Best Beginnings

Developmental • Autism • Social-Emotional • Maternal Depression Screening

An ACHIA Early Screening and Referral Collaborative

# *Best Beginnings Early Screening and Referral Completion Collaborative 2020 Final Report*

## Contents

## Our Sponsors

This collaborative made possible by the generous support of:

## Early Screening and Referral Completion: Why It Matters

Unaddressed developmental delays, behavioral issues, and postpartum depression may adversely affect child health outcomes. The nine health supervision visits in the first two years of life are opportunities for pediatric primary care providers to identify these conditions and refer families to timely resources. Unfortunately, even when needs are identified and families are referred, specialist visits often remain 'unscheduled and unattended' leading to persistent care gaps.

### The Importance of Screening

Twelve to sixteen percent of children in the United States have at least one developmental delay, yet as many as one-half of affected children will not be identified by the time, they enter kindergarten. Disabilities such as language impairment, mild intellectual disabilities and learning disabilities are associated with poorer health status and high rates of school failure. Behavioral or emotion disorders are also common affecting approximately 11% to 20% of children ages 2-5 years in the United States at any given time. Developmental and behavioral health disorders are now in the top five chronic pediatric conditions causing functional impairment in the pediatric population. Postpartum depression, the most common obstetric complication in the United States, may adversely affect child brain development during the critical early period.

### Primary Care Provider Role

The American Academy of Pediatrics (AAP) provides clinical guidance to conduct surveillance for developmental, behavioral, and postpartum depression at all health supervision visits and to conduct screening at specific intervals. Early identification and intervention are the responsibility of pediatric professionals as an integral function of the medical home. Standardized developmental screening is recommended at the 9-, 18, and 30- (or 24-) month visits. Postpartum depression screening is part of the 1-, 2-, 4-, and 6-month well visits. Social-emotional screening does not have a specific timeframe in the first few years of life; however, integrated behavioral screening is part of best practices for a medical home. Once a risk is identified, providers are responsible for referring- and tracking referrals - to connect families to resources to optimize early screening outcomes.


Hamilton S. Screening for developmental delay: reliable, easy-to-use tools. *J Fam Pract*. 2006;55(5):415–422.

Nelson HD, Nygren P, Walker M, Panoscha R. Screening for speech and language delay in preschool children: systematic evidence review for the US Preventive Services Task Force [published correction appears in *Pediatrics*. 2006;117(6):2336–2337]. *Pediatrics*. 2006;117(2): e298–e319.

Buschmann A, Joss B, Rupp A, et al. Parent based language intervention for 2-year-old children with specific expressive language delay: a randomized controlled trial. *Arch Dis Child*. 2009;94(2):110–116.

Lipkin PH, Macias MM, AAP COUNCIL ON CHILDREN WITH DISABILITIES, SECTION ON DEVELOPMENTAL AND BEHAVIORAL PEDIATRICS. Promoting Optimal Development: Identifying Infants and Young Children with Developmental Disorders Through Developmental Surveillance and Screening. Pediatrics. 2020;145(1): e20193449.

Glascoe FP. Screening for developmental and behavioral problems. *Ment Retard Dev Disabil Res Rev*. 2005;11(3):173–179.'

Centers for Disease Control and Prevention. Child development: Using developmental screening to improve children's health. http://www.cdc.gov/ncbddd/child/improve.htm. Accessed June 27, 2011.

Bohnhoff JC, Taormina JM, Ferrante L, et al. Unscheduled Referrals and Unattended Appointments After Pediatric Subspecialty Referral. Pediatrics. 2019. 144(6): e20190545

Wall-Wieler E, Roos LL, Gotlib IH. Maternal Depression in Early Childhood and Developmental Vulnerability at School Entry. Pediatrics. 2020;146(3): e20200794

## Best Beginnings Collaborative QI Training

QI Training for the practices begins with a virtual coaching visit. Practices prepare for the visit by preparing Aim statements and a process map informed by brief videos on the Model for Improvement and a PowerPoint presentation on process maps. During the coaching visit, Aim statements are revised, the process map is reviewed for change ideas, the data collection plan is developed and the plan for the first test of change is developed.

QI concepts are shared throughout the remainder of the collaborative with opportunities for transparency of practice level measures and peer to peer learning. The objective for this sharing is that practices learn from their measures and adjust their testing accordingly. In addition, through the sharing of practice experiences, new ideas for testing and improvement can be adapted in a variety of practice settings.

## Best Beginnings Curriculum

For the Best Beginnings collaborative, participants completed the AAP Star Center Screening Time Modules (approximately 3.25 hours). These screening modules addressed Screening and Conversation, Follow Up, Maternal Depression, Developmental Screening, Social Determinants of Health, and Workflow. State-based experts supplemented the curriculum during the monthly webinars.

**Alabama Expert Faculty**

Best Beginnings faculty came from across the state:

- Developmental Delay and Autism: Justin Schwartz, MD. UAB Developmental-Behavior Pediatrics Birmingham, Alabama
- Social-Emotional Screening: Elizabeth Dawson, MD, Charles Henderson Child Health Center, Troy Alabama
- Postpartum Depression Screening: Lamenda Blakeney, MD Partners in Pediatrics, Montgomery, Alabama
- Family Representative: Susan Pannell

**Community Partners**

ACHIA partnered with Help Me Grow (HMG) Alabama, Reach Out and Read (ROR) Alabama, and the Regional Autism Network (RAN).

Most participating practices already had Reach Out and Read practices established. The one that did not have a previously established program contacted ROR. Most practices participated in the summer reading initiative “Pete the Cat” even with COVID. One practice handed out sunglasses along with the book, shared information on how to check out books virtually, and posted a YouTube video with a doctor reading the book. Another began posting activities and crafts several weeks before the Facebook Watch party when a physician read the book live.

Practices working with Help Me Grow valued transition support from Early Intervention at 3 years of age, for help obtaining Early Intervention reports, and for removing barriers to Early Intervention Evaluations. One practice used HMG to support referral tracking.

Half of the practices reported more engagement with the Regional Autism Network because of the collaborative.

## Best Beginnings Participating Practices

**Provider Incentive Alignment**

ACHIA collaboratives align with multiple practice and provider requirements. This collaborative provided:

- Continuing Medical Education and Continuing Education Units for providers and nurses which is required for State Licenses.
- Maintenance of Certification Part 4 for the American Board of Pediatrics which is required for the American Board of Pediatrics good standing.
- Alignment with several payor incentives to:
    - increase early screening (developmental, autism, behavioral, postpartum depression)
    - increase referral completion for at-risk patients.
    - become or re-certify as a Patient Centered Medical Home.

**Participating Practices**

Participating Practices: Dothan Healthcare Network Dothan Clinic, Dothan Healthcare Network Enterprise Clinic, Dothan Healthcare Network Eufaula Clinic, Dothan Healthcare Network Ozark Clinic, Greenvale Pediatrics - Brook Highland, Heritage Pediatrics, Huntsville Pediatric Associates, Infants' and Children's Clinic, P.C, Midtown Pediatrics, Partners in Pediatrics, Pediatrics West Bessemer, Pediatrics West McAdory, Peds Primary Care Clinic, Vestavia Pediatrics

## Best Beginnings Early Screening and Referral Completion Goals, Aims, Key Drivers and Measures

**Practice Aims and Measures**

**Global Aim**: *We will build a sustainable patient-centered quality improvement infrastructure for best beginnings within our practice where children at risk for developmental, autism and/or social/emotional concerns, as well as mothers with post-partum depression, are identified through recommended screening and are appropriately referred for services.*

Over 9 months, participants will increase knowledge of best practices for early screening for developmental, autism social-emotional, and maternal depression at well visit by reviewing online educational modules and engaging with faculty experts on monthly webinars. Practices will conduct assessments of current practices through surveys and will implement change ideas by applying QI tools such as plan-do-study-act cycles under the guidance of the ACHIA QI coach.

Practices will select ONE of the Early Screens: development, autism, social-emotional, or postpartum depression; and then focus on:

- reliable screening
- documenting screen interpretation and plan
- for patients at risk, making and tracking referrals.

**Specific Interventions:** Between January and September 2020 we will increase the rate at which recommended Well Visit screening and referrals for conditions impacting children ages 1 month to 3 years are reliably screened and, if at risk, are referred for services:

- 90% of Well Visits ages 1 month to 3 years appropriately complete selected early screening*
- 90% of children or mothers identified as at risk have a follow up plan documented.
- The percentage of children or mothers at risk who complete follow up plan.

