

Piloting the AAP Algorithm: Lessons Learned

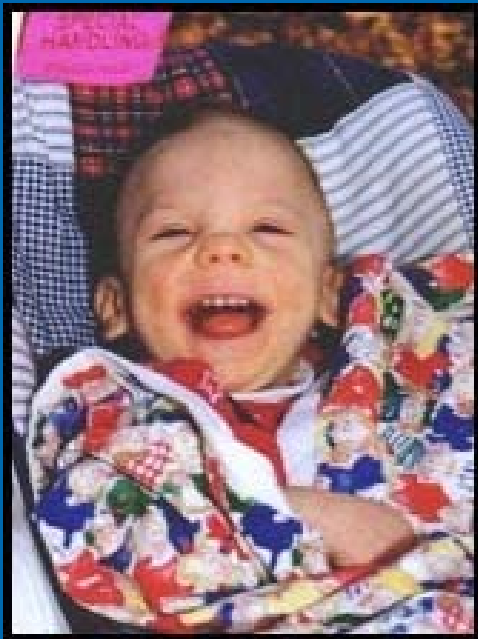
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Piloting the AAP Algorithm: Lessons Learned

**ABCD Academy Webcast
October 18, 2007**



**Paul Lipkin, MD, FAAP
Kennedy Krieger Institute,
Johns Hopkins University School
of Medicine**



**Chair, Policy Revision Committee
on Developmental Surveillance
and Screening, American
Academy of Pediatrics**

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



The 2006 AAP Policy Statement on Developmental Surveillance and Screening: New Recommendations to Improve Quality

- Revision of 2001 AAP policy statement
- **AAP, CDC, and MCHB Collaboration**
- **Writing group (Policy Revision Committee):**
 - Council on Children with Disabilities,
 - Section on Developmental and Behavioral Pediatrics,
 - Bright Futures Steering Committee,
 - Medical Home Initiatives for Children with Special Needs Project Advisory Committee,
 - Medical informatician (Partnership for Policy Implementation)



The 2006 AAP Policy Statement on Screening and Surveillance Goals

- Increase identification of children with developmental disorders by child health professionals
 - Improve methods of surveillance and screening
 - Greater consideration of motor and communication disorders
 - Provide concrete guidelines (algorithm)
 - Age-targeted screening
 - Eliminate barriers, e.g. reimbursement
- Improve medical assessment



The 2006 AAP Policy Statement on Developmental Surveillance and Screening: New Content

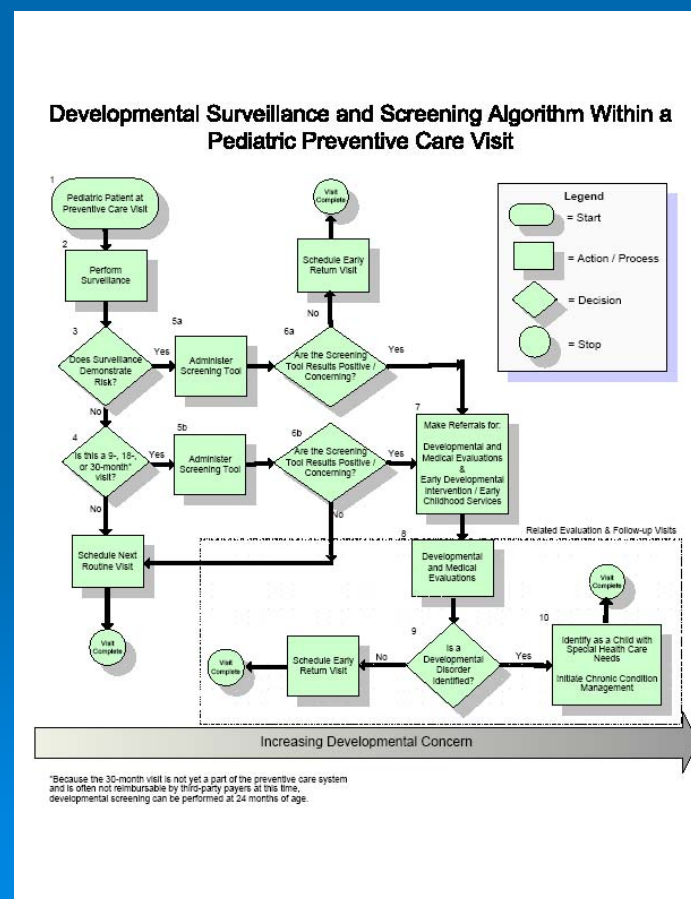
- Emphasis on ID of developmental disabilities
- Medical home role
- Practice challenges
- Reimbursement issues
- Working definitions:
 - **Surveillance**- continuous
 - **Screening**- periodic
 - **Evaluation** (vs. assessment)- diagnosis and treatment
- Medical evaluation
- Subspecialist role, community linkages

Identifying Infants and Young Children with Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening

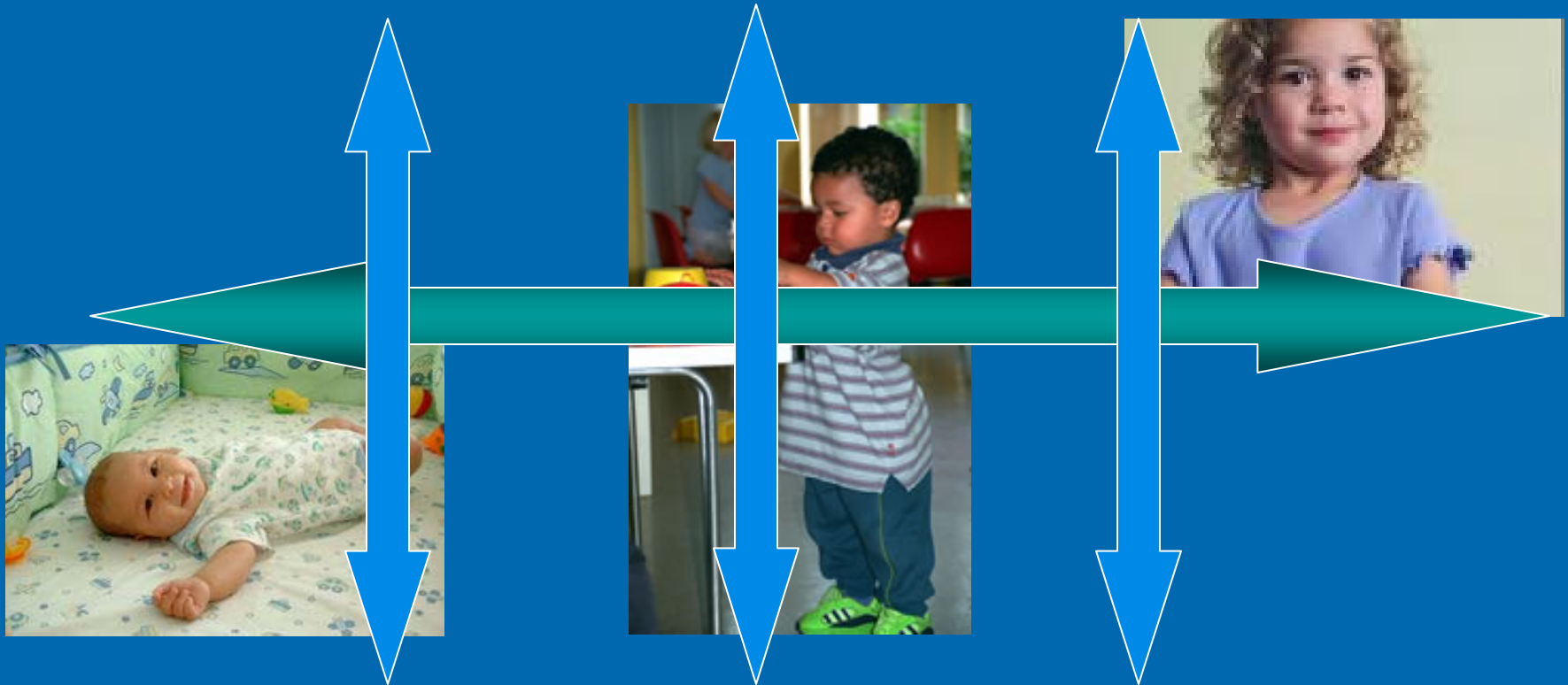
(American Academy of Pediatrics 2006)

