

**Jai Medical Systems
Managed Care Organization, Inc.
Provider Manual**

Revised 1/2014

Introduction to the Provider Manual

HealthChoice is Maryland's Medicaid managed care program. Overseen by the Maryland Department of Health and Mental Hygiene (DHMH), the HealthChoice program serves over 500,000 individuals. These individuals are enrolled in one of the participating managed care organizations (MCOs). Each MCO has policies and procedures that providers who deliver services to recipients must adhere to. Any questions a provider has about the policies of individual MCOs should be addressed by the provider information supplied by the MCO they participate in.

While each HealthChoice MCO has its own policies and procedures, many program elements apply to all providers, regardless of the MCO. The purpose of this manual is to explain those elements and be a useful reference for providers who participate in the HealthChoice program. The manual is divided into six sections:

Section I - General Information. This section provides general descriptive information on the HealthChoice program including, but not limited to, program eligibility, MCO reimbursement policies, continuity of care and transportation.

Section II - Provider Responsibilities. This section discusses expectations of all providers, regardless of MCO affiliation.

Section III - HealthChoice Benefits and Services. This section provides a listing of the benefits that are and are not the responsibility of all MCOs that participate in HealthChoice. This section briefly outlines some of the optional benefits that Jai Medical Systems Managed Care Organization, Inc. (Jai Medical Systems) may provide. This section also identifies benefit limitations and services that are not the responsibility of Jai Medical Systems.

Section IV - Specialty Mental Health Services . Individuals eligible for the HealthChoice program who are receiving specialty mental health services may receive some or all of their services outside of Jai Medical Systems network. This section details the services.

Section V - Rare and Expensive Case Management (REM). Enrollees with certain diagnoses may disenroll from Jai Medical Systems and receive their services through the REM program. This section details the REM program.

Section VI - DHMH Quality Improvement Program and MCO Oversight Activities. DHMH conducts numerous quality improvement activities for the HealthChoice program. This section reviews DHMH's quality improvement activities. These activities are separate from quality improvement activities that Jai Medical Systems may engage in.

Section VII – Forms & Attachments. This section contains forms and other reference materials that may be useful to a provider in the HealthChoice program.

HealthChoice Provider Manual

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Section I

General Information

THE MARYLAND HEALTHCHOICE PROGRAM

HealthChoice is Maryland's Medicaid managed care program. Almost three-quarters of the Medicaid population and the Maryland Children's Health Program (MCHP) are enrolled in this Program. The HealthChoice Program's philosophy is based on providing quality cost-effective and accessible health care that is patient-focused.

HEALTHCHOICE ELIGIBILITY

All individuals qualifying for Maryland Medical Assistance or MCHP are enrolled in the HealthChoice Program, except for the following categories:

- Individuals who receive Medicare;
- Individuals age 65 or over;
- Individuals who are eligible for Medicaid under spend down;
- Medicaid recipients who have been or are expected to be continuously institutionalized for more than 30 successive days in a long term care facility or in an institution for mental disease (IMD);
- Individuals institutionalized in an intermediate care facility for mentally retarded persons (ICF-MR);
- Recipients enrolled in the Model Waiver;
- Recipients who receive limited coverage, such as women who receive family planning services through the Family Planning Waiver, Primary Adult Care Program, or Employed Individuals with Disabilities Program;
- Inmates of public institutions, including a State operated institution or facility;
- A child receiving adoption subsidy who is covered under the parent's private insurance;
- A child under State supervision receiving adoption subsidy who lives outside of the State; or
- A child who is in an out-of-State placement.

If you have any questions about eligibility requirements or how your patients can apply for medical assistance benefits, you can visit the HealthChoice website at www.dhmf.state.md.us/mma/healthchoice/.

You can also call our Customer Service Department at (410) 433-2200 for more information.

All Medicaid recipients who are eligible for the HealthChoice Program, without exception, will be enrolled in an MCO or in the Rare and Expensive Case Management Program (REM). The REM

program is discussed in detail in Section V.

Medicaid-eligible individuals who are not eligible for HealthChoice will continue to receive services in the Medicaid fee-for-service system.

PROVIDER REIMBURSEMENT

Payment is in accordance with your provider contract with Jai Medical Systems (or with their management groups that contract on your behalf with Jai Medical Systems). In accordance with the Maryland Annotated Code, Health General Article 15-1005, we must mail or transmit payment to our providers eligible for reimbursement for covered services within 30 days after receipt of a clean claim. If additional information is necessary, we shall reimburse providers for covered services within 30 days after receipt of all reasonable and necessary documentation. We shall pay interest on the amount of the clean claim that remains unpaid 30 days after the claim is filed. You must verify through the Eligibility Verification System (EVS) that recipients are assigned to Jai Medical Systems before rendering services.

Reimbursement for hospitals and other applicable provider sites will be in accordance with Health Services Cost Review Commission (HSCRC) rates.

Jai Medical Systems is not responsible for payment of any remaining days of a hospital admission that began prior to a Medicaid recipient's enrollment in our MCO. We are however, responsible for reimbursement to providers for professional services rendered during the remaining days of the admission.

Self-Referred and Emergency Services

Jai Medical Systems will reimburse out-of-plan providers for the following services:

- Emergency services provided in a hospital emergency facility;
- Family planning services except sterilizations;
- School-based health center services. School-based health centers are required to send a medical encounter form to the child's MCO. We will forward this form to the child's PCP who will be responsible for filing the form in the child's medical record. A school-based health center reporting form can be found in Section VII;
- Pregnancy-related services when an enrollee has begun receiving services from an out-of-plan provider prior to enrolling in an MCO;
- Initial medical examination for children in State custody;
- Annual Diagnostic and Evaluation services for recipients with HIV/AIDS;
- Renal dialysis provided at a Medicare-certified facility;

- The initial examination of a newborn by an on-call hospital physician when we do not provide for the service prior to the baby's discharge;
- An initial assessment for substance abuse; and
- Substance abuse services such as individual and group counseling, detoxification, and inpatient care when provided by an ADAA certified provider and ASAM criteria is met.

Self-Referred Services for Children with Special Health Care Needs

Children with special health care needs may self-refer to providers outside of Jai Medical Systems network under certain conditions. Self-referral for children with special needs is intended to ensure continuity of care and appropriate plans of care. Self-referral for children with special health care needs will depend on whether or not the condition that is the basis for the child's special health care needs is diagnosed before or after the child's initial enrollment in Jai Medical Systems. Medical services directly related to a special needs child's medical condition may be accessed out-of-network only if the following specific conditions are satisfied:

- **New Enrollee:** A child who, at the time of initial enrollment, was receiving these services as part of a current plan of care may continue to receive these specialty services provided the pre-existing out-of-network provider submits the plan of care to us for review and approval within 30 days of the child's effective date of enrollment into Jai Medical Systems, and we approve the services as medically necessary.
- **Established Enrollee:** A child who is already enrolled in Jai Medical Systems when diagnosed as having a special health care need requiring a plan of care that includes specific types of services may request a specific out-of-network provider. We are obliged to grant the enrollee's request unless we have a local in-network specialty provider with the same professional training and expertise who is reasonably available and provides the same services and service modalities.

If Jai Medical Systems denies, reduces, or terminates the services, enrollees have an appeal right, regardless of whether they are a new or established enrollee. Pending the outcome of an appeal, we may reimburse for services provided.

PRIMARY CARE PROVIDER (PCP) CONTRACT TERMINATIONS

If you are a PCP and we terminate your contract for any of the following reasons, the enrollees assigned to you may elect to change to another MCO in which you participate by calling the Enrollment Broker within 90 days of the contract termination:

- For reasons other than the quality of care or your failure to comply with contractual requirements related to quality assurance activities; or
- Jai Medical Systems reduction of your reimbursement to the extent that the reduction in rate is greater than the actual change in capitation paid to Jai Medical Systems by the Department, and Jai Medical Systems and you are unable to negotiate a mutually acceptable

rate.

CONTINUITY OF CARE

As part of the HealthChoice program design, we are responsible for providing ongoing treatments and patient care to new recipients until an initial evaluation is completed and we develop a new plan of care.

The following steps are to be taken to ensure that enrollees continue to receive necessary health services at the time of enrollment into Jai Medical Systems:

- Appropriate service referrals to specialty care providers are to be provided in a timely manner.
- Authorization for ongoing specialty services will not be delayed while members await their initial PCP visit and comprehensive assessment. Services comparable to those that the member was receiving upon enrollment into Jai Medical Systems are to be continued during this transition period.
- If, after the member receives a comprehensive assessment, we determine that a reduction in or termination of services is warranted, we will notify the recipient of this change at least 10 days before it is implemented. This notification will tell the member that he/she has the right to formally appeal to the MCO or to the Department by calling Jai Medical Systems at (410) 433-2200 or the Enrollee Help Line at 1-800-284-4510. In addition, the notice will explain that if the member files an appeal within 10 days of our notification, and requests to continue receiving the services, then we will continue to provide these services until the appeal is resolved. You will receive a copy of this notification.

SPECIALTY REFERRALS

- We will maintain a complete network of adult and pediatric providers adequate to deliver the full scope of benefits as required by COMAR 10.09.66 and 10.09.67.
- If a specialty provider cannot be identified contact us at (410) 433-2200 or the Provider Hotline at 1-800-766-8692 for assistance.

TRANSPORTATION

You may contact the Local Health Department (LHD) to assist enrollees in accessing non-emergency transportation services. Jai Medical Systems will cooperate with and make reasonable efforts to accommodate logistical and scheduling concerns of the LHD.

Jai Medical Systems will provide non-emergency transportation necessary for our enrollees to access a covered service if we choose to provide the service at a location that is outside of the closest county (or Baltimore City) in which the service is available. Please also refer to the Local

Transportation Contacts list in Section III.

Section II

Provider Responsibilities

REPORTING COMMUNICABLE DISEASE

You must ensure that all cases of reportable communicable disease that are detected or suspected in an enrollee by either a clinician or a laboratory are reported to the LHD as required by Health - General Article, 18-201 to 18-216, Annotated Code of Maryland and COMAR 10.06.01 Communicable Diseases.

Any health care provider with reason to suspect that an enrollee has a reportable communicable disease or condition that endangers public health, or that an outbreak of a reportable communicable disease or public health-endangering condition has occurred, must submit a report to the health officer for the jurisdiction where the provider cares for the enrollee.

- The provider report must identify the disease or suspected disease and demographics on the enrollee including the name, age, race, sex, address of residence, hospitalization, date of death, etc. on a form provided by the Department (DHMH1140) as directed by COMAR 10.06.01.
- With respect to patients with tuberculosis, you must:
 - Report each confirmed or suspected case of tuberculosis to the LHD within 48 hours.
 - Provide treatment in accordance with the goals, priorities, and procedures set forth in the most recent edition of the Guidelines for Prevention and Treatment of Tuberculosis, published by DHMH.

Other Reportable Diseases and Conditions

- A single case of a disease of known or unknown etiology that may be a danger to the public health, as well as unusual manifestation(s) of a communicable disease, are reportable to the local health department.
- An outbreak of a disease of known or unknown etiology that may be a danger to the public health is reportable immediately by telephone.

Reportable Communicable Diseases - Laboratory Providers

Providers of laboratory services must report positive laboratory results as directed by Health - General Article §18-205, Annotated Code of Maryland.

In order to be in compliance with the Maryland HIV/AIDS reporting Act of 2007, Laboratory providers must report HIV positive members and all CD4 test results to the Health Department by using the member's name. The State of Maryland HIV/CD4 Laboratory Report Form DHMH 4492 must be used. The reporting law and the revised reporting forms may be found at the following website:

<http://dhmh.state.md.us/AIDS/HivReporting/HivReport>

Laboratories that perform mycobacteriology services located within Maryland, must report all positive findings to the Health Officer of the jurisdiction in which the laboratory is located. For out-of-state laboratories licensed in Maryland and performing tests on specimens from Maryland, the laboratory may report to the Health Officer of the county of residence of the patient or to Maryland DHMH, Division of Tuberculosis Control within 48 hours by telephone (410) 767-6698 or fax (410) 669-4215.

Jai Medical Systems will cooperate with LHDs in investigations and control measures for communicable diseases and outbreaks.

Please see the List of Reportable Communicable Diseases on the next page.

Reportable Communicable Diseases:

Amebiasis
Anaplasmosis
Animal Bites
Anthrax
Arboviral infections
Babesiosis
Botulism
Brucellosis
Campylobacter infection
Chancroid
Chlamydia infection
Cholera
Coccidioidomycosis
Creutzfeldt-Jakob Disease
Cryptosporidiosis
Cyclosporiasis
Dengue fever
Diphtheria
Ehrlichiosis
Encephalitis
Epsilon Toxin of Clostridium perfringens
Escherichia coli O157:H7 infection
Giardiasis
Glanders
Gonococcal Infection
Haemophilus influenzae, invasive disease
Hantavirus infection
Harmful Algal Bloom Related Illness
Hemolytic Uremic Syndrome, post-diarrheal
Hepatitis, Viral, (A, B, C, Delta, non-ABC, E, F, G, undetermined)
Influenza-associated pediatric mortality
Isosporiasis
Kawasaki Syndrome
LaCrosse Virus
Legionellosis
Leprosy
Leptospirosis
Listeriosis
Lyme disease
Malaria
Measles (rubeola)
Meliodosis
Meningitis, infectious
Meningococcal invasive disease
Microsporidiosis
Mumps (infectious parotitis)
Mycobacteriosis, other than TB and leprosy
Novel influenza A virus infection
Pertussis
Pertussis vaccine adverse reactions
Pesticide related illness
Plague
Pneumonia in a health care worker resulting in hospitalization
Poliomyelitis
Psittacosis
Q Fever
Rabies
Ricin toxin
Rocky Mountain spotted fever
Rubella (German Measles) and congenital rubella syndrome
Salmonellosis (non-typhoid fever types)
Septicemia in newborns
Severe acute respiratory syndrome (SARS)
Shiga-like toxin producing enteric bacterial infections
Shigellosis
Smallpox and other orthopoxvirus infections
Staphylococcal enterotoxin B
Streptococcal invasive disease, group A
Streptococcal invasive disease, group B
Streptococcus pneumoniae, invasive disease
Syphilis
Tetanus
Trichinosis
Tuberculosis and Suspected Tuberculosis
Tularemia
Typhoid fever (case or carrier, or both, of Salmonella typhi)
Vancomycin-intermed Staph Aureus (VISA)
Vancomycin-resistant Staph (VRSA)
Varicella (chickenpox), fatal cases only
Vibriosis, non-cholera types
Viral hemorrhagic fevers (all types)
Yellow fever
Yersiniosis

APPOINTMENT SCHEDULING AND OUTREACH REQUIREMENTS

In order to ensure that HealthChoice enrollees have every opportunity to access needed health related services, as specified under COMAR 10.09.66, PCPs must develop collaborative relationships with the following entities to bring enrollees into care:

- Jai Medical Systems;
- Specialty care providers;
- The Administrative Care Coordination Units (ACCU) at the LHD; and
- DHMH Provider Hotline staff as needed.

We will, before referring an adult enrollee to the local health department, make documented attempts to ensure that follow-up appointments are scheduled in accordance with the enrollee's treatment plan by attempting a variety of contact methods, which may include written correspondence, telephone contact, and face-to-face contact.

Prior to any appointment for a HealthChoice recipient you must call EVS at 1-866-710-1447 to verify recipient eligibility and MCO enrollment. This procedure will assist in ensuring payment for services.

The Centers for Medicare/Medicaid (CMS), prohibits providers from billing Medicaid recipients for missed appointments. See Transmittal #52 dated April 14, 2004.

Initial Health Appointment for HealthChoice Enrollees

HealthChoice enrollees must be scheduled for an initial health appointment within 90 days of enrollment, unless one of the following exceptions apply:

- You determine that no immediate initial appointment is necessary because the enrollee already has an established relationship with you.
- For children under 21, the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) periodicity schedule requires a visit in a shorter timeframe. For example, new enrollees up to two years of age must have a well child visit within 30 days of enrollment unless the child already has an established relationship with a provider and is not due for a well child visit.
- For pregnant and post-partum women who have not started to receive care, the initial health visit must be scheduled and the women seen within 10 days of a request.
- As part of the enrollment process, the State conducts a Health Risk Assessment (HRA)

and screens each HealthChoice recipient for conditions requiring expedited intervention by providers. HealthChoice recipients who screen positive must be seen for their initial health visit within 15 days of Jai Medical Systems receipt of the completed HRA.

During the initial health visit, the PCP is responsible for documenting a complete medical history and performing and documenting results of an age appropriate physical exam.

In addition, at the initial health visit, initial prenatal visit, or when physical status, behavior of the enrollee, or laboratory findings indicate possible substance abuse, you are to perform a substance abuse screening using approved Substance Abuse and Mental Health Services Administration (SAMSA) screening instrument and appropriate for the age of the member.

SERVICES FOR CHILDREN

For children younger than 21 years old, we shall assign the enrollee to a PCP who is certified by the EPSDT Program, unless the enrollee or enrollee's parent, guardian, or care taker, as appropriate, specifically requests assignment to a PCP who is not EPSDT-certified. In this case, the non-EPSDT provider is responsible for ensuring that the child receives well childcare according to the EPSDT schedule.

Wellness Services for Children Under 21 Years

Providers shall refer children for specialty care as appropriate. This includes:

- Making a specialty referral when a child is identified as being at risk of a developmental delay by the developmental screen required by EPSDT; is experiencing a delay of 25% or more in any developmental area as measured by appropriate diagnostic instruments and procedures; is manifesting atypical development or behavior; or has a diagnosed physical or mental condition that has a high probability of resulting in developmental delay; and
- Immediately referring any child thought to have been abused physically, mentally, or sexually to a specialist who is able to make that determination.

You are to follow the rules of the Maryland Healthy Kids Program to fulfill the requirements under Title XIX of the Social Security Act for providing children under 21 with EPSDT services (Attachment C.). The Program requires you to:

- Notify enrollees of their due dates for wellness services and immunizations.
- Schedule and provide preventive health services according to the State's EPSDT Periodicity Schedule and Screening Manual.
- Refer infants and children under age 5 and pregnant teens to the Supplemental Nutritional Program for Women Infants and Children (WIC). Provide the WIC Program with enrollee information about hematocrits and nutrition status to assist in determining an

enrollee's eligibility for WIC.

- Participate in the Vaccination For Children (VFC) Program. Many of the routine childhood immunizations are furnished under the VFC Program. The VFC Program provides free vaccines for health care providers who participate in the VFC Program. When new vaccines are approved by the Food and Drug Administration, the VFC Program is not obligated to make the vaccine available to VFC providers. Therefore, under the HealthChoice formulary requirement (COMAR 10.09.67.04D(3)), we will pay for new vaccines that are not yet available through the VFC.

Enrollees under age 21 are eligible for a wider range of services under EPSDT than the adult population. PCPs are responsible for understanding these expanded services (see Section III Benefits) so that appropriate referrals are made for services that prevent, treat, or ameliorate physical, mental, or developmental problems or conditions.

Appointments must be scheduled at an appropriate time interval for any enrollee who has an identified need for follow-up treatment as the result of a diagnosed condition.

Healthy Kids (EPSDT) Outreach and Referral to LHD

For each scheduled Healthy Kids appointment, written notice of the appointment date and time must be sent by mail to the child's parent, guardian, or caretaker, and attempts must be made to notify the child's parent, guardian, or caretaker of the appointment date and time by telephone.

For children 0-2 years of age who miss EPSDT appointments and for children under age 21 who are determined to have parents, care givers or guardians who are difficult to reach, or repeatedly fail to comply with a regimen of treatment for the child, you should follow the procedures below to bring the child into care:

- Document outreach efforts in the medical record. These efforts should include attempts to notify the enrollee by mail, by telephone, and through face-to-face contact.
- Notify our case management unit at (410) 433-2200 for assistance with outreach as defined in the Provider Agreement.
- Schedule a second appointment within 30 days of the first missed appointment.
- Within 10 days of the child missing the second consecutive appointment, request assistance in locating and contacting the child's parent, guardian or caretaker by making a referral to the ACCU of the LHD. Use the Local Health Services request form (See www.dhmf.state.md.us/mma/LHS/index).
- After referring to the ACCU, work collaboratively with the ACCU and Jai Medical Systems to bring the child into care. This collaborative effort will continue until the child complies with the EPSDT periodicity schedule or receives appropriate follow-up care.

SPECIAL NEEDS POPULATIONS

The State has identified certain groups as requiring special clinical and support services from their MCO. These special needs populations are:

- Pregnant and postpartum women,
- Children with special health care needs,
- Individuals with HIV/AIDS,
- Individuals with a physical disability,
- Individuals with a developmental disability,
- Individuals who are homeless,
- Individuals with a need for substance abuse treatment, and
- Children in State supervised care.

Services Every Special Needs Population Receives

In general, to provide care to a special needs population, it is important for the PCP and Specialist to:

- Demonstrate their credentials and experience to us in treating special populations.
- Collaborate with our case management staff on issues pertaining to the care of a special needs enrollee.
- Document the plan of care and care modalities and update the plan annually.

Individuals in one or more of these special needs populations must receive services in the following manner from Jai Medical Systems and/or our providers:

- Upon the request of the recipient or the PCP, a case manager trained as a nurse or a social worker will be assigned to the recipient. The case manager will work with the enrollee and the PCP to plan the treatment and services needed. The case manager will not only help plan the care, but will help keep track of the health care services the enrollee receives during the year and will serve as the coordinator of care with the PCP across a continuum of inpatient and outpatient care.

- The PCP and our case managers, when required, coordinate referrals for needed specialty care. This includes specialists for disposable medical supplies (DMS), durable medical equipment (DME), and assistive technology devices based on medical necessity. PCPs should follow the referral protocols established by us for sending HealthChoice enrollees to specialty care networks.
- We have a Special Needs Coordinator on staff to focus on the concerns and issues of special needs populations. The Special Needs Coordinator helps enrollees find information about their condition or suggests places in their area where they may receive community services and/or referrals.
- All of our providers are required to treat individuals with disabilities consistent with the requirements of the Americans with Disabilities Act of 1990 (P.L. 101-336 42 U.S.C. 12101 et. seq. and regulations promulgated under it).

Special Needs Population - Outreach and Referral to the LHD

A member of a special needs population who fails to appear for appointments or who has been non-compliant with a regimen of care may be referred to the local health department for specific outreach efforts, according to the process described below.

If the PCP or specialist finds that an enrollee continues to miss appointments, Jai Medical Systems must be informed. We will attempt to contact the enrollee by mail, telephone, and/or face-to-face visit. If we are unsuccessful in these outreach attempts, we will notify the local health department in the jurisdiction where the enrollee lives.

Within 10 days of either the third consecutive missed appointment, or you becoming aware of the patient's repeated non-compliance with a regimen of care, whichever occurs first, you should make a written referral to the LHD ACCU using the Local Health Services Request Form (See www.dhmd.state.md.us/mma/LHS/index). The ACCU will assist in locating and contacting the enrollee for the purpose of encouraging them to seek care. After referral to the ACCU, Jai Medical Systems and our providers will work collaboratively with the ACCU to bring the enrollee into care.

Services for Pregnant and Postpartum Women

Jai Medical Systems and our providers are responsible for providing pregnancy-related services, which include:

- Prenatal risk assessment and completion of the Maryland Prenatal Risk Assessment form;
- Comprehensive prenatal, perinatal, and postpartum care (including high-risk specialty care);
- Development of an individualized plan of care, which is based upon the risk assessment

and is modified during the course of care if needed;

- Case management services;
- Prenatal and postpartum counseling and education;
- Basic nutritional education;
- Special substance abuse treatment including access to treatment within 24 hours of request and intensive outpatient programs that allow for children to accompany their mother;
- Nutrition counseling by a licensed nutritionist or dietician for nutritionally high-risk pregnant women;
- Appropriate levels of inpatient care, including emergency transfer of pregnant women and newborns to tertiary care centers;
- Postpartum home visits; and
- Referral to the ACCU.

The PCP, OB/GYN, and Jai Medical Systems are responsible for making appropriate referrals of pregnant enrollees to publicly provided services that may improve pregnancy outcome. Examples of appropriate referrals include the Women, Infants, and Children special supplemental nutritional program (WIC) and the local health departments' ACCU. In connection with such referrals, necessary medical information will be supplied to the program for the purpose of making eligibility determinations.