Screens (select one)

- Development: 9, 18, and 30 (or 24) months
- Autism: 18 and 24 months
- Post-Partum Depression: 1, 2, 4 and 6 months
- Social Emotional: Practice Identified Age

*Appropriately complete:

- Screen scored accurately in appropriate language.
- Development and Social Emotional: Correct age screen deployed.
- Autism and Maternal Depression: Follow up questions administered when indicated.

**Key Drivers**

Engage QI Team and Practice: The QI Team and practice is active and engaged in improving practice processes and patient outcomes.

Manage Population: Practice patients due for best beginnings screens are tracked to ensure screening and referral completion if identified as at risk.

Build Community Capacity: Develop and use community resource effectively.

Reliable Screening and Referral: Standardize practice-wide process for sustainability of early screening, maternal depression screening, and referral process.

Parent/Guardian Engagement: Communicate effectively and provide self-management support.

## Best Beginnings Early Screening and Referral Completion Results

**Practice Demographics**

Sixty-seven pediatricians representing 14 practice sites across Alabama voluntarily participated. In addition to the pediatricians, 17 nursing/clinical staff and 11 administrative/support staff also participated.

Of the practices, 31% self-identified as Medium sized (4-6 physicians), while 69% identified as a Large practice (≥ 7 physicians). Looking at where the practices were in the state: 8% identified in Rural, 23% in urban settings, and 69% considered themselves in a suburban setting. Through self-report, practices had an annual total of 93,389 patient visits attributed to children ages 0 - 3; years of age while reported 234,450 patients ages 0 – 18 for annual visits. Practices reported that 41% of patients were Medicaid eligible.

### Early Screening and Referral Completion Practice Data Highlights

**Measure #1: Appropriately Completing Screen**

To count as "appropriately completed," practices had to assess several items. At the most fundamental level, the screen had to be in the medical record.

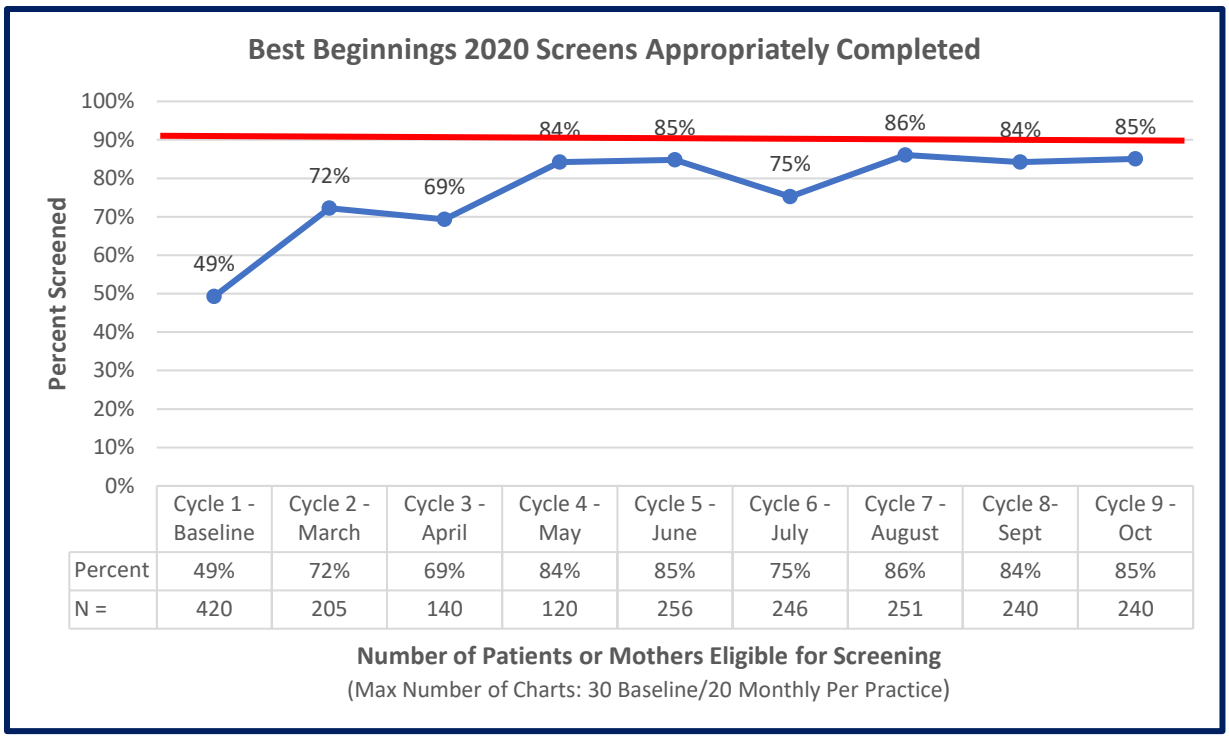
For ASQ3 (developmental) and ASQSE (social-emotional) practices assessed whether:

- the correct age screen was deployed.
- the screen was scored correctly.
- the screen was interpreted correctly.

For the Autism and Postpartum depression screen, practices assessed whether follow up questions were administered and documented when indicated.

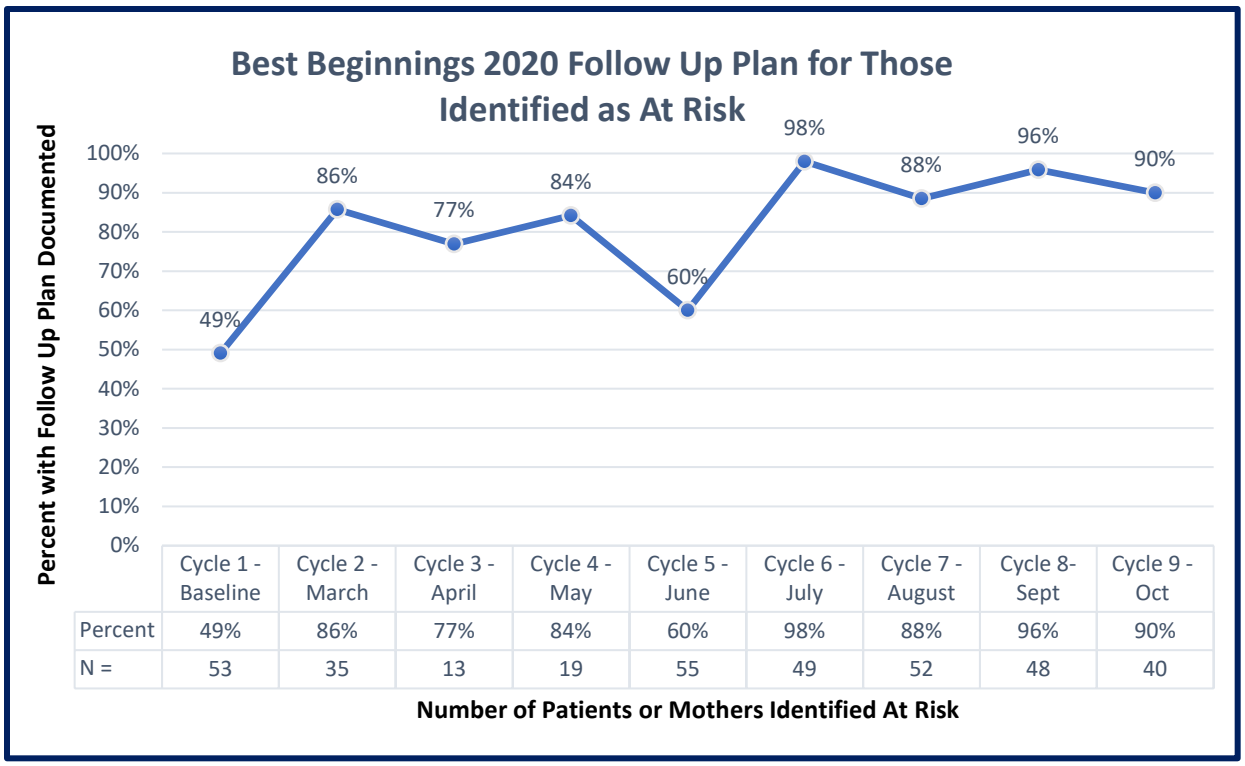
"Appropriate completion" leads to better identification of those a risk, thus minimizing unnecessary referrals. Practices improved screening from 49% to 85%.