Pediatrics 2006; 118: 405-420

- Perform developmental surveillance at every well-child visit
- Perform developmental screening using a standardized screening tool at 9, 18, or 30* months or when concern is expressed
- If screening results are concerning, refer to developmental and medical evaluations and early intervention services
- Follow up on referrals made and continually track child's developmental status



Developmental Surveillance



Developmental Screening

Definitions:

Developmental surveillance

- “A flexible, **longitudinal**, **continuous**, and **cumulative** process whereby knowledgeable health care professionals identify children who may have developmental problems”
(AAP 2006)
- Role of parent concern
- Use of developmental history
- Role of observation
- Risk and protective factor assessment
 - Environmental
 - Biologic
 - Genetic
 - Social/ demographic
- Documentation

Definitions:

Developmental screening

- “The administration of a **brief standardized** tool aiding the **identification of children at risk** of a developmental disorder”

(AAP 2006)

- Periodic
- 3 specific age-determined visits during infancy and toddler years
- Use of standardized screening instruments
- **NOT DIAGNOSTIC**

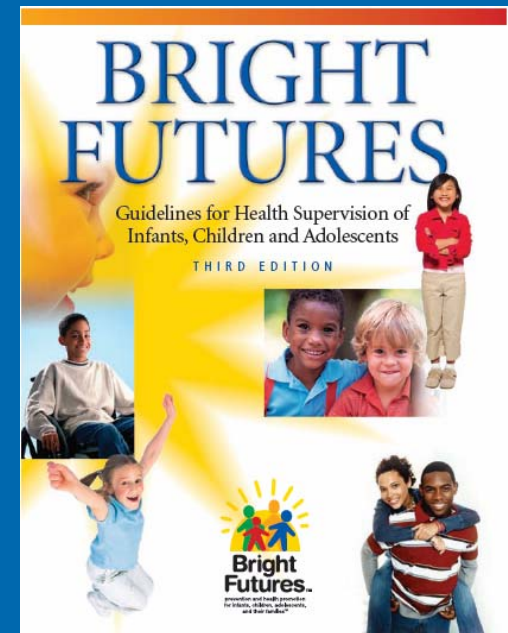
Developmental Screening

AAP 2006

- All children, most of whom will not have identifiable risks or whose development appears to be proceeding typically, should receive periodic developmental screening using a standardized test.
- In the absence of established risk factors or parental or provider concerns:
 - **9 months**
 - **18 months**
 - **30-months***

Developmental Screening: The Asterisk * (AAP 2006)

- * Because the 30-month visit is not yet a part of the preventive care system and is often not reimbursable by third-party payers at this time, developmental screening can be performed at 24 months of age
- * In addition, because the frequency of regular pediatric visits decreases after 24 months of age, a pediatrician who expects that his or her patients will have difficulty attending a 30-month visit should conduct screening during the 24-month visit



Developmental Screening: Normal Results (AAP 2006)

- When the results are normal:
 - Inform parents and continue with other aspects of the preventive visit.
 - Provides an opportunity to focus on developmental promotion.



Developmental Screening: Concerns (AAP 2006)

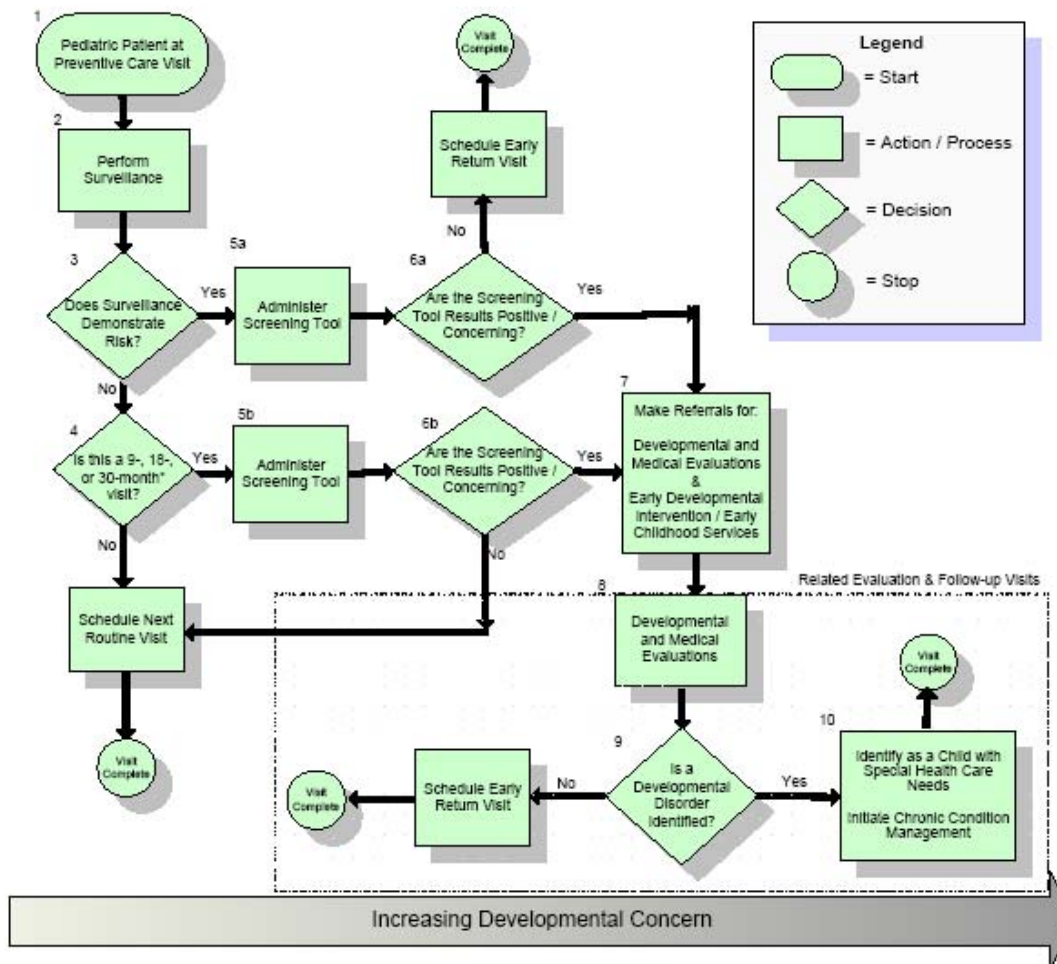
- When administered due to concerns:
 - Schedule early return visit for additional surveillance, even if the screening tool results do not indicate a risk of delay.
- When results concerning, refer for:
 - Developmental evaluations.
 - Medical evaluations.
 - Early developmental intervention/early childhood services.

