From Baseline to Best-In-Class:

Improving the Health of Georgia's Children Ages One to Five

Health Screening and Healthy Development Project

- Improving the quality of care
- Empowering families with relevant, accessible information
- Unifying and coordinating child-centered data

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Acknowledgements

This work was made possible by Federal Grant Award No. 90SC0004/01 from the U.S. Department of Health and Human Services, Administration for Children and Families, through a contract between the Georgia Department of Early Care and Learning (DECAL), the grant funded agency, and the Georgia Department of Public Health (DPH).

The Georgia Department of Public Health (DPH) is the lead agency in preventing disease, injury and disability; promoting health and well-being; and preparing for and responding to disasters from a health perspective. In 2011, the General Assembly restored DPH to its own state agency after more than 30 years of consolidation with other departments. At the state level, DPH functions through numerous divisions, sections, offices and programs. Locally, DPH funds and collaborates with Georgia's 159 county health departments and 18 public health districts. Through the changes, the mission has remained constant—to protect the lives of all Georgians. Today, DPH's main functions include: Health Promotion and Disease Prevention, Maternal and Child Health, Infectious Disease and Immunization, Environmental Health, Epidemiology Emergency Preparedness and Response, Emergency Medical Services, Pharmacy, Nursing, Volunteer Health Care, the Office of Health Equity, Vital Records, and the State Public Health Laboratory. For more information about DPH, visit www.dph.ga.gov.

The Georgia Department of Early Care and Learning (DECAL)—Bright from the Start—is responsible for meeting the child care and early education needs of Georgia's children and their families. It administers Georgia's nationally recognized Pre-K Program, licensed child care centers and home-based child care, administers Georgia's Childcare and Parent Services (CAPS) program, manages federal nutrition programs, and manages voluntary quality enhancement programs.

Report Editorial Services
Provided by Ottima Group, LLC

Report Brochure Design and Execution
Provided by Georgia Department of Public Health
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Executive Summary

Georgia's population is younger, lower-income, and more mobile than the population of most states. According to the U.S. Census Bureau, Georgia has an overall population approaching 10 million, making it one of the most populous states in the nation. Most significant is that 7.65 percent of Georgia's population is under the age of five, which is the fifth highest percentage among the 50 states (and the highest of any state east of the Mississippi River).[1]

Poverty provides a serious challenge for Georgia's children, with 26 percent of Georgia's young children living below the poverty line, a higher percentage than for the nation as a whole at 24 percent. Whether urban, suburban, or rural, the percentage of children who are low income is higher than the national average.[2]

- The rural population represents the highest difference—67 percent compared with 53 percent nationally.
- In urban areas, low-income children represent 58 percent, compared with 52 percent nationwide.
- For suburban areas, low-income children represent 38 percent, versus 36 percent nationally.
- In all categories, many of these are children of the working poor, as 55 percent of Georgia's low-income parents have full-time, year-round employment, higher than the 47 percent national average.

In addition, Georgia's mobility rate is high. Georgia ranks seventh among states in numbers of residents going to other states and fourth in receiving residents from other states. All told, 28 percent of Georgia's low-income young children have moved recently, compared with the national average of 21 percent.[3]

Couple all this with the fact that Georgia ranks 42nd among all 50 states for child well-being, and you can see quickly that the conditions facing Georgia's young children compel us to act to improve the services provided to them and their families.

In September 2009, an executive order created the Georgia State Advisory Council on Early Childhood Education and Care. In 2012, the Council was merged into the Georgia Children's Cabinet (Cabinet). The goal of the Cabinet is to improve outcomes for children so that all children enter kindergarten ready to learn. Accomplishing this goal requires coordinated, focused efforts on the part of families and state public and private partners. The Cabinet is working to create a comprehensive plan and roadmap to strengthen Georgia's existing infrastructure, to identify and fill gaps in services to the birth to age 5 populations, and to coordinate and link programs.

To improve outcomes for children, the Cabinet is focused on three primary objectives:

- Improving the quality of care
- Empowering families with relevant, accessible information
- Unifying and coordinating child-centered data

In 2011, Bright from the Start: Georgia Department of Early Care and Learning (DECAL) contracted with the Georgia Department of Public Health (DPH) to complete the objectives of the Cabinet concerning the Health Screening and Healthy Development portions of the Georgia grant awarded to DECAL [Award No. 90SC0004/01 from the U.S. Department of Health and Human Services, Administration for Children and Families].

Through the Health Screening and Healthy Development project, DPH undertook the vast task of embarking on a comprehensive and systematic look at the never-before-examined areas of health screenings.

The overall objective of this uncharted area of work is to help better position the birth to age 5 population of Georgia for healthy development and better outcomes as they enter school. The near-term objective of the project was to examine four areas of screening:

- Developmental
- Hearing
- Vision
- Oral health

The project was designed to expose gaps, overlaps and barriers and to identify and recommend initiatives to improve access, use, delivery and coordination of these health screenings to ensure our youngest Georgians have successful outcomes as they enter school ready to learn and succeed.

From the start, DPH, working in partnership with DECAL, created a systematic approach and organization to the project by ensuring this work included an in-depth review and examination of the existing programs, current practices, policies, processes and methodologies, tools and the available statewide early childhood resources. Coupling this far-reaching analysis with a needs assessment and using surveys, focus groups with key stakeholders, resource mapping and other investigative data collection, clear themes surfaced and workable remedies to gaps and barriers became apparent. The investigation results point to implementable, feasible recommendations, supported by data, to spur improvement in both delivery and follow-up for identified needs.

To ensure a robust outcome, families were actively engaged throughout the process, and DPH also involved medical and health practitioners, child care providers and others. In addition, a thorough review of current literature to uncover national and other state approaches showcased some very successful programs to round out the examination of each component.

Findings and Recommendations

Most experts agree that a coordinated application of health screenings, early observations and interventions where needed are among the most effective methods to foster positive outcomes for learning. Identifying and then minimizing all possible barriers from such issues as hearing and vision problems, addressing developmental issues, and preventing or correcting oral health concerns or problems in order to give these children a greater chance of learning readiness when they enter school.

With only about 50 percent of children birth to age 5 in a pre-school type of program, the challenges to coordinated screening and effective follow-up and follow-through when problems are identified may seem daunting. Overlaying the need with the fiscal crisis faced by the state and federal government, it is abundantly clear that today's issues demand innovative approaches. According to several studies, preventative care investments in our children have been demonstrated to provide huge returns.[1]

After an in-depth and extensive investigation, several universal themes emerged that can be summed up in five major areas of need.

Medical Provider Challenges and Resources

A medical-dental home is the model for the 21st century primary care. Its goal is to address and integrate high quality health promotion, acute care and chronic condition management in a planned, coordinated and family-centered manner. Patient care associated with the medical home improves outcomes in health status, timeliness of care, family centeredness and family function. Yet this is an elusive concept for many of Georgia's children under 5 years old.

Across the state and especially in rural areas, there is a serious shortage of specialists and subspecialists. There is also a tremendous lack of access to providers who accept Medicaid, and low reimbursements prevent more specialists from taking Medicaid patients, all adding up to gaps in service to the neediest children and important corrective measures being delayed.

Families—A Vital Link that is Often Broken

Low health literacy, cultural and language differences, maternal depression, transportation challenges and socio-economic conditions all contribute to a lack of follow-up and follow-through even when screening identifies an issue that can be minimized with early intervention. A recent survey conducted in collaboration between DPH and DECAL, aimed at the directors of licensed child care programs, shows that even when problems are identified through observation and through screening, parents often resist intervention either because of lack of understanding or because of economic concerns.

Missed appointments due to transportation issues, work conflicts, or lack of understanding are also keeping others from accessing those scarce specialists, with limited time slots. This is a universal theme among medical care providers.

Universal and Coordinated Data Collection and Access

A serious lack of complete, coordinated, integrated health data makes it difficult for family physicians to have the proper information they need for patient referrals and follow-up care. Hospital screenings and public health department data often do not get fed back to a medical home, even when one is created. Screening, referral and follow-up data has no universal linkage, which often results in duplicate screenings, or worse, delayed interventions. Moreover, there is no ability for referring physicians to find out if the patient has been seen and what, if any, corrective measures or interventions have been prescribed.

Follow-up and Follow-Through

Navigating the system and ensuring delivery of care for a child with a diagnosis requiring intervention is a daunting task for many families due to language, educational level, transportation and insurance challenges. Care coordinators can serve a vital role in educating families and helping them navigate the system. Assigning a care coordinator or health advocate can be a tremendous boost toward ensuring that families get the support, education and understanding they need to take their children from the point of getting screened to receiving a diagnosis and then through referral, follow-up and follow-through.

Assigning a care coordinator or health advocate can be a tremendous boost toward ensuring that families get the support, education and understanding they need...

New technologies for the 21st Century offer cost-effective, high-quality solutions

Expand Medical Provider Resources

Georgia is among the forefront in telehealth delivery services, using telecommunications and related technologies in support of patient care, health education and administrative activities. The subset, telemedicine, is focused on clinical services, both clinician-to-clinician and clinician-to-patients. Telehealth and telemedicine together are supporting innovations in health care delivery, health education and distribution of health-related information such as medical records and clinical services.

Telemedicine can help eliminate the distance and transportation challenges to accessing specialty care and intervention for children in rural communities. It is being applied in virtually all medical domains and provides both convenience and efficiency, helping to alleviate some of the delay in service delivery.

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Another way to expand resources where there are shortages is to increase Medicaid reimbursements to health care providers and specialists serving young children. This would help add more specialists to the list of providers who take Medicaid patients.

Empower Families through Enhanced Outreach

While parents are getting some educational health information in a variety of ways, there is a huge opportunity to improve and increase family awareness, education and support by stepping up the educational efforts and emphasis toward empowering families. Providing tools to increase health literacy will allow families to understand the critical nature of early screenings, follow-up and follow-through, and therefore seek to identify and remediate potential problems and early corrective measures that can impact a child’s ability to learn.

All currently available communication and education tools about developmental, hearing, vision and oral health examinations should be used at existing family interaction touch-points, to expand this education effort.

Also vital are methods such as expanding outreach and employing the new technologies along with the more traditional vehicles of TV and radio. Some examples are: Prenatal appointments and prenatal classes; Medicaid enrollment and re-certification; well-baby care visits; partnerships with Babies Can’t Wait, religious organizations, WIC, and others; sending text alerts and increasing the visibility of “Text for Baby” programs and reminders; social media; and TV and radio public announcements on English and Spanish stations. These efforts can benefit from modeling successful programs and creating comprehensive messaging about parent responsibility, screening and follow-up, such as the state’s immunization campaign and Easter Seals online developmental screening effort.

More assistance is needed with transportation to appointments, and telemedicine should offer great opportunity for specialized care in more remote and rural areas.

These programs can build the capacity of families to be true partners with their child's health/medical providers by improving knowledge, assistance and support in obtaining screenings, follow-up and follow-through on results and recommendations. Better coordination of health screenings and follow-up services by public and private medical-dental providers can make this process more successful. Families increased empowerment with providers will lead to improved policies, practices and tools related to health services.

Universal and Coordinated Data Collection and Access

Because of the high mobility nature of Georgia's children and the fact that more than half never participate in a recognized pre-school or day care environment, there is an urgent need to implement immediately the Cross Agency Child Data System. This unification across all agencies, accessible to medical care providers and allowing data collection from all entry points, such as Head Start and Pre-K, the Department of Public Health and the medical home, will result in savings in time, missed diagnoses, children falling through the cracks and much more. It will also provide an excellent feed into telemedicine.

Care Coordinators Needed to Facilitate Education, Follow-up and Follow-Through

A care coordinator or health advocate can help families gain an improved understanding, education and knowledge to facilitate them through the most difficult aspects in a teaching role, so that going forward, the family can take the reins, but have someone to turn to when problems arise. One proposed solution is the creation of Health Navigator role(s) within the school system.

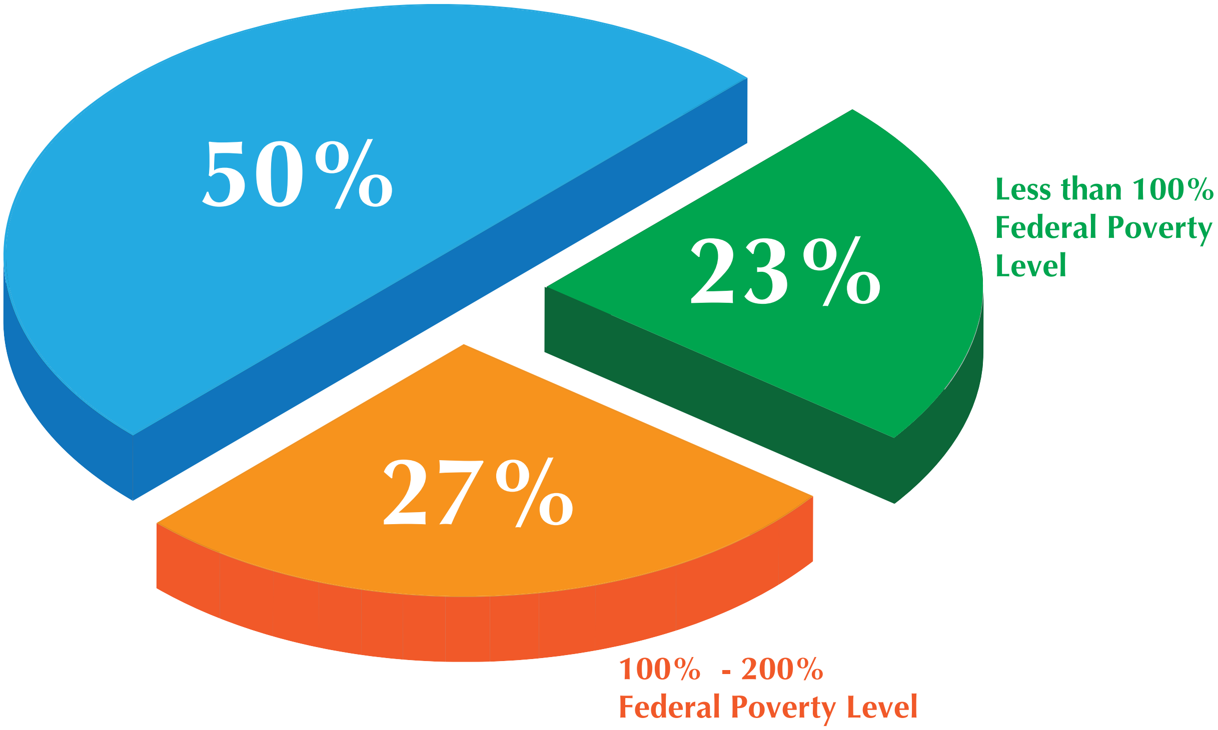
A health coordinator or navigator can help serve as the link between the primary care physician, specialty providers and other ancillary providers to ensure service delivery for identified children. Helping families navigate through the issues of getting specialty care, insurance or Medicaid coverage and helping communicate, educate and monitor from screening to follow-up and follow-through will create a positive outcome. An advocate or navigator, with appropriate cultural sensibilities and language skills, can help address a family's challenges, fears and confusion when a child is diagnosed with developmental, hearing or vision problems, and can help families better appreciate the importance of good oral health.

