level in order to support root cause and trend analysis. Implementation of this measure will hinge on the implementation of a state-level collection and tracking system that supports tracking by CCB and provider.
3. Personal Safety and Security (Additional) % of individuals who report that they feel safe in their homes and communities (additional; information available) % of third parties who report that they are satisfied that the safety needs of the individual are addressed (additional; information not currently available)	This indicator measures individual perceptions concerning their own safety and security. This information is available from the present CIOS. The views of third parties also should be sought concerning the extent to which providers are addressing the safety needs of individuals.

Measures	Rationale/Discussion
4. Satisfaction with Support Staff (Current key indicators plus additional) % of individuals who express satisfaction with their comprehensive support staff (current key indicator) % of individuals who express satisfaction with their SLS day and in-home support staff (additional; information available) % of individuals who report that staff treat them with respect (additional; information available) % of individuals who report that staff are responsive to their wishes (additional; information not currently available) % of third parties who express satisfaction with the skills and competencies of comprehensive support staff (additional; information not currently available) % of third parties who express satisfaction with the skills and competencies of SLS support staff (additional; information not currently available)	The current key indicator should continue. Additional indicators would be added to gauge individual staff-interaction. In addition, third parties would be tapped to provide their assessment of the skills and competencies of staff. Alternatively, this indicator could be located in the satisfaction domain. Included are additional measures/indicators that would gauge third-party satisfaction with staff skills and competencies. Information for these measures would be collected via the proposed third-party survey.
5. General Health (additional) % of individuals who had a physical exam in the past year (additional; information available) % of women who have had an OBY/GYN exam in the past year (additional; information available) % of individuals who have had a routine dental exam in the past six months (additional; information available) % of third parties who report concerns about the availability of health care for their family member (additional; information not currently available)	These general health indicators parallel indicators in NCI. They probe the extent to which individuals are receiving basic health care services. The information for the first three indicators is presently collected via CIOS. An additional indicator is included for which information would be gathered via the proposed third-party survey.
6. Problems (Additional; information available) % of third parties who report problems or concerns with the quality of services their family member receives by type of problem	This indicator is drawn from the advocate section of CIOS. It would be removed from CIOS and incorporated into the proposed third party survey.

Measures	Rationale/Discussion
Domain: Accessibility	
1. Wait List (Current key indicator) % of demand met for comprehensive and SLS	This indicator should continue. The extent to which the system is meeting expressed consumer demand is obviously an important performance measure and should be retained. Changes in performance hinge on state action concerning funding. The present measure (individuals wait listed divided by demand (the sum of people served plus people waiting) is appropriate measure.
2. Growth in People Served (Current key indicator) Number of people receiving: (a) comprehensive and (b) SLS	This indicator should continue.
3. Equitability (Current key indicator) Distribution of comprehensive and SLS resources relative to CCB service area general population	This indicator should continue. Equitable distribution of resources across Colorado remains a topic of high concern. However, performance concerning this indicator is tied to state funding. The current measure should be supplemented with a statistical measure of the extent to which the distribution of resources is growing wider or narrowing over time.
4. Services needed (Additional) % of individuals receiving services who say that they need different or additional services but cannot get them (additional; information not currently available) % of third parties who report that the family member needs different or additional services but cannot get them (additional; information not currently available	The present accessibility indicators do not explore the extent to which individuals who currently receive services might need different or additional services. This topic is explored only to a limited extent in CIOS. Service needs might include an increased volume of current services and/or new services. The necessary information would be collected via modifications to CIOS and the survey of third parties.
Domain: Efficiency	
1. Minimum number served (Current key indicator) Persons served versus contract minimums	This performance measure should continue. It is a basic performance standard. This measure should be reported in the aggregate and by CCB.
2. Member months (Current key indicator) Days/member months of services versus contract	This performance measure should continue. It is a basic performance standard.
3. Overhead (Current key indicator) % Overhead (Management and General) to total CCB expenses	Current indicator should continue. Relative overhead expense is a measure of efficiency.

