

## Complete Summary

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### **GUIDELINE TITLE**

Routine preventive services for children and adolescents (ages 2 - 18).

### **BIBLIOGRAPHIC SOURCE(S)**

Michigan Quality Improvement Consortium. Routine preventive services for children and adolescents (ages 2-18). Southfield (MI): Michigan Quality Improvement Consortium; 2007 May. 1 p.

### **GUIDELINE STATUS**

This is the current release of the guideline.

## COMPLETE SUMMARY CONTENT

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## SCOPE

### **DISEASE/CONDITION(S)**

Preventable diseases or conditions such as:

- Infectious diseases including diphtheria, tetanus, pertussis, poliomyelitis, measles, mumps, rubella, varicella, influenza, meningitis, sexually transmitted infections (STI)
- Overweight
- Injuries due to motor vehicles, bicycles, burns, poisoning, firearms
- Tobacco use/exposure to second-hand smoke
- Hypercholesterolemia
- Cervical cancer
- Unintended pregnancy
- Vision disorders

## **GUIDELINE CATEGORY**

Counseling  
Prevention  
Risk Assessment  
Screening

## **CLINICAL SPECIALTY**

Family Practice  
Obstetrics and Gynecology  
Pediatrics  
Preventive Medicine

## **INTENDED USERS**

Advanced Practice Nurses  
Health Plans  
Physician Assistants  
Physicians

## **GUIDELINE OBJECTIVE(S)**

- To achieve significant, measurable improvements in the routine preventive services for children and adolescents (ages 2 to 18) through the development and implementation of common evidence-based clinical practice guidelines
- To design concise guidelines that are focused on key management components of routine preventive services for children and adolescents to improve outcomes

## **TARGET POPULATION**

Children and adolescents ages 2 to 18 years

## **INTERVENTIONS AND PRACTICES CONSIDERED**

### **Counseling/Screening/Prevention/Risk Assessment**

1. Assessment of risk factors
2. Parent and child education and counseling regarding:
  - Nutrition, physical activity, dental health, violence and abuse, depression, suicide threats, alcohol and drug abuse, anxiety, stress reduction, coping skills, immunizations, sexually transmitted infection (STI) prevention
  - Motor-vehicle and bicycle safety, poison prevention, burn and injury prevention
  - Preconception and pregnancy prevention
3. Screening for tobacco use/second-hand exposure, overweight, cholesterol, sexually transmitted infection, cervical cancer, and vision disorders
4. Immunizations

- Diphtheria, tetanus, and acellular pertussis vaccine (DTaP), tetanus-diphtheria-acellular pertussis vaccine(Tdap)
- Inactivated poliovirus vaccine (IPV)
- Measles, mumps, rubella (MMR) or measles, mumps, rubella, and varicella vaccine (MMRV)
- Varicella vaccine
- Meningococcal vaccine
- Influenza vaccine
- Human papilloma virus vaccine

## **MAJOR OUTCOMES CONSIDERED**

Not stated

## **METHODOLOGY**

### **METHODS USED TO COLLECT/SELECT EVIDENCE**

Searches of Electronic Databases

### **DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE**

The Michigan Quality Improvement Consortium (MQIC) project leader conducts a search of current literature in support of the guideline topic. Computer database searches are used to identify published studies, existing protocols and/or national guidelines on the selected topic developed by organizations such as the American Diabetes Association, American Heart Association, American Academy of Pediatrics, etc. If available, clinical practice guidelines from participating MQIC health plans and Michigan health systems are also used to develop a framework for the new guideline.

### **NUMBER OF SOURCE DOCUMENTS**

Not stated

### **METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE**

Weighting According to a Rating Scheme (Scheme Given)

### **RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE**

#### **Levels of Evidence for the Most Significant Recommendations**

- A. Randomized controlled trials
- B. Controlled trials, no randomization
- C. Observational studies
- D. Opinion of expert panel

### **METHODS USED TO ANALYZE THE EVIDENCE**

Review

## **DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE**

Not stated

## **METHODS USED TO FORMULATE THE RECOMMENDATIONS**

Expert Consensus

## **DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS**

Using information obtained from literature searches and available health plan guidelines on the designated topic, the Michigan Quality Improvement Consortium (MQIC) project leader prepares a draft guideline to be reviewed by the medical directors' committee at one of their scheduled meetings. Priority is given to recommendations with [A] and [B] levels of evidence (see "Rating Scheme for the Strength of the Evidence" field).