DPH Form 3300 Can Evolve to a Useful Instrument for Early Identification of Issues.

All children, who have never been in a Georgia public school, are required to have a completed and signed Form 3300 for school entry. However, the consensus on the part of many of the medical care providers is that the form is an end in itself and doesn't provide all of the information needed to properly serve children.

Improving the required information on this mandatory form can turn a check-listed item into an extremely important tool in identifying children who need follow-up or interventions in hearing, vision or oral health. By expanding Form 3300's requirements, the form can be entered into the Cross Agency Child Data System, thus ensuring a better picture for health care providers going forward. This required form has the potential to improve follow-up and ensure proper interventions for children with identified problems in hearing, vision, and oral health examination and prevent them from slipping through the cracks.

Georgia Infants & Toddlers by Family Income Level



50%

of Georgia infants and toddlers live in low-income families {U.S. is 46%}

11% Live with unemployed parents
36% Live with single parent
67% Have at least one risk factor known to increase the chance of poor health, school, and developmental outcomes

Source: (National Center for Infants and Toddlers-Zero to Three, State Baby Facts Sheet 2011)

Introduction

Experts generally agree that all babies need good health, strong families, and positive early learning experiences to foster healthy brain development and realize their potential. We know that brains develop at lightning speed in the first three years of life. A baby's early experiences shape the brain's architecture into a strong—or fragile—foundation for learning, health, and success in the workplace.

Adverse early experiences, such as poverty, can weaken babies' brain development and follow them their entire lives. Lack of nutritious food during pregnancy increases the risk of infant mortality and poor long-term health. Preterm babies may endure lifelong consequences like blindness, chronic lung disease, and other conditions. Underweight babies are 166 percent more likely to be at developmental risk compared to normal weight babies.[2]

Investing Early Pays in More Productive Adults, Lower Costs in the Future

Georgia ranks 42 among all 50 states for child well-being. Of the identified 438,885 infants and toddlers in the state: *(National Center for Infants and Toddlers-Zero to Three, State Baby Facts Sheet 2011)*

- 67 percent have at least one risk factor known to increase the chance of poor health, school, and developmental outcomes.
- 11 percent live with unemployed parents.
- 36 percent live with a single parent.
- 50 percent of Georgia infants and toddlers live in low-income families.

The issues are serious when you consider that:

- Only 56 percent of Georgia children birth to age 5 received care within a medical home. *(2011/2012 NSCH National Chartbook Profile for GA vs. Nationwide)*
- Many at-risk preschoolers are not associated with a medical home, and often those providers who conduct screening are not knowledgeable of current practices or do not follow evidenced-based practices.
- Preschoolers who are not part of a federal or state program are not required to have evidence of screening
- Health care providers who have contact with preschool children are missing opportunities to educate parents as well as screen children during periodic well-child visits.

Given these statistics and the size of the population, the Cabinet is leading a three-year effort to pave the way to help children from birth to age 5 have the very best start in life and school readiness by examining all elements and developing a roadmap for improvement and success for the youngest Georgians.

The Cabinet's efforts are focused on helping families better understand what constitutes quality care and education and on helping to improve the quality of early education and care at the individual provider and system level. Families serve as a child's first teacher and caregiver. Empowering families by providing appropriate, relevant and timely information helps ensure that needs are identified early and children with special needs receive services early to avoid obstacles to learning.

Another important element is unifying and coordinating child-centered data. A unified early learning data system would provide parents with the information they need to advocate on behalf of their children; educators with the information they need to serve those children; and policymakers with the information they need to manage the state's resources. Having accurate data from Georgia's early care and education stakeholders is key toward providing solutions to care coordination, filling gaps in services, follow-up on children's health and developmental screenings, assessing quality in child care and early education programs, and developing strategies to improve quality.

It also is clear that for those children being reached, a comprehensive approach to health and developmental screening, follow-up and follow-through services is needed to eliminate overlaps and gaps, and to ensure that the next steps are followed through to ensure all children birth to age 5 are ready for learning and have the most advantageous opportunity for success in school and in life.

In this report, the Georgia DPH has laid out the key themes and the identified gaps and barriers, exposed inconsistencies and uncovered opportunities for improvement. You'll find practical recommendations that can be implemented with expediency and some that can be introduced first on a pilot basis and then statewide as effectiveness is assessed or needed refinements identified.

Each of the four areas investigated—Developmental, Hearing, Oral Health Examination and Vision—are thoroughly vetted and recommendations provided. Through the resource mapping efforts, DPH identified not only the current resources, but also gaps and barriers to accessing those resources.

One of the most glaring opportunities is in the area of follow-up for children identified with a possible barrier to learning. Whether developmental, hearing, oral health examination or vision, consistently cited was the failure to provide a timely follow-up evaluation and follow-through on corrective measures. The various reasons for failure in follow-up and follow-through are the subject of many of the recommendations. Detailed examination of the survey on policy, practice and tools used to perform screenings, referral and follow-up for children shows that existing practices leave gaps and inconsistencies in the services to these children.

A significant finding was the need for better awareness and health literacy for families on the importance of social/emotional development for this age group.

Recommendations for training in some of the four screening areas surfaced, as well as how to train both caregivers and evaluators on screening instruments and referral, follow-up and follow-through. Another significant finding was the need for better awareness training for providers of all types on the importance of social/emotional development for this age group.

The following report provides a foundation for improvement. It is in no way exhaustive of all the current programs or best practices.

Project Methodology

The Health Screening and Healthy Development project represents a far-reaching analysis and needs assessment.

The research efforts included hosting focus groups with physicians, school and public health nurses, as well as conducting numerous phone interviews with physicians from a federally qualified health center and with pediatric dentists. Also, surveys were used to collect information and ideas from larger groups. These sources provided invaluable understanding of the health care providers' perspectives as a source of referrals and as recipients of referrals.

The project combined these materials with resource mapping and other investigative data collection. To ensure a robust outcome, families were actively engaged throughout the process, along with child care providers.

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In addition, a thorough review of current literature to uncover national and other state approaches showcased some very successful programs to round out the examination of each component. The criteria for selection of research articles for the review included: research was conducted in the United States; published in English, in peer-reviewed journals and published no earlier than 2009; and articles related to developmental, hearing, vision or oral health screening, referral and/or follow-up of children birth to age 5.

Key Themes Emerging from Focus Groups and Surveys

Focus groups and surveys brought new insights into needs, problem areas, and the actual situation faced by providers regarding screenings, follow-up and follow-through. What follows are some of the themes and possible solutions to issues that emerged from the analysis of the participant responses, in their own words, to a common set of questions about the challenges to screening follow-up care of young children.

The topics of special interest to the Health Screening/Healthy Development Project included:

1. Access to follow-up referral services
2. Families' understanding of the importance of screening follow-up care
3. Tracking /monitoring
4. Challenges to screening follow-up
5. Improvement suggestions

Theme—Access to Screening Follow-up Referral Services

- *"Family physicians do not have the information they need for patient follow-up care."*
- *"Access to subspecialists is a problem especially in rural areas. There is a shortage of subspecialists such as audiologists, developmental pediatricians, board-certified psychiatrists, and pediatric dentists. Follow-up with developmental screening/behavioral health is difficult to impossible."*
- *"Access to providers who are accepting Medicaid is difficult. Foster children, who are on Medicaid and need counseling, need psychiatrists to see them in order to receive services. It is difficult to get the prior authorization which is needed."*
- *"Access to transportation is a huge issue especially outside of the metro areas. For patients without insurance or Medicaid, or access to referral services, it often takes a minimum of a two-hour drive to see a specialist. Medicaid vans have to be scheduled three days in advance and are often unreliable and erratic. Van only allows child being seen and parent to ride; often the parent may not be able to get a sitter for the other children and has to miss the appointment. If a patient misses an appointment with a subspecialist and did not cancel the appointment in time, the patient is removed from the system. Often transportation challenges are the cause for missed appointments."*
- *"Newborn screening results may not get to baby's health home. The doctor who sees the child in the hospital nursery may not be the primary care physician (PCP) who sees the child after discharge. If there are abnormal results, the hospital physician often doesn't know who the child's PCP is and has to go to DPH. An additional issue is the patient may have a new/different name. The success of retrieving hearing results is hospital-specific. Some hospitals are better than others. They may or may not inform the family about taking the newborn paperwork to the first pediatrician visit."*
- *"Families' insurance coverage and/or cost of care are obstacles to accessing services."*
- *"Missing appointments (also called "no shows") creates barriers to others' access to follow-up care."*

Theme—Communicating with the Family, Interaction and Education

- *"The electronic medical record (EMR) is a tool physicians are using to assist with scheduling prompts and documentation support associated with various assessments and also to serve as a repository of educational materials."*
- *Physicians' offices are interacting with families and educating them in a variety of ways."*
- *"Some examples of how these offices are communicating with families include providing handouts and pamphlets; holding conversations and educating parents."*
- *"Some offices are using a referral coordinator or care coordinator to contact family, providers, school for care of child, and sharing documentation, such as sending referrals to a referral coordinator who checks with insurance provider and finds physicians who will then follow up with families. However, this is only tracking initial referral."*
- *"Pediatricians are being asked to provide more services during what is usually a well-child visit, such as applying fluoride sealant, and perceive it to be due to shortage of pediatric dentists."*
- *"There is a perceived problem by providers with parent apathy and sense of responsibility."*

Theme—Tracking and Monitoring the Referral Process

- *Some physician offices appear to have established, effective protocols or processes for tracking and monitoring their referrals, as well as for providing education to families and the child.*
- *Family physicians reported that they do not consistently receive feedback from service providers on referrals made for follow-up care and that pathway to contacting families is a challenge to parent communication, monitoring and tracking.*
- *"Having an interpreter for our Hispanic population works very well."*
- *"Missed appointments for follow-up care create barriers to providing care." "Even when the doctor does everything to get the child referred, sometimes the family doesn't follow through for any number of reasons."*
- *"When referred to Babies Can't Wait (BCW), a family may refuse the program because some families don't want someone coming into their home."*
- *"Pediatricians may see child up to age 2 and they may not see child in the office again until age 4 when they are ready to enter pre-kindergarten. Often families do not understand the importance or purpose of the well-child visits."*
- *"Tracking problems are prevalent due to moving and cell phone numbers changing or out of service. Having a valid contact pathway is important."*

Theme—Challenges to Follow-up Care

- *"Georgia does not have an organized, coordinated system to address children with developmental or mental health issues."*
- *"Lack of follow-up with the medical home creates delays in care."*
- *"Access to transportation to referral provider appointments is an issue especially in rural areas. Early identification is key."*
- *"Some issues include: Oral health literacy; low health IQ is a barrier; no medical/dental coverage."*
- *"A shared understanding of the importance of a dental home is needed."*

- *"There are long-term shortages of specialty providers and specialty care, especially developmental specialists and psychiatrists. Psychiatrists must write prescriptions or they are not reimbursed."*
- *"Wish we had more providers available, even once a month—e.g., orthopedics. The ride to Atlanta can be very difficult for parents to make. In our situation the orthopedists came one day once per month. Another idea is to have the specialist provider needed (pediatric ophthalmologist, for example) come in regularly—especially good for our premature babies. There is not good follow-up for vision care."*

Themes—Suggestions for Improving Outcomes

- *"Improve and increase family awareness, education and support by increasing the educational efforts and emphasis to empowering parents and providing tools to increase their health literacy."*
- *"They need more understanding about the critical nature of early screenings, follow-up and follow-through to identify potential problems (plus the value of early corrective measures) that can negatively impact a child's ability to learn. Use communication and education tools about developmental, hearing, vision and oral health examinations at existing points of contact, expand outreach, and employ the new technologies as well as the more traditional vehicles of TV and radio. Examples include: prenatal appointments and prenatal classes, Medicaid enrollment and re-certification; well-baby care visits; WIC; text alerts and 'Text for Baby' programs and reminders; social media, and TV and radio public announcements. Model successful programs with comprehensive messaging about parent responsibility, screening and follow-up, such as the state's immunization campaign, Easter Seals, etc."*
- *"Increase and improve referral feedback loops, e.g., from Public Health to medical home, Public Health and dental home."*
- *"Create service care coordinators to follow up in Babies Can't Wait (BCW) and with families to help coordinate through to successful completion of referral and getting all testing and information back to medical-dental home. Look at a case management function in Medicaid for opportunities."*
- *"Improve assistance with transportation to appointments and create opportunities for specialized care to come to more remote and rural areas at least once a month. The shortage of subspecialties can be remedied using telemedicine and setting up monthly centers with specialists so appointments can be scheduled in a fair type of atmosphere with child care services—for instance, pediatric ophthalmologists."*
- *"Increase obstetrician engagement in discussion of factors that influence the baby's healthy development and early infant care."*
- *"Improve the BCW services to families, physicians and on their website for more effective points of contact, referrals, follow-up and follow-through. For example, identify a list of resources for specialties and subspecialties that accept Medicaid, or do not need insurance, and provide those lists to PCPs and health care providers so that referrals can be made easily and effectively; for example, lists of resources for audiology, pediatric dentists, and others."*
- *"Identify a coordinator within BCW to follow up with patients for WIC."*
- *"Place phone numbers in large fonts and in easily seen places."*

- *"On the Website:*
  - *List contact information for physicians by county or ZIP code, and the actual name of person to ask.*
  - *Create hyperlink with developmental milestone information that physicians can access."*
- *"Include the {American} Academy of Pediatrics pre-screen questionnaires as part of the Well Check form; encourage use across all families."*
- *"Improve access to oral health care for the birth to age 5 ranges, something in place after child is 2 years old."*
- *"Increase access to specialty services to underserved areas through flexible and innovative scheduling of specialty providers. For example, provide more flexible office hours to improve family access on evenings and weekends; arrange for mobile visits to underserved areas monthly, or in home visiting."*
- *"Improve follow-up and feedback from the school to physicians on Forms 3300 and 3231."*
- *"Add additional items to the Form 3231 (immunization form), such as check boxes for age-appropriate development and hearing, because Form 3231 is reviewed regularly."*
- *"Reduce administrative costs to insurance companies to 10 percent, so as to apply those dollars to children."*
- *"Improve the reimbursement rates so as to make more practitioners available in underserved areas.."*
- *"Offer more parenting classes and coaching, teaching families how to parent, led by family physicians, health care providers and other parents. These can be great occasions for interaction, videos, socialization with other parents to share and learn. Use school and community settings for educational talks by pediatricians and other specialists."*

"Improve access to oral health care for the birth to age 5 ranges, something in place after child is 2 years old."

