

# Developing a Quality Management and Improvement Program for School-Based Health Centers



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Keeping children healthy, in school,  
and ready to learn

# **Developing a Quality Management and Improvement Program for School-Based Health Centers**

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## **I. Introduction to Quality Standards**

The National Committee for Quality Assurance (NCQA) is an independent, not-for-profit organization, founded in 1990. It is widely recognized as the authority on health care quality. NCQA supports voluntary efforts by providers to be accountable for the quality of care and services they deliver through two complementary activities – accreditation reviews, and developing, auditing, and reporting performance measures. Currently, NCQA provides programs and services to both managed care organizations (MCOs) and managed behavioral healthcare organizations (MBHOs), putting forth a basic formula for improvement: “Measure. Analyze. Improve. Repeat.”<sup>1</sup>

Because school-based health centers (SBHCs) wish to be recognized as high quality, low cost providers of primary and preventative health care to children, it is vitally important that SBHC administrators and practitioners become knowledgeable about the quality standards that NCQA has developed, and implement those that are applicable to the SBHC setting.

NCQA’s publication “2010 MBHO Accreditation Requirements”<sup>2</sup> was used as the primary resource for this document. According to NCQA, an MBHO wishing to receive accreditation must have a comprehensive quality assurance program that will include the following components:

- Quality Management and Improvement
- Utilization Management
- Credentialing and Re-credentialing
- Patients’ Rights and Responsibilities
- Preventative Health

With the exception of Utilization Management, all of these components have elements that are applicable to school-based health centers and are discussed below.

### **A. Quality Management and Improvement**

A quality management and improvement program is the framework within which the school-based health center improves the quality of clinical care and service to patients. The SBHC must be able to provide written documentation of the following:

- A description of the quality management and improvement program which details program structure and content. The description must be approved by the SBHC’s governing body, reviewed annually and updated as necessary.

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<sup>1</sup> National Committee for Quality Assurance (n.d.) *About NCQA*. Retrieved from <http://www.ncqa.org/tabid/675/Default.aspx>. [Click here to follow link](#)

<sup>2</sup> National Committee for Quality Assurance (n.d.) 2010 NCQA MBHO Accreditation Requirements Link. Retrieved from <http://www.ncqa.org/LinkClick.aspx?fileticket=gzY9ekGW9Ys=&tabid=1489&forcedownload=true>. [Click here to follow link](#)

- Formation of a committee that oversees quality management and improvement activities. The role, structure and function of the committee, as well as frequency of meetings, are specified in the program description. Records of committee meetings are kept.
- An annual quality management and improvement work plan, which includes objectives and planned activities for the year, monitoring of previously identified issues, and an evaluation. The plan includes activities related to both the quality of clinical care and the quality of service provided to patients. The selection of clinical issues reflects the population served in terms of age, disease categories, and special risk factors. The selection of clinical issues includes high-volume, high-risk services and the care of acute and chronic conditions. If practice guidelines are used, they are based on reasonable scientific evidence, updated periodically and communicated effectively. Quality indicators are objective and measurable. The committee provides regular oral reports to the SBHC's governing body, and submits a written annual report related to the work plan.
- Clinical practice guidelines for all practitioners. These guidelines must be distributed appropriately and reviewed at least every two years. The organization must measure its performance against these guidelines annually, making improvements when necessary, and monitor the continuity and coordination of care between practitioners of different specialties.
- Standards for timeliness of preventive care appointments, primary care appointments, behavioral health services and urgent care as well as access to after-hours care. Data is collected and analyzed to measure performance against the standards. Opportunities for improvement are identified and acted upon. The effectiveness of interventions is measured.
- A formal mechanism for informing patients about services provided, access to services, charges for services, billing and collection policy, appointment scheduling, and provisions for after-hours emergency coverage. This information is available in the language(s) of the major population groups served.
- A timely organized system for resolving patient complaints and formal grievances. The system includes procedures for registering complaints and grievances, for ensuring that a resolution is provided in a timely manner, and for aggregating and analyzing the data to use for quality improvement purposes.
- Periodic assessment to assure patient satisfaction services. Patient issues are identified and patients are surveyed to collect relevant data. The data is analyzed, opportunities for improvement are identified, and interventions are implemented. The effectiveness of interventions is measured.
- Linkage between the quality management and improvement program and other management functions such as annual employee performance evaluations, patient grievance resolution, provider re-credentialing, and vendor contracting.
- Requirement to participate in quality improvement activities is incorporated into all provider contracts and employee job descriptions. Providers must be involved in the planning, design, implementation and review of the program.

## **B. Standards for Credentialing and Re-credentialing**

The school-based health center must enforce a written policy and procedures for the credentialing process, which will assess the qualifications and practice history of **all** physicians, physician assistants, advanced practice nurses and licensed mental health therapists who fall under its scope of authority. The credentialing policy must be approved by the SBHC's governing body. A credentialing committee must be appointed to identify practitioners who fall under the SBHC's

scope of authority, and to make recommendations regarding credentialing decisions. Re-credentialing must occur every 36 months. The credentialing policy must include procedures for reducing activities of, suspending or terminating practitioners. The credentialing policy must also include the right of the practitioners to review information collected in support of their own credentialing applications.

At a minimum, the credentialing process obtains and reviews verification of the following primary sources:

- current valid license to practice
- valid DEA or CDS certification, if appropriate
- education and training of practitioners, including graduation from appropriate school(s) and attainment of appropriate degree(s) or certifications; for physicians, completion of residency and Board Certification, as applicable.
- work history
- the status of clinical privileges at the hospital(s) designated by the practitioner as the primary admitting facility, as applicable
- current, adequate malpractice insurance

The credentialing application must contain statements by the applicant regarding:

- reasons for any inability to perform the essential functions of the position, with or without accommodation
- lack of present illegal drug use
- history of loss of license to practice
- history of felony conviction
- history of loss or limitation of privileges or initiation or disciplinary action
- attestation to the correctness/completeness of the application

The re-credentialing process must also include review of data from:

- patient complaints
- quality improvement evaluations
- patient satisfaction surveys
- medical record reviews

The credentialing and re-credentialing policy must also detail a process for discontinuing the contracts of practitioners who demonstrate poor performance. A process allowing the practitioner to appeal the plan's decisions should be designed, and the procedures must indicate reporting of any terminations to the appropriate authorities.

### **C. Standards for Patients' Rights and Responsibilities**

The school-based health center must have a written policy that addresses the rights and responsibilities of patients. At a minimum the policy must address the rights of patients to:

- voice grievances about the care provided and expect resolution of grievances in a timely manner
- be provided with information regarding the SBHC's organizational structure and services, and the qualifications of the practitioners under the SBHC's scope of authority

- receive information about benefits and charges for which they are responsible, including co-payments
- participate in decision-making regarding who provides services to them the health care they receive, and
- be treated with respect and recognition of their dignity and need for privacy and confidentiality

and the responsibility of patients to:

- cooperate with those providing services
- provide, to the extent possible, information that professional staff need in order to provide appropriate care
- follow instructions and guidelines given

The policy on patients' rights and responsibilities must be approved by the SBHC's governing body. The SBHC must provide a copy of the policy to all practitioners falling under its scope of authority, and directly to patients through posting it in the facility's reception area or through making copies available in a brochure rack or other appropriate location.

#### **D. Standards for Preventative Health Services**

The school-based health center must adopt preventive health guidelines for the prevention and early detection of disease in order to reduce undesirable variation in the process and outcome of care. The guidelines must be specific to the age, sex, and risk status of patients within its covered population. Each guideline describes the prevention or early detection intervention, the recommended frequency, and the indications or conditions under which the intervention is required.

The SBHC must engage in an active process of choosing preventive health guidelines appropriate to its patient population and its operation. The guidelines may be adopted from nationally recognized organizations. If the SBHC develops its own, the process must include the use of established sources of scientific research and recommendations. The scientific basis or authority upon which each preventive health guideline is based must be documented.

The SBHC must actively distribute and communicate preventative health program information to health care practitioners. All updates must be conveyed in a timely manner.

The SBHC must inform parents and patients about, and encourage patients to use, the preventive health services available to them. The SBHC must annually distribute information about preventative health to all enrollees, and evaluate the use of preventive health services. At least one specific group of enrollees must be identified as an at-risk population and targeted for outreach. The SBHC must also take action to improve the use of at least two of its preventative health services, as appropriate.

## **II. Quality Management and Improvement Documents for Adoption or Adaptation by School-Based Health Centers**

The following documents are sample program descriptions, policies and procedures that meet the quality assurance standards describe above, and which a school-based health center can adopt or adapt for its internal use.

## A. Quality Management and Improvement Program

Quality Management and Improvement Program of (Organization Name)

A Quality Management and Improvement Committee (QMIC) shall be established to develop a written Quality Management and Improvement Plan, implement the Plan, issue an annual written Quality Management and Improvement Report to (name of governing board), update the Plan annually and administer the patient grievance process. The Committee shall be structured as follows:

1. **Composition.** The QMIC shall consist of (number) individuals as follows:
  - Medical Director
  - At least two others to include both clinical and administrative personnel
2. **Scope.** The QMIC is responsible for all aspects of quality assurance. Broadly defined, this includes administration of four overlapping functions:
  - Evaluation and management of clinical quality, including standards for medical records
  - Evaluation of access and service issues, including patient satisfaction
  - Patient grievance process
  - Overall program evaluation

The specific activities associated with each function are described below:

### Evaluation and Management of Clinical Quality

The objective of this activity is to improve the quality of health services by systematically monitoring practice patterns and reporting results to the practitioners involved. The core of the process is education, and studies are designed to identify those areas where quality of care and cost effectiveness can be improved through feedback and education.

Study topics are chosen based upon patient demographic and disease characteristics. Study designs are based on objective, measurable, outcomes-based standards that directly relate to the issues of:

- accuracy and completeness of the medical record,
- appropriate use of services and medication,
- coordination and continuity of care,
- follow-up of identified problems,
- health education and promotion

The goals of the studies are to determine whether services are delivered appropriately. To accomplish this, review efforts encompass all services – preventive, primary and ancillary.

The Committee is responsible for all phases of the quality improvement process including:

- prioritizing review topics,
- developing practice guidelines and standards and communicating these prospectively to affected providers,
- setting review schedules,
- developing data collecting strategies
- interpreting, screening, and reviewing results,
- recommending corrective action and documenting effectiveness, and
- recommending other actions/sanctions to achieve the desired behavior.

#### Evaluation of Access and Service Issues

The QMIC is responsible for assessing patient satisfaction with the quality of service provided by (Organization Name) administration and providers. The availability and acceptability of primary and preventive care, and access to routine, urgent, and emergency care will be part of this assessment.

#### Patient Grievance Process

The QMIC is responsible for organizing and managing the patient grievance process. Although it is anticipated that most patient problems can be resolved by simply making the provider or administrator aware of the situation, if the issue is not resolved at the provider/administration level, there are provisions for Committee involvement in the case.

#### Overall Program Evaluation

To assure that the Quality Management and Improvement Program is as effective and efficient as possible, the QMIC reviews all aspects of the program annually. Review criteria evaluate study methodologies, trends in clinical service indicators, effectiveness of corrective actions, compliance with process guidelines and standards, and timeliness of responses. In carrying out this evaluation, the Committee reviews the materials and documentation used in making decisions and audits records and logs that support the process. Review results along with relevant documentation are sent to the (name of the governing body).

3. **Responsibilities.** The (name of governing body) has overall responsibility for the quality of care delivered to the (Organization Name) patients. The (name of governing body) delegates administrative responsibility for this activity to the Medical Director who works with the QMIC to carry out the process.

The Medical Director is Chairman of the Committee and is responsible for carrying out the policies and procedures outlined. This responsibility covers not only administering the process itself, but also, as clinical manager, translating process standards and recommendations into practice. Specifically, these responsibilities include communicating standards and taking any necessary action to assure that they are met, communicating results of reviews and recommendations to providers, answering questions and clarifying policy, and responding to complaints and grievances, and communicating grievance decisions to affected parents and patients.

The (title of staff person) is responsible for day-to-day operation of the Quality Management and Improvement Program including organizing meetings, conducting quality improvement studies and follow-up, researching grievances, maintaining all records and logs

to support the quality improvement process, and organizing the reports and documentation needed for QMIC meetings.

