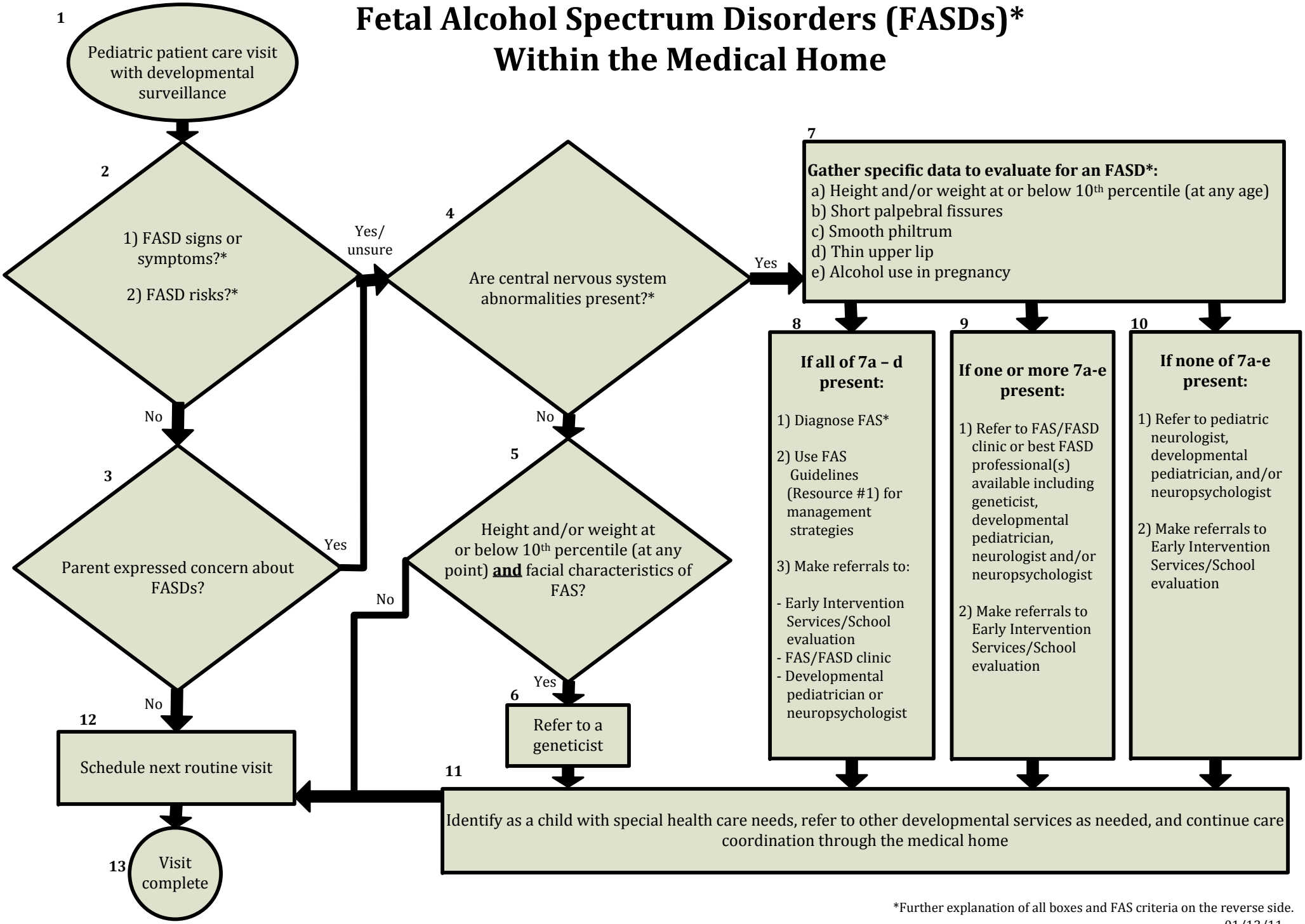
Algorithm for Evaluation of Fetal Alcohol Syndrome (FAS)* and Fetal Alcohol Spectrum Disorders (FASDs)* Within the Medical Home



*Further explanation of all boxes and FAS criteria on the reverse side.

01/13/11

GUIDELINES FOR EVALUATING A CHILD FOR FETAL ALCOHOL SPECTRUM DISORDERS (FASDS)

This algorithm was devised to facilitate greater clinical recognition of children with fetal alcohol spectrum disorders (FASDs), including fetal alcohol syndrome (FAS). The AAP working in concert with the Centers for Disease Control and Prevention created this schema to guide medical home providers through effective FAS/FASD screening, early identification, management and referral. The term fetal alcohol spectrum disorders describes the range of outcomes that can occur in an individual who was exposed to alcohol *in utero*. This term is not intended as a clinical diagnosis, but refers to a continuum of conditions or 'disorders' that may include physical, mental, behavioral, and/or learning disabilities with possible lifelong implications. FAS, which represents only the tip of the 'FASD iceberg,' has very specific diagnostic criteria to identify those individuals most severely affected by alcohol exposure *in utero*. (FAS criteria: see Reference 1.) Other FASDs are Partial FAS, alcohol-related birth defects and alcohol-related neurodevelopmental disorder.