Survey Supports Need for Stepped-up Family Education Efforts

DECAL Child Care Program Survey Report Summary

The Department of Early Care and Learning (DECAL) asked DPH to develop a survey questionnaire for the directors of licensed child care programs in the state who were interested in or planning to participate in Georgia's Tiered Quality Rating and Improvement System (TQRIS), known as Quality Rated (QR). The purpose of the survey was to collect data regarding items in the Health Information and Family Resources section described in Standard 2 of the *QR Program Manual*. This information included developmental, vision and hearing screening, as well as oral hygiene.

The DPH program staff and epidemiologists, developed a 31-item survey that was sent to 940 child care program directors from a list sent by DECAL to DPH. The survey was conducted between March 25 and April 5, 2013. There were 404 responses for a response rate of 43 percent. The MCH epidemiologist analyzed the relationship between the child's age and type of child care program and four variables:

1. Is your program performing health screening?
2. What barriers has your child care program experienced in implementing health screening?
3. What starts the referral process?
4. What are the barriers to referral and follow-up?

The data from that analysis is presented here.

1. Is your child care program currently performing health screening? This item was analyzed by age groups, by type of child care program (Child Care Center [CCC], Group Day Care Center [GDCC] and Family Day Care Home [FDCH]) and by both age and type of program. Percentages responding "yes" are reported:

- Screening by age: primarily in the 3- to 5-year-olds (22 percent) and those under 3 (20 percent)
- Screening by type of child care: CCC (24 percent); GDCC (20 percent)
- Screening by age and type of child care:
  CCC: primarily in ages 3-5 (25 percent) and those under age 3 years (23 percent)
  GDCC: primarily in ages 3-5 (22 percent)
  FDCC: less than half of each of the above percentages

2. What barriers has your childcare program experienced in implementing health screening? There were nine pre-determined options, plus "other."

- Barriers: time to conduct screening was the highest and the same for all three age groups (23 percent).
- Items at or between 10-12 percent were: ability and time to score screening for age 5 and older; interpreting results for under age 3, and 5 and above; cost of staff (know how to screen) for 3- to 5-year-olds.
- Barriers by type of program: time to conduct the screening was the highest for GDCC (50 percent); CCC and FDCC were in the 20 percent range.

3. What starts the referral process?

Start Referral Process by Age and Program: Child Care Center

Ages	Staff Concerns	Family Concerns	Screening Results
Less than age 3	27%	25%	17%
3 to less than 5	26%	24%	18%
Age 5 and over	27%	25%	16%

Start Referral Process by Age and Program: Group Day Care

Ages	Staff Concerns	Family Concerns	Screening Results
Less than age 3	47%	35%	12%
3 to less than 5	41%	32%	14%
Age 5 and over	47%	35%	12%

Start Referral Process by Age and Program: Family Day Care

Ages	Staff Concerns	Family Concerns	Screening Results
Less than age 3	30%	30%	13%
3 to less than 5	29%	31%	12%
Age 5 and over	27%	26%	13%

Comments related to this question:

- *"Provide Babies Can't Wait (information) for the school system over the age of 3."*
- *"We communicate with the parent and let them know what we have observed or noticed; from there we talk with them about where they can go to get their child the necessary help; the parent takes over the process from there."*
- *"All families are asked to take their child in once a year for a full health screening with their own pediatrician."*
- *"Resource and referral agency telephone contact numbers are provided and it is the guideline that only the parents of the child can call and ask for assistance."*

4. What are the barriers to referral and follow-up? There were five response categories, plus "other."

Barriers to Referral and Follow-up by Age and Program: Child Care Center

Ages	Families believe services not needed	Family does not want services
Less than age 3	37%	25%
3 to less than 5	36%	25%
Age 5 and over	38%	26%

Barriers to Referral and Follow-up by Age and Program: Group Day Care

Ages	Families believe services not needed	Family does not want services
Less than age 3	43%	14%
3 to less than 5	33%	11%
Age 5 and over	43%	14%

Barriers to Referral and Follow-up by Age and Program: Family Day Care

Ages	Families believe services not needed	Family does not want services
Less than age 3	41%	21%
3 to less than 5	43%	20%
Age 5 and over	41%	21%

Other barriers: **lack of transportation** was much higher for GDCC (14-22 percent) compared to FDCC (12-13 percent) and CCC (14-17 percent); **availability of providers** was much higher for GDCC (29-33 percent) compared to FDCC (8-9 percent) and CCC (10-11 percent).

Comments related to this question:

- *"Mostly, families are in denial and are scared of the costs. When they learn that the costs are free to them and that we will help them with paperwork, etc., they are more inclined to get services."*
- *"LEA (local education agency) process can often take a long time before a child starts to receive needed services."*
- *"County screening services can be behind at least a month; by the time the services are finally started, the school year may be about over."*
- *"Families live out of our county." "Some cannot get off work." "Families do not have insurance." "Parents (are not) making the time to follow through." "Parents will sometime miss appointments due to their work schedule."*
- *"There is a lack of specialized providers for children birth to 5 in our area."*

Families Need Greater Understanding and Knowledge on Importance of Well-child Visits

Key Screenings for Birth to Age 5

The overall goal of the Health Screening and Healthy Development Project is to improve screenings and follow-up care in the four key screening areas for Georgia children birth to age 5.

The project set out to contribute to the State of Georgia comprehensive plan, and to draft recommendations and a road map to further these objectives:

- Improve families' access to health screening and follow-up care for their children from birth to age 5.
- Improve support to families to obtain and follow-up on care for their children birth to age 5.
- Improve the coordination of health screenings and follow-up care by public and private providers.
- Improve the reporting and monitoring process for health screening and follow-up care.
- Improve policies, practices, and tools as they relate to health screening and follow-up care.

Each of the four screening topics—Developmental, Hearing, Oral Health Examination and Vision—has been thoroughly investigated and recommendations for improvements are provided. These are accompanied by recommended specific initiatives and actions designed to meet the objectives of the project. Ultimately, these would lead to having screenings and following up on results becoming "a community norm."

The following sections discuss current resources, practices and issues, along with gaps and deficiencies. Most importantly, these four sections present the detailed outcomes, findings and recommended solutions from the study of each screening area.

DEVELOPMENTAL—Findings and Solutions

FINDING 1: Families Need Greater Understanding and Knowledge on Importance of Well-child Visits

An examination of the current practices points to families and communities suffering a lack of understanding and knowledge about the critical importance of keeping pediatric, preventive, and well-child visits, which include developmental screening. Families also need a greater understanding of the need to follow up and follow through on any diagnosed problem and referrals to a medical-dental home, so they do not miss out on the surveillance and guidance this would provide toward positive outcomes.

Only 56 percent of Georgia's children, birth to age 5, are reported to have received care in a medical home.[4] Nationally, Georgia ranks 44th in the number of uninsured children birth to age 5.[5] It's imperative that this situation be remedied, since children who experience the recommended number of well-child visits in the first two years of life have a 23 percent higher adjusted odds ratio of being ready for school than those with fewer visits.[6]

Recommendation: Embark on a statewide education campaign to increase public awareness and family and community health literacy about the importance of having a medical-dental home and about keeping all preventive pediatric well-child visits and follow-up appointments, so that getting screenings and following up on results becomes "a community norm." Develop the campaign through outreach and partnering with other stakeholders and agencies that serve the birth to age 5 populations, from planning to implementation.

Initiatives and actions to achieve the above recommendation:

- Adopt some of the features of other successful campaigns such as the "Immunize by 2" to extend the message.
- Leverage April, Month of the Young Child and National Autism Awareness Month, and October, Month of the Healthy Child, to promote the importance of the medical and dental home and preventive well-child visits through a variety of appropriate media vehicles. An example would be texting, through partnerships such as Verizon, T-Mobile and others.
- Piggyback on all Medicaid mailings sent to pregnant women, and to families when applying for or renewing Medicaid, about the importance of a "medical home." The mailings should include informational materials about the critical impact on a child's well-being of pediatric preventive well-child visits.
- Promote the continuation of the recently completed one-day statewide training on medical and dental homes and developmental screening by Atlanta United Way, Sheltering Arms: Georgia Training Institute for agency administrators and staff statewide annually by providing additional funding.
- Develop mechanisms for currently available materials to be included in birthing hospital's discharge packets given to parents, such as the following materials: www.brightfuturesforfamilies.org/pdf/checklist.pdf, www.cdc.gov/ActEarly, and www.healthychildren.org.
- Partner with care management organizations (CMOs) to create easy-to-grasp message reminders about the importance of well-child visits to disseminate through public service announcements on television and radio stations, Spanish-speaking channels, on public transportation and other organizations' communication channels, such as bulletin boards and newsletters.
- Write a series of brief information articles on the importance of the medical/dental home and preventive pediatric well-child visits for publication in the DPH's "PH Weekly" e-newsletter that goes to some 6,400 Georgia DPH employee subscribers and hundreds more stakeholders. Re-purpose these informative pieces and distribute vigorously through DPH's social media channels and websites as well through local, county and state media outlets.
- Engage with organizations serving diverse ethnic groups, such as Hispanic Health Coalition, Migrant Health, and Refugee Health, as well as area church outreach organizations to employ their connections, opportunities and communication vehicles to extend awareness and knowledge.
- Leverage family visits to Public Health clinics (WIC, Family Planning) or during program enrollment (Children 1st, Children Medical Services) about the importance of keeping preventive well-child visits for children from birth to age 5.

Milestones: Year 1 — Convene a multidisciplinary, multicultural task force about the well-child visits; develop and disseminate materials to groups providing prenatal services, as well as to birthing hospitals and local and county Medicaid offices. Year 2 — Georgia Training Institute includes this content into its ongoing, one-day trainings; appropriate multi-language "messages" are distributed across media venues such as print, TV and radio. Year 3 — Families, providers and communities are more knowledgeable about the importance of a medical home and of preventive well-child visits.

FINDING 2: Lack of Access to Services

There is consensus across all process descriptions and focus groups that families' inability to fully access follow-up and referral services is due to:

- Transportation barriers and challenges, such as lack of own transportation, public transportation, unreliable Medicaid transportation, time away from work, and cost to family to travel long distances, especially in rural areas, when seeking a specialist
- A health professional shortage in areas in the state, for pediatric primary care providers and specialists, as shown by resource maps
- Shortage of providers serving young children who accept Medicaid
- A relatively large number of uninsured children
- Dearth of flexible provider hours in evenings or weekends to accommodate family work and transportation schedules

Recommendation: Build partnerships to leverage limited resources, improve transportation needs and increase flexible office hours, to improve access for all children to developmental screening, referrals and follow-up services.

Initiatives and actions to achieve the above recommendation:

- Collaborate with agencies that serve families with young children who are uninsured, underinsured, and low-income, racial and ethnic groups to develop mechanisms to identify and reach out to families of young children, who are currently not receiving health services. This includes those in homeless shelters, and living in rural areas. Some of the agencies to partner with are: Hispanic Health Coalition, State Office of Rural Health, Migrant Health, Homeless and Special Projects Program, and Refugee Health Program.
    - Develop mechanisms to address barriers that apply to parents who are eligible for public health insurance, but do not apply for it. For example: Explore the potential use of telemedicine and other technologies. Start small, with a four- to five-item questionnaire and give to families who are eligible, but uninsured, and continue to work on the issues.
- Provide information about health screenings to expectant and new parents as early as possible and at every opportunity (prenatal classes; breastfeeding consultants and organizations; Special Supplemental Nutrition Program for Women, Infants and Children (WIC); local health fairs).
- Explore development of specialists' clinics being made available to underserved areas through telemedicine.
- Share updates and new information about health status of children birth to age 5 (such as Georgia data from the 2011-2012 National Survey—Children's Health) with stakeholders on a regular basis (such as Georgia's Early Childhood Comprehensive System's meetings; Georgia Association of Young Children [GAYC], Department of Early Care and Learning, Public Health Coordinators meetings and the Division of Family and Children Services).