The Committee members provide general consultation and recommend all quality assurance policies and administrative actions. Specifically, for quality improvement, the Committee chooses study topics, selects indicators, sets practice standards, interprets research finding, and recommends actions to address identified problems. For grievances, the Committee reviews cases and recommends actions. Committee decisions are based on majority vote.

4. **Frequency of Meetings.** The QMIC sets meetings at least quarterly. Meetings may be face-to-face or by conference call.
5. **Minutes.** Minutes will be kept of each meeting. At a minimum these will include:
  - where, who, date, time;
  - approval of minutes from last meeting;
  - review of quality improvement and grievance reports;
  - problems identified including a summary of discussion, conclusions, recommendations, actions taken, follow-up, and method for re-evaluation;
  - unfinished business;
  - new business; and
  - adjournment

## **B. Credentialing and Re-credentialing Policy**

Provider Credentialing Policy of (Organization Name)

1. **Purpose.** The purpose of the credentialing process is to assure that providers practicing at (Organization Name) meet certain criteria for initial appointment and that these qualifications plus patient satisfaction survey and quality improvement results are re-evaluated on a regular basis.
2. **Basic Criteria.**
  - a. Physicians

The following criteria must be met for routine acceptance as a provider. Physicians must maintain compliance with all criteria as a condition of continued participation.

- Accurate completion of credentialing application and required documentation.
- Current license to practice medicine in the State of Colorado. If the license is restricted, the restriction has been reviewed and deemed acceptable.
- Board certification in their field of medical practice. An exception may be made on an individual basis by the Credentialing Committee for physicians who are board qualified, or bring unique and necessary skills to (Organization Name).
- Current unrestricted staff membership and admitting privileges granted by a general or psychiatric hospital in the service area, if applicable.
- Have a DEA number, if appropriate.

- Policy of professional liability insurance with a minimum of \$1 million/\$3 million coverage.
- No felony convictions or pleas of guilt or nolo contendere to felony charges.
- No conviction of any federal or state law regulating the possession, distribution or use of any controlled substance.
- Good standing with Medicare and Medicaid in any state in which there is or has been a license.
- No history of revocation or suspension of privileges and no relevant permanent restrictions by hospital, medical review board, licensing board, or other medical body or governing agency.
- No habitual intemperance or excessive use of any habit forming drugs or controlled substances.
- No physical or mental disability as to render the license unable to perform medical services with reasonable skill and with safety to the patient.
- Provision of high quality, appropriate, timely care. (This is initially evaluated through review of malpractice history, employment history, and other information available on the application.)

b. Physician Assistant, Nurse Practitioner, Certified Midwife, Licensed Clinical Social Worker or Mental Health Therapist

The following criteria must be met by a non-physician provider. Providers must maintain compliance with all criteria as a condition of continued participation.

- Accurate completion of credentialing application and required documentation.
- A current unrestricted Colorado license and/or Colorado state certification.
- Certificate and/or diploma from an appropriate training program.
- Policy of professional liability insurance with a minimum of \$1 million/\$3 million coverage. If provider is covered under a group policy, the provider's name must be individually listed on the policy document. Coverage minimum may be waived if provider governmental immunity applies.
- No felony convictions or pleas of guilty or nolo contendere to felony charges.
- Good standing with Medicare and Medicaid in any state in which there is or has been a license.
- No conviction of any federal or state law regulating the possession, distribution or use of any controlled substance.
- No habitual intemperance or excessive use of any habit-forming drug or controlled substance.
- No history of revocation or suspension of privileges and no current restrictions by licensing board or other medical body or governing agency.
- No physical or mental disability as to render the license unable to perform medical services with reasonable skill and with safety to the patient.
- Provision of high quality, appropriate, timely care. (This is initially evaluated through review of malpractice history and other information available on the application.)

c. Continued Status

Providers must notify (Organization Name) within no more than five days of:

- Any judgment by a State Board.
- Change in Medicare and/or Medicaid provider status, suspension or exclusion.
- Any suspension or loss of hospital staff privileges, state licensure or certification, or state controlled substance certificate.
- Any physical or emotional impairment to his/her ability to practice.
- Any felony arrests or convictions.

3. **Quality Assurance.** Providers must be willing to participate in, accept the rules of, and comply with the requirements of (Organization Name)'s quality assurance program. This may include review of medical records for compliance with practice guidelines and quality improvement standards. When a question is raised regarding the appropriateness or quality of care that is at variance with established norms, the burden shall be on the provider to demonstrate that his/her practice is otherwise appropriate.

4. **Patient Relations.** Each provider shall conduct his or her practice in a manner that maintains positive provider-patient relationships.

5. **Re-credentialing Criteria.** Providers are re-credentialed every three years, or immediately upon notification that one of the events listed under "Current Status" has occurred. This process reconsiders the Basic Criteria listed above during the interval since the last credentialing, as well as:

- a. Patient satisfaction measured by number and type of patient complaints as well as patient satisfaction surveys.
- b. Results of record review and quality assurance studies.
- c. Provider support of philosophy and concept of (Organization Name).
- d. Filing of malpractice claims since initial certification.

6. **Responsibilities.** The (name of governing body) will appoint a Credentialing Committee made up of (number) individuals, at least one of which is a provider.

The (title of staff person) will be responsible for collecting and verifying applicant information and maintaining credentialing records. The credentialing process will include inspection of application documents and review of information from the National Practitioner Data Bank and the applicable state board.

The findings from the investigation will be compared against a check-list of the criteria. The check-list and any supporting documentation for negative finding will then be submitted to the Credentialing Committee to make appointment decisions.

The provider application, the credentialing and re-credentialing check-lists, and any sustaining information are maintained by (Organization Name) for each provider. All credentialing documentation will be kept confidential with access restricted to the (title of staff person), members of the Credentialing Committee, and the Medical Director.

Re-credentialing materials are requested from the provider four months before his/her re-credentialing begins and review is completed within 60 days of receipt of the complete application. The re-credentialing process is similar to the initial one except that results of quality improvement studies, including medical record audits, and patient satisfaction surveys are summarized along with the credentialing criteria for the Credentialing Committee.

Providers who meet the Basic Criteria and have satisfactory quality improvement results will be forwarded to the Credentialing Committee with a recommendation for automatic renewal. Providers who fail any of the Basic Criteria and/or have questionable quality improvement or patient satisfaction results will be forwarded for review by the Committee. The Committee may decide upon unconditional renewal, renewal with recommendations for improvement, renewal with restrictions, or non-renewal of appointments. In cases where renewal is conditional, the Committee recommends measure to correct the problem and establishes a time frame for improvement. If the provider fails to correct the problem within the specified time, the case is referred to the (name of governing body) for follow-up that may include termination of the provider.

Credentialing decisions are communicated to providers in writing. If the Committee needs more information from the provider to make a decision, it requests the information in writing and specifies a date for response. Re-credentialing decisions along with any problems, corrective actions, and time frames are also communicated in writing.

7. **Reporting and Final Approval.** Recommendations of the Credentialing Committee are reported to the (name of governing body) for final approval.

### **C. Patients Rights and Responsibilities**

Patient Rights and Responsibilities Statement of (Organization Name)<sup>3</sup>

All patients of (Organization Name) have the right to:

- Care and treatment (list services offered such as:)
  - Well-child exams and physical exams for camp, sports, or college entrance
  - Immunizations
  - Diagnosis and treatment of minor injuries and acute illness
  - Management of chronic conditions
  - Mental health assessment and crisis intervention
  - Oral health education, dental cleaning and sealants
- Respect from all staff
- Give informed consent for all treatment and procedures
- Know the names, professional status, and experience of the staff that are providing care and treatment

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<sup>3</sup> Adapted from a document provided by the Multnomah County Health Department School-Based Health Center. Retrieved from: [http://www.mchealth.org/sbhc/documents/patient\\_rights\\_resp.pdf](http://www.mchealth.org/sbhc/documents/patient_rights_resp.pdf). [Click here to follow link](#)

- Know if the facility is participating in teaching programs, research, and/or experimental programs
- Refuse any drug, test, procedure, or treatment
- Care and treatment that recognizes a person's dignity and provides for personal privacy to the extent possible during the course of treatment
- Be informed of the facility's rules and regulations that apply to the patient
- Be informed prior to the initiation of care or treatment of the standard charges of services and based upon insurance information supplied by the patient, to be given an estimate of any co-payment, deductible, or other expenses that will not be covered by a third party payer and must be paid by the patient
- Understand information provided, regardless of language barriers or disabilities

All patients of (Organization Name) have the responsibility to:

- Keep appointments and be on time
- Contact the clinic in a timely manner to cancel an appointment
- Follow the health care provider's instructions, and ask if instructions are not understood
- Know when to come back to the health center for follow-up and know who to call and where to go for other services
- Give full and honest information on all forms and in all conversations. Patients should bring a list of all medications being taken and information about any conditions being treated;
- Report any changes in general condition, symptoms, allergies, etc.
- In case of emergency, call the emergency phone numbers provided and notify (Organization Name) of any treatment received;
- Treat the staff and other patients with respect;
- Provide complete insurance information if any
- Report any changes of address, phone number or insurance information
- Pay all bills promptly, or call our patient representative if there are financial difficulties.

#### **D. Annual Quality Improvement Work Plan**

CHOOSE TWO OR THREE OF THE FOLLOWING MEASURES, OR DEVELOP YOUR OWN. Remember that the selection of clinical issues should reflect the population served in terms of age, prevalence of disease, and risk-taking behaviors. The selection of clinical issues includes high-volume, high-risk services and the care of acute and chronic conditions.

Annual Quality Improvement Work Plan of (Organization Name)

(Organization Name) will conduct chart reviews on the following clinical outcome measures. Depending upon the results of these reviews, an action plan will be developed to improve compliance where necessary. Follow-up chart reviews will be conducted six to twelve months after implementation of the action plan to measure impact of the plan and make adjustments, if necessary. By (TARGET DATE), the target compliance for all measures will be achieved.

##### **1. Childhood Immunizations**

As regulated by the U.S. Department of Health and Human Services, Centers for Disease Control and Prevention (see Appendix A)

- a. For children under six years of age, who are patients in the SBHC, the following immunizations will have been provided and charted (see Appendix B)
- b. For children who are aged seven through eighteen years and who are patients in the SBHC, the following immunizations will have been provided and charted (see Appendix C)

TARGET COMPLIANCE: 90%.

RATIONALE: Immunizations are an effective intervention for preventing disease in children and adolescents, and are a well-recognized indicator of quality in a primary care setting. This clinical outcome measure meets the requirements of the “Recommended Childhood Immunization Schedule, United States, January, 2010” issued by the Centers for Disease Control and Prevention and approved by the Advisory Committee on Immunization Practices, the American Academy of Pediatrics, and the American Academy of Family Physicians. The CDCP schedule has been adopted by the Colorado Department of Public Health and Environment and by the Colorado Clinical Guidelines Collaborative.

AUDIT PROCESS: Twenty-five charts at each SBHC site will be audited. Each site will identify one of the two age groups to be audited (children under six years old OR children between six years and eighteen years of age). The site will generate a list of children who 1) made at least one visit (of any type) between (DATE) and (DATE) and 2) had the appropriate birthday prior to (DATE). The list should include patient name, birthdate and date of qualifying visit. There must also be a total count of children on the list. The auditor will randomly select 30 children from the list. Staff at the site will pull the selected charts or identify the electronic medical record and provide the auditor with space to work. Original records will not be removed from the site. The auditor will check the first 25 charts for the following:

- Birth date (must agree with age group being audited)
- evidence of visit between the identified dates
- evidence of immunizations per standard appropriate for age group

Compliance with each antigen will be tracked separately. In addition, children who have completed all required immunizations will be noted.

Should the chart indicate 1) that the recorded birthdate makes the child ineligible for audit, 2) that there was no visit within the required time period, 3) that an immunization was not given due to a valid contraindication such as an allergy to wheat, a religious exemption, or a personal exemption (parental refusal), or 4) that the child’s immunization status has been evaluated, gaps have been identified, a catch-up plan has been developed, and immunizations have been administered according to the plan, that file will be laid aside and not audited. The next chart in line will be selected to take its place.

The auditor will provide a separate report for each site showing compliance rates for each immunization separately, for all immunizations required for the selected age group.