The initial draft guideline is reviewed, evaluated, and revised by the committee resulting in draft two of the guideline. Additionally, the Michigan Academy of Family Physicians participates in guideline development at the onset of the process and throughout the guideline development procedure. The MQIC guideline feedback form and draft two of the guideline are distributed to the medical directors, as well as the MQIC measurement and implementation group members, for review and comments. Feedback from members is collected by the MQIC project leader and prepared for review by the medical directors' committee at their next scheduled meeting. The review, evaluation, and revision process with several iterations of the guideline may be repeated over several meetings before consensus is reached on a final draft guideline.

## **RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS**

Not applicable

## **COST ANALYSIS**

A formal cost analysis was not performed and published cost analyses were not reviewed.

## **METHOD OF GUIDELINE VALIDATION**

External Peer Review  
Internal Peer Review

## **DESCRIPTION OF METHOD OF GUIDELINE VALIDATION**

When consensus is reached on the final draft guideline, the medical directors approve the guideline for external distribution to practitioners with review and comments requested via the Michigan Quality Improvement Consortium (MQIC)

health plans (project leader distributes final draft to medical directors' committee, measurement and implementation groups to solicit feedback).

The MQIC project leader also forwards the approved guideline draft to appropriate state medical specialty societies for their input. After all feedback is received from external reviews, it is presented for discussion at the next scheduled committee meeting. Based on feedback, subsequent guideline review, evaluation, and revision may be required prior to final guideline approval.

The MQIC Medical Directors approved this guideline in May 2007.

## RECOMMENDATIONS

### MAJOR RECOMMENDATIONS

The level of evidence grades (A-D) are provided for the most significant recommendations and are defined at the end of the "Major Recommendations" field.

Recommendations	2-6 years	7-12 years	13-18 years
Health, developmental and risk assessments	X	X	X
Parent/Child education and counseling: <ul style="list-style-type: none"> <li>Nutrition, physical activity, dental health, violence and abuse, sexually transmitted infection (STI) prevention, depression, suicide threats, alcohol/drug abuse, anxiety, stress reduction, coping skills, immunizations</li> <li>Bicycle safety - helmet use when riding bicycle <b>[B]</b></li> <li>Motor vehicle safety - Car seat/booster seat/seat belt use <b>[B]</b></li> <li>Poison prevention - Keep National Poison Control numbers readily accessible; use child resistant containers; dispose expired/unused medications</li> <li>Burn prevention - Install smoke detectors and test bi-annually; carbon monoxide detectors; water heater temperature and fire prevention</li> <li>Injury prevention - Firearm safety; water safety; CPR training</li> </ul>	X	X	X

<b>Recommendations</b>	<b>2-6 years</b>	<b>7-12 years</b>	<b>13-18 years</b>
Tobacco Use Screening: Establish tobacco use and second-hand exposure	X	X	X
Screening for overweight	Record height, weight and BMI annually		
Cholesterol Screening <b>[A]</b>	Over age 2 if increased risk for genetic forms of hypercholesterolemia		
Chlamydia Screening (sexually transmitted infection) (STI) <b>[B]</b>			All sexually active women 25 years and younger
Cervical Cancer Screening (Pap Smear) <b>[B]</b>			Beginning at age 21 or within three years after first sexual intercourse, whichever is earlier; every 3 years after 3 consecutive normal Pap smears over 5 years.
Preconception and Pregnancy Prevention Counseling		Preventive counseling beginning at age 12, or earlier if sexually active	
Vision Screening <b>[A]</b>	Children 4 years old and younger. By age 5, should be performed as part of preschool screening.		
<b>Immunizations</b>	4-6 years	11-12 years	15-18 years
<ul style="list-style-type: none"> <li>Consult the Advisory Committee on Immunization Practices (ACIP) website (<a href="http://www.cdc.gov/nip/acip/">www.cdc.gov/nip/acip/</a>) for most updated immunization schedules for routine and high risk populations.</li> <li>Use combination vaccines to minimize the number of injections</li> <li>Update the Michigan Care Improvement Registry (MCIR)</li> </ul>			
DTaP <b>[A]</b>	X	Tdap	
IPV	X		

<b>Recommendations</b>	<b>2-6 years</b>	<b>7-12 years</b>	<b>13-18 years</b>
MMR (MMRV) <b>[A]</b>	X		
Varicella <b>[A]</b>		X	
Meningococcal		X	
Influenza <b>[B]</b>	X 6 – 59 months, annually		
Human papilloma Virus (females 9 – 26 years)		X 3-dose series	X 3-dose series

Abbreviations: BMI, body mass index; CPR, cardiopulmonary resuscitation; DTaP, diphtheria, tetanus, acellular pertussis; IPV, inactivated poliovirus vaccine; MMR, measles, mumps, rubella; MMRV, measles, mumps, rubella, varicella; Tdap, tetanus-diphtheria-acellular pertussis

### **Definitions:**

### **Levels of Evidence for the Most Significant Recommendations**

- A. Randomized controlled trials
- B. Controlled trials, no randomization
- C. Observational studies
- D. Opinion of expert panel

### **CLINICAL ALGORITHM(S)**

None provided

## **EVIDENCE SUPPORTING THE RECOMMENDATIONS**

### **TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS**

The type of evidence is provided for the most significant recommendations (See "Major Recommendations" field).