Milestones: Year 1 and ongoing — Establish relationships with the agencies identified above as those serving families whose children are not receiving the recommended well-child visits; make available materials about health screenings at sites identified above. Year 2 — Development and implement a short survey regarding the barriers to family ability to apply for public insurance; maintain agency relationships. Year 3 — Survey data is collected and updated on health screenings for children birth to age 5 and is shared with stakeholders on a regular basis.

FINDING 3: Families Need Better Awareness, Education, Support and Understanding of Resources

A common theme identified across all groups and across many areas of both the quantitative and qualitative data collected was the need to improve parent awareness, education and support. Also identified was insufficient knowledge of typical development, of parenting skills, and of how to navigate the health system and access community resources. Among suggestions from physician focus group for improving child outcomes: "educating parents; no one has done any type of educating parents; patient education needs more funding," "developmental milestone information is needed to be made available to parents," "increase community education." Family education must start during prenatal visits as many things that occur during pregnancy can affect the child. Encourage parents to visit and select pediatrician before delivery.

A significant issue is the lack of an infrastructure that brings together agencies or groups involved in parent education, and the lack of a coordinated, integrated system for the planning, implementation and ongoing evaluation of education and supportive services, starting prenatally through age 5.

Recommendation #1: Build the capacity of families to be a partner with the child's health/medical providers, by improving knowledge, assistance and support to parents to obtain screenings and follow through on recommendations, and by improving coordination of health screenings and follow-up by public and private providers.

Initiatives and actions to achieve the above recommendation:

- Integrate Strengthening Families™ core principles into existing parenting and provider education efforts as a framework for family education and support.
- Use telehealth and other technology to increase family access to education and training offerings with such tools as webinars, Video Interactive Communication System (VICS) and others.
- Promote and foster awareness of already existing materials and resources, which are often available in English and Spanish, prenatally and at point of newborn hospital discharge. Among such materials and websites are:
  - Positive Parenting Tips for Healthy Child Development: http://www.cdc.gov/ncbddd/childdevelopment/positive parenting/infant.html
  - American Academy of Pediatrics (AAP)'s website: www.healthychildren.com
  - Developmental milestones: www.cdc.gov/ActEarly
- Materials developed for those with low health literacy: *Beginnings Guide and Parent Guide*
- Promote increased availability of Georgia's First Steps Programs, particularly in underserved areas. www.firststepsgeorgia.org.
- Develop, revise, or review program policies at state, district, and local level to assure practices are promoting families' engagement with their children's health.

- Promote knowledge of and importance of developmental screening and follow-up to early child care and health care providers and professionals (for example, obstetricians' offices, nurse midwives, childbirth classes, Public Health Child Programs, home visiting programs, rural health clinics).
- Partner with Reach Out and Read (ROR), Georgia's State Office of ROR, Executive Director and Georgia Chapter of the American Academy of Pediatrics, medical director of ROR, to promote the program's goals, including early literacy, school readiness and guidance to families about reading to their children every day; involve families in collecting books to give to children. www.reachoutandread.org
- Promote family engagement in child's health and development through practices such as:
    - Solicit families' ideas, suggestions and involve them in the decision-making about their child's health care as well as in choosing and accessing services for their child.
    - Engage family in activities that promote health and development and increase knowledge and awareness of child's needs, so they will know and understand their ability to influence and promote their child's health and development.[4]

Recommendation #2: Promote social-emotional-behavioral health and wellness as well as social-emotional screening, referral and follow-up, when indicated.[5]

Initiatives and actions to achieve the above recommendation:

- Integrate into all family and provider trainings typical patterns and competencies of social-emotional-behavioral development, as well as knowledge of children who are most at risk for social-emotional-behavioral conditions (such as children in foster care, children who have experienced maltreatment; children of mothers screened and diagnosed with depression; siblings of children with a diagnosed autism spectrum disorder and others).
- Increase awareness of referral resources available for pregnant and post-partum women with disorders of mood/anxiety/depression. *(Mental Health America, Georgia; Project Healthy Mom)*; www.ciclt.net
- Provide parents with available social-emotional-behavioral developmental materials and resources: American Academy of Pediatrics: http://www.healthychildren.org; Learn the Signs, Act Early: www.cdc.gov/actearly; and Zero to Three Social-emotional materials for parents; http://zerotothree.org.
- Implement a web-based system for maintaining updated lists of known referral resources for both parents and children needing social-emotional-behavioral referrals, and widely disseminate its availability.

Milestones: Year 1 — Begin integrating core principles of Strengthening Families™ into parent education; include materials in hospital discharge packets. Year 2 — Document use of technology to provide family training; build relationship with ROR; review policies. Year 3 — Gather data to determine outcomes for families.

FINDING 4: Lack of communication and coordination among providers and across systems

There is a clear and evident lack of communication infrastructure between and among providers and across systems such as health/medical, early intervention, education and mental health. There is a gaping need for a systematic, coordinated screening, referral and follow-up system to close the loop from screening results to follow-up. This kind of system could remedy the problem of screening results not being shared with the primary care provider, or between and among other providers or across systems.

Recommendation: Align existing developmental screening, referral and follow-up practices to assure a more comprehensive, consistent, systematic approach.

Initiatives and actions to achieve the above recommendation:

- Implement standardized electronic (web-based bi-directional interface among multiple data systems) forms and processes for referral and follow-up among primary care providers (PCPs), specialists and community-based services and providers, as well as across systems (such as PCPs and state agencies such as Education, Public Health , Mental Health). Examples of similar mechanisms in place: www.eicolorado.org (Click on Documents and Reports>>State Approved Forms>>Referral Forms, New); forms available in English and Spanish, in paper or electronic format; others available from Michigan and Arkansas.
- Develop policies that promote the sharing of developmental screening results between community-based organizations with the child's PCP.
- Develop policies for referral and follow-up processes between and among community agencies (for instance, Head Start to Early Intervention) and across systems (Public Health to PCPs) via use of Memorandums of Understanding (MOUs) or Memorandums of Agreement (MOAs).
- Review and model the most successful elements from Illinois and other states that have participated in Plan, Do, Study, Act (PDSA) quality improvement cycles to adapt appropriate elements for Georgia.
- Implement the role of care coordinators, system-wide, to assure that when referrals are initiated, needed assistance is available to families to receive services in a timely manner.
- Initiate ongoing quality improvement activities that will meet the physician requirements for Maintenance of Certification.
- Develop policies to assure that at-risk children, who are referred to Early Intervention, but not eligible, have a documented linkage to other community resources.

Milestones: Year 1— Develop the policies and procedures necessary to begin a pilot project between a PCP practice and a local Babies' Can't Wait Program, using standardized referral and follow-up processes. Year 2 — Implement and complete the pilot project. Year 3 — launch a quality improvement process plan at the pilot site, with plans to expand to additional sites.

FINDING 5: Need to Monitor Follow-up and Follow-through Services

Developmental screening using validated tools is being performed; however, there is limited tracking and monitoring of those referred and follow-up on whether or not the child and family actually received any recommended services. Communication is limited among the multiple groups who provide developmental screening. There is insufficient communication, cooperation, collaboration and knowledge among various disciplines regarding who is doing what, as well as their issues, concerns and best practices.

At the same time there are some “best practices” currently being implemented by various groups, such as office practices using electronic medical/health records and receiving incentive funds for certain activities; and home visiting programs working with families to assure they do receive recommended services after referrals.

Recommendation: Plan, form and implement an interdisciplinary state-level conference of appropriate stakeholders on all the steps and elements concerning developmental health, including screening, referral, follow-up and follow-through, to align current practices into a more comprehensive, integrated system of services for families and children from identification to treatment.

Initiatives and actions to achieve the above recommendation:

- Initiate a Developmental Screening Task Force to act as an interdisciplinary conference planning committee, and to determine logistics and communications.
- Assure representation and participation from all appropriate stakeholders; should include families of newborn to age 5 children, professional societies, community agencies, and others serving children from birth to 5.
- Invite and urge those identified stakeholders to participate and facilitate their attendance. Ask members of the task force to solicit input regarding priorities on how to improve the developmental screening process to become more comprehensive and integrated from their colleagues and share results.
- Develop final agenda based on input and priorities from stakeholders.

Milestones: Year 1 and ongoing — Document activities initiated and results, challenges, barriers; revise or develop policies; develop MOUs or MOAs. Document changes in practices in relation to referral and follow-up practices; begin utilization of care coordinators and/or use of electronic systems for tracking referrals and outcomes.

In Georgia, hospitals are screening more than 96 percent of newborns before they are discharged from the hospital.

HEARING—Findings and Solutions

FINDING 1: Screening Results Not Presented Effectively

In Georgia, hospitals are screening more than 96 percent of newborns before they are discharged from the hospital. However, according to the 2010 CDC EHDI Hearing Screening and Follow-up Survey (HSFS), 16 percent of Georgia's newborns and infants identified as not passing the hospital screening slipped through the cracks, causing a delay in service follow-up, or loss to follow-up documentation or diagnostic follow-up.

Hospital-based screening is often performed by nursing and newborn care staff and most are trained by other screeners or equipment manufacturers. Many have not been trained in how to present screening results to families, which can be important in helping a family in prioritizing and deciding next steps when there was a non-pass result. Key providers also report errors or missing contact information, and often there is a failure to note name changes or to include screening results, in the data collection process. (*Shulman, et al, 2010)*

Access to the newborn hearing screening results by primary care providers and medical homes is an issue that impacts timely tracking and follow-up. The level of family awareness and engagement in newborn hearing screening creates an additional barrier to timely follow-up and intervention.

Recommendation: Address the above concerns in hospital-based screening and reporting that either delay or hinder timely communication to the primary care provider and access to community-based follow-up and intervention services.

Initiatives and actions to achieve the above recommendation:

- Improve screening administration techniques, data collection and delivery of follow-up guidance through increased training and by developing check-list procedures that are followed uniformly. For example:
  - Concentrate screening responsibilities to a small group of hospital staff who have demonstrated evidence of formal training, participate in ongoing training, competency checks and undergo annual competency checks. The designated screening staff should be proficient in administering screens, data collection and reporting, communicating educational information and feedback to families when follow-up is required. (*Shulman, et al, 2010)*
  - Screening hospitals should provide evidence of collaborating with the state's Universal Newborn Hearing Screening and Intervention (UNHSI) program and the technical assistance UNHSI provides.
- Ensure families are thoroughly informed and understand the implications when an infant does not pass the hearing screening by using a pre-written "scripted message" to cover all appropriate details, avoiding any communication gaps. *(Russ, et al 2010)*
- Prior to hospital discharge:
  - Ensure families are adequately informed about the hearing screening and armed with information about the importance of hearing screenings and appropriate follow-up after a "refer" screening result. *(Hoffman, Munoz, Bradham & Nelson, 2011)*
  - Verify family address and contact information; obtain a second point of contact for the family (e.g., a relative or close friend); and update hospital system databases.
  - Verify the identity of the baby's pediatrician/medical home and schedule the follow-up appointment before the family leaves the hospital. Explain why it is important to keep the scheduled appointment.

- Educate pediatricians/primary providers and their key staff of the screening, follow-up plan and implementation date. Implement a universally adopted information system protocol that documents that the pediatrician/medical home received the "refer" screening results and that a follow-up appointment for a "refer" on the hearing screening was made and verified.
- Implement and monitor hospital procedures for adherence to policy, quality assurance and opportunities for improvement.
- Support UNHSI goal to conduct site visits to birthing hospitals and providers to provide training, technical assistance and increase compliance.

Milestones: Year 1 and ongoing — Initiate the UNHSI program focused on training of small groups at each birthing hospital to include hospital staff and pediatricians on staff; report the implemented hospital activities and strategies; document technical assistance (TA) requests and provision of TA to birthing hospitals; create a methodology for describing and measuring impact of activities.

FINDING 2: Changes Needed for Conducting Hearing Screening

The continued reliance on subjective and informal observations, based on a child's response to sound, increases the likelihood that children with hearing loss will remain unidentified, receive inappropriate treatment or no services at all, and most important, fall even further behind in language development. *(Eiserman & Shisler, 2010)*

Otoacoustic emissions (OAE) hearing screening technology, used widely in hospital-based newborn screening programs and validated by professional organizations as an objective and reliable screening method *(Joint Committee on Infant Hearing, 2007),* is beginning to be recognized as a more practical and effective alternative for screening children up to age 3. *(Eiserman & Shisler, 2010)* Since 2002, Early Head Start (EHS) programs have funded initiatives for certain programs to update their screening practices using OAEs. More recently, since 2011, the national Parents As Teachers (PAT) organization requires new affiliates to include OAE screening as part of their start-up plans, while existing programs have until 2014 to incorporate OAE screening. *(American Speech-Language-Hearing Association)*

Due to current Georgia UNHSI regulations that restrict who can conduct OAE hearing screenings on infants after the age of three months, many of the current screening modalities in preschool children continue to rely on traditional pure tone audiometry conducted in such settings as pediatric offices, Head Start, Pre-K, and school programs. *(Yin, et al. 2009)*

These tool and age restrictions may delay timely, needed follow-up for children who are referred on the newborn screening, as well as at-risk children and non-compliant families. The restriction may pose a service barrier in rural and underserved areas where there is a shortage of qualified health professionals and experts to perform hearing screenings. The lack of continuity in provider screening practices, service provision, care coordination, and reporting contributes to duplication of services, discrepancies in identifying hearing impairment, screening rates, and Loss to Follow-up/Diagnosis (LTF/LTD).

Recommendation: Georgia's UNHSI and school entry regulations should be reviewed, and practice standards should be defined in accordance with current, evidence-based hearing screening practices. The goals for this are to reduce barriers; identify infants with LTF/LTD and children at risk for or with post-neonatal hearing loss; and to improve hearing outcomes for all children.

Initiatives and actions to achieve the above recommendation:

- Convene an expert panel of public and private providers and stakeholders to review current regulations and make recommendations.
- Recommendations should include standardizing screening tools, identifying minimum training requirements, improving communication with both providers and families, improving information exchange and reporting between health care and service partners, and updating standards for reporting and submitting results in hearing screening programs for preschool age children as well as newborns.
- Regulations should address home-visiting programs and relationships with medical homes, early child care, and school-based screening programs.