Several practices noted that increased awareness of missed screening opportunities and screening with the incorrect age were the most beneficial aspects of the collaborative.




**Measure #2: Follow up Plan documented.**

As important as screening is, taking action when risk is identified as equally important. The baseline data showed practices were not reliably documenting a follow up plan. Over the course of the collaborative, practices increased documentation for children or mothers identified as at risk from 49% to 89%.




**Measure #3: Referral Status Assessed**

Measuring referral visit completion is important to close care gaps; however, referrals may take longer to finalize than the entirety of the collaborative.

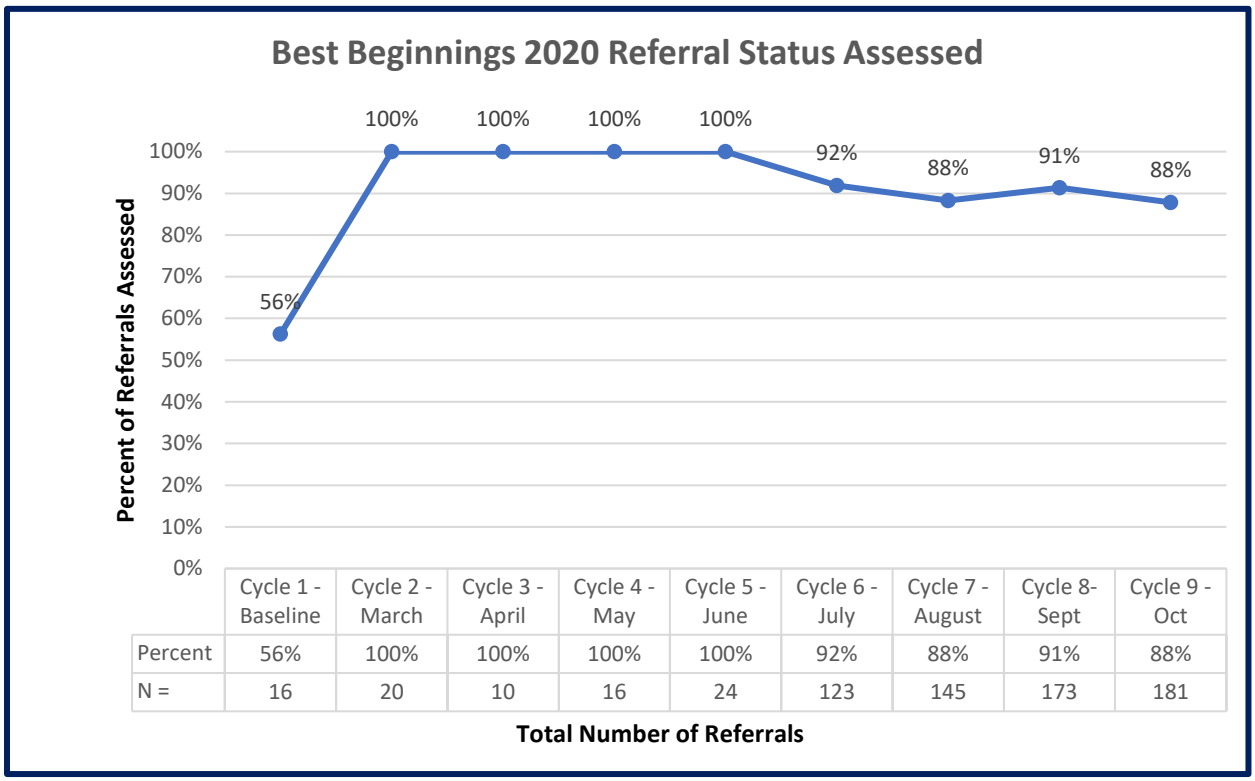
ACHIA developed an innovative measure for practices to test change ideas in the 9-month collaborative timeframe to close care gaps. Practices tracked whether a referral was pending, missed and rescheduled, or – if complete – needed additional actions taken.

The process measure helped practices be aware of the referral status to prevent patients being lost to follow up. Multiple practices cited this practice improvement as the most valuable measure from the collaborative.

The run chart follows the predicted pattern. Early in the collaborative when few referrals were made, especially during the COVID-19 pandemic, most appointments were scheduled and therefore "assessed" as 100%. Over time, as families missed appointments, referral tracking helped practices identify and address the barriers to referral completion.

*"There have been so many instances when patients 'referrals have been lost to follow up. Now we have a dedicated staff member following our referrals, we have already (even the in the last few months)*

*identified several patients who* did not receive a phone call, go to their appt, etc*., and we have been able to make appropriate follow-up plans for the patient and family from there. This is something we plan to continue going forward." (A Best Beginnings Practice)*




| | Cycle 1 - Baseline | Cycle 2 - March | Cycle 3 - April | Cycle 4 - May | Cycle 5 - June | Cycle 6 - July | Cycle 7 - August | Cycle 8- Sept | Cycle 9 - Oct |
|---|---|---|---|---|---|---|---|---|---|
| Percent | 56% | 100% | 100% | 100% | 100% | 92% | 88% | 91% | 88% |
| N = | 16 | 20 | 10 | 16 | 24 | 123 | 145 | 173 | 181 |

## A word about COVID-19

Practices had just completed baseline data and were starting to test change ideas when COVID-19 affected Alabama. ACHIA paused collaborative work for March, April, and May. Three of the 14 practices withdrew to give full attention to the COVID crisis. Notwithstanding, a few practices – especially those that had selected screening for postpartum depression – continued to test and improve screening.

While the curriculum was paused, ACHIA continued to offer monthly webinars so collaborative participants could share best practices around making necessary changes for COVID: obtaining Personal Protective Equipment (PPE), changing scheduling to separate sick and well patients, setting up outdoor visits, and so on.

Two practices identified COVID conditions (short staffed, lower patient volumes) as the biggest impediment to making improvements.

## Qualitative Results

### Peer-to-Peer Learning

Four practices described the most beneficial aspect of the collaborative as “sharing ideas”, “bouncing ideas off one another” and “interacting with other physician groups”.

### Practice Self-Assessment

Eleven of 12 practices reported significant improvement in screen administration. Nine practices noted that follow up plan documentation significantly improved; the remaining 3 practices reported follow up plan documentation as somewhat improved. For Referral tracking, 9 reported significantly improved, 2 somewhat improved and 1 was not able to participate in referral tracking.

Eleven of 12 practices reported on the Institute for Healthcare Improvement as making “Significant Progress and Real Improvements.”

## Lessons Learned

Learning Collaboratives provide structure to make desired improvements, which can be challenging to prioritize and develop outside the collaborative.

- Practices value interacting with other primary care providers to bring novel ideas to their clinic. Bouncing ideas off each other was especially useful during COVID-19 to address the rapid changes around scheduling, supplies, and telehealth.
- Working as a team is essential to improve diagnoses, referrals, tracking, and communication with families.

- Multiple practices identified referral tracking improvements as the most impactful change to connect those at risk to needed services in a timely manner.
- Our community partners were highly utilized in this collaborative. Practices especially valued assistance from HMG in closing Early Intervention referral gaps and their support in transitioning off Early Intervention at 3 years of age.

## ACHIA Best Beginnings Key Informant Interviews Report

Eight individuals were identified as key informants by ACHIA staff. In November 2020, two Applied Evaluation and Assessment Center (AEAC) staff members coordinated phone or Zoom interviews with seven key informants. One individual did not respond to multiple requests for an interview. AEAC staff members conducted the interviews, which lasted between 15 and 20 minutes. Interviewers recorded and analyzed notes for common themes using NVivo 12.

### Strengths

All interviewees had positive feedback about their experience participating in the Best Beginnings learning collaborative. More than half of those interviewed commented that communication was excellent throughout the learning collaborative. Participants appreciated frequent, clear communication from ACHIA staff regarding responsibilities, expectations, and meeting reminders. More specifically, one participant described the way ACHIA staff discussed participant "failings" as normal and opportunities for growth. This created a "safe space" for learning collaborative participants.

More than half of interviewees also commented on how well this learning collaborative was organized. Participants suggested that the structure of the learning collaborative offered practices the opportunity to implement the changes they wanted to make but had not previously made a priority. Due to the structure and organization of the learning collaborative, participants indicated a high level of confidence in their understanding of program objectives.

