Early Developmental Screening and Intervention Initiative (EDSI): Lessons Learned

2005-2010
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The Early Developmental Screening and Intervention (EDSI) Initiative, administered by the Center for Healthier Children, Families and Communities (the Center), was supported by First 5 LA from 2005-2010. EDSI’s goal was to identify children with delays as early as possible and to connect them with appropriate and effective services and interventions that will optimize their potential for success. This would be accomplished through physician, parent and community organization education and systems improvement.

EDSI also included an ECE Program Collaborative that was designed to support early care and education (ECE) programs to discuss development concerns with parents. For this report, First 5 LA staff reviewed documents from throughout the program’s lifespan, conducted a focus group of a population collaborative and surveyed Physician Learning Collaborative participants. Based on the documented EDSI activities and participant input, this study finds the following:

1. The EDSI collaboratives’ successes were attributed to the fact that the Population and Physician Learning Collaboratives had clear goals, structure and dedicated resources.
2. EDSI linked organizations that had not formerly communicated with each other.
3. EDSI reached many physicians who had not previously done developmental screenings.
4. Developmental screenings require additional work for medical practices to implement them.
5. For physicians to continue to carry out developmental screenings, mechanisms need to be in place to support the costs of staff time and other resources.
6. Some parents find the paperwork associated with developmental screenings burdensome and repetitive.
7. To fully understand the program’s impact on children and families, a follow-up or longitudinal evaluation would be required.

Given these findings, several recommendations are made for projects that seek to increase physician screenings for developmental delays:

1. Support Medi-Cal reimbursement for developmental screenings.
2. Help parents understand the importance of developmental screening and prepare for conversations with health and ECE professionals.
3. Provide collaboratives with clear goals, structure and resources to succeed.
4. Provide physicians with help to implement new practices.
5. Provide mechanisms in programs for follow-up so outcomes can be monitored.
6. Consider longitudinal evaluations in the future to understand a program’s impact on children.
Introduction

The Early Developmental Screening and Intervention Initiative (EDSI) began in 2005 as a First 5 LA-funded initiative administered by the UCLA Center for Healthier Children, Families and Communities (the Center). EDSI’s goal was to identify children with delays as early as possible and to connect them with appropriate and effective services and interventions. This would be accomplished through education for physicians, parents and community-based organizations, as well as systems improvements. During the five years of First 5 LA funding, EDSI created or advised medical learning collaboratives, community groups and parent education programs to help participants better serve the developmental needs of children 0-5. Through these efforts, EDSI has become an independent program whose work is continuing past the conclusion of First 5 LA’s funding in 2010. This report provides an overview of the EDSI Initiative, compares its accomplishments with the program’s stated intentions and identifies lessons learned that can be applied to future projects both at First 5 LA and in the broader field.
Although EDSI began in 2005, its roots lie in First 5 LA's Healthy Kids Initiative, which provides access to health insurance for children 0-5 in families earning less than 300 percent of the Federal Poverty Level\(^1\) and who are not eligible for Medi-Cal\(^2\) or Healthy Families.\(^3\) In July 2002, the First 5 LA Commission allocated $5.5 million from within the Healthy Kids Initiative to improve the quality of health care for children 0-5. First 5 LA staff consulted with experts in the field of child health, including the Los Angeles Department of Health Services, the Los Angeles Department of Mental Health, community clinics, hospitals, the Los Angeles County Office of Education, the W.M. Keck Foundation, the Child Health and Disability Prevention Program and the Early Identification and Intervention Group. Based on the information gathered, First 5 LA determined that:

The greatest need in quality of health care within the prenatal to 5 population is in the area of behavioral and developmental health care:

- 5-14 percent of children have developmental or behavioral problems severe enough to cause academic, social or family impairment.
- 30-40 percent are “at risk” of behavioral, mental health and learning problems and would therefore benefit from primary and secondary prevention.
- Ethnic or language minority children tend to be identified [as developmentally delayed] later than other children.
- Clinical judgment alone identifies only 40 percent of developmental delays.\(^4\)

In response to these findings, on May 14, 2004, the First 5 LA Board of Commissioners approved the “Healthy Kids Early Screening for Child Development Framework” with this goal:

To improve school readiness for children ages prenatal to 5 years by improving the systems of early screening and intervention for children with developmental and behavioral needs and changing related policies to ensure sustainability of the initiative.\(^5\)

In May 2005, First 5 LA issued a Request for Proposal (RFP) to find an organization to put this approval into action. In the intervening year, intermediate goals of the project were identified as follows:

1. Increase the percentage of primary care providers who are trained to conduct behavioral and developmental screenings and assessments.
2. Increase the percentage of children whose developmental and behavioral needs are screened and assessed within the context of their primary care.
3. Increase parents/families’ knowledge of early childhood development and recognition of key developmental milestones.
4. Increase the coordination between primary care providers and other community resources for young children (e.g. preschool, Head Start, WIC, DCFS, early intervention, etc.).
5. Increase the capacity of existing clinical and other community systems of care to provide behavioral and developmental services to children identified with developmental and behavioral problems.\(^6\)

In December 2005, the UCLA Center for Healthier Children Families and Communities was awarded a series of one-year contracts renewable for up to five years to carry out the necessary work.
During the project’s five years, the Center implemented a five-pronged strategy to carry out the RFP’s requirements:

1. Three Physician Learning Collaboratives: Structured learning collaboratives designed to teach evidence-based best practices for developmental screening, assessment, referral and treatment to physicians and their practices.