Pregnancy-related service providers will follow, at a minimum, the applicable American College of Obstetricians and Gynecologists (ACOG) clinical practice guidelines. For each scheduled appointment, you must provide written and telephonic, if possible, notice to enrollee of the prenatal appointment dates and times.

You must:

- Schedule prenatal appointments in a manner consistent with the ACOG guidelines.
- Provide the initial health visit within 10 days of the request.
- Complete the Maryland Prenatal Risk Assessment form-DHMH 4850 (sample on page 17) for each pregnant enrollee and submit it to the Local Health Department in the jurisdiction in which the enrollee lives within 10 days of the initial visit.
- For pregnant enrollees under the age of 21, refer them to their PCP to have their EPSDT screening services provided.

- Reschedule appointments within 10 days for enrollees who miss prenatal appointments.
- Refer to the WIC Program.
- Refer pregnant and postpartum enrollees who are substance abusers for appropriate substance abuse assessments and treatment services.
- Offer HIV counseling and testing and provide information on HIV infection and its effects on the unborn child.
- Instruct pregnant enrollee to notify the MCO of her pregnancy and her expected date of delivery after her initial prenatal visit.
- Instruct the pregnant enrollee to contact the MCO for assistance in choosing a PCP for the newborn prior to her eighth month of pregnancy.
- Document the pregnant enrollee's choice of pediatric provider in the medical record.
- Advise the pregnant enrollee that she should be prepared to name the newborn at birth. This is required for the hospital to complete the "Hospital Report of Newborns," DHMH 1184 and get the newborn enrolled in HealthChoice.

MARYLAND PRENATAL RISK ASSESSMENT

(Please print all hand written information in capital letters in black ink and refer to instructions on back before starting.)

Registration Date:
MM / DD / YY

MA Provider #:

Provider Name:

Provider Phone Number:

<p>LAST NAME: _____</p> <p>HOUSE NUMBER: _____ STREET NAME: _____</p> <p>CITY: _____ COUNTY: (If patient lives in Baltimore City, leave blank) STATE: _____ ZIP CODE: _____</p> <p>HOME PHONE NUMBER: _____ WORK PHONE NUMBER: _____ EMERGENCY PHONE NUMBER: _____</p> <p>SOCIAL SECURITY NUMBER: _____ DATE OF BIRTH: MM / DD / YY _____</p> <p>RACE: <input type="radio"/> African American <input type="radio"/> White <input type="radio"/> Asian/Pacific Islander <input type="radio"/> Native American <input type="radio"/> Biracial/Multiracial <input type="radio"/> Unknown</p> <p>HISPANIC? <input type="radio"/> Yes <input type="radio"/> No</p> <p>MARITAL STATUS: <input type="radio"/> Married <input type="radio"/> Unmarried <input type="radio"/> Unknown</p>	<p>FIRST NAME: _____ MI: _____</p> <p>APT. NUMBER: _____</p> <p>Name and relationship of emergency phone contact: _____</p> <p>EDUCATIONAL LEVEL: Highest grade completed: _____ Currently in school? <input type="radio"/> Yes <input type="radio"/> No</p> <p>PAYMENT STATUS (Mark all that apply): <input type="radio"/> Private Insurance MA #: _____ <input type="radio"/> MA / HealthChoice <input type="radio"/> Uninsured Name of MCO: _____ <input type="radio"/> Other public <input type="radio"/> Unknown</p>
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<p>Date of this prenatal visit: MM / DD / YY _____</p> <p>Transferred from other source of prenatal care? <input type="radio"/> Yes <input type="radio"/> No</p> <p>If YES, date care began: MM / DD / YY _____</p> <p>Other source of prenatal care: _____</p> <p>Trimester of registration for prenatal care? <input type="radio"/> 1st <input type="radio"/> 2nd <input type="radio"/> 3rd</p> <p>INITIAL EDC: MM / DD / YY _____</p>	<p>PREVIOUS PREGNANCIES:</p> <table style="width: 100%;"> <tr> <td># Full-term live births</td> <td># Ectopic pregnancies</td> </tr> <tr> <td># Pre-term live births</td> <td># Children now living</td> </tr> <tr> <td># Spontaneous abortions</td> <td># Prior LBW births</td> </tr> <tr> <td># Therapeutic abortions</td> <td></td> </tr> </table>	# Full-term live births	# Ectopic pregnancies	# Pre-term live births	# Children now living	# Spontaneous abortions	# Prior LBW births	# Therapeutic abortions	
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ADDITIONAL COMMENTS: _____

LHD USE ONLY Meets criteria for Healthy Start? Yes No

DHMH USE ONLY _____

FORM COMPLETED BY: _____

STAFF ID: _____ DATE FORM COMPLETED: MM / DD / YY _____

DO NOT WRITE IN THIS SPACE

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CENTRAL OFFICE COPY 1

Dental Care for Pregnant Enrollees

Dental services for pregnant women are provided by the Maryland Healthy Smiles Dental Program, administered by DentaQuest. Contact them at 1-888-696-9596 if you have questions about dental benefits.

Childbirth Related Provisions

Special rules for length of hospital stay following childbirth:

- An enrollee's length of hospital stay after childbirth is determined in accordance with the ACOG and AAP Guidelines for perinatal care, unless the 48 hour (uncomplicated vaginal delivery) / 96 hour (uncomplicated cesarean section) length of stay guaranteed by State law is longer than that required under the Guidelines.
- If an enrollee must remain in the hospital after childbirth for medical reasons, and she requests that her newborn remain in the hospital while she is hospitalized, additional hospitalization of up to 4 days is covered for the newborn and must be provided.
- If an enrollee elects to be discharged earlier than the conclusion of the length of stay guaranteed by State law, a home visit must be provided.
- When an enrollee opts for early discharge from the hospital following childbirth, (before 48 hours for vaginal delivery or before 96 hours for C-section) one home nursing visit within 24 hours after discharge and an additional home visit, if prescribed by the attending provider, are covered.

Post-natal home visits are to be performed by a registered nurse, in accordance with generally accepted standards of nursing practice for home care of a mother and newborn, and must include:

- An evaluation to detect immediate problems of dehydration, sepsis, infection, jaundice, respiratory distress, cardiac distress, or other adverse symptoms of the newborn;
- An evaluation to detect immediate problems of dehydration, sepsis, infection, bleeding, pain, or other adverse symptoms of the mother;
- Blood collection from the newborn for screening, unless previously completed;
- Appropriate referrals; and
- Any other nursing services ordered by the referring provider.

If an enrollee remains in the hospital for the standard length of stay following childbirth, a home visit, if prescribed by the provider, is covered.

Unless Jai Medical Systems provides for the service prior to discharge, a newborn's initial

evaluation by an out-of-network on-call hospital physician before the newborn's hospital discharge is covered as a self-referred service.

Jai Medical Systems is required to schedule the newborn for a follow-up visit 2 weeks after discharge if no home visit has occurred or within 30 days after discharge if there has been a home visit.

Children with Special Health Care Needs

Jai Medical Systems will:

- Provide the full range of medical services for children, including services intended to improve or preserve the continuing health and quality of life, regardless of the ability of services to affect a permanent cure.
- Provide case management services to children with special health care needs as appropriate. For complex cases involving multiple medical interventions, social services, or both, a multi-disciplinary team must be used to review and develop the plan of care for children with special health care needs.
- Refer special needs children to specialists as needed. This includes specialty referrals for children who have been found to be functioning one third or more below chronological age in any developmental area as identified by the developmental screen required by the EPSDT periodicity schedule.
- Allow children with special health care needs to access out-of-network specialty providers as specified in the special provisions and guidelines detailed on Page 3 of Section I.
- Log any complaints made to the State or to Jai Medical Systems about a child who is denied a service by us. We will inform the State about all denials of service to children. All denial letters sent to children or their representative will state that recipients can appeal by calling the State's HealthChoice Enrollee Help Line.
- Work closely with the schools that provide education and family services programs to children with special needs.
- Ensure coordination of care for children in State supervised care. If a child in State supervised care moves out of the area and must transfer to another MCO, the State and Jai Medical Systems will work together to find another MCO as quickly as possible.

Individuals with HIV/AIDS

Children with HIV/AIDS are eligible for enrollment in the REM Program. All other individuals with HIV/AIDS are enrolled in one of the HealthChoice MCOs.

The following service requirements apply for persons with HIV/AIDS:

- An HIV/AIDS specialist for treatment and coordination of primary and specialty care. To qualify as an HIV/AIDS specialist, a health care provider must meet the criteria specified under COMAR 10.09.65.10.B.
- A diagnostic evaluation service (DES) assessment can be performed once every year at the enrollee's request. The DES includes a physical, mental, and social evaluation. The enrollee may choose the DES provider from a list of approved locations or can self-refer to a certified DES for the evaluation.
- Substance abuse treatment within 24 hours of request.
- The right to ask us to send them to a site doing HIV/AIDS related clinical trials. We may refer enrollees who are individuals with HIV/AIDS to facilities or organizations that can provide the enrollees access to clinical trials.
- The LHD will designate a single staff member to serve as a contact. In all instances, providers will maintain the confidentiality of client records and eligibility information, in accordance with all Federal, State, and local laws and regulations, and use this information only to assist the recipient to receive needed health care services.

Case management services are covered for any enrollee who is diagnosed with HIV. These services are to be provided, with the enrollee's consent, to facilitate timely and coordinated access to appropriate levels of care, and to support continuity of care across the continuum of qualified service providers. Case management will link HIV-infected enrollees with the full range of benefits (e.g. substance abuse treatment, primary mental health care, and somatic health care services), as well as referral for any additional needed services, including, specialty mental health services, social services, financial services, educational services, housing services, counseling, and other required support services. HIV case management services include:

- Initial and ongoing assessment of the enrollee's needs and personal support systems, including using a multi-disciplinary approach to develop a comprehensive, individualized service plan;
- Coordination of services needed to implement the plan;
- Periodic re-evaluation and adaptation of the plan, as appropriate; and
- Outreach for the enrollee and the enrollee's family by which the case manager and the PCP track services received, clinical outcomes, and the need for additional follow-up.

The enrollee's case manager will serve as the enrollee's advocate to resolve differences between the enrollee and providers of care pertaining to the course or content of therapeutic interventions.

If an enrollee initially refuses HIV case management services, the services are to be available at any later time if requested by the enrollee

Individuals with Physical or Developmental Disabilities

Before placement of an individual with a physical disability into an intermediate or long-term care facility, Jai Medical Systems will assess the needs of the individual and the community as supplemented by other Medicaid services. We will conduct a second opinion review of the case, performed by our medical director, before placement. If our medical director determines that the transfer to an intermediate or long-term care facility is medically necessary and that the expected stay will be greater than 30 days, we will obtain approval from the Department before making the transfer.

Providers who treat individuals with physical or developmental disabilities must be trained on the special communications requirements of individuals with physical disabilities. Jai Medical Systems is responsible for accommodating deaf and hard of hearing enrollees who require and request a qualified interpreter. We can delegate the financial risk and responsibility to our providers, but we are ultimately responsible for ensuring that our enrollees have access to these services. For more information, please call (410) 433-2200 and ask for the Special Needs Coordinator.

- Jai Medical Systems will have its informational materials approved by persons with experience in the needs of individuals with disabilities. This means that the information should be presented in a manner in which enrollees understand the material, whether on paper or by voice translation.
- Jai Medical Systems' providers must be clinically qualified to provide durable medical equipment and assistive technology services for both adults and children.

Individuals in Need of Substance Abuse Treatment

As part of an enrollee's initial health appraisal, first prenatal visit, and whenever you think it is appropriate, a substance abuse screen must be performed, using a formal substance abuse screening instrument that is:

- Appropriate for the detection of both alcohol and drug abuse; and
- Recommended by SAMSA and appropriate for the age of the patient.

When the substance abuse screen yields a positive result, we will arrange for or the enrollee may self-refer for a comprehensive substance abuse assessment performed by a qualified provider using either:

- The Problem Oriented Screening Instrument for Teenagers (POSIT), or

- The Addictions Severity Index (ASI).

If the comprehensive assessment indicates that the enrollee is in need of substance abuse treatment, a placement appraisal to determine the appropriate level and intensity of care for the enrollee must be conducted. Placement appraisal must be based on the current edition of The American Society of Addictions Medicine Patient Placement Criteria for the Treatment of Substance-Related Disorders, or its equivalent, as approved by the Alcohol and Drug Administration.

Based on the results of a comprehensive assessment and a placement appraisal, the enrollee is referred to an appropriate substance abuse treatment modality. Substance abuse treatment services covered for all enrollees include:

- Individual, Family, or group counseling;
- Detoxification (outpatient, or, if medically necessary, inpatient);
- Opioid maintenance;
- Intermediate Care Facility-Addictions (ICF-A) intermediate treatment for enrollees younger than age 21;
- Partial Hospitalization; and
- Case management.

Jai Medical Systems will not deny substance abuse treatment solely because the enrollee has had a problem with substance abuse in the past. In addition, individuals in certain special populations are covered for some additional substance abuse services, specifically:

Pregnant and postpartum women:

- Access to treatment within 24 hours of request;
- Case management; and
- Intensive outpatient programs, including day treatment that allows for children to accompany their mother.

Individuals with HIV/AIDS.

Individuals with HIV/AIDS who are substance abusers will receive substance abuse treatment within 24 hours of request.

Individuals who are Homeless

If an individual is identified as homeless, we will provide a case manager to coordinate health care services.

Adult Enrollees with Impaired Cognitive Ability / Psychosocial Problems

Support and outreach services are available for adult enrollees needing follow-up care who have impaired cognitive ability or psychosocial problems and who can be expected to have difficulty understanding the importance of care instructions or difficulty navigating the health care system.

Jai Medical Systems Support Services for Outreach

Jai Medical Systems' Outreach Department is available to assist network providers with patient outreach efforts. The Outreach Department is intended to supplement each provider's own outreach efforts and should be contacted only after the provider has made every effort to contact the patient. To refer a patient to Jai Medical Systems' Outreach Department, simply call 1-888-JAI-1999 or (410) 433-2200 and ask for the Director of Outreach.

Referral / Authorization Process

The primary care provider (PCP) is responsible for the provision and authorization of all health care services for his/her enrollee. Notification to Jai Medical Systems is required whenever an enrollee is referred by the PCP for the following care:

- Specialty care (inpatient or outpatient),
- Urgent care,
- Inpatient admissions,
- Home health care, or
- Coverage while out of area.

All referrals must be documented by the PCP in the patient's medical record. Referrals are initiated by the PCP's completion of the Jai Medical Systems Referral Form. (See Attachment F.) Please also refer to the Provider Quick Reference Guide (Attachment N) for more information.

Provider Referral Process and Documentation Requirements

Special Note: Jai Medical Systems' Referral Form is comprised of two carbon copies colored white. One copy of the referral is to be faxed to 1-717-703-3890 and retained by the PCP in the patient's file. The other copy is the patient's copy to be taken to the referred appointment. It is important that all specialty services be authorized properly through a referral. Requests for

payment for services provided without a referral may be denied. To request Jai Medical Systems referrals, please call the Provider Relations Department at (410) 433-2200.

Notes on Referrals for Specialists:

It is important that care for our enrollees be provided in a timely and coordinated manner. It is for these reasons that there are certain requirements of which the specialist must be aware.

- The specialist must follow the specific referral provided by the PCP. If the specialist wishes to perform services broader or different in scope than that requested by the PCP, *including the referral of an enrollee to another specialist*, the specialist must obtain further authorization from the enrollee's PCP. Specialists may verify the type of referral made by the PCP by reviewing the PCP's specific written instructions as documented on the referral form or by calling the PCP directly.
- A referral by a PCP does not negate the specialist's responsibility for following all of Jai Medical Systems' Precertification and Utilization Management requirements.
- Specialists must send a report to the referring PCP regarding all pertinent medical findings concerning the referred enrollee.

After Hours and Emergency Care

Jai Medical Systems requires that all Primary Care Providers (PCPs) maintain 24-hour coverage. The reason for this is so that patients may reach their PCPs in the event of an emergency when the PCP's office is closed. Each enrollee's membership card has the name of the enrollee's designated PCP, as well as the 24 hour phone number for the PCP. Jai Medical Systems has instructed its enrollees to call this number when the PCP's office is closed. If the enrollee is unable to contact his/her PCP, then he/she is instructed to call Jai Medical Systems' toll free hotline (1-888-JAI-1999). Jai Medical Systems' Provider Relations Department will track calls received from enrollees who are unable to contact their PCPs.

Jai Medical Systems has instructed its patients to seek immediate medical attention in the event of an emergency. The Jai Medical Systems Member Handbook defines an emergency in the following manner:

**A medical emergency is a health problem that happens suddenly and has symptoms of enough severity, including extreme pain, that the absence of immediate medical attention could reasonably be expected to result in placing your health in serious jeopardy or serious loss of function to some part of your body.*

Should a Jai Medical Systems' enrollee present at an emergency room, providers should follow the following guidelines:

Emergency Services

Hospital providers must provide medically necessary emergency services required to treat enrollees, in accordance with EMTALA and other applicable laws and regulations.

If, due to the severity of the emergency, prior authorization for admission cannot be obtained, the hospital provider shall notify Jai Medical Systems' Utilization Management Department of the admission and obtain authorization as soon as possible, but in any event, not more than 24 hours after a patient has been identified as a Jai Medical Systems enrollee, or at the end of the next business day if the emergency admission occurs on a weekend or holiday.

Jai Medical Systems may conduct retrospective medical reviews on hospital provider emergency medical services claims submitted by hospitals to ascertain emergent status, service necessity, and cost appropriateness.

In the event that a hospital provider fails to notify Jai Medical Systems within the required time period, neither Jai Medical Systems nor the enrollee shall be liable for the costs of such hospital services rendered subsequent to the required notification period that are deemed by Jai Medical Systems to be not medically necessary.

Emergency Admissions

If an enrollee receiving emergency medical services requires emergent inpatient care, the hospital provider agrees to notify Jai Medical Systems as soon as possible, but no later than 24 hours after such admission or the next business day.

The preceding procedures should be followed in the event of a medical emergency. Non-emergent care should not be provided in the hospital emergency room. Enrollees seeking non-emergent care should be instructed to call their designated PCP.

Pre-Authorization Process

All inpatient and outpatient **admissions and procedures** must be precertified by Jai Medical Systems' Utilization Management (UM) Department. The UM Department may be reached on its direct line (410) 433-5600 or by calling Jai Medical Systems' main number 1-888-JAI-1999. A general listing of procedures requiring precertification can be found in Attachment G.

For more specific information regarding procedures which require prior authorization, providers should refer to their contract with Jai Medical Systems. If a provider is unsure whether or not precertification is necessary, he/she should call the Utilization Management Department at the above number prior to rendering services. Payment for services provided without proper authorization or certification may be denied.

Verifying an Enrollee's Eligibility and PCP

In order to verify that a patient is enrolled with Jai Medical Systems, please ask the patient to present his/her membership card. Further, each provider should call the State of Maryland's Eligibility Verification System (EVS) to verify the patient's enrollment status on the date of service. The number for the EVS hotline is 410-333-3020. Providers may also access EVS on the internet at www.emdhealthchoice.org. Instructions on the appropriate use of the EVS system are available from the State Medicaid Program.

To verify an enrollee's Primary Care Physician, a provider should check the enrollee's membership card. The name of the enrollee's PCP, as well as the provider's phone number, is printed on the front of the membership card. In the event that an enrollee's membership card is not available, providers should call Jai Medical Systems' Provider Relations Department at 1-888-JAI-1999 to determine PCP affiliation.

Referral Procedures for Transportation Services

Jai Medical Systems will provide members with transportation for medically necessary appointments. To request transportation assistance, members should call the Customer Service Department at 1-888-JAI-1999 at least 2 days before the scheduled appointment. Van service (or bus tokens) will be provided.

Transportation can also be arranged by contacting the Local Health Department's Administrative Care Coordination Unit (ACCU) at 410-545-3007.

Procedures for Second Opinions

Some procedures, such as elective procedures, may require a second opinion from a physician other than the requesting provider. Procedures requiring second opinions under Jai Medical Systems are the same as those procedures which require a second opinion under the Medical Assistance fee-for-service program. If a provider is unclear whether or not a procedure requires a second opinion, he/she should contact Jai Medical Systems' Utilization Management Department at 410-433-5600.

Referral Protocols for Special Populations

Please see page 13 for the referral protocols for special needs populations, Attachment H for general clinical guidelines, and Attachment B for the Local Health Services request form.

Referral to the Local Health Department

Please see Section II for information on referring enrollees to the Local Health Department.

Submitting Claims

Billing and Reporting Requirements

The participating provider must submit a current CMS 1500 form or UB-04 form for every covered service provided to a member by the practitioner. A current CMS 1500 form has a revision date of 02-12. All claims, including electronic and paper, must be submitted to Jai Medical Systems within **one hundred and eighty (180) calendar days** from the date of service. If you have any questions about a claim, please call Jai Medical Systems' Claims Processing Department at 1-888-JAI-1999. For questions regarding billing procedures, please call Jai Medical Systems' Provider Relations Department at 1-888-JAI-1999.

Minimum requirement for claims submission:

- Member's Name, Sex, and Date of Birth;
- Member's Maryland Medicaid Managed Care Program I.D. Number;
- Diagnosis Code (Current ICD Codes);
- Procedure Code (Current HCPCS Codes including CPT), Place of Service, and Type of Service;
- Date(s) of service (must be reported using individual dates of service; date spans are not acceptable);
- Jai Medical Systems Prior Authorization Number/ Copy of Authorization or Referral form;
- Rendering Provider's Name, Address, and Authorized Signature;
- Rendering Provider's NPI;
- Explanation of Payments from other insurance carrier(s) if applicable; and
- Rates and Charges (usual and customary billing charges).

Failure to submit the aforementioned information and data within the prescribed time frame of one hundred and eighty (180) calendar days from the date of service may result in payment delay and/or denial.

Mail all claims addressed to the Jai Medical Systems Claims Department at the following address:

Jai Medical Systems Managed Care Organization, Inc.
Attn: Claims Department
5010 York Road
Baltimore, MD 21212

Ethical Medical Billing Practices

Providers are responsible for the accuracy of their medical billing, regardless of whether or not a medical billing company is used. It is fraudulent to submit a claim that is known to be inaccurate. It is also fraudulent to bill for a procedure or encounter that did not occur. A provider must be able to substantiate all billed procedures and diagnosis codes through appropriate medical record documentation. Jai Medical Systems, the State of Maryland, and the Office of the Inspector General reserve the right to audit all provider medical billing practices. Providers engaged in fraudulent medical billing practices are subject to legal action, including criminal prosecution and penalties. Below are examples of common types of medical billing fraud:

Upcoding—coding a diagnosis which is more severe than what the patient really has or coding a procedure that has a higher reimbursement rate than what actually occurred.

Downcoding – coding a diagnosis which is less severe than what the patient really has.

Separating Procedures/Unbundling – separating procedures that should not be separated in order to gain a higher payment

Double Billing – Billing for the same visit more than once.

Unnecessary Treatments – Providing treatments that are not medically necessary.

All providers are reminded to document in the medical record all procedures performed and all relevant diagnoses.

Third Party Recoveries

Jai Medical Systems is the payer of the last resort and the practitioner shall identify and bill other third-party carries or insurers first.

If a member has third-party coverage, including but not limited to Part A or B Medicare, the practitioner agrees to identify and seek such payment before submitting claims to Jai Medical Systems.

Claims involving third parties shall be filed in accordance with the following:

- The practitioner shall include a complete copy of the other third-party carrier's explanation of payments (EOP) or remittance advice (RA) when submitting a claim for a non-capitated service for the balance due under non-duplication of benefits. A claim for

any balance due must be received within one hundred and eighty (180) calendar days from the date of the third-party carriers EOP.

- For Jai Medical Systems non-Medicare members, the allowed amount will be based upon Jai Medical Systems' Fee Schedule, less the paid amount of the other third-party carrier(s); any balance of which will be paid by Jai Medical Systems as non-duplication of benefits.