Developmental Diagnostic Evaluation: Identification

- If a developmental disorder is identified:
 1. The child should be identified as a *child with special health care needs*
 - Practice registry recommended
 2. *Chronic condition management* should be initiated




Developmental Surveillance and Screening Algorithm Within a Pediatric Preventive Care Visit

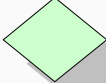



*Because the 30-month visit is not yet a part of the preventive care system and is often not reimbursable by third-party payers at this time, developmental screening can be performed at 24 months of age.

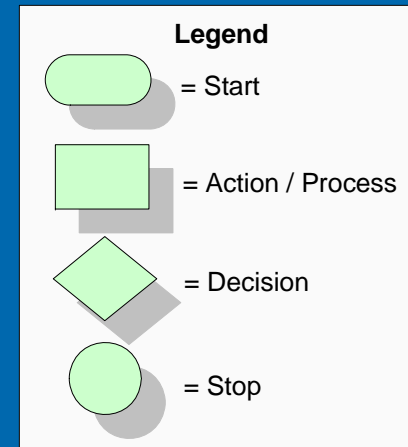
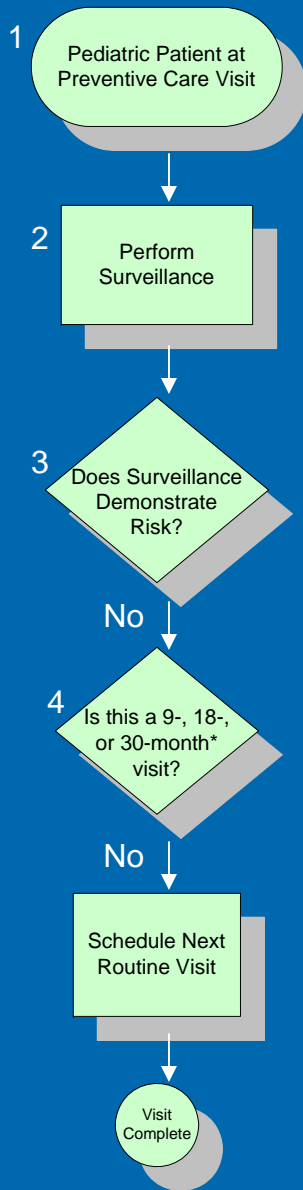
Legend

