
DRAFT EVALUATION DESIGN PLAN

MCHB Combating Autism Act Initiative

DBP Training Program



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October 19, 2009

Submitted to:

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I. INTRODUCTION

Under the authority of the Combating Autism Act of 2006 (CAA), the Maternal and Child Health Bureau (MCHB) established the Combating Autism Act Initiative (CAAI), which provides funding for training, research, education and the development of systems of services relating to autism spectrum disorders (ASD) and other developmental disorders (DD). To assess the effectiveness of MCHB's activities in meeting the legislative goals of the Combating Autism Act, Insight Policy Research has designed a detailed evaluation plan for each program funded under the CAAI. This document presents Insight's evaluation design plan for the Developmental Behavioral Pediatrics (DBP) Programs that received CAAI supplemental grants in Fiscal Year (FY) 2008. The evaluation of these DBP programs will take place over three consecutive project phases, including a base year and two option years. Each phase is briefly described below.

Phase I. Planning and Evaluation Design. Phase I took place over the first eight months of the contract, beginning in October 2008 and ending in May 2009. During this phase, our activities included: gathering information on the DBP program activities; reviewing grant applications; identifying available data sources; developing and refining evaluation questions and a logic model to guide the program evaluation; formulating a draft evaluation design; conferring with grantees to obtain their feedback on the evaluation design; and finalizing the design. To ensure timely collection of quantitative data for the first grant year, we also developed new data elements and detailed specifications for incorporating those elements into the National Information and Reporting System (NIRS) database.

Phase II. Data Collection. Phase II will begin in June 2009 and end in March 2011. During this period, we will obtain grantees' summary progress reports from MCHB, collect quantitative information through DGIS and NIRS, develop qualitative data collection protocols, conduct in-depth interviews with DBP directors, and deliver periodic presentations to MCHB staff on the preliminary results. We will also prepare presentations for the annual grantee meetings to be held in November 2009 and November 2010.

Phase III. Data Analysis and Reporting. In Phase III, beginning in April 2011 and ending in September 2011, we will analyze the data collected, develop a draft evaluation report, and finalize that report following MCHB's review of the draft. Additionally, we will write the MCHB contribution to the Report to Congress as required by Section 399DD of the Combating Autism Act of 2006. This report will summarize the activities and outcomes for the DBP programs and will report on national measures, as required.

A. CHALLENGES TO THIS EVALUATION

Every evaluation has its share of potential challenges. In the case of the DBP programs, one potential challenge that we have anticipated involves the relatively short duration of the project,

which may result in relatively small changes in long term outcomes, such as time between screening and diagnostic assessment, or average age of first intervention for ASD/DD. Accordingly, we have developed an evaluation plan that includes collection of interim data and measures of short term outcomes that can feasibly be obtained within the project timeline. The measured outcomes will indicate what the DBP programs have been able to accomplish with the supplemental CAAI funding. Additionally, the data collected can provide a foundation for assessing longer term outcomes in future years.

A second challenge is the September 2011 due date for the final Report to Congress. We will need draft materials for this report by June 2011 to provide adequate time for review by MCHB. This timeline means the individual evaluation report for the DBP program must be completed and reviewed by MCHB by May 2011. To make these deadlines and to have sufficient time to analyze the collected information, data collection must end by March 15th, 2011. As a result, the evaluation will not be able to obtain a full third year of data. The only information the evaluation will have for the final year of grant activities will be collected through telephone interviews that could be conducted as late as March 15th, 2011.

B. OVERVIEW OF EVALUATION PLAN

The following chapters describe our proposed plan for evaluating the DBP grantees' performance in meeting the goals of the CAAI. Chapter II describes the goals and objectives of the Combating Autism Act of 2006, and reviews MCHB's Combating Autism Act Initiative. Chapter III provides an overview of the goals, objectives and activities of the DBP training programs that received supplemental CAAI grants. Chapter IV describes the evaluation design plan for the DBP programs. Chapter V outlines the proposed data collection methodology. Chapters VI and VII provide plans for data analysis and writing the final reports, respectively. Attachment A provides a list of the six DBP programs that were awarded expansion/supplemental CAAI grants in FY 2008. Attachment B presents the logic model that Insight developed for this evaluation. Attachment C includes the semi-structured interview guide for collecting qualitative data from the DBP grantees. Attachment D includes the new data elements that were developed to collect quantitative data from the DBP grantees through NIRS.

II. THE 2006 COMBATING AUTISM ACT AND MCHB'S COMBATING AUTISM ACT INITIATIVE

A. OVERVIEW OF CAA LEGISLATION

1. Intent of Legislation: Goals and Objectives

In response to the growing need for research and resources devoted to autism spectrum disorders, the U.S. Congress passed the Combating Autism Act of 2006.¹ The goal of the CAA is to enable all children to reach their full potential by developing a system of services that includes:

- Screening children early for ASD and DDs;
- Conducting early, interdisciplinary evaluations to confirm or rule out ASDs and other DDs; and
- Providing evidence-based, early interventions when a diagnosis is confirmed.

2. Funding Levels

In FY 2008, Congress appropriated a total of \$168 million to the following agencies for activities under the CAA:

- **National Institutes of Health (NIH)**, which received \$114.5 million for research into causes, diagnosis, early detection and treatment through the Centers of Excellence;
- **Centers for Disease Control and Prevention (CDC)**, which received \$16.5 million to conduct research and surveillance activities, including collection of state-level epidemiologic data; and
- **Health Resources and Services Administration (HRSA)**, which received \$37 million to increase awareness, reduce barriers to screening and diagnosis, promote evidence-based interventions, and train health care professionals (note: the appropriation of \$37 million included a transfer of approximately \$20 million of Special Projects of Regional and National Significance (SPRANS) funds to the Autism and Other Developmental Disorders Program).

B. HRSA's COMBATING AUTISM ACT INITIATIVE

1. Goals and Objectives

In response to the Combating Autism Act, HRSA implemented the Combating Autism Act Initiative through MCHB. MCHB administers a broad range of programs that promote and

¹ Public Law 109-416§42 U.S.C.§1

support the development of family-centered, culturally/linguistically competent, community-based systems of care. These programs are often targeted to meet the needs of specific population groups, such as low-income families, racial and ethnic minority families, children with special health care needs, and rural families. MCHB also builds maternal and child health services capacity by training health professionals, developing standards of care, and increasing assessment, planning and quality assurance capabilities of state and local government maternal and child health programs.

The overall goal of HRSA/MCHB's Combating Autism Act Initiative is to enable all children to reach their full potential by developing a system of services that address the three goals of the CAA:

1. Screening children as early as possible for ASD and other DD.
2. Conducting early, interdisciplinary evaluations to confirm or rule out ASD and other DD.
3. If a diagnosis is confirmed, providing early, evidence-based interventions.

Additionally, in alignment with guidance from the CAA, the CAAI specifies five main objectives:

1. Increase public/provider awareness of ASDs and other DD.
2. Reduce barriers to screening and diagnosis.
3. Support research on evidence-based interventions.
4. Promote the development of evidence-based guidelines and tested/validated intervention tools.
5. Train professionals to use valid and reliable screening tools, to confirm or rule out a diagnosis of ASD/DD and to provide evidence-based interventions.

2. Activities

To achieve the aforementioned goals and objectives, HRSA/MCHB has provided support to three different programs that focus on training, research and implementation, respectively. Each program is briefly described below.

1. Training Programs

- *Expansion of Leadership Education in Neurodevelopmental Disabilities (LEND) training programs.* In addition to the base support to 34 LEND grantees that was moved from the SPRANS budget to CAAI, in FY 2008, eighteen LEND grantees were given supplements of \$200,000 per year, for three years, to focus on autism and 4 new LEND programs were funded at a level of \$550,000 each, per year, for three years. In FY 2009, the remaining 16 existing LEND programs were given \$100,000

supplements per year for two years to focus on autism and one new LEND was funded at \$450,000 per year for two years.

- *Expansion of existing Developmental Behavioral Pediatrics (DBP) training programs.* In addition to the base support to 9 DBP grants that was moved from the SPRANS budget to CAAI, 6 grantees were given \$50,000 supplements to focus on autism and one new DBP program was funded (one grantee had a \$15,253 offset.²
- *A National Combating Autism Interdisciplinary Training Resource Center cooperative agreement.* One grantee received \$500,000 in funding.

2a. Research Networks Program

- *Two Autism Intervention Research Networks.* These Networks focus on intervention research, guideline development and information dissemination. In FY 2008, one network was funded at \$3,999,342 to focus on physical/medical health intervention research (AIR-P) while the other was funded at \$2,000,000 to focus on behavioral, mental, social, and/or cognitive health intervention research (AIR-B).

2b. R40: MCH Autism Intervention Research Program.

- *Five intervention research grantees.* These grantees are to conduct research leading to improvements in interventions that address the health and well-being of children and adolescents with ASD and other DD. Each grantee to receive funds of approximately \$400,000 per year for two years.
- *Two secondary data analysis grantees.* These grantees are to conduct research leading to improvements in interventions that address the health and well-being of children and adolescents with ASD and other DD, utilizing existing secondary data. Each grantee to receive funds of approximately \$100,000 for one year.

3. State Implementation Grants

- Nine grantees will implement state autism plans and develop models for systems of services for children with ASD and other DD. In FFY 2008, five grantees were awarded \$300,000 in funding each year for three years and one grantee was awarded \$297,957 each year for three years. In FFY 2009, three additional states were awarded \$300,000 in funding each year for two years.
- A State Public Health Coordinating Center that will coordinate with the State Implementation grantees to develop and implement a strategy for defining, supporting, and monitoring the role of state public health agencies in assuring

² Another 4 DBP grantees did not receive an expansion over their existing level of approximately \$192,000 per year. Note that all of the DBP grants were awarded before the CAAI funds were allocated; thus, the DBP grantee guidance did not specifically require autism-specific training.

that children and youth with ASD and other DD receive early and appropriate identification, diagnosis, and intervention. One grantee received \$250,000 in funding.

III. DEVELOPMENTAL-BEHAVIORAL PEDIATRICS TRAINING PROGRAMS

The MCH Leadership Education in Developmental-Behavioral Pediatrics Training Programs aim to enhance the behavioral, psychosocial and developmental aspects of pediatric care through (a) supporting fellows in developmental-behavioral pediatrics preparing for leadership roles as teachers, investigators, and clinicians advancing the field of developmental behavioral pediatrics; (b) providing pediatric practitioners, residents, and medical students with essential biopsychosocial knowledge and expertise. The DBP program is concerned with the broad range of behavioral, psychosocial, and developmental issues that present in primary care pediatric practice.