Other aspects of the learning collaborative that multiple participants described as strengths were the webinar content and ACHIA's flexibility when the COVID-19 pandemic began to affect practices. One participant specifically mentioned Dr. Schwartz's talk as providing practical lessons that were brought back to their practice. Another participant commented, "The webinars were great and easily accessible." Two participants expressed appreciation that ACHIA staff pivoted when it became clear that practices would be focused on managing the pandemic. For a period, instead of continuing with the planned learning collaborative activities, participants were able to discuss transitioning to virtual care, best practices for conducting sick visits, and managing limited supplies of personal protective equipment, among many other pandemic-related topics.

One participant shared that, as a faculty member, this learning collaborative was an opportunity for professional development, stating Dr. Benton (ACHIA Director) provides support for faculty members to succeed. Another participant noted that the learning collaborative was "data-driven," further sharing that this aspect is important "because we can all have our own ideas about what's working and not working." A final comment on the strengths of the learning collaborative was that it provided an opportunity for practices across Alabama to connect and discuss best practices in a low-risk environment.

**Challenges**

Over half of interviewees described the COVID-19 pandemic as being a challenge to the learning collaborative. Each of these interviewees also shared that the challenges posed by the pandemic were handled as well as possible by ACHIA staff. More than half of interviewees also described the use of multiple forms of communication and platforms as being a challenge and "cumbersome." These participants mentioned four platforms, including Slack (communication), QIDA (data entry), the ACHIA website (resources), and another unspecified platform for completing surveys. Most interviewees had trouble using Slack. One participant shared that not all communication occurred in Slack, which was confusing. Another participant made this suggestion, "I love the ACHIA website. It would be nice to coordinate everything through the website."

An interviewee who served as a faculty member indicated that it would be helpful to receive more clarity regarding the expectations of faculty. This individual suggested that faculty could have provided more "direct or on-going" support and be available to answer participants' questions. A learning collaborative participant found it difficult to delegate program activities, such as data entry, to other staff members in their clinic.

**Opportunities**

One interviewee suggested taking a "broad to narrow" approach by building on previous learning collaboratives and exploring more detailed aspects of the topics already covered. This interviewee specifically mentioned referral tracking as an "applicable skill" that they would like to learn more about through a learning collaborative. Similarly, another interviewee suggested taking a "deeper dive" into quality improvement on topics that have been covered in previous learning collaboratives. This individual cited the additional data that participating practices had collected at the conclusion of this learning collaborative because the program was extended. With this extra data, some practices have elected to participate in "orchestrated PDSAs" regarding healthy weight in infants and toddlers. The concept of "orchestrated PDSAs" is new to learning collaborative participants, and in the case of healthy weight in infants and toddlers, leaves "room for lots of innovation" because there are limited best practices available on the topic. The last opportunity for improvement in future learning collaboratives was the use of Slack as a communication channel. One interviewee shared that a

"round-robin learning structure" was used throughout this learning collaborative and the plan is to continue using Slack in future programs, however, ACHIA needs "a different way to test Slack."

**Future Topics**

Interviewees shared a wide variety of topics of interest for future learning collaboratives. Two participants reported interest in learning more about pediatric and adolescent mental health. These interviewees mentioned many topics that are more specific, such as adverse childhood experiences, anxiety, depression, ADHD, concussions, and psychotherapy treatments. Two participants expressed interest in participating in a learning collaborative that focused on managing chronic conditions in the pediatric population.

All the other topics of interest were unique and are listed below.

| Autism Spectrum Disorder and developmental delays (improving primary care providers provision of care and support of families) |
|---|
| **Clinic logistics (referral trends)** |
| **HPV vaccination** |
| **Lead screening (determining who should be screened)** |
| **Metabolic screening** |
| **Parental engagement (improving relationships between physicians and parents)** |

## Conclusion

Despite delays and disruptions to the ACHIA Best Beginnings Learning Collaborative due to the COVID-19 global pandemic, participating practices increased knowledge of best practices for early screening for developmental, autism, behavioral, and maternal depression. Practices accomplished this goal by addressing the key drivers of the initiative, specifically quality improvement team and practice engagement, patient population tracking, community capacity building, standardized processes for screening and referral, and parent/guardian engagement.

In addition to improvements in process measures, practices expressed appreciation for the structure and continuity of ACHIA during this unprecedented time. Moreover, practices recognized ACHIA's flexibility and willingness to adapt the learning collaborative to address issues of critical importance related to COVID-19 (e.g., PPE, supplies, telehealth), while still maintaining a focus on the primary aim. Adapting in real-time to the evolving pandemic was a strength of this learning collaborative. Participants welcomed the opportunity to collaborate with each other through peer-to-peer interactions and identified multiple opportunities for improvement related to future learning collaborative strategies and topics.

## Appendices

About ACHIA
Collaborative Format
Best Beginnings 360
Key Driver
Best Beginnings Timeline (Revised with COVID Pause)

## *Appendix 1*
## *About the Alabama Child Health Improvement Alliance*

A member of the National Improvement Partnership Network (NIPN) since 2013, the Alabama Child Health Improvement Alliance (ACHIA) is a statewide collaboration of public and private partners that uses measurement-based efforts and a system approach to improve the quality of children's healthcare. Our partners include the Alabama Chapter American Academy of Pediatrics, Children's of Alabama, the University of Alabama at Birmingham Department of Pediatrics, the University of South Alabama Department of Pediatrics, the Alabama Medicaid Agency, the Alabama Department of Public Health – Title V, ALL Kids, Blue Cross and Blue Shield of Alabama, Jefferson County Department of Health, Family Voices, The Children's Rehabilitation Services, and others. ACHIA's administrative home is in the University of Alabama at Birmingham Department of Pediatrics, a state agency, with staffing comprised of a Director and administrative/support staffing. An ACHIA cornerstone is establishing learning collaboratives for practices and health systems to improve care on the front-line, using meaningful data to gauge these efforts, and identifying policy-level implications and improvements. A key component of our staffing structure and work is the use of practice-/system-level facilitators to guide improvement efforts at the ground-level and ensure that evidence-based strategies are implemented and sustained.

**Vision and Mission Statements**
**Vision**: Alabama's children achieve optimal health.

**Mission:** To improve health outcomes by fostering a culture of quality improvement through partnerships with practitioners, payers, families, and organizations that deliver care to Alabama children.

**Values Guiding ACHIA Work**
We will:

- Be committed to conducting high value, high quality project work.
- Be measurement driven.
- Focus our work on improving the use of interventions with a solid evidence base of effectiveness in practice-based settings.
- Select projects that address priority health/healthcare issues for Alabama children.
- Conduct our work in a multi-disciplinary fashion as improving pediatric care requires the involvement of many different sectors and systems.
- Operate in a spirit of collaboration not competition. We will not address a pediatric health or healthcare priority that is already being comprehensively addressed by another organization unless there is a mutually identified role the ACHIA can play to support that organization's efforts.
- Adhere to principles of health data confidentiality.
- Share knowledge and information learned through our quality improvement work with Alabama public agencies interested in child health and National Improvement Network Partnership stakeholders in the interest of child betterment.

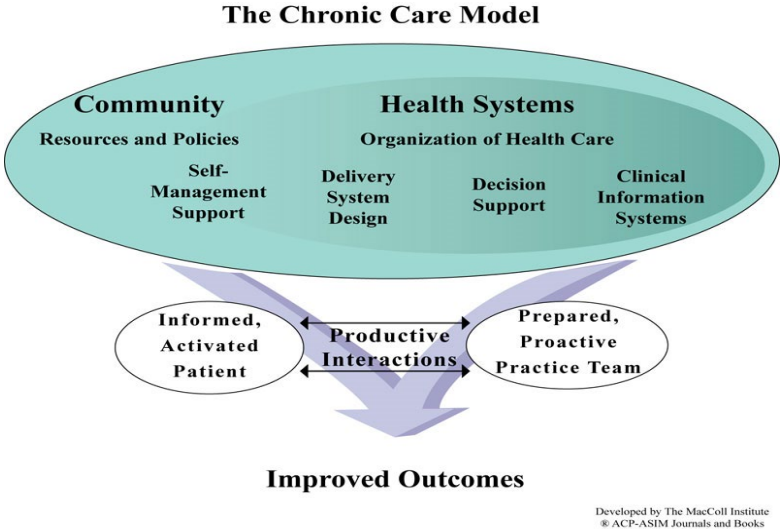
***Appendix 2***

***Collaborative Format***

ACHIA Collaboratives use three tightly linked and highly successful frameworks: the IHI Breakthrough Series Collaborative Learning Model, the Chronic Care Model, and the Model for Improvement.

