Oregon's updated plan for meeting legislatively mandated benchmarks

April 2, 2012

Benchmark and construct measures

<u>Proposed Measures</u>

The attached document provides the following information for every proposed measure:

- Construct measured: as specified by federal guidelines
- Measure ID: a tracking number for internal purposes as our draft measures have changed over the course of the past few months
- Updated date
- Measure type: process or outcome
- Target population: the population that will be included in the measure
- Performance measure: brief description of the measure
- Improvement definition: how improvement will be defined for the measure
- Comparison type: Individual, cross-sectional, or cohort
- Numerator: specification of who and what data will be included in the numerator
- Denominator: specification of who and what data will be included in the denominator
- Operational definition: where required, a more comprehensive definition of how the measure will be defined and calculated
- Measurement tool: the specific published instrument or questions to be asked by the home visitor
- Reliability / validity: where appropriate, information about the reliability and validity of the instrument
- References: given for those instruments not included in the DOHVE compendium
- Collection schedule: specified times for conducting the instrument or asking the questions
- Data source: where the data will come from
- Notes: any additional information, if needed
- HV model protocol variances: information for each home visiting model about whether or not the data collection fits within their current protocol or will require a supplemental protocol; information about the burden of the measure on the home visiting programs
- Federal variances: any deviations from federal guidelines requested by Oregon

Measures for five of the constructs specify use of administrative data, two of them from Oregon Division of Medical Assistance Programs and three of them from Oregon Children, Adults, and Families Division. Memoranda of Understanding will be put in place for data sharing with the MIECHV program in the next couple of months.

Validity and reliability

The attached document provides information about the validity / reliability of the tool used for each of our proposed measures. Five of the measures will use administrative data from another agency and will not require a validated instrument. Seventeen of the measures are either simple questions asked by the home visitor, other tracking completed by the home visitor (such as referrals), or tracking done

administratively by the home visiting program (such as MOUs with other social service agencies in the community). The remainder of the measures use the following validated instruments:

- Substance Use Risk Profile-Pregnancy Scale
- PHQ-9
- Parent-Child Activities Scale
- Ages and Stages Questionnaire (ASQ)
- ASQ:SE
- Ounce
- HOME Inventory – Responsivity and Acceptance scales
- Parenting Stress Index Short Form
- Women's Experience with Battering (WEB)

Several of these tools are included in the DOHVE compendium of valid and reliable tools. The others have validity studies showing them to be acceptable tools. References to those studies, as well as brief descriptions of the studies and reasons for selecting the tools, are included in the attached document.

Definition of improvement

The definition of improvement, including numerator and denominator where appropriate, is provided for each measure in the attached document. The document also provides additional information, when needed for clarity, about how the measures will be calculated.

Data collection and analysis plan

Source of data and justification

Selection of measures was guided by the following principles:

- ***Use valid and reliable tools.***

Where a standardized tool is required, we most often selected measures that are in the DOHVE compendium. In a couple of instances we preferred briefer assessments than those found in the compendium, but used ones for which literature supporting validity/reliability could be found. For some measures we chose instruments that were not in the compendium but for which validity studies have been conducted.

- ***Minimize program burden by gathering data from administrative sources when available.***

We have identified the Oregon DHS Children, Adults, and Family Services (CAF) OR-KIDS system as administrative sources of child abuse data. In addition Medicaid data (Oregon Division of Medical Assistance Programs) will be used for two measures. This will decrease the burden on program staff and ensure uniform data collection across all programs.

- ***Continue use of existing tools.***

Several of the program sites are already using valid, reliable tools, such as the Ages and Stages Questionnaire (ASQ). We are continuing to use existing tools whenever possible.

- ***Minimize the use of multiple tools for the same measure.***

For outcome measures, it is necessary for all three home visiting models to collect the data in exactly the same way in order for the data to be comparable and for aggregation to be possible. So in the case of outcome measures, our home visiting programs will use the same instruments or the same questions that home visitors will ask clients. For some process measures, the different models will use different tools, as the process data will be comparable even if the data for the results of the tools will not be comparable.