1. Grant Guidance and Program Goals

The long term goal of the DBP expansion grants, as set forth under the CAAI, is to increase early screening and diagnostic evaluation for ASD and other DD, and to provide early, evidence-based intervention for children with a confirmed ASD or other DD. A list of the 6 DBP programs awarded expansion/ supplemental grants in FY 2008 is presented in Attachment A.

2. Overview of DBP Activities and CAAI Objectives

The purpose of the DBP training programs under the CAAI is to enhance the behavioral, psychosocial, and developmental aspects of pediatric care. Funding for the DBP expansion was designed to provide professionals with training opportunities to increase screening and diagnosis of ASD and other DD, to provide continuing education and technical assistance to pediatricians and other providers who can provide evidence-based interventions for ASD and other DD, to increase awareness of ASD and other developmental disabilities (DD), to provide evidence based interventions for ASD and other DD, and to contribute to building systems of care for families and individuals with ASD and other DD.

Grantees were asked to propose plans related to the following key areas: 1) curriculum (including elements of leadership, interdisciplinary training and practice, cultural competency, family-centered care, public health, research, emerging issues, and MCH/Title V and related legislation), 2) training (including clinical preparation and community-based preparation), 3) fellowships (including other trainees, medium-term trainees, and short-term trainees), 4) interchange with other programs, 5) continuing education and development, and 6) technical assistance/consultation and collaboration with State Title V/MCH Agencies and other related programs.

There are five main DBP objectives which support the accomplishment of MCHB's long term goals. These objectives include:

- 1) Increase awareness of developmental milestones; early signs and symptoms of ASD and other DD; valid screening tools; valid diagnostic tools; evaluation referral procedures; and evidence-based interventions among health care and

allied health professionals, educators, community service providers, families and the public.

- 2) Reduce barriers to screening and diagnosis.
- 3) Translate research on evidence-based interventions for children and adolescents with ASD and other DD into practice.
- 4) Train professionals to use valid and reliable screening and diagnostic tools.
- 5) Train professionals to provide advocacy, counseling, and coordination of care.

To accomplish the five aforementioned objectives, each DBP grantee has proposed specific activities to be carried out throughout the three year grant period. An overview of the activities related to each objective is presented below.

Objective 1: Increase awareness

To increase awareness of the different core aspects of autism spectrum disorders, DBP training programs conduct trainings, workshops, consultations and technical assistance activities and disseminate current, evidence-based information on ASD and other DD. Their dissemination efforts target various audiences, including health care providers, educators, and families. Dissemination products include publications and other educational products (including web-based products), and conference presentations provided by DBP faculty and trainees. To expand their reach and ensure wide dissemination of information about ASD and other DD, DBP grantees partner with state Title V and community based organizations to widely disseminate information about ASD and other DD.

Objective 2: Reduce barriers

DBP training programs seek to reduce barriers to screening and diagnosis primarily by preparing more professionals to accurately screen for and diagnose/rule out ASD and other DD. Specific activities include expanded trainings and workshops, technical assistance and CME events, research and development activities, and partnerships and collaborations focused on increasing access and expanding the provision of screening and diagnostic services. DBP programs are also seeking to reduce barriers by recruiting trainees from ethnic/racial minority groups, expanding leadership trainings of ethnic/racial professionals, and by incorporating curriculum on cultural and linguistic competency into coursework.

Objective 3: Translate research into practice

The DBP grant programs aim to promote the translation of research on evidence-based interventions for children and adolescents with ASD and other DD into practice. Specific activities include dissemination of evidence-based research to practitioners, participation in trainings, workshops, consultations and technical assistance activities based on evidence-based research as well as partnerships and collaborations focusing on the use of these interventions. Dissemination activities focus on publications, conferences, and presentations regarding evidence-based interventions.

Objective 4: Train professionals to use valid and reliable screening and diagnostic tools

A primary goal of the DBP grants is to train professionals to use valid and reliable screening and diagnostic tools. Activities towards achieving this goal include provider trainings, refinement of coursework and curricula, and refinement of training protocols to increase health care professionals' knowledge of, and competency in, the use of valid screening and diagnostic tools.

Objective 5: Train professionals to provide advocacy, counseling, and coordination of care.

An overarching goal of the DBP programs is to train professionals to provide advocacy, counseling, and coordination of care. Related activities include CME and other trainings focused on improving knowledge and capabilities related to advocacy, counseling, and coordination of care. DBP grantees also focus on activities tied to the engagement of family members of children with ASD and other DD, and building bridges between those families and available networks of services.

IV. OVERVIEW OF THE EVALUATION

A. PURPOSE

The evaluation design presented here was developed to measure the DBP grantees' performance in meeting the goals of the CAAI, as well as their progress towards fulfilling MCHB's broader objective of improving the well being of the maternal and child health population through health systems change. The evaluation of this grant program will rely on both qualitative and quantitative research methods to assess program implementation, systems change, and outcomes.

1. Evaluation Goals and Objectives

The *objectives of the DBP Evaluation* include the following:

1. Determine whether the DBP programs are accomplishing the intended goals and objectives of MCHB's CAAI;
2. Identify barriers encountered during implementation and how these problems or barriers were resolved;
3. Identify remaining gaps between intermediate outcomes and longer term goals (i.e., what remains to be accomplished); and
4. Measure the CAAI outputs and outcomes for the Report to Congress.

2. Use of Results

The results of this evaluation will be used to inform two reports: one for MCHB and one for Congress. The first report will inform MCHB about the DBP grantees' performance, particularly with respect to their short- and intermediate-term objectives under the CAAI. The results of this report will also help future grantees build on the successes of those grantees already funded. The Report to Congress will describe the measurable impacts of federal investments in DBP training programs, and the DBP grantees' contributions toward meeting the goals and objectives of the Combating Autism Act of 2006. Finally, the results will provide grantees with an external assessment of their effectiveness in: increasing awareness of ASD and other DD; reducing barriers to screening and diagnosis; translating research into practice; training professionals to use screening and diagnostic tools; and training professionals to provide advocacy, counseling, and coordination of care.

B. EVALUATION QUESTIONS

In this section, we present the five major questions that we plan to address in this evaluation, the data we plan to collect in order to answer each question, and the proposed data sources.

1. Development of the Evaluation Questions

As a starting point for developing the evaluation questions, we reviewed each of the DBP grant applications and developed a short summary for each grantee of its project goals, objectives, activities, and key outcomes. We also considered how their activities aligned with the five major goals of the CAAI. We determined that the DBP grantees are primarily dedicated to training professionals, but they are also increasing awareness and knowledge of ASD and other DD, enhancing capabilities in the utilization of screening and diagnostic tools, translating research on evidence-based interventions into practice, and improving systems of care and coordination of care for children with ASD and other DD. Based on these determinations, we formulated the following major evaluation questions:

How effective are the DBP programs in increasing awareness of: developmental milestones; early signs and symptoms of ASD and other DD; valid screening tools; valid diagnostic tools; evaluation referral procedures; and evidence-based interventions among health care and allied health professionals, educators, community service providers, families and the public?

How effective are the DBP programs in reducing barriers to screening and diagnosis?

How effective are the DBP training programs in helping translate research on evidence-based interventions for children and adolescents with ASD and other DD into practice?

How effective are the DBP programs in training professionals to use valid and reliable screening and diagnostic tools?

How effective are the DBP training programs in training professionals to provide advocacy, counseling, and coordination of care for children and the families of children with ASD and other DD?

2. Crosswalk for the Evaluation Questions, Data Elements and Proposed Data Sources

In Table III.1 below, we provide an overview of the evaluation design, organized by objective. Listed under each objective are the five major evaluation questions identified above, along with more specific secondary questions. These questions are designed to: 1) qualitatively describe and document how the grantees use federal funds to achieve their program objectives; 2) quantitatively measure the short term and intermediate outcomes of their federally funded activities; and 3) set the foundation for measuring the grantees' long-term impact on individuals with ASD and other DD.

For each research question, we report the likely data source (or sources) for the information needed to answer the question. Specifically, column 1 provides the evaluation questions (grouped by the overall CAAI objective). Column 2 provides the key data source (or sources). Last, column 3 lists the detailed data elements. These data elements will be reported in MCHB's 2011 Report to Congress on the outcomes of the CAAI.

To frame the evaluation design, we also developed an overall logic model that links the DBP activities to the desired short, intermediate, and long-term outcomes which are critical to assessing the program's success in meeting the CAAI objectives. This logic model is shown in Attachment B. Note that the intermediate objectives are grouped by the MCHB CAAI objectives and the long term outcomes are grouped by the three goals of the CAA legislation.

TABLE IV.1

Evaluation Design Matrix

Evaluation Questions	Key Data Sources	Data Elements
DBP Objective #1: Increasing awareness of developmental milestones , early signs of ASD/DD, screening, assessment, and/or evidence-based interventions among health care and allied health professionals, educators, community service providers, families and the public.		
<p>What are the DBP grantees doing to increase awareness among MCH professionals (e.g., health care and allied health professionals, psychologists and social workers, educators, community service providers)?</p> <ol style="list-style-type: none"> a. In what specific areas of focus are the DBP grantees increasing the awareness of MCH physicians (e.g., early signs and symptoms, valid screening tools, assessment, etc)? b. How are the grantees increasing awareness among the non-physician MCH professional community? c. Which awareness building efforts have been most successful and why? Explain how this success was defined, measured, and documented. 	<p>Semi-structured grantee interviews</p> <p>Progress reports</p> <p>DGIS</p> <p>NIRS</p>	<p>Qualitative Data</p> <p>Description of activities performed to increase ASD and other DD awareness among MCH professionals</p> <p>Description of (a) content and (b) audiences (specific MCH disciplines) targeted for awareness raising efforts</p> <p>Description of formal and informal partnerships and collaborations with Title V or other agencies to raise ASD and other DD awareness and results of such efforts</p> <p>Impact of collaborative efforts on raising awareness among various groups (e.g. health professionals, paraprofessionals, et. al)</p> <p>Quantitative Data</p> <p>Number of professionals trained through CE professional development activities in one or more of the following; early signs of ASD and other DD, screening, diagnosis, and/or evidence-based interventions for ASD and other DD</p> <p>Number of short-, medium, and long-term trainees who completed classes or coursework on one of more of the following; early signs of ASD and other DD, screening, diagnosis, and/or evidence-based interventions for ASD and other DD</p> <p>Number of short-, medium, and long-term trainees who participated in practica/field work that addressed one of more of the following; early signs of ASD and other DD, screening, diagnosis, and/or evidence-based interventions for ASD and other DD</p> <p>Number of ASD and other DD related: (a) articles published in peer review journals, (b) educational products developed and disseminated (other than peer review), and (c) presentations and total number reached through these media</p> <p>Number of trainings developed on ASD screening and diagnosis targeted to professionals who work with underserved populations and total number trained through these efforts</p>