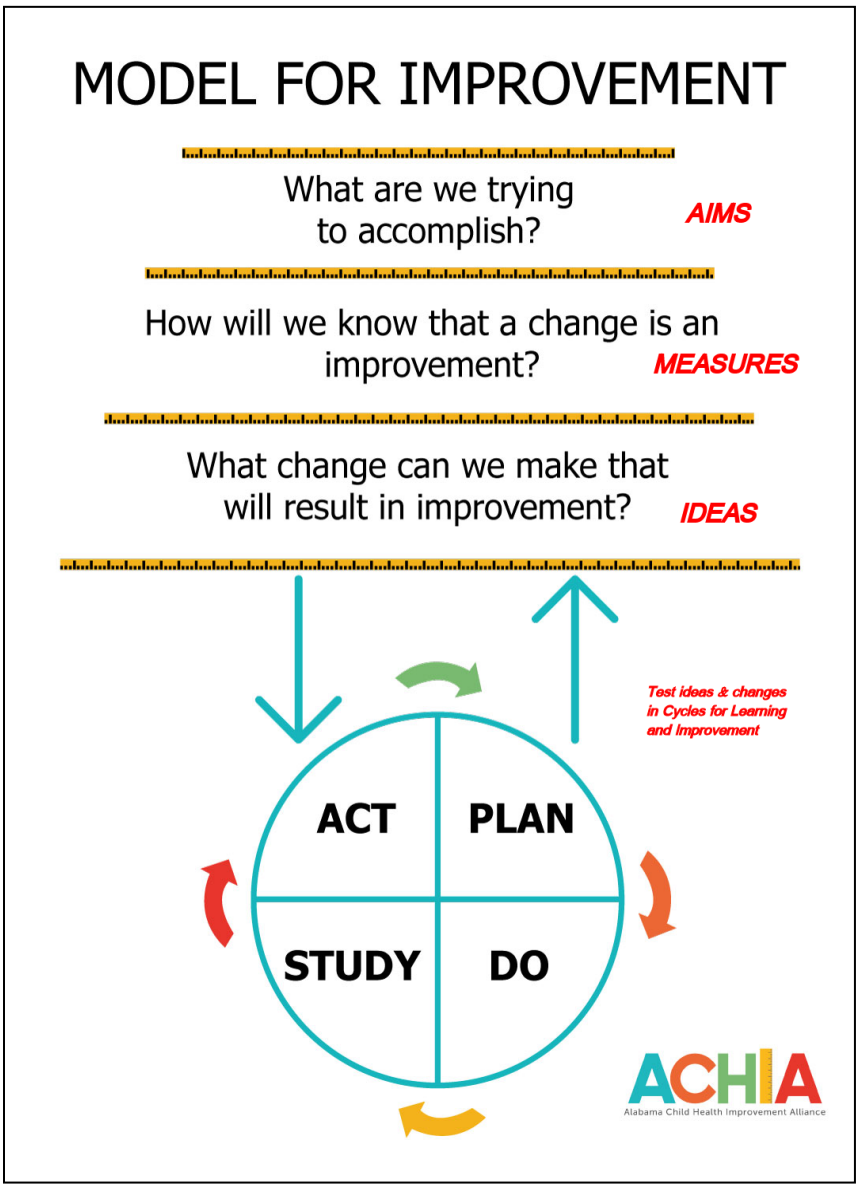
1. **The IHI Breakthrough Series Collaborative Learning Model** –The collaborative learning model is based on the Institute for Healthcare Improvement's (IHI) Breakthrough Series. The model is designed to create a learning laboratory for practices to test and implement changes using the methods and approaches outlined in this section. In the Adolescent Well Visit learning collaborative, practice QI Core Team members voluntarily participate in monthly webinars over a 9-month period. Practice QI Core Teams identify approaches, tools, and resources to implement small *tests of change* with guidance from improvement faculty. Beyond guidance from experts, we have found that many practices learn the most from one another. Hearing what a similar practice has tested and learning what works (and what does not work), are repeatedly reported to be the most valuable part of the collaborative. During "*action periods*," the time in between practice calls and webinars, the learning collaborative participants analyze their progress by reviewing their data with input from improvement faculty. Monthly practice calls/webinars develop strategies to overcome barriers to making change based on what your practice and other practices are facing as they develop and implement tests of change. Because the learning collaborative is dynamic, topics and assignments currently listed on the syllabus may be revised to meet participant's needs.

2. **The Chronic Care Model** – The Chronic Care Model, developed by Ed Wagner of the MacColl Center for Healthcare Innovation, identifies the essential elements of a health care system that encourages high quality child health care. These elements are outlined in the visual below: the community, the health system, self-management support, delivery system design, decision support and clinical information systems. Since you may be hearing more about the concept of "patient centered medical home," you should know that many of the chronic care components are similar to those required to be a patient centered medical home. The practice *key driver diagram* is based on Wagner's Chronic Care Model.




3. **The Model for Improvement (MFI)** – Building multiple, planned *tests of change* with Plan-Do-Study- Act cycles allow learning to be captured in small increments. This approach reduces the risk of lengthy planning periods and lost time and effort. The MFI is based on the 3 questions stated below. The circle describes the iterative cycles that your *Practice QI Core Team* will go through to identify whether a test you have tried is worth acting on a larger scale.

The MFI is at the core of your practice's work, so it is described below. More information about the Model for Improvement developed by Associates in Process Improvement is available at http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx



***Appendix 3***
***Best Beginnings 360***

Best Beginnings
Developmental • Autism • Social-Emotional • Maternal Depression Screening
An ACHA Early Screening and Referral Collaborative

*Unaddressed developmental delays, behavioral issues, and postpartum depression may adversely affect child health outcomes. The nine health supervision visits in the first two years of life are opportunities for pediatric primary care providers to identify these conditions and refer families to timely resources. Unfortunately, even when needs are identified and families are referred, specialist visits often remain 'unscheduled and unattended,' leading to persistent care gaps.*

***January - November 2020***

**Global Aim**
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**Specific Aim**
Between January and September 2020 we will increase the rate at which recommended well-visit screening and referrals for conditions impacting children ages one month to three years are reliably screened and, if at risk, are referred for services:

- 90% of well visits ages one month - three years appropriately complete selected early screening*
- 90% of children or mothers identified as at risk have a follow-up plan documented
- The percentage of children or mothers at risk who complete follow-up plan

Screens (select one)

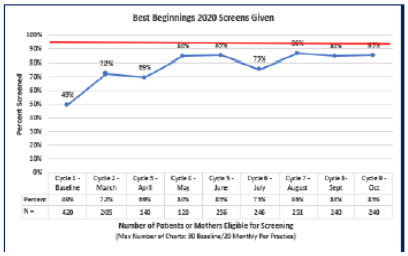
- Development: 9, 18, and 30 (or 24) months
- Autism: 18 and 24 months
- Post-partum Depression: 1, 2, 4 and 6 months
- Social-Emotional: Practice Identified Age

*Appropriately complete:

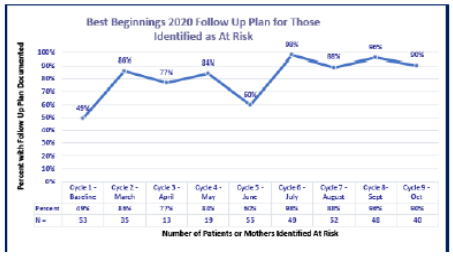
- Screen scored accurately in appropriate language
- Development and Social-Emotional: Correct age screen deployed
- Autism and Maternal Depression: Follow-up questions administered when indicated

**COVID Pause** -- *From March-May collaborative work "paused" as practices addressed COVID needs. Monthly interactive webinars allowed practices to share tips for schedule revisions, COVID testing, rolling out telehealth, and obtaining personal protective equipment. Several practices continued to track and enter data.*

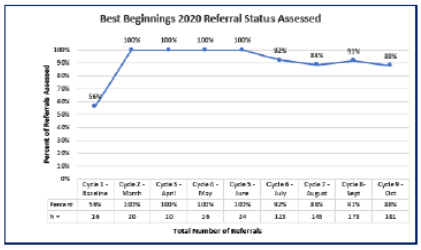
## Measures




The Best Beginnings Screen measure assesses multiple components to ensure the accuracy of the screen interpretation. Practices began the collaborative with half of recommended screens appropriately completed and quickly implemented screening for around 85% of visits. Improvements most commonly noted were reliably completing the screen and scoring the screen accurately.