2. One Residency Program Collaborative: A structured learning collaborative designed to teach evidence-based best practices for developmental screening, assessment, referral and treatment to medical residents.

3. Two Population Collaboratives: Structured learning collaboratives designed to bring together community organizations to work on developmental issues in their respective communities.

4. WIC Parent Education Classes: A class created in partnership with Women, Infants, and Children (WIC) to help parents talk to their children’s doctors about developmental issues.

5. Policy Work: Efforts to enact broad policy solutions to challenges identified within current systems of developmental care for children.

See Appendix D for a full list of activities by year and the amounts funded. The results of these programs will be discussed in the Findings section.

The diagram on page 9 shows the interrelationships between the different components of EDSI, as well as how they relate to the populations targeted for change.

The Physician Learning, Population and Residency Program collaboratives relied on a learning approach called the Model for Improvement. The Model has participants create plans for small changes, try those changes, examine the results and act to fix or expand the change. The results of these changes were tracked on “dashboards” that show rates of desirable results. Below are more detailed descriptions of EDSI’s strategies, based on a document review of the Center’s internal evaluations.

Physician Learning Collaboratives

EDSI conducted three rounds of physician learning collaboratives, in 2007, 2008-2009 and 2009-2010. These collaboratives brought together private practices and clinics from around Los Angeles County (and later Orange, Ventura, Riverside and San Bernardino counties) to work to improve the rates of developmental screening by improving the processes within the offices. In each round, community clinics and private medical practices, represented by a team of doctors and office staff, attended three meetings over the course of 8-12 months, with conference calls between in-person meetings. At each two-day meeting, the UCLA staff and experts presented information on how, when and why to undertake routine developmental screening. Initiative staff introduced process improvement strategies to help physicians adapt best practices into the unique context of their work settings and patient populations. Each medical practice would then attempt to make the changes using the Model for Improvement and report their progress to the Center. At the next meeting, this data was used to update the participating medical practices on the Collaborative’s overall progress and identify opportunities for improvement. Participants received Continuing Education Credits, which are essential for medical professionals to maintain their licenses.

Physicians also received Maintenance of Certification, Part 4 Performance in Practice credits, which are essential for pediatricians and family medicine physicians to maintain board certification in their medical specialty. The goals of these learning collaboratives were:

1. More than 90 percent of parents report receiving age-appropriate anticipatory guidance and parent education in a way that meets their informational needs.
2. More than 90 percent of parents report receiving information to address their concerns about their child’s learning, development and behavior.
3. More than 90 percent of parents report being asked about substance abuse and family violence.
4. More than 75 percent of parents report interactive parent/child behavior, as measured by reading to child daily.
5. More than 90 percent of parents report always receiving parent-centered care.
6. More than 95 percent of encounters include screening for parental depression (by nine months), other psychosocial issues (in the previous 12 months) and structured developmental screening.
7. Children at risk are entered into a practice population management registry.
8. More than 12 of these systems are in place in the office or clinic, as measured by the “Office Systems Inventory” (OSI) score.

To track these goals, the teams were required to monitor well-child visits and collect feedback forms from patients. This data was submitted to the Center and used to create trend graphs that were presented to the group.

Residency Program Collaborative

In 2009-2010, EDSI convened a Residency Program Collaborative in which participants in five pediatric and family medicine residency programs learned about
Early Development Screening and Intervention (EDSI) Initiative Components

Policy Work
EDSI worked with its Steering Committee and other stakeholders to effect systems change in developmental screening and intervention. These changes were targeted mainly at the state and county level.

Parents


ECE Providers and CBOs and Agencies

- Population Collaboratives: Pacoima and Magnolia Place (2008–2011)

Physicians

- Residency Program Collaborative (2008–2009)

These strategies utilized the Model for Improvement to make changes in the participants' internal processes and systems.

Improving developmental care for children and how to accomplish quality improvement within a clinic. The participating residency programs included nearly 50 percent of the pediatric residents in L.A. County. The Residency Collaborative lasted 10 months and included two in-person meetings. The Residency Collaborative had a shorter list of goals than the Physician Learning Collaborative. The goals were to attain the following rates among patients of collaborative members:

- 95 percent of patients ages nine, 18 and 24 months receive developmental screening.
- 95 percent of patients ages nine, 18 and 24 months receive psychosocial screening.

- 95 percent of patients’ medical records include a preventive services prompting system.
- 95 percent of at-risk patients have a documented follow-up plan.

The Residency Collaborative also used the Model for Improvement and regularly submitted data. Each residency program also gave the Center a final report.

Population Collaboratives
In 2009, EDSI began creating “Population Collaboratives” in Pacoima, Santa Monica and within the Magnolia Community Initiative. EDSI leveraged existing community efforts
to recruit members for the Collaboratives. EDSI sought to involve participants in key early childhood initiatives such as the School Readiness Initiative, Partnerships for Families and others. The Population Collaboratives worked on introducing the Early Development Instrument (EDI), a Community Data Dashboard, and a system design and improvement process to their communities.