TABLE IV.1

Evaluation Design Matrix

Evaluation Questions	Key Data Sources	Data Elements
<p>What are the DBP programs doing to increase awareness among families of children with ASD and other DD and the general public?</p> <ol style="list-style-type: none"> Which awareness building efforts have been most successful and why? Explain how this success was defined, measured, and documented. What are the DBP grantees doing to increase awareness in underserved populations? Which, if any, underserved populations have been identified by the DBP? 	<p>Semi-structured grantee interviews</p> <p>Progress reports</p>	<p>Qualitative Data</p> <p>Description of activities performed to increase ASD and other DD awareness among families and the general public and any outcomes of such efforts</p> <p>Descriptive assessment of impact of awareness raising efforts to date and remaining steps that need to be taken to promote understanding of ASD and the importance of early detection, evaluation and intervention (e.g. advocates, families, general public)</p> <p>Quantitative Data</p> <p>Number of TA/consultation/collaboration activities provided to state or local health agencies, education or social service agencies, community based organizations or other entities and total number reached through these efforts</p>
<p>DBP Objective #2: Reducing barriers to screening and diagnosis</p>		
<p>What are some of the barriers to screening and diagnosis and have they been reduced since the program’s start?</p> <ol style="list-style-type: none"> How has the DBP program expanded MCH leadership in the field of ASD/DD? How has the DBP program contributed to the knowledge base regarding screening for and diagnosing ASD and other DD in young children? What have the DBP programs been doing to expand access to timely and accurate screening and evaluation services for children? Which efforts have been most successful and why? 	<p>Semi-structured grantee interviews</p> <p>Progress reports</p> <p>DGIS</p> <p>NIRS</p>	<p>Qualitative Data</p> <p>Description of barriers to expanding screening efforts both locally and nationally and which barriers are addressed by the program activities</p> <p>Description of barriers to expanding diagnostic efforts both locally and nationally and which barriers are addressed by the program activities</p> <p>Description of activities undertaken to expand children’s access to timely and accurate screening services for ASD and other DD</p> <p>Description of activities undertaken to expand children’s access to timely and accurate diagnostic services for ASD and other DD</p> <p>Description of formal and informal partnerships and collaborations to increase access to (a) screening services and (b) diagnostic services</p> <p>Descriptive assessment of impact of efforts to (a) screen children as early as possible, and (b) conduct early, interdisciplinary evaluations to confirm or rule out ASD and other DD</p> <p>Quantitative Data</p> <p>Number of faculty and fellows who participated in research on the development and validation of (1) screening tools and (2) diagnostic tools</p>

TABLE IV.1

Evaluation Design Matrix

Evaluation Questions	Key Data Sources	Data Elements
<p>How have the DBP grantees reduced barriers to screening and diagnosis for underserved populations?</p> <ol style="list-style-type: none"> a. How has the DBP program expanded the supply of health care professionals from racially/ethnically/culturally diverse population groups? b. To what extent does the training curriculum include cultural competency elements? c. How has the DBP program expanded access to screening services in underserved populations? d. How has the DBP program expanded access to diagnostic services in underserved populations? 	<p>Semi-structured grantee interviews</p> <p>Progress reports</p> <p>DGIS</p>	<p>Qualitative Data</p> <p>Description of specific plans or actions to reduce barriers to screening among underserved children and any preliminary results from such efforts</p> <p>Description of specific plans or actions to reduce barriers to diagnosis among underserved children and any preliminary results from such efforts</p> <p>Description of efforts to include working with children and families from underserved populations and extent to which underserved populations are (a) screened and (b) evaluated</p> <p>Description of recruitment efforts to ensure trainee diversity, specifically recruitment of trainees from cultural or ethnic minority groups</p> <p>Quantitative Data</p> <p>Number of trainings developed on ASD screening and diagnosis targeted to professionals who work with underserved populations and total number trained through these efforts</p> <p>Number of medium-term and long-term trainees who are skilled in the administration of reliable, valid screening tools for ASD and other DD</p> <p>Number of medium-term and long-term trainees who are skilled in the administration of reliable, valid diagnostic tools for ASD and other DD</p> <p>Number of medium-term and long-term trainees who are skilled in providing evidence-based interventions for ASD and other DD</p>
<p>DBP Objective #3: Translating research into evidence-based practices</p>		
<p>How have the DBP programs contributed to translating research on evidence-based interventions into practice?</p> <ol style="list-style-type: none"> a. To what extent have DBP faculty incorporated findings on evidence based interventions research into practice? b. To what extent have DBP faculty incorporated findings on evidence based interventions research into training others? c. To what extent have DBP programs furthered the 	<p>Semi-structured grantee interviews</p> <p>Progress reports</p> <p>NIRS</p>	<p>Qualitative Data</p> <p>Description of faculty and trainees conduct of research studies related to evidence-based interventions in ASD and other DD</p> <p>Description of the current and anticipated impact of the results of the current research on evidence-based interventions</p> <p>Description of faculty and trainees translation of existing evidence-based intervention research on ASD and other DD into practice</p> <p>Description of current and anticipated impact of the results of the current translation of research on evidence-based intervention</p>

TABLE IV.1

Evaluation Design Matrix

Evaluation Questions	Key Data Sources	Data Elements
translation of evidence-based interventions into practice for underserved populations?		Description of additional research needed to further support the development of new practices.
DBP Objective #4: Training professionals to use valid and reliable screening and diagnostic tools		
<p>What have the DBP programs been doing to train more interns to use valid and reliable screening and diagnostic tools?</p> <ol style="list-style-type: none"> What training is being done regarding the use of valid and reliable screening tools through DBP? What training is being done regarding the use of valid and reliable diagnostic tools through DBP? How effective are these training efforts in increasing the number of professionals who know how to use valid screening tools? How effective are these training efforts in increasing the number of professionals who know how to accurately diagnose ASD and other DD in young children? <p>What have the DBP programs been doing to train more fellows to use valid and reliable screening and diagnostic tools?</p> <ol style="list-style-type: none"> What training is being done regarding the use of valid and reliable screening tools through DBP? What training is being done regarding the use of valid and reliable diagnostic tools through DBP? How effective are these training efforts in increasing the number of professionals who know how to use valid screening tools? How effective are these training efforts in increasing the number of professionals who know how to accurately diagnose ASD and other DD in young children? <p>What have the DBP programs been doing to train non-DBP</p>	<p>Semi-structured grantee interviews</p> <p>Progress reports</p> <p>NIRS</p>	<p>Qualitative Data</p> <p>Description of change in training opportunities since receipt of the supplemental grant.</p> <p>Description of the manner in which the program has helped in increased the number of professionals skilled in providing evidence based interventions for children with ASD and other DD</p> <p>Description of professionals trained in the use of valid and reliable screening and diagnostic tools and evidence-based interventions</p> <p>Description of measures to evaluate the ability of trainees to effectively screen to detect ASD and other DD upon completion of training</p> <p>Description of measures to evaluate the ability of trainees to perform diagnostic evaluations to confirm or rule out ASD and other DD upon completion of training</p> <p>Description of measures to evaluate the ability of trainees to provide evidence based interventions to children suspected of having an ASD upon completion of training</p> <p>Describe any formal or informal collaborations or partnerships undertaken to increase training of professionals to use valid and reliable screening tools and to confirm or rule out a diagnosis of ASD/DD.</p> <p>Quantitative Data</p> <p>Number of trainees: short-term, medium-term, long-term</p> <p>Number of professionals trained through CE professional development activities in one or more of the following; early signs of ASD and other DD, screening, diagnosis, and/or evidence-based interventions for ASD and other DD</p> <p>Number of short-, medium, and long-term trainees who completed classes or coursework on one of more of the following; early signs of ASD and other DD, screening, diagnosis, and/or evidence-based interventions for ASD and other DD</p> <p>Number of short-, medium, and long-term trainees who participated in practica/field work that addressed one of more of the following; early signs</p>

TABLE IV.1

Evaluation Design Matrix

Evaluation Questions	Key Data Sources	Data Elements
<p>physicians to use valid and reliable screening and diagnostic tools?</p> <ol style="list-style-type: none"> What training is being done regarding the use of valid and reliable screening tools through DBP? What training is being done regarding the use of valid and reliable diagnostic tools through DBP? How effective are these training efforts in increasing the number of professionals who know how to use valid screening tools? How effective are these training efforts in increasing the number of professionals who know how to accurately diagnose ASD and other DD in young children? <p>What have the DBP programs done to ensure that the coursework, practica and CME activities include adequate training in the use of the most current valid screening and diagnostic tools?</p>		<p>of ASD and other DD, screening, diagnosis, and/or evidence-based interventions for ASD and other DD</p> <p>Number of medium-term and long-term trainees who are skilled in the administration of reliable, valid screening tools for ASD and other DD</p> <p>Number of medium-term and long-term trainees who are skilled in the administration of reliable, valid diagnostic tools for ASD and other DD</p> <p>Number of medium-term and long-term trainees who are skilled in providing evidence-based interventions for ASD and other DD</p>
<p>DBP Objective #5: Training Professionals to Provide Advocacy, Counseling, and Coordination of Care</p>		
<p>What have the DBP grantees been doing to train more professionals to provide advocacy, counseling, and coordination of care?</p> <ol style="list-style-type: none"> How effective are these training efforts in increasing the number of professionals who can provide advocacy, counseling and coordination of care? To what extent have DBPs helped link children/families with appropriate interventions/networks of services Have DBP grantees incorporated medical home training concepts into the training/curriculum Have the grantees trained professionals who provide/are working within a medical home environment? 	<p>Semi-structured grantee interviews</p> <p>Progress reports</p> <p>DGIS</p>	<p>Qualitative Data</p> <p>Description of activities to address patients’ needs with respect to advocacy, counseling, and coordination of care</p> <p>Description of curricular changes to incorporate training in medical home practice models and extent to which changes have been made</p> <p>Description of activities focused on facilitating communication between families of children with ASD and other DD and available networks of services and results of such efforts.</p> <p>Description of activities aimed at engaging family members with regard to (a) screening, (b) evaluation, and (c) intervention and descriptive assessments of the effects of those efforts</p> <p>Quantitative Data</p> <p>Number of short-, medium, and long-term trainees who received training on</p>