Measures	Rationale/Discussion
Domain: Agency Strength	
Indicators of CCB Performance	
1. Case Management (all of these measures are additional **Individuals:** % of individuals who report that they know their case managers (information not currently available) % of individuals who report that their case managers asked about their preferences (information not currently available) % of people who report that their case managers help them get what they need (information not currently available) % of people who report that their service plan is about things that are important to them (information currently available) % of people who report that they are satisfied with their case manager (information not currently available) **Third Parties** % of third parties who report that the family member's service plan is about things that are important to them (information available) % of third parties who report the case manager helps them when needed (information not available) % of third parties who report that the case manager has the necessary skills and experience to provide effective assistance (information not available) % of third parties who report that they are satisfied with the performance of their family member's case manager (information not available **Workload** The ratio of case managers/case management staff to total number of persons receiving services (information not currently available) The ratio of case managers/case management staff to total	As previously noted, case management is a central CCB responsibility. Indicators are proposed to measure various dimensions of case management performance. Some of these indicators are drawn from NCI; others from indicators employed in New Hampshire NHQOP. A potentially complicating factor in Colorado is the interplay between CCB managers and Supported Living Consultants for individuals who participate in SLS. While case managers are assigned to these individuals, SLCs also are involved in areas that historically fell under case management. This will have implications for the design of survey instruments. With respect to individuals, some CIOS modifications would be necessary. Information for the third-party measures would be compiled through the proposed third party survey. Workload measures are proposed in order to gauge case management capabilities. This information would have to be periodically supplied by CCBs. Down the road, potentially additional indicators could be added, including case manager tenure, effectively conducting HCBS waiver case management activities and so forth.

Measures	Rationale/Discussion
number of persons served plus people waiting for services (information not currently available)	
2. Information (additional) % of individuals who express satisfaction with the information that CCBs provide about community services and supports (information not currently available) % of third parties who express satisfaction with the information they receive from CCBs about community services and supports (information not currently available)	A primary responsibility of CCBs is furnishing information to individuals and families upon which they can base their decisions concerning services and supports.
3. Rights (additional; information not currently available) % of individuals who know and understand their rights % of third parties who know and understand their rights % of individuals who know how to make a formal complaint or grievance % of third parties who know how to make a formal compliant or grievance The number of disputes, grievances or complaints filed by individuals or families concerning a CCB compared to total number of individuals served by the CCB % of individuals and third parties who have filed a dispute, grievance or complaint or brought problems to the attention of the CCB in the past year % of individuals and third parties who are satisfied with the way that the CCB addresses grievances, complaints and other problems	Colorado law and DDS/CDHS regulations establish key rights for individuals. CCBs have the responsibility for making sure that individuals and third parties know and understand their rights as well as how to dispute CCB decisions or file a grievance or complaint. CIOS would need to be modified and third-party information collected via the third-party survey. The volume of formal disputes, grievances and complaints filed is an indicator – albeit imperfect – of possible problems in the effectiveness of a CCB in resolving issues informally. CCBs would be required to keep track of the number of formal disputes and grievances/ complaints that are filed. In order to gauge whether CCBs are addressing problems to the satisfaction of individuals and families, this topic will need to be probed via CIOS and/or the proposed third-party survey.
4. Provider Network Management (additional) % of non-CCB providers (subcontractors) who express satisfaction concerning their relationship with the CCB (information not currently available)	In advance of the Systems Change Project, DDS recommended an indicator to gauge whether CCBs treat other providers fairly and conducting a survey to that end. We believe this idea has merit as a means to obtain information concerning CCB provider network management. However, there are cautions that attach to this method of data collection.

General Measures of Agency Strength/Stability	
1. Staff turnover (Current key indicator) Measure: overall staff turnover rate	Staff stability is critical to the provision of high quality and effective services. The current indicator is appropriate and should continue. Achieving a lower turnover rate, however, hinges in large part on funding levels, which may only be affected by state action. While significant deviations in the turnover rate from the "industry norm" across employing organizations are possible indicators of good or poor agency performance, such deviations are difficult to interpret because they also can be affected by other local factors. Consequently, we do not recommend this as a CCB performance indicator.
2. **Wages** (Current key indicator) Measure: Average community worker wages compared to other human services organizations, general industry and Regional Centers	Wages are closely related to staff stability and should continue as a measure. The present method of comparing wages to other human services employers and general industry is a solid approach to benchmarking.
3. Individual/Third Party Involvement in Program Review and Quality Improvement (additional) % of agencies (CCB and non-CCB) who actively involve individuals and third parties in program review and quality improvement activities (information not currently available)	As part of its provider survey, NH asks area agencies and other service providers to report their efforts to enlist individuals and third parties in program assessment and quality improvement activities. We recommend adding a similar measure to the Colorado performance measure set. Information concerning this measure would be gathered by survey of CCBs and, in the case of non-CCB providers, in conjunction with the survey to gather information concerning CCB provider network management.
4. Provider attrition: (additional) % providers terminating operation in the past twelve months (information not currently available)	The rate of provider termination/attrition is a potential indicator of system instability. The net loss of providers can have consequences for consumer choice. Providers may terminate voluntarily or lose program approval. Either cause indicates possible issues in stability. It also must be recognized that provider terminations may result of individual/family choice. This information should be supplemented by a count of: providers at the beginning of the year, new providers, providers terminating and the net count of providers at the end of the year in order to gauge trends or alert the department to potential issues. In collecting and reporting this information, DDS may wish to exclude very small providers.