Claims Appeals Process

The practitioner may appeal claims that have paid or denied if they are not satisfied with the adjudication of the claim. The practitioner has one hundred and eighty (180) calendar days to submit a first level appeal from the date of Explanation of Payment (EOP) for the claim in question. The practitioner has thirty (30) calendar days to submit a second level appeal from the date of the first level appeal's determination letter. The practitioner has eighty five (85) business days to submit a third level appeal from the date that the first level appeal was received. Jai Medical Systems will send a written acknowledgement for all appeals received within 5 business days of receipt.

Jai Medical Systems will review appeals submitted by the practitioner only if the initial claim had been filed within the prescribed submission deadline.

Claims appeals must include the following information:

- Cover letter explaining the reason for the appeal including:
 - Full name and Date of Birth (DOB) of the patient
 - Claim number being appealed
 - Date of Service (DOS) of the claim being appealed
 - Contact phone number and return mail address where the determination letter should be mailed. An email address is also requested, if available.
- Copy of the claim being appealed
- Copy of JMSMCO remittance advice; and
- Supporting relevant documentation.

Claims appeals should be submitted to the following addresses:

All appeals for Medical Record Review should be addressed and mailed to:

Jai Medical Systems Managed Care Organization, Inc.
Attn: Medical Record Review
P.O. Box 39659
Baltimore, MD 21212

All other appeals should be addressed and mailed to:

Jai Medical Systems Managed Care Organization, Inc.
Attn: Appeals Department
5010 York Road
Baltimore, MD 21212

All appeals received that do not meet the aforementioned requirements may be returned to the submitting party and may not be reviewed.

Quality Assurance Monitoring

The Maryland Department of Health and Mental Hygiene has developed a Quality Assurance (QA) Monitoring Plan for HealthChoice. The QA Monitoring Plan includes special provider and recipient focused studies, surveys, encounter data, and complaint hotlines.

In assuring quality of care for HealthChoice enrollees, the provider, and in some cases, the provider staff will have the following responsibilities:

- Actively participate in an *annual quality of care review* consisting of: (1) clinically focused medical record reviews and (2) special focused studies. This audit is to be performed by any of the following: a State contracted External Quality Review Organization (EQRO) and/or Jai Medical Systems' Quality Assurance staff. The audit is to include the special needs populations.
- Actively participate in the annual State-required HEDIS audit and ensure your office is in compliance with HEDIS standards. Jai Medical Systems will regularly send compliance guidelines to ensure you are aware of these standards.
- Provide the individuals performing the studies staff as needed.
- Provide assistance as requested in the investigation of care denials and enrollee appeals.
- Participate in Jai Medical Systems and State surveys regarding the delivery of care to HealthChoice enrollees.
- Maintain up-to-date professional qualifications and submit renewal information to Jai Medical Systems.
- Submit complete and timely encounter data as requested by Jai Medical Systems or by the State.
- Provide requested medical documentation in the timeframe specified.
- Even under HIPAA regulations, providers are required to supply requested information

from medical records for quality and billing purposes.

- Outreaching to members who are on your panel or are not following up with their care. Jai Medical Systems is available to help you with this. Please contact our Director of Outreach at 410-433-2200.

If contacted by a Jai Medical Systems' employee, we would appreciate a timely and courteous response to our request.

Section III

HealthChoice Benefits and Services

OVERVIEW

- Jai Medical Systems must provide a complete and comprehensive benefit package that is equivalent to the benefits that are available to Maryland Medicaid recipients through the Medicaid fee-for-service delivery system. Carve-out services (which are not subject to capitation and are not Jai Medical Systems responsibility) are still available for HealthChoice recipients. Medicaid will reimburse these services directly, on a fee-for-service basis.
- A HealthChoice PCP serves as the entry point for access to health care services. The PCP is responsible for providing enrollees with medically necessary covered services, or for referring an enrollee to a specialty care provider to furnish the needed services. The PCP is also responsible for maintaining medical records and coordinating comprehensive medical care for each assigned enrollee.
- An enrollee has the right to access certain services without prior referral or authorization by a PCP. This applies to specified self-referred services and emergency services. We are responsible for reimbursing out-of-plan providers who have furnished these services to our enrollees. (See Self-Referred Services Section- Page 47.)
- Only benefits and services that are medically necessary are covered.
- HealthChoice enrollees may not be charged any co-payments, premiums or cost sharing of any kind, except for the following:
 - Up to a \$3.00 co-payment for brand-name drugs;
 - Up to a \$1.00 co-payment for generic drugs; and
 - Any other charge up to the fee-for-service limit as approved by the Department.
- Jai Medical Systems will not impose pharmacy co-payments on the following:
 - Family planning drugs and devices;
 - Individuals under 21 years old;
 - Pregnant women; and
 - Institutionalized individuals who are inpatient in long-term care facilities or other institutions requiring spending all but a minimal amount of income for medical costs.
- Limitations on covered services do not apply to children under age 21 receiving medically necessary treatment under the EPSDT program.
- The pharmacy cannot withhold services even if the recipient cannot pay the co-payment.

The recipient's inability to pay the co-payment does not excuse the debt and they can be billed for the co-payment at a later time. We will not restrict our enrollees' access to needed drugs and related pharmaceutical products by requiring that enrollees use mail-order pharmacy providers.

COVERED BENEFITS AND SERVICES

(Listed Alphabetically)

Audiology Services for Adults

These services are only covered when part of an inpatient hospital stay

Blood and Blood Products

Blood, blood products, derivatives, components, biologics, and serums to include autologous services, whole blood, red blood cells, platelets, plasma, immunoglobulin, and albumin.

Case Management Services

Case management services are covered for enrollees who need such services including, but not limited to, members of special needs populations, which consist of the following non-mutually exclusive populations:

- Children with special health care needs;
- Individuals with a physical disability;
- Individuals with a developmental disability;
- Pregnant and postpartum women;
- Individuals who are homeless;
- Individuals with HIV/AIDS;
- Individuals with a need for substance abuse services; and
- Children in State supervised care.

If warranted, a case manager will be assigned to an enrollee when the results of the initial health screen are received by the MCO.

A case manager will perform home visits as necessary as part of Jai Medical Systems' case management program, and will have the ability to respond to an enrollee's urgent care needs during this home visit.

Dental Services for Children and Pregnant Women

These services are provided by the Maryland Healthy Smiles Dental Program, administered by DentaQuest. Contact them at 1-888-696-6969 if you have questions about dental benefits.

Diabetes Care Services

Jai Medical Systems covers all medically necessary diabetes care services. We cover diabetes care services for enrollees who have been discharged from a hospital inpatient stay for a diabetes-related diagnosis that include:

- Diabetes nutrition counseling;
- Diabetes outpatient education;
- Diabetes-related durable medical equipment and disposable medical supplies, including:
 - Blood glucose meters for home use;
 - Finger sticking devices for blood sampling;
 - Blood glucose monitoring supplies; and
 - Diagnostic reagent strips and tablets used for testing for ketone and glucose in urine and glucose in blood; and
- Therapeutic footwear and related services to prevent or delay amputation that would be highly probable in the absence of specialized footwear.

Dialysis Services

Enrollees in HealthChoice who suffer from End Stage Renal Disease (ESRD) are eligible for REM. To be REM-eligible on the basis of ESRD, enrollees must meet one of the following sets of criteria:

- Children (under 21 years old) with chronic renal failure (ICD-9 code 585.1-585.6) diagnosed by a pediatric nephrologist; or
- Adults (ages 21-64) with chronic renal failure with dialysis (ICD-9 code 585.6, V45.11 and 585.9).

For those enrollees needing dialysis treatment who are enrolled in Jai Medical Systems, dialysis services are covered, either through participating providers or, at the enrollee's option, non-participating providers.

DMS/DME

Authorization

Authorization for DME and/or DMS will be provided in a timely manner so as not to adversely affect the enrollee's health and within 2 business days of receipt of necessary clinical information but not later than 7 calendar days from the date of the initial request.

Disposable Medical Supplies

Disposable medical supplies are covered, including incontinency pants and disposable underpants for medical conditions associated with prolonged urinary or bowel incontinence, if necessary to prevent institutionalization or infection, and all supplies used in the administration or monitoring of prescriptions by the enrollee.

Durable Medical Equipment

Durable medical equipment is covered when medically necessary including but not limited to all equipment used in the administration or monitoring of prescriptions by the enrollee. We pay for any durable medical equipment authorized for enrollees even if delivery of the item occurs within 90 days after the member's disenrollment from Jai Medical Systems, as long as the member remains Medicaid eligible during the 90-day time period.

Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) Services

For enrollees under 21 years of age, all of the following EPSDT services are covered:

- Well-child services provided in accordance with the EPSDT periodicity schedule by an EPSDT-certified provider, including:
 - Periodic comprehensive physical examinations;
 - Comprehensive health and developmental history, including an evaluation of both physical and mental health development;
 - Immunizations;
 - Laboratory tests including blood level assessments;
 - Vision, hearing, and dental screening; and
 - Health education.
- EPSDT partial or interperiodic well-child services and health care services necessary to prevent, treat, or ameliorate physical, mental, or developmental problems or conditions, which services are sufficient in amount, duration, and scope to treat the identified condition, and are subject to limitation only on the basis of medical necessity, including:
 - Chiropractic services;
 - Nutrition counseling;
 - Audiological screening when performed by a PCP;
 - Private duty nursing;
 - Durable medical equipment including assistive devices; and
 - Any other benefit listed in this section.

- Providers are responsible for making appropriate referrals for publicly funded programs not covered by Medicaid, including Head Start, the WIC nutritional program, early intervention services; School Health-Related Special Education Services, vocational rehabilitation, and Maternal and Child Health Services (located at local health departments).

Family Planning Services

Comprehensive family planning services are covered, including:

- Office visits for family planning services;
- Laboratory tests including pap smears;
- Contraceptive devices; and
- Voluntary sterilization.

Home Health Services

Home health services are covered when the enrollee's PCP or attending physician certifies that the services are necessary on a part-time, intermittent basis by an enrollee who requires home visits. Covered home health services are delivered in the enrollee's home and include:

- Skilled nursing services including supervisory visits;
- Home health aide services (including biweekly supervisory visits by a registered nurse in the enrollee's home, with observation of aide's delivery of services to enrollee at least every second visit);
- Physical therapy services;
- Occupational therapy services;
- Speech pathology services; and
- Medical supplies used in a home health visit.

Hospice Care Services

Hospice care services are covered for enrollees who are terminally ill with a life expectancy of six months or less. Hospice services can be provided in a hospice facility, in a long-term care facility, or at home.

Hospice providers should inform their Medicaid enrollees (or patients applying for Medicaid coverage) as soon as possible after they enter hospice care about the MCOs with whom they contract so that enrollees can make an informed choice.

Jai Medical Systems will not require a hospice care enrollee to change his/her out of network hospice provider to an in-network hospice provider. Hospice providers should make enrollees aware of the option to change MCOs. DHMH will allow new enrollees who are in hospice care to voluntarily change their MCO if they have been auto-assigned to a MCO with whom the hospice provider does not contract. If the new enrollee does not change their MCO, then the MCO, which the new enrollee is currently enrolled must pay the out-of-network hospice provider.

Inpatient Hospital Services

Inpatient hospital services are covered.

For special rules for length of stay for childbirth, see page 17.

Laboratory Services

Diagnostic services and laboratory services performed by providers who are CLIA certified or have a waiver of a certificate registration and a CLIA ID number are covered. However, viral load testing, Genotypic, phenotypic, or HIV/AIDS drug resistance testing used in treatment of HIV/AIDS are reimbursed directly by the Department and must be rendered by a Department approved provider and be medically necessary.

Long-Term Care Facility Services / Nursing Facility Services

Long-term care facilities include chronic hospitals, chronic rehabilitation hospitals, and nursing facilities. The first 30 days in a long-term care facility are the responsibility of Jai Medical Systems, subject to specific rules.

When an enrollee is transferred to a long-term care facility and the length of the enrollee's stay is expected to exceed 30 days, medical eligibility approval of the Department of Health and Mental Hygiene (DHMH) for long-term institutionalization must be secured as soon as possible.

Jai Medical Systems will cover the first thirty days or until DHMH medical eligibility approval is obtained, whichever is longer. If required disenrollment procedures are not followed, our financial responsibility continues until the State's requirements for the enrollee's disenrollment are satisfied. In order for an enrollee to be disenrolled from Jai Medical Systems based on a long-term care facility admission, all of the following must first occur:

- An application, DHMH 3871, for a Departmental determination of medical necessity must be filed. (If a length of stay of more than 30 days is anticipated at the time of admission, the application should be filed at the time of admission.)

- DHMH must determine that the enrollee's long-term care facility admission was medically necessary in accordance with the State's criteria.
- The enrollee's length of stay must exceed 30 consecutive days.
- We must file an application for disenrollment with DHMH, including documentation of the enrollee's medical and utilization history, if requested.

Once an individual has been disenrolled from Jai Medical Systems, the services they receive in a qualifying long-term care facility will be directly reimbursed by the Maryland Medical Assistance program, as long as the recipient maintains continued eligibility.

Inpatient acute care services provided within the first 30 days following admission to a long-term care facility are not considered an interruption of Jai Medical Systems covered 30 continuous days in a long term care facility as long as the enrollee is discharged from the hospital back to the long term care facility.

An individual with serious mental illness, mental retardation, or a related condition may not be admitted to a nursing facility unless the State determines that nursing facility services are appropriate. For each enrollee seeking nursing facility admission, a Pre-admission Screening and Resident Review (PASRR) ID Screen must be completed. The first section of the ID Screen exempts an enrollee if nursing facility admission is directly from a hospital for the condition treated in the hospital and, the attending physician certifies prior to admission to the NF that the recipient is likely to require less than 30 days of nursing facility services.

If an enrollee is not exempted, complete the ID Screen to identify whether the enrollee screens positive for mental illness or mental retardation. If the enrollee screens negative, refer to Adult Evaluation and Review Services (AERS) located in the local health department for a STEPS assessment to help identify alternative services to nursing facility placement.

If an enrollee is admitted into an Institution for Mental Disease (IMD), we are responsible for an enrollee's somatic care during the first 30 consecutive days after admission, and during stays of less than 30 days, with an overall limit of a total of 60 days per calendar year, regardless of consecutiveness. Our responsibility for an enrollee's somatic care would continue beyond 30 consecutive days if the enrollee is not disenrolled from the MCO.

An enrollee admitted to an Intermediate Care Facility - Mental Retardation (ICF-MR) is disenrolled from Jai Medical Systems immediately upon admission to the facility, and we retain no responsibility for the enrollee's care.

If we place an enrollee in a licensed nursing facility that is not a Maryland Medical Assistance Program provider, Medicaid cannot pay the facility for services. Upon MCO disenrollment, the patient may transfer to a nursing home that accepts Medicaid payment.

If an enrollee under age 21 is admitted into an ICF-A, we are responsible for medically necessary treatment for as many days as required.

We will reserve nursing facility beds for recipients hospitalized for an acute condition within the first 3 days not to exceed 15 days per single acute visit.

Outpatient Hospital Services

Medically necessary outpatient hospital services are covered. Prior-authorization on a Jai Medical Systems referral written by the enrollee's PCP is required.

Oxygen and Related Respiratory Equipment

Oxygen and related respiratory equipment are covered. Prior-authorization on a Jai Medical Systems referral written by the enrollee's PCP or case manager is required.

Pharmacy Services

We will expand our drug formulary to include new products approved by the Food and Drug Administration (COMAR 10.09.67.04D(3)) in addition to maintaining drug formularies that are at least equivalent to the standard benefits of the Maryland Medical Assistance Program. This requirement pertains to new drugs or equivalent drug therapies, routine childhood immunizations, vaccines prescribed for high risk and special needs populations, and vaccines prescribed to protect individuals against vaccine-preventable diseases. If a generic equivalent drug is not available, new brand name drug rated as P (priority) by the FDA will be added to the formulary. Coverage may be subject to preauthorization to ensure medical necessity for specific therapies. For formulary drugs requiring preauthorization, a decision will be provided in a timely manner so as not to adversely affect the enrollee's health and within 2 business days of receipt of necessary clinical information but not later than 7 calendar days from the date of the initial request. If the service is denied, Jai Medical Systems will notify the prescriber and the enrollee in writing of the denial (COMAR 10.09.71.04).

You may access Jai Medical Systems' formulary on www.epocrates.com.

When a prescriber believes that a non-formulary drug is medically indicated, we have procedures in place for non-formulary requests (COMAR 10.09.67.04F(2)(a)). The State expects a non-formulary drug to be approved if documentation is provided indicating that the formulary alternative is not medically appropriate. Requests for non-formulary drugs will not be automatically denied or delayed with repeated requests for additional information.

Pharmaceutical services and counseling ordered by an in-plan provider, by a provider to whom the enrollee has legitimately self-referred (if provided on-site), or by an emergency medical provider are covered, including:

- Legend (prescription) drugs;
- Insulin;

- Contraceptives;
- Latex condoms (to be provided without any requirement for a provider's order);
- Non-legend ergocalciferol liquid (Vitamin D);
- Hypodermic needles and syringes;
- Enteral nutritional and supplemental vitamins and mineral products given in the home by nasogastric, jejunostomy, or gastrostomy tube;
- Enteric coated aspirin prescribed for treatment of arthritic conditions;
- Nonlegend ferrous sulfate oral preparations;
- Nonlegend chewable ferrous salt tablets when combined with vitamin C, multivitamins, multivitamins and minerals, or other minerals in formulation, for enrollees under age 12;
- Formulas for genetic abnormalities;
- Medical supplies for compounding prescriptions for home intravenous therapy;
- Medical supplies or equipment used in the administration or monitoring of medication prescribed or ordered for an enrollee by a qualifying provider.
- Most Mental health drugs are on SMHS formulary and are to be paid by SMHS.
- **Most HIV/AIDS drugs are paid directly by the State**

Jai Medical Systems drug utilization review program is subject to review and approval by DHMH, and is coordinated with the drug utilization review program of the Specialty Mental Health Service delivery system.

Limitations: neither the State nor the MCO cover the following:

- Prescriptions or injections for central nervous system stimulants and anorectic agents when used for controlling weight; or
- Non-legend drugs other than insulin and enteric aspirin ordered for treatment of an arthritic condition.

Physician and Advanced Practice Nurse Specialty Care Services

Specialty care services provided by a physician or an advanced practice nurse (APN) are covered when services are medically necessary and are outside of the PCP's customary scope of practice.

Specialty care services covered under this section also include:

- Services performed by non-physician, non-APN practitioners, within their scope of practice, employed by a physician to assist in the provision of specialty care services, and working under the physician's direct supervision;
- Services provided in a clinic by or under the direction of a physician or dentist; and
- Services performed by a dentist or dental surgeon, when the services are customarily performed by physicians.

Jai Medical Systems shall clearly define and specify referral requirements to all providers.

An enrollee's PCP is responsible for making the determination, based on our referral requirements, of whether or not a specialty care referral is medically necessary.

- PCPs must follow our special referral protocol for children with special health care needs who suffer from a moderate to severe chronic health condition which:
 - Has significant potential or actual impact on health and ability to function;
 - Requires special health care services; and
 - Is expected to last longer than 6 months.
- A child who is functioning one third or more below chronological age in any developmental area, must be referred for specialty care services intended to improve or preserve the child's continuing health and quality of life, regardless of the services ability to effect a permanent cure.

Podiatry Services

Jai Medical Systems provides its enrollees medically necessary podiatry services as follows:

- For enrollees younger than 21 years old;
- Diabetes care services specified in COMAR 10.09.67.24; and
- Routine foot care for enrollees 21 years old or older with vascular disease affecting the lower extremities.

Primary Care Services

Primary care is generally received through an enrollee's PCP, who acts as a coordinator of care, and has the responsibility to provide accessible, comprehensive, and coordinated health care services covering the full range of benefits for which an enrollee is eligible. In some cases,

enrollees will opt to access certain primary care services by self-referral to providers other than their PCPs, for example, school-based health centers. Primary care services include:

- Addressing the enrollee's general health needs;
- Coordination of the enrollee's health care;
- Disease prevention and promotion and maintenance of health;
- Treatment of illness;
- Maintenance of the enrollees' health records; and
- Referral for specialty care.

For female enrollees, if the enrollee's PCP is not a women's health specialist she may see a women's health specialist within Jai Medical Systems, without a referral, for covered services necessary to provide women's routine and preventive health care services

Primary Mental Health Services

- We cover primary mental health services required by enrollees, including clinical evaluation and assessment, provision of primary mental health services, and/or referral for additional services, as appropriate.
- The PCP of an enrollee requiring mental health services may elect to treat the enrollee, if the treatment falls within the scope of the PCP's practice, training, and expertise. Neither the PCP nor Jai Medical Systems may bill the Public Mental Health System (PMHS) for the provision of such services because these services are included in the HealthChoice capitation rates.
- When, in the PCP's judgment, an enrollee's need for mental health treatment cannot be adequately addressed by primary mental health services provided by the PCP, the PCP should, after determining the enrollee's eligibility (based on probable diagnosis), refer the enrollee to the SMHS for specialty mental health services. (This process is described in Section IV.)

Rehabilitative Services

Rehabilitative services including medically necessary physical therapy, speech therapy, and occupational therapy for adults are covered. For enrollees under 21, rehabilitative services are covered **by Jai Medical Systems** only if part of a home health visit or inpatient hospital stay. All other rehabilitative services for enrollees under 21 should be billed fee-for-service to the Department.

Second Opinions

If an enrollee requests one, we will provide for a second opinion from a qualified health care professional within our network. If necessary, we will arrange for the enrollee to obtain one outside of our network.

Substance Abuse Treatment Services

Substance abuse treatment services are covered. (See Section II.)

Transplants

Medically necessary transplants are covered.

Vision Care Services

Medically necessary vision care services are covered.

Jai Medical Systems is responsible to provide at a minimum:

- One eye examination every 2 years for enrollees age 21 or older; or
- For enrollees under 21, at least one eye examination every year in addition to EPSDT screening, one pair of eyeglasses per year unless lost, stolen, broken, or no longer vision appropriate, and contact lenses, if eyeglasses are not medically appropriate for the condition.

Effective July 1, 2013, Block Vision became Jai Medical Systems' Optometric Vision Benefits Manager and Administrator. Please contact Block Vision at 1-800-428-8789 for any vision care questions.

Dental Services

Dental services are available as an additional benefit by Jai Medical Systems for adult members 21 years and older.

Effective July 1, 2013, DentaQuest became Jai Medical Systems' Dental Benefits Manager and Administrator. Please contact DentaQuest at 800-341-8478 for any dental questions.

Benefit Limitations

The following are not covered under HealthChoice:

- Services that are not medically necessary.
- Services not performed or prescribed by or under the direction of a health care

practitioner (i.e., by a person who is licensed, certified, or otherwise legally authorized to provide health care services in Maryland or a contiguous state).

- Services that are beyond the scope of practice of the health care practitioner performing the service.
- Abortions. (Available under limited circumstances through Medicaid fee-for-service.)
- Autopsies.
- Cosmetic surgery to improve appearance or related services, but not including surgery and related services to restore bodily function or correct deformity resulting from disease, trauma, or congenital or developmental abnormalities.
- Services provided outside the United States.
- Dental services for adults, unless pregnant.
- Diet and exercise programs for weight loss except when medically necessary.
- Experimental or investigational services, including organ transplants determined by Medicare to be experimental, except when an enrollee is participating in an authorized clinical trial as specified in COMAR 10.09.67.26-1.
- Immunizations for travel outside the U.S.
- In vitro fertilization, ovum transplants and gamete intra-fallopian tube transfer, zygote intra-fallopian transfer, or cryogenic or other preservation techniques used in these or similar procedures.
- Lifestyle improvements (physical fitness programs, nutrition counseling, smoking cessation) unless specifically included as a covered service.
- Medication for the treatment of sexual dysfunction.
- Non-legend chewable tablets of any ferrous salt when combined with vitamin C, multivitamins, multivitamins and minerals, or other minerals in the formulation when the enrollee is younger than 12 years old.
- Non-legend drugs other than insulin and enteric-coated aspirin for arthritis.
- Non-medical ancillary services such as vocational rehabilitation, employment counseling, or educational therapy.
- Orthodontia except when the enrollee is under 21 and scores at least 15 points on the

Handicapping Labio-lingual Deviations Index No. 4 and the condition causes dysfunction.

- Ovulation stimulants.
- Piped-in oxygen or oxygen prescribed for standby purposes or on an as-needed basis.
- Private duty nursing for adults 21 years old and older.
- Private hospital room unless medically necessary or no other room available.
- Purchase, examination, or fitting of hearing aids and supplies, and tinnitus maskers, other than for enrollees younger than 21 years old.
- Reversal of voluntary sterilization procedure.
- Services performed before the effective date of the enrollee's coverage.
- Therapeutic footwear other than for an enrollee who qualifies for diabetes care services or for an enrollee who is younger than 21 years old.
- Transportation services that are provided through Local Health Departments. Jai Medical Systems will assist enrollees to secure non-emergency transportation through their Local Health Departments. Additionally, we provide non-emergency transportation to access a covered service if we choose to provide the service at a location that is outside of the closest county in which the service is available. The following is a list of the transportation contact numbers for each county:

<u>County</u>	<u>Telephone number to Call</u>
Alleghany	Van Trans Inc. - 301-722-2770 Alleghany Ambulance – 301-689-1113
Anne Arundel	AAA Transport – 1-800-442-2858
Baltimore City	New Clients – 410-396-7007 Established Clients – 410-396-6422 (Facilities only) – 410-396-6665
Baltimore County	Veolia Transportation – 410-783-2465 410-887-2828
Calvert	AAA Transport – 800-577-1050
Caroline	Bay Area Transportation – 800-987-9088 Best Care Ambulance – 410-476-3688

Carroll	Butler Medical Transport – 888-602-4007 410-602-4007
Cecil	410-996-5171
Charles	301-6097917
Dorchester	410-901-2426
Frederick	301-600-1725
Garrett	Garrett Community Action – 301-334-9431
Harford Howard	410-638-1671 AAA Transport – 800-577-1050
Kent	410-778-7025
Montgomery	Montgomery Co Dept of Public Works & Transit – 240-777-5899
Prince George’s	301-856-9555
Queen Anne’s	QA Co Dept of Aging – 410-758-2357
St. Mary’s	301-475-4296
Somerset	Shore Transit – 443-260-2300 Lifestar – 410-546-0809
Talbot	Bay Area Transportation – 800-987-9008 Best Care ambulance – 410-476-3688
Washington	240-313-3264
Wicomico	Shore Transit – 443-260-2300 Lifestar -410-546-0809
Wocester	410-632-0092 or 0093

Medicaid Covered Services That Are Not The Responsibility of Jai Medical Systems

The following services are paid for by the State on a fee-for-service basis:

- Occupational therapy, physical therapy, speech therapy or audiology services for children under the age of 21 years old.
- Intermediate care facilities - mental retardation services are available through State facilities.
- Medical day care services are available through direct provider reimbursement by the State on a fee-for-service basis.
- Personal care services are available through direct provider reimbursement by the State on a fee-for-service basis.
- Viral load testing, genotypic, phenotypic or HIV/AIDS drug resistance testing, and enfuvirtide used in treatment of HIV/AIDS are reimbursed directly by the Department if the service is rendered by a Department approved provider and medically necessary.
- Specialty mental health services. (See Section IV.)
- All services to individuals enrolled in the Rare and Expensive Case Management Program. (See Section V.)
- Service provided after the thirtieth day of an enrollee's admission in a chronic hospital, rehabilitation hospital, skilled nursing facility, intermediate care facility, or Institution for Mental Disease. (The 30 day limit is subject to Jai Medical Systems receiving the Department's approval for disenrollment from our MCO.)
- Health-related services and targeted case management services provided to children when the services are specified in the child's Individualized Family Service Plan or Individualized Education Plan and provided in the schools or by community-based children's medical services providers.
- Healthy Start Case Management Services delivered by Local Health Departments.
- Special support services for individuals covered under the Developmental Disabilities waiver.
- Antiretroviral drugs in American Hospital Formulary Service therapeutic class 8:18:08 used in the treatment of HIV/AIDS.

Self-Referral Services

Enrollees can elect to receive certain covered services from out-of-plan providers. Jai Medical Systems will cover these pursuant to COMAR 10.09.67.28. The services that an enrollee has the right to access on a self-referral basis include:

- Certain family planning services including office visits, diaphragm fitting, IUD insertion and removal, special contraceptive supplies, Norplant removal, depo-provera-FP, latex condoms, and PAP smear;
- Certain school-based health center services, including treatment and one uncomplicated follow-up visit for up to four acute somatic illnesses per semester, and the family planning services listed above;
- Initial medical examination for a child in State supervised care;
- Unless Jai Medical Systems provides for the service before a newborn is discharged from the hospital, the initial examination of a newborn before discharge, if performed by an out-of-network on-call hospital provider;
- Annual Diagnostic and Evaluation Service (DES) visit for an enrollee diagnosed with HIV or AIDS;
- Continued obstetric care with her pre-established provider for a new pregnant enrollee;
- Renal dialysis services; and
- Pharmaceutical and laboratory services, when provided in connection with a legitimately self-referred service, provided on-site by the same out of plan provider at the same location as the self-referred service.
- A newly enrolled child with a special health care need may continue to receive medical services directly related to the child's medical condition under a plan of care that was active at the time of the child's initial enrollment, if the child's out-of-plan provider submits the plan of care to Jai Medical Systems for review and approval within 30 days of enrollment (For additional information, see Page 7).
- Emergency services as described in COMAR 10.09.66.08 B.
- Substance abuse services such as individual and group counseling, detoxification and inpatient care when provided by and ADAA certified provider and ASAM criteria is met.
- A comprehensive substance abuse assessment (CSAA) if the following conditions are met:
 - Recipient is not currently in substance abuse treatment.

- Recipient has not had a CSAA during the same calendar year, and
- The assessment provider is an ADAA certified substance abuse provider who is qualified to administer the ASI or POSIT, and the ASAM.

Optional Services Provided by Jai Medical Systems

Dental Services for Adults 21 Years and Older with a referral written by their PCP:

- Oral exam and cleaning every 6 months.
- Amalgram restorations, sedative fillings, and simple extractions.

Vision Services for Adults 21 Years and Older:

- One exam every year.
- One pair of eyeglasses every 2 years.

Podiatry Services for Adults 21 Years and Older:

- As needed, determined by your PCP.

Section IV

Specialty Mental Health Services

Introduction

Under the HealthChoice program we are responsible for a comprehensive package of services, with limited exceptions detailed in Section III. The HealthChoice program, however, has two significant program areas where eligible recipient's services are not the responsibility of the MCO. These 'carve outs' are distinct in that one carves out a service, specialty mental health care, and the other carves out a population, individuals who qualify for the Rare and Expensive Case Management (REM program).

SPECIALTY MENTAL HEALTH SERVICES (SMHS)

www.dhmd.state.md.us/mha

Description

In the State of Maryland, the system responsible for the delivering of mental health services to Medicaid recipients is the Public Mental Health System (PMHS). The PMHS will deliver all specialty mental health services to enrollees in HealthChoice. The Mental Hygiene Administration (MHA), in collaboration with Core Service Agencies (CSA) operate the PMHS. The MHA contracts with an Administrative Service Organization (ASO) to provide administrative management functions for all the PMHS, Statewide.

Local Access to SMHS - Role of the Core Services Agencies (CSAs)

www.dhmd.state.us/mha/csa.overview

Twenty CSAs serve as the local entities in charge of the mental health service delivery system in their jurisdictions. Working in conjunction with the MHA, CSAs:

- Plan, establish, coordinate, and manage publicly funded mental health services in their respective jurisdictions. CSAs will promote the full participation of mental health recipients, family members, caregivers, local human service and healthcare agencies, as well as other appropriate stakeholders in developing and evaluating these services.
- Determine type and capacity need of providers to offer a comprehensive array of publicly funded mental health services for their communities.
- Assure recipient access to services.
- Measure the quality of the services rendered.
- Handle grievances complaints and appeals, in accordance with COMAR.

Role of the Administrative Service Organization (ASO)

The ASO:

- Verifies the eligibility of recipients.
- Authorizes services that are determined to be medically necessary according to criteria set by the MHA.
- Refers individuals to qualified providers of public mental health services
- Performs service utilization review to assess quality, appropriateness, and effectiveness of care for the MHA in collaboration with the CSAs.
- Processes billing claims and remits payments.
- Maintains 24-hour, toll-free telephone access seven days a week for recipients at 1-800-888-1965. Access for providers is maintained from 8:00 am – 6:00 pm Monday through Friday at 1-800-888-1965.
- Conducts annual provider and recipient satisfaction surveys and submits results to the MHA and the CSAs.

Access to Specialty Mental Health Services

- Specialty mental health services (i.e., any mental health services other than primary mental health services) are not subject to capitation and are not our responsibility. Even so, Jai Medical Systems or our PCPs do have the responsibility to refer eligible enrollees to the PMHS when specialty mental health services are needed.
- An enrollee with a probable diagnosis of a mental disorder is eligible for referral to the SMHS by the PCP or Jai Medical Systems if the following conditions are met:
 - The enrollee's probable diagnosis of a mental disorder was established in accordance with the current American Psychiatric Association Diagnostic and Statistical Manual recognized by DHMH;
 - The probable diagnosis is not a sole diagnosis of substance abuse or dependence, dementia, or mental retardation or one of the diagnoses listed at the end of this section; and
 - The PCP or Jai Medical Systems determines that primary mental health services provided by the PCP are insufficient to address the enrollee's mental health treatment needs.

- A mental health professional functioning as the SMHS utilization review (UR) agent will accept preauthorization requests to determine the medical necessity for mental health assessment or treatment. The SMHS UR agent will preauthorize medically necessary services of a type, frequency, and duration that are consistent with expected results and are cost-effective.
- If the SMHS UR agent determines that there is medical necessity for specialty mental health services, the enrollee will be linked with the appropriate services.
- If the SMHS UR agent determines that specialty mental health services are not medically necessary, the SMHS UR will, as appropriate, promptly consult the referral source for assistance in developing a plan for the enrollee, to determine whether an alternative service or a service of alternate duration is appropriate.
- If the SMHS UR agent denies services, the enrollee, and the provider are notified or in writing, specifying the clinical rationale for the denial, and outlining procedures for appealing the denial.
- With the recipient's permission, the treating mental health provider communicates directly with the PCP, to coordinate mental health and somatic care.
- The SMHS UR agent may not deny services without arranging an appropriate alternative service if the denial of services would abruptly change the enrollee's living situation or cause severe disruption to an enrollee with serious and persistent mental illness or serious emotional disturbance.

Referring an Enrollee to the SMHS through a Toll-Free Help Line: 1-800-888-1965

The ASO's toll-free number is available 24 hours a day, 7 days a week and is staffed by qualified mental health professional called Care Managers.

Enrollees are able to access the ASO directly or through assistance from Jai Medical Systems, their PCP, a mental health provider, family member, or caregiver. Staff is trained to handle those who are non-English speaking or hearing impaired. Back up physician advisors will be available at all times.

Once a call is received, Care Managers assess requests for service using the following definitions of need:

- **Acute Crisis**- A situation in which an individual is threatening imminent harm to them self or others. The enrollee or the person making the call may state or imply that the recipient is not in control of these impulses. Help will be dispatched immediately, while keeping the caller on the line with a clinician.

- **Emergency-** A situation involving an enrollee or the person making the call who states or implies that the recipient may do harm to them self or others if help is not received soon. The caller states or implies the recipient's need for help, but may be able to maintain impulse control for several hours until help can be arranged. The Care Manager's assessment of the situation presented is that acute crisis services would not be needed. In these cases, the PMHS protocols require that authorizations be made within one hour and face-to-face emergency services must be provided within four hours.
- **Urgent-** A situation in which the recipient is experiencing a decrease in self-control and increasing frustration over life events. The Care Manager's assessment is that neither acute crisis nor emergency services are needed. As a result, the enrollee plans or engages in avoidance activities, such as running away, rather than threatening harm to self or others. The PMHS protocols require that an urgent situation be handled through face-to-face services within 24 hours.
- **Scheduled-** A situation in which the enrollee or caller feels that the enrollee is in no immediate harm, but requires an assessment and, probably mental health services. The PMHS protocols require that recipients be seen by a provider within 10 working days.
- The PMHS will arrange for medically appropriate psychiatric consultations for any condition.

Specialty Mental Health Diagnoses Covered by the PMHS

295.00 – 298.9
 299.9
 300.00 – 301.6
 301.81 – 302.6
 302.81 – 302.9
 307.1
 307.3
 307.5 – 307.89
 308.0 – 308.9
 309.0 - 309.9
 311
 312.0 – 312.9
 313.0 - 313.82
 313.89 – 314.9
 332.1
 333.1
 333.82
 333.90
 333.92
 333.99
 648.4
 648.40-648.44

Section V

Rare and Expensive Case Management (REM) Program

Overview

The Department of Health and Mental Hygiene (DHMH) administers a Rare and Expensive Case Management (REM) program to address the special needs of waiver-eligible individuals diagnosed with rare and expensive medical conditions. The REM program, a part of the HealthChoice program, was developed to ensure that individuals who meet specific criteria receive high quality, medically necessary and timely access to health services.

Qualifying diagnoses for inclusion in the REM program must meet the following criteria:

- Occurrence is generally fewer than 300 individuals per year;
- Cost is generally more than \$10,000 on average per year;
- Need is for highly specialized and/or multiple providers/delivery system;
- Chronic condition;
- Increased need for continuity of care; and
- Complex medical, habilitative and rehabilitative needs.

Medicaid Services and Benefits

To qualify for the REM program, a recipient must have one or more of the diagnoses specified in the Rare and Expensive Disease List at the end of this section. The recipients may elect to enroll in the REM Program, or to remain in Jai Medical Systems if the Department agrees that it is medically appropriate. REM participants are eligible for fee-for-service benefits currently offered to Medicaid-eligible recipients not enrolled in MCOs as well as additional, optional services, which are described in COMAR 10.09.69. All certified Medicaid providers other than HMOs, MCOs, ICF-MRs and IMDs are available to REM participants, in accordance with the individual's plan of care.

Case Management Services

In addition to the standard and optional Medicaid services, REM participants have a case manager assigned to them. The case manager's responsibilities include:

- Gathering all relevant information needed to complete a comprehensive needs assessment;
- Assisting the participant with selecting an appropriate PCP, if needed;
- Consulting with a multi-disciplinary team that includes providers, participants, and family/care givers, to develop the participant's plan of care;
- Implementing the plan of care, monitoring service delivery, and making modifications to the

plan as warranted by changes in the participant's condition;

- Documenting findings and maintaining clear and concise records; and
- Assisting in the participant's transfer out of the REM program, when and if appropriate.

Care Coordination

REM case managers are also expected to coordinate care and services from other programs and/or agencies to ensure a comprehensive approach to REM case management services.

Examples of these agencies and programs are:

- DHMH - Healthy Start Program - follow up newborn assessments;
- Developmental Disability Administration - coordinate services for those also in the Home and Community-based Services Waiver;
- DHMH - Maternal Child Health Division on EPSDT - guidelines and benchmarks and other special needs children's issues;
- AIDS Administration - consult on pediatric AIDS;
- DHR - coordinate Medical Assistance eligibility issues; coordinate/consult with Child Protective Services and Adult Protective Services; coordinate with foster care programs;
- Department of Education - coordination with the service coordinators of Infants and Toddlers Program and other special education programs;
- Mental Hygiene Administration - referral for mental health services to the Specialty Mental Health System, as appropriate, and coordination of these services with somatic care.

Referral and Enrollment Process

Candidates for REM are generally referred from HealthChoice MCOs, providers, or other community sources. Self-referral or family-referral is also acceptable. Referral must include a physician's signature and the required supporting documentation for the qualifying diagnosis(es). A registered nurse reviews the medical information: in order determine the recipient's eligibility for REM. If the Intake nurse determines that there is no qualifying REM diagnosis, the application is sent to the REM physician advisor for a second level review before a denial notice is sent to the recipient and referral source.

If the Intake nurse determines that the recipient has a REM-qualifying diagnosis, the nurse approves the recipient for enrollment. However, before actual enrollment is completed, the Intake Unit contacts the PCP to see if he/she will continue providing services in the fee-for service environment. If not, the case is referred to a case manager to arrange a PCP in

consultation with the recipient. If the PCP will continue providing services, the Intake Unit then calls the recipient to notify of the enrollment approval, briefly explain the program, and give the recipient an opportunity to refuse REM enrollment. If enrollment is refused, the enrollee remains in the MCO. At the time of recipient notification, the Intake Unit also ascertains if the recipient is receiving services in the home, e.g., home nursing, therapies, supplies, equipment, etc. If so, the case is referred to a case manager for service coordination. We are responsible for providing the recipient's care until the recipient is actually enrolled in the REM program. If the recipient does not meet the REM criteria, the recipient will remain enrolled in Jai Medical Systems.

For questions or to request a REM Referral Form, please call telephone number 1-800-565-8190. Referrals may be faxed to the REM Intake Unit at 410-333-5426 or mailed to the following address:

**REM Program Intake Unit
Maryland Department of Health and Mental Hygiene
Office of Health Services
201 W. Preston Street, Room 210
Baltimore, MD 21201-2399**

Table of Rare and Expensive Disease List as of January 2013

ICD-9	Disease	Age Group
042	Symptomatic HIV disease/AIDS (pediatric)	0-20
V08	Asymptomatic HIV status (pediatric)	0-20
795.71	Infant with inconclusive HIV result	0-12 months
270.0	Disturbances of amino-acid transport: Cystinosis Cystinuria Hartnup disease	0-20
270.1	Phenylketonuria – PKU	0-20
270.2	Other disturbances of aromatic-acid metabolism	0-20
270.3	Disturbances of branched-chain amino-acid metabolism	0-20
270.4	Disturbances of sulphur-bearing amino-acid metabolism	0-20
270.5	Disturbances of histidine metabolism: Carnosinemia Histidinemia Hyperhistidinemia Imidazole aminoaciduria	0-20
270.6	Disorders of urea cycle metabolism	0-20
270.7	Other disturbances of straight-chain amino-acid: Glucoglycinuria Glycinemia (with methylmalonic acidemia) Hyperglycinemia, Hyperlysinemia Pipecolic acidemia Saccharopinuria Other disturbances of metabolism of glycine, threonine, serine, glutamine, and lysine	0-20

ICD-9	Disease	Age Group
270.8	Other specified disorders of amino-acid metabolism: Alaninemia Ethanolaminuria Glycoprolinuria Hydroxyprolinemia Hyperprolinemia Iminoacidopathy Prolinemia Prolinuria Sarcosinemia	0-20
271.0	Glycogenosis	0-20
271.1	Galactosemia	0-20
271.2	Hereditary fructose intolerance	0-20
272.7	Lipidoses	0-20
277.00	Cystic fibrosis without ileus	0-64
277.01	Cystic fibrosis with ileus	0-64
277.02	Cystic fibrosis with pulmonary manifestations	0-64
277.03	Cystic fibrosis with gastrointestinal manifestations	0-64
277.09	Cystic fibrosis with other manifestations	0-64
277.2	Other disorders of purine and pyrimidine metabolism	0-64
277.5	Mucopolysaccharidosis	0-64
277.81	Primary Carnitine deficiency	0-64
277.82	Carnitine deficiency due to inborn errors of metabolism	0-64
277.89	Other specified disorders of metabolism	0-64
284.01	Constitutional red blood cell aplasia	0-20
284.09	Other constitutional aplastic anemia	0-20
286.0	Congenital factor VIII disorder	0-64
286.1	Congenital factor IX disorder	0-64
286.2	Congenital factor XI deficiency	0-64

ICD-9	Disease	Age Group
286.3	Congenital deficiency of other clotting factors	0-64
286.4	von Willebrand's disease	0-64
330.0	Leukodystrophy	0-20
330.1	Cerebral lipidoses	0-20
330.2	Cerebral degenerations in generalized lipidoses	0-20
330.3	Cerebral degeneration of childhood in other diseases classified elsewhere	0-20
330.8	Other specified cerebral degeneration in childhood	0-20
330.9	Unspecified cerebral degeneration in childhood	0-20
331.3	Communicating hydrocephalus	0-20
331.4	Obstructive hydrocephalus	0-20
333.2	Myoclonus	0-5
333.6	Idiopathic torsion dystonia	0-64
333.7	Symptomatic torsion dystonia	0-64
333.90	Unspecified extrapyramidal disease and abnormal movement disorder	0-20
334.0	Friedreich's ataxia	0-20
334.1	Hereditary spastic paraplegia	0-20
334.2	Primary cerebellar degeneration	0-20
334.3	Cerebellar ataxia NOS	0-20
334.4	Cerebellar ataxia in other diseases	0-20
334.8	Other spinocerebellar diseases NEC	0-20
334.9	Spinocerebellar disease NOS	0-20
335.0	Werdnig-Hoffmann disease	0-20
335.10	Spinal muscular atrophy unspecified	0-20
335.11	Kugelberg-Welander disease	0-20
335.19	Spinal muscular atrophy NEC	0-20
335.20	Amyotrophic lateral sclerosis	0-20
335.21	Progressive muscular atrophy	0-20
335.22	Progressive bulbar palsy	0-20
335.23	Pseudobulbar palsy	0-20
335.24	Primary lateral sclerosis	0-20
335.29	Motor neuron disease NEC	0-20

ICD-9	Disease	Age Group
335.8	Anterior horn disease NEC	0-20
335.9	Anterior horn disease NOS	0-20
341.1	Schilder's disease	0-64
343.0	Diplegic infantile cerebral palsy	0-20
343.2	Quadriplegic infantile cerebral palsy	0-64
344.00	Quadriplegia, unspecified	0-64
344.01	Quadriplegia, C1-C4, complete	0-64
344.02	Quadriplegia, C1-C4, incomplete	0-64
344.03	Quadriplegia, C5-C7, complete	0-64
344.04	Quadriplegia, C5-C7, incomplete	0-64
344.09	Quadriplegia, Other	0-64
359.0	Congenital hereditary muscular dystrophy	0-64
359.1	Hereditary progressive muscular dystrophy	0-64
359.21	Congenital myotonic dystrophy (Steinert's only)	0-64
437.5	Moyamoya disease	0-64
579.3	Short gut syndrome	0-20
582.0	Chronic glomerulonephritis with lesion of proliferative glomerulonephritis	0-20
582.1	Chronic glomerulonephritis with lesion of membranous glomerulonephritis	0-20
582.2	Chronic glomerulonephritis with lesion of membranoproliferative glomerulonephritis	0-20
582.4	Chronic glomerulonephritis with lesion of rapidly progressive glomerulonephritis	0-20
582.81	Chronic glomerulonephritis in diseases classified elsewhere	0-20
582.89	Other: Chronic glomerulonephritis with lesion of exudative nephritis interstitial (diffuse) (focal) nephritis	0-20

ICD-9	Disease	Age Group
582.9	Chronic glomerulonephritis with unspecified pathological lesion in kidney Nephritis specified as chronic, Nephropathy specified as chronic NOS glomerulonephritis specified as chronic Hemorrhagic glomerulonephritis specified as chronic	0-20
585.1	Chronic kidney disease, Stage I	0-20
585.2	Chronic kidney disease, Stage II (mild)	0-20
585.3	Chronic kidney disease, Stage III (moderate)	0-20
585.4	Chronic kidney disease, Stage IV (severe)	0-20
585.5	Chronic kidney disease, Stage V	0-20
585.6	End stage renal disease	0-20
585.9	Chronic kidney disease, unspecified	21-64
585.6, V45.11	Chronic renal failure with dialysis	21-64
741.00	Spina bifida with hydrocephalus NOS	0-64
741.01	Spina bifida with hydrocephalus cervical region	0-64
741.02	Spina bifida with hydrocephalus dorsal region	0-64
741.03	Spina bifida with hydrocephalus lumbar region	0-64
741.90	Spina bifida unspecified region	0-64
741.91	Spina bifida cervical region	0-64
741.92	Spina bifida dorsal region	0-64
741.93	Spina bifida lumbar region	0-64
742.0	Encephalocele: Encephalocystocele Encephalomyelocele Hydroencephalocele Hydromeningocele, cranial Meningocele, cerebral Menigoencephalocele	0-20
742.1	Microcephalus: Hydromicrocephaly	0-20
742.3	Congenital hydrocephalus	0-20
742.4	Other specified anomalies of brain	0-20
742.51	Other specified anomalies of the spinal cord Diastematomyelia	0-64

ICD-9	Disease	Age Group
742.53	Other specified anomalies of the spinal cord: Hydromyelia	0-64
742.59	Other specified anomalies of spinal cord: Amyelia Congenital anomaly of spinal meninges Myelodysplasia Hypoplasia of spinal cord	0-64
748.1	Nose anomaly - cleft or absent nose ONLY	0-5
748.2	Web of larynx	0-20
748.3	Laryngotracheal anomaly NEC- Atresia or agenesis of larynx, bronchus, trachea, only	0-20
748.4	Congenital cystic lung	0-20
748.5	Agenesis, hypoplasia and dysplasia of lung	0-20
749.00	Cleft palate NOS	0-20
749.01	Unilateral cleft palate complete	0-20
749.02	Unilateral cleft palate incomplete	0-20
749.03	Bilateral cleft palate complete	0-20
749.04	Bilateral cleft palate incomplete	0-20
749.20	Cleft palate and cleft lip NOS	0-20
749.21	Unilateral cleft palate with cleft lip complete	0-20
749.22	Unilateral cleft palate with cleft lip incomplete	0-20
749.23	Bilateral cleft palate with cleft lip complete	0-20
749.24	Bilateral cleft palate with cleft lip incomplete	0-20
749.25	Cleft palate with cleft lip NEC	0-20
750.3	Congenital tracheoesophageal fistula, esophageal atresia and stenosis	0-3
751.2	Atresia large intestine	0-5
751.3	Hirschsprung's disease	0-15
751.61	Biliary atresia	0-20
751.62	Congenital cystic liver disease	0-20
751.7	Pancreas anomalies	0-5
751.8	Other specified anomalies of digestive system NOS	0-10

Section VI

DHMH Quality Improvement and MCO Oversight Activities

QUALITY ASSURANCE MONITORING PLAN

The quality assurance monitoring plan for the HealthChoice program is based upon the philosophy that the delivery of health care services, both clinical and administrative, is a process that can be continuously improved. The State of Maryland's quality assurance plan structure and function supports efforts to deal efficiently and effectively with any identified quality issue. On a daily basis and through a systematic process of annual audit of MCO operations and health care delivery, the Department identifies both positive and negative trends in service delivery. Quality monitoring and evaluation and education through enrollee and provider feedback is an integral part of the managed care process and helps to ensure that cost containment activities do not adversely affect the quality of care provided to enrollees.

The Department's quality assurance monitoring plan is a multifaceted strategy for assuring that the care provided to HealthChoice enrollees is high quality, complies with regulatory requirements, and is rendered in an environment that stresses continuous quality improvement. Components of the Department's quality improvement strategy include: establishing quality assurance standards for MCOs; developing quality assurance monitoring methodologies; and developing, implementing and evaluating quality indicators, outcomes measures, and data reporting activities.

The Department has adopted a variety of methods and data reporting activities to assess MCO service quality to Medicaid enrollees. These areas include:

- Health Risk Assessment screening conducted by the enrollment broker at the time the recipient selects an MCO to assure that the MCO is alerted to immediate health needs, e.g., prenatal care service needs.
- A complaint, grievance, and appeals system administered by Department staff.
- A complaint, grievance, and appeals system administered by Jai Medical Systems.
- A review of each MCO's quality improvement processes and clinical care through an annual systems performance review performed by an External Quality Review Organization (EQRO) selected by the Department. The audit assesses the structure, process, and outcome of each MCO's internal quality assurance program. The audit also assesses the quality of services provided to Medicaid enrollees by Jai Medical Systems, the network providers, and subcontractors of the organization.
- The annual collection, validation and evaluation of the Healthcare Effectiveness Data and Information Set (HEDIS). HEDIS is a set of standardized performance measures designed by the National Committee for Quality Assurance. The measures are audited by an independent entity and results are reported to DHMH.
- The annual collection and evaluation of a set of performance measures identified by the Department.

- An annual enrollee satisfaction survey using the Consumer Assessment Plans Survey.
- Monitoring of preventive health, access and quality of care outcome measures based on encounter data.
- Development and implementation of a HealthChoice outreach plan.
- A review of services to children to determine our compliance with federally required EPSDT standards of care.
- The annual production of a Consumer Report Card.

Quarterly Complaint Reporting

We are responsible for gathering and reporting to the State information about enrollee's appeals and grievances and our interventions and resolution to these appeals and grievances. The reports contain data on appeals and grievances in a standardized format and are submitted on a quarterly basis. To accomplish this, we are required to operate a Consumer Services Hotline and Internal complaint process.

Jai Medical Systems Member Hotline

Jai Medical Systems maintains a member services unit that operates a member services hotline from 9am to 6pm. This unit handles and resolves or properly refers enrollees' inquiries or complaints to other agencies. Additionally, we provide enrollees with information about how to access our member services unit and consumer services hotline to obtain information and assistance.

Jai Medical Systems Enrollee Complaint Policy and Procedures

Jai Medical Systems has written complaint policies and procedures whereby an enrollee who is dissatisfied with the MCO or its network may seek recourse verbally or in writing from the HealthChoice Enrollee Help Line staff. Jai Medical Systems must submit its written internal complaint policy and procedures to the Department for its approval.

Jai Medical Systems' internal complaint materials are developed in a culturally sensitive manner, at a suitable reading comprehension level, and in the enrollee's native tongue if the enrollee is a member of a substantial minority. Jai Medical Systems delivers a copy of its complaint policy and procedures to each new enrollee at the time of initial enrollment, and at any time upon an enrollee's request.

Jai Medical Systems includes in its written internal complaint process the procedures for registering and responding to appeals and grievances in a timely fashion. These procedures include resolving emergency medically related complaints within 24 hours, non-emergency medically related complaints within 5 days, and administrative complaints within 30 days. In addition, the written procedures:

- Require documentation of the substance of the complaints and steps taken to resolve;
- Include participation by the provider, if appropriate;
- Allow participation by the ombudsman, if appropriate;
- Ensure the participation of individuals within the MCO who have the authority to require corrective action;
- Include a documented procedure for written notification on the outcome of our determination;
- Include a procedure for immediate notice to the Department of all disputed denials of benefits or services in emergency medical situations;
- Include a procedure for notice to the enrollee through an Adverse Action Letter that meets the approval of the Department of all disputed denials, reductions, suspensions, or terminations of services or benefits;
- Include an appeal process which provides, at its final level, an opportunity for the enrollee to be heard by our Chief Executive Officer, or their designee;
- Include a documented procedure for reporting of all complaints received by us to appropriate parties; and
- Include a protocol for the aggregation and analysis of complaints and grievance data and use of the data for quality improvement;

No punitive action will be taken against the enrollee for making a complaint against the Department or Jai Medical Systems.

Appeals

If the member wants to file an appeal with us, they have to file it within 90 days from the date of receipt of the denial letter.

You can also file an appeal for them if the member signs a form giving you permission. Other people can also help the member to file an appeal such as a family member or a lawyer.

When the member files an appeal, or at any time during our review they should be sure to provide us with any new information that they have that will help us make our decision.

When reviewing the member's appeal Jai Medical Systems will:

- Use doctors with appropriate clinical expertise in treating the enrollee's condition or

disease.

- Not use the same MCO staff to review the appeal who denied the original request for service.
- Make a decision about administrative appeals within 30 days.

If the member's doctor or Jai Medical Systems feels that the member's appeal should be reviewed quickly due to the seriousness of the member's condition, the member will receive a decision about their appeal within 3 business days.

The appeal process may take up to 44 days if the member asks for more time to submit information or if we need to get additional information from other sources. We will send the member a letter if we need additional information.

If the member's appeal is about a service that was already authorized and they were already receiving, they may be able to continue to receive the service while we review their appeal. The member should contact us at 1-888-JAI-1999 if they would like to continue receiving services while their appeal is reviewed. If the member does not win their appeal, they may have to pay for the services that they received while the appeal was being reviewed.

Once we complete our review, we will send the member a letter letting them know our decision. If we decide that they should not receive the denied service, that letter will tell them how to file another appeal through us or ask for a State Fair Hearing.

Grievances

If the member's complaint is about something other than not receiving a service, this is a grievance. Examples of grievances would be, not being able to find a doctor, trouble getting an appointment, or not being treated fairly by someone who works at Jai Medical Systems or at the doctor's office.

If the member's grievance is:

- About an urgent medical problem that they are having, it will be solved within 24 hours
- About a medical problem but it is not urgent, it will be solved within 5 days
- Not about a medical problem, it will be solved within 30 days

If a member would like a copy of our official complaint procedure or if they need help filing a complaint, they can call 1-888-JAI-1999.

Jai Medical Systems Provider Complaint and Grievance/Appeal Process

The following outlines the Provider Complaint and Grievance/Appeal process.

A. (Level 1) Informal Complaint:

- A provider may file an informal complaint with Jai Medical Systems' Provider Relations Department in person, in writing, by phone, or by appointment. (The informal complaint is the first level of the complaint process). For administrative and claims related complaints, the Provider Relations Department will provide a written or phone response to the provider within 10 days from the date of receipt of the complaint.
- All informal complaints which are medically related and involving decisions related to professional care and treatment provided by the provider will be reviewed by Jai Medical Systems' Executive Medical Director. The Executive Medical Director or designee will meet with the provider to discuss his/her complaint and will render a response within five days. Complaints related to quality of care issues are forwarded to the Executive Medical Director and the Director of Quality Assurance. Both the Executive Medical Director and the Director of Quality Assurance will review the case and meet with the provider to discuss his/her complaint. A written response is given to the provider within 5 days.
- All informal complaints which are not clinically related and involving decisions related to administrative services provided by the provider will be reviewed by Jai Medical Systems' Chief Executive Officer. The Chief Executive Officer will meet with the provider to discuss his/her complaint and will render a written response to the provider within 5 days.
- If the informal complaint is not resolved to the provider's satisfaction, he/she may file a formal appeal or grievance in writing with the Provider Relations Department.

B. (Level 2) Formal Grievance/Appeal

- A provider may obtain a formal grievance/appeal form from the Provider Relations Department. (See Attachment K.) Jai Medical Systems will acknowledge receipt of the grievance/appeal in writing within 5 business days of receipt of the grievance/appeal form.
- A provider must file their formal grievance/appeal with Jai Medical Systems within 90 business days of the action or adverse decision.
- Upon receipt of the grievance/appeal form, the Provider Relations Department ensures that the complaint issue is processed for review and investigation by the Physician Advisory Sub-Committee (PASC). The PASC is comprised of five network physicians,

including the Executive Medical Director; a representative from the Provider Relations Department; and a representative from Administration.

- A grievance/appeal hearing is held within 30 days of receipt of the complainant's formal grievance/appeal form. The provider is contacted 3 to 5 days after receipt of the formal grievance/appeal form to discuss a mutually convenient date/time for the hearing. When a mutual date/time is agreed upon, the Provider Relations Department sends a formal letter which includes the date and time of the hearing, hearing procedures, and the provider's rights at the hearing. The provider is invited to attend the grievance/appeal hearing. The complainant has the right to be accompanied by legal counsel. The Executive Medical Director must attend the hearing (or be on call) to provide input regarding medical issues.
- During the grievance/appeal hearing, a summary of the complaint issue and all supporting documentation is presented by the Executive Medical Director to the Committee members. The complainant also presents the complaint issue and all supporting documentation from his/her perspective to the members of the Committee. The Committee has the opportunity to ask questions and review all supporting documentation. After the hearing, the Committee members assemble to assess the facts and make a fair decision. The majority vote wins. The Committee will provide a written response (sent via certified mail) to the complainant within ten days from the date of the grievance/appeal hearing. This response will include the reasons for the decision and the complainant's rights to request a second hearing. If the formal grievance/appeal procedure does not resolve the provider's complaint to his/her satisfaction, he/she has the right to ask for the decision to be reviewed by the Chief Executive Officer of Jai Medical Systems Managed Care Organization, Inc.

C. (Level 3) Second Grievance/Appeal

A complainant who is dissatisfied with the decision of the PASC has five days from the date that he/she receives the decision letter from the PASC to request a second hearing. If a second hearing is desired, the complainant's case will be reviewed by the Chief Executive Officer of Jai Medical Systems Managed Care Organization, Inc. The Chief Executive Officer will provide a response in writing to the complainant within five days of receipt of the request for a second hearing, including the reasons for his decision. This Second Grievance/Appeal process can be repeated until 90 business days from the initial appeal have passed. At that time, the final decision will be binding.

Jai Medical Systems will not take any punitive action against a provider for utilizing our provider complaint process. For more detailed information regarding the claims appeal process, please see page 31.

DHMH Quality Oversight: Complaint and Appeal Processes

The HealthChoice and Acute Care Administration operates the central complaint investigation process. The Enrollee Help Line and the Complaint Resolution and Provider Hotline Units, are

responsible for the tracking of both provider and enrollee complaints and grievances called into the hotlines, or sent to the Department in writing.

Enrollee Help Line

The Enrollee Help Line (EHL) is available Monday through Friday from 7:30 AM to 5:30 PM. The toll free telephone number is: 1-800-284-4510 or TDD at 1-800-735-2258 for the hearing impaired.

The EHL is typically an enrollee's first contact with the Department. Help line staff are trained to answer questions about the HealthChoice program. EHL staff will:

- Direct recipients to our member services line when needed;
- Attempt to resolve simple issues by contacting us or other parties as needed; and
- Refer medical issues to the Department's Complaint Resolution Unit for resolution.

The EHL has the capability to address callers in languages other than English either through bilingual staff or through the use of a language line service.

The EHL uses an automated system for logging and tracking enrollee inquiries and grievances. Information is analyzed monthly and quarterly to determine if specific intervention with a particular MCO is required or changes in State policies and procedures are necessary.

Provider Hotline

The Provider Hotline provides HealthChoice providers access to DHMH staff for grievances and inquiries. Provider Hotline staff respond to general inquiries and resolves complaints from providers concerning enrollee access and quality of care as well as educating providers about the HealthChoice program. The telephone number for the Provider Hotline is 1-800-766-8692; TDD 1-800-735-2258. We will not take any punitive action against you for accessing the Provider Hotline.

As with the EHL, provider inquiries and complaints are tracked and analyzed monthly and quarterly to determine if specific intervention with particular MCOs is required or changes in State policies and procedures are necessary.

Complaint Resolution Unit

The Complaint Resolution Unit is a unit in the Outreach and Care Coordination Division of the HealthChoice and Acute Care Administration.

Roles and Responsibilities

Calls are referred by either the Enrollee Help Line or the Provider Hotline. With a staff of nurses and a physician consultant trained to address complex issues that may require medical knowledge, the Complaint Resolution Unit serves in the following capacities:

- Advocates on the caller's behalf to obtain resolution of the issue.
- Communicates with our staff, providers, and advocacy groups to resolve the issue and /or secure possible additional community resources for the enrollee's care when needed.
- Assists enrollees and providers in navigating the MCO system.
- Utilizes the local health department Ombudsman Program to provide localized assistance.
- Facilitates working with us and our providers to coordinate plans of care that meet the enrollees needs.
- Coordinates the State appeal process relating to a denied covered benefit or service for the enrollee.

The Complaint Resolution Unit operates Monday through Friday from 7:30 AM to 5:30 PM and has the capability to address recipients in languages other than English through the use of a language line service.

Ombudsman/Administrative Care Coordination Unit (ACCU) Program

The Department operates an Ombudsman/ACCU Program for the purpose of investigating disputes between enrollees and Managed Care Organizations referred by the Department's complaint unit. The ombudsman educates enrollees about the services provided by Jai Medical Systems and their rights and responsibilities in receiving services from us. When appropriate, the ombudsman may advocate on the enrollee's behalf including assisting the enrollee to resolve a dispute in a timely manner, using our internal grievance and appeal procedure.

The Ombudsman program is operated locally in each county of the State, under the direction of the Department. In most jurisdictions, local health departments carry out the local ombudsman function. A local health department that desires to serve as both the county ombudsman and as a MCO subcontractor must first secure the approval of the Secretary of the Department and of the local governing body. In addition, a local health department may not subcontract the ombudsman program.

Local ombudsman programs include staff with suitable experience and training to address complex issues that may require medical knowledge. When a complaint is referred from the Department's complaint unit, the local ombudsman may take any or all of the following steps, as appropriate:

- Attempt to resolve the dispute by educating the MCO or the enrollee;

- Utilize mediation or other dispute resolution techniques;
- Assist the enrollee in negotiating our internal complaint process; and
- Advocate on behalf of the enrollee throughout our internal grievance and appeal process.

All cases referred to the Ombudsman/ACCU, will be resolved within the timeframe specified by the Department's Complaint Resolution Unit or within 30 days of the date of referral.

The local ombudsman does not have the authority to compel us to provide disputed services or benefits. If the dispute is one that cannot be resolved by the local ombudsman's intervention, the local ombudsman will refer the dispute back to the Department for resolution. A local health department may not serve as ombudsman for cases in which the dispute between the enrollee and us involves the services of the local health department as a MCO subcontractor. The Department conducts a periodic review of the Ombudsman Program activities as part of the quarterly and annual complaint review process.

Departmental Dispute Resolution

When an enrollee does not agree with the MCO's decision to deny, stop, or reduce a service, the enrollee can appeal the decision. The enrollee can contact the EHL at 1-800-284-4510 and tell the representative that they would like to appeal the MCO's decision. The appeal will be sent to a nurse in the Complaint Resolution Unit. The Complaint Resolution Unit will attempt to resolve the issue with the MCO in 10 business days. If it cannot be resolved in 10 business days, the enrollee will be sent a notice that gives them a choice to request a fair hearing or wait until the Complaint Resolution Unit has finished its review. When the Complaint Resolution Unit is finished, working on the appeal, the enrollee will be notified of their findings.

If the Department disagrees with our determination, it may order us to provide the benefit or service immediately.

If the Department agrees with our determination to deny a benefit or service, it will issue written notice within 10 business days to the enrollee, stating the grounds for its decision and explaining the enrollee's appeal rights. The enrollee may exercise their right to an appeal by calling 1-888-767-0013 or by completing the Request for a Fair Hearing form attached to their appeal letter and sending it to:

Susan J. Tucker, Executive Director
Attn: Dina Smoot
Office of Health Services
201 W. Preston Street, Room 127
Baltimore, MD 21201

Enrollee Appeal

A HealthChoice enrollee may exercise their appeal rights pursuant to State Government Article, 10-201 et seq., Annotated Code of Maryland. An enrollee may appeal a Departmental decision that: (1) agrees with our determination to deny a benefit or service; (2) denies a waiver-eligible individual's request to disenroll; or (3) denies an enrollee eligibility in the REM program.

The enrollee may appeal a decision to the Office of Administrative Hearings. In appeals concerning the medical necessity of a denied benefit or service, a hearing that meets Department established criteria, as determined by the Department, for an expedited hearing, shall be scheduled by the Office of Administrative Hearings, and a decision shall be rendered within 3 days of the hearing. In cases other than those that are urgent concerning the medical necessity of a denied benefit or service, the hearing shall be scheduled within 30 days of receipt by the Office of Administrative Hearings of the notice of appeal and a decision shall be rendered within 30 days of the hearing. The parties to an appeal to the Office of Administrative Hearings under this section will be the Department and the enrollee, the enrollee's representative or the estate representative of a deceased enrollee. We may move to intervene as a party aligned with the Department.

We will provide all relevant records to the Department and provide witnesses for the Department, as required.

Following the hearing, the Office of Administrative Hearings issues a final decision. The final decision of the Office of Administrative Hearings is appealable to the Board of Review pursuant to Health-General Article, 2-201 to 2-207, Annotated Code of Maryland. The decision of the Board of Review is appealable to the Circuit Court, and is governed by the procedures specified in State Government Article, 10-201 et seq., Annotated Code of Maryland.

Section VII

Forms and Attachments

Attachment A:
School-Based Health Center
Health Visit Form

SCHOOL-BASED HEALTH CENTER VISIT REPORT

Well Child Exam (see attached physical form)

Confidential: Yes No

SBHC Name & Address: SBHC Provider Number: Contact Number: Telephone: Fax:	MCO Name & Address: Contact Name: Telephone: Fax: Date Faxed:	
Student Name: DOB: MA Number: SS Number:	Date of Visit:	ICD-9 Codes
	Type of Visit: ___ Acute/Urgent ___ Follow Up ___ Health Maintenance	CPT Codes
Provider Name/Title: (Please Print)	Drug Allergy: _____ • NKDA	
T: _____ Hgt: _____ Rapid Strep test: + - P: _____ Wgt: _____ Hgb: _____ RR: _____ BMI: _____ BGL: _____ BP: _____ U/A: _____ PF: _____ PaO2: _____	Current Medications:	Immunization review: • UTD Needs: _____ Given today: _____

Chief Complaint: _____ **Age:** _____

HPI:

Past Medical History: • Unremarkable • See health history • Other: _____

Physical Findings:

General: • Alert/NAD

• Other:

Head: • Normal

• Other:

Ears: • TMs: pearly, + landmarks, + light reflex

• Cerumen removed curette/lavage

• Other:

Eyes: • PERRLA, sclerae clear, no discharge/crusting

• Other:

Nose: • Turbinates: pink, without swelling

• Other:

Mouth: • Pharynx without erythema, swelling, or exudate

• Normal dentition without caries

• Other:

Neck: • Full ROM. No tenderness

• Other:

Lymph Nodes: • No lymphadenopathy

• Other:

Cardiac: • RRR, normal S1 S2, no murmur

• Other:

Lungs: • CTA bilaterally, no retractions, wheezes, rales, ronchi

• Other:

Abdomen: • Soft, non-tender, no HSM, no masses,

• Bowel sounds present

• Other:

Genitalia: • Normal female/normal male Tanner Stage _____

• Other:

Extremities: • FROM

• Other:

Neurologic: • Grossly intact

• Other:

Skin: • Intact, no rashes

• Other:

ASSESSMENT:

PLAN:

Treatment plan communicated to student/parent
RTC or PCP:

Provider Signature: _____
BEBCO 2242-09

PCP F/U Required: <input type="checkbox"/> Yes <input type="checkbox"/> No
--

Attachment B:
Local Health Services
Request Form

**LOCAL HEALTH SERVICES REQUEST FORM
INSTRUCTIONS**

PURPOSE: This form is intended for use by the Managed Care Organization [MCO] to refer clients in need of outreach and health-related services to the Local Health Department Administrative Care Coordination Unit [LHD-ACCU]. The assistance of the Local Health Department may be requested only after the MCO has made documented attempts to contact and bring into care a recipient who is difficult to reach or misses appointments. (COMAR 10.09.66.03B)

INSTRUCTIONS FOR USE:

1. **'TO'** - Fill in the appropriate Local Health Department based on the client's county of residence.
2. **'FROM'** - Indicate the referral source including contact name, address, phone number and fax number
3. **'CLIENT NAME'** - Provide client demographic information, MA number and last known address and phone number[s]
4. **'FOLLOW-UP'** - Indicate the client's population category [FOR] and the reason for the request [Related To]. Please add additional information or comments that may assist the LHD to outreach the member.

MCO Section:

- Indicate the type and number of outreach attempts (letters, phone calls, face-to-face)
- Provide the health care provider name and phone number
- Add any additional information under "Comments" that may assist the LHD to outreach the member i.e. full name and contact information of the Head of Household/Guardian; potential need for interpreter services; diagnosis/treatment; EDC; date of most recent contact between MCO and client and/or provider.
- Forward the top copy to the LHD-ACCU [LHD addresses attached]

Local Health Department Section:

- Indicate the action taken
- Include any additional case findings under "Comments" that may assist the MCO in providing on-going care coordination for the client
- Return the appropriate copy to the MCO/Provider

SELECTED DEFINITIONS:

MISSED APPOINTMENTS:

- Child under 2years who has missed two consecutive EPSDT appointments
- Child 2-21 years who has missed two consecutive appointments and is in need of treatment
- Pregnant woman who is thirty days past appointment date.
- Adult meeting 'special needs' criteria who has missed three consecutive appointments for treatment.

ADHERENCE TO PLAN OF CARE:

- Non-compliance with treatment plan or medical regime.

IMMUNIZATION DELAY:

- 60 days past immunization due date

PREVENTABLE HOSPITALIZATION:

- Inpatient care within the preceding 60 days for dehydration, pneumonia, burns, cellulitis, 'Failure to Thrive', lead poisoning, ingestion, intentional injuries

OTHER:

- Additional information that will assist the LHD with care coordination.

LOCAL HEALTH SERVICES REQUEST

Date: _____
 To: _____
 Attention: _____
 Address: _____
 City/State/Zip: _____
 Phone () _____ - _____

Client Name: _____
 Address: _____
 City/State/Zip: _____
 County: _____

Caregiver/Emergency Contact: _____
 Relationship: _____ Phone # _____

MA# _____ Private Ins. None
 Birthdate ___/___/___ SS# _____ - _____ - _____
 Sex: M F Hispanic: Y N
 Race: (circle) Afr-Amer/Black; Alaskan Native; Amer Native;
 Asian; More than one race; Native Hawaiian; or Pacific Islander;
 Unknown; White
 Marital Status (circle) Single Married Unk
 If Interpreter is needed specify language: _____

FOLLOW-UP FOR: (Check all that apply)

- Child under 2 years of age
- Child 2 - 21 years of age
- Child with special health care needs
- Pregnant EDD: ___/___/___
- Adult with disability (mental, physical, or developmental)
- Substance abuse care needed
- Homeless (at-risk)

Diagnosis: _____

Comments: _____

MCO
 From: _____ MCO
 Date Received: ___/___/___
 Document Outreach:
 Letter(s) _____
 Phone Call(s) _____
 Face to Face _____
 _____ Unable to Locate
 _____ Contact Date ___/___/___
 _____ Advised _____ Refused
 Comments: _____

 Contact Person _____
 Telephone # _____
 Fax # _____
 Provider Name: _____
 Provider Phone # _____

RELATED TO: (Check all that apply)

- Missed appointments: ___ # missed
- Adherence to plan of care
- Immunization delay
- Preventable hospitalization
- Transportation
- Other

LOCAL HEALTH DEPARTMENT (COUNTY)

Date Received: ___/___/___
 No Action (returned)
 Reason for return: _____
 Documented Outreach: _____
 Letter(s): _____
 Phone Call(s): _____
 Face to Face: _____
 Disposition:
 Contact Complete: Date ___/___/___
 Unable to Locate: Date ___/___/___
 Referred to: _____ Date ___/___/___
 Contact Person: _____
 Telephone # _____ Date ___/___/___

Comments: _____

LOCAL HEALTH SERVICES REQUEST FORM

INSTRUCTIONS FOR USE:

- 1.) **Purpose:** This form is to be used by PMP/ MCO to refer clients in need of outreach and health-related services to the LHD-ACCU.
- 2.) **To:** Fill the appropriate local health department based on the clients county of residence.
- 3.) **From:** Indicate the referral source including, mailing address, contact name, phone number, and fax number.
- 4.) **Client Name:** Provide demographic information, MA number, last known address and phone number.
- 5.) **Follow-up:** Indicate the population category (FOR) and the reason for the request (Related To) Please add additional information or comments, that may assist the LHD to outreach member.

MCO Section:

Indicate type and number of outreach attempts; forward top copy to LHD-ACCU. Please indicate provider name and phone number. Please add additional information/comments that may assist the LHD to outreach member.

LHD Section:

Indicate action taken and return the appropriate copy to the MCO/Provider.

SEND REFERRALS TO:

Allegany Co. Hlth. Dept.

12501 Willowbrook Rd., S.E.,
P O Box 1745
Cumberland, MD 21501-1745

(301) 759-5094
(fax) 301-777-2401

Anne Arundel Co. Hlth. Dept. - ACCU

3 Harry S. Truman Pkwy., HD 23
Annapolis, MD 21401

(410) 222-7541
(fax) 410-222-4150

Baltimore Co. Hlth. Dept. - ACCU

8501 LaSalle Rd., Suite 111
Towson, MD 21286

(410) 887-8741
(fax) 410-828-8346

Calvert Co. Hlth. Dept. - ACCU

975 Solomons Island Rd. North,
P.O. Box 980
Prince Frederick, MD 20678

(410) 535-5400
(fax) 410-535-1955

Caroline Co. Hlth. Dept. - ACCU

403 S. Seventh Street
P.O. Box 10
Denton, MD 21629

(410) 479-8000
(fax) 410-479-0244

Carroll Co. Hlth. Dept. - ACCU

290 S. Center Street, P.O. Box 845
Westminster, MD 21157

(410) 876-4940
(fax) 410-876-4959

Cecil Co. Hlth. Dept. - ACCU

401 Bow Street
Elkton, MD 21921

(410) 996-5145
(fax) 410-996-5121

Charles Co. Hlth. Dept. - ACCU

4545 Crain Hwy., P.O. BOX 1050
White Plains, MD 20695

(301) 609-6900
(fax) 301-934-7048

Dorchester Co. Hlth. Dept. - ACCU

503-B Muir Street
Cambridge, MD 21613

(410) 228-3294
(fax) 410-228-8976

Frederick Co. Hlth. Dept. - ACCU

350 Montevue Lane
Frederick, MD 21702

(301) 600-3348
(fax) 301-600-3302

Garrett Co. Hlth. Dept. - ACCU

1025 Memorial Dr.
Oakland, MD 21550

(301) 334-7770
(fax) 301-334-7771

Harford Co. Hlth. Dept. - ACCU

Aberdeen Hlth. Ctr.
34 North Philadelphia Blvd.
Aberdeen, MD 21001

(410) 273-5626
(fax) 410-272-5467

Howard Co. Hlth. Dept. - ACCU

7180 Columbia Gateway Dr.
Columbia, MD 21046

(410) 313-7500
(fax) 410-313-6108

Kent Co. Hlth. Dept. - ACCU

125 S. Lynchburg St.
Chestertown, MD 21620

(410) 778-1350
(fax) 410-778-7019

Montgomery Co. Hlth. Dept. - ACCU

1335 Piccard Drive, 2nd Floor
Rockville, MD 20850

(240) 777-1616
(fax) 240-777-1604

Prince Georges' Co. Hlth. Dept. - ACCU

9314 Piscataway Road
Clinton, MD 20735

1-888-561-4049
(fax) 301-856-9628
(fax) 301-856-9607

Queen Anne's Co. Hlth. Dept. - ACCU

206 N. Commerce Street
Centreville, MD 21617

(410) 758-0720
(fax) 443-262-9357

St. Mary's Co. Hlth. Dept. - ACCU

21580 Peabody Street
P.O. Box 316
Leonardtown, MD 20650-0316

(301) 475-4316
(fax) 301-475-4350

Somerset Co. Hlth. Dept. - ACCU

7920 Crisfield Hwy.
Westover, MD 21871

(443) 523-1740
(fax) 410-651-2572

Talbot Co. Hlth. Dept. - ACCU

100 S. Hanson Street
Easton, MD 21601-0480

(410) 819-5600
(fax) 410-819-5690

Washington Co. Hlth. Dept. - ACCU

1302 Pennsylvania Avenue
Hagerstown, MD 21742

(240) 313-3290
(fax) 240-313-3444

Wicomico Co. Hlth. Dept. - ACCU

108 E. Main Street
Salisbury, MD 21801

(410) 543-6944
(fax) 410-543-6568

Worcester Co. Hlth. Dept. - ACCU

9730 Healthway Drive
Berlin, MD 21811

(410) 629-0164
(fax) 410-629-0185

Baltimore Hlth. Care Access

1 Calvert Plaza, #1000-ACCU
201 E. Baltimore Street
Baltimore, MD 21202

(410) 649-0500
(fax) 410-649-3553

Attachment C:
Maryland Healthy Kids
Schedule of
Preventive Health Care

Maryland Schedule of Preventive Health Care

Components	Infancy (months)						Early Childhood (yrs)					Late Childhood (yrs)						Adolescence (yrs)																		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22														
Birth	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Medical and family history/update	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Perinatal history	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Psycho-social/environmental assessment/update	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Developmental Surveillance (Subjective)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Developmental Screening (Standard Tools) ¹	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Mental health/behavioral assessment	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Substance abuse assessment																																				
Physical Exam																																				
Systems exam	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Vision/hearing assessments ²	O ³	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S			
Oral/dentition assessment	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Nutrition assessment	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Measurements and graphing: Ht-Wt-FC-BMI ⁴	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Blood Pressure																																				
Risk Assessments by Questionnaire																																				
Lead assessment by questionnaire	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Tuberculosis ⁵	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Sexually transmitted infections (STI) ⁶																																				
Laboratory Tests																																				
Hereditary/metabolic hemoglobinopathy	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Blood lead test																																				
Anemia/iron-def	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Immunizations																																				
History of immunizations	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Vaccines given per schedule	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Health Education																																				
Age-appropriate education/guidance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Counselor referral for identified problems	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Dental education/oral care	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Scheduled return visit	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		

The Schedule reflects minimum standards required for all Maryland Medicaid recipients from birth to 21 years of age. The Maryland Healthy Kids Program requires yearly preventive care visits between ages 2 years through 20 years. However, based on the provider's professional judgment, children after age 6 years can receive a preventive care visit at 2-year intervals if specifically documented in the medical record as the plan of care. *Refer to AAP 2006 Policy Statement referenced in the Healthy Kids Program Manual. -Screening required using standardized tools. -Newborn Hearing Screen follow-up required for abnormal results. -Per AAP guidelines, head circumference measurement continues to age 2 years and BMI should be calculated and graphed yearly beginning at age 2 years.

Attachment D:
Local Health Department
Healthy Start Contacts

Local Health Department Contacts for:
 Administrative Care Coordination Unit
 Lead Prevention Program

County	Contact	Name	Telephone	Fax
Allegany	Administrative Care Coordination	Margaret Wright	(301) 759-5094	(301) 777-2401
	Lead Prevention Program	Janie Hutcherson	(301) 777-5680	(301) 777-2098
Anne Arundel	Administrative Care Coordination	Sherry Dico	(410) 222-7541	(410) 222-4094
	Lead Prevention Program	Carol Lawrence	(410) 222-7541	(410) 222-4633
Baltimore City	Administrative Care Coordination	Lynell Torres	(410) 649-0507	(410) 649-3553
	Lead Prevention Program	Sarah Norman	(443) 984-2466	(410) 426-7047
Baltimore Co.	Administrative Care Coordination	Karen Bratton	(410) 887-8741	(410) 828-8346
	Lead Prevention Program	Susan Keller or Nancy Miller	(410) 887-2705	(410) 887-2737
Calvert	Administrative Care Coordination	Karen Brown	(410) 535-5400	(410) 535-1955
	Lead Prevention Program	Chidy Lohman (1 st Call) Michelle Jones	(410) 535-5400 X405 (410) 535-5400 x400	(410) 535-1955
Caroline	Administrative Care Coordination	Katiny Harvey	(410) 479-8000	(410) 479-0244
	Lead Prevention Program	Gail Spivey	(410) 479-8000	(410) 479-4871
Carroll	Administrative Care Coordination	Terry Coglianese	(410) 876-4940	(410) 876-4959
	Lead Prevention Program	Penny Bramlett	(410) 876-4942	(410) 876-4959
Cecil	Administrative Care Coordination	Sara Smith	(410) 996-5145	(410) 996-5121
	Lead Prevention Program	Norma Dempsey	(410) 996-5145	(410) 996-5121
Charles	Administrative Care Coordination	Lois Beverage	(301) 609-6803	(301) 934-7048
	Lead Prevention Program	Lois Beverage	(301) 609-6803	(301) 934-7048
Dorchester	Administrative Care Coordination	Misty Elliott	(410) 228-3294	(410) 228-8976
	Lead Prevention Program	Yvonne Church	(410) 228-3294	(410) 228-8976
Frederick	Administrative Care Coordination	Gail Bard	(301) 600-3348	(301) 600-3302
	Lead Prevention Program	Nancy Haines	(301) 631-3341	(301) 600-3302
Garrett	Administrative Care Coordination	Christie Cameron or Lu Friend	(301) 334-7777 (301) 334-7778	(301) 334-7771
	Lead Prevention Program	Christie Cameron or Jennifer Lee Steckman	(301) 334-7695 (301) 334-7772	(301) 334-7771
Harford	Administrative Care Coordination	Melinda Kreisel	(410) 273-5626	(410) 272-5467
	Lead Prevention Program	Melinda Kreisel	(410) 273-5626 x 2253	(410) 272-5467

**Local Health Department Contacts for:
Administrative Care Coordination Unit
Lead Prevention Program**

County	Coordinator Name	Telephone	Fax
Howard	Administrative Care Coordination	(410) 313-7323	(410) 313-6108
	Lead Prevention Program	(410) 313-7693	(410) 313-7502
	Administrative Care Coordination	(410) 778-1350	(410) 778-7019
Kent	Lead Prevention Program	(410) 778-1350	(410) 778-7913
	Administrative Care Coordination	(240) 777-1616	(240) 777-4654
Montgomery	Administrative Care Coordination	(240) 777-4567	(240) 777-4750
	Lead Prevention Program	1-888-561-4049	(301) 856-9528
Prince George's	Administrative Care Coordination	(301) 883-7280	(301) 889-7572
	Lead Prevention Program	(301) 883-7862	(301) 889-7601
	Administrative Care Coordination	(410) 758-0720 ext. 324	(443) 262-9357
Queen Anne's	Administrative Care Coordination	(410) 758-0720	(410) 758-2838
	Lead Prevention Program	(443) 523-1740	(410) 651-2572
Somerset	Administrative Care Coordination	(443) 523-1740	(410) 651-5680
	Lead Prevention Program	(443) 523-1740	(301) 475-4350
	Administrative Care Coordination	(301) 475-4316	(301) 475-4350
St. Mary's	Administrative Care Coordination	(301) 475-4380	(301) 475-4350
	Lead Prevention Program	(410) 819-5600	(410) 819-5690
Talbot	Administrative Care Coordination	(410) 819-5607	(410) 819-5690
	Lead Prevention Program	(410) 819-5607	(240) 313-3444
	Administrative Care Coordination	(240) 313-3290	(240) 313-3222
Washington	Lead Prevention Program	(240) 313-3467	(240) 313-3334
	Administrative Care Coordination	(240) 313-3464	(410) 543-6568
Wicomico	Administrative Care Coordination	(410) 543-6944 ext. 1219	(410) 543-6964
	Lead Prevention Program	(410) 543-6942	(410) 629-0185
Worcester	Administrative Care Coordination	(410) 643-6959 x1705	(410) 957-2417
	Lead Prevention Program	(410) 629-0164	(410) 957-2005

Attachment E:
Hospital Report
of Newborns Form



**DEPARTMENT OF HEALTH AND MENTAL HYGIENE
MARYLAND MEDICAL ASSISTANCE PROGRAM**

HOSPITAL REPORT OF NEWBORNS

<u>DHMH USE ONLY</u>	<u>FAX FORM IMMEDIATELY TO:</u>	<u>OR</u>	<u>MAIL FORM TO:</u>
Date Received: _____ Date Processed: _____ Processed By: _____	Division of Recipient Eligibility 410-333-7012		Division of Recipient Eligibility 201 West Preston Street Room SS7C Baltimore, Maryland 21201

Mother's Name: _____ (Last) (First) (M.I.) DOB: ___/___/___

Mother's Medical Assistance Number: _____ /

Address: _____ S.S.#: _____ / _____ / _____

City: _____ State: _____ Zip Code: _____

Full Name of Newborn (s)			Date of Birth	Sex	Birth Weight	Race
Last	First	MI	Month/ Day/ Year	M or F	grams	
(A)			/ /		grams	
(B)			/ /		grams	

DHMH Use Only: MA Number Assigned: (A) _____
(B) _____

Name of Mother's MCO: _____

Complete Name of Hospital: _____

Address: _____ Telephone #: _____

Printed Name of Person Completing Form _____ Signature of Person Completing Form _____ Date of Completion _____

Optional

Has parent selected pediatrician for ongoing care after discharge? Yes No

Name: _____ Practice Name: _____

Address: _____

Note: Automatic eligibility for the newborn(s) is dependent on the mother being eligible for and receiving Medical Assistance at the time of the child's or children's birth and the child living with the mother. It is advisable to confirm the mother's eligibility status on the date of delivery by using the Eligibility Verification System (EVS). Do not submit this form if the child will not be discharged to the mother.

Attachment F:
Jai Medical Systems
Referral Form

Jai Medical Systems Managed Care Organization, Inc.

REFERRAL FORM

ICN: HR 0061251

1-888-JAI-1999

Please Print Legibly

MEMBER INFORMATION:

Name: _____
Last First MI
Date of Birth: _____
Member ID #: _____
Phone #: _____

NOTICE: Please confirm this member's enrollment status with JMSMCO using the Maryland Medicaid EVS system prior to performing any health care services. JMSMCO will not be responsible for payment of services rendered to a member who is not eligible on the date of service or for non-covered benefits. To verify eligibility, call the Maryland Medicaid EVS system at 1-866-710-1447 or visit www.emdhealthchoice.org.

REFERRAL FROM:

Primary Care Provider Office Stamp

Referring PCP: _____
Print Legibly

Referring PCP Address: _____

Referring PCP NPI #: _____

Date Referral Issued: _____
Do NOT back date

Referring PCP Signature: _____
Do NOT pre-sign



Referral is VALID for contracted participating providers and limited outpatient services ONLY. This Referral is not valid for any inpatient services or any procedures requiring pre-certification or prior authorization. Please call JMSMCO's Utilization Management Department for authorization of procedures requiring pre-certification or prior authorization.

REFERRAL TO:

First Name Last Name Organization Specialty
Street Address City State Zip
Phone # Fax # Referred to Organization or Provider's NPI #

REASON FOR REFERRAL:

Primary Diagnosis: _____
ICD-9 Code: _____
Brief Patient History: _____

Procedure to be Performed

(Not valid for procedures requiring Pre-Certification or Prior Authorization.)

Procedure # 1: _____

CPT Code: _____

Procedure # 2: _____

CPT Code: _____

Number of Visits: _____
If blank, one assumed

Number of Services: _____

Note: A new referral must be executed every 60 days.

TYPE OF REFERRAL:

STANDARD
 URGENT (Contact with referring PCP by Specialist is mandatory within 3 business days of referral appointment.)

SERVICES DESIRED: (Provide care as indicated)

- Consultation Only
- Consultation with Specific Procedures
(specify in spaces provided in box on left)
- Diagnostic Testing (specify): _____
- Specific Treatment: _____
- Global OB Care
- Case Management
- Health Education
- Other (explain): _____

PLACE OF SERVICE: (*Specific facility must be named)

- Office
- Outpatient Medical / Surgical Center:*
- Radiology
- Other (explain): _____

APPOINTMENT:

Date: _____ Time: _____ AM/PM

Address: _____

Note: A separate referral must be used for each provider or group.

PLEASE SEE REVERSE FOR BILLING INSTRUCTIONS AND REFERRAL RESTRICTIONS.

REFERRAL ISSUANCE IS NOT A GUARANTEE OF PAYMENT. PARTICIPATING PROVIDER STATUS MAY AFFECT PAYMENT.

First Page - Fax to JMSMCO Referral Fax 1-866-381-7200

Second Page - Specialist Copy

Referral Fax # 1-866-381-7200

JMSMCO does not employ the providers participating in our network. Participating providers in the JMSMCO network are not the actual or apparent agents of JMSMCO. Participating providers are independent and not controlled, operated, owned, or directed by JMSMCO.

Rev. 10/12

PLEASE FAX COMPLETED REFERRAL FORM TO
1-866-381-7200
FOR PROCESSING

BILLING INSTRUCTIONS

If you bill JMSMCO using CMS 1500 forms, you must include your NPI number in field #24J.

Payment may be delayed or denied for claims received without this Referral Form.

REFERRAL RESTRICTIONS

This recipient is enrolled with Jai Medical Systems Managed Care Organization, Inc. under the Maryland Medicaid HealthChoice Program. This Referral is restricted to benefits covered by the HealthChoice Program as specified by COMAR. JMSMCO will not be held financially responsible for a service written by a PCP that is not a covered benefit by the HealthChoice Program or JMSMCO.

Please keep the referring PCP informed of the disposition of the member by sending a written report. Failure to send a written report to the referring PCP may result in a denial of payment.

If you wish to refer this member to another treatment source that will be billing JMSMCO, please coordinate care with the referring PCP and request an additional referral from the PCP. Referrals written by providers other than PCPs will not be honored.

Please confirm this member's enrollment status with JMSMCO using the Maryland Medicaid EVS system prior to performing any health care services. JMSMCO will not be responsible for payment of services rendered to a member who is not eligible on the date of service or for non-covered services. To verify eligibility, call the Maryland Medicaid EVS system at 1-866-710-1447 or visit www.emdhealthchoice.org.

This referral is VALID for contracted participating providers and limited outpatient services ONLY.

This referral is NOT valid for any inpatient services or procedures requiring pre-certification or prior authorization. Please visit our website at www.jaimedicalsystems.com for a complete list of procedures requiring pre-certification or prior authorization. Contact JMSMCO's Utilization Management Department at 1-888-JAI-1999 for more information or if you have questions about how to obtain authorization for procedures requiring pre-certification or prior authorization.

Referrals do not guarantee payment for services rendered.

This Referral Form cannot be used to convey participating provider status to non-participating providers.

Non-participating providers must contact JMSMCO's Utilization Management Department at 1-888-JAI-1999 before initiating any health care services that are not classified as self referral services by the State of Maryland.

Medically necessary, emergency services may be provided by any provider regardless of referral.

FIRST PAGE: FAX to JMSMCO at 1-866-381-7200 and keep original for member's medical record.

SECOND PAGE: Specialist copy to be taken to the referral appointment by member.

AN ORIGINAL REFERRAL FORM MUST BE COMPLETED FOR EVERY REFERRAL.

JMSMCO does not employ the providers participating in our network. Participating providers in the JMSMCO network are not the actual or apparent agents of JMSMCO. Participating providers are independent and not controlled, operated, owned, or directed by JMSMCO.

Attachment G:
Pre-Certification
Procedures List

JAI MEDICAL SYSTEMS MANAGED CARE ORGANIZATION, INC.

SERVICES AND PROCEDURES REQUIRING PRIOR AUTHORIZATION

Jai Medical Systems Managed Care Organization, Inc. (JMSMCO) requires prior authorization for the services and procedures listed below. All requests must go through the PCP office for approval before being reviewed by the UM department. If you do not see the procedure listed below for which you are seeking approval, or if you are unsure if a service or procedure requires prior authorization, please contact our Utilization Management Department at 1-888-JAI-1999.

Services Requiring Prior Authorization

- Ambulance/Wheelchair Van Transportation (Non-Emergent)
- Braces and Splints (greater than \$1,000 for the member's total claim)
- Cardiac Rehabilitation/Specialty Procedures
- Chiropractic Services (>10 visits) for < 21 yrs
- Cosmetic Procedures
- Durable Medical Equipment > \$1,000.00 or rental equipment > 90 days
(Including Motorized Wheelchairs, CPM Machines, Bone Growth Stimulators, Holter Monitors, External Defibrillators, Breast Pumps)
- Genetic Testing
- Home Health Care (>10 visits)
- Hospice (Home and Inpatient)
- Hyperbaric Oxygen Therapy
- Investigational Surgeries/Clinical Trials
- Neuro-Psychological Testing/Developmental Delay Programs
- Out-of-network services of any kind (Single case agreement must be completed)
- Outpatient Rehab- PT, OT, ST (>10 visits) for >21 yrs only
- PET Scans
- Prosthetics (including breast prosthetics and mastectomy bras)
- Skilled Nursing Facility Admissions
- Sub-Acute/Inpatient Rehabilitative Services
- Sleep Studies
- Urgent Procedures or Admissions
(notification to Utilization Management Department within 24-48 hours mandatory)
- Wound Vac

Procedures Requiring Prior Authorization

- Organ Transplants
- Bypass
- Cardiac Procedures (including, but not limited to, non-emergent cardiac catheterizations, cardiac defibrillators/pacemakers, cardiac ablations)
- Amputations
- Neurosurgical procedures (including, but not limited to, **back surgeries**, craniotomies)
- Endoscopic Procedures (excluding routine colonoscopies)
- Grafts/Implants
- Plastic/Reconstructive Surgery
- Corrective Surgery (including specialty podiatry surgeries)

Please note: Dialysis does not require prior authorization; however a contracted facility should be used when possible. If a member requires dialysis, please notify the Utilization Management Department as soon as possible.

NOTICE:

To avoid unnecessary delays, please send elective authorizations requests at least seven (7) days before the procedure. Only written authorizations issued by JMSMCO are valid.

Please contact the Utilization Management Department at 1-888-JAI-1999 for any questions or concerns regarding prior authorizations.

Attachment H:
Clinical Guidelines

1. Hypertension

Approximately 30% of JMSMCO's patient population is hypertensive. It is not uncommon in the JMSMCO MCO population to see patients with end-organ disease in multiple body systems. The most common organs of damage are eyes, heart, kidneys and brain. The effects of uncontrolled hypertension are devastating and irreversible, but preventable with healthy living and early detection and treatment. JMSMCO's primary care providers utilize the protocol below in order to aid in the prevention, early detection and proper management of hypertension and its known sequelae.

Based on recommendations of the JNC 7, the classification of BP (expressed in mm Hg) for adults aged 18 years or older is as follows:

Classification	Systolic	Diastolic	Follow-up
Normal	<120	<80	2 years
Pre-hypertension	120-139	80-89	1 year
<i>Hypertension</i>			
Stage 1	140-159	90-99	2 months
Stage 2	≥160	≥100	Assess and treat immediately

The classification above is based on the average of 2 or more readings taken at each of 2 or more visits after initial screening. [javascript:showrefcontent\('referenceslayer'\);](#) Normal BP with respect to cardiovascular risk is less than 120/80 mm Hg. However, unusually low readings should be evaluated for clinical significance.

The natural history of essential hypertension evolves from occasional to established hypertension. After a long invariable asymptomatic period, persistent hypertension develops into complicated hypertension, in which end-organ damage to the aorta and small arteries, heart, kidneys, retina, and central nervous system is evident.

The progression of essential hypertension is as follows:

1. Prehypertension in persons aged 10-30 years (by increased cardiac output)
2. Early hypertension in persons aged 20-40 years (in which increased peripheral resistance is prominent)
3. Established hypertension in persons aged 30-50 years
4. Complicated hypertension in persons aged 40-60 years

Cochrane Authors' Conclusions: First-line low-dose thiazides reduce all morbidity and mortality outcomes. ACE inhibitors and calcium channel blockers may be similarly

effective, but the evidence is less robust. First-line high-dose thiazides and beta blockers are inferior to first-line low-dose thiazides.

In comparing the effects of thiazide diuretics, beta blockers, angiotensin-converting enzyme (ACE) inhibitors, and calcium channel blockers (CCBs) with placebo, thiazide diuretics lowered mortality and morbidity from stroke, heart attack, and heart failure more than beta blockers. ACE inhibitors and CCBs reduced mortality and morbidity as much as thiazide diuretics, but the evidence is less robust. Thiazide diuretics are a more favorable first-line choice in patients who do not have contraindications for their use.

The JNC 7 calls for routine blood pressure measurement at least once every 2 years for adults with a systolic blood pressure below 120 mm Hg and a diastolic blood pressure below 80 mm Hg, and every year for systolic blood pressure 120-139 and diastolic blood pressure 80-89 mm Hg.

I. Evaluation

A. Objectives:

1. Identify known causes of hypertension
2. Assess target organ damage and cardiovascular disease
3. Assess response to therapy
4. Identify cardiovascular risk factors and other diseases which may guide treatment

B. Methods:

Clinical history should contain, at minimum, the following data:

1. Known duration and previous B.P. readings
2. Presence or absence of cardiac, neurologic, renal, and peripheral vascular disease, diabetes, gout, dyslipidemia by previous knowledge or by presence of specific symptoms
3. Recent changes in weight, physical activity, sexual function, tobacco use, diet (including salt intake), alcohol consumption, fat intake, and caffeine
4. List all prescribed and OTC medication, adverse effects, including illicit and herbal therapy
5. Family history of hypertension, diabetes, CVA, CHD, and renal disease
6. Social history should include education level, marital status, and employment status.

C. Complete Physical Examination:

1. Initial lab data:
CBC, U/A, chemistry profile, lipid profile, 12 lead E.K.G., TSH, funduscopic exam, CXR
2. Work up for secondary hypertension if:
 - a. History, physical, and initial lab data indicates
 - b. B.P. responds poorly to drug treatment
 - c. Previously well controlled pressure becomes uncontrolled
 - d. Sudden onset of symptomatic or labile hypertension

3. Cause of secondary hypertension
 - a. Pheochromocytoma
 - b. Cushings Syndrome
 - c. Primary Aldosterionism
 - d. Hyperparathyroidism
 - e. Renal Syndrome
 - f. Sleep Apnea
 - g. Substance Abuse
 - h. Thyroid Disease
 - i. Medications – OCPs, steroids, licorice, NSAIDS (COX-2), Epo, cyclosporine
 - j. Coarctation of aorta
 - k. Polycythemia vera (↑Hct)

D. Risk Evaluation:

1. Major risk factors for development of clinical cardiovascular disease (CCD) and target organ damage (TOD)
 - a. Smoking
 - b. Dyslipidemia
 - c. Diabetes
 - d. Age over 60
 - e. Menopause
 - f. Family history of cardiovascular disease
 - g. Obesity, BMI >30
2. Target organ damage
3. Heart--left ventricular hypertrophy, CAD, heart failure
4. Neurovascular- TIA, CVA
5. Renal--nephropathy
6. Peripheral vascular disease
7. Retinopathy

All patients with diabetes and one or more of TOD or CCD should receive drug therapy.

II. Drug Treatment of Hypertension

A. Treatment can be divided into:

1. Initiation
2. Individualism
3. Modification
4. Step down therapy

Please note that previously used step-up therapy is not used anymore

B. Initiation: Treatment goal is BP <140/90 mmHg (BP<130/80 mmHg in patients with diabetes or chronic kidney disease. Most patients will need two medications to reach goal.

1. Lifestyle Modifications (each ↓SBP ~5mmHg)
 - a. Weight loss: BMI 18-24.9
 - b. Exercise: ≥30min/d for ≥5d/wk
 - c. Diet: ↑fruits & vegetables; ↓sat. and total fat (DASH Diet)

d. Na restriction $\leq 2.6\text{g/d}$ or lower

If patient does not reach BP goal then:

2. Initial Drug Choices

a. Without Compelling Indications

Stage 1 Hypertension (Systolic BP 140-159 mmHg or diastolic BP 90-99 mmHg)

Thiazide-type diuretics for most. May consider ACEI, ARB, BB, CCB, or combination

Stage 2 Hypertension (Systolic BP ≥ 160 mmHg or diastolic BP ≥ 100 mmHg)

2-drug combination for most (usually thiazide-type diuretic and ACEI, ARB, BB, or CCB).

b. With Compelling Indications

Medications for the compelling indications (see Section 6) and other antihypertensive drugs (diuretics, ACEI, ARB, BB, CCB) as needed.

3. If Not at Goal Blood Pressure

Optimize dosages or add additional drugs until goal BP is achieved. Consider consultation with hypertension specialist.

- C. Individualism (cost factors, dosing frequency): Plasma renin profile may be helpful.
Renin low to medium – HCTZ best
Renin medium to high – capropril best (dlt and clonidine efficiency was independent of renin level)

III. Modification

A. When another disease process compels use of a specific agent

- | | |
|-------------------------------------|------------------------------|
| 1. Type 1 diabetes with proteinuria | Ace inhibitor |
| 2. Heart failure | Ace inhibitor + diuretic |
| 3. Myocardial infraction | Beta blocker + ace inhibitor |

IV. Favorable Effect on Comorbid Condition

- | | |
|---|---|
| A. Angina | Beta blocker, CCB |
| B. Atrial tachycardia and fibrillation | Beta blocker, non DHP CCB |
| C. Cyclosporine infused hypertension | CCB |
| D. Diabetes both 1 & 2 with proteinuria | ACEI, CCB |
| E. Type 2 DM | Low dose diuretic |
| F. Dyslipidemia | Alpha blocker |
| G. Essential tremor | Beta blocker |
| H. CHF | ACEI/ARB, Beta blocker, Aldo antagonist |
| I. Migraine | Beta blocker, CCB (non DHA) |
| J. Osteoporosis | Thiazide |
| K. Pre-operative hypertension | Beta blocker |
| L. Prostatism | Alpha blocker |
| M. Post- MI | Beta Blocker, ACEI |
| N. Chronic Kidney Disease | ACEI/ARB, Diuretics |

- V. Unfavorable Effects
- | | |
|---------------|---|
| A. Asthma | Beta blocker |
| B. Depression | Beta blocker, central alpha agonist reserpine |
| C. Diabetes | Beta blocker, high dose diuretic |
| D. Gout | Diuretic |
| E. Pregnancy | Ace, ARB |
- VI. Patient Education
- A. Disease process and ways patients can manage their own care; Low sodium diet, weight reduction, decrease stress etc.
1. Importance of follow-up visits; and
 2. Need for compliance with regimen to prevent unnecessary sequelae.
- B. Specific dietary interventions:
1. Soy protein may reduce both systolic and diastolic blood pressure
 2. Avoid black licorice
 3. K+ Supplementation (especially effective in African Americans)
- VII. Follow-up:
- A. Provider visit every three to six months or earlier if indicated.
- B. Lab Work
1. Urine test every 12 months;
 2. EKG every 12 months;
 3. Chest X-Ray for those patients over the age of 40 with lung cancer risk factors, *i.e.*: cigarette smoking, positive family history; and
 4. If HTN patient is taking diuretic medication, electrolytes are tested every 3-6 months or earlier as determined by the primary care provider. Potassium supplemented as necessary.

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Sources:

1. *Conn's Current Therapy, 2000 Edition.*
2. *Cecil Text Book of Medicine, 21st Edition*
3. *Annals of Internal Medicine, 2005*
4. *Arch Internal Medicine, 1996*
5. *Emedicine.com.nephrology.hypertension (2/19/10)*
6. *JNC7 Report, Joint National Council on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure Committee*
7. *Lancet 2000; 356:1955*
8. *DASH, NEJM 2001;344:3*

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2. Low Back Pain

Low back pain (LBP) afflicts up to 80% of American adults during their lives. Low back pain is one of the most common complaints among JMSMCO's patients, accounting for 17.3% of the most frequent diagnoses listed in the CQI report. Back pain is the most frequent cause of activity limitation in people younger than 45 yrs, the second most common reason for patient visits, the fifth ranking reason for hospitalizations, and the third most common reason for surgical procedures. The causes of low back pain are developmental, infection, inflammatory, traumatic, metabolic, neoplastic and degenerative.

The process utilized by JMSMCO's primary care providers is as follows. A complaint of LBP is elicited during the history and risk factors are ascertained. After the appropriate musculoskeletal and neurologic examinations, medical treatment, including physical therapy if necessary, is initiated. In addition, the practitioner works with the patient to modify the home and work environment. The following is a more detailed protocol outlining this process:

1. At the initial visit, a complete history and physical exam are performed, including a neurological examination.
2. Appropriate diagnostic testing is obtained (the treating provider must evaluate the necessity of diagnostic exams, such as x-ray, before ordering)
 - a. CBC, blood chemistry profile, ESR, urinalysis
 - b. X-rays, such as lumbar spine, lumbosacral spine
 - c. MRI
 - d. CT scan if MRI is contraindicated (patients with implanted pacemaker or vascular metal chips, etc.)
 - e. Myelography
 - f. Bone scan
 - g. Electrodiagnostic studies (EMG/NCU)
3. Specific diagnosis is established.
4. Treatment plan is formulated based on history, physical exam and diagnostic testing results. Typical treatment plans include treatments such as:
 - a. Medications
 - i. NSAIDS, like Ibuprofen, Naproxen
 - ii. Muscle relaxants like Flexeril
 - iii. Narcotic analgesic like codeine derivations (Percocet, Tylox, etc.) for short term use only
 - b. Physical Therapy
 - i. Hydroculator packs
 - ii. Ultrasound

- iii. Electrical stimulation (TENS)
 - iv. Massage
 - v. Therapeutic exercise
 - vi. Yoga
 - vii. Spinal manipulation B chiropractic care
- c. Referral to appropriate sources, as needed, such as a Neurosurgeon or an Orthopedist.

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Sources:

1. *Conn's Current Therapy, 1999 edition.*

2. *U.S. Preventative Services Task Force; Back Pain (low),*

<http://www.ahrq.gov/clinic/3rduspstf/lowback/lowbackrs.htm>

3. *National Guideline Clearinghouse: Low back pain,*

http://www.guideline.gov/summary/summary.aspx?doc_id=13479&nbr=006888&string=physical+AND+disability

4. *Diagnosis and Treatment of Low Back Pain: A Joint Clinical Practice Guideline from the American College of physician and the American Pain Society, 2007.*

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3. Depression/Anxiety

Approximately 25% of JMSMCO's patient population has some form of mental illness. Of this number, in a State-performed CQI report, 13.5% of these patients have some form of depression and 6% suffer from anxiety. Combined these numbers indicate that 19.5% of the medically-under served population of Maryland suffers from depression or anxiety. In response to this, the following protocol has been developed to treat depression and anxiety.

- I. At the initial visit, a complete history and physical exam are performed, including laboratory evaluation and mental health screening.
 - A. PHQ-2
 - B. PHQ-9

- II. A specific diagnosis of Depression is established using the following symptoms, in the absence of substance abuse, manic diagnosis, and/or recent death of a loved one and it must include at least 5 of the following symptoms during the same 2 week period and represent a change in previous functioning:
 - A. Depressed Mood
 - B. Markedly diminished interest or pleasure in activities most of the time
 - C. Significant change in appetite or weight—5% change without dieting, or change in appetite.
 - D. Alterations in sleep pattern (insomnia or hypersomnia)
 - E. Psychomotor agitation or retardation
 - F. Fatigue or loss of energy
 - G. Feelings of worthlessness, excessive or inappropriate guilt
 - H. Lack of concentration/ Indecisiveness
 - I. Thoughts of death, dying or suicide

- III. Differential includes: general medical conditions, mood incongruent delusions or hallucinations
- IV. Symptoms should not be due to drug abuse, medication side effects, or general medical conditions
- V. Initial Evaluations should aim to screen for other concurrent diseases and establish baseline testing
 - A. Medical History
 - B. Laboratory Data
 1. CBC
 2. Hemoglobin/Hematocrit
 3. Renal/Liver/Thyroid Function
 4. Electrolytes and Blood Sugar
 5. If medically indicated screen for cancer and/or infectious etiologies

- VI. A treatment plan is decided upon with the patient, and initiated. Typical treatment plans include components such as:
 - A. Counseling by the primary care provider

- B. Consultation by psychologist or psychiatrist and/or with notification sent to ValueOptions.
- C. Trial of anti-depressant medication, initiated by primary care provider
 - 1. Tricyclic agents (TCAs)
 - 2. Selective Serotonin Re-uptake Inhibitors (SSRIs)
 - 3. Others
- D. Continual follow-up by both primary care provider and/or psychiatrists or psychologists
- E. Monitor appropriate blood levels of therapeutic agents.

VII. Follow Up

- A. Within the month after starting medical therapy
- B. Every 4-8 weeks thereafter
- C. Monitor appropriate blood levels of therapeutic agents

VII. Generalized Anxiety Disorder

- A. Diagnosis
 - 1. Excessive or difficult to control worry about a number of events or activities
 - 2. Difficulty controlling worry
 - 3. Worry is associated with 3 physical symptoms that are present most of the time:
 - Restlessness or feeling on the edge
 - Easily fatigued
 - Irritability
 - Muscle tension
 - Sleep decrease
 - Decreased concentration or mind going blank
- B. Symptoms cause significant distress or impairment in social occupational or other areas of functioning
- C. Rule out substance abuse, medication side effect or general medical conditions
- D. Treatment and Follow Up
 - 1. Major approaches include: cognitive-behavioral, supportive, insight oriented and pharmacotherapy
 - 2. Pharmacotherapy should rarely be initiated on the first visit
May include Benzodiazepines, Buspirone, Venlafaxine, SSRI's

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Sources:

1. *Mood Disorders*, by Elliot Richardson, MD, Mayo Clinic Jacksonville , Jacksonville Florida.
2. *Generalized Anxiety Disorder DSM-IV Criteria, Anxiety + Stress Disorder Clinic, The Ohio State University*
(<http://anxiety.psy.ohio-state.edu/gad-dsm-.htm>)
3. Saddock, Benjamin and Virginia Saddock. *Concise Textbook of Clinical Psychiatry. 3rd Edition.* Pennsylvania: Lippincott Williams and Wilkins, 2008.
4. PHQ-9: <http://www.integration.samhsa.gov/images/res/PHQ%20-%20Questions.pdf> (9/25/12)
5. Explanation PHQ-9: <http://www.depression-primarycare.org/clinicians/toolkits/materials/forms/phq9/> (9/25/12)

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4. High Risk for HIV Infection Protocol

- I. The Centers for Disease Control (CDC) recommend screening for everyone 13 to 64 years of age (USPSTF recommends screening ages 15-65, Grade A).
 - A. Obtain informed consent for:
 1. ELISA for HIV-1 Ab
 2. Western Blot – Confirmatory test for positive ELISA
 3. RNA PCR – useful if acute infection suspected
 - B. Rapid preliminary tests: 4Ab tests uses saliva, plasma, blood (requires confirmation)
 - C. If testing negative after potential exposure, retest 3 months after exposure
- II. At the initial patient visit, a complete history and physical examination are performed.
 - A. Review all meds
 - B. Evidence of opportunistic infections, malignancies, STDs
- III. Patient education is focused on safer sex practices, proper condom use, proper needle cleaning and disposal technique, information about available needle exchange programs, and substance abuse treatment, as needed.
- IV. PEP (Post-Exposure Prophylaxis)
 - A. If significant exposure, Initiate ≥ 3 drug regimen ASAP, for 4 weeks
 - B. Preferred regimens by exposure type (see guidelines for alternative regimens):
 1. Occupational: raltegravir 400mg BID + tenofovir/emtricitabine QD
 2. Nonoccupational:
 - NRTI based -> efavirenz + (lamivudine or emtricitabine) + (zidovudine or Tenofovir)
 - PI based -> lopinavir/ritonavir (co-formulated as Kaletra) plus (lamivudine or emtricitabine) plus zidovudine
 - C. Consider expert consultation, but do not delay treatment
 - D. Recommended follow-up:
 1. HIV testing at baseline and at 6 weeks, 12 weeks, and 6 months after exposure; alternatively, if the clinician is certain that a fourth-generation combination HIV p24 antigen–HIV antibody test is being utilized, then HIV testing could be performed at baseline, 6 weeks after exposure, and 4 months after exposure.
 2. Complete blood counts and renal and hepatic function tests (at baseline and 2 weeks after exposure; further testing may be indicated if abnormalities are detected).
 3. Additional testing recommended for non-occupational exposures, where there is concern for other transmissible diseases (see referenced guideline #7).
 - E. National Clinicians' Post-Exposure Prophylaxis Hotline at telephone number 888-448-4911 and website http://www.nccc.ucsf.edu/about_nccc/pepline/
- V. PrEP (Pre-Exposure Prophylaxis)
 - A. Only in those with very high risk of contracting HIV through sex or injection drug use.

- B. Tenofovir plus emtricitabine (TDF/FTC or Truvada) is FDA approved for use as PrEP among sexually active adults at risk for HIV infection.
- C. Eligibility criteria: Negative test for HIV, CrCl must be >60, persistent/ongoing risk
- D. Monitoring:
1. Q2-3 months with HIV testing, reassessing risk, counseling risk reduction
 2. Screen for STD's Q6mon
 3. Monitor BUN/Cr Q3mon for first year, annually thereafter
 4. Check b-HCG in women of reproductive age pre and periodically during Tx.

CDC Interim Guidance on HIV Pre-Exposure Prophylaxis

<p>Before initiating PrEP</p> <p>Determine eligibility:</p> <ul style="list-style-type: none"> Document negative HIV antibody test immediately before starting PrEP medication. Test for acute HIV infection if patient has symptoms consistent with acute HIV infection or reports unprotected sex with an HIV-positive person in the preceding month. Determine if women are planning to become pregnant, are currently pregnant, or are breastfeeding. Confirm that patient is at ongoing, very high risk for acquiring HIV infection. If any sexual partner is known to be HIV-infected, determine whether receiving antiretroviral therapy, assist with linkage to care, if not in care or not receiving antiretroviral therapy. Confirm that calculated creatinine clearance is ≥ 60 mL per minute (Cockcroft-Gault formula). <p>Other recommended actions:</p> <ul style="list-style-type: none"> Screen for hepatitis B infection; vaccinate against hepatitis B, if susceptible, or treat if active infection exists, regardless of decision regarding prescribing PrEP. Screen and treat as needed for sexually transmitted infections (STIs). Disclose to women that safety for infants exposed during pregnancy is not fully assessed but no harm has been reported. Do not prescribe PrEP to women who are breastfeeding. 	<p>Beginning PrEP medication regimen:</p> <ul style="list-style-type: none"> Prescribe tenofovir disoproxil fumarate 300 mg (TDF) plus emtricitabine 200 mg (FTC) (i.e., one Truvada [Gilead Sciences] tablet) daily. In general, prescribe no more than a 90-day supply, renewable only after HIV testing confirms that patient remains HIV-uninfected. For women, ensure that pregnancy test is negative or, if pregnant, that the patient has been informed about use during pregnancy. If active hepatitis B infection is diagnosed, consider using TDF/FTC, which may serve as both treatment of active hepatitis B infection and HIV prevention. Provide risk-reduction and PrEP medication-adherence counseling and condoms. <p>Follow-up while PrEP medication is being taken:</p> <ul style="list-style-type: none"> Every 2-3 months, perform an HIV antibody test (or fourth generation antibody/antigen test) and document negative result. At each follow-up visit for women, conduct a pregnancy test and document results; if pregnant, discuss continued use of PrEP with patient and prenatal care provider. Evaluate and support PrEP medication adherence at each follow-up visit, more often if inconsistent adherence is identified. 	<ul style="list-style-type: none"> Every 2-3 months, assess risk behaviors and provide risk-reduction counseling and condoms. Assess STI symptoms and, if present, test and treat for STIs as needed. Every 6 months, test for bacterial STIs even if asymptomatic and treat as needed. Three months after initiation, then every six months while on PrEP medication, check serum creatinine and calculate creatinine clearance. <p>On discontinuing PrEP (at patient request, for safety concerns, or if HIV infection is acquired):</p> <ul style="list-style-type: none"> Perform HIV test(s) to confirm whether HIV infection has occurred. If HIV positive, order and document results of resistance testing, establish linkage to HIV care. If HIV negative, establish linkage to risk reduction support services as indicated. If active hepatitis B is diagnosed at initiation of PrEP, consider appropriate medication for continued treatment of hepatitis B infection. If pregnant, inform prenatal care provider of TDF/FTC use in early pregnancy and coordinate care to maintain HIV prevention during pregnancy and breastfeeding.
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Recommendations in black apply to both adult MSM and heterosexually active men and women; items in blue are specific to heterosexual women.