TABLE IV.1

Evaluation Design Matrix

Evaluation Questions	Key Data Sources	Data Elements
<p>e. To what extent do trainees work in an interdisciplinary manner post training?</p> <p>f. What have the DBP grantees been doing to engage families in program and policy activities? Have these efforts successfully increased family participation in program and policy activities?</p>		<p>advocacy, counseling, and coordination of care</p> <p>Number of courses developed, modified, and/or taught by DBP faculty or trainees which include specific training on advocacy, counseling, and coordination of care and total number trained through these courses</p>

C. GRANTEE INVOLVEMENT

1. MCHB Autism Grantee Kick-Off Meeting (December, 2008)

During the first CAAI grantee meeting held on December 15-16th, 2008, Insight facilitated a breakout session with the DBP grantees to discuss the evaluation plans and activities, and to obtain their feedback. A discussion guide was developed in advance of the session to ensure that the facilitator was able to gather all the information needed to refine the evaluation questions. At the start of the session, we presented the logic model, and asked grantees to comment on our understanding of their primary activities, and the link between those activities and their measurable outputs and outcomes. We also discussed, in detail, the evaluation questions, their associated data elements and the proposed data sources to assess: (1) whether we should revise any of the questions, (2) which data elements would provide the most appropriate measure of their performance, and (3) which elements could feasibly be collected within the data collection timeline.

Throughout the session, we took notes and recorded the grantees' suggestions for improving the evaluation questions and the overall evaluation process. Following the meeting, we summarized the discussion and developed a list of the grantees' comments and recommendations. Based on their recommendations and our review of the discussion, we refined some of the evaluation questions and revised our proposed list of data elements. No changes were needed for the logic model.

2. Ongoing Communication

Subsequent to the annual meeting, Insight collaborated with the DBP Project Officer on the best means for continued communication and feedback from the grantees. The decision was made to include all ten DBP grantees on the request for comment. On March 12th, 2009, a request for comment was sent out to all DBP grantees. The request email attached (a) the draft logic model for the DBP evaluation; and (b) the revised evaluation questions. Reminders were sent out during the three week comment period encouraging response and noting the remaining time available.

The request noted that the revisions to the evaluation questions were guided by the feedback provided by the DBP grantees at the December 15th-16th MCHB grantee meeting. We asked that everyone, both those who were able to attend the December session and those who would be looking at the materials for the first time, review and provide feedback on the revised evaluation questions. It was noted that, following the review and comment, Insight and MCHB staff would work to develop the final evaluation design plan. In addition to any proposed changes or comments with respect to the evaluation questions and logic model, grantees were asked to indicate whether they will be able to provide the proposed data and the level of difficulty they would expect in obtaining and reporting that data.

Insight received feedback from three DBP grantees. The comments pertained to the logic model, the primary research questions, and the ease or difficulty of reporting the proposed data to be

collected. Based on our careful review of the grantees' comments, Insight revised the logic model, evaluation and data elements for the final evaluation design plan.

V. DATA COLLECTION METHODOLOGY

Data collection for the DBP evaluation will begin in July, 2009 and end in March, 2011. To meet the requirements of the Report to Congress, the evaluation will measure the results of the grantees’ activities in clear, quantifiable terms. Quantitative measures alone, however, are not anticipated to adequately capture the full spectrum of achievements that these programs may realize under the CAAI expansion. For example, an increase in the number of awareness building efforts is an important quantifiable outcome of the supplemental funding. However, through qualitative research, we can obtain information on the particular areas that the grantees are targeting in their awareness building efforts, as well as which efforts were most successful, and what barriers they faced. Qualitative research can also provide contextual descriptions of specific activities such as awareness raising efforts in clinical visits and on-on-one patient interactions. Accordingly, the evaluation will use a mixed-method data collection approach that includes quantitative measures of the grantees’ outputs and outcomes, and qualitative accounts of their activities directed towards accomplishment of programs goals and objectives.

Quantitative data for this evaluation will be collected through two sources: NIRS and DGIS. Qualitative data will be collected through grantee progress reports and in-depth, semi-structured interviews. In the sections that follow, we describe our specific plans with respect to the data elements and the schedule for collecting that data from each source.

A. QUANTITATIVE DATA

1. National Information Reporting System (NIRS)

a. Data Elements

To assess the DBP grantees’ progress toward meeting the objectives of the Combating Autism Act Initiative, Insight developed a set of new data elements to be collected through NIRS. These data elements are based on our understanding of the grantees’ goals, objectives, activities, and the intended outputs/outcomes of those activities. The list of these data elements is shown in Table V.1 below, organized by objective.

TABLE V.1

NEW NIRS DATA ELEMENTS

Number	Data Element
Objective I: Increasing awareness	
I.1	Number of professionals trained through CE professional development activities in one or more of the following; early signs of ASD and other DD, screening, diagnosis, and/or evidence-based interventions for ASD and other DD
I.2	Number of short-, medium- and long-term trainees who completed classes or

	coursework on one of more of the following; early signs of ASD and other DD, screening, diagnosis, and/or evidence-based interventions for ASD and other DD
I.3	Number of short-, medium- and long-term trainees who participated in practica/field work that addressed one of more of the following; early signs of ASD and other DD, screening, diagnosis, and/or evidence-based interventions for ASD and other DD
I.4	Number of ASD and other DD related: (a) articles published in peer review journals, (b) educational products developed and disseminated (other than peer review), and (c) presentations and total number reached through these media
I.5	Number of trainings developed on ASD screening and diagnosis targeted to professionals who work with underserved populations and total number trained through these efforts
I.6	Number of TA/consultation/collaboration activities provided to state or local health agencies, education or social service agencies, community based organizations or other entities and total number reached through these efforts
Objective II: Reduce barriers to screening and diagnosis	
II.1	Number of faculty and fellows who participated in research on the development and validation of (1) screening tools and (2) diagnostic tools
II.2	Number of medium-term and long-term trainees from underrepresented groups who are skilled in the administration of reliable, valid screening tools for ASD and other DD
II.3	Number of medium-term and long-term trainees from underrepresented groups who are skilled in the administration of reliable, valid diagnostic tools for ASD and other DD
II.4	Number of medium-term and long-term trainees from underrepresented groups who are skilled in providing evidence-based interventions for ASD and other DD
II.5	Number of trainings developed on ASD screening and diagnosis targeted to professionals who work with underserved populations and total number trained through these efforts
Objective IV: Train professionals to use valid and reliable screening and diagnostic tools	
IV.1	Number of trainees: short-term, medium-term, long-term
IV.2	Number of professionals trained through CE professional development activities in one or more of the following; early signs of ASD and other DD, screening, diagnosis, and/or evidence-based interventions for ASD and other DD
IV.3	Number of short-, medium- and long-term trainees who completed classes or coursework on one of more of the following; early signs of ASD and other DD, screening, diagnosis, and/or evidence-based interventions for ASD and other DD
IV.4	Number of short-, medium- and long-term trainees who participated in practica/field

	work that addressed one of more of the following; early signs of ASD and other DD, screening, diagnosis, and/or evidence-based interventions for ASD and other DD
IV.5	Number of medium-term and long-term trainees who are skilled in the administration of reliable, valid screening tools for ASD and other DD
IV.6	Number of medium-term and long-term trainees who are skilled in the administration of reliable, valid diagnostic tools for ASD and other DD
IV.7	Number of medium-term and long-term trainees who are skilled in providing evidence-based interventions for ASD and other DD
Objective V: Train professionals to provide advocacy, counseling, and coordination of care	
V.1	Number of short-, medium, and long-term trainees who received training on advocacy, counseling, and coordination of care
V.2	Number of courses developed, modified, and/or taught by DBP faculty or trainees which include specific training on advocacy, counseling, and coordination of care and total number trained through these courses

b. Data Acquisition Plan and Schedule

The six DBP grantees that were awarded funds under the CAAI expansion grant will be asked to provide their responses to the quantitative data elements shown in Table V.1 beginning in July 2009. These grantees will have until July 31, 2009 to report this data in the new NIRS module. At the end of the reporting period, Insight will obtain a raw data file from AUCD for analysis. We expect this data will be available mid-September 2009.

Prior to the release of this module, Insight will develop a detailed data dictionary that grantees can access through NIRS, to assist them in responding. The data dictionary will explain the general intent of each question, provide specific meanings for certain terms, and include details on how to answer each question, as needed. Insight will also conduct a webinar shortly after the new module is released. The purpose of the webinar will be to review the data items and to clarify any questions or concerns grantees may have about particular items or how to report their data. Each of the six grantees will be invited to participate. The webinar will also be archived so grantees can reference it at any time.

The data collected through the new NIRS module by July 31st 2009 will be considered pilot data, in part because the questions were developed post-award, so grantees did not know, at the time of their award, what data they would be asked to report. Treating this data collection effort as a pilot will provide an opportunity to assess what information the grantees are able to report with confidence, what information is not available at this point but could be reported in the future (e.g., if grantees are asked to start tracking it), and what information might not be feasible to collect. Conducting this pilot will also provide an opportunity to refine the questions to ensure that they provide the best quality data. Based on what we learn from the pilot, we will revise the NIRS module as needed for the 2010 reporting period.

2. Discretionary Grant Information System (DGIS)

MCHB developed 37 national performance measures and several program performance measures across many maternal and child public health areas. The performance measures are assigned by the MCHB programs based on the applicability of the performance measures to the current program. For each assigned performance measure, the grantees provide annual objectives and annually report the indicators against these objectives. All DBP grantees track and report the degree to which their programs address several performance measures that reflect the goals and priorities of the MCHB. These data are collected through DGIS on an annual basis. Insight reviewed these performance measures to identify those that met two criteria: (1) they were relevant to the DBP grantees' goals under the CAAI, and (2) they could contribute information to the evaluation that was not being collected through another source.

a. Data Elements

The following data sources will be obtained from the Discretionary Grant Information System (DGIS).