Practices began the collaborative with 50% of their patients or at-risk mothers having a documented follow-up plan and quickly implemented reliable documentation.




Referral gaps exist when a patient at risk is referred for services, but the appointment is not completed.

Measuring the desired outcome of referral completion has little utility for making improvements in a 9-month collaborative as referrals may require months to complete.

This innovative measure tracked all referrals made during the collaborative. For a referral to count as "assessed," the appointment was completed OR scheduled for a future date.

The run chart follows the predicted pattern. Early in the collaborative when few referrals were made (especially in the pandemic), most appointments were scheduled and therefore "assessed" as 100%. Over time, as families missed appointments, referral tracking helped the practices identify and address the barriers to referral completion.

| Participants | Project Partners | Project Support |
|---|---|---|
| 14 practices from across Alabama with 95 total staff:<br>• 64 physicians<br>• 17 nursing/clinical<br>• 11 administrative/ support<br><br>*11 practices remained in the extended collaborative while navigating the pandemic* | • Help Me Grow<br>• Reach Out and Read-Alabama<br>• Regional Autism Network<br>• Alabama Chapter-American Academy of Pediatrics | • Children's of Alabama<br>• University of Alabama – Department of Pediatrics<br>• University of South Alabama<br>• The Caring Foundation<br>• Alabama Medicaid Agency<br>• ALL Kids<br>• Alabama Department of Early Childhood Education |

Practice panels annually have:
• 93,389 well visits 0 - 3 years • 237,540 total visits ages birth – 18 years • 41.06% of participating practice patients have Medicaid

Best Beginnings faculty came from across the state:
• Developmental Delay and Autism: Justin Schwartz, MD, FAAP, UAB Developmental-Behavior Pediatrics Birmingham, Alabama
• Social-Emotional Screening: Elizabeth Dawson, MD, FAAP, Charles Henderson Child Health Center, Troy, Alabama
• Postpartum Depression Screening: Lamenda Blakeney, MD, FAAP, Partners in Pediatrics, Montgomery, Alabama
• Family Representative: Susan Pannell

ACHIA
Alabama Child Health Improvement Alliance

**For more information on this and other collaboratives, visit www.achia.org.**

**Participating Practices:** Dothan Healthcare Network -- Dothan Pediatric Clinic, Enterprise Pediatric Clinic, Eufaula Pediatric Clinic, Ozark Pediatric Clinic; Greenvale Pediatrics - Brook Highland; Heritage Pediatrics; Huntsville Pediatric Associates; Infants' and Children's Clinic, P.C.; Midtown Pediatrics; Partners in Pediatrics; Pediatrics West Bessemer; Pediatrics West McAdory; UAB Pediatric Primary Care Clinic

**LESSONS LEARNED**

- Learning collaboratives provide practices structure to make desired improvements challenging to prioritize and develop outside the collaborative.
- Practices value interacting with other primary care providers to bring novel ideas to their clinic. Bouncing ideas off of each other was especially useful during COVID to address the rapid changes around scheduling, supplies, and telehealth.
- Working as a team is essential to improve diagnoses, referrals, tracking, and communication with families.
- Multiple practices identified referral-tracking improvements as the most impactful change to connect those at risk to needed services in a timely manner.
- Our community partners were highly utilized in this collaborative. Practices especially valued Help Me Grow's assistance in closing Early Intervention referral gaps and their support in transitioning off Early Intervention at 3 years of age.

***Appendix 4***
***Key Driver***

# Key Driver Best Beginnings 2020

## Outcomes

### Global Aim

We will build a sustainable patient-centered quality improvement infrastructure for best beginnings within our practice where children at risk for developmental, autism and/or social/emotional concerns, as well as mothers with post-partum depression, are identified through recommended screening and are appropriately referred for services.

### Specific Aims

Between January and September 2020 we will increase the rate at which recommended Well Visit screening and referrals for conditions impacting children ages 1 month to 3 years are reliably screened and, if at risk, are referred for the following services:

- 90% of Well Visits ages 1 month to 3 years appropriately complete selected early screening*
- 90% of children or mothers identified as at risk have a follow-up plan documented
- The percentage of children or mothers at risk who complete follow up plan

*Screens (select one)*

- Development: 9, 18, and 30 (or 24) months
- Autism: 18 and 24 months
- Post-Partum Depression: 1, 2, 4 and 6 months
- Social Emotional: Practice Identified Age

*Appropriately complete:*

- Screen scored accurately in appropriate language
- Development and Social Emotional: Correct age screen deployed
- Autism and Maternal Depression: Follow up questions administered when indicated

## Key Drivers

**Engage QI Team and Practice**
The QI Team and practice is active and engaged in improving practice processes and patient outcomes.

**Manage Population**
Practice patients due for best beginnings screens are tracked to ensure screening and referral completion if identified as at risk

**Build Community Capacity**
Develop and use community resources effectively

**Reliable Screening and Referral**
Standardize practice-wide process for sustainability of early screening, maternal depression screening, and referral process

**Parent/Guardian Engagement**
Communicate effectively and provide self-management support

## Change Concepts + Interventions

### QI Core Team

- Form minimum 3 person team and meet routinely (MD, Nurse, Admin)
- Meet with QI Coach on-site or virtually
- Communicate to practice importance and goals of the Best Beginnings Collaborative
- Collect, enter, and review baseline and monthly data with team and practice
- Use data to inform QI tools such as aim statement, process maps, PDSAs, and Key Driver diagram
- Involve Parents/Families in workflow design (Parent Advisories)
- Complete monthly QI assignments
- Participate in monthly webinars
- Ensure knowledge of evidence-based medicine among all practice staff and clinicians

- Ensure visits coded properly
- Use tools to remind or recall patients who have not been screened

- Connect with Help Me Grow care coordinators in your community
- Identify and enhance practice connection with other community resources
- Link families to community resources

- Select and customize evidence-based protocols for screening and referral completion; update as needed
- Determine staff workflow to support protocols, including standing orders
- Use QIDA data to drive process improvement ideas
- Select data to track post collaborative progress

- Select culturally appropriate materials for parents/guardians
- Gauge caregiver's self-assessment of comfort in supporting child's development
- Determine staff workflow to support parent/guarding under standing of development
- Document and monitor patient's progress toward family goals

## Key Driver 1 *Engage QI Team and Practice: the QI team and practice is engaged in improving practice process and patient outcomes.*

| Change Concept | Tools and Resources |
|---|---|
| Form a 3-person interdisciplinary team and meet routinely | Selecting a QI Core Team 2- #Selecting a QI Core Team.docx<br>AAP Team-Based Care in the Primary Care Office https://www.aap.org/en-us/professional-resources/practice-transformation/Implementation-Guide/Pages/Team-Based-Cared.aspx |
| Meet with QI Coach on-site or virtually | See practice expectations |
| Communicate to practice the importance and goal of the Best Beginnings Collaborative | • Announce collaborative at practice meetings<br>• Share with practice Family perspectives from your practice or Susan Pannell from ACHIA or Screening Matters: A Family Perspective https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Screening/Pages/The-Importance-of-Screening.aspx<br>• Post QI work on staff and patient Bulletin Boards<br>• Post on Social Media (website, Facebook, tweet, Instagram)<br>CDC Developmental Milestones Widget for practice websites https://www.cdc.gov/ncbddd/childdevelopment/multimedia.html<br>STAR AAP Help us Focus on What matters most poster<br>• How to run meetings Lacrecia |
| Collect, enter, and review baseline data and monthly intervention date with the team and practice | • Sign up for QIDA https://qidata.aap.org/bestbeginnings2020<br>• February 5, 2020 Webinar |
| Use data to inform QI Tools such as Aim Statement, Process Maps, PDSAs and Key Driver | QI Tools folder on ACHIA QI TeamSpace https://www.achia.org/qi-teamspace |
| Involve parents/families in workflow design | Patient/Family Centered Medical Home AAP Toolkit https://medicalhomes.aap.org/Pages/Providing-Family-Centered-Care.aspx<br>STAR AAP Parent Survey on Screening https://screeningtime.org/star-center/#/resources#top<br><br>FAMILY ADVISORY<br>NICHQ Creating and Patient and Family Advisory Council Toolkit https://www.nichq.org/resource/creating-patient-and-family-advisory-council-toolkit-pediatric-practices<br><br>Promoting Children's Social and Emotional Well-Being https://eclkc.ohs.acf.hhs.gov/mental-health/article/promoting-childrens-social-emotional-well-being |
| Complete monthly QI assignments | See Timeline. Content assigned monthly. |
| Participate in monthly Best Beginnings webinars | Prior to first Webinar, test Zoom access https://support.zoom.us/hc/en-us/articles/201362283-Testing-Computer-or-Device-Audio |
| Ensure knowledge of evidence-based medicine | Review AAP Guidelines on ACHIA.org<br>Providers and Core Team Complete STAR Screening Time (3.25 CME and Part 2 MOC) https://screeningtime.org/star-center/ |

**Key Driver 2 Manage Population** *Practice patients due for best beginnings screens are tracked to ensure screening and referral completion if identified as at risk.*

| Change Concept | Tools and Resources |
|---|---|
| Ensure visits are coded properly | ACHIA QI TeamSpace- Practice tools and Resources/Coding |
| Use the tools to remind or recall patients who have not been screened | ACHIA QI TeamSpace-Practice Tools and Resources/Reminder Recall<br>• Utilize payer reports |
| **Key Driver 3 Build Community Capacity** | *Develop and Use Community Resources Effectively* |
| Connect with Help Me Grow care coordinators in your community | ACHIA QI TeamSpace – Community Partners/HMG<br>Help Me Grow Alabama https://helpmegrowalabama.org/<br>Establish workflow for referrals to HMG and reports back to clinic |
| Identify and enhance practice connection with other community resources | STAR Referral Directory (Excel) https://screeningtime.org/star-center/#/resources#top<br>STAR Referral Directory (Word) https://screeningtime.org/star-center/#/resources#top<br>**General**<br>Alabama Early Intervention System http://www.rehab.alabama.gov/individuals-and-families/early-intervention<br>Alabama Medicaid: Alabama Coordinated Health Networks https://medicaid.alabama.gov/content/5.0_Managed_Care/default.aspxhttps://medicaid.alabama.gov/documents/2.0_Newsroom/2.7_Special_Initiatives/2.7.6_ACHN/2.7.6_ACHN_Regional_Map_Contacts.pdf<br>Family Voices https://familyvoicesal.org/<br>Parents as Teachers https://parentsasteachers.org/ find a program in Alabama http://ebiz.patnc.org/EBusiness/ProgramLocations.aspx<br>Department of Early Childhood Education https://children.alabama.gov/<br>Children's Trust Fund Program Directory https://ctf.alabama.gov/wp-con https://children.alabama.gov/firstteacher/tent/uploads/2018/08/2015-Curriculum-Directory.pdf<br>2-1-1-Connects Alabama http://www.211connectsalabama.org/<br>Children's Rehabilitation Service http://www.rehab.alabama.gov/individuals-and-families/childrens-rehabilitation-service<br>**Development**<br>Harvard Center for Developing Child https://developingchild.harvard.edu/<br>Born Ready. Org https://bornready.org/<br>**Autism**<br>Autism Society of Alabama https://www.autism-alabama.org/<br>Alabama Regional Autism Network http://www.autism.alabama.gov/Regional-Autism-Network.html<br>CDC Autism Case Training (ACT) – CE available https://www.cdc.gov/ncbddd/actearly/act.html<br>CDC Learn the Signs Act Early https://www.cdc.gov/ncbddd/actearly/index.html<br>**Social Emotional**<br>CDC Parenting Tips https://www.cdc.gov/ncbddd/childdevelopment/positiveparenting/index.html<br>First Five Alabama: Early Childhood Mental Health https://www.first5alabama.org/<br>Psychiatric Intake Response Center (PIRC) https://www.childrensal.org/pirc<br>Child Mind Institute –guidance for families https://childmind.org/audience/for-families/<br>ACES Connection https://www.acesconnection.com/<br>National Pediatric Practice Community on Adverse Childhood Experiences https://nppcaces.org/<br>Harvard Center for Developing Child https://developingchild.harvard.edu/Sesame Street (need link)<br>**Post-Partum**<br>Alabama Chapter Post-Partum Support International https://psichapters.com/al/<br>Department of Mental Health https://mh.alabama.gov/wp-content/uploads/2019/01/ADMH-Early-Childhood-Programs-Information-Sheet.pdf |
| Link families to community resources | See above |

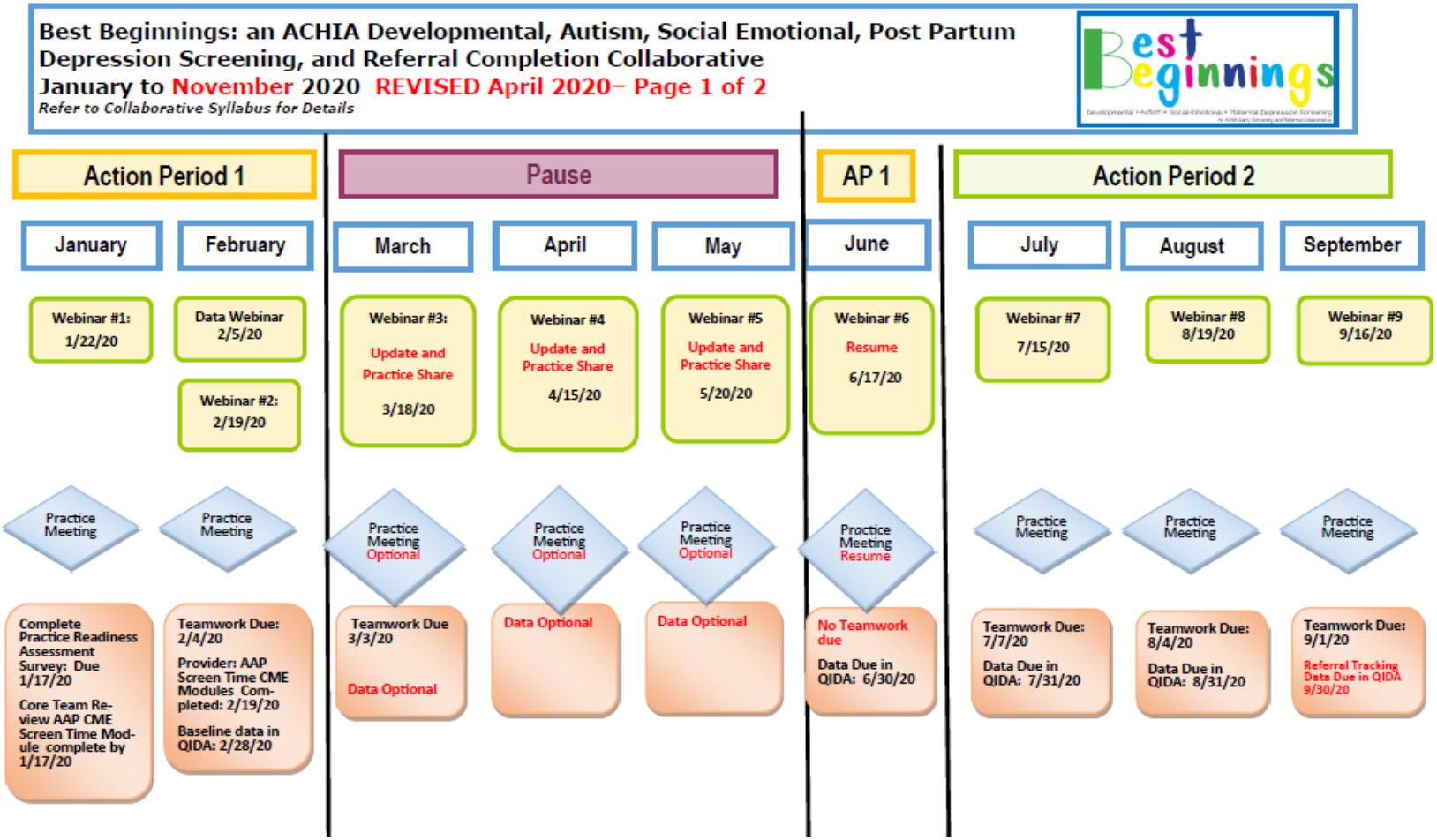
**Key Driver 4 Reliable Screening and Referral** *Standardize practice-wide process for sustainability of early screening, maternal depression screening, and referral process*