4. Data Acquisition

As indicated previously, we have attempted to hold down the amount of new costs that would have to be incurred in implementing these performance measures by relying as much as possible on existing data acquisition capabilities. Since we have continued many of the existing key performance indicators, current data acquisition activities would simply need to continue. The main data acquisition implications of these recommendations are:

- **CIOS**. It will be necessary to review CIOS in order to ensure that it aligns with these recommendations. Some of the recommendations might entail additions to CIOS or modifications of existing CIOS elements. However, we do not believe it will be necessary to make radical changes in CIOS. CIOS can be shortened somewhat by removing its advocate section and shifting these questions to the proposed third-party survey. In addition, it might be an apt time to review and solicit stakeholder input concerning the present instrument. Stakeholders should be satisfied that the revised CIOS will acquire the desired information. In order to better measure performance CCB-by-CCB, we recommend increasing the size of CIOS sample.[9] We do not recommend changing the two-year CIOS administration cycle.
- **Third Party Survey**. DDS has experience in the design and administration of third party survey tools. The design of the third party survey instrument recommended here might be informed by the NCI family surveys (one of which would more or less fit the support block and the other of which would more or less fit the Comp block). We note in passing that New Hampshire which previously conducted multiple surveys of third parties – depending on the family member's age and situation – has been successful in creating a single instrument that spans all ages and situations. New Hampshire officials should be consulted concerning the design of its third party instrument. Some of the indicators recommended parallel indicators in NHQOP. Both the NCI and New Hampshire surveys might also suggest other topics that could be probed employing a third party survey tool. We recommend that this survey be conducted by mail based on a random sample of individuals served by funding block and that the sample size be sufficient to ensure that the results are statistically reliable in making comparisons CCB-to-CCB. Assuming a return rate of 50%, this would require that the sample for the third-party survey be twice as large as CIOS. It would not be necessary to match the individuals selected to identify third parties who would receive this survey. Starting out, it

[9] As previously noted, the present CIOS sample size is sufficient only to detect relatively large differences in performance CCB-to-CCB. When the differences are smaller, it cannot be determined whether they are real differences or differences that fall outside the statistical confidence interval. A very large sample would be required to detect whether all differences are significant. Expanding CIOS data collection to achieve this result would be cost-prohibitive and logistically hard to manage. We recommend a 50% increase in the number of individuals served by CCBs included in the sample. This would improve the utility of CIOS for comparing results across CCBs, although it would still pose some problems in determining the significance of the differences.

would be beneficial to administer this survey on an annual basis. This will enable a shake down of the initial survey and then a quick follow-up with necessary modifications. After the initial period, it probably will be necessary only to administer the survey on a two year cycle in order to inform quality improvement activities.

A problem that will need to be addressed in conducting a third party survey is that, while DDS has the information upon which to draw the sample, it does not possess information about third-parties, including their mailing address and relationship to individuals. This information only resides at the CCB level. This may cause DDS to have to draw an even larger sample to anticipate the potential that some individuals may not have third parties. In addition, there will be time and expense at the CCB level in pulling up the necessary information and sending it to DDS in order to prepare mailing labels. However, we cannot estimate the amount of time and expense.

- **Non-CCB Provider Survey**. While the performance measure is expressed as the percentage of non-CCB providers who are satisfied with a CCB's provider network, it will likely be of benefit to address in this survey various other measures of satisfaction. These could include an overall rating of satisfaction in addition to ratings of CCB performance along various dimensions of provider network management (e.g., rate negotiation, fair bidding process, responsiveness to problems, and mutual problem solving). The main issue presented by this type of survey is whether non-CCB providers would be willing to respond candidly absent a guarantee of anonymity. At least in the beginning, such a guarantee should be provided. In addition, we believe it would be most appropriate for the results to be presented at least initially by keying them to the performance norm across all CCBs rather than on a raw score basis. Alternatively, a "report card" approach could be used that identifies CCB strengths and perceived weaknesses. It also may be necessary to exclude the results for smaller CCBs where there are few non-CCB providers to completely assure anonymity. The design of this survey should involve stakeholders, including CCB officials and non-CCB providers themselves. As part of the design of this survey, stakeholders may wish to explore additional opportunities to tap the views of non-CCB providers concerning strengths, issues and problems that do revolve around CCB provider network management. We caution very much against using the results of this type of survey to draw any hard and fast conclusions about CCB provider network management performance. The greatest value in conducting this type of survey should be to serve as the basis of dialogue between each CCB and its provider network about opportunities for improvement. The initial survey should be viewed as simply establishing a beginning baseline.