TABLE V.2

DATA ELEMENTS FROM DISCRETIONARY GRANT INFORMATION SYSTEM (DGIS)

DGIS Measure	Description	Associated Objective
PM #9	The percent of participants in MCHB long-term training programs who are from underrepresented groups.	II: Reducing barriers to screening and diagnosis
PM #11	The degree to which MCHB long-term training grantees include cultural competency in their curricula/training	V: Reducing barriers to screening and diagnosis

One caveat in using the performance measures reported in DGIS is that the questions are not specific to Autism Spectrum Disorders. It is clear, however, from both the language of the legislation and our discussions with MCHB that the intent of the legislation is to achieve improved outcomes for all children with neurodevelopmental disabilities through changes in training, health care delivery systems, and infrastructure. Additionally, it can be argued that it is impractical to try to parse out the impact of the grant funding on a single segment of the population that the DBP programs serve, because advances specific to autism are likely to impact the identification and treatment of other disabilities and vice-versa. We anticipate that the data obtained from these performance measures will be useful in assessing movement towards these broad goals.

b. Data Acquisition Plan and Schedule

Grantees report on DGIS measures 120 days after the end of each program year. Because the DBP grantees were reporting on these performance measures prior to the CAAI expansion

grants, baseline data from 2008 should be readily available. If feasible, we will ask grantees to report provisional data in March 2011 for the first 8 months of their third grant year so that we can include some Year 3 data in the Report to Congress.

B. QUALITATIVE DATA

1. Grant Applications

The grant applications provide a baseline description of the activities each grantee intends to pursue. To help inform the evaluation design, Insight's evaluation team read the applications thoroughly and developed short lists of the planned activities for each grantee. Insight will also obtain updates on the grantees' activities each grant year by conferring with them at the annual grantee meetings in the fall of 2009 and 2010, and by reviewing their annual continuation applications/summary progress reports. These updates will help the evaluation team track changes between the proposed and actual activities.

2. Annual Continuation Application/Summary Progress Reports

A non-competing continuation application is required for continuation of grant funding for a subsequent budget period. The continuation application, also referred to as a summary progress report, submits the budget request for the next year of funding and serves as the primary source of information regarding activities, accomplishments, outcomes, and obstacles related to achieving project outcomes during the current budget period. It also provides documentation necessary to justify continuation of the project, including plans for upcoming project periods.

In order to reduce respondent burden and maximize efficiency, Insight plans to use the DBP grantees' continuation applications/summary progress reports as a key source of qualitative data for this evaluation.

a. Data elements

To determine the extent to which grantee summary progress reports might fulfill our qualitative data needs, Insight reviewed the continuation grant guidance. We considered the information in these reports alongside our evaluation questions and identified several sections of the report that we plan to draw from for this evaluation. These sections are listed in Table V.3 by their associated CAAI objective.

TABLE V.3

DATA ELEMENTS FROM GRANTEE PROGRESS REPORTS, BY OBJECTIVE

Objective	Progress Report Section or Form	Descriptive of Data to be Extracted
Objective #1: Increase Awareness	Section C: Training	Descriptions and outcomes of training and awareness activities
	Section D: Collaboration/Coordination in Support of MCH Training	Description of partnerships and collaborations to provide community outreach and education
	Form 9: PM 62	Description of products and publications
	Form 9: PM 7	Description of materials and events targeted to families of children with ASD/DD and the general public
Objective #2: Reduce Barriers to Screening and Diagnosis	Section C: Training	Descriptions and outcomes of activities to expand access to screening and diagnosis
	Form 9: PM 8	Description and Number of DBP graduates demonstrating field leadership
	Form 9: PM 9	Description of recruitment plans to and efforts to increase the number of trainees who reflect the ethnic/racial/cultural diversity of the population served
	Form 9: PM 11	Description of degree to which training includes curriculum on cultural competency
Objective #3: Translate Research into Evidence-based Practices	Section C: Training	Description of research activities focused on translating research into practice
	Section D: Collaboration/Coordination in Support of MCH Training	Description of partnerships and collaborations to translate research into evidence-based practice and to train others on use of practices
	Form 7: Discretionary Grant Project Summary Data	Description of research activities focused on translating research into practice
Objective #4: Train Professionals to use Valid and Reliable Screening and Diagnostic Tools	Section C: Training	Descriptions of training activities to ensure competent use of screening and diagnostic tools
Objective #5: Train Professionals to Provide Advocacy, Counseling, and Coordination of Care	Section C: Training	Descriptions of activities focused on training professionals to provide advocacy, counseling, and coordination of care

b. Data Acquisition Plan and Schedule

Progress reports are scheduled to be submitted approximately 120 days following the next notice of grant award. The DBP grantees are on a July 1-June 30 grant cycle, with progress reports due around April of each year. Insight expects to obtain copies of the progress reports in June 2009 for FY 2009, and May 2010, for FY 2010. We will request provisional data for FY 2011 since the summary reports for that year would not be available in time for the Report to Congress.

3. Semi-Structured, In-Depth Interviews

To supplement the qualitative data that grantees submit in their summary progress reports, Insight plans to conduct in-depth, qualitative interviews with DBP project directors following the submission of those reports. The purpose of these interviews will be to: (1) collect baseline information as available; (2) gather more detailed information about program level activities and accomplishments related to specific CAAI objectives; (3) identify barriers encountered in implementing proposed activities and achieving interim goals, and; (4) identify gaps between current outcomes and long term goals, and what is needed to ensure continued progress towards those long term goals.

For this phase of the data collection, we plan to develop an interview protocol for the six funded DBP grantees. The interviews should provide a comprehensive picture of the full range contributions that each DBP is making towards the overall goals of the Combating Autism Act Initiative.

a. Data Elements

Table IV.4 below provides examples of some of the qualitative data we plan to collect through these interviews.

TABLE V.4

QUALITATIVE DATA ELEMENTS	
DBP Objective	Data Element
Objective #1: Increase Awareness	Description of activities performed to increase ASD and other DD awareness among MCH professionals
	Description of (a) content and (b) audiences (specific MCH disciplines) targeted for awareness raising efforts
	Description of formal and informal partnerships and collaborations with Title V or other agencies to raise ASD and other DD awareness and results of such efforts
	Impact of collaborative efforts on raising awareness among various groups (e.g. health professionals, paraprofessionals, etc)
	Descriptive assessment of impact of awareness raising efforts to date and remaining steps that need to be taken to promote understanding of ASD and the importance of early detection, evaluation and intervention
Objective #2: Reduce Barriers to Screening and Diagnosis	Description of barriers to expanding screening efforts both locally and nationally and which barriers are addressed by the program activities
	Description of barriers to expanding diagnostic efforts both locally and nationally and which barriers are addressed by the program activities
	Description of activities undertaken to expand children’s access to timely and

	accurate screening services for ASD and other DD
	Description of activities undertaken to expand children’s access to timely and accurate diagnostic services for ASD and other DD
	Description of formal and informal partnerships and collaborations to increase access to (a) screening services and (b) diagnostic services
	Descriptive assessment of impact of efforts to (a) screen children as early as possible, and (b) conduct early, interdisciplinary evaluations to confirm or rule out ASD and other DD
	Description of specific plans or actions to reduce barriers to screening among underserved children and any preliminary results from such efforts
	Description of specific plans or actions to reduce barriers to diagnosis among underserved children and any preliminary results from such efforts
	Description of efforts to include working with children and families from underserved populations and extent to which underserved populations are (a) screened and (b) evaluated
	Description of recruitment efforts to ensure trainee diversity, specifically recruitment of trainees from cultural or ethnic minority groups
Objective #3: Translate Research into Evidence-based Practices	Description of faculty and trainees conduct of research studies related to evidence-based interventions in ASD and other DD
	Description of the current and anticipated impact of the results of the current research on evidence-based interventions
	Description of faculty and trainees translation of existing evidence-based intervention research on ASD and other DD into practice
	Description of the current and anticipated impact of the results of the current translation of research on evidence-based intervention
	Description of additional research needed to further support the development of new practices
Objective #4: Train Professionals to use Valid and Reliable Screening and Diagnostic Tools	Description of change in training opportunities since receipt of the supplemental grant
	Description of the manner in which the program has helped in increased the number of professionals skilled in providing evidence based interventions for children with ASD and other DD
	Description of professionals trained in the use of valid and reliable screening and diagnostic tools and evidence-based interventions.
	Description of measures to evaluate the ability of trainees to effectively screen to detect ASD and other DD upon completion of training
	Description of measures to evaluate the ability of trainees to perform diagnostic evaluations to confirm or rule out ASD and other DD upon completion of training
	Description of measures to evaluate the ability of trainees to provide evidence based interventions to children suspected of having an ASD upon completion of training
	Describe any formal or informal collaborations or partnerships undertaken to increase training of professionals to use valid and reliable screening tools and to confirm or rule out a diagnosis of ASD/DD
Objective #5: Train Professionals to Provide Advocacy, Counseling, and Coordination of Care	Description of activities to address patients’ needs with respect to advocacy, counseling, and coordination of care
	Description of curricular changes to incorporate training in medical home practice models and extent to which changes have been made
	Description of activities focused on facilitating communication between families of children with ASD and other DD and available networks of services and results of such efforts

b. Data Acquisition Plan and Schedule

Following the development of the interview protocol, we will contact each DBP Director to schedule a telephone interview. We plan to conduct these interviews at two points in time to assess what each DBP program is doing to accomplish the goals and objectives of the CAAI, and to assess their progress towards accomplishing those objectives. We plan to conduct the first set of interviews in December 2009 and the second set in March 2011.

4. Interview with AUCD

In addition to awarding supplemental grants to six of the ten existing DBP programs, MCHB also funded a National Interdisciplinary Training Resource Center (NTRC) to provide technical assistance to the DBP and other interdisciplinary training programs. The Association for University Centers on Disabilities (AUCD) is the designated NTRC. AUCD also ensures coordination of CAAI activities across grantees. To determine what specific activities AUCD was able to perform with the CAAI funding, and to capture their contributions to the grantees' performance, we plan to interview AUCD's Director at the beginning of the third grant year. One goal of the interview will be to describe AUCD's support and technical assistance, and the extent to which the DBPs were able to leverage that support to accomplish the objectives of the CAAI. The results of this interview will be included in the final MCHB report.

VI. DATA ANALYSIS PLAN

The data analysis plan for the DBP evaluation is designed to assess grantees' achievement of five CAAI objectives. Below, we describe how we will approach the analysis of data in order to draw conclusions about the influence of the DBP grantees on the following outcomes : raising awareness of early signs and symptoms of ASD/DD, referral procedures and evidence-based interventions for ASD/DD; reducing barriers to screening and diagnosis; translating research on evidence-based interventions into practice; training professionals to use valid and reliable screening and diagnostic tools; and training professionals to provide advocacy, counseling, and coordination of care.