When all sites are complete, the auditor will calculate an aggregate compliance rate, to include all sites, and weighted by the number of children falling into the audit criteria at each site. The

aggregate compliance rate will be used as the “benchmark” for purposes of comparison. Sites should not be compared to each other, but only to the benchmark.

## 2. **Well-Child and Well-Adolescent Exams**

Recommendations for Preventative Pediatric Health Care from the American Academy of Pediatrics<sup>4</sup>:

- a. For all children under thirteen and who have been enrolled in the SBHC for at least six months, one comprehensive well-care visit will have been completed within the past twenty-four months.
- b. For children thirteen years of age or older and who have been enrolled in the SBHC for at least six months, one comprehensive well-care visit will have been completed within the past twelve months.

The SBHC may either have performed the visit on-site, or have obtained evidence from parent/guardian/health plan/primary care physician of a visit performed elsewhere. A comprehensive visit is defined as having received the following: health history, including psychosocial issues and risk factors, physical exam as directed by history, immunizations as needed, and laboratory, vision and hearing, and dental screenings as indicated by history.

TARGET COMPLIANCE: 75%

RATIONALE: Well-care visits are an effective means of detecting disease and promoting good health habits. The American Academy of Pediatrics and the American Medical Association’s Guidelines for Adolescent Preventative Services (GAPS) recommend a well-child visit every two years after age five, and an adolescent visit every year after age twelve.

AUDIT PROCESS: Same as above. Auditor will check each selected chart for evidence of a well-care visit per the standard for the appropriate age group. It should be noted if a well-care visit was performed that did not meet the definition of a comprehensive visit specified above (i.e. sports or camp physical).

## 3. **Body-Mass Index Documentation**

In order to assess and improve the management of pediatric obesity, the school-based health center will obtain documentation of:

- a. A BMI percentile
- b. A corresponding weight-category diagnosis, and
- c. If overweight or obesity is identified, an assessment of the patient’s readiness to change related behaviors

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<sup>4</sup> Practice Management Online. (2008). Recommendations for Pediatric Preventative Health Care: Periodicity Schedule. Retrieved from: <http://practice.aap.org/popup.aspx?aID=1625&language=>. [Click here to follow link](#)

TARGET COMPLIANCE: 75%

RATIONALE: With a rising national obesity, it is important that primary health care providers begin to confront the epidemic with knowledge, skills, and tools to deal with their overweight and obese patients. Recent national guidelines recommend a number of interventions on such matters, including tracking BMI according to the Centers for Disease Control and Preventions for Disease Control and Prevention BMI percentile charts<sup>5</sup> that are specific for both age and gender.<sup>6,7</sup>

AUDIT PROCESS: Same as above. Auditor will check each selected chart for a recorded BMI and corresponding weight-category diagnosis and, if overweight or obesity is identified, an assessment of the patient's readiness to change related behaviors.

#### 4. Assessment and Treatment of Asthma

The school-based health center shall assess a patient's risk factors for asthma, including obesity, single parent families, poverty, racial minority status, and decreased physical activity, and be able to effectively diagnose the condition. In order to successfully manage and treat childhood asthma, the school-based health center should:

- a. Regularly assess and monitor the patient, including use of objective measures of lung functioning
- b. Control any relevant triggers for asthma attacks
- c. Provide pharmacologic therapy to patients when necessary
- d. Sufficiently educate asthma patients and their parents so they can become partners in their own care.<sup>8</sup>

TARGET COMPLIANCE: 90%

RATIONALE: According to the Centers for Disease Control and Prevention, asthma is a leading chronic childhood disease and a major cause of childhood disability. Therefore, early diagnosis, assessment and treatment of asthma can limit the number of avoidable emergency department visits and hospitalizations for children and adolescents.

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<sup>5</sup> Centers for Disease Control and Prevention (2009). BMI Chart. Retrieved from:

[http://www.cdc.gov/healthyweight/assessing/bmi/childrens\\_bmi/about\\_childrens\\_bmi.html](http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html). Click here to follow link

<sup>6</sup> Bolton Oetzel, K., Anixter Scott, A., & McGrath, J., (2009). AAP News: School-Based Health Centers and Obesity Prevention: Changing Practice Through Quality Improvement. Retrieved from:

[http://pediatrics.aappublications.org/cgi/content/full/123/Supplement\\_5/S267](http://pediatrics.aappublications.org/cgi/content/full/123/Supplement_5/S267). Click here to follow link

<sup>7</sup> Barlow, S. E. (2007). Summary Report: Expert Committee Recommendations Regarding the Prevention, Assessment, and Treatment of Child and Adolescent Overweight and Obesity: Pediatrics, November 2007. Retrieved from:

[http://pediatrics.aappublications.org/cgi/content/abstract/120/Supplement\\_4/S164?ijkey=a14d355d784d0059c558a90bacd2049c9b6209a9&keytype=tf\\_ipsecsha](http://pediatrics.aappublications.org/cgi/content/abstract/120/Supplement_4/S164?ijkey=a14d355d784d0059c558a90bacd2049c9b6209a9&keytype=tf_ipsecsha). Click here to follow link

<sup>8</sup> National Association of School Nurses (2002). Issue Brief: Asthma Management in the School Setting. Retrieved from:

<http://www.nasn.org/Default.aspx?tabid=264>. Click here to follow link

AUDIT PROCESS: The clinic administrator will generate a list of all SBHC users with an asthma diagnosis. The auditor will select 15% of these patients or 15 charts, whichever is fewer, and will assess the documentation of a treatment plan and reassessment as outlined by the Colorado Clinical Guidelines Collaborative Asthma Management Guide (Appendix D). An additional 10 charts from SBHC users not having an asthma diagnosis will be randomly selected by the auditor and checked to determine whether there is documentation that the patient's asthma risk factors were assessed.

## **5. Assessment of Tobacco Exposure**

For all children seen in the SBHC, the SBHC practitioner shall assess tobacco exposure and use as appropriate by age, and shall indicate in the medical record that the assessment was performed.

TARGET COMPLIANCE: 90%

RATIONALE: The American Medical Association's Guidelines for Adolescent Preventive Services (GAPS) recommends that all adolescents should be asked annually about their use of tobacco products including cigarettes and smokeless tobacco. According to the AMA, more than 4 million adolescents smoke regularly and half a million males between 12 and 17 years of age use smokeless tobacco at least weekly. Tobacco use by youth is widely recognized as a "gateway" that precedes use of other drugs. More than two-thirds of adults who smoke began their habit during adolescence. Conversely, adolescents who do not begin smoking are unlikely to begin later.

It is widely recognized that exposure of young children to second-hand smoke exacerbates respiratory diseases such as asthma, and that children of parents who smoke are more likely than other children to become smokers.

AUDIT PROCESS: The selection of charts shall be the same as in measure 1. above. The auditor will look for an indication in the chart that tobacco exposure/use was assessed at least once during the previous twelve months. The SBHC will also review each piece of tobacco-related patient education literature used for counseling purposes and the cessation program provided or to which referrals are made, to make sure it is current, age-appropriate, and science-based.

## **6. Quality of Medical Record Keeping**

The school-based health center shall keep medical records consistent with the guidelines published by the National Committee for Quality Assurance (Appendix D).

TARGET COMPLIANCE: 100% for each of guidelines applicable to age.

RATIONALE: Consistent and complete documentation in the medical record is an essential component of quality patient care. The National Committee for Quality Assurance (NCQA) has published guidelines for medical recordkeeping practices, which have become the professional standard. Records kept in accordance with these guidelines facilitate effective medical care and continuity of care among practitioners.

**AUDIT PROCESS:** The selection of charts shall be the same as in measure 1. above. The auditor will prepare an NCQA medical record review summary sheet for each selected medical record, indicating compliance or non-compliance with each of the applicable elements. The summary sheets will then be aggregated and a compliance score given for each guideline.

## **7. Patient Satisfaction**

The school-based health center shall assess patient satisfaction at least once per year. The SBHC shall administer a survey instrument for patients (i.e. children six years of age or older) and for patients' parents or guardians. Appropriate sample size must be identified for each population and for each site. The surveys shall address, at a minimum, the following issues: access to care including ease of making appointments, time spent waiting to see the practitioner, attention given to patients' need, thoroughness and appropriateness of treatment, scope of services provided, cultural sensitivity of practitioner, how much patient was helped by the care received, and overall perception of the quality of care. The survey results are reported to practitioners and are used to identify opportunities for improvement. Interventions to effect improvement are implemented, and re-measuring occurs.

**TARGET COMPLIANCE:** Improvement shall be shown in 100% of the issues targeted for improvement after initial survey.

**RATIONALE:** Patient satisfaction surveys are recognized as an important tool for quality management and improvement. The Joint Commission for Accreditation of Healthcare Organizations (JCAHO) requires providers to administer a patient satisfaction survey. The National Committee for Quality Assurance (NCQA) also requires managed care organizations to assess patient satisfaction. The surveys are used to discover areas of interaction that are working well and to identify opportunities for improvement.

**AUDIT PROCESS:** SBHC will administer the patient satisfaction survey, note the dates the survey was completed and sample size, tabulate results and write up a report, and include steps to be taken to address any concerns in the SBHC's action plan.

**APPENDICES:**

Appendix A: Summary of Recommendations for Childhood and Adolescent Immunization

Appendix B: Recommended Immunization Schedule for Persons Aged 0 Through 6 Years

Appendix C: Recommended Immunization Schedule for Persons Aged 7 Through 18 Years