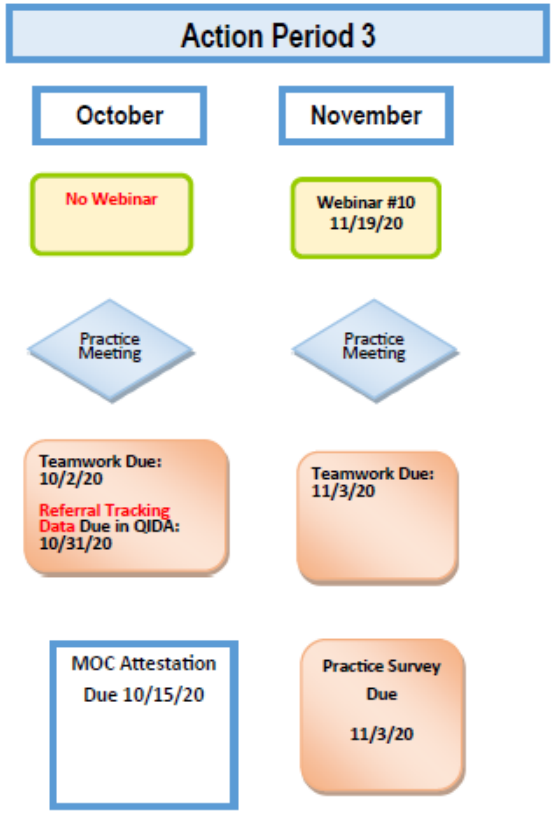
| Change Concept | Tools and Resources |
|---|---|
| Select screen to add or to improve | STAR Screening Tool Finder https://screeningtime.org/star-center/#/screening-tools#top |
| Ensure Accurate Scoring | ACHIA QI TeamSpace – Practice Tools and Resources/Development<br>ASQ3<br>ASQ Age Adjustment Chart<br>ASQ Score Adjustment Chart<br>ASQ3 Scoring Help<br>ASQ Calculator App https://apps.apple.com/us/app/asq-age-adjusted-score-calculator/id1035472490<br>ASQ online Calculator https://agesandstages.com/free-resources/asq-calculator/<br>ACHIA QI TeamSpace – Practice Tools and Resources/Autism<br>MCHAT<br>MCHAT Screener with follow<br>ACHIA QI TeamSpace – Practice Tools and Resources/Social-Emotional<br>ASQSE<br>ASQ SE Score Tips<br>ASQ3 and ASQSE- Combo Age Administration Chart<br>ASQSE Top Questions Answered |
| Standardize referral completion process practice-wide | Map the Workflow Worksheet ACHIA QI TeamSpace- QI Tools<br>Excel Referral Tracking tool ACHIA QI TeamSpace- Practice Tools and Resources/Referral Policy and Tool Examples<br>Scripting – 36 hour follow up ACHIA QI TeamSpace- Practice Tools and Resources/Referral Policy and Tool Examples<br>AAP Care Coordination Resources https://www.aap.org/en-us/professional-resources/practice-transformation/managing-patients/Pages/Care-Coordination.aspx<br>AAP Example Release/Referral Form https://pediatrics.aappublications.org/content/pediatrics/132/4/e1073/F2.large.jpg<br>STAR Referral Directory (Excel) https://screeningtime.org/star-center/#/resources#top<br>STAR Referral Directory (Word) https://screeningtime.org/star-center/#/resources#top<br>OPIP Beyond Developmental Screening: Children at Risk http://www.pcpci.org/resources/webinars/beyond-developmental-screening-children-identified-risk |
| Determine staff workflow to support protocols, including standing orders | ACHIA QI TeamSpace- QI Tools and Practice tools and Resources/Implementing Screen Tips |
| Incorporate Screening, Scoring and Referrals into Electronic Health Record | • ASQ Enterprise with Help Me Grow ACHIA QI TeamSpace- Community Partners/HMG<br>• STAR Electronic Health Capacity in Peds: Report for Pediatric Practices Case Study https://screeningtime.org/star-center/assets/documents/EHICAP%20Case%20Study%20Report.pdf<br>• STAR electronic Health Information Resource Road Map for Integrating Dev Measures into EHR https://screeningtime.org/star-center/assets/documents/EHICAP%20Road%20Map.pdf |
| Use QIDA data to drive process improvement ideas | Review monthly<br>Collaborative level- during webinar<br>Practice level- core team meetings and practice meetings |
| Select data to track post collaborative progress | QIDA available for 3 years<br>IHI QI Essentials Toolkit –ACHIA QI TeamSpace- QI Tools<br>Review ACHIA QI Team Space – Selected articles |

## Key Driver 5 Parent/Guardian Engagement *Communicate effectively and provide self-management support*

| Change Concept | Tools and Resources |
|---|---|
| Select culturally appropriate materials for parents/guardians | CDC Learn the Signs, Act Early (free) https://www.cdc.gov/ncbddd/actearly/freematerials.html<br>CDC Milestone Tracker App https://www.cdc.gov/ncbddd/actearly/milestones-app.html<br>CDC Social Media Posts, Tweets, Videos https://www.cdc.gov/ncbddd/actearly/multimedia/buttons.html<br>Pathways.org Baby Games Calendar https://pathways.org/baby-milestones-calendar/<br>Vroom App https://developingchild.harvard.edu/resources/vroom/<br>Born Ready https://bornready.org/<br>Text4Baby App and free texts https://www.text4baby.org/<br>Depression – Postpartum Support International https://www.postpartum.net/ |
| Enhance Communication Skills | STAR SIMULATIONS FOR THE FOLLOWING:<br>Maternal Depression, Child Development, Social Determinants of Health<br>https://screeningtime.org/star-center/#/simulations#top<br>GENERAL COMMUNICATION TIPS<br>Patient-Clinician Communication: Basic Principles and Expectations<br>https://www.accp.com/docs/positions/misc/IOMPatientClinicianDiscussionPaper.pdf<br>STAR Identifying Family Strengths- Practical Examples<br>https://medicalhomes.aap.org/Pages/Providing-Family-Centered-Care.aspx<br>Always Use TeachBack! Training tools and Resources http://www.teachbacktraining.org/<br>Elicit Youth and Parental Strengths and Needs<br>https://brightfutures.aap.org/Bright%20Futures%20Documents/BF_ElicitParentalStrength_Tipsheet.pdf<br>Teachback (AHRQ) https://www.ahrq.gov/patient-safety/reports/engage/interventions/teachback.html<br>Shared Decision making Approach AHRQ<br>https://www.ahrq.gov/health-literacy/curriculum-tools/shareddecisionmaking/tools/tool-2/index.html |
| Gauge caregiver's self-assessment of comfort in supporting child's development | STAR Maternal Depression Screening Conversation Tip Sheet<br>https://screeningtime.org/star-center/assets/documents/AAPF_Printable_Tip_Sheet_Convo_1_MD.pdf<br>STAR Developmental Screen Conversation Tip Sheet<br>https://screeningtime.org/star-center/assets/documents/AAPF_Printable_Tip_Sheet_Convo_2_DM.pdf<br>STAR Social Determinants of Health Screening Conversation Tip Sheet |
| Determine staff workflow to support parent/guarding understanding of development | ACHIA QI TeamSpace – QI Tools<br>PDSA/Process map |
| Document and monitor patient's progress toward family goals | Track with EMR/chart or work with vendor to develop a template |

***Appendix 5***
***Best Beginnings Timeline (Revised with COVID Pause)***




Action Period 3
October
November
No Webinar
Webinar #10
11/19/20
Practice Meeting
Practice Meeting
Teamwork Due:
10/2/20
Referral Tracking Data Due in QIDA:
10/31/20
Teamwork Due:
11/3/20
MOC Attestation
Due 10/15/20
Practice Survey
Due
11/3/20