A. INCREASE AWARENESS

Insight will use both quantitative and qualitative research methods to assess the extent to which the DBP grantees have increased awareness of: signs and symptoms of ASD/DD, procedures for screening, diagnosis and referral, and evidence-based interventions for ASD/DD among health professionals, allied health professionals, educators, families, and the public. Practicing professionals are an important target group for awareness building efforts because they may have the most opportunity to see early signs of ASD or other DD. At the same time, they may not have the most current information on what to look for, how to screen for, and what the proper response is when an ASD is suspected.

The quantitative analysis will address continuing education (CE), trainings, workshops, consultations, and technical assistance related to screening and diagnosis. To assess dissemination efforts, this analysis will report the number of articles, educational products, and presentations completed on screening and diagnosis. Quantitative data for the 6 grantees will be reported in the aggregate. Table VI.1 below shows how these data will be presented.

TABLE VI.1

INCREASING AWARENESS

ACTIVITY OR OUTCOME	TOTAL NUMBER	
CE professional development	2009	2010
Professionals trained through CE professional development activities in early signs of ASD and other DD		
Professionals trained through CE professional development activities in screening for ASD and other DD		
Professionals trained through CE professional development activities in diagnosis of ASD and other DD		
Professionals trained through CE professional development activities in evidence-based interventions for ASD and other DD		
Educational products developed and disseminated	2009	2010
ASD/DD-related articles published in peer-review journals		
ASD/DD-related educational products (other than peer review) developed or disseminated		

ASD/DD-related presentations		
Total number reached through these media		
Didactic training	2009	2010
Trainees who completed classes or coursework that included early signs of ASD and other DD		
Short term:		
Medium term:		
Long term:		
Trainees who completed classes or coursework that included screening for ASD and other DD		
Short term:		
Medium term:		
Long term:		
Trainees who completed classes or coursework that included diagnosis of ASD and other DD		
Short term:		
Medium term:		
Long term:		
Trainees who completed classes or coursework that included evidence-based interventions for ASD and other DD		
Short term:		
Medium term:		
Long term:		
Practica/Fieldwork	2009	2010
Trainees who participated in practica/fieldwork that included early signs of ASD and other DD		
Short term:		
Medium term:		
Long term:		
Trainees who participated in practica/fieldwork that included screening for ASD and other DD		
Short term:		
Medium term:		
Long term:		
Trainees who participated in practica/fieldwork that included diagnosis of ASD and other DD		
Short term:		
Medium term:		
Long term:		
Trainees who participated in practica/fieldwork that included evidence-based interventions for ASD and other DD		
Short term:		
Medium term:		
Long term:		
Trainings developed	2009	2010
Trainings developed on ASD screening and diagnosis targeted to professionals who work with underserved populations		
Total trained through these efforts		
Other training events	2009	2010

TA/consultation/collaboration activities provided to state or local health agencies, education or social service agencies, community based organizations or other entities

Total reached through these efforts

To supplement the quantitative results, we will also analyze qualitative data collected through summary progress reports and in-depth interviews. Using these data, we will describe the different ways in which the DBP grantees increased awareness of ASD/DD among health care professionals, families and the general public. Specific outcomes to be reported include the grantees' educational products and publications, the partnerships and collaborations they have formed to provide community outreach and education, and the training activities that have expanded awareness among professionals.

B. REDUCE BARRIERS TO SCREENING AND DIAGNOSIS

Ensuring that young children receive appropriate screening and, when indicated, appropriate diagnostic evaluation for ASD and other DD requires an adequate number of child health care professionals who are trained and available to provide these services. As the prevalence of ASD has risen, however, the demand for screening and diagnostic services has exceeded the availability of such qualified professionals. The DBP expansion grants aim to increase the number of professionals who are trained to screen for and perform diagnostic evaluations for ASD and other DD, with the long term goal of increasing early screening rates and, for children who screen positive for ASD, reducing the time between screening and diagnostic evaluation.

To assess the impact of the DBP grants on some known barriers to screening and diagnosis, we will analyze quantitative data collected through NIRS. Specifically, we will report on the number of trainees who have: completed leadership training; participated in research on the development and validation of evidence-based screening tools; successfully completed trainings related to screening and diagnosis of ASD and other DD, and provided technical assistance activities, workshops, and CE events to partner groups/organizations. Additionally, we will report on any change in the number of trainees from underrepresented groups.

To identify any additional barriers that the DBP programs are working to address, we will analyze qualitative data collected through the in-depth interviews. For each barrier, we will report the DBPs' plans for addressing the barrier and, in 2010, the progress they have made toward implementing those plans.

Using qualitative data obtained through the in-depth interviews and summary progress reports, we will also report on: specific activities the grantees have performed to expand access to child health care professionals who are qualified to screen for and diagnose/rule out ASD/DD, efforts to recruit trainees from racial/ethnic minority groups, and the degree to which the DBP training includes curriculum on cultural competencies.

Additionally, we will report on the degree to which the grantees have formed partnerships and collaborations that enhance existing infrastructures and lead to improved systems of care for children and the families of children with ASD/DD.

TABLE VI.2

REDUCING BARRIERS TO SCREENING AND DIAGNOSIS

ACTIVITY OR OUTCOME	TOTAL NUMBER	
	2009	2010
Participation in research and development		
DBP faculty and fellows who participated in research on the development and validation of screening tools		
DBP faculty and fellows who participated in research on the development and validation of diagnosis tools		
Targeting underserved populations	2009	2010
Trainings developed on ASD screening targeted to professionals who work with underserved populations		
Trainings developed on ASD diagnosis targeted to professionals who work with underserved populations		
Total trained through these efforts		
Trainees from underrepresented groups who are skilled in the administration of reliable, valid screening tools for ASD and other DD		
Medium term:		
Long term:		
Trainees from underrepresented groups who are skilled in the administration of reliable, valid diagnostic tools for ASD and other DD		
Medium term:		
Long term:		
Trainees from underrepresented groups who are skilled in the administration of reliable, valid evidence-based interventions for ASD and other DD		
Medium term:		
Long term:		

C. TRANSLATE RESEARCH INTO PRACTICE

The Insight team will analyze qualitative data from grantee progress reports and semi-structured interviews to assess the extent to which the DBP grantees helped translate research on evidence-based interventions for children and adolescents with ASD and other DD into practice. The analyses will describe the nature of trainings and educational events, as well as collaborations and partnerships that provided education or educational support in translating research into evidence-based practices.

D. USE OF VALID AND RELIABLE SCREENING AND DIAGNOSTIC TOOLS

The Insight team will analyze quantitative data to assess the impact of the DBP grants on the training of professionals, particularly with respect to using of valid and reliable tools to screen for and diagnose/rule out ASD and other DD. We will report the number of individuals trained in the use of these tools, and, using qualitative data, describe the impact of the training on providers' proficiency in the use of valid and reliable screening and diagnostic tools.

Drawing on qualitative data collected through the summary progress reports and semi-structured interviews, we will also report on the types of training activities, the most successful efforts, and

the continuing barriers to delivering effective training. The data analyses will also describe the steps taken to ensure that the trainings to reflect the latest in screening and diagnostic practices and that trainees have achieved appropriate levels of competencies.

TABLE VI.3

USE OF VALID AND RELIABLE SCREENING AND DIAGNOSTIC TOOLS		
ACTIVITY OR OUTCOME	TOTAL NUMBER	
Training	2009	2010
Trainees		
Short term:		
Medium term:		
Long term:		
CE professional development	2009	2010
Professionals trained through CE professional development activities in early signs of ASD and other DD		
Professionals trained through CE professional development activities in screening for ASD and other DD		
Professionals trained through CE professional development activities in diagnosis of ASD and other DD		
Professionals trained through CE professional development activities in evidence-based interventions for ASD and other DD		
Didactic training	2009	2010
Trainees who completed classes or coursework that included early signs of ASD and other DD		
Short term:		
Medium term:		
Long term:		
Trainees who completed classes or coursework that included screening for ASD and other DD		
Short term:		
Medium term:		
Long term:		
Trainees who completed classes or coursework that included diagnosis of ASD and other DD		
Short term:		
Medium term:		
Long term:		
Trainees who completed classes or coursework that included evidence-based interventions for ASD and other DD		
Short term:		
Medium term:		
Long term:		
Practica/Fieldwork	2009	2010
Trainees who participated in practica/fieldwork that included early signs of ASD and other DD		
Short term:		
Medium term:		
Long term:		

<p>Trainees who participated in practica/fieldwork that included screening for ASD and other DD</p> <p>Short term:</p> <p>Medium term:</p> <p>Long term:</p>		
<p>Trainees who participated in practica/fieldwork that included diagnosis of ASD and other DD</p> <p>Short term:</p> <p>Medium term:</p> <p>Long term:</p>		
<p>Trainees who participated in practica/fieldwork that included evidence-based interventions for ASD and other DD</p> <p>Short term:</p> <p>Medium term:</p> <p>Long term:</p>		
Administration of Reliable and Valid Tools	2009	2010
<p>Trainees who are skilled in the administration of reliable, valid screening tools for ASD and other DD</p> <p>Medium term:</p> <p>Long term:</p>		
<p>Trainees who are skilled in the administration of reliable, valid diagnostic tools for ASD and other DD</p> <p>Medium term:</p> <p>Long term:</p>		
<p>Trainees who are skilled in providing evidence-based interventions for ASD and other DD</p> <p>Medium term:</p> <p>Long term:</p>		

E. PROVIDE ADVOCACY, COUNSELING, AND COORDINATION OF CARE

Training professionals to provide advocacy, counseling, and coordination of care for children and the families of children with ASD/DD will be critical outcomes of the DBP programs. Although this aspect of grantee activities does not link directly to any of the CAAI objectives, increasing the effectiveness of professionals in providing these services will be an important determinant of the long-term impact of the DBP grants and their ability to improve access to screening, diagnosis, and treatment services. We will assess accomplishment of these outcomes using data obtained from grantees through NIRS, DGIS, summary progress reports and the in-depth interviews.

To assess the grantees’ performance on this objective, Insight will report the number of CE events, trainings and courses that include training on advocacy, counseling, and coordination of care. Table VI.4 below shows how this data will be reported.