Milestones: Year 1 - Convene a study committee to review UNHSI regulations, school entry rules and regulations and to make technology decisions for the purpose of making recommendations to the Cabinet.

Tool and age restrictions may delay timely, needed follow-up for children who are referred on the newborn screening, as well as at-risk children and non-compliant families.

The restriction may pose a service barrier in rural and underserved areas where there is a shortage of qualified health professionals and experts to perform hearing screenings.

Reduce barriers; identify infants with LTF/LTD and children at risk for or with post-neonatal hearing loss; and improve hearing outcomes for all children.

FINDING 3: Lack of shared recordkeeping system

There is a lack of and/or little evidence of a shared recordkeeping system, necessary for a coordinated system of care between hospitals, physicians, and specialty providers. Information gaps exist when data management and tracking systems are not accessible to providers or when poor communication exists between providers.

The DPH's UNHSI program, in partnership with Children First (C1st), provides a statewide system to ensure that all newborns are screened for hearing loss prior to hospital discharge. The UNHSI program has a designated UNHSI District Coordinator in each of the 18 health districts to facilitate newborn hearing screening and follow-up. The program uses the State Electronic Notifiable Disease Surveillance System (SENDSS) data management system, which allows for consistent data entry across the state. Currently, SENDSS is used only by selected local and state level public health program managers. However, audiologists in private practice also have access to SENDSS to enter screening and diagnostic results.

Other issues related to services include:

- C1st provides vital assistance to the UNHSI program and especially for identified at-risk children over age 1. However, unlike UNHSI, C1st is a voluntary program.
- Databases for early childhood health data management, tracking, and reporting systems either are not linked or do not have the capacity to merge information necessary to identify children due for hearing screening and/or who have received periodic screening and rescreening.

Recommendation: Create a systematic review of hearing screenings that ensures ongoing surveillance beyond newborn and infancy and continues to track through to pre-school years to kindergarten hearing screenings, rescreening, and reported outcomes.

Initiatives and actions to achieve the above recommendation:

- Work to standardize, as much as possible, all the hearing screening and follow-up policies and procedures for all early care and learning programs as well as local boards of education to ensure timely screening with age-appropriate tools. Creating connections with a child's medical home and making an effective link between health and education professionals, while instituting a continuum of monitoring, follow-up, and care coordination with appropriate interventions, will help ensure a successful transition for children identified with hearing loss. Develop or enlist technology that supports a coordinated system of care for children birth to age 5, which will inform providers of newborn hearing screening results and allow for posting of rescreening, diagnostic and intervention results, as well as periodic well-child hearing screening results that are accessible to providers with a need to know.
- Improve follow-up and readiness for school by requiring hearing screening for entry into pre-school with appropriately documented evaluations, interventions and or further follow-up, as well as into school for those who were not in pre-school.
- Extend SENDSS for newborns to include identifying, tracking, and reporting of infants and preschoolers in need of hearing screening, rescreening and reporting of interventions and outcomes.
- Create or assign a position in the early care and preschool education system that will work with UNHSI and C1st to create a consistent data entry, reporting and monitoring system across the state.

Milestones: Year 1 — A position is created or assigned in the early care and preschool education system that will work with UNHSI and Children 1st to create a consistent data entry, reporting, and monitoring system across the state. Year 2 — Following the recommendations and decisions of the study group, hearing screening and follow-up policies and procedures work to standardize and implement into all early care and learning programs as well as local boards of education. Plan and implement a pilot for the technology recommendation(s).

FINDING 4: Socioeconomic Factors Impact Families' Ability to Comply

The project identified a number of socioeconomic characteristics of parents/families and their children that make it difficult to comply fully with hearing screening requirements and diagnostic and treatment recommendations. Age, ethnicity, family education and income, insurance status, language barriers, place of residence, and having a reliable source of transportation are but a few of the barriers to care that many families face.

Rural communities socially isolated as well as economically disadvantaged communities and children of low socioeconomic status or from at-risk families may be particularly vulnerable to the negative effects of late identification and intervention. *(Yin, et al, 2009*) Parental lack of understanding of the problem and/or importance of timely treatment, gaps in or lack of insurance, and access to affordable transportation also make it difficult for families to comply with needs.

Recommendation: Reduce barriers to accessing clinical and community preventive services, especially among populations at greatest risk.

Initiatives and actions to achieve the above recommendation:

- Include age-appropriate hearing screening tools to complement early and periodic comprehensive ear/hearing examinations.
- Convene a panel of stakeholders to address hearing screening coding to ensure it is appropriately coded and reimbursed, and to encourage the use of objective hearing screening tools during well-child visits.
- Utilize telehealth in underserved and rural communities to increase access to specialty care providers.
- Enlist and convene families, providers, health plan administrators, and community and state leaders to address ways to improve access to care and follow-up.
- Develop and implement culturally appropriate steps to educate parents and families about the importance of screening and follow-up.
- Use social marketing campaigns targeting parents and families to get out important messages on child hearing and screening opportunities in their communities.
- Educate Medicaid-eligible and underinsured parents and families on the availability of screening resources, specialty care providers, and funding for hearing devices and cochlear implants.

Milestones: Year 1 - Assign a study group to review and make recommendations to the committee regarding objective screening tools; comprehensive well-child exams and reimbursement codes and culturally appropriate strategies and social marketing skills. The study group's recommendations should also address reducing barriers to care.

FINDING 5: Need for Better School Health Screening Certification Requirements

Any student regardless of grade level, who has never been in a Georgia public school, must provide certification of specific health screenings (DPH Form 3300 for vision, hearing, dental, and nutritional screening) and current immunization status (DPH Form 3231). DPH Form 3231 is also required for entry into all of Georgia's child care programs, with submission of updated certificate requirements when indicated. The forms must originate from a private provider or Public Health representative.

Use of existing Form 3300 has several follow-up concerns:

- Stakeholders are unclear on the responsibility for tracking, reporting, and follow-up of children identified on the form as needing further evaluation.
- School nurses routinely perform screenings, follow-up, coordinate care, and report outcomes for children involved in grade-level mass hearing screening activities. However, follow-up of screenings and reporting outcomes for Form 3300 appears less uniform.
- DPH Form 3300 is unlike Form 3231, which is dated and indicates to the school officials (and providers) that a child has completed all immunizations for school entry or a date the next immunization is due.
- Parents and families are informed of the screening requirements for Form 3300 for school enrollment, but they may not be adequately educated on the purpose and importance of these screenings and their relationship to identifying barriers to learning.

Recommendations: Explore revising the DPH Form 3300 for entry into the child care and education system, to support linking the child's hearing screening and care continuum with the early child care and education system. Consider requiring the (proposed) revised DPH Form 3300 for 3- and 4-year-olds enrolled in child care centers as well as Pre-K programs.

Initiatives and actions to achieve the above recommendations:

- Propose a revised DPH Form 3300 that could be a useful tool to report, track, inform, and provide follow-up opportunities, as well as to educate parents and families on well-child hearing screening and care.
- Ensure that guidelines for the timeliness of receiving a hearing screening, follow-up, coordinating care, and reporting are similarly enforced in child care centers as well as Pre-K programs and Early Head Start/Head Start programs.
- Enlist the support of and strengthen school nurse/health coordinator staffing and roles to allow use of the Form 3300 for Pre-K and school entry follow-up and reporting when indicated.
- As an alternative to strengthening school nurse/coordinator roles, create health navigator role(s) within the school system to serve as the link between the primary care physician, specialty providers, and other providers to ensure service delivery for identified children.
- Explore popular social media strategies such as texts and email alerts and messaging, local TV and Spanish language TV to educate and engage families of the importance of hearing screening.

Milestones: Within first six months —assign a study group to review DPH form 3300 (and/or a similar reporting form) and consider its appropriateness for entry into the child care system; study group reports their recommendations to the panel. Year 1 and ongoing —create the Health Navigator role(s) within the school system; create and implement communication initiatives that target families, communities and providers to increase awareness.

ORAL HEALTH EXAMINATION— Findings and Solutions

FINDING 1: Lack of Awareness on Importance of Oral Health

The lack of information or understanding about the importance of oral health during pregnancy and within the first few years of the child's life is evidenced by statistics and surveys. For example, 47 percent of Georgia's children, birth to 5, were reported as having no preventive dental care visits during the past 12 months.[6] Statements from stakeholder groups as to what could be better include "making families aware of how they can help prevent poor oral health," and "empowering them to continue to keep dental appointments." There is increasing evidence from the literature that recommendations regarding oral health during pregnancy and preventive services in the first years of the child's life are not being implemented in practice.

Recommendations:

Increase parent and community awareness of current recommendations regarding oral health during pregnancy and prevention of dental caries in the birth to 5 populations. Increase families' understanding that oral health is an important element of overall health, especially during pregnancy, and that childhood dental caries could be prevented if recommended practices were implemented. *(2011-2012 National Survey of Children's Health http://www.childhealthdata.org. Question: Preventive Dental Care Visits)*

Initiatives and actions to achieve the above recommendations:

- Collaborate with Georgia Dental Association (GDA) and Georgia Dental Hygienists Association (GDHA) to promote these current recommendations during Children's Dental Health Month (February) and the Month of the Young Child (April).
- Promote oral health during pregnancy through deliverables included in the DPH's contract with the Georgia Obstetrical and Gynecological Society (OB/GYN).
- Engage with providers, across broad spectrums, who are in contact with pregnant women, such as childbirth educators, certified nurse midwives, and lactation consultants.
- Provide training via VICS to Public Health District/county staff, including WIC, and provide them with materials on oral health during pregnancy and during first years of life to share with clients participating in their programs.
- Provide presentations to stakeholder groups who serve children birth to 5, such as Peach Partners, Georgia Association of Young Children (GAYC) and Georgia School Nurses Association annual meeting, and other groups as appropriate.
- Promote messages on Spanish radio and TV stations.

Milestones: Year 1 — Build relationships with Georgia Obstetrics and Gynecology Society, pregnancy-related groups, GDA and GDHA; provide training to Public Health staff to build momentum and a consistent message. Year 2 — Include deliverables into Georgia OB/GYN contract and participate with GDA and GDHA in outreach activities. Year 3 — Continue with above and provide presentations to professional groups; document all initiatives and outcomes throughout the three years.

FINDING 2: Limited Access to Oral Health Services

The need to increase access to oral health/dental services is evidenced by numerous statistics. Georgia ranks 49th in the country for the number of dentists per 10,000 residents (GA rate of 4.4; national rate 6.0) In addition, 35 counties do not have a dentist who takes Medicaid. Some Public Health Districts are able to offer only screening and education due to public health dental reductions. Stakeholders' statements include: "People are not seeking medical/dental care unless there is an acute need," "need to get to a dental home early." Other comments: "However, some dentists do not see children under age 3." "We have access to services here… the thing is getting the child into the office."

This project revealed that several barriers impact_access to oral health services: families' lack of knowledge of the importance of these services; the lack of insurance, or under-insurance; and limited provider availability (geographical, not serving very young children, hours of services, etc.).

Recommendation: Increase access to oral health services to childbearing women and children birth to age 5.

Initiatives and actions to achieve the above recommendation:

- Promote the expansion of teledentistry sites to health districts with dental professional shortage and underserved areas (using Waycross as a model).
- Increase provision of services to young children in school settings by Public Health Oral Health Unit staff by promoting increased funding.
- Promote access through methods such as co-location of oral health/dental services with other medical or school settings or with WIC services.
- Promote more flexible hours for families to access oral health/dental services during evening hours and on Saturday.
- Inform Georgia Association of School Nurses and Public Health Clinics serving children regarding the Georgia Dental Association's "school entry free oral evaluation."
- Promote messages on Spanish radio and TV stations; collaborate with Hispanic Health Coalition.
- Identify pilot sites to spread oral health information through partnering with Public Health programs serving pregnant women and with WIC clinics.

Milestones: Year 1 — Build relationships with state Public Health program staff serving pregnant women and WIC clinics and identify pilot sites; begin discussion with regional oral health coalitions regarding how to promote more flexible hours by dental providers; document initiatives and outcomes throughout process. Year 2 — Collaborate with Hispanic Health Coalition; promote information about school entry oral evaluation. Year 3 — Continue initiatives, and document increase in access and results of pilot sites.

FINDING 3: Greater Need for Oral Health Literacy

The need for greater oral health literacy among families is evidenced by statements by pediatric dentists: “Oral health literacy is such a problem… parent comes in … on cell phone, e-mail, texts, we have to use technology to do something about oral health literacy.” “The main barrier is low health IQ.” “What the state can do [to improve outcomes] is get out messages about oral health literacy.”

Major gaps include the lack of awareness of the importance and role of oral health literacy among families and communities. This is critical in increasing access and decreasing disparities in oral health services.

Georgia ranks 49th in the country for the number of dentists per 10,000 residents (GA rate of 4.4; national rate 6.0)

Recommendation: Develop and implement an Oral Health Literacy (OHL) Campaign.

Initiatives and actions to achieve the above recommendation:

- Collaborate with the regional oral health coalitions who are focusing on oral health literacy.
- Utilize the many literacy and low-literacy oral health materials that are available on web sites of the federal Title V Maternal and Child Health (MCH) Oral Health Resource Center, National Institute of Health (NIH) Literacy Initiative, CDC, PlainLanguage.gov, and others.
- Include oral health literacy materials in different languages.
- Build partnerships and networks with a focus on promoting health and oral health literacy such as Georgia Hispanic Health Coalition.
- Review, revise or develop materials, policies, procedures (program, district) that may inhibit or enhance oral health literacy.

Milestones: Year 1 — A leadership group is identified by the State Office of Oral Health to initiate planning the OHL Campaign. Year 2— Build partnerships and networks that focus on promoting oral health and literacy; develop an evaluation and outcome plan for interventions such as media events, presentations to consumer, professional and target groups. Year 3 — Review and revise as needed policies and materials to continue to enhance and improve oral health literacy; continue promoting oral health literacy and documenting outcomes.