Appendix D: Asthma Management for Children and Adults

Appendix E: 2010 NCQA MBHO Accreditation Requirements Link

# Summary of Recommendations for Childhood and Adolescent Immunization

Vaccine name and route	Schedule for routine vaccination and other guidelines (any vaccine can be given with another)	Schedule for catch-up vaccination and related issues	Contraindications and precautions (mild illness is not a contraindication)
<b>Hepatitis B (HepB)</b> <i>Give IM</i>	<ul style="list-style-type: none"> <li>Vaccinate all children age 0 through 18yrs.</li> <li>Vaccinate all newborns with monovalent vaccine prior to hospital discharge. Give dose #2 at age 1–2m and the final dose at age 6–18m (the last dose in the infant series should not be given earlier than age 24wks). After the birth dose, the series may be completed using 2 doses of single-antigen vaccine or up to 3 doses of Comvax (ages 2m, 4m, 12–15m) or Pediarix (ages 2m, 4m, 6m), which may result in giving a total of 4 doses of hepatitis B vaccine.</li> <li><b>If mother is HBsAg-positive:</b> give the newborn HBIG + dose #1 within 12hrs of birth; complete series at age 6m or, if using Comvax, at age 12–15m.</li> <li><b>If mother’s HBsAg status is unknown:</b> give the newborn dose #1 within 12hrs of birth. If mother is subsequently found to be HBsAg positive, give infant HBIG within 7d of birth and follow the schedule for infants born to HBsAg-positive mothers.</li> </ul>	<ul style="list-style-type: none"> <li>Do not restart series, no matter how long since previous dose.</li> <li>3-dose series can be started at any age.</li> <li>Minimum intervals between doses: 4wks between #1 and #2, 8wks between #2 and #3, and at least 16wks between #1 and #3 (e.g., 0-, 2-, 4m; 0-, 1-, 4m).</li> </ul> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin-top: 10px;"> <p><b>Special Notes on Hepatitis B Vaccine (HepB)</b>  <b>Dosing of HepB:</b> Monovalent vaccine brands are interchangeable. For people age 0 through 19yrs, give 0.5 mL of either Engerix-B or Recombivax HB.  <b>Alternative dosing schedule for unvaccinated adolescents age 11 through 15yrs:</b> Give 2 doses Recombivax HB 1.0 mL (adult formulation) spaced 4–6m apart. (Engerix-B is not licensed for a 2-dose schedule.)  <b>For preterm infants:</b> Consult ACIP hepatitis B recommendations (<i>MMWR</i> 2005; 54 [RR-16]).*</p> </div>	<p><b>Contraindication</b>            Previous anaphylaxis to this vaccine or to any of its components.</p> <p><b>Precaution</b>            Moderate or severe acute illness.</p>
<b>DTaP, DT (Diphtheria, tetanus, acellular pertussis)</b> <i>Give IM</i>	<ul style="list-style-type: none"> <li>Give to children at ages 2m, 4m, 6m, 15–18m, 4–6yrs.</li> <li>May give dose #1 as early as age 6wks.</li> <li>May give #4 as early as age 12m if 6m have elapsed since #3 and the child is unlikely to return at age 15–18m.</li> <li>Do not give DTaP/DT to children age 7yrs and older.</li> <li>If possible, use the same DTaP product for all doses.</li> </ul>	<ul style="list-style-type: none"> <li>#2 and #3 may be given 4wks after previous dose.</li> <li>#4 may be given 6m after #3.</li> <li>If #4 is given before 4th birthday, wait at least 6m for #5 (age 4–6yrs).</li> <li>If #4 is given after 4th birthday, #5 is not needed.</li> </ul>	<p><b>Contraindications</b></p> <ul style="list-style-type: none"> <li>Previous anaphylaxis to this vaccine or to any of its components.</li> <li>For DTaP/Tdap only: encephalopathy within 7d after DTP/DTaP.</li> </ul> <p><b>Precautions</b></p> <ul style="list-style-type: none"> <li>Moderate or severe acute illness.</li> <li>History of Arthus reaction following a prior dose of tetanus- and/or diphtheria-toxoid-containing vaccine, including MCV4.</li> <li>Guillain-Barré syndrome (GBS) within 6wks after previous dose of tetanus-toxoid-containing vaccine.</li> </ul>
<b>Td, Tdap (Tetanus, diphtheria, acellular pertussis)</b> <i>Give IM</i>	<ul style="list-style-type: none"> <li>Give 1-time Tdap dose to adolescents age 11–12yrs if 5yrs have elapsed since last dose DTaP; then boost every 10yrs with Td.</li> <li>Give 1-time dose of Tdap to all adolescents who have not received previous Tdap. Special efforts should be made to give Tdap to people age 11yrs and older who are 1) in contact with infants younger than age 12m and 2) healthcare workers with direct patient contact.</li> <li>In pregnancy, when indicated, give Td or Tdap in 2nd or 3rd trimester. If not administered during pregnancy, give Tdap in immediate postpartum period.</li> </ul>	<ul style="list-style-type: none"> <li>If never vaccinated with tetanus- and diphtheria-containing vaccine: give Td dose #1 now, dose #2 4wks later, and dose #3 6m after #2, then give booster every 10yrs. A 1-time Tdap may be substituted for any dose in the series, preferably as dose #1. If previously received Td booster, an interval of 2yrs or less between Td and Tdap may be used.</li> </ul>	<ul style="list-style-type: none"> <li>For DTaP only: Any of these events following a previous dose of DTP/DTaP: 1) temperature of 105°F (40.5°C) or higher within 48hrs; 2) continuous crying for 3hrs or more within 48hrs; 3) collapse or shock-like state within 48hrs; 4) convulsion with or without fever within 3d.</li> <li>For DTaP/Tdap only: Unstable neurologic disorder.</li> <li>For Td in teens: Progressive neurologic disorder.</li> </ul> <p><b>Note:</b> Tdap may be given to pregnant women at the provider’s discretion.</p>
<b>Polio (IPV)</b> <i>Give SC or IM</i>	<ul style="list-style-type: none"> <li>Give to children at ages 2m, 4m, 6–18m, 4–6yrs.</li> <li>May give dose #1 as early as age 6wks.</li> <li>Not routinely recommended for U.S. residents age 18yrs and older (except certain travelers).</li> </ul>	<ul style="list-style-type: none"> <li>The final dose should be given on or after the 4th birthday and at least 6m from the previous dose.</li> <li>If dose #3 is given after 4th birthday, dose #4 is not needed if dose #3 is given at least 6m after dose #2.</li> </ul>	<p><b>Contraindication</b>            Previous anaphylaxis to this vaccine or to any of its components.</p> <p><b>Precautions</b></p> <ul style="list-style-type: none"> <li>Moderate or severe acute illness.</li> <li>Pregnancy.</li> </ul>

\*This document was adapted from the recommendations of the Advisory Committee on Immunization Practices (ACIP). To obtain copies of the recommendations, call the CDC-INFO Contact Center at (800) 232-4636; visit CDC’s website at [www.cdc.gov/vaccines/pubs/ACIP-list.htm](http://www.cdc.gov/vaccines/pubs/ACIP-list.htm); or visit the Immunization Action Coalition (IAC)

website at [www.immunize.org/acip](http://www.immunize.org/acip). This table is revised periodically. Visit IAC’s website at [www.immunize.org/childrules](http://www.immunize.org/childrules) to make sure you have the most current version.

## Summary of Recommendations for Childhood and Adolescent Immunization

Vaccine name and route	Schedule for routine vaccination and other guidelines (any vaccine can be given with another)	Schedule for catch-up vaccination and related issues	Contraindications and precautions (mild illness is not a contraindication)
<p><b>Seasonal Influenza</b> Trivalent inactivated influenza vaccine (TIV) <i>Give IM</i> Live attenuated influenza vaccine (LAIV) <i>Give intranasally</i></p>	<ul style="list-style-type: none"> <li>• Vaccinate all children and teens age 6m through 18yrs.</li> <li>• LAIV may be given to healthy, non-pregnant people age 2–49yrs.</li> <li>• Give 2 doses to first-time vaccinees age 6m through 8yrs, spaced 4wks apart.</li> <li>• For TIV, give 0.25 mL dose to children age 6–35m and 0.5 mL dose if age 3yrs and older.</li> </ul>		<p><b>Contraindications</b></p> <ul style="list-style-type: none"> <li>• Previous anaphylaxis to this vaccine, to any of its components, or to eggs.</li> <li>• For LAIV only: age younger than 2yrs; pregnancy; chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, neurological/neuromuscular, hematologic, or metabolic (including diabetes) disorders; immunosuppression (including that caused by medications or HIV); for children and teens ages 6m through 18yrs, current long-term aspirin therapy; for children age 2 through 4yrs, wheezing or asthma within the past 12m, per healthcare provider statement.</li> </ul> <p><b>Precautions</b></p> <ul style="list-style-type: none"> <li>• Moderate or severe acute illness.</li> <li>• History of Guillain-Barré syndrome (GBS) within 6wks of a previous influenza vaccination.</li> <li>• For LAIV only: <ul style="list-style-type: none"> <li>- Close contact with an immunosuppressed person when the person requires protective isolation.</li> <li>- Receipt of specific antivirals (i.e., amantadine, rimantadine, zanamivir, or oseltamivir) 48hrs before vaccination. Avoid use of these antiviral drugs for 14d after vaccination.</li> </ul> </li> </ul>
<p><b>Varicella (Var)</b> (Chickenpox) <i>Give SC</i></p>	<ul style="list-style-type: none"> <li>• Give dose #1 at age 12–15m.</li> <li>• Give dose #2 at age 4–6yrs. Dose #2 may be given earlier if at least 3m since dose #1.</li> <li>• Give a 2nd dose to all older children and adolescents with history of only 1 dose.</li> <li>• MMRV may be used in children age 12m through 12yrs.</li> <li>• MMRV generally is preferred over separate injections of its separate components in children receiving their first dose at ages 4 through 12yrs or their second dose at any age through 12yrs.</li> </ul>	<ul style="list-style-type: none"> <li>• If younger than age 13yrs, space dose #1 and #2 at least 3m apart. If age 13yrs or older, space at least 4wks apart.</li> <li>• May use as postexposure prophylaxis if given within 5d.</li> <li>• If Var and either MMR, LAIV, and/or yellow fever vaccine are not given on the same day, space them at least 28d apart.</li> </ul>	<p><b>Contraindications</b></p> <ul style="list-style-type: none"> <li>• Previous anaphylaxis to this vaccine or to any of its components.</li> <li>• Pregnancy or possibility of pregnancy within 4wks.</li> <li>• Children on high-dose immunosuppressive therapy or who are immunocompromised because of malignancy and primary or acquired cellular immunodeficiency, including HIV/AIDS (although vaccination may be considered if CD4+ T-lymphocyte percentages are either 15% or greater in children ages 1 through 8yrs or 200 cells/μL or greater in children age 9yrs and older).</li> </ul> <p><b>Precautions</b></p> <ul style="list-style-type: none"> <li>• Moderate or severe acute illness.</li> <li>• If blood, plasma, and/or immune globulin (IG or VZIG) were given in past 11m, see ACIP statement <i>General Recommendations on Immunization*</i> regarding time to wait before vaccinating.</li> <li>• Receipt of specific antivirals (i.e., acyclovir, famciclovir, or valacyclovir) 24hrs before vaccination, if possible; delay resumption of these antiviral drugs for 14d after vaccination.</li> <li>• For MMRV only, personal or family (i.e., sibling or parent) history of seizures.</li> </ul> <p><b>Note:</b> For patients with humoral immunodeficiency or leukemia, see ACIP recommendations*.</p>
<p><b>MMR</b> (Measles, mumps, rubella) <i>Give SC</i></p>	<ul style="list-style-type: none"> <li>• Give dose #1 at age 12–15m.</li> <li>• Give dose #2 at age 4–6yrs. Dose #2 may be given earlier if at least 4wks since dose #1.</li> <li>• Give a 2nd dose to all older children and teens with history of only 1 dose.</li> <li>• MMRV may be used in children age 12m through 12yrs.</li> <li>• MMRV generally is preferred over separate injections of its separate components in children receiving their first dose at ages 4 through 12yrs or their second dose at any age through 12yrs.</li> </ul>	<ul style="list-style-type: none"> <li>• If MMR and either Var, LAIV, and/or yellow fever vaccine are not given on the same day, space them at least 28d apart.</li> <li>• When using MMR for both doses, minimum interval is 4wks.</li> <li>• When using MMRV for both doses, minimum interval is 3m.</li> <li>• Within 72hrs of measles exposure, give 1 dose of MMR as postexposure prophylaxis to susceptible healthy children age 12m and older.</li> </ul>	<p><b>Contraindications</b></p> <ul style="list-style-type: none"> <li>• Previous anaphylaxis to this vaccine or to any of its components.</li> <li>• Pregnancy or possibility of pregnancy within 4wks.</li> <li>• Severe immunodeficiency (e.g., hematologic and solid tumors; receiving chemotherapy; congenital immunodeficiency; long-term immunosuppressive therapy, or severely symptomatic HIV). Note: HIV infection is NOT a contraindication to MMR for children who are not severely immunocompromised (consult ACIP MMR recommendations [MMWR 1998;47 [RR-8] for details*).</li> </ul> <p><b>Precautions</b></p> <ul style="list-style-type: none"> <li>• Moderate or severe acute illness.</li> <li>• If blood, plasma, or immune globulin given in past 11m, see ACIP statement <i>General Recommendations on Immunization*</i> regarding time to wait before vaccinating.</li> <li>• History of thrombocytopenia or thrombocytopenic purpura.</li> <li>• For MMRV only, personal or family (i.e., sibling or parent) history of seizures.</li> </ul> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin-top: 10px;"> <p><b>Note:</b> MMR is not contraindicated if a TST (tuberculosis skin test) was recently applied. If TST and MMR are not given on same day, delay TST for at least 4wks after MMR.</p> </div>

## Summary of Recommendations for Childhood and Adolescent Immunization

Vaccine name and route	Schedule for routine vaccination and other guidelines (any vaccine can be given with another)	Schedule for catch-up vaccination and related issues	Contraindications and precautions (mild illness is not a contraindication)
<p><b>Hib</b> (<i>Haemophilus influenzae</i> type b) Give IM</p>	<ul style="list-style-type: none"> <li>• ActHib (PRP-T): give at age 2m, 4m, 6m, 12–15m (booster dose).</li> <li>• PedvaxHIB or Comvax (containing PRP-OMP): give at age 2m, 4m, 12–15m (booster dose).</li> <li>• Dose #1 of Hib vaccine should not be given earlier than age 6wks.</li> <li>• The last dose (booster dose) is given no earlier than age 12m and a minimum of 8wks after the previous dose.</li> <li>• Hib vaccines are interchangeable; however, if different brands of Hib vaccines are administered for dose #1 and dose #2, a total of 3 doses are necessary to complete the primary series in infants.</li> <li>• Any Hib vaccine may be used for the booster dose.</li> <li>• Hib is not routinely given to children age 5yrs and older.</li> <li>• Hiberix is approved ONLY for the booster dose at age 15m through 4yrs.</li> </ul>	<p><b>All Hib vaccines:</b></p> <ul style="list-style-type: none"> <li>• If #1 was given at 12–14m, give booster in 8wks.</li> <li>• Give only 1 dose to unvaccinated children ages 15 through 59m.</li> </ul> <p><b>ActHib:</b></p> <ul style="list-style-type: none"> <li>• #2 and #3 may be given 4wks after previous dose.</li> <li>• If #1 was given at age 7–11m, only 3 doses are needed; #2 is given 4–8wks after #1, then boost at age 12–15m (wait at least 8wks after dose #2).</li> </ul> <p><b>PedvaxHIB and Comvax:</b></p> <ul style="list-style-type: none"> <li>• #2 may be given 4wks after dose #1.</li> </ul>	<p><b>Contraindications</b></p> <ul style="list-style-type: none"> <li>• Previous anaphylaxis to this vaccine or to any of its components.</li> <li>• Age younger than 6wks.</li> </ul> <p><b>Precaution</b> Moderate or severe acute illness.</p>
<p><b>Pneumococcal conjugate (PCV13)</b> Give IM</p>	<p>As soon as feasible, replace existing stock of PCV7 with PCV13.</p> <ul style="list-style-type: none"> <li>• Give at ages 2m, 4m, 6m, 12–15m.</li> <li>• Dose #1 may be given as early as age 6wks.</li> <li>• When children are behind on PCV schedule, minimum interval for doses given to children younger than age 12m is 4wks; for doses given at 12m and older is 8wks.</li> <li>• Give 1 dose to unvaccinated healthy children age 24–59m.</li> <li>• For high-risk** children ages 24–71m: Give 2 doses at least 8wks apart if they previously received fewer than 3 doses; give 1 dose at least 8wks after the most recent dose if they previously received 3 doses.</li> <li>• PCV13 is not routinely given to healthy children age 5yrs and older.</li> </ul> <div style="border: 1px solid black; border-radius: 15px; padding: 5px; margin-top: 10px;"> <p><b>**High-risk:</b> Those with sickle cell disease; anatomic or functional asplenia; chronic cardiac, pulmonary, or renal disease; diabetes; cerebrospinal fluid leaks; HIV infection; immunosuppression; diseases associated with immunosuppressive and/or radiation therapy; or who have or will have a cochlear implant.</p> </div>	<ul style="list-style-type: none"> <li>• For minimum intervals, see bullet #3 at left.</li> <li>• For age 7–11m: If history of 0 doses, give 2 doses 4wks apart, with a 3rd dose at age 12–15m; if history of 1 or 2 doses, give 1 dose with a 2nd dose at age 12–15m.</li> <li>• For age 12–23m: If unvaccinated or history of 1 dose before age 12m, give 2 doses 8wks apart; if history of 1 dose at or after age 12m or 2 or 3 doses before age 12m, give 1 dose at least 8wks after most recent dose.</li> <li>• For age 24–59m and healthy: If unvaccinated or any incomplete schedule or if 4 doses of PCV7 or any other age-appropriate complete PCV7 schedule, give 1 dose at least 8wks after the most recent dose.</li> <li>• For age 24–71m and at high risk**: If unvaccinated or any incomplete schedule of 1 or 2 doses, give 2 doses, 1 at least 8wks after the most recent dose and another dose at least 8wks later; if any incomplete series of 3 doses, or if 4 doses of PCV7 or any other age-appropriate complete PCV7 schedule, give 1 dose at least 8wks after the most recent dose.</li> <li>• For children ages 6 through 18yrs with functional or anatomic asplenia (including sickle cell disease), HIV infection or other immunocompromising condition, cochlear implant, or CSF leak, consider giving 1 dose of PCV13 regardless of previous history of PCV7 or PPSV.</li> </ul>	<p><b>Contraindication</b> Previous anaphylaxis to a PCV vaccine, to any of its components, or to any diphtheria toxoid-containing vaccine.</p> <p><b>Precaution</b> Moderate or severe acute illness.</p>
<p><b>Pneumococcal polysaccharide (PPSV)</b> Give IM or SC</p>	<ul style="list-style-type: none"> <li>• Give 1 dose at least 8wks after final dose of PCV to high-risk children age 2yrs and older.</li> <li>• For children who are immunocompromised or have sickle cell disease or functional or anatomic asplenia, give a 2nd dose of PPSV 5yrs after previous PPSV (consult ACIP PPSV recommendations at <a href="http://www.cdc.gov/vaccines/pubs/ACIP-list.htm">www.cdc.gov/vaccines/pubs/ACIP-list.htm</a>*).</li> </ul>		<p><b>Contraindication</b> Previous anaphylaxis to this vaccine or to any of its components.</p> <p><b>Precaution</b> Moderate or severe acute illness.</p>

# Summary of Recommendations for Childhood and Adolescent Immunization

Vaccine name and route	Schedule for routine vaccination and other guidelines (any vaccine can be given with another)	Schedule for catch-up vaccination and related issues	Contraindications and precautions (mild illness is not a contraindication)
<b>Rotavirus (RV)</b> <i>Give orally</i>	<ul style="list-style-type: none"> <li>• Rotarix (RV1): give at age 2m, 4m.</li> <li>• RotaTeq (RV5): give at age 2m, 4m, 6m.</li> <li>• May give dose #1 as early as age 6wks.</li> <li>• Give final dose no later than age 8m 0 days.</li> </ul>	<ul style="list-style-type: none"> <li>• Do not begin series in infants older than age 15wks 0 days.</li> <li>• Intervals between doses may be as short as 4wks.</li> <li>• If prior vaccination included use of different or unknown brand(s), a total of 3 doses should be given.</li> </ul>	<p><b>Contraindication</b> Previous anaphylaxis to this vaccine or to any of its components. If allergy to latex, use RV5.</p> <p><b>Precautions</b></p> <ul style="list-style-type: none"> <li>• Moderate or severe acute illness.</li> <li>• Altered immunocompetence.</li> <li>• Moderate to severe acute gastroenteritis or chronic pre-existing gastrointestinal disease.</li> <li>• History of intussusception.</li> </ul>
<b>Hepatitis A (HepA)</b> <i>Give IM</i>	<ul style="list-style-type: none"> <li>• Give 2 doses spaced 6m apart to all children at age 1yr (12–23m).</li> <li>• Vaccinate all previously unvaccinated children and adolescents age 2yrs and older who               <ul style="list-style-type: none"> <li>- Want to be protected from HAV infection.</li> <li>- Live in areas where vaccination programs target older children.</li> <li>- Travel anywhere except U.S., W. Europe, N. Zealand, Australia, Canada, or Japan.</li> <li>- Have chronic liver disease, clotting factor disorder, or are adolescent males who have sex with other males.</li> <li>- Are users of illicit drugs (injectable or non-injectable).</li> <li>- Anticipate close personal contact with an international adoptee from a country of high or intermediate endemicity during the first 60 days following the adoptee’s arrival in the U.S.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Minimum interval between doses is 6m.</li> <li>• Children who are not fully vaccinated by age 2yrs can be vaccinated at subsequent visits.</li> <li>• Consider routine vaccination of children age 2yrs and older in areas with no existing program.</li> <li>• Give 1 dose as postexposure prophylaxis to incompletely vaccinated children age 12m and older who have recently (during the past 2wks) been exposed to hepatitis A virus.</li> </ul>	<p><b>Contraindication</b> Previous anaphylaxis to this vaccine or to any of its components.</p> <p><b>Precautions</b></p> <ul style="list-style-type: none"> <li>• Moderate or severe acute illness.</li> <li>• Pregnancy.</li> </ul>
<b>Meningococcal conjugate (MCV4)</b> Menactra (ages 2–55yrs) Menveo (ages 11–55yrs) <i>Give IM</i> <b>Meningococcal polysaccharide (MPSV4)</b> <i>Give SC</i>	<ul style="list-style-type: none"> <li>• Give 1-time dose of MCV4 to adolescents age 11 through 18yrs.</li> <li>• Vaccinate all college freshmen living in dorms who have not been vaccinated.</li> <li>• Vaccinate all children age 2yrs and older who have any of the following risk factors:               <ul style="list-style-type: none"> <li>- Anatomic or functional asplenia, or persistent complement component deficiency.</li> <li>- Travel to or reside in countries in which meningococcal disease is hyperendemic or epidemic (e.g., the “meningitis belt” of Sub-Saharan Africa).</li> <li>- Military recruits</li> </ul> </li> </ul> <p><b>Note:</b> Use MPSV4 ONLY if there is a permanent contraindication or precaution to MCV4.</p>	<p>If previously vaccinated with MPSV4 or MCV4 and risk of meningococcal disease persists, revaccinate with Menactra in 3yrs (if first dose given at age 2 through 6yrs) or revaccinate with either brand of MCV4 after 5yrs (if previous dose given at age 7yrs or older). If the only risk factor is living in a campus dormitory, there is no need to give a 2nd dose if previous dose was MCV4.</p>	<p><b>Contraindication</b> Previous anaphylaxis to any any meningococcal vaccine or to any of its components, including diphtheria toxoid (for MCV4).</p> <p><b>Precautions</b></p> <ul style="list-style-type: none"> <li>• Moderate or severe acute illness.</li> <li>• For MCV4 only: history of Guillain-Barré syndrome (if not at extremely high risk for meningococcal disease).</li> <li>• In pregnancy, studies of vaccination with MPSV4 have not documented adverse effects so may use MPSV4 if indicated. No data are available on the safety of MCV4 during pregnancy.</li> </ul>
<b>Human papillomavirus HPV</b> (HPV2, Cervarix) (HPV4, Gardasil) <i>Give IM</i>	<ul style="list-style-type: none"> <li>• Give 3-dose series to girls at age 11–12yrs on a 0, 1–2, 6m schedule. (May be given as early as age 9yrs.)</li> <li>• Vaccinate all older girls and women (through age 26yrs) who were not previously vaccinated.</li> <li>• Consider giving HPV4 to males age 9 through 26yrs to reduce their likelihood of acquiring genital warts.</li> </ul>	<p>Minimum intervals between doses: 4wks between #1 and #2; 12 wks between #2 and #3. Overall, there must be at least 24wks between doses #1 and #3. If possible, use the same vaccine product for all doses.</p>	<p><b>Contraindication</b> Previous anaphylaxis to this vaccine or to any of its components.</p> <p><b>Precautions</b></p> <ul style="list-style-type: none"> <li>• Moderate or severe acute illness.</li> <li>• Pregnancy.</li> </ul>

## Recommended Immunization Schedule for Persons Aged 0 Through 6 Years—United States • 2010

For those who fall behind or start late, see the catch-up schedule

Vaccine ▼	Age ►	Birth	1 month	2 months	4 months	6 months	12 months	15 months	18 months	19–23 months	2–3 years	4–6 years
Hepatitis B <sup>1</sup>		HepB	HepB			HepB						
Rotavirus <sup>2</sup>				RV	RV	RV <sup>2</sup>						
Diphtheria, Tetanus, Pertussis <sup>3</sup>				DTaP	DTaP	DTaP	<i>see footnote<sup>3</sup></i>	DTaP				DTaP
<i>Haemophilus influenzae</i> type b <sup>4</sup>				Hib	Hib	Hib <sup>4</sup>	Hib					
Pneumococcal <sup>5</sup>				PCV	PCV	PCV	PCV				PPSV	
Inactivated Poliovirus <sup>6</sup>				IPV	IPV		IPV					IPV
Influenza <sup>7</sup>							Influenza (Yearly)					
Measles, Mumps, Rubella <sup>8</sup>							MMR		<i>see footnote<sup>8</sup></i>			MMR
Varicella <sup>9</sup>							Varicella		<i>see footnote<sup>9</sup></i>			Varicella
Hepatitis A <sup>10</sup>							HepA (2 doses)				HepA Series	
Meningococcal <sup>11</sup>												MCV

Range of recommended ages for all children except certain high-risk groups

Range of recommended ages for certain high-risk groups

This schedule includes recommendations in effect as of December 15, 2009. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Considerations should include provider assessment, patient preference, and the potential for adverse

events. Providers should consult the relevant Advisory Committee on Immunization Practices statement for detailed recommendations: <http://www.cdc.gov/vaccines/pubs/acip-list.htm>. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS) at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967.