We will also report qualitative outcomes related to this objective, including the degree to which cultural competency has been included in the DBP curricula, the kinds of curricular changes that have been made to incorporate training in medical home practice models and .the types of

activities that grantees have performed to build bridges between families and health care service systems.

TABLE VI.4

PROVIDE ADVOCACY, COUNSELING, AND COORDINATION OF CARE		
ACTIVITY OR OUTCOME	TOTAL NUMBER	
Training on advocacy, counseling, and coordination of care	2009	2010
Trainees who received training on advocacy, counseling, and coordination of care		
Short term:		
Medium term:		
Long term:		
Courses developed on advocacy, counseling, and coordination of care	2009	2010
Courses developed by DBP faculty or trainees that include specific training on advocacy, counseling, and coordination of care		
Courses modified by DBP faculty or trainees that include specific training on advocacy, counseling, and coordination of care		
Courses taught by DBP faculty or trainees that include specific training on advocacy, counseling, and coordination of care		
Total trained through these courses		

VII. FINAL REPORTS

A. REPORT TO MCHB

The final report will be designed for MCHB's Division of Research, Training and Education (DRTE) through the Maternal and Child Health Research Program to determine the success of the DBP training programs in meeting the overall CAAI goals and objectives, as well as their own program-specific goals and objectives. We envision that the final report will include the following chapters:

Executive Summary

- I. Introduction
- II. The 2006 Combating Autism Act
- III. Description of the DBP program
 - A. Goals and objectives of the DBP training programs
 - B. Activities and accomplishments
 - C. Challenges to implementation
- IV. Evaluation Design
- V. Effectiveness of DBP grantees
 - A. Increasing awareness of ASD and other DD among providers, educators, families and the public.
 - B. Reducing barriers to screening and diagnosis
 - C. Translating research on evidence-based interventions into practice
 - D. Training professionals to use valid and reliable screening and diagnostic tools
 - E. Training professionals to provide advocacy, counseling, and coordination of care.
- VI. Conclusions (and future activities)

We will also include attachments illustrating the logic models, the evaluation questions and the data collection instruments.

B. DRAFT CHAPTER FOR REPORT TO CONGRESS

Insight will also prepare and submit a draft chapter for the MCHB contribution to the HHS Secretary's Report to Congress, as required in Section 399DD of the legislation. This chapter will summarize the activities and outcomes of the DBP and other CAAI grantees, and report evaluation results by major objectives. In addition, the HHS Secretary's Report to Congress will address several key outcomes, as described below.

C. REQUIREMENTS OF THE LEGISLATION FOR THE REPORT TO CONGRESS

The Combating Autism Act of 2006 requires that the DHHS provide, at a minimum, the following core elements in the report to Congress:

- Description of the amounts expended on the implementation of the particular provisions of the Combating Autism Act of 2006;
- Information on the incidence of autism spectrum disorders and trend data of such incidence since the date of enactment of the Combating Autism Act of 2006;
- Information on the average age of diagnosis for children with autism spectrum disorders and other developmental disabilities (DD), including how that age may have changed over the 4-year period beginning on the date of enactment of this Act;
- Information on the average age of intervention for individuals diagnosed with an autism spectrum disorder and other developmental disabilities, including how that age may have changed over the 4-year period beginning on the date of enactment of this Act;
- Information on the average time between initial screening and confirmation/ruling out a diagnosis of ASD or other developmental disability, as well as information on the average time between diagnosis and evidence-based intervention for individuals with an autism spectrum disorder or other developmental disabilities;
- Information on the effectiveness and outcomes of interventions for individuals diagnosed with an autism spectrum disorder, including various subtypes, and other developmental disabilities and how the age of the child may affect such effectiveness;
- Information on the effectiveness and outcomes of innovative and newly developed intervention strategies for individuals with an autism spectrum disorder or other developmental disabilities; and

- Information on services and supports provided to individuals with an autism spectrum disorder and other developmental disabilities who have reached the age of majority (as defined for purposes of section 615(m) of the *Individuals with Disabilities Education Act* (20 U.S.C. 1415(m)).

REFERENCES

Combating Autism Act of 2006. Public Law. No. 109-416, § SEC. 399BB, 120 Stat 2821, 2823-2827 (2006).

U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Care Bureau (2008). Leadership Education in Developmental-Behavioral Pediatrics (DBP) Expansion (Supplemental Funding) Announcement, Program Guidance.

U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Care Bureau (2008). Maternal and Child Health Long-Term Training Programs. Announcement Type: Non-Competing Continuation. Announcement Number HRSA 5-T73-09-001.

Attachment A: DBP Grantees

Attachment A: DBP PROGRAMS AWARDED CAAI GRANTS IN 2008

Organization	Location (City, State)	Funded Amount
DBPs THAT RECEIVED SUPPLEMENTAL CAAI GRANTS IN 2008		
Albert Einstein College of Medicine	New York, NY	\$50,000
Boston University	Boston, MA	\$50,000
Children's Hospital Boston	Boston, MA	\$50,000
Case Western Reserve University	Cleveland, OH	\$50,000
University of Pennsylvania School of Medicine	Philadelphia, PA	\$50,000
Yale University	New Haven, CT	\$50,000

Attachment B: Logic Model for DBP Evaluation

Attachment B: Logic Model for DBP Program

Inputs	Activities	Process-Level Outcomes/Outputs (1-2 year)	Intermediate Outcomes/Outputs (3 year)	Long-Term Outcomes (Beyond Federal Grant Period)
<p>Funding</p> <p>MCHB program staff</p> <p>Collaborating partners</p>	<p>Needs assessment and TA</p> <ul style="list-style-type: none"> - confer with stakeholders to identify local/regional training needs - provide CME/TA in response to identified needs - develop informational materials for families <p>Recruitment</p> <ul style="list-style-type: none"> - Set annual recruitment goals for number of LT and MT trainees - Expand awareness of training opportunities among racial, ethnic, cultural minorities and recruit from institutions serving large populations of underrepresented students - Recruit trainees from various disciplines - Recruit parents/family members to collaborate with faculty and to serve as teachers/ mentors. <p>Training</p> <ul style="list-style-type: none"> - Prepare LT/Fs to become leaders in the field; track their post-training activities - Provide training in interdisciplinary, evidence-based clinical practice, with emphasis on screening, diagnosis and evidence based interventions for children with ASD and other DD - Provide CME for practicing professionals in screening, assessment, and evidence-based interventions for ASD and other DD. <p>Curriculum development</p> <ul style="list-style-type: none"> - Enhance leadership curriculum and other coursework to include expanded ASD and other DD content - Incorporate principles of cultural competency, interdisciplinary practice and family-centered care into coursework <p>Research and Dissemination</p> <ul style="list-style-type: none"> - Advance research on development and validation of screening and diagnostic tools - Disseminate research findings through publications, etc. 	<p>TA/Consultation/Outreach</p> <ul style="list-style-type: none"> - Number of TA events and consultations (e.g., community trainings/workshops, webinars, presentations) provided by DBP faculty or trainees <p>Expanding the pipeline of MCH professionals with expertise in ASD/DD</p> <ul style="list-style-type: none"> - Number of LT/Fs and MTs recruited annually by discipline - Number trainees recruited from underrepresented/minority groups - Number of family members recruited to train students and collaborate with faculty <p>Building Leadership</p> <ul style="list-style-type: none"> - Number of trainees who successfully complete didactic leadership courses and who demonstrate competency in related practica. <p>Enhancing professionals' knowledge and skills regarding valid screening and diagnostic tools and evidence based interventions for ASD and other DD.</p> <ul style="list-style-type: none"> - Number of trainees who successfully complete coursework and demonstrate competency in ASD and other DD screening, diagnosis and interventions - Number of practicing professionals from various disciplines receiving CME in early signs and symptoms of ASD and other DD, the importance of early screening and intervention, and valid tools for screening, diagnosis and intervention - Number of didactic courses developed or revised to reflect new content on ASD and other DD - Number of new courses/practica offered to enhance competencies of MCH professionals in screening, diagnosis and provision of evidence-based interventions <p>Contributing to research on evidence based interventions</p> <ul style="list-style-type: none"> - Number of ongoing research projects - Number of publications and presentations 	<p>Objective 1. Increase awareness</p> <ul style="list-style-type: none"> - Increase awareness about screening, diagnosis and evidence-based interventions for ASD and other DD among professionals. - Increase awareness of typical developmental milestones and early signs/symptoms of ASD and other DD among families and the public. <p>Objective 2. Reduce barriers to screening and diagnosis</p> <ul style="list-style-type: none"> - Expand leadership in the field of ASDs/DDs - Increase the number of graduates/trainees/CME recipients who work with underserved populations - Increase number of graduates/CME recipients who screen, diagnose or provide evidence-based interventions for children with ASD and other DD. <p>Objective 3. Contribute to translating research base on evidence-based interventions into practice</p> <ul style="list-style-type: none"> - Expand knowledge base on translating research to practice <p>Objective 5. Train professionals to use valid screening/diagnostic tools and facilitate coordination of care</p> <ul style="list-style-type: none"> - Increase number of faculty providing training in use of valid tools and interventions - Increase number of graduates and CME recipients who report increased knowledge and skills in use of screening tools, evaluation, and provision of evidence-based interventions - Engage families in program and policy activities. - Promote family-centered care. 	<p>Goal 1. Screen children early for possible ASD and other DD</p> <ul style="list-style-type: none"> - Increase the percentage of 18 & 24 month old children screened for ASD and other DD <p>Goal 2. Conduct early, interdisciplinary evaluations to confirm or rule out ASD and other DD</p> <ul style="list-style-type: none"> - Reduce average age of diagnosis for children with ASD and other DD - Reduce average time between screening & diagnosis/rule out <p>Goal 3. If diagnosis is confirmed provide early evidence based interventions</p> <ul style="list-style-type: none"> - Reduce average age of intervention for individuals with ASD and other DD - Reduce average time between diagnosis and evidence based intervention - Increase the percentage of children with ASD and other DD enrolled in early evidence based interventions from a specially trained provider - Collaborate with other agencies working on ASD and other DD research.

Attachment C: DBP Interview Guide

DBP Interview Guide

This guide is divided into five domains, one for each CAAI goal associated with the DBP Training program grants. Each interview will build on the information that has already been obtained from reviews of program documents and other existing data sources.

The purpose of this interview is obtain some descriptive data about your program's activities and outcomes for the evaluation of MCHB's Combating Autism Act Initiative. Towards that end, we will be asking you questions on five main topic areas which relate to the goals and objectives of the Combating Autism Act Initiative. We have already collected some quantitative and qualitative data on your program from other sources, such as the electronic handbook and your summary progress reports. The information we collect today is intended to supplement the data we have already collected.