- ***Use outcome measures where possible.***

We have selected outcome measures for over half (18) of the constructs. For some of the constructs, process measures seemed more directly relevant or suitable, such as the construct regarding provision of information or training of participants on prevention of child injuries. For other constructs, such as some of the child development constructs, we tried diligently to find outcome measures that would be appropriate for all of the home visiting models. However, for the child development measures, it proved too difficult to find instruments that would fit the philosophies and protocols of all three models receiving MIECHV funding in Oregon.

Population to be assessed

The populations to be assessed are included in the attached document. All data sources have been found to be appropriate for the population for which they are planned to be used, with the possible exception of the HOME Inventory for Hispanic families. Further discussion of this issue is provided in the attached document (see construct number 18).

Plan for sampling

All of our measures will be collected for all enrolled families, and no sampling will be used.

Plan for a data collection schedule

A data collection schedule has been devised for each measure. The collection schedule selected takes into consideration for each measure: 1) the appropriate pregnancy phases, child ages, or stages of the family in the program, 2) the validation of the instrument, 3) the comparison points for improvement definition, and 4) the work flow and burden of the home visiting program.

Ensuring the quality of data collection and analysis

- **Consistent data sources**

We recommend that each measure be drawn from the same source of data across all programs and agencies whenever possible, to ensure consistency across sites. The project will use data from three sources:

1. Electronic data extracts from existing EHS, HFA, and NFP data systems.
2. Electronic extracts from State administrative databases such as OR-KIDS for child abuse and neglect information, and from Medicaid data for prenatal care and well child exams.

3. Prior to buying or developing a statewide home visiting data system, we are working to implement a repository for data pulled from existing home visiting data systems that also will provide an easy mechanism for data entry of MIECHV-required data that is not part of existing systems.

- **Selection and implementation of a state and local data system**

One method of ensuring data quality will be through a data system.

We plan to purchase a web-based case management software package that is already developed and available from a software vendor. A Home Visiting Data Workgroup has been formed to assess software packages and select the one most appropriate for Oregon.

We are in the process of assessing the functionalities of current systems in use by home visiting providers and gathering information on the system characteristics desired by providers.

We plan to build on work that is well under way on health information exchange (HIE) in Oregon. Some assessment of provider needs and preferences has already taken place, and a committee of the Oregon Coalition of Local Health Officials (CLHO) meets regularly to coordinate information management initiatives. The Home Visiting Data Workgroup includes representatives from HIE and CLHO as well as members of the team that has developed and refined the benchmark measures. The benchmark measures team includes representatives of the funded home visiting programs and state public health. Broad representation in the Home Visiting Data Workgroup will ensure that data system decisions will have maximum utility for current benchmark measurement, tracking and analysis; demographic and program utilization tracking and analysis; case management; and program CQI. In addition, broad representation can help guide data system development for future uses and possible expansion to or integration with other early childhood programs.

- **Data management**

When a statewide data system is in place, the State Data Manager will be responsible for tracking the monthly entry of data from each program site. The State Data Manager will also be responsible for maintaining and tracking a master client list in the State data system that will include each client's name, state-assigned unique ID number, and a summary of information received for that client. Reminders will be sent to the programs identifying clients who are missing information.

The data system will be designed to prevent data entry errors. Data fields will be restricted to accept only the type of data for which they were designed (e.g., numeric vs. text, or date vs. general numeric). Where possible, fields will be further restricted to accept only the range of data values that is valid (e.g., the birth date of a child cannot be a future date or a date earlier than one which is eligible for the program).

A data manual will be developed that will guide home visiting program staff on data system use, data definitions, and data entry guidelines. In addition, a complete data dictionary will be developed to guide consistent data analysis and interpretation.

- **Qualifications and training**

The table below details the qualifications and training requirements for each category of personnel involved with data collection and analysis. As shown in the table, all staff will be required to participate in training related to HIPAA and FERPA regulations, and have experience with data collection and/or analysis.

Training and Qualifications Required for Personnel Performing Data Collection and Analysis	
Personnel Type	**Minimum Qualifications and/or Training Requirements**
Home Visitor- Local program	-Training on all data collection tools and data collection system -Completion of HIPAA and FERPA training materials
Data Manager- Local program	-Experience managing data using database management software -Completion of HIPAA and FERPA training materials
Data Manager- State level	-Experience managing data using database management software -Completion of HIPAA, and FERPA, training materials
Data Analyst- State program	-Knowledge of and experience with statistical methods, data analysis, data presentation, and report writing -Completion of HIPAA, and FERPA training materials

Identification of metrics

Our metrics are defined in the attached document in the fields labeled "Improvement Definition," "Numerator," "Denominator," and "Operational Definition." Where scale scores are used, they come directly from the scales defined by standardized tools. Most measures are simple percentages, rates, or averages, although some rates / percentages will be adjusted for families who were not enrolled during the entire reporting period.

Analyzing the data at the local and state levels

Our goal is for the state to provide a report at least quarterly and preferably monthly to the local programs. The report will include the number of families served, attrition rate, graduation rate, a summary of families' demographics, and a snapshot of improvement measures. The improvement measures will be presented in a format in which they are compared to the statewide average, the program's average for the previous reporting period, and the program's target (if applicable). This will allow each program to use these data for their CQI process.

In addition, the Home Visiting Data Workgroup and CQI Team will develop an analysis plan for more in-depth state- and local-level analyses to be conducted by the state data analyst. The analyses will be run at least annually and will examine such factors as program enrollment, demographics of enrollees, retention, graduation, and benchmark progress, including benchmark progress by any identified sub-groups of interest. If any inequities among sub-groups are detected, further analyses will be conducted

to inform programmatic changes to reduce inequities. Overall data will also be examined to identify program gaps, weaknesses, and strengths. Any weaknesses and strengths that are identified will be analyzed in more depth to ascertain factors that can ameliorate weaknesses and factors that can build on strengths.

Gathering and analyzing demographic and service-utilization data

The Home Visiting Data Workgroup and CQI Team will develop a standard set of demographic factors and risk factors that will be gathered at intake for all families. All dates of home visits and other interactions between the home visitor and family (e.g., telephone conversations, meetings outside the home, attendance at socializations) will be documented. Documentation will include interventions, screenings and referrals provided. All demographic and service utilization data will be entered into the data system.

Demographic and service utilization data will be analyzed as indicated above.

Using benchmark data for CQI

The State is in the process of working with local program leads to determine the details of data analysis as part of the Continuous Quality Improvement (CQI) Team roles. For CQI purposes, the general approach that we plan to use is to develop standard reports that each home visiting program can run at any time using the data system. These standard reports will be designed by the Home Visiting Data Workgroup and CQI Team. The reports will answer such questions as: 1) Are all data fields complete and accurate? 2) Are screenings performed as indicated by protocols? 3) Are referrals made as indicated by screening results? 4) When referrals are made, are services received? The standard reports will also be monitored at the state level to provide feedback to programs on defined issues and help assure that improvements are made as defined by the benchmark measures.

Data safety and monitoring

As noted in the staff qualifications section, all persons involved with data collection and/or analysis will be required to receive or document previously received HIPAA and FERPA training, and they will all be required to sign a confidentiality agreement.

All program and state data managers and analysts will be required to use password-protected screen savers so that unauthorized people cannot use a computer that has access to data files. They will be required to always use these locked screen savers when a computer is on and the staff member is not at his/her desk. Program and state systems will be accessed using logins and passwords and will be protected by a network firewall. Paper files will be stored at program sites in locked file cabinets and destroyed per each agency's HIPAA and or FERPA-compliant protocols. All paper documents that include identifiable data about the client will be shredded when discarded. The MIECHV Home Visiting Coordinator and state evidence base program leads will conduct site visits to assure compliance and provide technical assistance as indicated.

Among the requirements of the state data system to be purchased will be that it uses secure encryption for web-based data transmission and that the data are maintained on a secure server.

Anticipated challenges

The biggest two anticipated challenges in the benchmark reporting process are related to each other: 1) quite a few of the measures require new data to be collected by the programs, and 2) the programs will be expanding or starting entirely new sites. These factors together mean that frequently new home visitors will be engaging in new practices that have not been routinized previously. Therefore, supervisors and trainers will also be working to systematize work flows and procedures.

We plan to use cross-model training on the new tools to allow staff to become as proficient and comfortable with the tools as possible prior to the enrollment of clients. We are in the process of hiring state-level model consultants who will facilitate communication between the state and the local programs and ameliorate implementation difficulties. In addition, our state Assessment, Evaluation and Informatics Units has staff who will consult with the home visiting programs on data collection methods and use of data systems.