Box #	Detailed Explanation
1	Intrinsic to all pediatric medical home well child visits is surveillance of growth and development and documentation of the complete patient history and physical examination, including a history of alcohol exposure and other risk factors. (Developmental surveillance and screening algorithm: see Reference 2.)
2	FASD signs and symptoms include: growth deficits of height and/or weight at or below the 10th percentile at any age, microcephaly, developmental or behavioral concerns, and specific facial features that include short palpebral fissures, smooth philtrum, and thin upper lip. FAS/FASD risk factors include: known/suspected maternal alcohol or other substance use; patient's sibling has FAS/FASD; patient was adopted; patient ever in foster care system.
3	Any parental concern expressed about the possibility of an FASD always warrants further evaluation.
4	CNS abnormalities include: microcephaly, focal neurological deficits, known MRI abnormalities, cognitive/developmental/behavioral problems. To meet the FAS diagnostic criteria,(See Reference 1.) must document structural (microcephaly and/or abnormality on neuroimaging), neurological (seizure or abnormality on neurological exam), **OR** functional abnormalities. [*Functional* = (1) Global cognitive deficits or significant developmental delay in child too young for an IQ assessment (e.g. IQ or developmental quotient below 3rd percentile) **OR** (2) deficits (below 16th percentile) in THREE or more specific functional domains, e.g. cognitive, academic, executive function, attention, memory, adaptive, motor, language, social skills, etc.].
5, 6	Presence of growth delay (not explained by post-natal environment or parental height) **and** dysmorphic facial features needs evaluation by a genetics specialist. Residual concern about one or the other of these features emphasizes the importance of continued developmental surveillance at each well child visit.
7	Document a comprehensive history and physical exam specifically seeking FASD manifestations. The 7a. growth delay is not explained by post-natal environment or parental height. Dysmorphic facial features meet strict criteria with racial norms detailed in Jones KL. Fetal alcohol syndrome. In: *Smith's Recognizable Patterns of Human Malformation*. 6th ed. Philadelphia, PA: Elsevier Saunders; 2006:646-651.
8	Meeting **all** FAS diagnostic criteria establishes definitive FAS diagnosis. (FAS criteria: see Reference 3.)
8-10	Refer to specialized care for comprehensive evaluation and/or specific management. Referral does not eliminate the possibility of FAS/FASD or the need for continued care coordination through the medical home.
11	The pediatric medical home coordinates and facilitates all aspects of comprehensive and continuing patient care, including referrals, educational services, health care specialists and community partners.

SELECTED RESOURCES:

1. *Fetal Alcohol Syndrome: Guidelines for Referral and Diagnosis* (NCBDDD/CDC/DHHS & National Task Force on FAS/FAE) http://www.cdc.gov/ncbddd/fasd/documents/FAS_guidelines_accessible.pdf
2. http://aappolicy.aappublications.org/cgi/content/full/pediatrics;118/1/405 Identifying Infants and Young Children with Developmental Disorders in the Medical Home: An Algorithm for Developmental Surveillance & Screening. Pediatrics. 2006; 118: 405-420
3. www.cdc.gov/fasd 1-800-CDC-INFO (800-232-4636) TTY: (888) 232-6348 Available 24/7.
4. www.aap.org A Minute for Kids: FAS http://patiented.aap.org/content.aspx?aid=6800 Special article: PEDIATRICS Vol. 123 No. 3 March 2009, pp. e526-e533 (doi:10.1542/peds.2008-2423) *Characteristics of Children Whose Siblings Have Fetal Alcohol Syndrome or Incomplete Fetal Alcohol Syndrome*.
5. www.nofas.org The National Organization on Fetal Alcohol Syndrome (NOFAS) – a non-profit organization dedicated to FASD prevention, education, intervention, and public policy in communities nationally and internationally.
6. www.come-over.to/FASCRC Fetal Alcohol Community Resource Center (Tucson, AZ) for parents, teachers and others.
7. http://www.von.ca/fasd/_fasdtool_fullproof_final.pdf "Let's Talk FASD" - a free downloadable manual for care providers, parents and teachers in Canada.

a program to enhance the health & development of infants & children
Fetal Alcohol Spectrum Disorders Program
A program of the American Academy of Pediatrics in cooperation with the Centers for Disease Control & Prevention