5. Sequence and Timelines

Here, we outline the sequence and timelines for various activities associated with implementing the proposed performance measures.

- Again, we strongly recommend the formation of the Colorado Quality Improvement Council. The Council's first order of business should be the development of a quality framework for Colorado. The framework should serve as the foundation for future quality improvement initiatives, including performance measurement.
- The Council should examine our recommendations here against the framework it adopts and modify our recommendations accordingly. The central considerations should be whether the proposed measures appropriately reflect the areas of focus in the framework and can serve as the basis for measuring progress toward the desired outcomes expressed in the framework.
- Calendar 2004 appears to us to be the most realistic timeframe for launching the full range of recommended performance indicators. The latest round of CIOS administration occurred during the first part of calendar 2002. Hence, calendar 2004 is when CIOS would be administered next. We believe it would be difficult to accelerate this schedule appreciably since it will take time to design/redesign instruments in any case. However, we strongly recommend that DDS have sufficient resources to turn around the 2002 CIOS data as early as possible in FY 2003-2004, including, if feasible, preparing CCB-by-CCB results to establish a performance baseline.
- Provided that DDS has sufficient staff resources, then the objective should be set to turn around the CIOS and other performance data during late calendar 2004 or early in 2005. In any event, the performance measure data should be released as soon as possible after it is received, checked and analyzed.
- The performance measure set and instruments will need to be evaluated once the results are in hand. It will be necessary to make changes. It may be necessary to discard some measures and modify others. In this respect, New Hampshire's experience is especially relevant. Changes are continuing even though NHQOP data collection is now in its fourth round. This means that it will be important for stakeholders to remain engaged.

6. Costs

We estimate the following costs to implement these recommendations:

- **Third Party Survey**. We estimate the non-staff expense of just the data collection phase of this survey at approximately $15,000. This estimate includes the cost of postage (cost to mail and cost of return postage), preparation of mailing labels, and data entry expense.
- **CIOS**. Increasing the CIOS sample of individuals served by CCBs to support better comparisons of CCB performance as recommended above would cost an additional $45,000 over and above the current total $90,000 contract cost to administer CIOS. The performance measures that hinge on CIOS (whether the current key performance indicators or the additional ones that we recommend) cannot be implemented absent adequate funding to conduct the

survey itself. We understand that CIOS funding might be reduced below the level necessary to continue the present level of effort. This would be substantially set back to efforts in Colorado to obtain vital information about individual outcomes and performance.

- **DDS Staff**. As previously discussed, the lack of staff at DDS causes the processing of CIOS to be bottlenecked and circumscribes the extent to which CIOS data can be exploited. Unless this problem is resolved satisfactorily, then it will be difficult to generate the CIOS results until mid-2005. It may not be possible to produce CCB-by-CCB results until even later than that, and the results may thereby lack currency and utility in their application to quality improvement. The addition of the third party survey would compound these problems. As a consequence, we recommend that the addition of two FTEs dedicated to performance measurement occur as soon as possible but no later than July 2003. We estimate the personal services costs of these two positions at $90,000 plus fringe benefits and other necessary operating expenses. If it is feasible to outsource the processing of the third-party survey data, then the number of FTEs added at DDS might potentially be reduced to 1.5 and $30,000 made available to DDS to contract for analysis of the third-party survey data.
- **Other Considerations**. Overhauling and updating the CCMS system to support improved data integration would improve the ease and efficiency with which DDS could generate performance measures and manage performance data over the long haul. We understand that there are other near-term pressing reasons to update CCMS, including assuring HIPAA compliance. As part of revamping CCMS, strong consideration should be given to the steps necessary to include performance measure data.

III. Tying CCB Funding to Performance

Our second task is to outline options for the Department and the JBC to tie CCB funding to performance. This is a complex topic and, therefore must be approached with caution. Clearly linking funding and performance is not unreasonable. It lies at the core of state budgeting and appropriation processes. However, substantial complexities arise in selecting an appropriate mechanism to establish the hard and fast linkage between performance measures and funding.

Here, we briefly recap the interest in Colorado concerning this topic. We also attempt to frame more precisely the parameters for establishing this linkage. We then briefly describe how Colorado currently ties CCB funding to performance. Next, we outline the major issues and considerable challenges that involved in establishing a linkage between funding and performance measures. We then spell out a series of steps and problems that would need to be addressed to make and suggest how it might be constructed. Colorado should proceed cautiously along these lines. Finally, we identify two other alternatives that might warrant consideration.

A. Background/Framing the Topic

In conjunction with the implementation of the Systems Change Project, the Joint Budget Committee directed in Memorandum of Understanding Element G that DDS/CDHS "create and implement a quantifiable performance and outcome-based system to evaluate system progress, efficiency and effectiveness and ***on which to base appropriations in the future*** …." [Emphasis added]. The JBC thereby signaled its intent to employ performance and outcome measures as the basis for funding going forward. As discussed in the previous section, DDS then adopted and implemented its key performance indicators.

In its final progress report concerning the Systems Change Project, DDS/CDHS observed:

> ***Performance Measures on which to Base Appropriations*** - MOU G suggests that performance measures might be used as a basis for appropriations. CDHS does not believe that it is advisable or practical to utilize a performance measurement system as the basis for appropriations for long-term care systems such as that for persons with developmental disabilities. Persons with developmental disabilities are vulnerable individuals with long-term needs for supports in order to live safe lives. They will not be "cured" nor is it likely that their needs for supports will decrease over time. Outcomes tend to measure movement of the system towards better practices, such as greater integration, more choice, higher satisfaction, etc. Even if certain outcomes are or are not achieved for some persons, the cost of continuing services to those individuals is not likely to have changed. Furthermore, CDHS is not aware of any other states that base appropriations on outcomes for long-term service systems, such as developmental disabilities.
>
> CDHS believes that appropriations for long-term services are best based on numbers of persons and costs of delivering those services. However, CDHS does believe that performance measures can and should be used to (1)

> support budget requests by documenting that service approaches are effective, (2) determine if progress is being made towards achieving goals of services, (3) identify programs and/or organizations which are doing particularly well so that such entities can receive recognition and to encourage replication of successful approaches, (4) to identify programs or organizations that need improvement so as to better target technical assistance, training and monitoring to ensure changes, and (5) for contract negotiations, contract penalties, and incentives.[10]

DDS/CDHS expressed legitimate reservations about basing all appropriations for community services on performance measures. The potential uses of performance measures outlined by DDS/CDHS are appropriate. As discussed elsewhere, performance measurement principally should be used in support of quality improvement, a theme expressed by DDS/CDHS in 2000.

The JBC, when requesting this evaluation study, shifted the focus from tying broad appropriations to performance to exploring options for tying CCB funding to performance. That is, rather than basing overall funding on performance – which obviously would have serious implications for people receiving services – the focus of the RFP is narrower and concerns how performance measures might be employed for "contract negotiations, penalties, and incentives" as outlined by DDS/CDHS.

Along these lines, tying CCB funding to performance implies that dollars that support CCB operations (e.g., administration and the management fee) would be tied to performance measures rather than the funds CCBs receive to furnish or purchase direct services on behalf of individuals in the community. Tying CCB funding to performance would take Colorado beyond its present CCB accountability mechanisms to condition CCB funding on new dimensions of performance. In context, the implication is that CCB funding would be cross-linked to databased performance measures. That is, such measures would be used as means of appraising performance CCB-by-CCB based on the evidence furnished by way of the performance measures. Based on that appraisal, CCB non-direct services dollars would be increased or possibly decreased. This is an appropriate topic for consideration. Consequently, we concentrate on examining alternatives along these lines.

B. Current Mechanisms Tying CCB Funding to Performance

By way of the Systems Change Project, DDS/CDHS linked CCB performance to funding through its contract performance standards and other design elements such as putting CCBs at risk in the Comprehensive Block. CCBs have to hit performance marks in terms of the persons they serve and member months in order to earn the amount of the contract. Various other check and balance mechanisms also are built into the contract. Broadly speaking, the present linkage between funding and performance is output-based and efficiency-oriented. While Colorado's specific funding mechanism is unique among the states, it parallels "performance contracting"

[10] DDS (2000). Final Progress Report on the Colorado Systems Change Project for Developmental Disabilities Services.

elsewhere that conditions state funding on a vendor's furnishing a minimum volume of services. The present contract between DDS and CCBs does not link funding to individual outcomes or other measures of performance such as customer satisfaction.

CCB funding also is linked to performance at a threshold level. CCBs have to comply with state rules, regulations and guidelines in conducting their operations. CCBs undergo annual designation by DDS, which conducts reviews of their operations. If a CCB does not comply with applicable performance requirements, then it risks losing its designation and funding altogether. This type of arrangement between states and "local authorities" like CCBs is common.

Our review of other states with system structures similar to Colorado revealed that none so far have tied local authority funding to performance measures and individual outcomes as commonly understood. This link has not been established in New Hampshire, which has a relatively advanced and comprehensive performance measurement system. As noted previously, "performance contracts" usually are output based. Some states (e.g., California) employ performance contracts as a means to contractually require that local authorities address critical objectives and track their performance in meeting those objectives. Elsewhere, "performance" provisions include fines, penalties, "withholds" and similar devices in the event that the local authority fails to comply with specific state regulatory requirements. While arguably these mechanisms provide states a wider range of options to ensure compliance than outright termination of the local authority (a step that states are understandably reluctant to take), they remain enforcement tools rather than ways to tie local authority funding directly to performance measures.

C. Issues and Challenges

There are various complex issues and challenges that must be resolved in tying funding to performance and outcome measures, which is why it is not common practice in human services, including developmental disabilities. These include:

- **Having solid measures**. As noted in the previous section, significant strides are being made in improving performance and outcome measurement in developmental disabilities services. There now are more robust and better tools available to measure outcomes. However, performance measurement is still far from an exact science. Measures that seem apt sometimes turn out to be poor descriptors of performance or yield results that are questionable. As a consequence, performance measurement systems typically evolve and change over time. This is one reason why states have not been quick to tie performance measures to funding. States first want to make sure that their performance measures are solid descriptors. It is important that the performance measures that would be the basis for linking performance and funding are stable, widely regarded as reliable and well accepted before linking them to funding.
- **Selecting the right measures**. When selecting performance measures that might be tied to organizational funding, it is important that they match up with clearly understood organizational responsibilities and that the affected

organizations are in a position to affect performance. In the public sector, for example, it is not appropriate to link funding and performance when performance itself hinges in large part on funding. Hence, it is important that the performance measures selected be appropriate in light of organizational duties and responsibilities.

- **Selecting the mechanism**. Linking organizational funding (as defined above) to performance measures in order to reward good and penalize bad performance can employ one of two basic mechanisms. One mechanism is to make funding contingent on organizations meeting or exceeding a predefined performance target or set of targets. This amounts to setting a threshold performance standard. Organizations that do not attain the threshold risk losing some portion of their funding and their funds potentially could be redistributed to organizations that meet or exceed the target.

  The second type of "carrot-stick" mechanism ties organization funding to the "industry" performance norm. The norm is defined as the level of performance that most organizations achieve. Organizations that perform appreciably below the norm would face the loss of some portion of their funding. Organizations that perform appreciably better than the norm potentially would be eligible for additional funding. The funding of organizations that operate in and around the norm is left be unaffected.

  In practical terms, performance targets usually are set with an eye to the industry norm in any case (e.g., current average or median performance). In order to tie performance to funding, it must be reasonably likely that most organizations can attain the target. However, setting targets has its pitfalls. If they are too loosely set, then they serve little purpose. Employing norms sometimes is the better approach to linking funding to organizational performance. By their very nature, norms take into account the current "state of the art" and can be an appropriate way to identify outliers – organizations that perform demonstrably better or worse than others. Norms may be established by employing statistical methods to identify outliers. However, when there are a small number of organizations, problems can arise in employing these methods.

  "Carrot-stick" approaches for linking performance and funding pose the problem of deciding the degree to which the funding of low and high performing organizations will be affected by performance. If the gain/loss is small, then they may have little appreciable affect on performance. However, if it is high, then the continuing operation of low performing organizations might be threatened. In addition, if an organization performs at substantially below-average levels, then other types of interventions might be more appropriate.

  Mechanisms to link funding and performance also can be exclusively incentive-based, distributing funds only to above average performers or rewarding appreciable improvements in performance. When funding is tied to performance in this fashion, targets also can be set higher rather than watered down. While not tied to performance measures, California's performance

contract was structured in this fashion (recent budget cutbacks have resulted in the elimination of incentives). Incentive-based mechanisms obviously are less threatening to organizations and arguably more consistent with and supportive of a quality improvement framework. However, the amount of the incentive must be sufficiently large for it to prompt improved performance. Often times, it is difficult to carve out sufficient dollars to provide a meaningful incentive due to other competing budgetary demands.

In a nutshell, mechanisms to link funding to performance can be structured along "carrot-stick" lines or they can be incentive based. Of the two types of mechanisms, incentive-based systems probably offer the best approach to prompting improved performance. Regardless of how the mechanism is structured, decisions must be made concerning the amount of funding that will be linked to performance.

- **Time**. Again, regardless of the mechanism employed, it is problematic to tie funding to performance measures where changing performance will take a long time. This is especially the case with some kinds of individual outcomes in developmental disabilities. If funding is linked to performance, then there must be a reasonable opportunity for an organization to achieve the performance target or improve performance within the funding/performance period. When budget/funding cycles are short, it can be difficult to link some types of performance to funding.
- **Measurement Lag**. Another challenge in tying performance to funding can be the amount of time it takes to acquire and process the data necessary for the performance measures. If the level of performance that is measured is retrospective but does not include current performance, then tying performance to funding is obviously problematic because organizations are unable to affect what they did in the past. If funding hinges on achieving a target during the budget period, then it must be feasible to measure performance before the period is over. This can be especially problematic when data acquisition cycles are extended and data turnaround is slow. It generally is important that, when tying performance, the measures of performance be available in as near "real time" as possible.

These issues and challenges in tying funding to performance are complex, again explaining in part why such a linkage is uncommon in developmental disabilities but more common in such arenas as managed health care and, to a lesser extent, in managed mental health services. In managed health care, the development of performance and patient outcome measures has a relatively long history. Consequently, performance measures are more highly developed, stable and accepted. Performance measurement also is more closely real time because the types of measures employed rely on data that is more easily retrievable. Consequently, payers can proceed with greater confidence in tying measures and funding.

This does not mean these challenges are insurmountable. However, when performance measurement is only in its beginning stages, it may take a considerable

amount of time before performance can be reliably measured and thereby linked to funding. In the meantime, great caution must be exercised.

Additionally, it may be more appropriate to tie some performance measures to funding than other measures plus how measures are tied to funding may vary. For instance, the contract performance standards are already tied to funding since some of them affect whether the entire contract is earned by CCBs and if earnings can be fully retained. On the other hand, measures such as accessibility (waiting list and equitability of resource distribution) and staff turnover plus wage equity are already tied to both appropriations and/or allocation of funding decisions. Still other measures, such as outcomes and satisfaction might be considered for payment of incentive funds in the future.

D. Strategy for Proceeding in Colorado

Tying CCB funding to performance will hinge to a certain extent on resolving some current problems that confront Colorado. In addition, a prudent strategy will roll out the link over a several year period. "Ready, set, go" may be an apt description of this strategy. In particular:

- **Get Ready Problem No. 1 – Need for More Robust Measures**. The present key performance indicator set is not sufficiently robust. Many of the indicators concern areas of performance that CCBs cannot affect or amount to performance standards in any case. The individual outcomes expressed are important but sparse. Some important dimensions of CCB performance are not included. It will be very difficult to tie CCB funding to performance in an appropriate fashion using the current key indicators. The main potential funding ties (over and above the contract performance standards and administrative costs indicator) currently available lie in the areas of individual outcomes and individual satisfaction with services. As discussed above, setting performance targets keyed to individual outcomes can be problematic within the borders of a 12-month budget year, although not necessarily inappropriate. Individual satisfaction with services also can be problematic as a tool to tie funding to performance. More robust measures of satisfaction along additional dimensions would better serve the process. Whether employing the various performance measures we have suggested or others, the first step in linking CCB performance to funding is to establish a more robust set of performance measures that has been adopted and accepted by stakeholders. In addition, the new performance measures will need to go through a shakedown period. This will take time.
- **Get Ready Problem No. 2 – DDS Capabilities**. As previously discussed, the CIOS in its present or modified form is central to moving forward with performance measurement. However, DDS does not have the resources to turn around the current CIOS results quickly. Nor does it have the resources at present to produce CIOS results CCB-by-CCB. In addition, to the extent that tying funding to performance hinges on the statistical reliability of comparisons of performance CCB-to-CCB, then consideration will have to be given to increasing the CIOS sample size to a much greater extent than we

recommended above. Clearly, it is impossible to tie CCB funding to performance absent CCB-by-CCB performance data. For example, the current key indicator concerning satisfaction is derived from CIOS. Given present staff limitations and CIOS administration cycle, the 2002 level of satisfaction may only become available sometime in 2004 and even then, potentially not at a CCB-by-CCB level. This measurement lag and the inability to produce CCB-by-CCB data clearly are major obstacles to tying CCB funding to performance. Without augmented DDS capability to shorten the time between CIOS administration and producing results (including results CCB-by-CCB), neither individual outcomes nor individual satisfaction can serve as a basis for linking CCB performance to funding. Both the Department and/or the JBC would be left establishing performance ties based on data that are not current. The present measurement lag makes it infeasible to use targets as a basis of the tie. Tying funding to norms also would be problematic because the available information is retrospective. Until these problems are resolved, it will be virtually impossible to proceed. Also, it must be kept in mind that CIOS is presently administered on a two-year cycle. Even if the measurement lag problem can be resolved, this cycle – while not a great problem in the use of CIOS for quality improvement purposes – will make it difficult to design a link between funding and performance that operates on a year-over-year basis.

- **Get Set – 1**. If the foregoing problems are worked out, the next step will entail deciding on the mechanism that will be used (carrot-stick or incentive-based) and the elements of CCB performance that will be tied to funding. With respect to the later topic, it will be better to select a battery of performance measures rather than one or two. In other words, CCB performance should be measured across several key dimensions and then combined to develop a broad measure. Linking funding to one or two narrow performance measures runs the risk of inappropriately promoting some dimensions of CCB performance over others.

- **Get Set – 2**. Whatever the measures and mechanism selected, they must be made known to CCBs (along with associated baseline performance data) a year in advance of implementation. This would give CCBs the opportunity to appraise their own performance and begin to develop strategies to improve it in advance of implementation. Interim performance targets also might be set as markers with final targets established in the year when the link goes into effect.

- **Go – 1**. A prudent strategy also will include avoiding setting targets or performance levels that are too high during the first year. Similarly, the amount of funding affected should be kept relatively small. This will assist all parties in gaining confidence that the link is serving its intended purpose and give CCBs another year to continue to make improvements.

- **Go – 2**. In the second and subsequent years of implementation, higher targets or performance levels may be selected. Such targets and levels can be informed by cumulative experience.

In our view, if a decision is made to tie funding to performance measures, the foregoing strategy – although lengthy to implement – is the most prudent to follow. It recognizes present limitations and rolls out the funding link planfully.

Also, if the decision is made to proceed with this strategy, the "Get Ready" period could be fruitfully used by having DDS/CDHS staff report progress to the JBC and JBC staff concerning the development of more robust performance indicators and the steps being taken to implement them. The "Get Ready" period also could serve to develop more fully the exact form that the funding-performance linkage would take and provide the opportunity – employing the initial performance measurement data that are collected – to test alternate configurations for this linkage.

A decision to proceed down this path hinges on how solid the underlying performance measures are, the ability to acquire and then turn around data. It also hinges on whether measures can be designed and selected that will fairly portray CCB performance with sufficient breadth in order to produce a credible rating of CCB performance. This in and of itself can be a challenging task.

In the end, Colorado might be able to establish this link but not without considerable time and effort. There is little in the way of relevant experience from elsewhere available to guide these efforts. In our view, the better near-to-mid term strategy would be to concentrate attention on quality improvement strategies as the principal tool to increase performance rather than focus energy on searching for a mechanical link to databased performance measures that will be complicated to construct.

E. Alternatives

The foregoing discussion, of course, presumes that linking CCB funding to performance would be accomplished principally by employing databased performance measures. There are other alternatives available to establish such a linkage short of establishing a direct tie between funding and performance measures. Performance measures might be one tool among many employed in conjunction with these alternatives. These include:

- **Contract Sanctions**. By virtue of the results of its own review of CCB operations and potentially through independent performance audit-type reviews of CCBs, DDS/CDHS contracts could specify areas of CCB operations that must be improved, setting out concrete performance expectations and spelling out the financial sanctions if these expectations are not met. This would focus attention on CCBs where critical problems have been identified. Performance measures might be one source of information that is employed to identify significant opportunities for improvement and also could serve to verify whether the improvements have been made. The amount of the financial sanctions could vary depending on the seriousness of the problem and its criticality. Financial sanctions may include withholding funds during the period in which the CCB is expected to address these critical problems and ultimately denying the funding if acceptable improvements have not been made. This approach has merit for its potential to identify CCB-specific problems. Obviously, the problem with this approach lies in its lack of a way to reward especially strong performance (e.g., it's all stick and no carrot). Nonetheless,

it merits consideration; also, it is not contingent on solving all the problems associated with defining a link solely between performance measures and funding.

- **Incentive-Based Contracting for Quality Improvement**. If dollars can be made available, then a second approach would be to include in each CCB's contract the requirement to conduct a specified number of quality improvement projects, including projects that may have been identified by DDS or the Colorado Quality Improvement Council. These projects might be identified based on broad system performance rather than performance at the CCB-level. They also might include areas that are less susceptible to formal performance measurement but nonetheless reflect important priorities. Successful completion of these specified quality improvement projects could be rewarded by special payment from a quality improvement fund. This approach would make use of performance measure information but avoid some of the pitfalls associated with establishing hard and fast ties between funding and performance measures.

Employing alternative approaches such as these for linking CCB funding to performance would have the additional advantage of permitting the performance measures themselves to be put to their best and most appropriate use: namely, identifying areas for quality improvement.