For each set of questions, we'd like you to report on activities or outcomes that have occurred since receipt of the Combating Autism Act Supplemental funds. Also, unless otherwise indicated, please report on activities pertaining to both ASD and other DD.

Objective: Increase awareness of ASD and other DD

We understand that the DBP programs are committed to promoting awareness of ASD and other developmental disabilities among MCH professionals and others and would like to talk with you a bit about your program's efforts in this area.

What, if any, actions has your DBP program planned or taken to increase awareness about ASD and other DD among physician and non-physician MCH professionals?

Probes: What disciplines have been targeted in these awareness building efforts?

 What topics/content areas did these efforts focus on (e.g., developmental milestones: early signs and symptoms of ASD and other DD; valid screening tools; valid diagnostic tools; evaluation referral procedures; and evidence-based interventions)?

Which efforts have been the most successful?

What barriers exist in trying to increase awareness among physician and non-physician MCH professionals?

Has your DBP program formed any partnerships or collaborations with other agencies or organizations to provide ASD-related technical assistance or training? Please describe any outcomes of these partnerships or collaborations, in terms how they may have contributed to the goal of increasing awareness of ASD and other developmental disabilities among various interest groups (e.g., health professionals, paraprofessionals, family members, advocates, et cetera).

Has your DBP program aimed to increase ASD and other DD awareness among other groups, such as families or the general public? Please describe any particular plans or activities, and comment on any outcomes of implemented awareness building efforts.

Probes: What have been the most successful efforts?

What are the barriers that exist in trying to increase awareness among families with ASD and other DD and the general public?

What, if any, awareness raising activities have been developed and targeted to underserved populations? Please describe any outcomes related to these activities.

What, if any, awareness raising activities have been implemented with respect to clinical visits and one-on-one patient interactions?

In general, where do you think your awareness building efforts have had the most impact, and what more remains to be done in order to promote more widespread understanding of ASD and the importance of early detection, evaluation and intervention?

Objective: Reduce barriers to screening and diagnosis.

One key objective of the Combating Autism Act is to reduce barriers to screening and diagnosis. We'll be asking questions on what DBP activities have been undertaken to help reduce these barriers and, how effective those activities have been.

Please describe any specific activities that your DBP program has undertaken to expand children's access to timely and accurate screening and diagnostic services for ASD and other DD since receiving the supplemental grant. Please describe any outcomes observed to date.

Probe: What, if any, activities have focused specifically on increasing access to timely and accurate screening services?

What, if any, activities have focused specifically on increasing access to timely and accurate diagnostic services?

What have been the most successful efforts to date?

What are the major barriers to screening and diagnosis both across the nation and in your region? Which of these barriers, if any, has your DBP program been working to address since receiving the supplemental grant?

Has your DBP program formed any partnerships or collaborations with other agencies or organizations to provide ASD or other DD related activities to increase access to (a)

screening services and (b) diagnostic services? Please describe any known outcomes of these partnerships or collaborations.

To what extent has your DBP program reached children from underserved populations with respect to (a) screening and (b) diagnostic services. Have you developed or carried out any specific plans to reduce barriers to screening and diagnosis among underserved children? If so, please describe those activities and any preliminary results you may have observed.

Does the clinical training include working with children and families from underserved populations? Are those children getting screened and evaluated for ASD by DBP faculty and/or trainees?

The Combating Autism Act legislation specifies a long term goal of screening children as early as possible and conducting early, interdisciplinary evaluations to confirm or rule out ASD and other developmental disabilities in children. In general, what part do you think the DBP programs can play, both now and in the future, in achieving the Combating Autism Act long-term goal of reducing the time between screening and diagnosis? What current activities that you undertake do you think are making the most important contribution towards realizing this goal?

Objective: Translate research on evidence-based interventions for children and adolescents with ASD and other DD into practice.

One other long-term goal of the Combating Autism Act is, once a diagnosis is confirmed, to increase the provision of evidence-based interventions. We'll be asking questions on what DBP activities have been undertaken to support the understanding, use and application of evidence-based interventions.

Has your DBP program undertaken or planned to undertake any research activities, such as research guidelines or case studies, focused on translating research into practice? If so, please describe what activities have taken place or are planned to take place. To what extent have the results of these research activities been disseminated? Please describe any known outcomes tied to these activities.

Has your DBP program undertaken or planned to undertake any research activities focused on translating research into training for future practice? If so, please describe what activities have taken place or are planned to take place. To what extent have the results of these research activities been disseminated? Please describe any known outcomes tied to these activities.

Has your DBP program entered, or planned to enter, into any partnerships or collaborations with other agencies or organizations with the focus on training others in the translation of research into practice? What have been the results of these partnerships and collaborations? What products have been developed? Please comment on any outcomes or results known from such activities.

Objective IV: Train professionals to effectively utilize valid and reliable tools for screening and diagnosis of ASD and other DD

One of the other primary goals of the Combating Autism Act Initiative is to train professionals to use valid and reliable screening tools to confirm or rule out a diagnosis of ASD/DD for children with a confirmed ASD diagnosis. We have already gathered information about the numbers of students and professionals that are being trained through DBP since the CAAI supplemental grants were awarded. Now we'd like you to tell us about some other ways that the supplemental grants have impacted the training that your program provides, particularly with respect to screening and diagnosis of ASD and other DD. For these questions, we'd like you to discuss any ways in which the DBP activities has changed or expanded since receipt of the Combating Autism Initiative supplemental grant funds. Unless otherwise indicated, we are requesting information as the activities pertain to Autism Spectrum Disorder and/or other developmental disabilities.

Have you incorporated any new training opportunities that focus specifically on screening tools or diagnostic instruments? If yes, please provide one or more examples, describing the content of the new training opportunity, including specific instruments covered, the medium for delivery, and the audience(s) reached.

Has the content of the long term and medium term trainees' curriculum been modified to reflect the latest screening and diagnostic practices since receipt of the supplemental grant? For example, have you incorporated any new training in the use of specific screening tools or diagnostic assessments?

What disciplines or groups of professionals have been trained in the use of valid and reliable screening and diagnostic tools through DBP? Have you seen any changes in the range of disciplines that have received such training since the supplemental grant was awarded?

(Following up on earlier discussions with respect to training students and professionals to accurately screen and evaluate individuals for ASD and other DD with the support of the supplemental grant). Are there any other ways that your DBP program has helped to increase the number of professionals who are skilled in administering valid screening tools and diagnostic assessments for ASD? What specific training activities enable trainees to become proficient in screening and diagnosis?

Has your DBP program taken any measures to evaluate, upon completion of training, the ability of trainees to use appropriate screening methods to identify children suspected of having an ASD, and, when indicated, refer children for a full evaluation? If yes, please describe.

Has the program taken any measures to evaluate, upon completion of training, the ability of trainees to perform diagnostic evaluations to confirm or rule out ASD and other developmental disabilities? If yes, please describe.

Objective V: Train professionals to provide advocacy, counseling, and coordination of care.

An overarching goal of the Combating Autism Act Initiative is to expand leadership in the field of maternal and child health and to improve systems of health care delivery for children and the families of children with special health care needs. We'd like you to tell us about some other ways that the supplemental grants have impacted the training of professionals to provide advocacy, counseling, and coordination of care for families of children with ASD and other D. For these questions, we'd like you to discuss any ways in which the DBP activities has changed or expanded since receipt of the Combating Autism Initiative supplemental grant funds. Unless otherwise indicated, we are requesting information as the activities pertain to Autism Spectrum Disorder and/or other developmental disabilities.

How is your DBP program preparing its trainees to address the advocacy, counseling, and coordination of care needs of their patients. For example, what activities are specifically designed to provide them with the skills and knowledge they may need to assume these roles? To what extent, if any, have your DBP programs change or refined coursework, curricula, or practica, to reflect these skill and knowledge needs?

To what extent, if any, have your DBP programs made curricular changes to incorporate training in the medical home practice models? How many trainees have received such training? Has there been any efforts to evaluate the effect of this enhanced training? If so, please describe.

Has your DBP program undertaken any activities focused on building bridges, such as increasing knowledge of, or increasing or accelerating communication between, families of children with ASD and other DD and their available network of services? Please describe any known results or outcomes associated with these activities.

To what extent has your DBP program engaged ASD and other DD family members in the care process (outside of awareness raising activities)? Please describe those efforts? Have any assessments been made with respect to the effectiveness of those efforts?

Attachment D: NIRS Pilot Instrument for DBP

NIRS Pilot Instrument for DBP Grantees

1. Number of trainees this year:

Short term:

Medium term:

Long term:

2. Number of trainees who completed classes or coursework on one or more of the following: early signs of ASD/DD; screening, diagnosis and/or evidence-based interventions for ASD/DD:

Short term:

Medium term:

Long term:

3. Number of trainees who participated in practica/field work that addressed one or more of the following: early signs/symptoms of ASD/DD; screening, diagnosis and/or evidence-based interventions for ASD/DD:

Short term:

Medium term:

Long term:

4. Number of trainees who received training on advocacy, counseling, and coordination of care:

Short term:

Medium term:

Long term:

5. Number of professionals trained through CE professional development activities in one or more of the following: early signs of ASD/DD; screening, diagnosis, and/or evidence-based interventions for ASD/DD:

6. Number of medium-term and long-term trainees who are skilled in the administration of reliable, valid screening tools for ASD/DD:

7. Number of medium-term and long-term trainees who are skilled in the administration of reliable, valid diagnostic tools for ASD/DD:
8. Number of medium-term and long-term trainees who are skilled in providing evidence-based interventions for ASD/DD:
9. Number of courses developed, modified, and/or taught by DBP faculty or trainees which include specific training on advocacy, counseling, and coordination of care:
10. Total number of participants in #9 above:
11. Number of TA/consultation/collaboration activities provided to state or local health agencies, education or social service agencies, community based organizations or other entities:
12. Total number reached in #11 above:
13. Number of trainings developed on ASD screening and diagnosis targeted to professionals who work with underserved populations:
14. Total number trained in #13 above:
15. Number of faculty and fellows who participated in research on the development and validation of:

Screening tools:

Diagnostic tools:
16. Number of ASD and other DD related:

Articles published in peer reviewed journals:

Educational products developed and disseminated (other than peer review):

Presentations:
17. Total number reached by products described in #16 above: