Health Management Programs

The Health Management Program provides chronically ill members with the resources to remain healthy and maintain their quality of life. The program is available to members diagnosed with asthma, diabetes, or congestive heart failure. Member participation is voluntary.

HMO Blue Texas takes a comprehensive approach to disease management by involving the patient and attending physician in the education and counseling process. We notify physicians in writing of their patients’ enrollment in the program and provide periodic updates on patient progress. We also notify physicians of changes in their patients’ health status and encourage patients to maintain open communication with their physicians.

HMO Blue Texas has established the following goals for the Health Management Program:

- Enhance member self-management skills
- Reduce work absenteeism
- Reduce intensity and frequency of condition-related symptoms
- Enhance member quality of life, satisfaction and functional status
- Improve member compliance with the physician’s treatment plan
- Improve communication between member, physician and health plan
- Reduce hospitalizations and emergency room visits associated with asthma, diabetes, and congestive heart failure.

Periodic assessments are conducted to identify diseases that have a significant impact on members. To identify members appropriate for health management, risk stratification is performed using medical claims. Based on stratification results, targeted interventions are offered to address members’ level of severity.

Members with mild severity may receive educational materials and other self-management tools to support their physicians’ treatment plans, while members with moderate or severe levels are eligible for the following extended program components:

**Asthma and Diabetes** — A contracted population care management company administers the asthma and diabetes program components, which focus on enhancing and supporting physicians’ treatment plans. Members electing to enroll in the asthma or diabetes programs have 24-hour, toll-free access to a care management nurse and receive:

Continued on next page
Health Management Programs, Continued

Program Overview and Compliance, Continued

• A customized self-management plan
• Personalized education and self-management tools
• Guidance counseling
• Behavior modification interventions

Any member who is referred for the asthma or diabetes program component and does not meet the condition severity enrollment criteria or requires supplementary support is referred to HMO Blue Texas Case Management Department for appropriate intervention. These interventions address barriers to optimal health status including financial barriers, limited specialist involvement, durable medical equipment needs, and self-care limitations. Additionally, these members may receive home health interventions and intensive telephonic follow-up.

Congestive Heart Failure — This program is managed by the HMO Blue Texas Case Management Department, and supports the physician’s treatment plan. Program components include the following:

• Home health visits
• Education and self-management tools
• Coordination of durable medical equipment (DME) for self-management
• Telephonic follow-up and intervention by a registered nurse
• Social service support for assistance in addressing barriers to self-management

Outcome Measures

The Health Management Program is in alignment with NCQA standards and state regulatory requirements for health management systems. Standard reports are produced periodically and summarize:

• Resource utilization
• Member’s self-reported compliance with physician’s plan of treatment
• Overall member satisfaction
• Quality of life and functional status

Special Beginnings®

Childbirth-related expenses have become the largest component of health care costs today. To maintain costs and to assist female members in achieving healthy pregnancy outcomes, HMO Blue Texas provides high-risk pregnancy case management services. In addition, HMO Blue Texas offers the Special Beginnings program, which monitors members from program referral through the first six months of the infant’s life with a goal of achieving healthier families through proactive pre- and post-natal health education.

Continued on next page

® Registered mark of Health Care Service Corporation, a Mutual Legal Reserve Company
Program Overview — The Special Beginnings program includes a pregnancy risk assessment, educational materials, and targeted communications during the pregnancy and for six months after delivery. HMO members also have access to a 24-hour nurse line, Babyline.

Risk Assessment — When the plan is notified of a member’s pregnancy, the member is contacted to determine her interest in participating in the voluntary Special Beginnings program. If she chooses to participate, an individualized risk assessment is conducted and follow-up monitoring of her pregnancy is coordinated through a scheduled series of follow-up calls. The call schedule varies according to the risk level of the pregnancy; however, women with normal pregnancies receive a minimum of two calls before and after delivery.

Educational Materials — The Special Beginnings nurse works with the member and physician to provide effective communication and educational materials throughout the pregnancy and the first six months of the infant’s life.

Satisfaction — To complete the process, we measure the mother’s satisfaction with the program six months after delivery. Satisfaction results are used in assessment of the program’s effectiveness.

The following topics are covered in this section:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
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<tbody>
<tr>
<td>Clinical Practice Guidelines</td>
<td>H — 4</td>
</tr>
<tr>
<td>Clinical Practice Guidelines for Asthma</td>
<td>H — 10</td>
</tr>
<tr>
<td>Clinical Practice Guidelines for Diabetes</td>
<td>H — 17</td>
</tr>
<tr>
<td>Clinical Practice Guidelines for Congestive Heart Failure (CHF)</td>
<td>H — 20</td>
</tr>
<tr>
<td>Clinical Practice Guidelines for Hypertension</td>
<td>H — 24</td>
</tr>
<tr>
<td>Clinical Practice Guidelines for Management of Cholesterol (Lipids)</td>
<td>H — 28</td>
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<tr>
<td>Clinical Practice Guidelines for Use of Antiretroviral Treatment for Adults with a Confirmed Diagnosis of HIV/AIDS</td>
<td>H — 32</td>
</tr>
<tr>
<td>Clinical Practice Guidelines for Treatment of Major Depressive Disorders in Adults</td>
<td>H — 34</td>
</tr>
</tbody>
</table>
### Clinical Practice Guidelines

**Guidelines**

HMO Blue Texas annually reviews and adopts clinical practice guidelines as a foundation for its health management programs, quality initiatives and provider tools. The guidelines are based upon input from clinical expert panels, and are available to assist physicians in clinical practice.

Copies of the guidelines can be obtained through the Health Management Department by calling 1-800-462-3275, or you may access the guidelines on the BlueLINK Web site at http://providers.bcbstx.com.

<table>
<thead>
<tr>
<th>Guidelines</th>
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<tbody>
<tr>
<td>Prenatal Care, Childhood/</td>
</tr>
<tr>
<td>Adolescent and Adult</td>
</tr>
<tr>
<td>Wellness Guidelines</td>
</tr>
</tbody>
</table>

Promotion of preventive health is a major objective of the HMO Blue Texas Quality Improvement Program. The following Prenatal Care, Childhood/Adolescent and Adult Wellness Guidelines have been adopted by HMO Blue Texas and provided to members. Practice guidelines for asthma, diabetes, congestive heart failure, hypertension, management of cholesterol and use of antiretroviral treatment for adults with a confirmed diagnosis of HIV/AIDS are also included. These guidelines have also been provided to physicians to assist in patient education.
# 2001 Suggested Prenatal Care Guidelines

Blue Cross and Blue Shield of Texas (BCBS) follows the guidelines of the American College of Obstetricians and Gynecologists (ACOG), their recommended schedule for prenatal care visits, as well as for the care that expectant mothers should receive at the initial and subsequent visits. BCBS has also included routine uncomplicated prenatal care assessments. Each prenatal care plan should be individualized.

Physicians should encourage plan members who suspect they are pregnant to come in for an initial prenatal care visit early in the first trimester. The initial visit should include the following:

**Initial history, including:** current health problems or treatments; drug allergies; surgical history; family history; post pregnancies, if any; gynecological conditions; sexually transmitted disease; dietary/exercise habits; and tobacco, alcohol and drug use.

**Physical examination, including:** blood pressure; height and weight; head and neck, breasts, heart and lungs, abdomen, extremities; pelvic examination for size and shape of uterus and adnexal areas as well as the configuration and capacity of bony pelvis.

<table>
<thead>
<tr>
<th>INITIAL PRENATAL LAB SCREENING:</th>
<th>PRENATAL PLANS/EDUCATION:</th>
<th>OPTIONAL LABS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy test, if pregnancy has not been confirmed</td>
<td>Tachyplasmosis precautions (cats/rod meat)</td>
<td>HGB Electrophoresis</td>
</tr>
<tr>
<td>PNA smear, unless a normal screening has been reported within the past six months</td>
<td>Childbirth classes</td>
<td>PPD</td>
</tr>
<tr>
<td>Blood type, and D (Rh) type</td>
<td>Notation of fetal activity</td>
<td>Chlamydia</td>
</tr>
<tr>
<td>Antibody screen</td>
<td>Physical/sexual activity</td>
<td>GC</td>
</tr>
<tr>
<td>HCT/HGB (CBC)</td>
<td>VBAC counseling, if appropriate to patient</td>
<td>Tay-Sachs</td>
</tr>
<tr>
<td>Rubella</td>
<td>Signs of labor/danger signals which</td>
<td></td>
</tr>
<tr>
<td>VDRL</td>
<td>require immediate physician notification</td>
<td></td>
</tr>
<tr>
<td>Urine culture/screen</td>
<td>Nutrition counseling</td>
<td></td>
</tr>
<tr>
<td>HBsAg</td>
<td>Environmental/work hazards</td>
<td></td>
</tr>
<tr>
<td>HIV counseling/screening, with consent</td>
<td>Travel</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lifestyle, tobacco, alcohol</td>
<td></td>
</tr>
</tbody>
</table>

“The frequency of subsequent antepartum office visits is determined by the individual needs of the woman and the assessment of her risks,” according to ACOG guidelines. For an uncomplicated pregnancy, the ACOG guidelines suggest the following frequency of office visits:

- Monthly office visits from the initial prenatal visit until 29 weeks of pregnancy
- Office visits every two to three weeks from 29 weeks to 36 weeks of pregnancy
- Weekly office visits from 36 weeks until delivery

**SUBSEQUENT ANTEPARTUM OFFICE VISITS SHOULD INCLUDE:**

<table>
<thead>
<tr>
<th>Blood pressure</th>
<th>Weight</th>
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</thead>
<tbody>
<tr>
<td>Urine for sugar and albuminuria</td>
<td></td>
</tr>
<tr>
<td>Fundal height</td>
<td></td>
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<tr>
<td>Fetal heart tones beginning at 10-12 weeks by doppler</td>
<td></td>
</tr>
</tbody>
</table>

**SUBSEQUENT PREGNATAL PLANS/EDUCATION:**

<table>
<thead>
<tr>
<th>Anesthesia</th>
<th>Ultrasound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breast or bottle feeding</td>
<td>MSAFP/Multiple Markers</td>
</tr>
<tr>
<td>Select PCP for newborn</td>
<td>Amnio/CVS</td>
</tr>
<tr>
<td>Newborn car seat</td>
<td>Karyotype</td>
</tr>
<tr>
<td>Tubal sterilization</td>
<td>Amniotic Fluid (AFP)</td>
</tr>
<tr>
<td>Circumcision</td>
<td></td>
</tr>
<tr>
<td>Limitations or restrictions</td>
<td></td>
</tr>
</tbody>
</table>

**8-18 WEEK LABS:**

- (when indicated/elected)
- Ultrasound
- MSAFP/Multiple Markers
- Amnio/CVS
- Karyotype
- Amniotic Fluid (AFP)

**24-28 WEEK LABS:**

- (when indicated)
- HCT/HGB (CBC)
- Diabetes Screen
- GFT (if screen abnormal)
- D (Rh) Antibody Screen
- Intrauterine Growth (IUGR) Given (28 weeks)

**32-36 WEEK LABS:**

- (when indicated)
- HCT/HGB (CBC)
- Ultrasound
- VDRL
- GC
- Chlamydia
- Group B Strep (35-37 weeks)

**Prior to Discharge:** Physicians should encourage an appointment for a postpartum examination within 42 days after delivery for a woman having a routine uncomplicated delivery. Postpartum Plans/Ed:*

- Method of birth control
- Limitations and restrictions

-bluecrossblueshield.com

**These are suggested guidelines for asymptomatic, low-risk persons, unless indicated otherwise. These suggestions should not be used as a substitute for the medical care and advice of your physician. Benefit plans may not cover these services.**
Hepatitis B
1st dose birth-2 mos of age; 2nd dose 1-4 mos of age; 3rd dose 6-18 mos of age. 11-12 yrs of age if not previously vaccinated.

ACIP, AAP, AAPF — These groups also recommend unvaccinated adolescents over 12 yrs of age who are at increased risk for HBV infection should also be vaccinated.

Diphtheria, Tetanus, Pertussis
DTaP or DTP at 2, 4, 6, & 15 mos of age, and 4-6 yrs of age. 1st booster at 11-17 yrs of age. DTaP is preferred over DTP. DT is recommended at 11-12 yrs of age if at least 5 yrs have elapsed since the last dose. Subsequent routine 1st boosters are recommended every 10 yrs.

ACIP, AAP, AAPF — These groups also say the 4th dose (DTaP) may be administered as early as 12 mos of age, provided 6 mos have elapsed since the 3rd dose and if the child is unlikely to remain at 15-18 mos of age.

H. influenzae type b
2, 4, & 6 mos of age and 12-15 mos of age. If PRP-OMP (Pedvax HIB™ and Comvax™ (Menve)C) is administered at 2, 4, & 6 mos of age, a dose at 6 mos of age is not required.

ACIP, AAP, AAPF

Polio
2 & 4 mos of age, 6-18 mos of age and 4-6 yrs of age. To eliminate the risk of vaccine-associated paralytic polio (VAPP), an all-IPV schedule is recommended for routine vaccination in the United States.

ACIP, AAP, AAPF

Pneumococcal Conjugate Vaccine (Pevnra™)
2, 4, & 6 mos of age and 12-15 months of age.

ACIP, AAP

Measles, Mumps, Rubella
12-15 mos of age and 4-6 yrs or 11-12 yrs of age. ACIP, AAP, AAPF — These groups also recommend the 2nd dose of MMR is routinely administered at 4-6 yrs of age but may be administered during any visit, provided at least 4 wks have elapsed since receipt of the 1st dose and that both doses are administered beginning at or after 12 mos of age. Those who have not previously received the second dose should complete the schedule no later than the 11-12 yrs of age visit.

Varicella
12-18 mos of age; 11-12 yrs of age if not previously vaccinated and lacking a reliable history of chicken pox.

ACIP, AAP, AAPF — These groups also recommend susceptible children > 13 yrs of age should receive 2 doses, at least 4 wks apart.

Physical Exam
Newborn, 2-4 days, by 1 mo, 2 mos, 4 mos, 6 mos, 9 mos, 12 mos, 15 mos, 18 mos, 24 mos, 3 yrs, 4 yrs, 5 yrs, 6 yrs, and 8 yrs of age, then yearly at 10-17 yrs of age.

AAP

Height and Weight
Newborn, 2-4 days, by 1 mo, 2 mos, 4 mos, 6 mos, 9 mos, 12 mos, 15 mos, 18 mos, 24 mos, 3 yrs, 4 yrs, 5 yrs, 6 yrs, and 8 yrs of age, then yearly at 10-17 yrs of age.

AAP

Head Circumference
Newborn, 2-4 days, by 1 mo, 2 mos, 4 mos, 6 mos, 9 mos, 12 mos, 15 mos, 18 mos, and 24 mos of age.

AAP

Blood Pressure
5 yrs, 4 yrs, 5 yrs, 6 yrs, and 8 yrs of age, then yearly at 10-17 yrs of age.

AAP

Vision and Hearing
By 1 mo (hearing only), 3 yrs, 4 yrs, 5 yrs, 6 yrs, 8 yrs, 10 yrs, 12 yrs, and 15 yrs of age.

AAP — Recommends subjective, by history, at each visit until 24 mos of age, than at 3 yrs (hearing only), 11 yrs, 13 yrs, 14 yrs, 16 yrs, & 17 yrs of age. Objective, by standard testing method, at 4-6 mos (hearing only), 3 yrs (vision only), 4 yrs, 5 yrs, 6 yrs, 8 yrs, 10 yrs, 12 yrs, & 15 yrs of age.

ACIP

Hereditary/Metabolic Screening
First specimen after 36 hrs of age and at 24 hrs after first protein feeding or before hospital discharge; 2nd specimen between 1-2 wks at age.

AAP — Recommends screening should be done according to state law.

Scoliosis Screening
Yearly 10-17 yrs of age.

SRS — Recommends annual screening of all children 10-15 yrs of age.

AAOS — Recommends screening girls at 10 & 12 yrs of age and screening boys once at 13 or 14 yrs of age.

Hct./Hgb.
Between 9-12 mos of age, 15 mos to 5 yrs of age and annually for all menstruating adolescents.

AAP

Urine Testing
5 yrs of age. Conduct dipstick urinalysis for leukocytes annually for sexually active male & female adolescents.

AAP

Accident/Injury Prevention
Newborn, 2-4 days, by 1 mo, 2 mos, 4 mos, 6 mos, 9 mos, 12 mos, 15 mos, 18 mos, 24 mos, 3 yrs, 4 yrs, 5 yrs, 6 yrs, and 8 yrs of age then yearly at 10-17 yrs of age.

AAP

Touch TE (Testicular Exam) or Teach BSE (Breast Self-Exam)
Yearly 14-17 yrs of age. Promote awareness of testicular cancer during physical examination.

ACS — Recommends monthly BSE starting at 20 yrs of age and older.

Ocular Prophylactic
Newborn.

AAP

Initial Dental Referral
12 mos – 3 yrs of age.

AAP — First visit should occur at 6 mos of age or when 1st tooth erupts, whichever comes later, but no later than 12 mos of age.

HIV Testing
At-risk intervention. Infants born to high-risk mothers whose HIV status is unknown.

AAP

Influenza
At-Risk intervention. Annually starting at 6 mos of age, based on clinical assessment.

ACIP

Tuberculosis (TB) Testing
At-Risk Intervention. Starting at 12 mos of age, based on clinical assessment.

AAP

Cholesterol Screening
At-Risk Intervention. Starting at 24 mos of age, based on clinical assessment.

AAP — Recommends infant history cannot be ascertained and other risk factors are present, screening should be determined by the discretion of the physician.

Lead Screening
At-risk intervention. Screen between 9-12 mos of age, 24 mos of age, and 5 yrs of age.

AAP — Recommends universal screening in areas with > 27% of housing built before 1950 and in areas where the percentage of 1-2 year olds with elevated BLLs is ≥ 12%.

Hepatitis A
At-Risk intervention. Starting at 24 mos of age in selected areas. Contact Texas Department of Health for specific counties.

AAP, AAPF, ACIP, Texas Department of Health

Pneumococcal Vaccine
At-Risk intervention. Pevnra™ from 24 to 59 months of age. Pneumovax™ 23 over 59 months of age.

ACIP, AAP, AAPF

Smoking Cessation
At-Risk Intervention. Based on clinical assessment.

AAP

STD Screening/Pregnancy Prevention
At-Risk Intervention. All sexually active patients should be screened for sexually transmitted diseases (STDs)/pregnancy prevention.

AAP

Pelvic Exam/Pap Smear
At-Risk Intervention. All sexually active females should have an annual pelvic exam and an annual Pap smear until 3 consecutive normal results, then every 1-3 years.

AAP — Recommends all sexually active females should have a pelvic examination. A pelvic examination and routine Pap smear should be offered as part of preventive health maintenance between the ages of 18 and 21 years of age.

ACS — Recommends annual Pap smears when a woman becomes sexually active until 3 consecutive normal results then the test may be performed less often at clinician’s discretion.

Reference Sources

ACIP: Advisory Committee on Immunization Practices
ACP: American College of Physicians
AAOS: American Academy of Orthopaedic Surgeons
AAP: American Academy of Pediatrics
AADC: American Academy of Pediatric Dentistry
AAOF: American Academy of Orthopedic Surgery
ACS: American Cancer Society
GORD: Geriatric Research Society

BCBSTX recommendations in BLUE

Reference sources citations/recommendations in BLACK

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## Immunizations

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Tetanus/Diphtheria</th>
<th>Measles/Mumps/Rubella</th>
<th>Influenza</th>
<th>Pneumococcal</th>
<th>Hepatitis B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages 18-39 years</td>
<td>every 10 years, after primary series</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ages 40-49 years</td>
<td>every 10 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ages 50-64 years</td>
<td>every 10 years</td>
<td></td>
<td></td>
<td></td>
<td>age 65</td>
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<tr>
<td>Ages 65+ years</td>
<td>every 10 years</td>
<td>yearly</td>
<td>yearly</td>
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</tbody>
</table>

- If born after 1957 and history of immunity, administer once.
- All adults who require medical follow-up or hospitalization during the preceding year because of chronic metabolic disease, including diabetes mellitus; renal dysfunction; hemorrhagic/pneumonia, immunosuppression, including immunosuppression caused by medications or by HIV.
- All adults who require medical follow-up or hospitalization during the preceding year because of chronic metabolic disease, including diabetes mellitus; renal dysfunction; hemorrhagic/pneumonia, immunosuppression, including immunosuppression caused by medications or by HIV.
- All adults who require medical follow-up or hospitalization during the preceding year because of chronic metabolic disease, including diabetes mellitus; renal dysfunction; hemorrhagic/pneumonia, immunosuppression, including immunosuppression caused by medications or by HIV.

## Preventive Medicine

<table>
<thead>
<tr>
<th>Test</th>
<th>Men &amp; Women</th>
<th>18-39 years</th>
<th>40-49 years</th>
<th>50-64 years</th>
<th>65+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholesterol Screening</td>
<td>Blood Pressure</td>
<td>every year</td>
<td>every 5 years</td>
<td>every 5 years</td>
<td>every 5 years</td>
</tr>
<tr>
<td>Weight</td>
<td>Men &amp; Women</td>
<td>every 1-3 years</td>
<td>every 1-3 years</td>
<td>every 1-3 years</td>
<td>every 1-3 years</td>
</tr>
<tr>
<td>Hearing and Vision</td>
<td>Men &amp; Women</td>
<td>60+ yearly</td>
<td>yearly</td>
<td>yearly</td>
<td>yearly</td>
</tr>
<tr>
<td>Flexible Sigmoidoscopy or Colonoscopy</td>
<td>Men &amp; Women</td>
<td>Flexible Sigmoidoscopy 60+ every 5 years or Colonoscopy every 10 years</td>
<td></td>
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<tr>
<td>Testicular Exam</td>
<td>Men</td>
<td>yearly</td>
<td></td>
<td></td>
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<tr>
<td>Clinical Prostate Exam/PSA</td>
<td>Men</td>
<td>yearly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone Mineral Content</td>
<td>Women</td>
<td>once</td>
<td></td>
<td></td>
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<tr>
<td>TSH</td>
<td>Women</td>
<td>screen 50+</td>
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<tr>
<td>Clinical Breast Exam/Tech Breast Self-Exam (BSE)</td>
<td>Women</td>
<td>20+ every 1-3 years</td>
<td>yearly</td>
<td>yearly</td>
<td>yearly</td>
</tr>
<tr>
<td>Mammogram</td>
<td>Women</td>
<td>yearly</td>
<td>yearly</td>
<td>yearly</td>
<td>yearly</td>
</tr>
<tr>
<td>Pap Smear</td>
<td>Women</td>
<td>yearly until 3 consecutive normal results, then every 1-3 years</td>
<td></td>
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</tr>
</tbody>
</table>

## At-Risk Interventions

<table>
<thead>
<tr>
<th>Intervention</th>
<th>All ages</th>
<th>age 45-49</th>
<th>age 45+</th>
<th>age 40-64</th>
<th>all ages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Pneumonia</td>
<td></td>
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<tr>
<td>Hepatitis A Vaccine</td>
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<tr>
<td>Hepatitis B Vaccine</td>
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<tr>
<td>Tuberculosis (TB) Skin Testing</td>
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<tr>
<td>Clinical Prostate Exam/Prostate Specific Antigen (PSA)</td>
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<td></td>
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<tr>
<td>Blood Glucose</td>
<td></td>
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<tr>
<td>Bone Mineral Content</td>
<td></td>
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<tr>
<td>STD Screening (Chlamydia, Gonorrhea, Syphilis)</td>
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<tr>
<td>HIV</td>
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</table>

*All adults should be provided counseling regarding tobacco use, nutrition, exercise, dental health, sexual behavior, domestic violence, depression, substance abuse, and accident/injury prevention.*

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**Blue Cross Blue Shield of Texas**

These are suggested guidelines for asymptomatic, low-risk persons, unless indicated otherwise. These suggestions should not be used as a substitute for the medical care and advice of your physician. Benefit plans may not cover these services.
Tetanus/Diphtheria
10-19 — Every 10 years after primary series. 40 and older — Every 10 years.
ACP, USPSTF, ACC, ACPM
AAFP — Booster every 10 years or at least at age 50.

Measles/Mumps/Rubella
18-49 — If born after 1956 and lacking evidence of immunity, administer once.
ACIP

Influenza
50 and older — Yearly.
ACP, USPSTF, ACIP, ACPM
AAFP — Offer yearly at age 50.

Pneumococcal
Age 65.
AAFP, ACP, ACIP, USPSTF, ACPM

Hepatitis B
≤ 24 yrs of age — Offer series to unimmunized persons with no reliable history.
AAFP, ACIP — Offer series to high-risk individuals.

Cholesterol Screening
Every 5 years.
NCEP of the NHLBI
AAFP, ACP, USPSTF — Males 35-65 yrs of age and females 45-65 yrs of age should be screened periodically.

Blood Pressure
Yearly.
AAFP, USPSTF — Measure periodically.
ACP — Every 1-2 years, yearly if African-American, obese, diastolic BP 85-89 mm Hg, history of hypertension either personally or a first degree relative.
NHLBI — At least every 2 years. If diastolic BP 80-89 mm Hg, yearly.

Weight
To age 64 — Every 1-3 years; 65 and older — yearly.
AAFP, USPSTF — Periodically at clinician’s discretion.

Hearing
60 and older — Yearly.
AAFP, USPSTF — 65 and older. Frequency at clinician’s discretion.

Vision
60 and older — Yearly.
ACP
USPSTF — Vision testing with Snellen acuity testing recommended for the elderly.
AAO — All individuals age 40-64 every 2-4 years; 65 and older every 1-2 years.
NEI — African-American 40+ every 2 years; All 60+ every 2 years; Diabetics yearly.

Stool for Occult Blood
50 and older — Yearly.
AAFP, USPSTF, AGA, ACS
AAFP — Also recommends annual screening starting at age 40 if family history of early colorectal cancer.

Flexible Sigmoidoscopy
50 and older — Every 5 years based on clinical assessment.
ACS, AGA — 50 yrs of age and older — Every 5 years for patients at normal risk.
USPSTF — Screening recommended for all persons 50 yrs of age, no periodicity recommended.

Colonoscopy
50 and older — Every 10 years.
ACS

Testicular Exam
Males 14-59 years of age. Promote awareness of testicular cancer during physical examinations.
ACS

Clinical Prostate Exam
Males 50 and older — Yearly.
ACS, AUA

Prostate Specific Antigen (PSA)
Males 50 and older — Yearly.
ACS, AUA — Males 50 and older, yearly, with life expectancy of 10 years or more.
AAFP, USPSTF, NCI — Not recommended for routine screening purposes.

Bone Mineral Content
Offer screening to women 65 years of age and older.
NDF

TSH
Screen women 50+ years of age.
ACP

Clinical Breast Exam/Mammography (BSE)
Females 20-39 — Every 1-3 years; 40 and older — yearly.
ACS — BSE 20 yrs and older every month; Clinical breast exam 20-39 yrs of age every 3 years, 40 and older every year.

Mammograms
Females 40 and older — Yearly.
ACS — Annually and older.
NCI — Every 1-2 years for 40 and older.
ACP — 50 and older every 1-2 years. ACP discourages for women over 75 yrs of age.
AAFP, USPSTF — 50-69 yrs of age every 1-2 years.

Pap Smears
Females — Yearly until 3 consecutive normal results, then every 1-3 years.
ACS, ACOG, NCI — Every year times 3 of consecutive normal, then at clinician’s discretion.
AAFP — Offer at least every 3 years.
USPSTF — At least every 3 years, based on clinician’s discretion.

Influenza (At-Risk Population)
Ages 10-19 — Annually.
AAFP, ACIP

Hepatitis A Vaccine (At-Risk Population)
Based on clinical assessment.
CDC, AAFP

Hepatitis B Vaccine (At-Risk Population)
Based on clinical assessment.
ACIP, AAFP

TB Testing (At-Risk Population)
Yearly for at-risk population based on clinical assessment.
AAFP, ACIP, USPSTF — all suggest high risk as well, but no frequency is indicated.

Prostate Specific Antigen (PSA) (At-Risk Population)
Males Age 45-49 — Yearly.
ACS
AUA — Males over 40 years of age identified as high-risk.

Blood Glucose (At-Risk Population)
45 and older — Screening of high-risk individuals every 3 years.
ADA, ACOG

Bone Mineral Content (At-Risk Population)
Women age 40-64.
NDF — All women 65 and over; less than 65 with one or more risk factors for osteoporosis in addition to menopause.

STD Screening (At-Risk Population)
Based on clinical assessment.
CDC, AAFP

HIV (At-Risk Population)
Based on clinical assessment.
CDC, AAFP

Reference Sources

AAFP: American Academy of Family Physicians
AAD: American Academy of Ophthalmology
ACIP: Advisory Committee on Immunization Practices
ACOG: American College of Obstetricians and Gynecologists
ACP: American College of Physicians
ACPM: The American College of Preventive Medicine
ACS: American Cancer Society
ADA: American Diabetes Association
AAG: American Gastroenterological Association
AHA: American Heart Association
ABHI: American Urological Association
CSCR: Centers for Disease Control and Prevention
NCPCP: National Cholesterol Education Program
NCI: National Cancer Instistute
NEI: National Eye Institute
NHLBI: National Heart, Lung, and Blood Institute
NOS: National Osteoporosis Foundation
USPSTF: U.S. Preventive Services Task Force
Clinical Practice Guidelines for Asthma

Guidelines
The Clinical Practice Guideline for Asthma is based on the National Heart, Lung and Blood Institute’s report of the Second Expert Panel on the Guidelines for the Diagnosis and Management of Asthma, 1997, updated in June 2002. It is not intended to replace your clinical medical judgement. Each medical decision should be based on current medical knowledge and practices considered in the clinical circumstances of the individual patient.

Goals
To provide guidelines for:

• Early and ongoing control of asthmatic symptoms through lifestyle management and pharmacotherapy to reduce complications and improve outcomes
• Maintaining (near) "normal" pulmonary function
• Maintaining normal activity levels (including exercise and other physical activity)
• Achieving optimal pharmacotherapy with minimal or no side effects
• Minimizing the need for acute services (ER encounters, urgent care and hospitalizations)

Step 4 — Severe Persistent

• Continual symptoms
• Limited physical activity
• Frequent exacerbations
• Nighttime symptoms frequent
• Lung Functions
  — Peak expiratory flow rate (PEFR) or forced expiratory volume (FEV1) ≤ 60% predicted
  — PEFR variability > 30%

Step 3 — Moderate Persistent

• Daily symptoms
• Daily use of inhaled short-acting beta2-agonist
• Exacerbations affect activity
• Exacerbations ≥ 2 times a week; may last days
• Nighttime symptoms > 1 time a week
• Lung Functions
  — PEFR or FEV1 > 60% to < 80% predicted
  — PEFR variability > 30%

Continued on next page
Clinical Practice Guidelines for Asthma, Continued

Assessment and Diagnosis, Continued

Step 2 — Mild Persistent

- Symptoms > 2 times a week but < 1 time a day
- Exacerbations may affect activity
- Nighttime symptoms > 2 times a month
- Lung Functions
  - PEFR or FEV1 ≥ than 80% predicted
  - PEFR variability 20% to 30%

Step 1 — Mild Intermittent

- Symptoms ≤ 2 times a week
- Asymptomatic and normal lung function (PEFR) between exacerbations
- Exacerbations may be brief and intensity may vary
- Nighttime symptoms ≤ 2 times a month
- Lung Functions
  - PEFR or FEV1 ≥ 80% predicted
  - PEFR variability < 20%

*The presence of one of the features of severity is sufficient to place a patient in that category. An individual should be assigned to the most severe category in which any feature occurs. The characteristics noted are general and may overlap because asthma is highly variable. Furthermore, an individual's classification may change over time. Patients at any level of severity can have mild, moderate or severe exacerbations. Some patients with intermittent asthma experience severe and life-threatening exacerbations separated by long periods of normal lung function and no symptoms.

Therapy**

Inhaled corticosteroids are now the preferred medication for controlling and preventing asthma symptoms and for improving lung function and quality of life. Inhaled steroids treat chronic inflammation of the airways, a key characteristic of asthma.

However, inhaled steroids alone may not be sufficient in all cases. Combination therapy – adding long-acting inhaled beta2-agonists to inhaled steroids – is more effective than simply increasing the dose of inhaled steroids for patients over age 5 with moderate or severe persistent asthma.

Continued on next page
Newer evidence has demonstrated the safety of inhaled steroids at appropriate doses for children under age 5. There is, however, insufficient evidence to make firm recommendations on combination therapy for these children.

Antibiotics should not be used to treat acute asthma attacks except when a bacterial infection due to another condition – such as pneumonia or sinusitis – is present.

Step 4 — Severe Persistent

- Daily medications for long-term control:
  - Anti-inflammatory inhaled corticosteroid (high dose) and
  - Long-acting bronchodilator, either long-acting inhaled beta2-agonist, sustained-release theophylline or long-acting beta2-agonist tablets and
  - Corticosteroid tablets or syrup long-term (make repeat attempts to reduce systemic steroids and maintain control with high dose inhaled steroids)
- Medications for quick relief:
  - Short-acting bronchodilator such as an inhaled beta2-agonist as needed for symptoms. Intensity of treatment will depend on severity of the exacerbation. Use of short-acting inhaled beta2-agonist on a daily basis, or increasing use, indicates the need for additional long-term control therapy.

Step 3 — Moderate Persistent

- Daily medications for long-term control:
  - Anti-inflammatory inhaled corticosteroid (medium dose) or
  - Inhaled corticosteroid (low-medium dose) and add a long-acting bronchodilator, especially for nighttime symptoms. The long-acting bronchodilator can be an inhaled beta2-agonist, sustained-release theophylline or long-acting beta2-agonist tablets.
  - If needed, use an anti-inflammatory inhaled corticosteroid (medium-high dose) and a long-acting bronchodilator, especially for nighttime symptoms; either long-acting inhaled beta2-agonist, sustained-release theophylline or long-acting beta2-agonist tablets.
- Medications for quick relief:
  - Short-acting bronchodilator such as an inhaled beta2-agonist as needed for symptoms. Intensity of treatment will depend on severity of the exacerbation. Use of short-acting inhaled beta2-agonist on a daily basis, or increasing use, indicates the need for additional long-term control therapy.

Continued on next page
Clinical Practice Guidelines for Asthma, Continued

Step 2 — Mild Persistent

• One daily medication for long-term control:
  — Anti-inflammatory inhaled corticosteroid (low dose) or cromolyn or nedocromil (children usually begin with a trial of cromolyn or nedocromil).
  — Sustained-release theophylline to serum concentration of five (5) to fifteen (15) mcg/mL is an alternative, but not preferred, therapy. Zafirlukast or zileuton may also be considered for patients ≥ 12 years of age, although the position of the drugs in therapy is not fully established.

• Medications for quick relief:
  — Short-acting bronchodilator such as an inhaled beta2-agonist as needed for symptoms. Intensity of treatment will depend on severity of the exacerbation. Use of short-acting inhaled beta2-agonist on a daily basis, or increasing use, indicates the need for additional long-term control therapy.

Step 1 — Mild Intermittent

• No daily medication needed for long-term control.

• Medications for quick relief:
  — Short-acting bronchodilator such as an inhaled beta2-agonist as needed for symptoms. Intensity of treatment will depend on severity of the exacerbation. Use of short-acting inhaled beta2-agonist more than two times a week may indicate the need to initiate long-term control therapy.

**Gain control as quickly as possible, then decrease treatment to the least medication necessary to maintain control. Gaining control may be accomplished by either starting treatment at the step most appropriate to the initial severity of the condition or starting at a higher level of therapy. A rescue course of systemic corticosteroids may be needed at any time and at any step.

General Counseling

• Basic facts about asthma
• Development of written "Action Plans" for self-management of asthma, including an "Emergency Action Plan."
• Importance of compliance with the treatment/plan of care
• Inhaler/spacer/holding chamber technique
• Self-monitoring
• Preparation for exercise
• Appropriate environmental control measures to avoid exposure to known allergens and irritants
• Annual influenza vaccine for patients with persistent asthma
• Avoidance of cigarette smoke (passive and active)

Group education, if appropriate

Continued on next page
Clinical Practice Guidelines for Asthma, Continued

Medications

• Discuss the roles and functions of medications

• **Prevention:**
  — *First Step Drugs* - inhaled corticosteroid, cromolyn, nedocromil,
    oral theophylline
  — *Second Step Drugs* - long-acting beta2-agonist, oral corticosteroid and
    inhaled anticholinergics
  — Undefined - Leukotriene inhibitors

• **Quick Relief:**
  — *First Step Drugs* - short-acting bronchodilators

• Maintenance therapy with anti-inflammatory agents recommended for
  moderate and severe disease. Early treatment of acute exacerbation with
  systemic corticosteroid. Reassess and adjust pharmacotherapy as patients
  move between levels and steps.

• A rescue course of systemic corticosteroid may be needed at any time and at
  any step.

Specialist involvement may be indicated when the following findings are present:

• Difficulty achieving or maintaining control of asthma
• Oral corticosteroid dependence
• Patient requires *Step 3 or Step 4* care
• Hospitalization

The stepwise approach presents general guidelines to assist clinical decision-
making; it is not intended to be a specific prescription. Asthma is highly variable;
clinicians should tailor specific medication plans to the needs and circumstances
of individual patients.
<table>
<thead>
<tr>
<th>Clinical Features*</th>
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</thead>
<tbody>
<tr>
<td><strong>STEP 2 — Mild Persistent</strong></td>
</tr>
<tr>
<td>Symptoms &gt; 2 times a week but &lt; 1 time a day</td>
</tr>
<tr>
<td>Exacerbations may affect activity</td>
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<tr>
<td>Nighttime symptoms &gt; 2 times a month</td>
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<tr>
<td>Lung function</td>
</tr>
<tr>
<td>— PEFR/FEV₁ ≥ 80% predicted</td>
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<tr>
<td>— PEFR variability 20-30%</td>
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<tr>
<th>Long-term Control</th>
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<tbody>
<tr>
<td>One daily medication:</td>
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<tr>
<td>— <strong>Anti-inflammatory</strong>: either <strong>inhaled corticosteroid (low dose)</strong> or <strong>cromolyn</strong> or ** nedocromil** (children usually begin with a trial of cromolyn or nedocromil)</td>
</tr>
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<tr>
<th>Quick Relief</th>
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<tbody>
<tr>
<td>— Short-acting bronchodilator: inhaled beta₂-agonist as needed for symptoms</td>
</tr>
<tr>
<td>— Intensity of treatment will depend on severity of the exacerbation; see component 3 - Managing Exacerbations 1997 NHLBI guidelines - page 105</td>
</tr>
<tr>
<td>— Use of short acting inhaled beta₂-agonist on a daily basis, or increasing use, indicates the need for additional long-term control therapy</td>
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<tr>
<th>Education Actions</th>
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<tbody>
<tr>
<td><strong>Step 1 actions plus:</strong></td>
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<tr>
<td>— Teach self-monitoring</td>
</tr>
<tr>
<td>— Refer to group education if available</td>
</tr>
<tr>
<td>— Review and update self-management plan</td>
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<table>
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<tr>
<th>STEP 1 — Mild Intermittent</th>
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<tbody>
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</table>

| **No daily medication needed.** |

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<tr>
<th><strong>Step down</strong></th>
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<tbody>
<tr>
<td>Review treatment every 1 to 6 months; gradually decrease treatment to the least medication necessary to maintain control.</td>
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<tr>
<th><strong>Step up</strong></th>
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<tbody>
<tr>
<td>If control is not maintained, consider step up. First, review patient medication technique, adherence, and environmental control (avoidance of allergens or other factors that contribute to asthma severity).</td>
</tr>
</tbody>
</table>

**NOTE:**
- The stepwise approach presents general guidelines to assist clinical decision-making; it is not intended to be a specific prescription. Asthma is highly variable; clinicians should tailor specific medication plans to the needs and circumstances of individual patients.
- Gain control as quickly as possible; then decrease treatment to the least medication necessary to maintain control. Gaining control may be accomplished by either starting treatment at the step most appropriate to the initial severity of the condition or starting at a higher level of therapy (e.g., a course of systemic corticosteroids or higher dose of inhaled corticosteroids).
- A rescue course of systemic corticosteroids may be needed at any time and at any step.
- Some patients with intermittent asthma experience severe and life-threatening exacerbations separated by long periods of normal lung function and no symptoms. This may be especially common with exacerbations provoked by respiratory infections. A short course of systemic corticosteroids is recommended.
- At each step, patients should control their environment to avoid or control factors that make their asthma worse (e.g., allergens, irritants); this requires specific diagnosis and education.
- Referral to an asthma specialist for consultation may be indicated if there are difficulties achieving or maintaining control of asthma, if the patient requires Step 3 or Step 4 care (see component 1 – Initial Assessment and Diagnosis 1997 NHLBI guidelines), oral corticosteroid dependence, or hospitalization.

Rev. 10/01
08/30/01
Clinical Practice Guidelines for Diabetes

The diabetes guidelines are based on the Clinical Practice Recommendations of the American Diabetes Association. It incorporates recently published recommendations in Diabetes Care, Volume 25, Number 1, January 2002. This CPG is not intended to replace your clinical medical judgment. A physician's medical decisions should be based on current medical knowledge and practices, taking into consideration the clinical circumstances of each individual patient.

Goals
To provide guidelines to:

• Achieve a near-normal glycemia defined by an HbA1c of < 7
• Achieve a blood glucose level of 80 to 120mg/dL before meals and 100 to 140 mg/dL at bedtime
• Detect and treat co-existing cardiovascular risk factors (hypertension, smoking, dyslipidemia and obesity)
• Prevent acute complications (ketoacidosis, hyperosmolar coma, hypoglycemia)
• Prevent major organ disease (retinopathy, nephropathy, vasculopathy, neuropathy)

Diagnosis
Any one of the following three parameters on two separate days confirm the diagnoses of diabetes:

• A fasting (8 hours) plasma glucose test level of ≥ 126 mg/dL
• A casual plasma glucose test level of ≥ 200 mg/dL with symptoms of diabetes
• Two-hour plasma glucose test level of ≥ 200 mg/dL

Assessment
• Inquire about symptoms of hypoglycemia and look for signs and symptoms of organ disease, acute complication and hypertension at every visit
• Assess and reinforce understanding of "basic" self-management knowledge at every visit
• Check HbA1c levels
  — Quarterly, coupled with an office visit, if goals are not met and/or treatment changes are required
  — Semiannually, if goals are met
• Annual lipid analysis
• Microalbumin measurement annually
• Foot exam at each visit
• Annual dilated retinal exam by a vision specialist
• Evaluate management plan at each visit (at least every six months)

Continued on next page
Clinical Practice Guidelines for Diabetes, Continued

**Therapy**

- An individualized diet plan with at least one initial consultation with a Registered Dietitian
- An individualized exercise regimen
- Type 1 Diabetes Drugs: insulin injections as indicated based upon daily self-glucose monitoring or continuous insulin via pump with preprandial insulin boluses
- Type 2 Diabetes Drugs: staged introduction of oral hypoglycemic and insulin sparing agents and/or insulin regimens of increasing complexity as needed to achieve glycemic targets
- Angiotensin-converting enzyme (ACE) inhibitors: patients with hypertension and albuminuria/nephropathy and patients over age 55 with one or more cardiac risk factors
- Angiotensin receptor blockers (ARBs): treatment of choice for type 2 patients with hypertension and albuminuria/nephropathy
- Early intensive management of hyperglycemia
- Annual influenza vaccine
- Pneumococcal vaccine
- Contact frequency:
  - Daily for initiation of insulin or change in regimen
  - Weekly for initiation of oral hypoglycemic agent(s) or change in regimen
  - Quarterly for patients not meeting goals
  - Semiannually for other patients

*Please refer to the attached quick reference guide, "Target Parameters for Care of Patients with Diabetes Mellitus*

**Patient Instructions**

- Self-management and problem solving (e.g., sick day management, use of glucagon, hypoglycemia recognition, carbohydrate counting, record keeping)
- Individualized self-glucose monitoring
- Preventive foot and skin care
- Self-referral for diabetic retinal exam

**Specialist Involvement**

Specialist involvement may be indicated when the following findings are present:

- Any hospital admission for diabetes or acute metabolic complications
- Evidence of target organ disease
- Persistent elevation of HbA1c
- Pre-conception for females during child bearing years and post-conception
- Consideration and management of an insulin pump
TARGET PARAMETERS FOR CARE OF PATIENTS WITH DIABETES MELLITUS
Summary of ADA Standards of Medical Care for Patients with Diabetes Mellitus—2002

Clinical Parameters:
- Blood Pressure <130/80
- HbA1c <7%
- Preprandial FSG between 80 and 120; Bedtime FSG between 100 and 140
- HDL — For Females >55, For Males >45
- LDL <100
- Triglycerides <150

Laboratory and Other Testing:
- HbA1c: at least twice a year; up to 4 times yearly for elevated, unstable or with changes
- Urine for microalbuminuria: within 5 years of diagnosis for type 1 diabetics and immediately for type 2 diabetics, and annually
- Urine for ketones, protein and sediment, initial visit and as needed
- Fasting lipid profile (total cholesterol, HDL, triglycerides, LDL) at least annually
  - Low risk- lipid profiles may be every 2 years (refer to ATP III recommendations)
- Serum creatinine, initial visit and as needed
- TSH in all type 1 diabetics and in type 2 diabetics as clinically indicated
- ECG

Selected Medications:
- Aspirin (75 to 325 mg/day): all diabetics with macrovascular disease; patients = 40 years and one or more cardiac risk factors; patients age 30 to 40 years with other (besides diabetes) cardiovascular risk factors. Aspirin generally contraindicated in patients under 21 years
- Angiotensin-converting enzyme (ACE) inhibitors: patients with hypertension and albuminuria/nephropathy and patients over age 55 with one or more cardiac risk factors
- Angiotensin receptor blockers (ARBs): treatment of choice for type 2 patients with hypertension and albuminuria/nephropathy
- Beta Blockers: patients with history of MI
- Statins for pharmacologic LDL lowering
- Fibrates for pharmacologic HDL raising

Preventive Measures:
- Yearly influenza vaccine
- Pneumovax: repeat in patients over the age of 65 years if previously vaccinated 5+ years prior

Complication Prevention and Management:
- Annual assessment of cardiovascular risk factors (dyslipidemia, hypertension, smoking, family history, albuminuria)
- Cardiac risk stratification (exercise stress test/cardiology referral as appropriate) in patients with cardiac symptoms, abnormal resting ECGs, history of peripheral or carotid arterial disease, sedentary 35+ year olds beginning exercise programs and those with 2 or more cardiac risk factors
- Pediatric:
  - Visual foot examination on each visit; comprehensive (including monofilament and tuning fork testing) annually
  - Referral of high-risk patients to podiatry
  - Referral for vascular assessment and exercise/surgical options if claudication found
- Ophthalmologic:
  - Initial comprehensive dilated eye examination within 3-5 years of diagnosis (type 1) and on diagnosis (type 2); annually thereafter
- Medical Nutrition Therapy (MNT) targeting blood glucose, lipid and blood pressure goals
  - Lifestyle changes: balanced, low saturated fat diet
  - Referral to registered dietitian specializing in diabetes management

Self Management Goals:
- Glucose self-monitoring:
  - 3 or more times per day - type 1; sufficient to reach goals - type 2
- Medical Nutrition Therapy
- Body Mass Index <25
- Regular exercise (manage around complications)
- Smoking cessation
- Adherence to medication regimen
- Daily self foot exams

See full copy of guidelines for added information on the management of special populations or persons with co-morbidities.
http://care.diabetesjournals.org/cgi/content/full/25/suppl_1/S33

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Rev. 9/02
Clinical Practice Guidelines for Congestive Heart Failure (CHF)

This clinical practice guideline (CPG) for Congestive Heart Failure (CHF) is based on the Agency for Health Care Policy and Research Clinical Practice Guideline No. 11, Heart Failure Evaluation and Care of Patients with Left Ventricular Systolic Dysfunction. It incorporates recently published recommendations from the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (JACC-Vol. 38, Nov. 7, 2001). This CPG is not intended to replace your clinical medical judgment. A physician's medical decisions should be based on current medical knowledge and practices, taking into consideration the clinical circumstances of each individual patient.

Goals

To provide guidelines for:

• Early and ongoing control of congestive heart failure symptoms through lifestyle management and pharmacotherapy to reduce complications, improve outcomes and life expectancy
• Preserving the left ventricular myocardium
• Achieving optimal pharmacotherapy with minimal or no side effects
• Minimizing the need for acute services (ER encounters, urgent care and hospitalizations)

Assessment and Diagnosis

• Complaints of paroxysmal nocturnal dyspnea, orthopnea or new-onset dyspnea on exertion
• History and physical examination to include chest X-ray, electrocardiogram (ECG), complete blood count (CBC), serum electrolytes, serum creatinine, serum albumin, liver function tests and urinalysis
• Echocardiography or radionuclide ventriculography to measure left ventricular ejection fraction (< 35% to 40%)
• T4 and thyroid-stimulating hormone (TSH) level for patients > 65 years of age, or who have atrial fibrillation or evidence of thyroid disease

For Stages of CHF, see Table 1, excerpted from the report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (JACC-Vol. 38, Nov. 7, 2001, pages 2102-2103).

Therapy

Routine Outpatient Management

• Daily weight recording/monitoring. Instruct the member when to call the physician for unexplained weight gain of greater than three to five pounds, unless a lower range is prescribed
• Daily fluid intake monitoring

Continued on next page
Clinical Practice Guidelines for Congestive Heart Failure (CHF), Continued

**Therapy, Continued**

- Low sodium diet
- Prescribed exercise program
- Smoking cessation
- Alcohol restriction
- Annual influenza vaccine
- Pneumococcal vaccine (generally once in a lifetime)

**Medications commonly used**

- Thiazide diuretics, loop diuretics, Potassium-sparing diuretics or Thiazide-related diuretics
- ACE inhibitors
- Beta Blockers
- Digoxin
- Hydralazine
- Isosorbide Dinitrate

*Continued on next page*
Clinical Practice Guidelines for Congestive Heart Failure (CHF), Continued

Hospital Management

May be indicated if the following findings are present:

• Clinical or electrocardiographic evidence of acute myocardial ischemia
• Pulmonary edema or severe respiratory distress
• Oxygen saturation below 90% (not due to pulmonary disease)
• Severe complicating medical illness (e.g., pneumonia)
• Anasarca
• Symptomatic hypotension or syncope
• Persistent NYHA Class 3 or 4 despite maximal outpatient therapy

Post hospital patient contact should be within one week following discharge to ensure patient understanding and compliance with treatment plan.

General Counseling

• Explanation of heart failure and the reason for symptoms
• Cause or probable cause of heart failure
• Expected symptoms
• Symptoms of worsening heart failure
• What to do if symptoms worsen
• Self-monitoring of daily weights
• Explanation of treatment/plan of care
• Clarification of patient’s responsibilities
• Importance of cessation of tobacco use
• Role of family members or other caregivers in the treatment/plan of care
• Availability and value of qualified local support group
• Importance of obtaining vaccinations against influenza and pneumococcal disease
• Importance of compliance with the treatment/plan of care

Prognosis

• Life expectancy
• Advance directives
• Advice for family members in the event of sudden death

Activity Recommendations

• Recreation, leisure and work activity
• Exercise
• Sexual activity and coping strategies

Continued on next page
Clinical Practice Guidelines for Congestive Heart Failure (CHF), Continued

Dietary Recommendations

- Sodium restriction
- Avoidance of excessive fluid intake
- Fluid restriction, if required
- Alcohol restriction

Medications

- Effects of medications on quality of life and survival
- Dosing
- Likely side effects and what to do if they occur
- Coping mechanisms for complicated medical regimens
- Availability of lower cost medications or financial assistance

Specialist Involvement

Specialist involvement is indicated when the following findings are present:

- Intolerance of ACE inhibitors
- Atrial or ventricular arrhythmias
- Suspicion of correctable cause of heart failure (ischemia, valve disease)
- Diastolic dysfunction
- Difficulty achieving or maintaining control of symptoms
Clinical Practice Guidelines for Hypertension

The hypertension guidelines are based on the Sixth Report of the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure, NIH Publication No. 98-4080. This CPG is not intended to replace your clinical medical judgment. A physician's medical decisions should be based on current medical knowledge and practices, taking into consideration the clinical circumstances of each individual patient.

To provide guidelines for:
• Early and ongoing control of high blood pressure through lifestyle management and pharmacotherapy to reduce complications, improve outcomes and life expectancy
• Preserving the myocardium
• Minimizing the need for future coronary revascularization
• Achieving optimal pharmacotherapy with minimal or no side effects
• Minimizing the need for acute services (ER encounters, urgent care and hospitalizations)

Major Risk Factors
— Smoking
— Dyslipidemia
— Diabetes mellitus
— Age > 60 years
— Gender: males and postmenopausal females
— Family history for males < age 55 and females < age 65

Target Organ Damage/Clinical Cardiovascular Disease
— Heart disease: left ventricular hypertrophy, angina/prior myocardial infarction, prior coronary artery bypass graft, heart failure
— Stroke or TIA
— Nephropathy
— Peripheral arterial disease
— Hypertensive retinopathy

Stages
— High-normal = 130-139/85-89 mm Hg
— Stage 1 = 140-159/90-99 mm Hg
— Stages 2 and 3 = ≥ 160 ≥ 100 mm Hg

Risk Groups
— Risk Group A - no major risk factors, no target organ damage or clinical cardiovascular disease
— Risk Group B - at least one major risk factor, not including diabetes but no target organ damage or clinical cardiovascular disease
— Risk Group C - target organ damage and/or clinical cardiovascular disease and/or diabetes with or without other risk factors

Continued on next page
Clinical Practice Guidelines for Hypertension, Continued

Management*

- Lifestyle modifications:
  - Smoking cessation
  - Weight reduction
  - Diet Modification: sodium restriction, reduction of saturated fat and cholesterol
  - Alcohol restriction
  - Prescribed exercise program
  - Calcium, Magnesium and Potassium intake maintenance

- Pharmacotherapy if blood pressure remains uncontrolled:
  - Start with diuretic or beta-blocker unless contraindicated
  - Consider combination drugs
  - Consider other agents or a second agent, if no response

*Treatment and goal blood pressure varies depending on blood pressure stage and risk group. Lifestyle modification should be definitive therapy for some patients and adjunctive therapy for all patients recommended for pharmacotherapy. For diabetics, please refer to the Diabetes Clinical Practice Guideline.

General Counseling

- General Counseling
  - Explanation of hypertension
  - Symptoms of worsening hypertension and what to do
  - Self-monitoring
  - Explanation of treatment/plan of care
  - Clarification of patient responsibilities
  - Importance of lifestyle modification
  - Importance of compliance with the treatment/plan of care

- Activity Recommendations
  - Recreation, leisure and work activity
  - Exercise

- Medications
  - Potential side effects and what to do if they occur

Specialist Involvement

Specialist involvement may be indicated when the following findings are present:
- Difficulties in achieving or maintaining control of hypertension
- Hospitalization
- Worsening target organ damage and/or clinical cardiovascular disease
JNC VI Risk Stratification and Treatment Recommendations

- Determine blood pressure stage.
- Determine risk group by major risk factors and TOD/CCD.
- Determine treatment recommendations (by using the table below).
- Determine goal blood pressure.
- Refer to specific treatment recommendations.

### Major Risk Factors
- Smoking
- Dyslipidemia
- Diabetes mellitus
- Age > 60 years
- Gender:
  - Men
  - Postmenopausal women
- Family history:
  - Women < age 65
  - Men < age 55

### TOD/CCD (Target Organ Damage/ Clinical Cardiovascular Disease)
- Heart diseases
  - LVH
  - Angina/prior MI
  - Prior CABG
- Heart failure
- Stroke or TIA
- Nephropathy
- Peripheral arterial disease
- Hypertensive retinopathy

<table>
<thead>
<tr>
<th>Blood pressure stages (mm Hg)</th>
<th>Risk Group A</th>
<th>Risk Group B</th>
<th>Risk Group C</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-normal (130-139/85-89)</td>
<td>No major risk factors No TOD/CCD</td>
<td>At least one major risk factor, not including diabetes No TOD/CCD</td>
<td>TOD/CCD and/or diabetes, with or without other risk factors</td>
</tr>
<tr>
<td>Stage 1 (140-159/90-99)</td>
<td>Lifestyle modification</td>
<td>Lifestyle modification</td>
<td>Drug therapy for those with heart failure, renal insufficiency or diabetes</td>
</tr>
<tr>
<td></td>
<td>(up to 12 months)</td>
<td>(up to 6 months)</td>
<td>Lifestyle modification</td>
</tr>
<tr>
<td>Stages 2 and 3 (≥160/≥100)</td>
<td>Drug therapy</td>
<td>Drug therapy</td>
<td>Drug therapy</td>
</tr>
<tr>
<td></td>
<td>Lifestyle modification</td>
<td>Lifestyle modification</td>
<td>Lifestyle modification</td>
</tr>
</tbody>
</table>

Example: A patient with diabetes and a blood pressure of 142/94 mm Hg plus left ventricular hypertrophy should be classified as having stage 1 hypertension with target organ disease (left ventricular hypertrophy) and with another major risk factor (diabetes). This patient would be categorized as Stage 1, Risk Group C, and recommended for immediate initiation of pharmacologic treatment.

### Goal Blood Pressure
- <140/90 mm Hg: Uncomplicated hypertension, Risk Group A, Risk Group B, Risk Group C except for the following:
- <130/85 mm Hg: Diabetes; renal failure; heart failure
- <125/75 mm Hg: Renal failure with proteinuria > 1 gram/24 hours

### Specific Treatment Recommendations
Lifestyle modification should be definitive therapy for some patients and adjunctive therapy for all patients recommended for pharmacologic therapy. Turn page over for a list of recommended lifestyle modifications.

### Initial Drug Choices
- Start with a low dose of a long-acting once-daily drug, and titrate dose
- Low-dose combinations may be appropriate

<table>
<thead>
<tr>
<th>Uncomplicated Hypertension</th>
<th>Compelling Indications</th>
<th>Specific Indications for the Following Drugs:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diuretics</td>
<td>start with ACE inhibitor if proteinuria is present</td>
<td>(See Table 9 in JNC VI for specific indications)</td>
</tr>
<tr>
<td>Beta-blockers</td>
<td>start with ACE inhibitor or diuretic</td>
<td>ACE inhibitors</td>
</tr>
<tr>
<td>Heart failure</td>
<td>beta-blocker (non-β1A); ACE inhibitor for LV dysfunction</td>
<td>Angiotensin II receptor blockers</td>
</tr>
<tr>
<td>Myocardial infarction</td>
<td>diuretics (preferred) or calcium antagonists</td>
<td>Alpha-blockers</td>
</tr>
<tr>
<td>Isolated systolic hypertension (older patients)</td>
<td>long-acting DHP</td>
<td>Alpha-beta-blockers</td>
</tr>
</tbody>
</table>

Page H — 26
### The JNC VI Guide To Prevention and Treatment of Hypertension

#### Recommendations

<table>
<thead>
<tr>
<th>Blood Pressure Measurement</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient should:</td>
<td></td>
</tr>
<tr>
<td>• Rest for 5 minutes before measurement.</td>
<td></td>
</tr>
<tr>
<td>• Refrain from smoking or ingesting caffeine for 30 minutes prior to measurement.</td>
<td></td>
</tr>
<tr>
<td>• Be seated with feet flat on floor, back and arm supported, arm at heart level.</td>
<td></td>
</tr>
<tr>
<td>Clinician should:</td>
<td></td>
</tr>
<tr>
<td>• Use the appropriate size cuff for the patient; the bladder should encircle at least 80 percent of the upper arm.</td>
<td></td>
</tr>
<tr>
<td>• Use calibrated or mercury manometer.</td>
<td></td>
</tr>
<tr>
<td>• Average two or more readings, separated by at least 2 minutes.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary Prevention</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Encourage patients to make healthy lifestyle choices:</td>
<td></td>
</tr>
<tr>
<td>• Quit smoking to reduce cardiovascular risk.</td>
<td></td>
</tr>
<tr>
<td>• Lose weight, if needed.</td>
<td></td>
</tr>
<tr>
<td>• Restrict sodium intake to no more than 100 mmol per day.</td>
<td></td>
</tr>
<tr>
<td>• Limit alcohol intake to no more than 1-2 drinks per day.</td>
<td></td>
</tr>
<tr>
<td>• Get at least 30-45 minutes of aerobic activity on most days.</td>
<td></td>
</tr>
<tr>
<td>• Maintain adequate potassium intake—about 90 mmol per day.</td>
<td></td>
</tr>
<tr>
<td>• Maintain adequate intakes of calcium and magnesium for general health.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Set a clear goal of therapy based on patient's risk. Control blood pressure to below:</td>
<td></td>
</tr>
<tr>
<td>• 140/90 mm Hg for patients with uncomplicated hypertension; set a lower goal for those with target organ damage or clinical cardiovascular disease.</td>
<td></td>
</tr>
<tr>
<td>• 130/85 mm Hg for patients with diabetes.</td>
<td></td>
</tr>
<tr>
<td>• 125/75 mm Hg for patients with renal insufficiency with proteinuria greater than 1 gram per 24 hours.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Begin with lifestyle modifications (see primary prevention box) for all patients. Be supportive!</td>
<td></td>
</tr>
<tr>
<td>• Add pharmacologic therapy if blood pressure remains uncontrolled.</td>
<td></td>
</tr>
<tr>
<td>• Start with a diuretic or beta-blocker unless there are compelling indications to use other agents. Use low dose and titrate upward. Consider low-dose combinations.</td>
<td></td>
</tr>
<tr>
<td>• If no response, try a drug from another class or add a second agent from a different class (diuretic if not already used).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Adherence</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Encourage lifestyle modifications. Be supportive!</td>
<td></td>
</tr>
<tr>
<td>• Educate patient and family about disease. Involve them in measurement and treatment.</td>
<td></td>
</tr>
<tr>
<td>• Maintain communications with patient.</td>
<td></td>
</tr>
<tr>
<td>• Discuss how to integrate treatment into daily activities.</td>
<td></td>
</tr>
<tr>
<td>• Keep care inexpensive and simple.</td>
<td></td>
</tr>
<tr>
<td>• Favor once-daily, long-acting formulations.</td>
<td></td>
</tr>
<tr>
<td>• Use combination tablets, when needed.</td>
<td></td>
</tr>
<tr>
<td>• Consider using generic formulas or larger tablets that can be divided. This may be less expensive.</td>
<td></td>
</tr>
<tr>
<td>• Be willing to stop unsuccessful therapy and try a different approach.</td>
<td></td>
</tr>
<tr>
<td>• Consider using nurse case management.</td>
<td></td>
</tr>
</tbody>
</table>

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NATIONAL INSTITUTES OF HEALTH
NATIONAL HEART, LUNG, AND BLOOD INSTITUTE
Clinical Practice Guidelines for Management of Cholesterol (Lipids)

Guidelines
The cholesterol guidelines are based on the National Cholesterol Education Program (NCEP) Third Report of the Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol in Adults (Adult Treatment Panel III or ATP III). This CPG is not intended to replace your clinical medical judgment. A physician's medical decisions should be based on current medical knowledge and practices, taking into consideration the clinical circumstances of each individual patient.

Goals
To provide guidelines for:
- Screening of cholesterol in asymptomatic adults
- Management of primary and secondary prevention of coronary heart disease (CHD), stroke and peripheral vascular disease in adults
- Reduction of risk through lifestyle changes and pharmacotherapy
- Identification of risk factors through history and physical, including family history and laboratory testing/screening

Assessment
Identify risk factors through history and physical, including family history and laboratory testing/screening

Major Risk Factors
- Male $\geq$ 45 years of age
- Female $\geq$ 55 years of age
- Family history of premature coronary heart disease (CHD before 55 years of age in male first degree relative or before 65 years of age in female first degree relative)
- Cigarette smoking
- Hypertension confirmed by several blood pressure readings of $\geq$ 140/90 mmHg or on antihypertensive medications
- Low (< 40 mg/dL) HDL cholesterol

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>LDL Goal (mg/dL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD and CHD risk equivalents†</td>
<td>&lt; 100</td>
</tr>
<tr>
<td>Multiple (2+) risk factors*</td>
<td>&lt; 130</td>
</tr>
<tr>
<td>Zero to one risk factor</td>
<td>&lt; 160</td>
</tr>
</tbody>
</table>

Continued on next page
Clinical Practice Guidelines for Management of Cholesterol (Lipids), Continued

Assessment, Continued

†CHD risk equivalents comprise:
   • Other clinical forms of atherosclerotic disease (peripheral arterial disease, abdominal aortic aneurysm, and symptomatic carotid artery disease)
   • Diabetes - refer to the diabetes clinical practice guideline
   • Multiple risk factors that confer a 10-year risk~ for CHD > 20%

*Risk factors listed above

~10 year risk assessment is based on Framingham scores for the probability of having a CHD event in 10 years based on risk factors.

Screening

Fasting lipoprotein profile (LDL cholesterol, total cholesterol, HDL cholesterol and triglycerides) measured in all adults 20 years of age and older at least once every five years. If testing can only be non-fasting, only total cholesterol and HDL will be usable. When testing is non-fasting, and total cholesterol is ≥ 200 mg/dL or HDL is < 40 mg/dL, a follow-up fasting lipoprotein profile is needed.

Fasting Lab Values

**LDL Cholesterol**

<table>
<thead>
<tr>
<th>Value</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 100</td>
<td>Optimal</td>
</tr>
<tr>
<td>100-129</td>
<td>Near optimal/above optimal</td>
</tr>
<tr>
<td>130-159</td>
<td>Borderline high</td>
</tr>
<tr>
<td>160-189</td>
<td>High</td>
</tr>
<tr>
<td>≥ 190</td>
<td>Very high</td>
</tr>
</tbody>
</table>

**Total Cholesterol**

<table>
<thead>
<tr>
<th>Value</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 200</td>
<td>Desirable</td>
</tr>
<tr>
<td>200-239</td>
<td>Borderline high</td>
</tr>
<tr>
<td>≥ 240</td>
<td>High</td>
</tr>
</tbody>
</table>

**HDL Cholesterol**

<table>
<thead>
<tr>
<th>Value</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 40</td>
<td>Low</td>
</tr>
<tr>
<td>≥ 60</td>
<td>High</td>
</tr>
</tbody>
</table>

**Triglycerides**

<table>
<thead>
<tr>
<th>Value</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 150</td>
<td>Normal</td>
</tr>
<tr>
<td>150-199</td>
<td>Borderline high</td>
</tr>
<tr>
<td>200-499</td>
<td>High</td>
</tr>
<tr>
<td>≥ 500</td>
<td>Very high</td>
</tr>
</tbody>
</table>

Continued on next page
Initiate multifaceted lifestyle approach to reduce risk of CHD.

**Therapeutic Lifestyle Changes (TLC):**
- **TLC diet:**
  - Saturated fat < 7% of calories, cholesterol < 200 mg/day
  - Consider increased viscous (soluble) fiber (10-25 g/day) and plant stanols/sterols (2g/day) as therapeutic options to enhance LDL lowering
- **Weight management**
- **Increased physical activity**

**Pharmacotherapy**
- Initiate drug therapy upon discharge from inpatient care for a major coronary event with LDL cholesterol level of $\geq 130 \text{ mg/dL}$ within 24 hours of admission.
- Consider adding plant stanols/sterols following 6 weeks of TLC diet therapy with goals not achieved. Drug therapy does not replace TLC regimen.
- Intensify drug therapy following 6 weeks of plant stanols/sterols and increased fiber with goals not achieved. Again TLC regimen continues.
- LDL $\geq 190 \text{ mg/dL}$ often requires combinations of statin and bile acid sequestrant drug therapy.


**Drug classifications**
- HMG CoA reductase inhibitors (statins)
- Bile acid sequestrants
- Nicotinic acid
- Fibric acids

**Goals of pharmacotherapy**

<table>
<thead>
<tr>
<th>Risk Category</th>
<th>LDL goal</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD or CHD Risk Equivalents</td>
<td>&lt; 100 mg/dL</td>
</tr>
<tr>
<td>(10-year risk &gt; 20%)</td>
<td></td>
</tr>
<tr>
<td>2+ Risk Factors</td>
<td>&lt; 130 mg/dL</td>
</tr>
<tr>
<td>(10-year risk $\leq 20%$)</td>
<td></td>
</tr>
<tr>
<td>0-1 Risk Factor</td>
<td>&lt; 160 mg/dL</td>
</tr>
</tbody>
</table>

**Secondary targets of therapy**
- Metabolic Syndrome
- Elevated serum triglycerides
- Other Dislipidemias

*Continued on next page*
### Clinical Practice Guidelines for Management of Cholesterol (Lipids), Continued

<table>
<thead>
<tr>
<th>Patient Instructions</th>
<th>Specialist Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Incorporate lifestyle modifications and therapies into daily routines</td>
<td>• Lipid specialist may be necessary for severe, complex or refractory lipid disorders</td>
</tr>
<tr>
<td>• Maintain an active role in care and enlist aid of family members, community resources and public education programs to achieve goals</td>
<td></td>
</tr>
<tr>
<td>• Take all medications as prescribed, even if symptom free</td>
<td></td>
</tr>
</tbody>
</table>
Clinical Practice Guidelines for Use of Antiretroviral Treatment for Adults with a Confirmed Diagnosis of HIV/AIDS

Guidelines

These practice guidelines are based on Guidelines for the Use of Antiretroviral Agents In HIV-infected Adults and Adolescents. Panel on clinical Practices for Treatment of HIV Infection, Department of Health and Human Services, and Henry J. Kaiser Foundation, February 5, 2001, and are not intended to replace your clinical medical judgment. Each medical decision should be based on current medical knowledge and practices considered in the clinical circumstances of the individual patient.

Goals

To provide guidelines for:

- the use of antiretroviral therapy to decrease HIV RNA levels (Viral Load)
- the use of antiretroviral therapy to increase CD4 T lymphocyte count (CD4) counts
- decreasing the risk of opportunistic infection
- optimal pharmacotherapy with minimal insult to body systems and side effects.

Assessment

- Complete history and physical at least yearly
- Lab evaluation of Viral Load, CD4, CBC, liver profile, lipid profile, chemistry profile, VDRL or RPR, HCV level, and HBV level
- PPD skin test
- Inquire about symptoms of night sweats, unexplained fever, fatigue, rash, lymphadenopathy, thrush, weight loss, or changing body composition
- Yearly eye exam

Therapy

- Asymptomatic with CD4 count > 200 but < 350 and any value for Viral Load — Generally would offer treatment, but must also consider the current clinical status and patient’s willingness to accept and comply with therapy*
- Asymptomatic with CD4 count > 350 and Viral Load > 55,000 by RNA — Initiate therapy
- Asymptomatic with CD4 count > 350 and Viral Load < 55,000 by RNA — Generally can defer therapy and observe lab values and clinical presentation
- Symptomatic or AIDS diagnosis regardless of lab values — Initiate therapy
- Hepatitis A and B immunization recommended for all patients
- Pneumovax vaccine recommended for all patients

Continued on next page
Clinical Practice Guidelines for Use of Antiretroviral Treatment for Adults with a Confirmed Diagnosis of HIV/AIDS, Continued

Therapy, Continued

- Viral Load and CD4 count testing frequency:
  - Every 3 - 4 months for routine monitoring or
  - 2 - 8 weeks after initiation of therapy and monthly until Viral Load levels are undetectable or
  - 2 - 8 weeks following a change of therapy and monthly until Viral Load levels are undetectable or
  - At the time of a significant clinical event

Patient Education

General Counseling

- Explanation of HIV/AIDS disease process
- Explanation of disease transmission
- Symptoms to report immediately to the physician
- Explanation of treatment plan
- Patient’s responsibilities
- Affect of tobacco, alcohol, or drug usage
- Availability of community-based support services
- Recommended vaccinations
- Role of nutrition
- Role of exercise
- Need for advanced directives or other legal documents

Medications

- Dosing schedule to include relation to meals
- Expected side effects and management measures available
- Importance of adherence to the schedule and consequence of non-adherence
- Coping mechanisms for complicated regimens
- Strategies for work schedule/issues
- Strategies for travel

Specialist Involvement

Specialist involvement may be necessary in the following situations:

- Yearly eye exam
- Complicated regimen
- Disease progression despite treatment
- Secondary malignancy
- Co-morbid conditions complicating treatment
Clinical Practice Guidelines for Treatment of Major Depressive Disorder in Adults

Introduction

The Clinical Practice Guideline for Major Depressive Disorder in Adults is based on the American Psychiatric Association’s clinical practice guideline for Major Depressive Disorder in Adults and a review of the current scientific literature. Since the American Psychiatric Association published its guideline in 1993, there have been notable advances in the treatment of Major Depressive Disorder (MDD).

This summary of the guideline is intended to help the provider select treatments with strong scientific support. When using it bear in mind the following 4 principles:

1. This guideline is intended to augment, not replace, sound clinical judgement.
2. The choice of therapeutic approach ultimately belongs to the patient.
3. Knowledge about treatment efficacy is dynamic; stay current with the latest scientific evidence about treatment.
4. The confidence ratings in this guideline form the basis for comparison within the same category of treatment.

Natural History/Etiology

MDD is a common condition whose lifetime prevalence ranges up to 24% for women and up to 15% in men.

MDD is a heterogeneous condition and a variety of biological, psychological, and social theories are used to describe its development. However, there is no unifying theory that thoroughly explains the development of MDD.

Treatment Strategies

- Accurately diagnose the form of MDD as treatment selection is increasingly driven by the type of MDD.
- Carefully rule out medical-surgical or behavioral conditions that can mask, mimic, or potentiate MDD.
- Prepare the patient and, as appropriate, his/her support system for treatment by discussing MDD and its treatment.
- Use the least intensive, clinically appropriate setting.
- Monitor for signs that the patient is a danger to self or others, and intervene immediately if a crisis occurs.
- Consider psychotherapy for mild MDD, psychotherapy or pharmacotherapy for moderate MDD, and pharmacotherapy or ECT for severe MDD.
- Consider combining psychotherapy and pharmacotherapy when either treatment is partially effective, or there are discrete targets of therapy.
- Consider modifying standard medication regimens with older adults, pregnant women, or whenever a medical-surgical condition is likely to alter an agent’s pharmacokinetics and pharmacodynamics.

Continued on next page
Clinical Practice Guidelines for Treatment of Major Depressive Disorder in Adults  

Treatment Strategies, Continued

- Periodically review the response to treatment with the patient, and provide additional psychoeducation as needed.
- If the response to treatment is not as anticipated, reconsider the treatment plan by
  — verifying the diagnosis;
  — confirming whether the patient is following the treatment plan;
  — making certain that an antidepressant medication’s dose is adequate;
  — considering a combination of psychotherapy and pharmacotherapy;
  — considering a substitution agent;
  — considering an augmentation strategy.
- Consider seeking an expert consultation if the patient still does not respond to treatment as anticipated.

Pharmacotherapy
[I] Substantial Clinical Confidence
- Generally begin pharmacotherapy with a non-MAOI agent.
- SSRI’s are a first line agent for mild to moderate forms of MDD.
- Cyclic antidepressants are employed to treat severe or refractory MDD, or when MDD has melancholic features.
- MAOI’s are second or third line agents, and are most often employed when MDD has atypical features.

[II] Moderate Clinical Confidence
- Atypical antidepressants are an alternative to SSRI’s and cyclic antidepressants especially when there are intolerable side effects.
- Substitution is indicated when there has been no response to an adequate trial.
- Patients who don’t respond to one SSRI may respond to another.
- Augmentation is indicated when there has been partial response, or other target symptoms suggest the use of a second agent.

Psychosocial Interventions
[I] Substantial Clinical Confidence
- Consider cognitive therapy or interpersonal therapy during the acute phase of treatment.
- Consider combining psychotherapy and pharmacotherapy when there is a severe, recurrent form of MDD.
- Consider Assertive Community Treatment when MDD is severe and persists.

Continued on next page
Clinical Practice Guidelines for Treatment of Major Depressive Disorder in Adults

Psychosocial Interventions, Continued

[II] Moderate Clinical Confidence
- Consider behavioral therapy or brief dynamic therapy during the acute phase.
- Consider cognitive therapy or interpersonal therapy during the continuation phase.
- Psychotherapy is not recommended as a standalone treatment during the maintenance phase.

Electroconvulsive [I] Substantial Clinical Confidence
Therapy
- ECT is especially effective when MDD is accompanied by psychotic or melancholic features.
- ECT is indicated when:
  — an urgent response is needed;
  — alternatives are riskier;
  — there is a history of superior response;
  — the patient requests ECT.
- Cautiously employ ECT when there are severe cardiovascular or neurological conditions as well as during pregnancy. Consult with an appropriate specialist.

[II] Moderate Clinical Confidence
- Continuation and maintenance ECT is indicated when:
  — there is a history of recurrent, episodic depression and prior favorable response to ECT;
  — the patient has not benefited from pharmacotherapy;
  — the patient is able to comply with ambulatory ECT.

Light Therapy
[II] Moderate Clinical Confidence
- Consider light therapy when there is an evident seasonal pattern of depression.
- Thirty minutes exposure at 10,000 lux is a convenient schedule while 2 hours exposure at >2500 lux may be better when patients cannot tolerate greater light intensities.

(Note: Some benefit plans do not cover purchase or rental of light therapy devices and associated professional charges. See the benefit plan for details.)