FINDING 4: Lack of Knowledge Among Families Regarding Preventing Poor Oral Health

There is a strong need for increasing family knowledge and the skills to be a partner with their provider and importance of keeping appointments. Statements from stakeholder groups: "Make families aware of how they can help prevent poor oral health." "Educate them that baby teeth are important and require care." "They do not take prevention seriously." Physicians and pediatric dentists say: "Parents do not understand oral health; it is not on their radar." "Increase community education." In the Georgia teledentistry program in Waycross, 29 percent of children birth to 5 were having their first dental visit. At least 47 percent of children up to age 5 in Georgia were reported as having no preventive dental visits in the past 12 months.[7]

There are limited supportive services for families to seek needed oral health services and lack of information on community resources available.

Recommendation: Build capacity of families to be a partner with their child's oral health/dental providers.

Initiatives and actions to achieve the above recommendation:

- Collaborate with Peach Partners to promote the incorporation of oral health recommendations for pregnant women and young children into parent education trainings provided by other groups.
- Encourage the ongoing presentations by Sheltering Arms: Georgia Training Institute about the dental home, and incorporate oral health recommendations in their trainings for agency staff.
- Include messages about oral health for birth to age 5 children in Medicaid materials that are provided when applying or re-applying for enrollment.
- Develop a mechanism to determine what outreach or information on oral health recommendations CMOs or dental insurers provide to their enrolled pregnant women and infants and toddlers.
- Include activities in the Georgia OB/GYN contract to promote oral health recommendations for pregnant women and during the first five years of child's life.
- Provide written materials in the primary language of the families.
- Encourage district dental hygienists and/or regional coalitions to work together to develop list of local dental resources that can be made available to families and shared with local family physicians and pediatricians.

Milestones: Year 1 — Collaborate with Peach Partners and Sheltering Arms: Georgia Training Institute to promote information into trainings and into Medicaid materials; document initiatives and outcomes throughout the project. Year 2 — Collaborate with Georgia OB/GYN society to develop deliverables; promote district Public Health and regional oral health coalitions working together. Year 3 — Continue initiatives; document activities and outcomes.

VISION—Findings and Solutions

FINDING 1: Vision Screening is Accepted, but has Gaps

Nationally, the vision screening of preschool and school age children is a widely accepted procedure to detect vision problems that can interfere with learning. In Georgia, vision screening is required by state law (Georgia Law Code §20-2-770) to enter first grade and for entry into Georgia public schools. The screening regulations have also been included in the guidelines for enrollment in Head Start and Pre-K programs.

However, too many children fall through the gaps:

- Nationally, an unacceptable number of children are not receiving the vision screening component of their preschool-age well-child exam. It is estimated that only 5 percent to 14 percent of children receive an exam by an eye care practitioner before entering school. *(Building a Comprehensive CVCS)*
- According to two studies, nearly 40 percent of children who were screened and referred for additional testing did not receive the recommended follow-up care. *(Building a Comprehensive CVCS)*
- Although most states require some vision screening/examination before school or during school, as of 2007, only five states (Arkansas, North Carolina, Massachusetts, Oklahoma, and Rhode Island) required a follow-up to the screening. *(Building a Comprehensive CVCS)*
- In addition, most state requirements are for children enrolling or attending public school. *(Building a Comprehensive CVCS)*Georgia's current law only requires proof of screening or exam for students entering first grade or prior to school entry. Even with the screening requirement and parent notification statement, the total percentage of Georgia preschool and school age children who actually receive the indicated follow-up is not known.

Recommendations:

Support earlier detection and treatment of vision threatening disorders that impact a child's life skills and ability to learn, through expanding screening to preschool age children. A comprehensive child vision health system must be available in the state to assure that all children are assessed for potential eye problems before entering school and throughout the school years.

A comprehensive child vision health system must be available in the state to assure that all children are assessed for potential eye problems before entering school and throughout the school years.

Initiatives and actions to achieve the above recommendations:

- Consider recent research and new recommendations for screening methods and screening technology for preschool age children.
- Revise legislation, regulations and rules for vision screening to include preschool screening (ages 3-5, child care, Pre-K and kindergarten).
- Require documentation of follow-up and/or rescreening when indicated.
- Expand promotion of birth to 5 screening and medical home concept.
- Increase public awareness of the importance of early childhood vision care via public service announcements on local cable channels, billboards, and targeted communities.

Milestones: Year 1 — Convene an expert panel, assigned to and or conferred with an existing collaborative committee to study and communicate with best-practices states; review new research; review new screening recommendations for preschool age children (which are due to be released in 2013); review current rules and regulations and make recommendations to the advisory panel. The expert panel will develop a plan for increasing public awareness of preschool vision screening and expanded promotion of medical home concept; and develop methodology for follow-up or rescreening when indicated.

FINDING 2: Lack of Information Sharing

In Georgia, vision is assessed through four primary resources: office-based screening and comprehensive exams conducted by physicians and eye care professionals; local health departments and community health centers; community-based organizations; and school-based screening programs. Results from this project identified several problems that arise from this variety. One is that screening results are captured in stand-alone databases. Providers of screening services report they are often unaware of previous screening attempts and findings.

Rescreening and/or follow-up care in multiple settings can lead to duplication of efforts and/or delays in intervention. School-based mass screenings are by nature typically conducted in isolation from a child's medical home.

There is limited documented evidence of service coordination across all providers. Georgia lacks a "point of accountability" program and an ongoing data system within its public health system for monitoring prevalence and use of child vision health services at the local and state level.

Recommendations: Design and implement a state-level data system that collects data and monitors utilization and provision of child vision screening and care services on local and state levels. Provide a mechanism for health care professionals and the education system, with a need to know, to either access or receive reports of child's current screening, diagnostic, and/or treatment information.

In addition to detecting possible vision problems and alerting parents, Georgia's vision screening requirement for school entry provides an opportunity to increase providers' knowledge and awareness of vision health and eye care.

Periodic school screenings and outcomes should be a part of the child's coordinated, integrated care continuum. Assure a "point of accountability" in the public health system by establishing a child vision health categorical program linked to the federal Title V MCH Block Grant. *(Building a Comprehensive Child Vision System)*

Periodic school screenings and outcomes should be a part of the child's coordinated, integrated care continuum.

Initiatives and actions to achieve the above recommendations:

- Create a coordinator role on the state level (linked to education) responsible for guiding, communicating, implementing and monitoring a plan.
- Create Health Navigator role(s) within school system to serve as the link between primary care physicians, specialty providers, and other ancillary providers to ensure service delivery for identified children.
- Develop and implement quantifiable measures to improve the referrals and communication flow among PCPs, eye care providers, and other key stakeholders. *(CDC, Improving the Nation's Vision)*
- Collaborate with partners on policies for the implementation, integration, and use of health information technology to improve and monitor vision health. *(CDC, Improving the Nation's Vision)*
- Pool patient information into registries and databases that will benefit individual children and families by coordinating and integrating care. Registries will aid in monitoring care in medical homes, in public health tracking, and in assuring longitudinal progress from infancy to young adulthood. This could model other tracking systems, such as the state newborn screening, hearing, immunizations, and other public health matters. *(NICHQ Policy Brief)*
- The approach should include simple data entry for community-based as well as health care provider office-based screening, incorporate straightforward communication among these entities, and integrate pertinent private practice electronic medical records (EMR) into the statewide system. *(National Center for Children's Vision & Eye Health)*
- Investigate existing database systems in Georgia that could accommodate vision records. *(Georgia Children's Vision Task Force)*

Milestones: Year 1 — Create a vision coordinator role on the state level. Develop policies, procedures, and quantifiable measures to improve referrals and communication with medical homes, physicians, and screening providers, for better data linkages, and screening rates. Year 2 — Create Health Navigator role(s) within each local board of education and child care center. Year 3 — Review tracking systems and technology; develop, pilot, and implement a data tracking system and technology.

FINDING 3: Building on School-Entry Requirements to Increase Knowledge

In addition to detecting possible vision problems and alerting parents, Georgia's vision screening requirement for school entry provides an opportunity to increase providers' knowledge and awareness of vision health and eye care. Prevent Blindness Georgia, using a manual jointly published by the American Academy of Pediatrics and Prevent Blindness America, is training school nurses and pediatric offices across the state in the best evidenced-based methods of vision screening. Further, through a state contract with DPH, Prevent Blindness Georgia works across the state to train the state's public health nurses to use these same evidenced-based methods. This collaborative effort provides opportunities to assure the continuity of staff training and certification. In addition, it provides a consistency in practice guidelines and screening tools utilized across the state.

Significant issues to address are:

- Medical homes and specialty providers' third-party reimbursement concerns for vision screening and diagnostic interventions
- Staff turnover and staffing ratios; expense associated with training and time involved; expense of screening tools and current technology
- Screening providers' variations and lack of consistency in following current guidelines and recommendations

Recommendation: Establish an effective, coordinated, comprehensive approach to vision screening in Georgia by supporting the work of Georgia's collaborative effort to develop and implement a statewide strategy for vision screening from age 3 through entry into school and monitoring through the continuum of grade-level rescreening.

Initiatives and actions to achieve the above recommendation:

- Establish and implement state standards and guidelines for preschool vision screening.
- All professional vision-related associations should educate parents and health professionals about the importance of children's vision care through health promotion programs. *(APHA)*
- Implement policy changes that focus on care provided by volunteers as well as provider organizations and on a more trained, effective care delivery network. *(CDC, Improving the Nation's Vision Health)*
- Educate primary care and specialty providers about the vision screening protocols and forms via association meetings, Grand Round lectures, PowerPoint presentations, e-mail updates, presentations on the internet, one-on-one teaching, listserve dialogue, and webinars. (Adapt actions based on Rhode Island experience.)
- Ensure that valid screenings are performed in each setting by formally trained staff. *(National Center for Children's Vision and Eye Care at PBA*)
- Use the vision screening requirement as an opportunity to alert parents of their child's possible visual impairment and refer the child for follow-up and intervention, as well as an opportunity to educate parents about the role of the medical home and the importance of follow-up.
- Create and disseminate one-page vision fact sheets that take into account cultural and literacy needs. *(PBA)*
- Convene panel of stakeholders to address vision screening coding to ensure it is appropriately coded and reimbursed.

Milestones: Year 1 — Convene an expert panel that confers with an existing collaborative study committee to communicate with best-practices states and review rules, regulations, and new screening recommendations; review tracking systems and technology and make recommendations to the Cabinet. Year 2 — Develop state standards and guidelines for preschool vision screening; develop and disseminate culturally relevant educational material. Conduct activities to educate providers.

FINDING 4: Socio-economic Characteristics Form Barriers

The need for more parental knowledge and engagement was a common theme identified in the literature review, business process descriptions, physician surveys, and interviews. Many families lack understanding of the problem and/or importance and need for timely treatment. A number of socio-economic characteristics of families and their children make it difficult to comply fully with vision screening requirements and, when indicated, treatment recommendations. Age, gender, ethnicity, education, income, language barriers and having a reliable source of transportation are but a few of the barriers many families face. Rural communities and socially isolated or economically disadvantaged communities often lack culturally relevant information, access to health care services and may be more burdened by time constraints.[8] Gaps in and lack of insurance coverage also impact the ability to receive vision services.

Recommendation: Reduce barriers to accessing clinical and community preventive vision services, especially among populations at greatest risk. *(National Prevention Strategy)*

Initiatives and actions to achieve the above recommendation:

- Utilize telehealth in underserved and rural communities to increase access to vision screening and care.
- Enlist and convene stakeholders (families, providers, payers, health plans, administrators, and community and state leaders) to address barriers involving access to care and follow-up.
- Develop, support and implement culturally appropriate materials to educate families about the importance of vision screening and vision care.
- Use social marketing campaigns to get out important messages on child vision health and screening opportunities in their communities.
- Educate Medicaid-eligible families on the availability of and access to screening resources, eye care specialists and funding for eyewear.
- Use proven methods of checking and confirming patient understanding of good health and of disease prevention (e.g., teach-back method). (*National Prevention Cabinet, 2011)*
- Include evidenced-based vision screenings, using testing instruments with high sensitivity, as a complement to early and periodic eye examinations to diagnose vision or eye problems. *(APHA, 2011)*
- Convene a panel of stakeholders to address vision screening coding to ensure it is appropriately coded and reimbursed, in order to incorporate the use of objective screening tools and examination during well-child visits.

Milestones: Year 1 — Convene expert panel that confers with an existing collaborative committee to address barriers impacting access to care. This will include exploring the use of telehealth. Year 1 and ongoing —develop brochures, fact sheets, and marketing activities that are culturally sensitive and at appropriate reading levels. Year 2 — Implement strategies to address barriers. Develop methodology for describing and measuring impact of activities.

Immunization Rules for Children Enrolled in Child Care, Pre-K and Kindergarten

ALL CHILDREN MUST MEET THE FOLLOWING VACCINE REQUIREMENTS:

1. If your child is under five (5) years of age, protection against pneumococcal disease must be documented. Your child will need the Pneumococcal Conjugate vaccine (PCV13). The number of doses will depend on the child's age.
2. Children under five (5) years who attend child care facilities (including Pre-K) must have two (2) doses of Hepatitis A (Hep A) vaccine or laboratory proof of immunity.
3. Children currently enrolled in a 4 year old pre-K program may need to obtain a 2nd dose of varicella (chicken pox), measles and mumps vaccines.
4. Contact your child care facility about your child's Certificate of Immunization (Form 3231) and the expiration date. When the certificate expires, your child will be required to meet the immunization requirements.
5. Contact your child's pediatrician or health care provider to receive any needed vaccinations and to obtain a new Certificate of Immunization (Form 3231). Photocopies are accepted.

Want to know more?

Visit http://health.state.ga.us/programs/immunization/schools.asp

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FINDING 5: Need for Better School Health Screening Certification Requirements

Any student regardless of grade level, who has never been in a Georgia public school, must provide certification of specific health screenings (DPH Form 3300 for vision, hearing, dental, and nutritional screening) and current immunization status (DPH Form 3231). DPH Form 3231 is also required for entry into all Georgia child care programs, with submission of updated certificate requirements when indicated. Both forms must originate from a private provider or public health representative.

However, stakeholders are unclear on the responsibility for tracking, reporting, and follow-up of children identified on DPH Form 3300 as needing further evaluation. School nurses uniformly perform, follow up, coordinate care, and report outcomes for children involved in grade-level-specific mass vision screening activities. Follow-up of outcomes for Form 3300, however, appears less uniform.

Another point is that Form 3300 is unlike Form 3231, which is dated and indicates to school officials (and providers) that a child's immunizations are complete for school or a date the next immunization is due.

Families are informed of the screening requirement for Form 3300 for school enrollment, but there is concern they may not be adequately educated on the purpose and importance of each screening, and of how the screenings can help identify barriers to learning.

Recommendations: Explore using a revised DPH Form 3300 to support linking the child's vision screening and care continuum with the early child care and education system. Consider requiring the (proposed) revised DPH Form 3300 for 3- and 4-year-old children enrolled in child care centers as well as Pre-K programs.

Initiatives and actions to achieve the above recommendations:

- Determine how to make DPH Form 3300 a useful tool to report, track, inform and provide follow-up opportunities, as well as opportunities to educate families on well-child vision and preventive care.
- Ensure guidelines for the timeliness of receiving follow-up, coordinating care and reporting are enforced in child care centers as well as in Pre-K programs and Early Head Start / Head Start programs.
- Enlist the support of and strengthen the school nurse/health coordinator staffing and their roles to allow provision of follow-up and reporting of Pre-K and school entry Form 3300 when indicated.
- As an alternative, create health navigator role(s) within the school system to assist families to ensure service delivery for identified children.
- Implement innovative strategies (e.g., those used in immunization promotion, safe sleeping, safety, etc.) to increase family, community and provider awareness of the importance of vision screening.
- Incorporate the promotion of wellness, periodic assessments and follow-up reminders in the child care and early childhood education settings.
- Explore popular social media strategies to educate and engage parents and families (texts, email alerts and messaging, Spanish language TV).

Milestones: Year 1 — Within first six months, an expert panel of public and private providers should assign a study group to review DPH form 3330 to determine the feasibility of using the form for entry into the child care system and to make recommendations to DECAL and DPH. Create a vision coordinator role on the state public health level. Year 1 and ongoing — Develop and implement communication strategies targeted to increase family, community and provider awareness. Years 2 and 3— Create health navigator role(s) within each local board of education and child care center.

FINDING 6: Need to Promote Recommended Techniques and Tools

The U.S. Preventative Services Task Force (USPSTF) recommends vision screening at least once for children between 36 months and 5 years of age and specifically mentions photo screening as an appropriate screening technology. *(Donahue, et al. Guidelines for automated preschool vision screening: A 10-year, evidence-based update)* Photo screening and handheld auto refraction may be electively performed in children 6 months to age 3, allowing earlier detection of conditions that may lead to amblyopia, as well as in older children who are unable or unwilling to cooperate with routine acuity screening.

Instrument-based screening is quick, requires minimal cooperation of the child and is especially useful in the preverbal, preliterate or developmentally delayed child. Children younger than age 4 can benefit from instrument-based screening. Vision screening should be performed at an early age and at regular intervals with age-appropriate, valid methods, ideally within the medical home. *(AAP)*

There are several issues that create barriers. First, the instruments themselves often cost thousands of dollars in addition to the costs of printers and supplies for each test performed. There are additional indirect costs, including space and staff time required to perform these tests, as well as physician time to interpret them. Adequate payment for instrument-based vision-screening services must be ensured if there is to be widespread adoption of this recommendation. (AAP)

Only 44 percent of Georgia children birth to age 5 received coordinated, ongoing, comprehensive care within a medical home, and 11.8 percent of children in the age group received no preventive medical care visit during a 12-month period.[9]

Recommendation: Establish and implement state standards and guidelines for preschool vision screening for children birth to age 5.

Initiatives and actions to achieve the above recommendation:

- Convene an expert panel of public and private providers to review current regulations and make recommendations.
- Recommendations should include adopting evidenced-based screening tools, standardizing screening tools, identifying providers and provider training requirements, and updating standards for follow-up, reporting and submitting results in vision screening programs for preschool age children, as well as for early child care education programs, school entry and school screenings.
- Updated regulations should address the collaborative role of home-visiting programs and relationships with medical homes, screening organizations, early child care and school-based screening.

Milestones: Year 1 — Year 1 - Convene an expert panel of public and private providers to make recommendations on regulations and policies to DECAL and DPH. Year 2 — Complete new state standards and guidelines, provide training, and implement the standards across the state. Year 3 — Establish uniform, age-appropriate screening tools and service practices for preschool children; improve vision screening and follow-up rates; increase the partnerships between home-visiting programs and the medical home; and increase the number of children with medical homes. Form collaborative relationships between and among school nurses, public health, and medical homes to increase follow-up of DPH form 3300, and referrals and follow-up of children identified through mass vision screening activities.

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Building on Existing Resources and Partnerships

Georgia has some outstanding programs serving children.

Several important federal and state programs help families secure resources needed to nurture their children's healthy development and realize their potential. Combinations of programs, such as nutrition and housing assistance, help buffer young children against the developmental effects of multiple hardships. Medicaid, the Supplemental Nutrition Assistance Program (SNAP), and the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) support physical health and provide fuel for healthy brains to develop. Home visiting and child welfare programs support families and protect and nurture children; housing assistance and the Low Income Home Energy Assistance Program (LIHEAP) help shelter them.

There are several primary education and early care programs within the state and each plays a major role in school readiness. Many of these programs also involve some methods of either screening or collecting information on health needs identified. The Health Screening and Healthy Development project looked into potential ways to expand the use of health screenings, referrals and increased coordination and communication with public and private health providers. During the three-year project plan, efforts will be made to develop more links between health screening, referral, follow-up and these programs.

Department of Early Care and Learning: Bright From the Start, the State's Pre-K Program:

Georgia's Pre-K Program is one of the nation's oldest, largest, and best. According to the annual survey by the National Institute for Early Education Research (NIEER), only two other states serve a higher percentage of their 4-year-olds in state pre-K programs. Children are served for 6.5 hours per day, five days a week, and the program is open to all children regardless of income. Programs are provided in a mixed delivery system, including the public schools and within a range of private providers. The program serves more than 81,000 children from all ethnicities with 39.9 percent white, 37.8 percent black, and 13 percent Hispanic. More than half of the children are considered economically at risk. Unlike child care and Head Start (discussed below), state Pre-K has no restrictions based on income and its demographic statistics are much more reflective of the state's overall population.

Georgia has long been aware of the need to provide infrastructure supporting the local delivery of quality state Pre-K. Georgia has done substantial work to develop Pre-K content standards that are directly correlated to Georgia's kindergarten standards that all providers must use. In addition, the state has piloted and is now implementing a statewide Pre-K Child Assessment based on the Work Sampling System, and teachers have been trained in the assessment's use. The state's efforts to improve inter-rater reliability have led to better and more consistent oversight. Unique identifiers are assigned to children in state Pre-K (both public and private settings) that follow the child through the state's longitudinal data system. Georgia's Pre-K Program meets all 10 of the quality benchmarks developed by NIEER.[10]

Results of an evaluation of the Pre-K program performed by the Frank Porter Graham (FPG) Child Development Institute at the University of North Carolina-Chapel Hill found that almost all of the classes evaluated met or exceeded Georgia's operating guidelines for the Pre-K program. Rated as medium, this means that environments were generally safe and there was access to good quality materials, but activities and interactions could have been more enriching and purposeful. The quality of emotional support in classrooms and the quality of classroom organization were rated as high, but the quality of instructional support was generally low. The evaluation found that the existing program provides a strong foundation for improvement; based on the evaluation's recommendations, changes have already been initiated.[11]

Child Care: Child care in Georgia is provided primarily by licensed, center-based caregivers. Of young children enrolled in subsidized child care programs, the percentages of in center- based care (85 percent) and licensed care (97 percent) are substantially higher than the national averages, of 61 percent and 76 percent, respectively. In Georgia, 35 percent of children birth to 2 years of age are enrolled in child care, compared with a national average of 30 percent; thirty three percent of Georgia's children ages 3 to 5 are enrolled child care, compared with 35 percent nationally.

The great majority of children in child care are subsidized by the Child Care & Development Fund (CCDF) and are from single-parent families—92.6 percent, according to September 2009 data from the Department of Human Services. The cost of child care for a Georgia infant is 30 percent of a single mother's median income and 9 percent of a two-parent family's median income. With tough economic times and a growing number of mothers entering the labor force, child care is more important than ever for the overall health and well-being of families.[12]

While a high percentage of Georgia's subsidized child care is in centers and offered by licensed providers, historically Georgia's requirements for licensed care have been among the nation's least restrictive. The staffing ratios and maximum group sizes allowed in Georgia have been among the most permissive in the 50 states, and Georgia has also been behind other states in its pre-service requirements for providers. Recently the state has undertaken administrative changes to its child care quality requirements with the goal of providing a better experience and quality for the children enrolled.

Georgia recently received the results of an evaluation performed by the FPG Child Development Institute at UNC-Chapel Hill on the quality of care provided by Georgia child care centers. The evaluation found that centers met or exceeded state licensing requirements but that care was generally of low to medium quality, with infants and toddlers receiving the lowest quality care. Two-thirds of the infant/toddler classrooms and one-third of preschool (non-Georgia-Pre-K) classrooms were rated as low quality. The evaluation points out the need for improved quality of care in Georgia, particularly for infants and toddlers.

Babies Can't Wait: Georgia's Early Intervention Part C Program: Though a mere 1.24 percent of Georgia's infants and toddlers receive Part C services, this early intervention for children with a disability or developmental delay has the potential to make a huge difference in these lives; in addition, the early intervention Part C program helps serve as a protective buffer against multiple adverse influences that may hinder a child's developmental progress.

Head Start: A federal-to-local funded program established in 1967, Head Start has provided comprehensive education, health, nutrition, and parent involvement services to low- income children and their families. It has served nearly 25 million children and their families nationwide in its 45-year history. Studies have shown that Head Start has a positive impact on children in both the short- and the long-term with benefits cutting across more than one developmental domain.

Recent national data shows that Head Start in Georgia serves a population that is disproportionately black compared to other states. In Georgia, 69 percent of Head Start enrollees are black, compared with 29 percent nationally. On the flip side, 21 percent of Georgia's Head Start children are white (compared to 39 percent nationally), and 19 percent are Hispanic (compared to 36 percent). At 12 percent compared with 26 percent, the percentage of children in Georgia Head Start who are primarily Spanish speakers is also much lower than the national percentage. Although not surprising as Georgia for many years has had one of the nation's highest percentages of black residents, and while in the 1990s Georgia had one of the nation's fastest-growing Hispanic populations, the state as a whole still has a lower-than-average percentage of Hispanic residents. *(Note: The percentages do not add up to 100 because in the data collected, children considered Hispanic can also be counted as white or black.*) Finally, the percentage of Head Start enrollees in Georgia from a single-parent family (74 percent) is markedly higher than the national percentage (57 percent).[13]

Early Head Start (EHS): With more than 2,500 Georgia infants and toddlers involved, EHS plays an important role in children's success in school, family self-sufficiency, and parent support of their child's development. Currently, only a small portion of low-income children are served by federal EHS and state EHS initiatives, leaving the majority of eligible infants and toddlers without access to this proven program.

Great Start Georgia (GSG): GSG is administered by the Governor's Office for Children and Families. The mission of GSG is to provide wide-ranging support services for families and children to ensure that families have the information and support they need to provide a great start in life. A promising service strategy of GSG is evidenced-based home-visiting (EBHV) that is being piloted in several targeted counties. According to the program, extensive research has shown the effectiveness of EBHV in improving outcomes for maternal and child health, home and child safety, school readiness, family safety, family economic self-sufficiency and referrals and linkages to community resources. A long term goal is to embed evidenced-based home visiting services into local community systems as an effective strategy to support a more coordinated system of care for children and families. The four EBHV models (Early Head Start, Parents As Teachers, Health Families America and Nurse Family Partnership)used in Georgia's federally funded Maternal Infant Early Childhood Home Visiting (MIECHV) program have been shown to favorably impact child development and school readiness. The strengths of the evidenced-based home visiting programs are that they are curriculum based, and provide services to families and children up to 5 years old, thus are able to have long-term relationships with the child and families.

Great Start GA

GSG

The Early Years Last a Lifetime

Developmental

First Steps Program: The mission of First Steps Georgia is to provide universal support services for all expectant parents and for all families with children ages birth to five. There are currently 18 site locations in Georgia.

Project Healthy Moms (PHM): A program of Mental Health America of Georgia. The goal of PHM is to increase awareness, identification, treatment, and support of perinatal mood disorders in Georgia, while also reducing the stigma associated with these disorders. Services include training providers of services to childbearing women on screening and identification of perinatal mood and anxiety disorders. They also provide perinatal peer support services to women affected by these disorders.

Health Care without Walls: Institute for the Study of Disadvantage and Disability, Inc., Atlanta is a 5 year federally funded grant project to improve child health through community-based initiatives for vulnerable populations. It is designed to address the unique health needs of children living with their mothers at a transitional shelter in Atlanta. The project provides primary health care, comprehensive evaluation, case management, and portable health record and referral coordination for up to 60 children per year. Increasing maternal health literacy and training healthcare professionals serving vulnerable populations are also activities of the project.

Use of Electronic Health Records: Pediatricians and Family Physicians serving children birth to age 5 report using the electronic health record (EHR) to assist with scheduling, download educational materials (in English and Spanish) from other web sites to give to parents and to document interaction with parents. Some offices are using a care coordinator to provide referral and follow-up activities. Head Start uses Child Plus as a data tracking system. A key goal of Head Start is to have parents actively involved. Two home visits are required annually. A family Needs Assessment is completed and family goals are established.

Hearing

Georgia PINES (Georgia Parent Infant Network for Educational Services):

Georgia PINES is a statewide early intervention program serving Georgia families of children birth to five years of age with a diagnosed hearing impairment and/or vision loss since 1980. The organization provides training to professionals who deliver services to families of children with hearing and/or vision loss. In addition, eligible families are provided information and training to assist their children to develop to their potential, across all areas of development. All services are provided in the home or other appropriate natural environments. A few of the available services to families include audiological testing, loaner hearing aid banks, functional vision evaluations, and parent lending libraries.

Oral Health

Georgia Dental Association (GDA): The GDA provides continuing education courses during their annual meeting. Members of GDA volunteer to offer, at no charge, a basic dental evaluation, for children entering public schools for the first time, regardless of the grade being entered. A list of participating dentist can be found on the GDA web site, www.gadental.org

Georgia Association for Primary Health Care (GAPHC): GPHAC was one of 5 Primary Care Associations (PACs) nationally to receive a DentaQuest Foundation Grant in 2011. The funding will support oral health technical assistance and leadership development to support community health centers across the state in order to expand oral health services.

Georgia Oral Health Coalition (GOHC): The GOHC in collaboration with the DPH, MCH Section's   Oral Health Unit developed Georgia's first State Oral Health Plan. The Plan has been approved by the DPH commissioner and distributed. The recommendations are divided into 4 areas of focus: 1) prevention, 2) public education and health promotion, 3) surveillance and 4) access to care.

Teledentistry Project: In 2009, a pilot school-based teledentistry clinic was established in a large rural health district, to provide dental services to children who otherwise may not receive dental care. Services are provided by Georgia's College of Dental Medicine faculty and residents. Prevention services are primarily provided to children in the 1st through the 4th grade. For the current 2012-2013 school year, by February 12, 2013, 646 children had received services. The DPH is reviewing opportunities for expanding this program to more districts.

Vision

Prevent Blindness Georgia (PBGA): PBGA is an affiliate of Prevent Blindness America, the nation's leading volunteer eye health and safety organization. Established in Georgia in 1945, PBGA is well recognized in the state for their expertise and technical support. PBGA representatives are also trained as eye screeners and are a major source for mass eye screening programs for children in local public health, community, and school settings.

Children's Vision Georgia: was created in conjunction with the Georgia Department of Public Health and Prevent Blindness Georgia. It is a coalition comprised of more than seventy members and advisors from over fifty agencies across the state involved in children's eye health. This group is tasked with examining the effectiveness of efforts to develop and implement statewide strategies for universal vision screening for children by the age of four.

Literature Research

More than 500 articles and research papers were reviewed by content specialists for the project to provide a comprehensive look at successful approaches across the country. The criteria for selection of the research articles for review included: 1)the research was conducted in the United States; 2)was published in English, in peer-reviewed journals and published no earlier than 2009; and 3) articles related to the four key areas of screening—developmental, hearing, oral health and vision—being studied. Of the material reviewed, 210 articles were selected for inclusion.

Literature was searched on Medline/Pub Med, Cumulative Index to Nursing and Allied Health Literature (CINAHL) SAGE, the U.S. Preventive Services Task Force and the National Academy for State Health Policy, http://www.nashp.org/abcd_welcome. State codes and regulations related to hearing and vision were also searched.

Using key search terms specific to each of the screening topics, abstracts were identified that fit the criteria described above and reviewed. If review confirmed that criteria were met, the full article was accessed and read. The reviewers, with extensive knowledge and experience in providing health services to the birth to age 5 populations and knowledgeable about the DPH Health Screening and Healthy Development project, selected articles and wrote the reviews for each of the screen areas.

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10. *The State of Preschool 2008,* National Institute for Early Education Research, Barnett et al., available online at www.nieer.org/yearbook/, at pp. 48-49 (Georgia profile).

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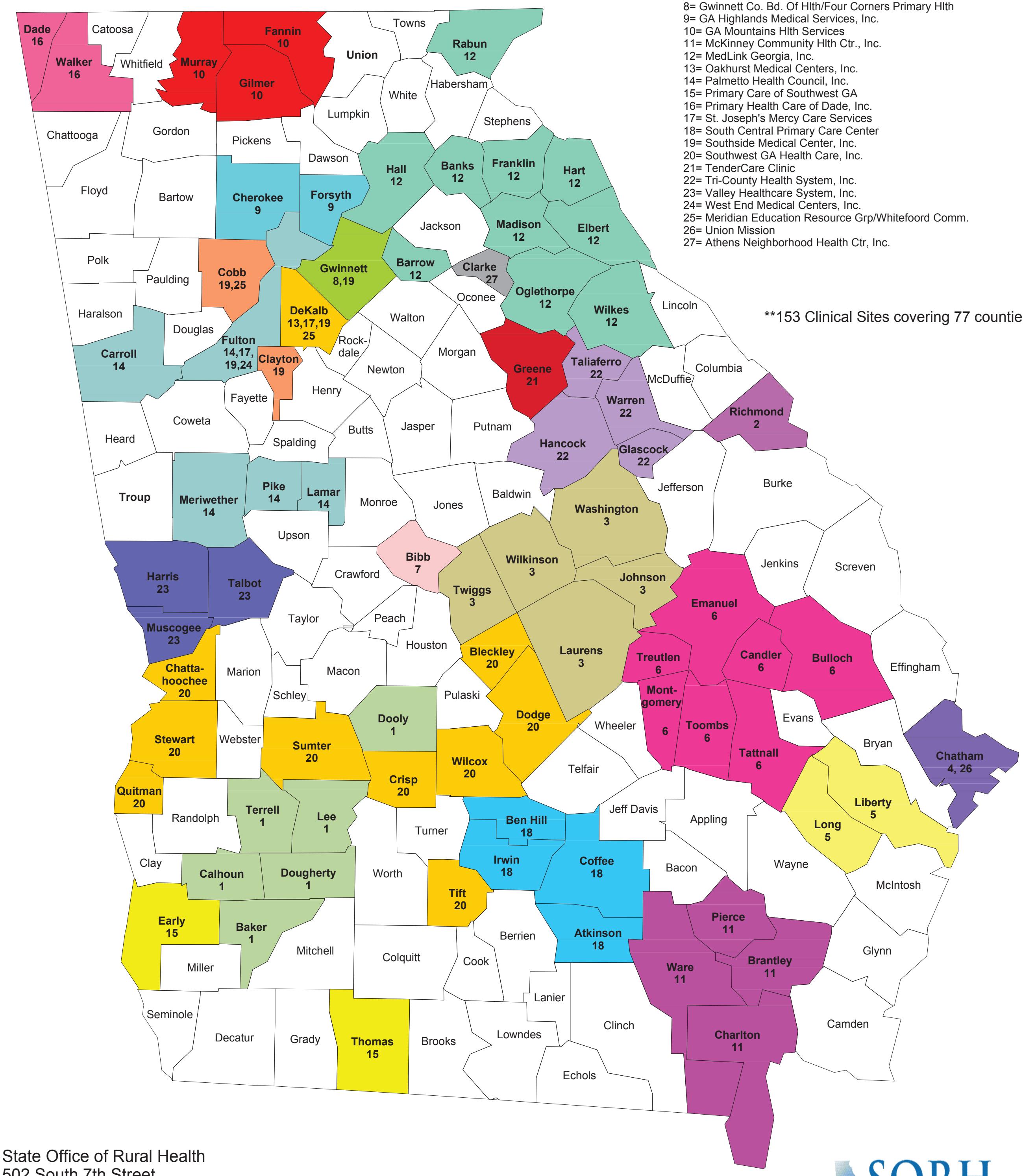
12. Child Care Participation State Profile, Georgia state profile, Center for Law and Social Policy, available online at www.clasp.org/in_the_states?id=0010

13. *Head Start by the Numbers*, Georgia state profile, Center for Law and Social Policy, available online at www.clasp.org/in_the_states?id=0010 p.2. United States Census data, www.census.gov. Head Start by the Numbers, Georgia state profile, n. 6 above, at p.2.

State of Georgia
Federally Qualified Health Center Sites

1= Albany Area Primary Hlth Care, Inc.
2= Neighborhood Improvement Project
3= Community Hlth Care Systems, Inc.
4= Curtis Cooper Primary Hlth Care
5= Diversity Hlth Center, Inc.
6= East GA Healthcare Center, Inc.
7= First Choice Primary Care, Inc.
8= Gwinnett Co. Bd. Of Hlth/Four Corners Primary Hlth
9= GA Highlands Medical Services, Inc.
10= GA Mountains Hlth Services
11= McKinney Community Hlth Ctr., Inc.
12= MedLink Georgia, Inc.
13= Oakhurst Medical Centers, Inc.
14= Palmetto Health Council, Inc.
15= Primary Care of Southwest GA
16= Primary Health Care of Dade, Inc.
17= St. Joseph's Mercy Care Services
18= South Central Primary Care Center
19= Southside Medical Center, Inc.
20= Southwest GA Health Care, Inc.
21= TenderCare Clinic
22= Tri-County Health System, Inc.
23= Valley Healthcare System, Inc.
24= West End Medical Centers, Inc.
25= Meridian Education Resource Grp/Whitefoord Comm.
26= Union Mission
27= Athens Neighborhood Health Ctr, Inc.

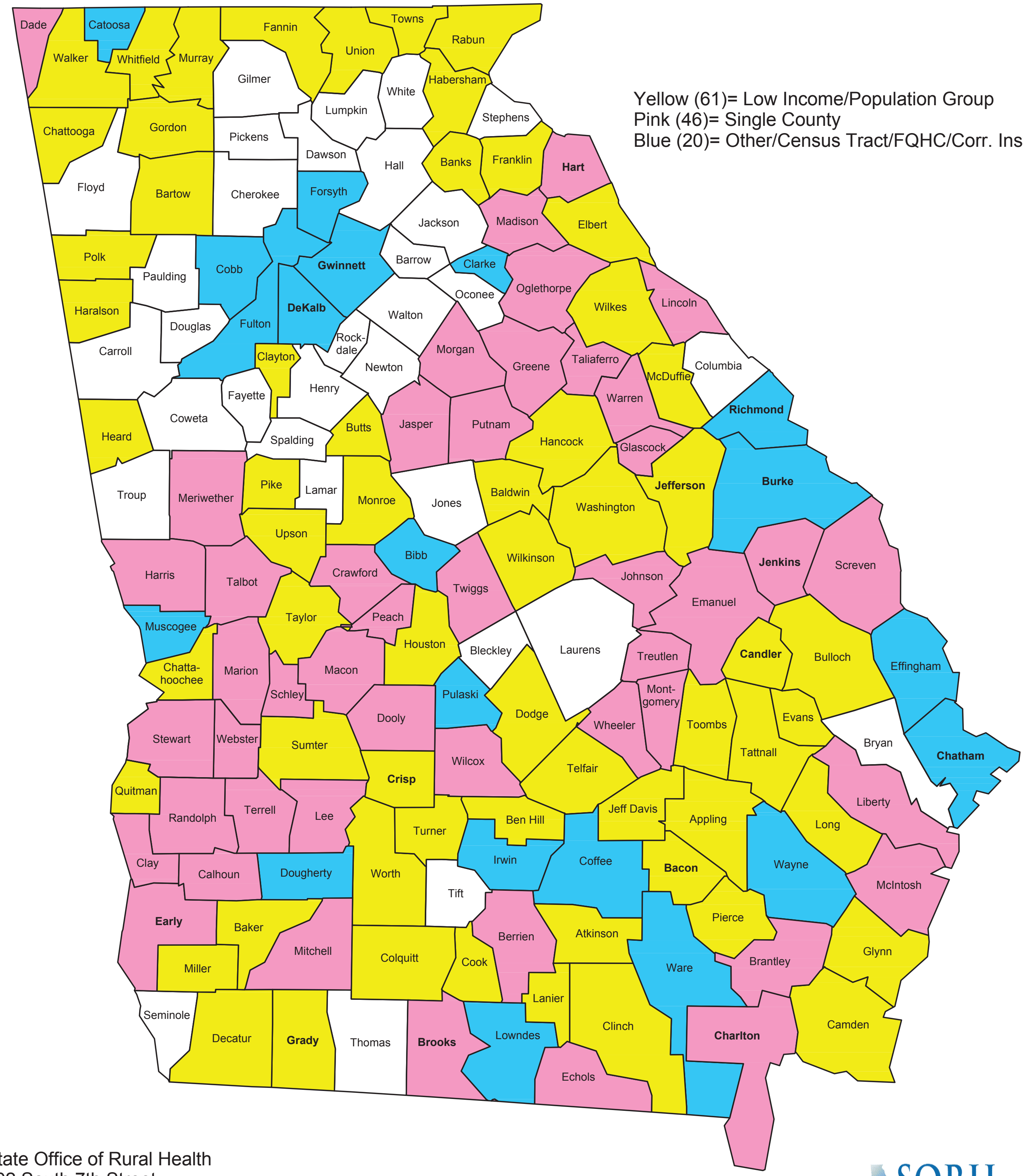


**153 Clinical Sites covering 77 counties

State Office of Rural Health
502 South 7th Street
Cordele, GA 31015
Ph: 229-401-3090
Source: http://www.hrsa.gov
April 2013

SORH
Georgia State Office of Rural Health

State of Georgia
Primary Health Professional Shortage Areas (HPSA's)



Yellow (61)= Low Income/Population Group
Pink (46)= Single County
Blue (20)= Other/Census Tract/FQHC/Corr. Inst.

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To view all background and detailed data collected, survey results and reports from process descriptions and focus groups meetings and other materials associated with this project, including articles and studies reviewed as well methodology, definitions, acronyms, references and appendices, please go to www.dph.ga.gov/publications/hshdproject.

Health Screening and
Healthy Development Project

Georgia Department of Public Health

Georgia Department of Public Health