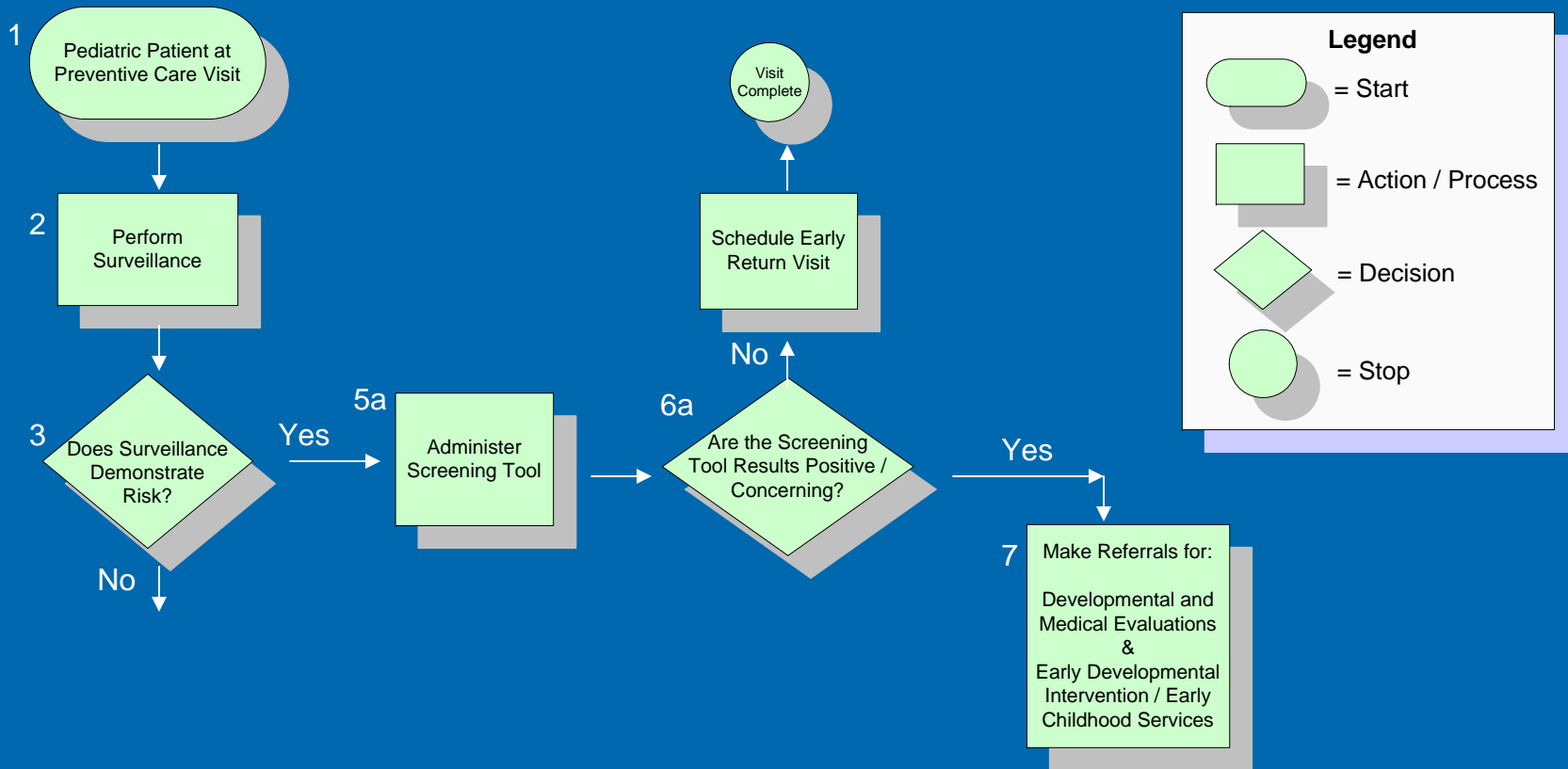
 = Start

 = Action / Process

 = Decision

 = Stop





Increasing Developmental Concern ➔

1 Pediatric Patient at Preventive Care Visit

2 Perform Surveillance

3 Does Surveillance Demonstrate Risk?

4 Is this a 9-, 18-, or 30-month* visit?

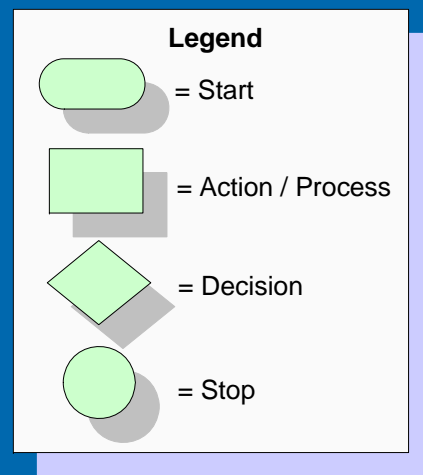
5b Administer Screening Tool

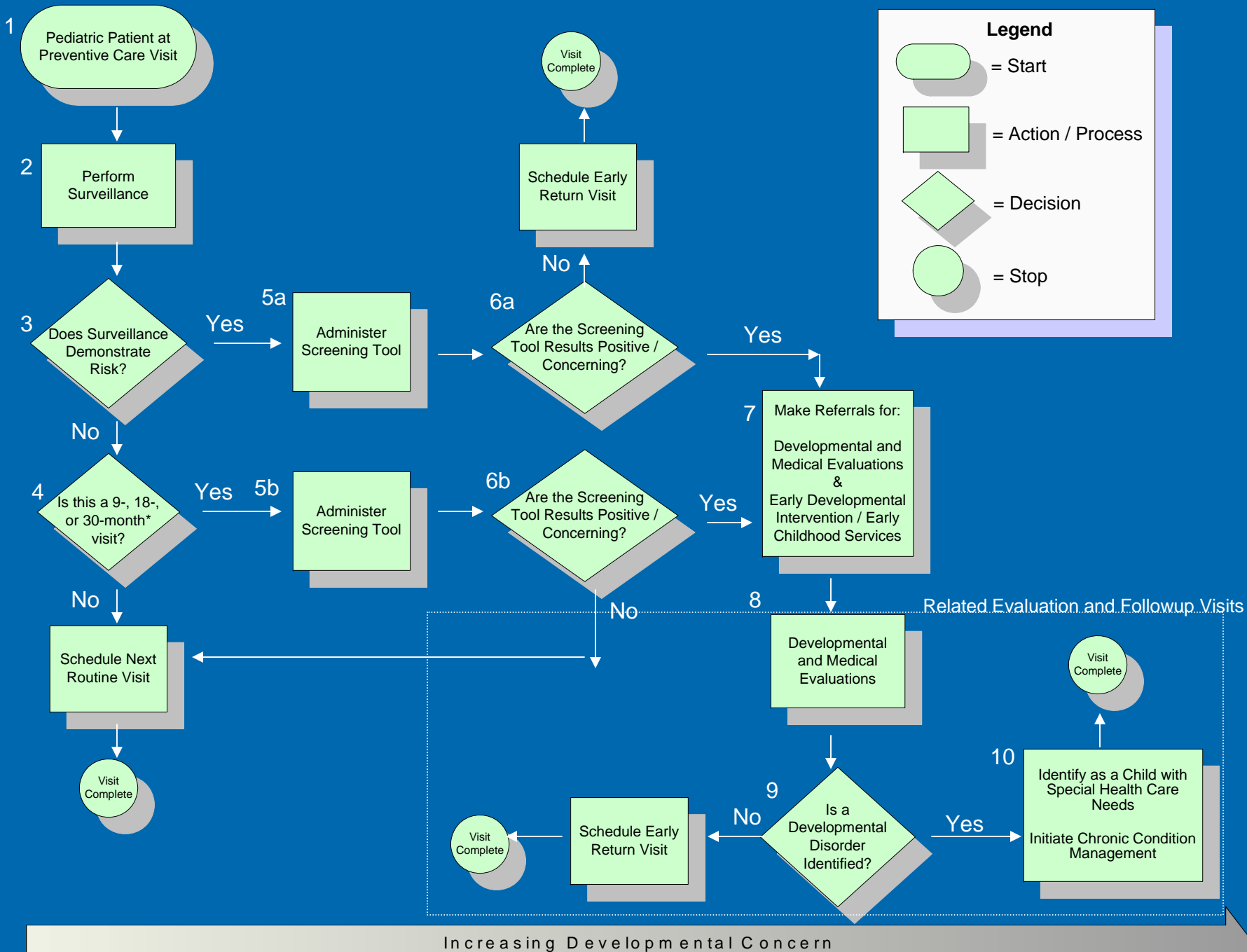
6b Are the Screening Tool Results Positive / Concerning?

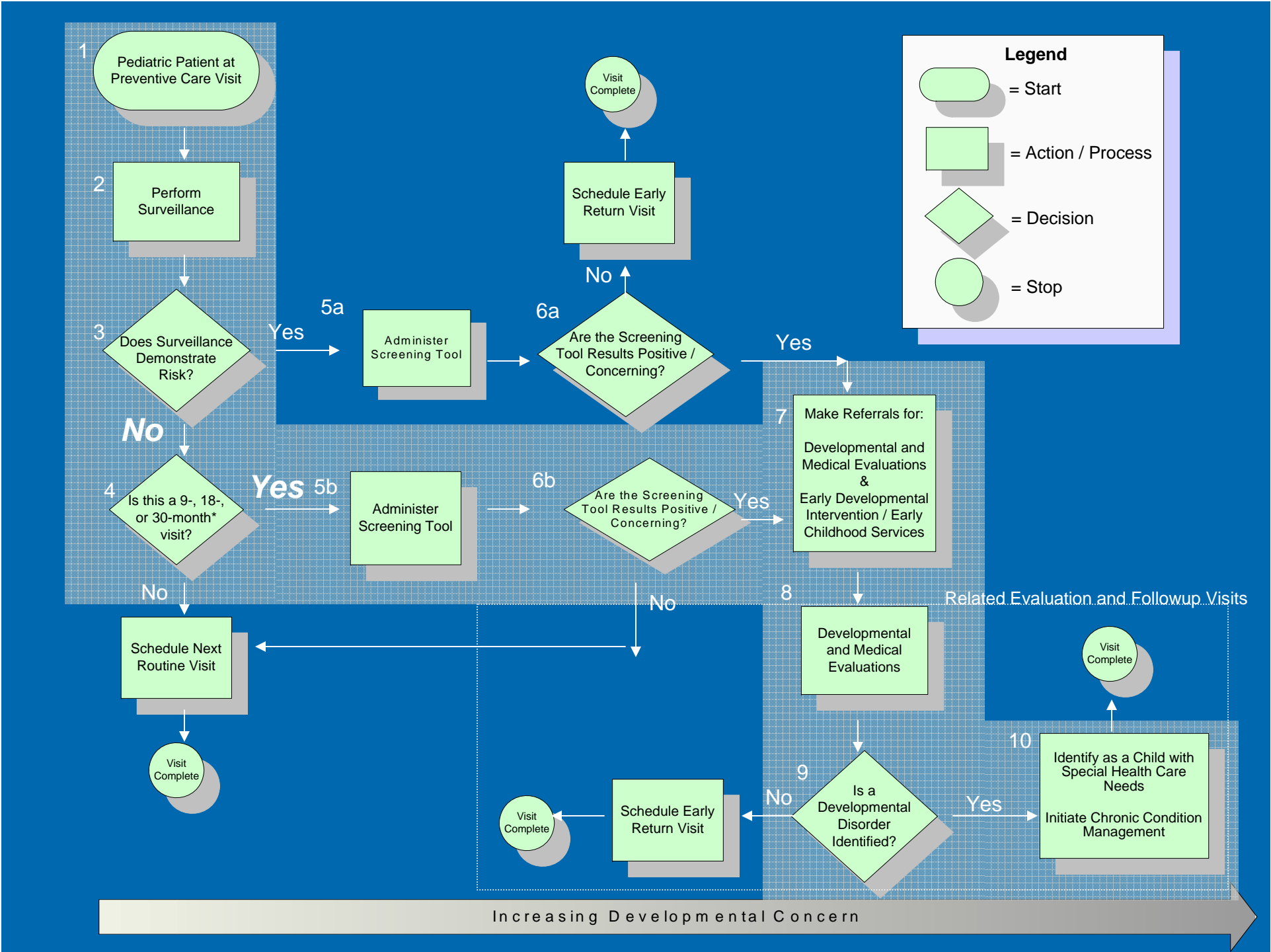
7 Make Referrals for:
Developmental and Medical Evaluations & Early Developmental Intervention / Early Childhood Services

Schedule Next Routine Visit

Visit Complete







Definitions:

Developmental evaluation

- “Aimed at identifying the specific developmental disorder or disorders affecting the child ” (AAP 2006)
- Consultation model
- Inter- or multi-disciplinary team models
- Performed by any of the following:
 - Trained and skilled general pediatrician,
 - Pediatric subspecialist,
 - Early childhood professional.

Medical Diagnostic Evaluation: Aim And Components

- To identify an underlying etiology
- May provide parents with a greater depth of understanding of their child's disability
- Can affect various aspects of treatment planning
 - Specific prognostic information,
 - Genetic counseling around recurrence risk and family planning,
 - Specific medical treatments for improved health and function of the child,
 - Therapeutic intervention programming

Referral:

Early Developmental Intervention/ Early Childhood Services

- Often provide evaluation and other services:
 - Developmental therapies,
 - Service coordination,
 - Social work services,
 - Assistance with transportation and related costs,
 - Family training,
 - Counseling,
 - Home visits.

- Diagnosis not necessary for referral.



Developmental Diagnostic Evaluation: Identification

- If a developmental disorder is identified:
 1. The child should be identified as a *child with special health care needs*
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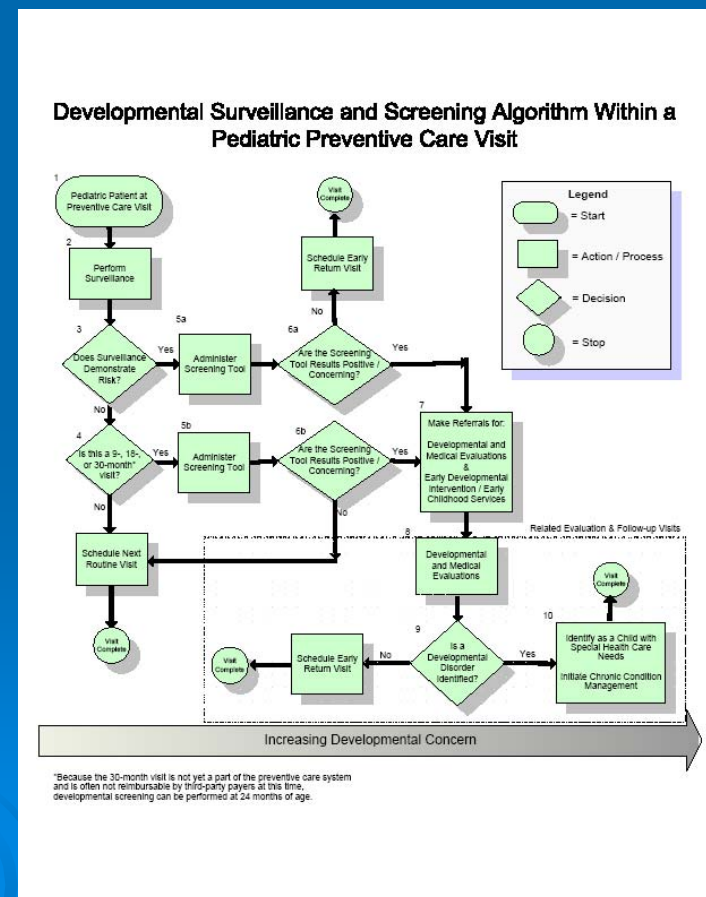
AAP 2006

Developmental Surveillance And Screening Guidelines

... the bottom line...

Identifying Infants and Young Children with Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance and Screening (American Academy of Pediatrics 2006)

- Perform developmental surveillance at every well-child visit
- Perform developmental screening using a standardized screening tool at 9, 18, or 30* months or when concern is expressed
- If screening results are concerning, refer to developmental and medical evaluations and early intervention services
- Follow up on referrals made and continually track child's developmental status



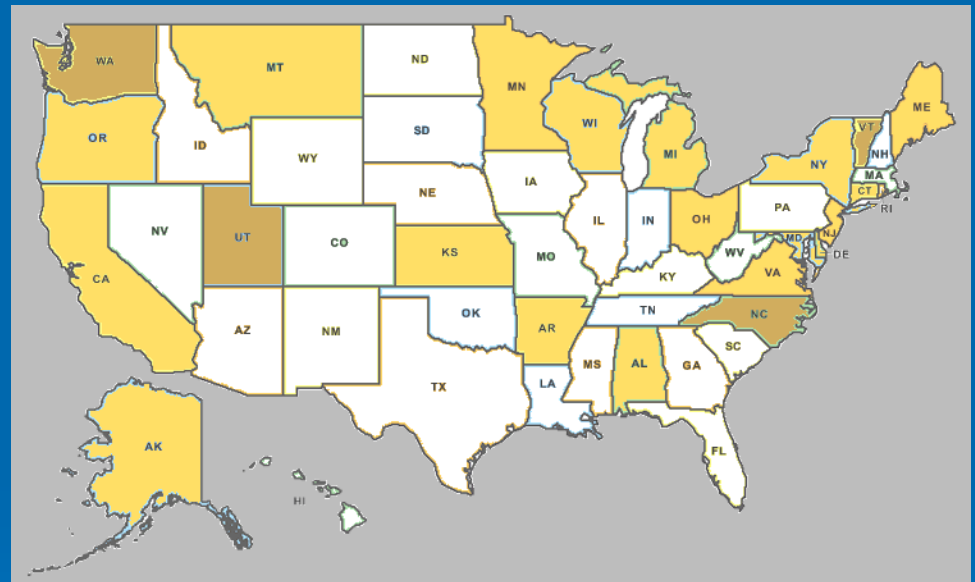
So, what's
next?