### 1. Hepatitis B vaccine (HepB). (Minimum age: birth)

#### At birth:

- Administer monovalent HepB to all newborns before hospital discharge.
- If mother is hepatitis B surface antigen (HBsAg)-positive, administer HepB and 0.5 mL of hepatitis B immune globulin (HBIG) within 12 hours of birth.
- If mother's HBsAg status is unknown, administer HepB within 12 hours of birth. Determine mother's HBsAg status as soon as possible and, if HBsAg-positive, administer HBIG (no later than age 1 week).

#### After the birth dose:

- The HepB series should be completed with either monovalent HepB or a combination vaccine containing HepB. The second dose should be administered at age 1 or 2 months. Monovalent HepB vaccine should be used for doses administered before age 6 weeks. The final dose should be administered no earlier than age 24 weeks.
- Infants born to HBsAg-positive mothers should be tested for HBsAg and antibody to HBsAg 1 to 2 months after completion of at least 3 doses of the HepB series, at age 9 through 18 months (generally at the next well-child visit).
- Administration of 4 doses of HepB to infants is permissible when a combination vaccine containing HepB is administered after the birth dose. The fourth dose should be administered no earlier than age 24 weeks.

### 2. Rotavirus vaccine (RV). (Minimum age: 6 weeks)

- Administer the first dose at age 6 through 14 weeks (maximum age: 14 weeks 6 days). Vaccination should not be initiated for infants aged 15 weeks 0 days or older.
- The maximum age for the final dose in the series is 8 months 0 days
- If Rotarix is administered at ages 2 and 4 months, a dose at 6 months is not indicated.

### 3. Diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP).

(Minimum age: 6 weeks)

- The fourth dose may be administered as early as age 12 months, provided at least 6 months have elapsed since the third dose.
- Administer the final dose in the series at age 4 through 6 years.

### 4. *Haemophilus influenzae* type b conjugate vaccine (Hib).

(Minimum age: 6 weeks)

- If PRP-OMP (PedvaxHIB or Comvax [HepB-Hib]) is administered at ages 2 and 4 months, a dose at age 6 months is not indicated.
- TriHibit (DTaP/Hib) and Hiberix (PRP-T) should not be used for doses at ages 2, 4, or 6 months for the primary series but can be used as the final dose in children aged 12 months through 4 years. See *MMWR* 1997;46(No. RR-8).

### 5. Pneumococcal vaccine. (Minimum age: 6 weeks for pneumococcal conjugate vaccine [PCV]; 2 years for pneumococcal polysaccharide vaccine [PPSV])

- PCV is recommended for all children aged younger than 5 years. Administer 1 dose of PCV to all healthy children aged 24 through 59 months who are not completely vaccinated for their age.
- Administer PPSV 2 or more months after last dose of PCV to children aged 2 years or older with certain underlying medical conditions, including a cochlear implant.

### 6. Inactivated poliovirus vaccine (IPV). (Minimum age: 6 weeks)

- The final dose in the series should be administered on or after the fourth birthday and at least 6 months following the previous dose.
- If 4 doses are administered prior to age 4 years a fifth dose should be administered at age 4 through 6 years. See *MMWR* 2009;58(30):829–30.

### 7. Influenza vaccine (seasonal). (Minimum age: 6 months for trivalent inactivated influenza vaccine [TIV]; 2 years for live, attenuated influenza vaccine [LAIV])

- Administer annually to children aged 6 months through 18 years.
- For healthy children aged 2 through 6 years (i.e., those who do not have underlying medical conditions that predispose them to influenza complications), either LAIV or TIV may be used, except LAIV should not be given to children aged 2 through 4 years who have had wheezing in the past 12 months.
- Children receiving TIV should receive 0.25 mL if aged 6 through 35 months or 0.5 mL if aged 3 years or older.
- Administer 2 doses (separated by at least 4 weeks) to children aged younger than 9 years who are receiving influenza vaccine for the first time or who were vaccinated for the first time during the previous influenza season but only received 1 dose.
- For recommendations for use of influenza A (H1N1) 2009 monovalent vaccine see *MMWR* 2009;58(No. RR-10).

### 8. Measles, mumps, and rubella vaccine (MMR). (Minimum age: 12 months)

- Administer the second dose routinely at age 4 through 6 years. However, the second dose may be administered before age 4, provided at least 28 days have elapsed since the first dose.

### 9. Varicella vaccine. (Minimum age: 12 months)

- Administer the second dose routinely at age 4 through 6 years. However, the second dose may be administered before age 4, provided at least 3 months have elapsed since the first dose.
- For children aged 12 months through 12 years the minimum interval between doses is 3 months. However, if the second dose was administered at least 28 days after the first dose, it can be accepted as valid.

### 10. Hepatitis A vaccine (HepA). (Minimum age: 12 months)

- Administer to all children aged 1 year (i.e., aged 12 through 23 months). Administer 2 doses at least 6 months apart.
- Children not fully vaccinated by age 2 years can be vaccinated at subsequent visits
- HepA also is recommended for older children who live in areas where vaccination programs target older children, who are at increased risk for infection, or for whom immunity against hepatitis A is desired.

### 11. Meningococcal vaccine. (Minimum age: 2 years for meningococcal conjugate vaccine [MCV4] and for meningococcal polysaccharide vaccine [MPSV4])

- Administer MCV4 to children aged 2 through 10 years with persistent complement component deficiency, anatomic or functional asplenia, and certain other conditions placing them at high risk.
- Administer MCV4 to children previously vaccinated with MCV4 or MPSV4 after 3 years if first dose administered at age 2 through 6 years. See *MMWR* 2009; 58:1042–3.

## Recommended Immunization Schedule for Persons Aged 7 Through 18 Years—United States • 2010

For those who fall behind or start late, see the schedule below and the catch-up schedule

Vaccine ▼	Age ►	7–10 years	11–12 years	13–18 years	
Tetanus, Diphtheria, Pertussis <sup>1</sup>			Tdap	Tdap	Range of recommended ages for all children except certain high-risk groups
Human Papillomavirus <sup>2</sup>	see footnote 2		HPV (3 doses)	HPV series	
Meningococcal <sup>3</sup>		MCV	MCV	MCV	Range of recommended ages for catch-up immunization
Influenza <sup>4</sup>		Influenza (Yearly)			
Pneumococcal <sup>5</sup>		PPSV			Range of recommended ages for certain high-risk groups
Hepatitis A <sup>6</sup>		HepA Series			
Hepatitis B <sup>7</sup>		Hep B Series			Range of recommended ages for certain high-risk groups
Inactivated Poliovirus <sup>8</sup>		IPV Series			
Measles, Mumps, Rubella <sup>9</sup>		MMR Series			Range of recommended ages for certain high-risk groups
Varicella <sup>10</sup>		Varicella Series			

This schedule includes recommendations in effect as of December 15, 2009. Any dose not administered at the recommended age should be administered at a subsequent visit, when indicated and feasible. The use of a combination vaccine generally is preferred over separate injections of its equivalent component vaccines. Considerations should include provider assessment, patient preference, and the potential for adverse

events. Providers should consult the relevant Advisory Committee on Immunization Practices statement for detailed recommendations: <http://www.cdc.gov/vaccines/pubs/acip-list.htm>. Clinically significant adverse events that follow immunization should be reported to the Vaccine Adverse Event Reporting System (VAERS) at <http://www.vaers.hhs.gov> or by telephone, 800-822-7967.

### 1. Tetanus and diphtheria toxoids and acellular pertussis vaccine (Tdap).

(Minimum age: 10 years for Boostrix and 11 years for Adacel)

- Administer at age 11 or 12 years for those who have completed the recommended childhood DTP/DaP vaccination series and have not received a tetanus and diphtheria toxoid (Td) booster dose.
- Persons aged 13 through 18 years who have not received Tdap should receive a dose.
- A 5-year interval from the last Td dose is encouraged when Tdap is used as a booster dose; however, a shorter interval may be used if pertussis immunity is needed.

### 2. Human papillomavirus vaccine (HPV). (Minimum age: 9 years)

- Two HPV vaccines are licensed: a quadrivalent vaccine (HPV4) for the prevention of cervical, vaginal and vulvar cancers (in females) and genital warts (in females and males), and a bivalent vaccine (HPV2) for the prevention of cervical cancers in females.
- HPV vaccines are most effective for both males and females when given before exposure to HPV through sexual contact.
- HPV4 or HPV2 is recommended for the prevention of cervical precancers and cancers in females.
- HPV4 is recommended for the prevention of cervical, vaginal and vulvar precancers and cancers and genital warts in females.
- Administer the first dose to females at age 11 or 12 years.
- Administer the second dose 1 to 2 months after the first dose and the third dose 6 months after the first dose (at least 24 weeks after the first dose).
- Administer the series to females at age 13 through 18 years if not previously vaccinated.
- HPV4 may be administered in a 3-dose series to males aged 9 through 18 years to reduce their likelihood of acquiring genital warts.

### 3. Meningococcal conjugate vaccine (MCV4).

- Administer at age 11 or 12 years, or at age 13 through 18 years if not previously vaccinated.
- Administer to previously unvaccinated college freshmen living in a dormitory.
- Administer MCV4 to children aged 2 through 10 years with persistent complement component deficiency, anatomic or functional asplenia, or certain other conditions placing them at high risk.
- Administer to children previously vaccinated with MCV4 or MPSV4 who remain at increased risk after 3 years (if first dose administered at age 2 through 6 years) or after 5 years (if first dose administered at age 7 years or older). Persons whose only risk factor is living in on-campus housing are not recommended to receive an additional dose. See *MMWR* 2009;58:1042–3.

### 4. Influenza vaccine (seasonal).

- Administer annually to children aged 6 months through 18 years.
- For healthy nonpregnant persons aged 7 through 18 years (i.e., those who do not have underlying medical conditions that predispose them to influenza complications), either LAIV or TIV may be used.
- Administer 2 doses (separated by at least 4 weeks) to children aged younger than 9 years who are receiving influenza vaccine for the first time or who were vaccinated for the first time during the previous influenza season but only received 1 dose.
- For recommendations for use of influenza A (H1N1) 2009 monovalent vaccine. See *MMWR* 2009;58(No. RR-10)

### 5. Pneumococcal polysaccharide vaccine (PPSV).

- Administer to children with certain underlying medical conditions, including a cochlear implant. A single revaccination should be administered after 5 years to children with functional or anatomic asplenia or an immunocompromising condition. See *MMWR* 1997;46(No. RR-8).

### 6. Hepatitis A vaccine (HepA).

- Administer 2 doses at least 6 months apart.
- HepA is recommended for children older than 23 months of age who live in areas where vaccination programs target older children or who are at increased risk for infection or for whom immunity against hepatitis A is desired.

### 7. Hepatitis B vaccine (HepB).

- Administer the 3-dose series to those not previously vaccinated.
- A 2-dose series (separated by at least 4 months) of adult formulation Recombivax HB is licensed for children aged 11 through 15 years.

### 8. Inactivated poliovirus vaccine (IPV).

- The final dose in the series should be administered on or after the fourth birthday and at least 6 months following the previous dose.
- If both OPV and IPV were administered as part of a series, a total of 4 doses should be administered, regardless of the child's current age.

### 9. Measles, mumps, and rubella vaccine (MMR).

- If not previously vaccinated, administer 2 doses or the second dose for those who have received only 1 dose, with at least 28 days between doses.

### 10. Varicella vaccine.

- For persons aged 7 through 18 years without evidence of immunity (see *MMWR* 2007;56[No. RR-4]), administer 2 doses if not previously vaccinated or the second dose if only 1 dose has been administered.
- For persons aged 7 through 12 years, the minimum interval between doses is 3 months. However, if the second dose was administered at least 28 days after the first dose, it can be accepted as valid.
- For persons aged 13 years and older, the minimum interval between doses is 28 days.

# Asthma Management for Children and Adults

## Consider the diagnosis of "asthma" if:

1. **RECURRENT** coughing, wheezing, or shortness of breath relieved by a bronchodilator
2. Objective response by spirometry ( $\geq 12\%$  increase of FEV<sub>1</sub> post bronchodilator)
3. Rule out conditions such as aspiration, GERD, airway anomaly, foreign body, cystic fibrosis, vocal cord dysfunction, or COPD. GERD is a common co-morbidity. (If diagnosis in doubt, consult with an asthma specialist.)

## Assess Asthma Severity: Persistent vs. Intermittent

### Persistent Asthma

1. Symptoms  $> 2$  days per week **OR**
2. Awaken at night from asthma  $> 2X$  per month **OR**
3. Limitation of activities, despite pretreatment for exercise induced asthma **OR**
4. More than 2 steroid bursts in 1 year **OR**
5. FEV<sub>1</sub>  $< 80\%$  predicted **OR** low FEV<sub>1</sub>/FVC ratio (see below)
6. For children  $< 4$  years consider "persistent" if more than 4 episodes of wheezing in a year **AND** parental history of asthma or eczema or wheezing between illnesses.

### Treatment for Persistent Asthma: Daily Inhaled Corticosteroids (steps 2, 3 or higher)

### Assess Response within 2-6 weeks

### "Well Controlled" Asthma

1. Daytime symptoms  $< 2$  days per week **AND**
2. Awakening at night from asthma  $< 2X$  per month **AND**
3. No limitation of activities **AND**
4. Less than 2 steroid bursts per year
5. FEV<sub>1</sub>  $\geq 80\%$  predicted
6. FEV<sub>1</sub>/FVC

FEV <sub>1</sub> /FVC:	
5-19 yrs	$\geq 85\%$
20-39 yrs	$\geq 80\%$
40-59 yrs	$\geq 75\%$
60-80 yrs	$\geq 70\%$

**YES**

Follow the **Stepwise Approach Guideline** and consider *step down* if well controlled for 3 consecutive months. Then **re-assess every 3 to 6 months.**

**NO**

Follow the **Stepwise Approach Guideline** and *step up* until well controlled is achieved. **Re-assess in 2 to 6 weeks.**

### Quick Tips for All Patients with Asthma

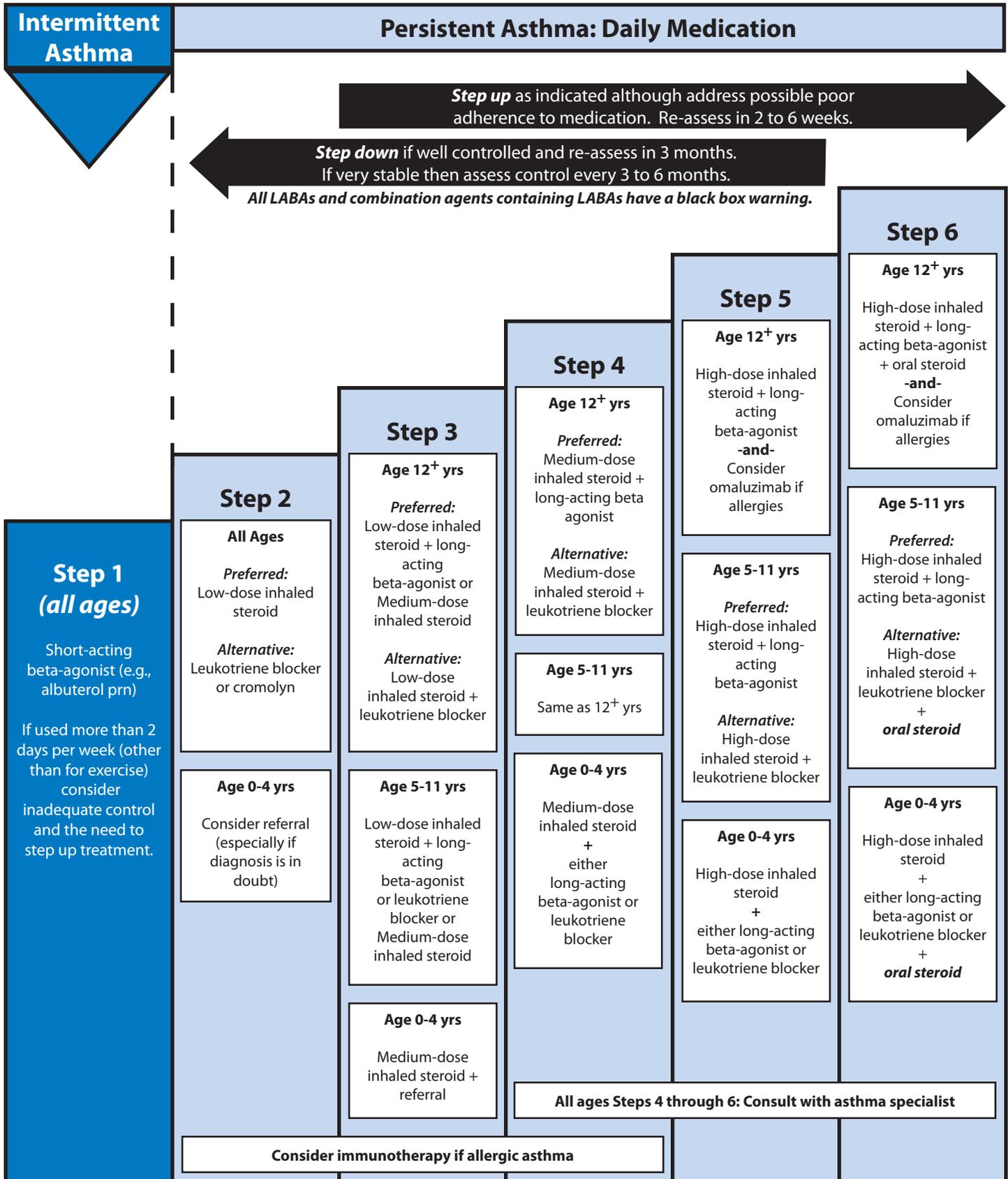
- Environmental Control:** identify and avoid triggers such as tobacco smoke, pollens, molds, animal dander, cockroaches, and dust mites.
- Flu Vaccine:** recommend annually.
- Spirometry:** at diagnosis and at least annually.
- Asthma Score:** use tools such as ACQ<sup>®</sup>, ACT<sup>™</sup> or ATAQ<sup>®</sup> to assess asthma control.
- Asthma Education:** review correct inhaled medication device technique every visit, if needed.
- Asthma Action Plan:** at diagnosis; review and update at each visit.
- Short-Acting Beta-Agonist (e.g., albuterol):** 1) for quick relief every 4-6 hours as needed (see step 1), 2) pretreat with 2 puffs for exercise-induced bronchospasm 10-60 minutes before exercise.
- Oral Corticosteroids:** consider for acute exacerbation.
- Spacer with Valve:** if spacer selected, use spacer with valve.
- Mask:** use with spacer with valve and with nebulizer for children  $< 5$  years and anyone unable to use correct mouthpiece technique.

See [www.coloradoguidelines.org](http://www.coloradoguidelines.org) for additional asthma management resources.

Consider referral to a specialist if not well controlled within 3-6 months using stepwise approach **OR** 2 or more ED visits or hospitalizations for asthma in a year.

# Asthma

## Stepwise Approach



Adapted from the NAEPP 3; <http://www.nhlbi.nih.gov/guidelines/asthma/>. This guideline is designed to assist the clinician in the management of asthma. This guideline is not intended to replace the clinician's judgment or establish a protocol for all patients with a particular condition. For references, additional copies of the guideline, or patient documents go to [www.coloradoguidelines.org](http://www.coloradoguidelines.org) or call (720) 297-1681 or 866-401-2092.

## **2010 NCQA MBHO Accreditation Requirements Link**

### **A Summary of What NCQA Looks for When It Reviews an MBHO**

#### **Quality Management and Improvement (QI)**

##### 1. QI Program Structure (QI 1)

- Does the organization have a written description of its QI program that is reviewed and updated annually?
- Is the organization's governing body accountable for the QI program?
- Does a QI Committee oversee the QI program?
- Are the roles, structures and functions of the QI Committee and other committees described in the QI program, description?
- Is there an annual QI work plan?
- Does the QI program include objectives for culturally and linguistically diverse memberships?

##### 2. Program Operations (QI 2)

- Does the QI committee meet regularly and take action on quality improvement activities?
- Is there documentation of QI committee meetings?
- Are practitioners involved in the planning, design, implementation and review of the QI program?
- Are the organization's practitioners and members informed about its QI program?
- Is there a plan for collecting and providing information on provider and practitioner safety and quality?

##### 3. Health Services Contracting (QI 3)

- Are participating practitioners and providers required to cooperate with QI activities, provide access to their medical records and protect the confidentiality of member information?
- Do contracts with practitioners assure their free communication with patients about treatment?

##### 4. Availability of Practitioners and Providers (QI 4)

- Are organization practitioners located throughout its service area?
- Did the organization consider the cultural needs of its members when it created its practitioner network? For example, are there multilingual practitioners?
- Does the organization take steps to ensure that there are sufficient numbers of practitioners available to its members?
- Does the organization measure its performance in these areas and make improvements when needed?

##### 5. Accessibility of Services (QI 5)

- Does the organization have standards to ensure access to behavioral health care, including non-life-threatening emergency, urgent care, and routine office visit?
- Does the organization measure its performance in these areas?
- Does the organization improve the accessibility of behavioral health services and customer needs by identifying opportunities for improvement, implementing interventions and measuring effectiveness of the interventions?

##### 6. Member Satisfaction (QI 6)

- Does the organization evaluate member complaints and appeals to assess member satisfaction?
- Does the organization analyze results of member satisfaction surveys?
- Does the organization take steps to improve performance in these areas?

## 7. Clinical Practice Guidelines (QI 7)

- Does the organization establish practice guidelines for its practitioners to follow?
- Is there a clinical basis to the guidelines?
- Are the guidelines reviewed at least every two years?
- Are the guidelines distributed to appropriate practitioners?
- Does the organization measure its performance against the guidelines annually?
- Continuity and Coordination of Behavioral Health Care (QI 8)
- Does the organization monitor the continuity and coordination of care between practitioners; for example, between a psychiatrist and a non-physician behavioral health practitioner?
- Does the organization measure its performance in these areas and make improvements when needed?
- Does the organization or practitioner notify members affected by the termination of a behavioral health practitioner?
- Under certain circumstances, can members continue to see a practitioner whose contract is terminated?

## 9. Continuity and Coordination Between Behavioral Health and Medical Care (QI 9)

- Does the organization monitor and collaborate with relevant medical delivery systems to improve coordination between behavioral health and medical care?
- Does the organization collaborate with its behavioral health specialists in collecting and analyzing data and implementing actions to improve the coordination of behavioral health with general medical care?

## 10. Clinical Measurement Activities (QI 10)

- Does the organization identify at least three clinical care issues relevant to its members?
- Does the organization measure and demonstrate improvement in the quality of clinical care?

## 11. Effectiveness of the QI Program (QI 11)

- Does the organization measure and demonstrate meaningful improvements in the quality of clinical care and service it renders to members?

## 12. Standards for Treatment Record Documentation (QI 12)

- Does the organization establish and distribute treatment record policies that address confidentiality, documentation standards, record keeping and availability?
- Does the organization have methods to improve treatment record keeping where appropriate?

## 13. Delegation of QI (QI 13)

- If the organization delegates QI activity, has it worked with the delegated party to develop a mutually agreed-upon document that outlines responsibilities, delegated activities, and evaluation processes?
- Has the organization evaluated whether or not the delegated party can perform the activities?
- Does the organization approve the delegated party's QI work plan and review its performance annually?

## Utilization Management (UM)

### 1. Utilization Management Structure (UM 1)

- Does the organization have a written description of its program for managing care?
- Is the program evaluated and approved annually?
- Does the organization involve a designated behavioral health care practitioner in the implementation of the behavioral health care aspects described in the program?

## 2. Clinical Criteria for UM Decisions (UM 2)

- Are criteria and procedures for approving and denying care objective and based on clinical evidence?
- Are practitioners involved in procedures development?
- Does the organization review and revise criteria regularly?
- Can practitioners obtain the criteria upon request?
- Does the organization evaluate the consistency with which the criteria are applied?

## 3. Communication Services (UM 3)

- Is UM staff accessible to practitioners and members to discuss UM issues?

## 4. Appropriate Professionals (UM 4)

- Do qualified licensed behavioral health professionals oversee all review decisions?
- Does an appropriate practitioner review any denial of care based on medical necessity?

## 5. Timeliness of UM Decisions (UM 5)

- Does the organization make decisions regarding coverage in a timely manner? Specifically, does it make preservice nonurgent decisions within 15 days; preservice urgent decisions within 72 hours; urgent concurrent decisions within 24 hours; and postservice decisions within 30 days?
- Does the organization notify members of coverage decisions within the required time frames?

## 6. Clinical Information (UM 6)

- When determining whether to approve or deny coverage based on medical necessity, does the organization gather sufficient information and consult with the treating physician?

## 7. Denial Notices (UM 7)

- Does the organization clearly communicate the reasons for denials of service?
- Can a practitioner discuss the reason for the denial with the organization's physician reviewer?
- Does the organization state to the member and the practitioner its reasons for denial, in writing?
- Is the appeal process outlined clearly in all denial notifications?

## 8. Policies for Appeals (UM 8)

- Does the organization have written policies and procedures for the resolution of member appeals, including preservice, postservice, expedited and external appeals?
- Do members have at least 180 days to appeal denial decisions?
- Does the organization have procedures for providing member access to all documents relevant to an appeal?
- Do members have the opportunity to submit comments, documents or other information relating to an appeal?
- Are appeal reviewers disinterested parties (i.e., not involved in the initial denial decision)?
- Are same-or-similar-specialty reviewers (i.e., practitioners in the same or a similar specialty who treat the condition under appeal) involved in appeals?
- Does the organization have procedures for allowing an authorized representative to act on behalf of a member?
- Are members notified of further appeal rights?

## 9. Appropriate Handling of Appeals (UM 9)

- Does the organization have a full and fair process for resolving member appeals?
- Does the organization follow the policies outlined in UM 8?

## 10 Satisfaction with the UM Process (UM 10)

- Does the organization evaluate member and practitioner satisfaction with its process for determining coverage, and does it address areas of dissatisfaction?

## 11. Emergency Services (UM 11)

- Does the organization cover emergency services without precertification in cases where a prudent layperson, acting reasonably, would have believed that an emergency existed?
- Does the organization cover emergency services if an authorized agent of the plan has approved the provision of emergency services?

## 12. Triage and Referral for Behavioral Health Care (UM 12)

- Does the organization prioritize or make referrals for behavioral health care based on accepted definitions for the level of urgency and setting?
- Depending on the case, are these decisions made by qualified staff or a behavioral health professional?

## 13. Delegation of UM (UM 13)

- If the organization delegates UM activities, does a delegation agreement outline responsibilities of the delegate and the organization, the delegated activities and the evaluation process?
- Does the organization approve the delegated party's UM plan on an annual basis?
- Does the organization receive reports, evaluate delegate performance, and identify opportunities for improvement on a regular basis?

## Credentialing and Recredentialing (CR)

### 1. Credentialing Policies (CR 1)

- Does the organization have clearly defined and documented procedures for assessing its practitioners' qualifications and practice history?
- Does the organization identify which types of practitioners must be credentialed?
- Does the organization have policies and procedures that define practitioner rights to review and correct credentialing information?

### 2. Credentialing Committee (CR 2)

- Has the organization designated a committee to make recommendations regarding decisions about practitioners' credentials?

### 3. Initial Credentialing Verification (CR 3)

- Prior to allowing network participation, does the organization verify practitioners' credentials, including a valid license to practice medicine; education and training, malpractice history; and work history?

### 4. Application and Attestation (CR 4)

- Do practitioners applications to the organization include a current and signed attestation about why they cannot perform certain tasks; a history of loss of medical license and felony convictions; a history of limitation of privileges or disciplinary actions; and current malpractice insurance coverage?

### 5. Initial Sanction Information (CR 5)

- Before making a decision on a practitioner's qualifications, does the organization receive and review information from third parties, such as information about any disciplinary actions?
6. Practitioner Office Site Quality (CR 6)
- Has the organization set performance standards/thresholds for office site and medical/treatment record keeping criteria?
  - Does the organization take necessary steps when they receive member complaints related to a practitioner's office site to evaluate and work to improve the problems?
7. Recredentialing Verification (CR 7)
- Does the organization reevaluate practitioners' qualifications every 36 months?
  - Before reevaluating its decision on a practitioner's qualifications, does the organization receive information from third parties, such as information about disciplinary actions?
8. Recredentialing Cycle Length (CR 8)
- Does the organization reevaluate practitioners' qualifications every 36 months?
9. Ongoing Monitoring (CR 9)
- Between recredentialing cycles, does the organization conduct ongoing monitoring of practitioner sanctions, complaints and quality issues?
  - Does the organization take appropriate action when issues are identified?
10. Notification to Authorities and Practitioner Appeal Rights (CR 10)
- Does the organization have a process for discontinuing the contracts of practitioners who demonstrate poor performance?
  - Is there a process in place by which the practitioner can appeal the organization's decision?
  - Does the organization report to appropriate authorities when it suspends or terminates practitioners?
11. Assessment of Organizational Providers (CR 11)
- Does the organization confirm that psychiatric hospitals, clinics, addiction disorder facilities and residential treatment centers for psychiatric and addiction disorder are in good standing with state and federal agencies and accrediting organizations?
  - Does the organization re-review these standings at least every three years?
12. Delegation of Credentialing (CR 12)
- If the organization delegates CR activities, does a delegation agreement outline responsibilities of the delegate and the organization, the delegated activities and the evaluation process?
  - Does the organization evaluate the delegate on a regular basis?

## Members' Rights and Responsibilities (RR)

1. Statement of Member's Rights and Responsibilities (RR 1)
- Does the organization have a written policy that states its commitment to treating members in a manner that respects their rights?
  - Does the policy state the organization's expectations of members' responsibilities?

2. Distribution of Rights Statement to Members and Practitioners (RR 2)
  - Does the organization distribute to members and participating practitioners its policy on member's rights and responsibilities?
3. Policies for Complaints and Appeals (RR 3)
  - Does the organization have written policies and procedures for the timely resolution of member complaints and appeals?
4. Subscriber Information (RR 4)
  - Does the organization provide written information about benefits and charges for which members are responsible, including co-payments?
  - Does the organization provide written information for members on how to obtain care?
  - Does the organization provide written information for members about how to file a complaint or appeal?
5. Privacy and Confidentiality (RR 5)
  - Does the organization take steps to protect the privacy of members' information and records?
  - Does the organization inform members, practitioners and potential members of these policies?
6. Delegation of RR (RR 6)
  - If the organization delegates RR activities, does a delegation agreement outline responsibilities of the delegate and the organization, the delegated activities and the evaluation process?
  - Does the organization evaluate the delegate on a regular basis?

## Preventative Health (PH)

1. Implementing Preventive Behavioral Health Programs (PH 1)
  - Has the organization established preventive health programs based on the needs of its covered population; if so, does the program cover at least two groups?
2. Distributing Preventive Health Information (PH 2)
  - Does the organization distribute and communicate preventive health program information and updates to practitioners and providers?
3. Promoting Member Health (PH 3)
  - Does the organization annually distribute information about preventive health programs to all members?
  - Does the organization target outreach to at least one specific group of members identified as an at-risk population?
4. Delegation of PH (PH 4)
  - If the organization delegates behavioral preventive health activity, does a delegation agreement outline responsibilities of the delegate and the organization, the delegated activities and the evaluation process? Does the organization evaluate the delegate on a regular basis?

## The Advantages of Working with NCQA-Accredited MBHOs

NCQA awards automatic credit on certain elements (in other words, 100% compliance) to organizations that contract with NCQA-Accredited MBHOs. This policy is designed to streamline the accreditation process and encourage the development of lasting, mutually beneficial partnerships between NCQA-Accredited organizations.

These advantages are available to HPs that delegate to NCQA-Accredited MBHOs and whose delegation agreements are active at the time of their survey. (There are exceptions for agreements that have been terminated). This applies for an HP that did not delegate behavioral health to an MBHO when the MBHO was surveyed.

- Automatic credit is received for the following elements if at least 70 percent of an HP's total membership is covered by the NCQA-Accredited MBHO's services and the agreement includes the specific responsibilities listed.**

QUALITY IMPROVEMENT	
<b>QI 1:</b> Element A— factors 2, 6	The authority to select QI topics relevant to its population, to design activities and analyze results of the activities, to implement interventions and to evaluate results of the interventions.
<b>QI 4:</b> Element D	The authority to perform behavioral health services availability functions.
<b>QI 5:</b> Elements B, C	The authority to perform behavioral health services accessibility functions.
<b>QI 9:</b> For behavioral health guideline— Element A—factors 1–3; Element C	The authority to adopt and disseminate 2 behavioral health clinical practice guidelines.
UTILIZATION MANAGEMENT	
<b>UM 1:</b> Element A— factors 2, 4; Element C	The authority to evaluate and determine the appropriateness of the utilization of behavioral healthcare services and to provide any needed assistance to clinician or patient in cooperation with other parties to ensure appropriate use of resources.  UM includes preservice (prior authorization), concurrent review, postservice (retrospective review), discharge planning and case management.
<b>UM 4:</b> Element D	The authority to evaluate and determine the appropriateness of the utilization of behavioral healthcare services and to provide any needed assistance to clinician or patient in cooperation with other parties to ensure appropriate use of resources. UM includes prior authorization, concurrent review, retrospective review, discharge planning and case management.
<b>UM 5:</b> Elements C, D	
<b>UM 6:</b> Element D	
<b>UM 7:</b> Elements E–G	This delegation results in full credit for any MBHO files selected and all review elements counted compliant.
<b>UM 9:</b> For behavioral health files—Elements A–E	The authority to evaluate and determine the appropriateness of appeals.  This delegation results in full credit for any MBHO files selected and all review elements counted compliant.
<b>UM 11:</b> For behavioral health files—Elements B, C	The authority to evaluate ER visits or claims.  This delegation results in full credit for any MBHO files selected and all review elements counted compliant.
<b>UM 12</b> All elements	The authority to provide behavioral health triage and referral functions.
CREDENTIALING	
For behavioral health files:	The authority for primary source verification and credentialing/recredentialing decision making, which results in full credit for any MBHO files selected and all review elements counted compliant.  The authority for primary source verification only, which results in verification elements automatically being considered present and current. Only timeliness is reviewed.
<b>CR 3:</b> Elements A, B	
<b>CR 4:</b> Element A	
<b>CR 5:</b> Element A	

CR 7: Elements A–D	
CR 8: Element A	Meeting the recredentialing cycle length
CR 11: Elements C, E	The authority to credential behavioral health organizational providers.

## 2. Full credit on MBHO file pulls:

- **CR:** During an HP survey, behavioral health files may be included in the CR file review, as delegate files are included in the total universe from which NCQA selects the sample. The HP receives full credit if such a behavioral health file is pulled and the delegate is responsible for primary source verification and decision making because all review elements are counted as present.
- **UM** (denials, appeals and ER files): This file pull is random; surveyors select a sample of files, and delegate files are included in the total number from which NCQA selects the sample. The HP receives full credit if a behavioral health file is pulled.

## 3. Requirements for oversight are reduced:

- NCQA does not require an HP to conduct predelegation audit/evaluations if it contracts with an accredited MBHO.
- Once an HP contracts with an accredited MBHO, NCQA does not require an annual oversight audit.
- NCQA does not require the HP to conduct file review/audits of an accredited MBHO.

When an organization delegates defined activities to an NCQA-Accredited or NCQA-Certified organization, the expectation of a formal predelegation evaluation, annual evaluation and annual audit, as applicable, and the determination of meeting NCQA standards are satisfied for activities covered within the delegate's NCQA-Accreditation or NCQA-Certification survey. NCQA waives the predelegation assessment and annual oversight requirements of NCQA-Accredited or NCQA-Certified delegates. Oversight relief is not available for activities that are not covered—including NA activities—within the scope of a delegate's NCQA-Accreditation or NCQA-Certification survey.

## 4. NCQA does not expect the organization to produce the MBHO's full documentation as part of its evidence during its survey:

- The HP may reference the MBHO material as a separate document.
- HPs are held to the behavioral health requirement of the HP standard, not the MBHO standard itself.

For additional information regarding delegation and automatic credit, refer to Appendices 3 and 4 of the 2010 MBHO *Standards and Guidelines*.