Each Population Collaborative agreed to:

1. Come to agreement about shared goals and targets
2. Share and analyze together measures of performance and progress
3. Work together to develop and test specific system and policy changes
4. Share learning from success and challenges

The timeline for accomplishing these aims was:

- Months 1-3: Establishing shared vision and outcomes
- Months 4-7: Learning to apply the Model for Improvement
- Months 8-11: Reaching consensus on defining risk and core services/supports
- Months 12-15: Actively testing design ideas for a population of children
- Months 16-18: Introducing new tools and scripts for use with families
- Ongoing: Measuring performance, testing tools and linkage and referral

EDSI Parent Education Classes

Women, Infants, and Children (WIC) is a federal nutrition program for low-income pregnant and breastfeeding women and children up to age 5. WIC serves about half of the young children in L.A. County. To help these mothers better communicate their concerns, EDSI and WIC developed a curriculum for parents called “Talking to Your Doctor.” WIC staff received training on how to conduct the class from pediatricians. From 2007 to 2010, WIC administered this class to 500,000 families.

Policy Development

EDSI was also charged with making systems-level changes at the policy level. To this end, EDSI produced a report in September 2007 on the policy environment for developmental services in L.A. County, policy areas key to achieving early development and policy changes needed to support children with developmental delays. The report found that, for early developmental delays to be recognized and for children to receive the appropriate response, the following strategies were needed:

1. Shared vision and engagement of leaders, providers and consumers for a system that can achieve desired outcomes;
2. System leadership and collaboration to enable and sustain a well-functioning system;
3. Transparent performance measurement at all levels to provide a picture of current outcomes relative to goals, and to show which changes are effective;
4. Continuous learning culture to equip providers with the ability to adapt to the needs of parents and young children and to changes in the resource environment;
5. Incentives and motivation to encourage the effective care that providers want to deliver;
6. Population-based supports to facilitate prevention, health promotion and care for parents and young children with specific needs; and
7. Capacity and capability to care for families so that the needs can be met with effective, acceptable services and supports.

EDSI participated in California’s state-level team in the national Assuring Better Child Development (ABCD) Screening Academy, which “examined the delivery of appropriate mental health and developmental screening and treatment in primary care from both the state and local perspective. The project identified barriers to screening and treatment and developed strategies to overcome these challenges and improve the delivery of child development services.” Specifically, EDSI worked on the “system level” issues, targeting the following goals:

- Recognize and agree upon tools for assessing development and behavior
- Link payment with quality
- Identify expectations for care
- Prioritize, promote and reconcile expectations for care with the realities of practice
- Develop public and professional messages for key audiences
- Develop a community approach to promoting development and ensuring monitoring takes place
- Promote consultation as a strategy where there are limited resources, knowledge and/or capacity
- Improve synergies among state programs involved in recognition and response activities
- Develop the workforce
- Promote continuous self-reflection and learning
- Create consensus on measures and reporting.

In addition to the statewide efforts, EDSI worked with L.A. County agencies to coordinate services. These efforts included:

- Working with the L.A. Unified School District on its Preschool Saturdays program, which offers comprehensive screening to children 2-5 years old;
- Involving the L.A. County Department of Mental Health in coaching pediatric practices on how to refer families to mental health services; and
- Strategizing with the L.A. County Department of Child Care Steps to Excellence Program (STEP) on how to provide developmental screening and connect families with resources in the early care and education settings.
Qualitative methods were used in this study to understand EDSI and its results:

- A document review of the initiative planning process and Center program reports
- A focus group of Pacoima Population Collaborative members
- A survey of past and current Physician Learning Collaborative participants

In addition to this study, the Center carried out its own extensive internal evaluation designed to document processes and provide lessons learned, as well as to determine to what degree the EDSI goals were met. The Center’s internal reports covered the WIC parent class, the Physician Learning Collaboratives, the Residency Program Collaborative and the Population Collaboratives. The goals of the participant focus group and survey were to add context to those results and to uncover best practices to improve upon this model for future initiatives.

(A full list of reviewed documents can be found in Appendix A.)

For scheduling purposes, the Pacoima Population Collaborative was chosen for the focus group. First 5 LA staff attended the Pacoima Population Collaborative on Aug. 10, 2010. After the meeting was concluded, participants were invited to stay for a focus group discussion. Seven collaborative members (out of eight attending that day) participated in the focus group, representing LAUSD, child care resource centers, a local clinic and a mental health center. Notes were taken by two First 5 LA staff and analyzed for themes. (See Appendix B for the focus group protocol.)

Another source of participant impressions was a survey administered to current and past Physician Learning Collaborative members. The survey consisted of 14 open-ended questions (see Appendix C). The first version of the survey was posted online in July 2010, and past participants in the Medical Collaborative were invited to take it. Eleven responses were received out of the 15 practices that had participated in the Pilot Physician Collaborative (2008) and the Expansion Physician Learning Collaborative (2008-09). In addition, paper versions of the survey were distributed in the active Physician Learning Collaborative’s meeting in November 2010. There was some overlap between past and current collaboratives, so clinics that had participated in the online survey were not given paper surveys to avoid duplication. At the active collaborative meeting, another 11 responses, out of the 16 attending practices, were collected, for a total of 22 completed surveys.

Given that the medical practices and Population Collaborative members were all speaking in a professional capacity for the purposes of program improvement (rather than research), no Institutional Review Board approval was required. Survey responses were entered into Atlas.ti and coded accorded to question number. Due to the small number of responses, no further coding was done.
The Center’s internal evaluation reports were reviewed for descriptions of both the program components and results. The goal of this study is to summarize the Center’s findings, not to separately evaluate its conclusions.

Since this is a qualitative study, the incidences of certain qualitative responses are characterized by words like “most” or “several.” The goal is to express approximately how typical an opinion was, not to assign a percentage that would create an artificial sense of representativeness.

Limitations

This study can only present observations and some lessons learned, not outcomes. The number of people, clinics and organizations participating in EDSI is relatively small, and the number interviewed or surveyed is even smaller. The clinics participating in the Learning Collaboratives were particularly motivated, as shown by their volunteering to be part of the group. The members of the Population Collaboratives were similarly self-selected, and their regions were specifically recruited for the communities’ readiness. Findings and impressions of these groups cannot be generalized to how less-motivated clinics or community-based organizations would experience EDSI.

Data was principally gathered via self-report from the professionals receiving the EDSI training; no further research was done to see how the patients or community members viewed the changes in practice, or if there was a measurable change in referrals. If there is interest in studying how children and families experienced or benefitted from EDSI, additional resources and a longer time frame would be required for further study. To accurately gauge, for example, an increase in referrals and successful follow-up, chart reviews of patients would be required over the course of the project.
The Center conducted its own internal evaluation to document the EDSI process and results, and to provide lessons learned. This section provides a brief summary of their findings.

According to the Center, the major highlights of the Physician Learning Collaboratives were:

- Participants in the 2007 collaborative increased their use of a developmental screening tool during well-child visits from 19 percent to 80 percent.
- At the end of the 2008-2009 collaborative, 85 percent of participating practices included a developmental screening in their well-child appointments.
- The 2009-2010 collaborative participants reached a 93 percent developmental screening rate.

The Center concluded that most Physician Learning Collaborative practices integrated a developmental screening tool into their practice, developed a preventive services prompting system, introduced standards around asking about psychosocial issues and developed relationships with the local regional centers and other local resources to improve the effectiveness and timeliness of referrals and feedback.

In reviewing the EDSI Residency Program Collaborative, the Center found that, although none of the residency programs used a validated developmental screening tool recommended by the American Academy of Pediatrics at the beginning of the Collaborative, after eight months, 20 percent of the programs began using an appropriate tool.

The Population Collaboratives, according to the Center, created better referral processes and consistency in messages to parents about coordinating their children’s care messages to parents about how to navigate multiple programs for their children’s care. The Collaborative participants reported that implementing changes in smaller increments decreased organization staff resistance in implementing changes to referral processes and screenings.

The Center’s evaluation of the WIC parent education classes showed that the classes affected both parent behavior and staff knowledge. Although, before the class, 42 percent of parents reported having a concern about their child’s learning, development or behavior, only 26 percent reported being asked whether they had concerns at their child’s last check-up. Forty-three percent of the parents educated by the WIC classes used the tools they were given to prepare for their child’s next medical visit, such as questions to ask. Eighty-one percent of the WIC staff reported that they learned new information about child development as a result of the curriculum training.

The Center did not report any specific policy changes at the state or county level. Policy impact emphasized involving major programs for young children (such as school districts, Regional Centers and WIC) enhancing their services or approaches to families, or taking a stronger stewardship role in improving care for young children and their families.

**Physician Learning Collaboratives Surveys**

Twenty-two clinics and physician practices shared their perspectives on the Physician Learning Collaborative model for this study. In response to the open-ended questions, respondents universally stated that the EDSI collaborative increased their capacity for prevention, recognition and response. Many of the clinics reported having had no developmental screening in place before EDSI. For those clinics that did have screening previously, they indicated that after EDSI, they were able to help parents use this information better. For instance, one respondent wrote:

“There was no referral process prior. Patients were typically just given a resource and phone #. Now there is follow up with patients and the Providers were ensured that follow [-up] was actually conducted.”

Most respondents stated that the changes were sustainable long-term, but several were concerned about continual commitment from the staff. Implementing the developmental screening tools and referral systems requires a large, ongoing effort from the administrative staff; the respondents were unsure if this effort could be maintained without the continuous collaborative efforts. One clinic indicated that continued Medi-Cal payment for screenings was the only way providing screenings would be sustainable. Other funding concerns included getting copyright permission for the screening tool (the Ages and Stages Questionnaire) and finding ways to add the tools to the electronic health record system. One participant articulated the challenge this way:

“Weakness: requires a process that increases our workload without a mechanism for improved payment for this time and results from payers.”

Although most clinics stated that EDSI had made a lasting change in their practice, there were several comments that there was far more to be done on a system level.

“The seed has been planted. The real work begins and there is a lot more to do.”
The clinics appreciated the opportunity to meet face-to-face to share challenges and solutions. However, a few clinics referenced the “time requirements” and that the learning sessions were “just a little too far” geographically. Although the webinars and monthly phone calls were praised, the in-person sessions were preferred. Another benefit of the face-to-face meetings was that they included representatives from the regional center to meet with the clinics. Before EDSI, most clinics reported little direct contact with the local regional center. This new, direct relationship helped streamline the referral process. Typical comments about this new relationship with the regional center included:

“Have met with our family resource centers (first time) and our regional center team. We are re-vamping our referral process to regional center and will now track referrals to be sure they go through.”

“We now have a ‘face’ to the people we email or speak with over the phone. Also we have a relationship with staff so we can call to get help on processes.”

“I have already heard some key changes made by regional centers due to feedback from collaborative.”

Almost all the clinics rated the difficulty of adding developmental screening to their practices as easy to moderate, explaining:

“At first the changes seemed difficult, but once everyone was trained, it seems to be working well.”

One clinic, however, sharply differed, saying:

“[T]he screening tools have been difficult to implement in that all staff feel too overwhelmed to take on any further responsibilities.”

Clinics consistently noted that the changes created more work for their administrative staff. In addition to the greater amount of paperwork, the staff was also charged with educating the parents as to why the forms were important. However, most clinics reported that their staff adjusted. Several believed that their staff became more educated about developmental issues as a result.

“Many of our staff members are recognizing the importance of screening and are using the tools themselves for their own kids!”

Although most of the clinics stated that parents appreciated the greater emphasis on development from the clinic, as well as the fact that the results were tailored to their child instead of simply generic information, two clinics raised the issue that some parents see the worksheets as simply more paperwork.

“They only see another piece of paper to fill out. Some have objected (to the front desk, but never to me) having to fill out the same questionnaire at every visit.”

Of the clinics that were able to estimate, most indicated they were making more referrals to the regional center. Estimates of the increase ranged widely, from no increase,
to the more typical 20-50 percent increase, to one clinic that claimed a fivefold increase in referrals. Most of the clinics weren’t formally tracking the number of referrals before EDSI, so an accurate estimate is not possible. Furthermore, there was no component of the EDSI initiative to follow-up and determine what happened to the referred children afterward.

**Pacoima Population Collaborative Focus Group**

Members of the Pacoima Population Collaborative discussed their collaborative experiences in a focus group. At the time of the focus group, the collaborative had been in existence for a little over a year. The focus group members stated it was too early to talk about the long-term impact of changes the collaborative introduced; they had mainly worked on building a shared understanding of early childhood development issues. In fact, one participant estimated it would take three years to make the changes fully operational.

The group discussed what drew them to join this particular collaborative. At first, they simply wanted to know what was available in the community, to know where to refer patients or were curious about the idea of system change. However, once they joined, they discovered it was truly a working collaborative to improve the system. This contrasted with other collaboratives that were based on networking and mutual support, as opposed to the EDSI collaborative, which was about how to work smarter and seeing how they could change the system.

Although the group indicated that the collaborative was more than networking, it seemed that getting to know each other personally was a key ingredient in better referrals, such as the agency that made successful connections with LAUSD preschool clinics with a referral form and regular contact with [the LAUSD Collaborative member]. Personal connections gave them confidence to give parents referrals that we will feel good about. Indeed, before the collaborative, one member stated she had not been aware of community supports in her backyard.

One of the tools that the collaborative members mentioned several times was the Ages and Stages Questionnaire (ASQ), which several of the agencies had implemented as part of their programs. One member explained that so many agencies using the same tool helped establish the ASQ as a norm for parents, so they were more likely to pay attention. Receiving the ASQ at a community agency might be the only opportunity to expose the parents to these questions and allow early identification of developmental problems. Even if the ASQ results from the first administration did not convince the parents to take action, a later one might, as sometimes it takes multiple professionals telling them something for them to believe it. One participant had a broader vision of the ASQ providing continuity over time, allowing a running record of the child’s development. Having the ASQ as a common tool means that the whole community is speaking the same language.

The other tool that the collaborative members learned about was the Quality Improvement Process, using the Plan Do Study Analyze (PDSA) method. One member was particularly successful in using it to train her staff on the ASQ. She explained that the PDSA helped her pinpoint where the challenges were in the implementation process.

The collaborative members were concerned that the work could not continue without on-going First 5 LA support for a facilitator. Although the relationships among the members would continue, as well as the new referral processes, participants indicated that continuing systems improvements were less likely without an outside body (the Center staff) steering the meetings. One person stated that having the framework established in advance lets them see what the next steps will be and understand why they are doing it; the UCLA EDSI team was a great motivator. For example, one member recalled that, at first, she was afraid it was going to take too much time, but UCLA kept reaching out. Another explained that it would be a challenge to keep this focus without a facilitator. Despite having a facilitator from outside the community, the participants still indicated that the Collaborative was very community directed: UCLA just supported it in a way that made it real. The Center staff would hear different ideas and helped put them in a framework to organize them better.

The group members were extremely positive, but they did mention a few points of confusion or difficulties, such as feeling overwhelmed in the beginning and, when one person joined the group later, not understanding what was going on at first. They would support a more thorough new member orientation to set clear expectations about the amount of time the project would take and what the final outcome would be. The collaborative members put a positive spin on even this occasional confusion: If they always knew what they were doing, it would feel externally driven.

**EDSI Today**

In June 2012, First 5 LA received an update on EDSI’s current status from the Center; some aspects of EDSI are continuing. With support from the Magnolia Community Initiative, the Center is able to maintain the community dashboard, monthly data reporting and the improvement process for that population collaborative. Despite the lower level of coaching the Center now provides, the data have begun to show improvement in care processes. In contrast, without First 5 LA funding, the Pacoima and Santa Monica Population Collaboratives have not continued, as predicted by the Pacoima membership. However, the Pacoima Population Collaborative could “ramp up immediately if resources permitted.”

EDSI is also branching out to new opportunities. Philanthropies and initiative leaders from several California counties and other states have expressed interest in bringing the EDSI learning system to their own areas. In addition, EDSI is supporting a South Los Angeles community system of seven organizations in developing a community data dashboard and a reporting infrastructure.
The Center’s internal evaluation of the EDSI programs shows that EDSI, for the most part, accomplished its goals. The Physician Learning Collaboratives report indicates an increased number of providers trained to conduct developmental screenings and an increased number of children assessed for developmental delays. The WIC Parent Education report shows how EDSI educated parents about how to talk to their children’s physicians about developmental concerns. The Population Collaboratives report demonstrates how EDSI gave the child-focused organizations a forum to coordinate on developmental screening and referrals issues. EDSI also increased the capacity of the clinical and community systems to provide additional services through the Physician Learning, Residency Program and Population Collaboratives. In addition, EDSI advised L.A. County agencies on implementing screening programs and how to make them more effective. EDSI’s activities included policy reports and policy summits that helped articulate the changes the stakeholders wanted to see at the system level, and strategize how these changes could be made.

Seven major themes emerged in First 5 LA’s study of the EDSI initiative:

1. The EDSI Collaboratives’ successes were attributed to the fact that the Population and Physician Learning Collaboratives had clear goals, structure and dedicated resources. Having the Center administer and give technical support to the Population collaborative gave shape and direction to the meetings that differed from more common “networking” collaboratives. The Physician Learning Collaboratives had a much more formal structure with a set curriculum for each meeting, but the individual medical practices were still given opportunity to find individualized solutions for their offices. The technical support from the Center, in the form of phone calls between face-to-face meetings, was important to keeping the participants engaged and on track.

2. EDSI linked organizations that had not formerly communicated with each other. Both the Physician Learning Collaborative and the Population Collaboratives gave groups involved in early childhood services the opportunity to communicate about developmental screenings and referrals. In the Population Collaboratives, disparate organizations working in mental health, early education and medical services were brought together, some for the first time. The Physician Learning Collaboratives excelled at bringing referrers (doctors) together with the agencies receiving the referrals (regional centers) to help them understand the part they both played in the process of securing services for families with a developmental concern.

3. EDSI reached many physicians who had not previously done developmental screenings. Given the number of participants in the Physician Learning Collaborative who reported not doing developmental screenings previously, this finding suggests there is a need for L.A. County physicians to be trained and coached in implementing developmental screenings.

4. Developmental screenings require additional work for medical practices to implement them. Implementing developmental screenings always requires changes in paperwork and workflow, a change that some physician practices reported was difficult at first.

5. For physicians to continue to carry out developmental screenings, mechanisms need to be in place to support the costs of staff time and other resources. Several of the participating practices worried about how they could continue providing developmental screenings, as this is an additional service that is not reimbursed by Medi-Cal.

6. Some parents find the paperwork associated with developmental screenings burdensome and repetitive. Parents require education on the importance of developmental screening to make the paperwork seem worthwhile.

7. To fully understand the program’s impact on parents and children, a longitudinal or follow-up study would be required. This study focused on documents and participant impressions because there was no mechanism for tracking the patients and their experiences in the long term. If long-term impact is to be understood, parents whose children received a referral would need to opt-in to a longer-term study so that they could be interviewed months later to discover the referral results.
The findings suggest several ways that First 5 LA or other agencies can support developmental screening efforts in the future. EDSI’s work can also model ways to organize community collaboratives and achieve physician practice change in general. In addition, the limitations of this study point to ways that First 5 LA can better monitor progress in future studies.

**Improved Developmental Screening Rates**

1. **Support Medi-Cal reimbursement for developmental screenings.** One common theme in the physician comments is the need for Medi-Cal reimbursement for developmental screening. If physicians are not being paid for the time it takes to do the work, they will find it difficult to justify continuing to provide the service. First 5 LA should consider including promotion of this reimbursement as part of its policy agenda.

2. **Help parents understand the importance of developmental screening and prepare for conversations with health and ECE professionals.** Help parents understand the importance of developmental screening and prepare for conversations with health and ECE professionals. Public education campaigns and messaging may help parents understand, and potentially advocate for, developmental screening.

**Improved Collaboration and Learning**

3. **Provide collaboratives with clear goals, structure and resources to succeed.** Merely bringing together interested parties is not enough to effect change. Successful collaborations are more likely when they have a skilled guide providing technical assistance in how to proceed.

4. **Provide help to the whole clinic staff to implement new practices.** Changing medical practice is often more than the doctor doing something different in the exam room. The entire office needs to be involved in supporting the change. EDSI was approved by the American Board of Pediatrics and the American Board of Family Medicine to offer continuing board certification credits around quality improvement for doctors. EDSI’s Physician Learning Collaborative model could be used to help doctors make any change to their practice. First 5 LA should consider this model for future programs that attempt to change physician practice.

**Improved Evaluation**

5. **Establish mechanisms to track referrals.** This study was limited by the lack of direct follow-up of the children screened for developmental delays. It is unknown if the newly created referral systems put in place by the medical practices were successful in getting the children into the regional center for assessment. Nor is it known if the children, once diagnosed with developmental delays, were able to receive services.

6. **Consider longitudinal evaluations for understanding impact on children.** This project was designed to create change in professional practices, with the long-term intent of improving developmental outcomes for children. EDSI promoted approaches to developmental screening and preventative care that are considered evidence-based by national professional organizations. To document locally how much changing professional practices actually leads to changes in children’s outcomes, much longer-term data collection and analysis would be required.

In sum, the EDSI initiative was successful at educating doctors about developmental screenings, providing a mechanism for community groups to focus concretely on developmental delays and encouraging parents to talk with their children’s doctors about their concerns. EDSI’s work provides several examples of successful work to replicate, as well as showing system-level gaps that First 5 LA or other agencies could work to fill.
Appendix A

List of Documents Reviewed (in chronological order by publication date):

- First 5 Los Angeles Board Packet, May 13, 2004
- Early Developmental Screening and Intervention Initiative Request for Proposals (RFP), May 18, 2005
- Year 1 Update
- Final Report, Year 2, December 2006- November 2007
- Policy Scan: Desired Results and Achieving Improvement in a System of Early Identification and Intervention in Los Angeles County, September 2007
- Progress Narrative, December 2007- February 2008
- ABCD Strategy Implementation Matrix- System Level (Policy), July 2008
- Progress Narrative, Year 3, November 1, 2008
- Learning Session 2 packet, November 21-22, 2008
- Final Report, Year 4 (December 2008 – November 2009)
- Progress Narrative, Year 5, Quarter 1

List of UCLA Center for Healthier Children, Families and Communities Reports:

- How to Sustain Quality Improvement and Infrastructure for Learning Collaboratives
- Roles for the Women, Infants and Children (WIC) Program in Promoting Quality Developmental Care for Young Children: A Report on Lessons Learned and Options
- The Early Developmental Screening and Intervention (EDSI) Initiative: Goals and Accomplishments
- The Early Developmental Screening and Intervention (EDSI) Initiative Residency Program Collaborative: Goals and Accomplishments
- How to Sustain Quality Improvement and Infrastructure for Community Learning Collaboratives

All reports available at: http://www.first5la.org/Community-Change/Program-Evaluations/Early-Developmental-Screening-and-Intervention

Appendix B

Focus Group for Members in the Pacoima Collaborative Protocol

Hello, my name is Holly Campbell, I'm a research analyst at First 5 LA. Today I’d like to ask you a few questions about your experiences with the Pacoima Collaborative.

1. Please tell me your name and organization.

2. Why did you decide to participate in this collaborative? What do you hope that it will accomplish?

3. What is different about it, if anything, from other collaborative groups that you’ve been part of?

4. Has your participation in the EDSI collaborative helped you to increase your capacity for prevention, recognition and response? Please explain.

5. What changes were you able to incorporate into your services, if any? How difficult were these changes to implement?

6. Can these changes in your services be sustained for a long time? Why or why not?

7. What is working well in terms of the resources, training and technical assistance that were provided in the EDSI collaborative activities? What has not worked well?

8. To what extent do you think EDSI has been influential in coordinating or integrating the existing system in LA County for prevention, recognition and response?

9. Are there any other areas of successes and weaknesses of the EDSI collaborative approach that you can share with us?

Thanks for your input!
Physician Learning Collaborative Survey
One representative from each clinic was asked to respond to 14 questions:

1. Your name: ____________________________

2. Your organization or clinic name: ____________________________

3. Your contact number and email address: ____________________________

4. Which EDSI collaborative(s) did you participate in?

5. Did your participation in the EDSI collaborative help you to increase your capacity for prevention, recognition and response?

6. What changes were you able to incorporate into your services, if any? How difficult were these changes to implement?

7. Can these changes in your services be sustained for a long time? Why or why not?

8. Can you describe how these changes are having an impact on the parents?

9. Can you describe how these changes are having an impact on staff?

10. What worked well in terms of the resources, training and technical assistance that were provided in the EDSI collaborative activities? What did not work well?

11. How did your participation in the EDSI collaborative help to improve your relations with other agencies or community resources?

12. To what extent do you think EDSI was influential in coordinating or integrating the existing system in L.A. County for prevention, recognition and response?

13. Prior to your participation in EDSI, approximately what was the average monthly volume or rate of referrals you have made to the regional center, compared to now?

14. Are there any other areas of successes and weaknesses of the EDSI collaborative approach that you can share with us?
## Timeline and Cost of EDSI’s Activities

<table>
<thead>
<tr>
<th>Period</th>
<th>Amount Paid</th>
<th>Major Activities</th>
</tr>
</thead>
</table>
| 12/1/2005-11/30/2006     | $810,073.20   | • Coordinated activities with P-3 Focus Area<sup>4</sup>  
• Created report on the developmental services policy environment in L.A. County  
• Established a Steering Committee  
• Identified and recruited pilot learning collaborative communities  
• Conducted needs assessment of pilot communities  
• Developed collaborative curriculum, data collection instruments and trained key staff  
• Developed parenting education curriculum |
| 12/1/2006-11/30/2007     | $496,113.38   | • Established a learning collaborative consisting of 8 primary care practices and 12 early childhood education settings from the Metro and Westside areas of L.A. County  
• WIC piloted EDSI-designed classes on promoting effective parent-provider interactions  
• Began expansion of class to other WIC centers  
• Completed a report on the policy areas key to achieving early detection and support for developmental delays  
• Began participation in California Assuring Better Child Development (ABCD) Screening Academy |
| 12/1/2007-11/30/2008     | $1,538,768.52 | • Developed recruitment materials and developed partnership with California Chapter 2 of the American Academy of Pediatrics for a medical collaborative to work on quality improvement skills with pediatricians  
• Provided continuing support to Learning Collaborative members  
• Continued expansion of parent-provider interaction class to other WIC centers  
• Began Physician Learning Collaborative  
• Began working on population collaboratives in Santa Monica and Pacoima  
• Started Residency Learning Collaborative |
| 12/1/2008-11/30/2009     | $1,183,237.85 | • Continued Physician Learning Collaborative  
• Continued Residency Learning Collaborative  
• Began Pacoima Population Collaborative  
• Studied effectiveness of WIC class  
• Leveraged with LAUSD, LACDMH, STEP program  
• Developed messaging/communications strategy to work on sustainability |
| 12/1/2009-11/30/2010     | $1,463,757.17 | • Maintained extension of improvement activities in the Clinician Expansion Collaborative, support activities of the Population Collaboratives and support the Residency Program Collaborative.  
• Wrote final reports |
| Total Spent               | $5,491,950.12 |                                                                                                                                            |
1 300 percent of the Federal Poverty Line (FPL) would be $67,050 yearly gross income for a family of four in 2011.

2 The California version of Medicaid, a federal program co-funded by the states to provide the impoverished with free or low-cost medical insurance. In California, the income cut-off varies by age.

3 A low-cost medical, dental and vision insurance program for California children under 250 percent of the FPL who don’t qualify for Medi-Cal.


5 Ibid.

6 Early Developmental Screening and Intervention Initiative Request for Proposals, May 18, 2005.

7 Developed originally by the Associates for Process Improvement, the Model for Improvement has been adopted by many organizations, including the Institute for Healthcare Improvement, National Initiative for Children’s Healthcare Quality, American Academy of Family Physicians and the United States Indian Health Service.

8 As stated in meeting packets.

9 Anticipatory guidance refers to advising parents on what developmental changes they should expect to see in their children in the upcoming months.

10 The Magnolia Community Initiative is a collaboration of community-based organizations dedicated to improving outcomes for children in a five square mile area southwest of downtown Los Angeles.

11 The EDI is a population-based measure of child development based on kindergarten teacher observation of their students.


13 “Providers” refers to medical and early childhood education professionals.

14 Moira Inkelas, Sarah Martinez, Leila Espinosa, Marlene Zepeda, Kathryn Smith, Joanna Mackie, Thomas Rice and Lou Brown, UCLA Center for Healthier Children, Families and Communities, Policy Scan: Desired Results and Achieving Improvement in a System of Early Identification and Intervention in Los Angeles County, September 2007.


16 ABCD Strategy Implementation Matrix-System Level (Policy), July 2008

17 Having a formal system of reminders to provide appropriate preventive services

18 In California, children under the age of 4 with developmental delays are referred to a “regional center” that assesses and provides services to the child.

19 All survey quotes are presented as written and were not edited, except for clarifications in brackets.

20 All of the comments are paraphrased, based on written or typed notes from the focus group discussions. Those comments are indicated in italics in the text.

21 The PDSA method guides participants through making small changes, examining the results and expanding the change based on the findings.

22 Inkelas, Moira. “Re: EDSI Update?” Email to Holly Campbell. 28 June 2012.

23 Ibid.

24 Early iteration of Best Start, a place-based program that was the centerpiece of the First 5 LA 2009-2014 Strategic Plan.

Acknowledgments

First 5 LA oversees the Los Angeles County allocation of funds from Proposition 10, which added a 50-cent tax on tobacco products sold in California. Funds raised help pay for health care, education and child development programs for children from the prenatal stage to age 5 and their families. First 5 LA’s mission is to increase the number of young children who are physically and emotionally healthy, safe and ready to learn. For more information, please visit www.First5LA.org.

First 5 LA:

Holly Campbell
Research Analyst