Implementation!



ABCD (Assuring Better Child Health and Development) Projects

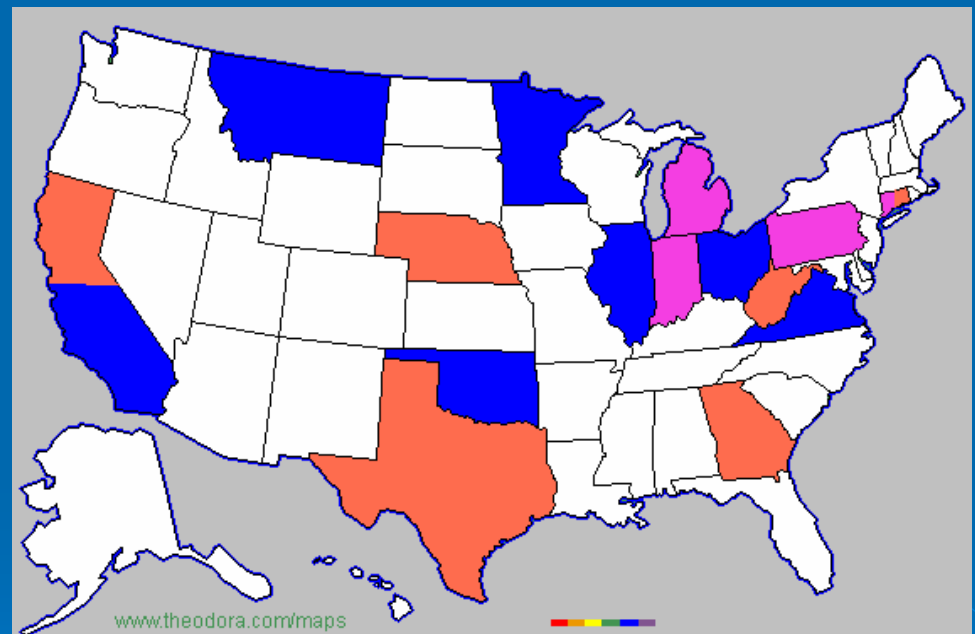
- North Carolina quality improvement initiative
- Physician/practice driven
 - Use of a formal, standardized screening tool at 6, 12, 18, 24, and 36 months
 - Office resource guide
 - Curricula and workbooks developed
 - Anticipatory guidance
 - Talking guides for clinicians
 - Posters for examination and waiting rooms



Earls and Shackelford Hay, *Pediatrics* 2006

AAP Developmental Surveillance and Screening Policy Implementation Project (D-PIP)

- Aims to implement the new policy statement into 17 pilot pediatric practices
- Goals of the D-PIP include:
 - Determine if the policy statement is efficiently and effectively implemented into pediatric practice
 - Recognize strategies for implementation
 - Examine outcomes of implementing the algorithm



- Pilot sites will serve as best-practices following the project

Learning Objectives

- After this event core team members, stakeholders, and demonstration sites will:
 - Understand the AAP algorithm and how it can be used to incorporate surveillance and screening into office practices
 - Be able to build on the experience of the D-PIP sites in implementing the algorithm to more effectively incorporate developmental screening into well child care.

Questions?



Piloting the AAP Algorithm: Lessons Learned

ABCD Screening Academy Webcast
October 18, 2007

Tracy King, MD, MPH
Assistant Professor

Darius Tandon, PhD
Assistant Professor

Department of Pediatrics
Johns Hopkins University School of Medicine

D-PIP Qualitative Evaluation: Background and Methods

- Objective: To gain insight into the experiences of practices using the AAP algorithm on developmental surveillance and screening
- Participants: Three team members from each site
 1. Provider (e.g., pediatrician, nurse practitioner)
 2. Clinic support staff (e.g., nurse, social worker)
 3. Practice support staff (e.g., office manager, billing specialist)

D-PIP Qualitative Evaluation: Background and Methods


- Two semi-structured telephone interviews
 1. Mid-implementation (at least 3 months into project)
 2. Post-implementation (at least 6 months into project)

- All interviews were
 - Audiotaped, then transcribed verbatim
 - Reviewed for accuracy
 - Coded to determine emerging themes, with emphasis on:
 - Positive patterns (what are the similarities?)
 - Negative cases (are there exceptions?)

Results: Thematic Domains

- Analysis of mid-implementation interviews revealed emerging themes in 6 areas:
 1. Screening Tool Choice
 2. Implementation Ease
 3. Implementation Experiences
 4. Implementation Challenges
 5. Results of Screening
 6. Coding/Billing/Reimbursement
- There are likely to be other thematic domains after analysis of post-implementation interviews

Screening Tool Choice: Emerging Themes

1. Some practices desired more direction and guidance on the selection and use of a screening tool
 2. There was considerable variation in reasons for choosing a particular screening tool
- 

Direction and Guidance

Re: Screening Tool

- “So one of the difficulties was there was no recommendations which screening tool to use... so it did take us awhile to sort out which one we wanted to use.”

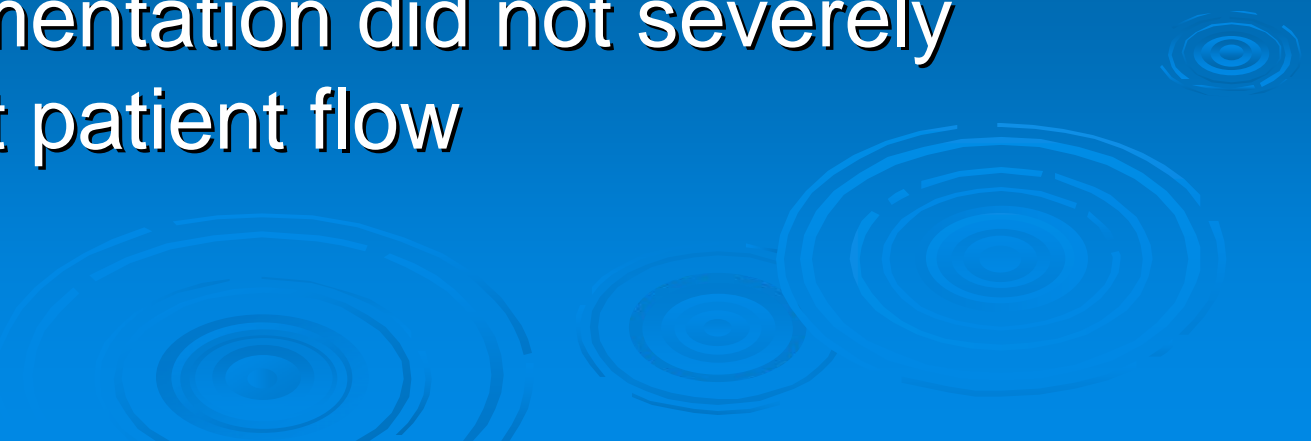
Variability in Choice of Screening Tool

- “[We chose the PEDS] because of the simplicity of it...we’ve got a busy practice [and] you’ve got to move fast or you’ll get trampled.”
- “[The ASQ] gives [us] a little more opportunity for teaching...both teaching parents and teaching students about appropriate developmental expectations.”