This guideline is based on several sources, including: Preventive Services for Children and Adolescents, Institute for Clinical Systems Improvement, 2006 ([www.icsi.org](http://www.icsi.org)).

## **BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS**

### **POTENTIAL BENEFITS**

Through a collaborative approach to developing and implementing common clinical practice guidelines and performance measures for routine preventive services for children and adolescents ages 2 to 18, Michigan health plans will achieve consistent delivery of evidence-based services and better health outcomes. This approach also will augment the practice environment for physicians by reducing the administrative burdens imposed by compliance with diverse health plan guidelines and associated requirements.

## POTENTIAL HARMS

Not stated

## QUALIFYING STATEMENTS

### QUALIFYING STATEMENTS

This guideline lists core management steps. Individual patient considerations and advances in medical science may supersede or modify these recommendations.

## IMPLEMENTATION OF THE GUIDELINE

### DESCRIPTION OF IMPLEMENTATION STRATEGY

Approved Michigan Quality Improvement Consortium (MQIC) guidelines are disseminated through email, U.S. mail, and websites.

The MQIC project leader prepares approved guidelines for distribution. Portable Document Format (PDF) versions of the guidelines are used for distribution.

The MQIC project leader distributes approved guidelines to MQIC membership via email.

The MQIC project leader submits request to website vendor to post approved guidelines to MQIC website ([www.mqic.org](http://www.mqic.org)).

The MQIC project leader completes a statewide mailing of the comprehensive set of approved guidelines and educational tools annually. The guidelines and tools are distributed in February of each year to physicians in the following medical specialties:

- Family Practice
- General Practice
- Internal Medicine
- Other Specialists for which the guideline is applicable (e.g. endocrinologists, allergists, pediatricians, cardiologists, etc.)

The statewide mailing list is derived from the Blue Cross Blue Shield of Michigan (BCBSM) provider database. Approximately 95% of the state's M.D.'s and 96% of the state's D.O.'s are included in the database.

The MQIC project leader submits request to the National Guideline Clearinghouse (NGC) to post approved guidelines to NGC website ([www.guideline.gov](http://www.guideline.gov)).

## INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

### IOM CARE NEED



Staying Healthy

## **IOM DOMAIN**

Effectiveness  
Patient-centeredness

## **IDENTIFYING INFORMATION AND AVAILABILITY**

### **BIBLIOGRAPHIC SOURCE(S)**

Michigan Quality Improvement Consortium. Routine preventive services for children and adolescents (ages 2-18). Southfield (MI): Michigan Quality Improvement Consortium; 2007 May. 1 p.

### **ADAPTATION**

This guideline is based on several sources, including: Preventive Services for Children and Adolescents, Institute for Clinical Systems Improvement, 2006 ([www.icsi.org](http://www.icsi.org)).

### **DATE RELEASED**

2007 May

### **GUIDELINE DEVELOPER(S)**

Michigan Quality Improvement Consortium - Professional Association

### **SOURCE(S) OF FUNDING**

Michigan Quality Improvement Consortium

### **GUIDELINE COMMITTEE**

Michigan Quality Improvement Consortium Medical Director's Committee

### **COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE**

Physician representatives from participating Michigan Quality Improvement Consortium health plans, Michigan State Medical Society, Michigan Osteopathic Association, Michigan Association of Health Plans, Michigan Department of Community Health and Michigan Peer Review Organization

### **FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST**

Standard disclosure is requested from all individuals participating in the Michigan Quality Improvement Consortium (MQIC) guideline development process, including those parties who are solicited for guideline feedback (e.g. health plans,

medical specialty societies). Additionally, members of the MQIC Medical Directors' Committee are asked to disclose all commercial relationships.

## **GUIDELINE STATUS**

This is the current release of the guideline.

## **GUIDELINE AVAILABILITY**

Electronic copies: Available in Portable Document Format (PDF) from the [Michigan Quality Improvement Consortium Web site](#).

## **AVAILABILITY OF COMPANION DOCUMENTS**

None available

## **PATIENT RESOURCES**

None available

## **NGC STATUS**

This NGC summary was completed by ECRI Institute on March 5, 2008. The information was verified by the guideline developer on March 12, 2008.

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