Screening Tool Choice: Implications

- Criteria could be constructed to help future practices make informed choices about the most appropriate screening tool(s) for their needs

Implementation Ease: Emerging Themes

1. Initial implementation of the AAP algorithm tended to be relatively easy for practices
 2. Generally speaking, AAP algorithm implementation did not severely impact patient flow
- 

Initial Implementation of AAP Algorithm Tended to be Relatively Easy

- “Once you...get everybody to understand that okay these forms need to go in the chart when you are seeing this age children...I don't think it's that much extra work.”

AAP Algorithm did not Severely Impact Patient Flow

- “Really, it has not slowed down anything. I know that’s the concern for a lot of people, that it’s going to be time-consuming, and I don’t think it is.”

Implementation Ease: Implications

- Motivated, well-trained practices were often able to implement AAP algorithm without considerable difficulty

Implementation Experiences: Emerging Themes

1. Staff turnover influences the pace of adoption and ease of implementation
2. Surveillance and screening became more routinized over time
3. Changing provider and staff behavior is challenging; different motivations exist for individuals within practices

Staff Turnover Influences Pace of Adoption and Ease of Implementation

- “The big challenge was mainly just the staff, because when the staff changed the office was obviously in chaos...so I had to put D-PIP on a back burner.”

Surveillance and Screening Became More Routinized

- “About four years ago now, we started using the Ages and Stages Questionnaire but it was sketchy...and now it’s become more of our routine.”

Changing Provider and Staff Behavior is Challenging

- “Getting [staff] to do it was the bigger problem. I think from an ideological standpoint...we had the buy-in...changing behaviors takes more effort.”

Implementation Experiences: Implications

- Implementation of AAP Algorithm an ongoing process, not one-time event
- Strategies for implementing and sustaining must be tailored to characteristics of individual practices

Implementation Challenges: Emerging Themes

1. Practices faced numerous logistical challenges to completing screens
2. Language and literacy issues often interfered with parents' ability to complete screening tools
3. Despite the best-laid plans, practices periodically experienced challenges to capturing all children in need of screening
4. Residency training sites experience unique implementation challenges

Several Logistical Challenges to Completing Screens

- “The hardest part we’ve had is getting this to the parent so they can get it filled in by the time we are ready to see them, and if the nurse forgets...then I have to go get the tool and give it to the mother and then I have to wait 10 minutes for her to fill it out.”

Language and Literacy Issues

- “The ones that are not completely filled out are very often due to the fact that there’s some literacy problem in the family.”

Challenges to Capturing All Children in Need of Screening

- “It got really busy toward the winter months when we started getting a lot of sick kids coming in and it got very crazy in the front. Sometimes they would, I think, just forget...”

Residency Training Sites

Experience Unique Implementation Challenges

- “There’s some faculty who are more likely just to forget about it...they don’t sort of look for it to make sure all the residents have done their screening.”
- “I think the reason it didn’t go well is that ...people thought it was part of a study and so they were not interested I guess...”

Implementation Challenges: Implications

- 100% screening may not be feasible, given logistical and circumstantial factors
- Parents are likely to be a valuable resource in determining how to address the logistical challenges faced by practices in conducting developmental screening

Results of Screening: Emerging Themes

1. The majority of practices did not see increase in identification and referrals
2. Many practices indicated that D-PIP facilitated identification of delays in younger children
3. Submission and tracking of referrals also became more routinized

Majority of practices did not see increase in identification and referrals

- “Well, I don’t even think our referrals have increased because ...we were doing so well in the beginning.”
- “I thought we would get a lot more referrals, but whether those are just the ten [charts] I’m pulling I don’t know...it’s hard to say”.

D-PIP Facilitated Identification in Younger Children

- “I believe it has increased...early referrals...it’s usually when the kids are four or five, getting ready to go to school, that we make a lot of those referrals and recently I’ve seen a big increase...oh probably in the 9 months to 18 months where we’ve had referrals”.

Submission and Tracking of Referrals Became More Routinized

- “I’m not exactly sure what we were doing before [with referrals]...if we were just waiting for the next visit and finding out...we were never sure if they followed through or when did they need help following through.”

Results of Screening: Implications

- Further efforts should attempt to distinguish among possible explanations for limited change in identification rates

Coding, Billing & Reimbursement: Emerging Themes

1. Many practices lacked full information, and access to information, about coding, billing, & reimbursement procedures
2. There was great variability in coding, billing & reimbursement procedures across practices
3. Practices were intentional in their decisions not to pursue certain coding, billing & reimbursement activities

Limited Information and Access to Information about Coding, Billing, & Reimbursement

- “I don’t really know anything about billing... We take their co-pay...we enter their insurance stuff, but that’s all we do with coding and billing.”

Great Variability in Coding, Billing & Reimbursement Procedures

- “Here, [coding and billing] is just total lip service, really. I don’t know how the heck they get their money, if at all.”
- “Dr. [X] said it’s an opportunity for more reimbursement and we just said we’d try it, cause it really didn’t take a lot of extra time...”

Practices Were Intentional in their Decisions not to Pursue Certain Coding & Billing Activities

- “My understanding is that they [the AAP] are going to start recommending a two and a half year visit, so if it’s recommended then the insurance will be more likely to pay for it...and we would be glad to try to implement that.”


Coding, Billing & Reimbursement: Implications

- Practices need to become more familiar with the details of coding and billing for preventive services at their practices
- The AAP needs to think about its role in advocating for reimbursement with major payors

Summary

- Highlights from mid-implementation interviews included the following findings:
 - Many practices found initial implementation of the AAP algorithm to be easier than expected
 - At the same time, many practices experienced challenges sustaining implementation over time
 - At this interim point, many practices were struggling with issues around referral and coding/billing/ reimbursement
- We expect that findings from post-implementation interviews will provide additional insights into reimbursement, referral tracking and sustainability

Acknowledgements

- Commonwealth Fund
 - Paul Lipkin, MD (D-PIP Principal Investigator)
 - Jill Ackerman, Ginny Chanda, Stephanie Skipper (AAP Staff)
 - ***D-PIP Practices!***
- 

Questions?



The Developmental Surveillance and Screening Policy Implementation Project (D-PIP) at Boys Town Pediatrics

Amy Gibson

Assistant Director of the Boys Town Institute for Child Health
Improvement in Omaha, Nebraska



Preparing the Practice

- Review AAP policy statement with all physicians
- Get physician buy-in
- Review developmental screening with all clinic staff and get feedback on implementation strategies
- Choose validated screening tool
 - Ages and Stages

Preparing the Practice

- Obtain tools and make available for staff
- Determined which visits routine screening performed
 - Chose to do screening at 24 month visit
 - Increased time available at 9, 18, and 24 months due to no or fewer immunizations given
- Incorporate physician and clinic staff input that preserves current work flow

Preparing the Practice

- Identified resource nurse for staff
- Communicated with entire staff about new procedures for screening.

Preparing the Practice

- Determined parent to receive and complete the screening instrument before seeing physician
- Determined protocol for getting screening tool to parents prior to exam*
- Discussed scoring*

**changed soon after implementation*

Implementation

- Started screening July 1, 2006!
- Data collection
 - Reviewed 10 charts every month
- Improve documentation
 - Created stamp to document surveillance (chart review indicated poor documentation of development)
 - Created stamp to indicate screening completed and results reviewed
- Review billing processes
- Start utilizing appropriate CPT codes and billing for developmental screening Nov 2006
- Provided ongoing feedback to practice staff

Bring in Partners

- Local Early Intervention Providers
 - District 66 and County Early Intervention Staff
 - Helped familiarize staff with resources available
 - How to coordinate referral process
- Omaha Urban Area Health Education Center
 - Grant for this program to help with disseminating lessons learned from this project to the community and AAP policy on developmental screening.

Goals not yet accomplished

- 75% patients being screened – buy in
- Improve documentation
 - Well-child visits/Sick visit
- Changes in practice staff
- Tracking referrals
- Initiate a program of chronic condition management for child identified with a developmental disorder

What we learned about changing a practice

- Changing a practice is not easy!
- Physician buy-in is essential
- Nursing buy-in is essential
- Need to keep staff motivated and educate all new staff about clinic procedures
- Strive to maintain workflow
 - if screening completed before physician enters exam room

Our Successes

- Documentation of developmental surveillance dramatically improved!
- If coded and documented properly, there is reimbursement
 - 75% of payers at \$6.70 to \$7.40 per screen
- Parents like it!
- Identifying and referring children earlier
- Roll out to all practices

Questions?



D-PIP at ALPs

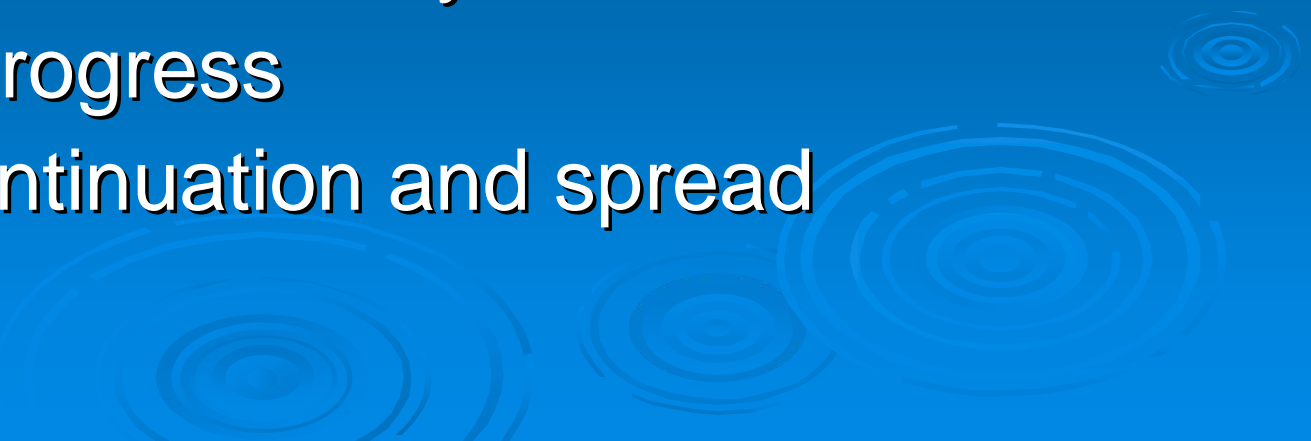
“All politics is local” Tip O'Neill

Thomas Sullivan, M.D.

President of Alexandria Lake Ridge Pediatrics



System Change

- Build on past experience
 - Engage partners
 - Engage key staff
 - Anticipate setbacks
 - Keep moving forward
 - Engage the Community
 - Measure Progress
 - Plan for continuation and spread
- 

Engage Key Staff

- Partners bought it
- Key staff is willing prior to partner discussion
- Engage billing office to monitor reimbursement
- Go slow with staff involved in PDSA cycles
- Measure results by to D-PIP protocol

Build on Past Experience

- Our Mission Statement family focused medical home
- 5 equal partners & 4 associates productivity based
- Past retreat divided areas of responsibility
- PROS practice 4 members participate
- Decisions by consensus
- Family to individual charts to templates
- Medical Home Spread Practice
- Close Alliance with ACPS “schools”

Engage Partners

Pros

- Staff in place stable
- Nurse Supervisor
- AAP Policy
- Code 96610 Vanderbilt paid
- PEDS 2 min before visit
- 70-80% specificity/sensitivity
- Provider schedule FU
- Not reimbursable surveillance

Cons

- Busy Practice
- MA's resistance
- Cost uncovered
- Slows Patient flow
- No time to learn
- Positives add time to visit
- Screen already
- Who will implement

Anticipate Setbacks Move Forward

- Front desk to busy
- Office flow change
- Improper data collection
- Nurse supervisor leaves
- Allow New Supervisor to get up to speed
- Outside billing Administrator leaves March
- Change assignment
- New well room desk
- Re do data in error from billing system recall
- Sept – Jan expect drop in compliance
- Start up in Jan new PDSA all systems go
- Investigate need for change suspend monitoring

Engage the Community

- Contacted EIP'S Early Intervention Programs NVA
- Used Alexandria Child Find supervisor to get other NVA EIP'S part C and part B.
- ALP'S staff set up a meeting and presentation at our office for all.
- Major finding different interpretations of FERPA impaired exchange of information and tracking of referrals. State level intervention.
- We ask for information but haven't agreed on its content
- 3 Parent focus groups approved of the screening

Measure Progress

- Successful implementation in March
- In February half the office stopped rumor that the project was over! Re education
- Partners and Associates updated in discussion and minutes of monthly meetings
- Algorithm known only to implementation team based on prior experience with medical home
- April reported all data submitted
- Rumor we can stop squelched by management

Plan for Continuation and Spread

- Show Partners we are integral to state spread through ABCD
- Present state EPDST document showing Medicaid managed care adoption of payment codes, AAP, and Bright Future Guidelines
- Work with the VA ABCD Project to develop uniform consent and content exchange
- VCAAP Collaboration on spread & reimbursement thru Council, Reimbursement Com and Medical Home Init

Summary

- System change “like changing a tire on a moving bicycle
- Know your Practice, Families and Community
- Expect Resistance
- Be a Champion and move to the goal.
- Measure success and failure
- Hide the Algorithm but follow it
- Continue and spread the process with State Chapter and State Government

Questions?