<http://www.cdc.gov/hiv/prep/pdf/PrEPfactsheet.pdf>

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Sources:

1. HIV Infection: John G. Bartlett, M.D. Professor of Medicine, Johns Hopkins School of Medicine, 2004.
2. MMWR Sept 22, 2006
3. CDC. Interim guidance: preexposure prophylaxis for the prevention of HIV infection in men who have sex with men. MMWR 2011;60:65–8
4. CDC. Interim guidance for clinicians considering the use of preexposure prophylaxis for the prevention of HIV infection in heterosexually active adults. MMWR 2012;61:586–9.
5. CDC. Update to Interim Guidance for Preexposure Prophylaxis (PrEP) for the Prevention of HIV Infection: PrEP for Injecting Drug Users. MMWR 2013; 62(23);463-465
6. Updated US Public Health Service Guidelines for the Management of Occupational Exposures to Human Immunodeficiency Virus and Recommendations for Postexposure Prophylaxis. David T. Kuhar, MD; David K. Henderson, MD; Kimberly A. Struble, PharmD; Walid Heneine, PhD; Vasavi Thomas, RPh, MPH; Laura W. Cheever, MD, ScM; Ahmed Gomaa, MD, ScD, MSPH; Adélisa L. Panlilio, MD and for the US Public Health Service Working Group Infection Control and Hospital Epidemiology , Vol. 34, No. 9 (September 2013), pp. 875-892
7. Centers for Disease Control and Prevention. Antiretroviral postexposure prophylaxis after sexual, injection-drug use, or other nonoccupational exposure to HIV in the United States: recommendations from the U.S. Department of Health and Human Services. MMWR 2005;54(No. RR-2)

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5. Women's Health Protocol

- I. At the initial visit, a complete history and physical exam are performed, including a detailed gynecologic, contraceptive, and pregnancy history.
- II. The components of the annual women's health preventative services:
 - A. Blood pressure, weight checks and body mass index
 - B. Blood glucose and cholesterol levels if risk factors for development of Diabetes and/or Heart Disease are present (Heart Disease remain #1 killer of women)
 - C. Breast exam
 - D. Pelvic exam including Pap smear, after age 21 (frequency to be determined according to patient risk levels), and STD screen
 - E. Colon Cancer screening beginning at age 50 or earlier depending on risk
 - F. Tobacco screening and counseling
- III. The health care provider will review patients' contraceptive methods and ensure patients' satisfaction with their method of choice. The importance of practicing safe sex at every encounter should be stressed. The most commonly used types of contraceptive methods are:
 - A. Oral contraceptive pill
 - B. Depo-Provera
 - C. Condom
 - D. Diaphragm
 - E. IUD
 - F. Tubal ligation
 - G. Ortho Evra
 - H. Implantable contraception (Implanon)
- IV. If the patient desires to become pregnant, counseling should emphasize the importance of early prenatal care, proper diet, use of vitamins and folic acid, and avoidance of alcohol, tobacco, and other drugs.
- V. Monthly self breast exams should be reinforced and correct techniques reviewed. A clinical breast exam should be performed yearly.
- VI. Women should receive regular mammogram screening appropriate for their age group and risk profile.
- VII. Women who are menopausal should be counseled regarding latest recommendations regarding hormone replacement therapy. Treatment should be based on the delicate balance between benefit versus risk.
- VIII. The importance of exercise at every age should be stressed and the significance of a balanced diet with calcium supplementation at an early age in the prevention of osteoporosis should be reviewed. A low fat and reduced carbohydrate diet should be reinforced and the risks of obesity discussed.

- IX. Women with high risk factors should be screened for substance abuse and receive appropriate counseling and rehabilitation.
- X. Risk reduction education and HIV testing should be offered to sexually active individuals.
- XI. A safety assessment to screen for domestic violence and a mental health assessment to screen for depression and other disorders should be performed regularly.
- XII. The need for immunizations should be evaluated including:
 - A. Td booster every 10 years; administer a dose of Tdap if not previously received
 - B. Influenza vaccine annually
 - C. Pneumococcal vaccine for the elderly/high risk individuals
 - D. Hepatitis B vaccines in high risk persons
 - E. Varicella vaccines in susceptible individuals
 - F. HPV vaccines to 26 years of age
 - G. Herpes Zoster vaccine at age 60 or older.

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Sources:

1. *Guidelines: American College of Obstetrics and Gynecology*
2. *American Cancer Society*
3. *Institute For Clinical Systems Improvement*
4. <http://www.guideline.gov> <http://www.guideline.gov>
5. *Agency for Healthcare Research and Quality*
6. *National Guideline Clearinghouse. Adult preventive services: 1/20/11*
7. *Institute for Clinical Systems Improvement, Preventive services for adults; 2011 Sep.90*
8. *Womenshealth.gov A project of the U.S. Department of Health and Human Services office on Women's Health June 07, 2013*

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6. Children with Special Health Care Needs

- I. Complete history and physical on initial visit with particular emphasis on:
 - A. Prenatal exposures including medications and drugs
 - B. Prenatal infections
 - C. Family history
 - D. Prior pregnancy history
 - E. Child's medical history and neurodevelopmental status including a history of prematurity or chromosomal disorders (e.g. Down's Syndrome, Fragile X, Tuberos Sclerosis)
 - F. Features of genetic syndromes (e.g.: Brushfield spots, webbed neck, coarse facial features, hepatosplenomegaly, dysmorphic features, macro or microcephaly)
 - G. Neurological findings (e.g.: cranial nerve function, hyper/hypotonicity)

- II. Laboratory studies & other screening tools:
 - A. Blood and/or urine tests
 - B. Developmental Screening Test
 - C. Additional studies as appropriate:
 1. Chest x-ray
 2. EKG
 3. Metabolic screening
 4. Hormone levels, etc.
 5. Cytogenetic studies
 6. Imaging studies, e.g. MRI
 7. EEG

- III. Establish a diagnosis(es) based on above information. Refer to genetic, neurological developmental specialists, audiology and ophthalmology, if indicated.

- IV. Develop a chronic condition management plan. Administer medical treatment in accordance to the plan. Refer the patient to case management, using a JMS referral form. If the patient qualifies, please enroll in REM.

- V. Refer for early intervention and necessary therapies such as speech, occupational and physical therapies.

- VI. Establish a medical home to include the provision of culturally effective, coordinated, and comprehensive care for children with special health care needs.

- VII. Address the child's needs for appropriate educational services and access to adequate community services. Screen for co-existing conditions such as ADHD, anxiety and mood disorders and refer as needed to mental health/ behavioral specialists.

VIII. Review care plan at least annually to address any changes in the patient's general health.

IX. Assure accessibility to necessary durable medical equipment.

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Sources:

1. *Home and Community Care for Chronically Ill Children, 1993.*

2. *Severity of Illness: Concepts and Measurements, 1987.*

3. *Persistence and Impact of Multiple Childhood Chronic Illness, 1994.*

4. *Institute of Medicine: Disability in America: Toward a National Agenda for Prevention, 1991.*

5. *National Institute for Health and Clinical Excellence (NICE). Autism. Recognition, referral and diagnosis of children and young people on the autism spectrum. London (UK): (NICE); 2011 Sep.51p; (clinical guideline; no. 128)*

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7. Individuals with a Physical Disability

I. Principles and Goals

- A. Comprehensive effort that incorporates physical, emotional and social parameters in the process of care.
- B. Team effort that is multi-disciplinary in membership and interdisciplinary in process.
- C. Not to be a limited intervention.
- D. Frequently involving a plan of care that is continuing and intended for long-term follow-up.
- E. Primarily focused on functional abilities of patient

- 1. Function that has been lost and may be restored.
- 2. Remaining function that needs to be protected and strengthened to accommodate disabilities resulting from lost functions unable to be restored.

II. Complete History and Physical Exam on initial visit to differentiate

- A. Acquired causes of disability (e.g.: stroke, cancer, trauma, etc.).
- B. Congenital causes of disability (e.g.: club feet, shortened or missing limb, birth trauma, etc.).

III. Diagnostic studies

- A. Blood work profiles
- B. Mini Mental Status
- C. Radiology

- 1. X-rays
- 2. CT Scan
- 3. MRI
- 4. EMG

- D. Nerve Conduction Studies
- E. Vascular Studies
- F. Other special labs or tests particular to the disability

IV. Assess Activity Capacity

- A. Assess Functional Residual Capacity
- B. Assess ability to perform Activities of Daily Living (ADLs) (e.g.: brush teeth, use toilet independently, dress self, bathe)
- C. Assess ability to perform Instrumental Activities of Daily Living (e.g.: make a phone call, write a check, access transportation)
- D. Collaborate with Home Health Agency, as needed.

V. Assess for Mental Illness secondary to physical disability.

VI. Treat Symptoms or Underlying Condition, if able

A. Medication

1. NSAID's
2. Narcotics
3. Muscle relaxants
4. Blood thinning agents
5. Bone-building agents
6. Other, as needed

B. Referral to specialty services, as needed

VII. Acquire Durable Medical Supplies, as needed

- A. Assistive devices (e.g.: canes, walkers, crutches, shower stools, orthotics)
- B. Home monitoring equipment (e.g.: glucometers)
- C. Supportive devices (e.g.: braces, splints)
- D. Personal needs equipment (e.g.: colostomy care products)

VIII. Ensure transportation to and from PCPs office.

IX. Assess patient's housing situation.

A. Work with Housing Authority to obtain necessary requirements, such as:

1. Ground floor
2. Elevator
3. Handicapped parking
4. No carpet
5. Well-lit hallways
6. Stall shower.

B. Advise patient to maximize available properties of current home and ensure safety factors:

1. Clear pathways through home
2. Wear slippers
3. Remove throw rugs, etc.

- X. Facilitate changing insurance plans, as needed, according to disability level and permanence
 - A. Attempt to return patient to work force
 - B. Social service referral if potentially out of work for extended time
 - C. Perform disability determinations.
- XI. Perform long-term monitoring and follow-up care
- XII. Evaluate for intermediate or long-term care facility.

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Sources:

1. *Geriatrics Syllabus, 1999*

2. *National Guideline Clearinghouse: Fitness for Duty,*

http://www.guideline.gov/summary/summary.aspx?doc_id=10419&nbr=005465&string=disability+AND+physical

3. *Guideline for Documentation of Physical Disabilities and Chronic Health Conditions in Adolescents and Adults, September 2003.*

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8. Individuals with a Developmental Disability

I. Definition of Developmental Disability:

Group of chronic, nonprogressive neurologic disorders with an onset from prenatal period through childhood and which continues into adulthood

II. Complete history and physical should be performed on the initial visit with particular emphasis on:

- A. Family/Genetic history
- B. Pregnancy history including exposures, toxins, and infections
- C. Perinatal history
- D. Developmental history
- E. Educational history including adaptive, communication, and self care functioning
- F. Social history
- G. Complete Neurological Exam

III. Laboratory tests are indicated by the findings and history and may include:

- A. Chromosomal analysis
- B. Appropriate test for inborn errors of metabolism
- C. Brain imaging studies (CT scan, MRI)

IV. The comprehensive assessment also includes standardized intelligence and psychoeducational testing. Prior assessment results should be reviewed and additional testing requested when indicated.

V. Establish a diagnosis based on the above information:

- A. Mental retardation
- B. Motor skills disorders
- C. Speech disorders
- D. Learning disorders
- E. Mood disorders
- F. Pervasive developmental disorders/Autism spectrum disorders
- G. ADHD and disruptive behavior disorders
- H. Medical/neurological primary diagnoses, e.g., fetal alcohol syndrome, prenatal substance abuse, fragile X syndrome

VI. An Individualized Care Plan (ICP) should be developed and the patient should be referred to case management.

VII. The management of persons with developmental disabilities is typically multidisciplinary. Early intervention should be instituted including educational and ancillary therapies such as physical, occupational, language, and family support.

- VIII. Medical and psychological treatment should be administered in accordance with ICP goals. Referrals to specialists based on those goals should be done using approved network providers whenever possible.
- XIII. The patient should have access to medically necessary equipment
- XIV. The patient's progress should be monitored and the ICP should be reviewed/updated at least annually to address any changes in the patient's health needs.
- XV. The medical needs of the whole person, not just the disability should be addressed. A healthy lifestyle should be promoted including proper nutrition and physical activity as tolerated. Clinical preventive services should be recommended.

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Sources:

1. *American Academy of Pediatrics: Screening infant and young children for developmental disabilities, 1994.*
2. *Perrin JM., Development of Children with Chronic Illness, 1994*
3. *Developmental and Behavioral Pediatrics: A Handbook for Primary Care, 1994.*
4. *J Am Acad Child Adolescent Psychiatry, 1999*
5. *National Guideline Clearinghouse: MA Department of Mental Retardation Health Screening Recommendation, http://www.guideline.gov/summary/summary.aspx?ss=15&doc_id=13696&nbr=7030*
6. *Disability & Health – CDC (ncbddd/disabilityandhealth/index.html)*
7. *US Dept of Health and Human Services, Surgeon General's call to action to improve the health and wellness of persons with disabilities. Washington (DC): Office of the Surgeon General; 2005*
8. *American Family Physician: Medical Care of Adults with Mental Retardation, 2006; 73:2175-83, 2184*

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9. Pregnant & Postpartum Women

(It is important that all pregnant women are seen for prenatal care as early as possible during their pregnancy, preferably during the first trimester of pregnancy or within 42 days of enrollment with Jai Medical Systems Managed Care Organization, Inc. – per HEDIS quality assurance standards.)

Note: For PCP's who see a patient for initial diagnosis or confirmation of pregnancy, but will not be providing subsequent global OB care, the Jai MCO's requirements for the visit include:

- A. E/M code 99201-99205 or 99211-99215 as appropriate
- B. Order an obstetric prenatal lab panel
- C. Document LMP or EDD and obstetric history
- D. Document counseling and education
- E. Diagnosis of pregnancy with V22, V23, or V28 code on bill
- F. Refer patient to OB case management, using appropriate form

Note: Though not a listed requirement, Rx of a prenatal vitamin is also appropriate.

I. Identification & Health History of Patient

A. Confirm Pregnancy

- 1. Physical Exam
- 2. Urine
- 3. Blood

B. Complete the Maryland Prenatal Risk Assessment Form

C. History of patient, with focus on:

- 1. Presenting pregnancy
 - a. Calculate Estimated Date of Confinement (EDC)
 - i. Nägele's Rule, based on LMP
 - ii. Uterine size by palpation as well as in centimeters
 - at 8wks, pubic symphysis
 - at 12wks, slightly above pubic symphysis
 - at 15wks, midway between pubic symphysis and umbilicus
 - at 20wks, umbilicus
 - b. Common signs & symptoms of pregnancy patient is currently experiencing
 - c. Care to date
 - i. Begun vitamins?
 - ii. Adjusted eating habits to pregnancy requirements?

D. Previous pregnancy history, if any

- 1. Length of gestation
- 2. Birth weight
- 3. Fetal outcome
- 4. Length of labor
- 5. Fetal presentation

6. Type of delivery
7. Complications

E. Medical history, with focus on:

1. Chronic diseases, such as:
 - a. Hypertension
 - b. Diabetes
 - a. Sickle Cell Trait/Anemia
 - b. Hepatitis (all types)
 - c. HIV
 - d. Thyroid Dysfunction
 - e. Tuberculosis
2. Drug allergies
3. History of blood transfusions
4. History of cancer
5. History of sexually transmitted diseases (STD)
6. Potential risk of current STD
7. History of (or current) Substance Abuse
8. Current mental illness

F. Surgical history, with focus on:

1. GYN surgery
2. Induced abortions
3. Previous Caesarean delivery and reason

G. Family history, with focus on:

1. Diabetes, gestational or otherwise
2. Pregnancy difficulties, including large babies
3. Hypertension, during pregnancy or otherwise
4. Stillbirths
5. Multiple pregnancy
6. Cancer
7. Other inheritable diseases

II. Physical Exam

A. Complete physical exam, head to toe, including vital signs

B. Complete pelvic exam

1. Pap smear – only if due to be done by standard screening guidelines.
2. Cervical cultures for STDs (at initial exam and at 36th week)
 - a. Gonorrhea
 - b. Chlamydia
 - c. β -Strep (35-37 weeks only)
 - d. Others
3. Examination of pelvic soft tissue for masses or other unusual qualities
4. Examination of the bony pelvis

C. TB skin test – if otherwise indicated

III. Lab Work

A. Basic blood screening

1. Complete blood count with differentiation
2. Blood group type
3. Rh factor
4. Blood group antigen antibodies (at initial exam and at 28wks if unsensitized Rh neg.)
5. RPR (at initial exam and 28 wks)
6. Rubella titer
7. Varicella titer
8. Hepatitis diagnostic profile
9. HIV (with pre- and post-test counseling)

B. Urine screening (UA with microscopic & culture) to look for:

1. Infection
2. Protein
3. Glucose

C. Pregnancy specific screening

1. Sonogram:
 - To improve dating accuracy if uncertain LMP
 - Anatomy scan at 18-22wk
 - For other concerns
2. Aneuploidy screen 1st and/or 2nd trimester labs +/-US
3. Neural tube defect screen - Maternal serum AFP +/- US @15-20wks
4. Chorionic villus sampling (CVS) – if indicated, after 10wks
5. Amniocentesis (if indicated) - done at 16wks
6. Glucose tolerance test - done at 26-28wks
7. Group β -strep culture of lower vagina - done between 35-37wks

D. Immunizations

1. Rh vaccine – if Rh negative, Rh immune globulin done at 28 wks, w/in 72 hr of delivery, and whenever there is risk of fetomaternal hemorrhage
2. Influenza vaccine (inactivated) recommended
3. Tdap – done at 27-36wk of each pregnancy

IV. General Prenatal Care Concepts for healthy, singleton pregnancy

A. Ideal frequency of visits

1. Initial exam - up to 30 wks gestation - visit every four weeks
2. 30 wks - 36 wks gestation - visit every two weeks
3. 36 wks - delivery - every week

B. Details to note at each exam:

1. Maternal weight gain or loss
2. Maternal blood pressure
3. Fundal height
4. Abdominal exam findings
5. Normal fetal heart tones
6. Maternal urine
7. Protein
8. Glucose
9. Screen for depression and domestic violence
10. Screen for ongoing substance abuse

C. Encourage mother to enroll and participate in educational programs

1. Newborn care
2. Childbirth experience
3. Nutrition during pregnancy

D. Recommend:

1. Multivitamin supplementation
2. Preventative dental services
3. Regular mild to moderate exercise
4. Appropriate weight gain per IOM 2009 guidelines, by pre-pregnancy BMI
 - BMI <18.5 kg/m² (underweight) — weight gain 28 to 40 lbs (12.5 to 18.0 kg)
 - BMI 18.5 to 24.9 kg/m² (normal weight) — weight gain 25 to 35 lbs (11.5 to 16.0 kg)
 - BMI 25.0 to 29.9 kg/m² (overweight) — weight gain 15 to 25 lbs (7.0 to 11.5 kg)
 - BMI ≥ 30.0 kg/m² (obese) — weight gain 11 to 20 lbs (5 to 9.0 kg)

E. Send copy of prenatal records to hospital at 34-36 wks, in preparation for labor and delivery; weekly copies after

V. Some Common Complaints & Their Treatments (if any)

A. Urinary frequency

1. No treatment if urine is negative.
2. Asymptomatic bacteria should be treated, do to risk of pyelonephritis

B. Back and/or pelvis pain

1. Wear maternity girdle
2. Rest frequently
3. Local heat and back/message rubs

C. Varicose Veins

1. Elastic stockings
2. Elevation of legs
3. Frequent rest
4. Monitor for signs & symptoms of deep vein thrombosis

D. Lower limb edema

Elevate legs

E. Breast Tenderness

1. Wear good-fitting bra 24hrs/day
2. Decrease caffeine products

F. Nausea & Vomiting

1. Small frequent meals, solids and liquids separately
2. Decrease caffeine products
3. Anti-histamines
4. Vitamin B₆

G. Sexually transmitted diseases

1. Syphilis
 - a. Penicillin
 - b. Erythromycin
 - c. Ceftriaxone (Category B)
2. Chlamydia
 - a. Zithromax (Category B)
 - b. Erythromycin
3. Gonorrhea
Ceftriaxone
4. Herpes Simplex
 - a. Acyclovir prophylaxis from 36wk if symptomatic during pregnancy
 - b. Cesarean delivery, if active when in labor

H. Other vaginal irritations

1. Trichomoniasis
 - a. Oral Flagyl (only after 1st trimester) (Category C)
 - b. Vaginal Metrogel (any time)
 - c. Clindamycin, vaginally
2. Candidiasis
 - a. Terazol (2nd and 3rd trimesters only) (Category C)
 - b. Monistat (Category C)
 - c. Mycostatin
 - d. Topical Imidazole

I. GERD

Antacids

J. Constipation/Hemorrhoids

Dietary modifications including more bran and wheat

VI. Signs of Potential Problem

- A. Upper extremity and/or facial edema
- B. Unexplained Bleeding
- C. Unexplained elevated AFP levels
- D. Low maternal weight gain (in a non-obese patient) or excessive weight gain.
- E. Decrease or cessation of fetal movement
- F. No evidence of maternal blood pressure drop with increasing gestation
- G. Compounding maternal medical problems
- H. Substance use/abuse
- I. Nicotine dependence
- J. Preterm uterine cramping with severe pain
- K. Abnormal fetal growth
- L. Vaginal infection
- M. Exposure to fetotoxic agents
 - 1. Irradiation
 - 2. Viruses
 - 3. Gases
 - 4. Drugs

VII. Basic Principles of High Risk OB Management

- A. Frequency of visits
 - Increase frequency as indicated throughout pregnancy to allow for close monitoring
- B. Additional Testing (as indicated)
 - 1. Ultrasound
 - 2. Amniocentesis
 - 3. Chorionic Villus sampling
 - 4. Fetal Blood Sampling
 - 5. Maternal Alfa-Fetoprotein testing
 - 6. Maternal and Paternal Karyotyping
 - 7. Pulmonary Maturity testing
- C. Biometric Evaluations of Fetal Well-being - done at appropriate intervals
 - 1. Fetal Movement Counting
 - 2. Doppler Ultrasound
 - 3. Nonstress Testing
 - 4. Contraction Stress Testing
 - 5. Biophysical Profile
- D. Management of specific concurrent maternal diseases according to recent research-based protocols

VIII. Postpartum Care

- A. In-hospital Care
 - 1. Rubella vaccine (if needed)
 - 2. Varicella vaccine (if needed)

3. Rh immune globulin (if needed)
 4. Tdap vaccine (if not done during pregnancy)
 5. Monitor bladder function, secondary to birth trauma
 6. Monitor bowel function, secondary to birth trauma
 7. Ensure general good hygiene, particularly of the perineal area
 8. Monitor lochia drainage
 9. Ambulate to prevent deep vein thrombosis
 10. Ensure adequate nutrition
 11. Discuss contraception
 12. Discuss breastfeeding
- B. At-home care
1. First month
 - a. Monitor for fever, pain, heavy bleeding, or excessive breast tenderness - call doctor immediately if experience these
 - b. Rest
 - c. Restrict activity level for first three weeks
 2. Consider contraceptive options
 3. Schedule postpartum exam appointment at four to six weeks (21-56 days after delivery to meet HEDIS guidelines), consider earlier visit if cesarean delivery, medical issues require follow-up, or at risk for post-partum depression.
 - a. Maternal and newborn's weight
 - b. Maternal blood pressure
 - c. Maternal CBC with differentiation if indicated
 - d. Breast exam
 - e. Pelvic exam with rectal exam
 - f. Episiotomy (and any other reparative sutures) examination
 - g. Discuss contraception/family planning
 - h. Ensure adequate newborn nutrition/breastfeeding issues
 - i. Discuss any areas of concern to patient
 - j. Assess maternal ability to return to work
 - k. Discuss safe infant sleep patterns
 - l. Screen for diabetes in individuals with previous gestational diabetes
 - m. Screen for postpartum depression
 - n. HEDIS requirements
 - Code V24.1, V24.2, or V25.1 as appropriate
 - Document at least one of the following:
 - A pelvic exam
 - Evaluation of weight, breasts, abdomen, and BP
 - A notation of postpartum care

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Sources:

1. Guidelines: American College of Obstetrics and Gynecology

2. National Clearinghouse Guideline,

<http://www.guideline.gov/content.aspx?id=13174&search=post+partum+care>

3. IOM (Institute of Medicine). *Weight Gain During Pregnancy: Reexamining the Guidelines*. Washington, DC: The National Academies Press. Posted online May 28, 2009.

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10. Individuals who are Homeless

I. Principles & Goals

A. Multi-disciplinary team approach to address the unique needs of the homeless patient, particularly:

1. Physical illness
2. Emotional illness
3. Substance Abuse problems
4. Nutritional problems
5. Lack of:
 - a. Stable housing arrangements
 - b. Employment
 - c. Income
 - d. Health insurance
 - e. Health care access

B. Identify that they are four times more likely to die than age-matched controls

II. Complete Psychosocial Evaluation

A. Psychosocial History Assessment

1. Educational achievements
2. Job/employment/armed forces history
3. Housing history
4. Substance abuse history & evaluation
5. Family history
6. Domestic violence
7. History of survival sex

B. Comprehensive Mental Health Assessment

1. Mental status exam
2. Previously diagnosed mental disorders
3. Symptomatology
4. Personality & Coping Assessment
5. Medication history

C. Lifestyle-related Disease Assessment

1. Substance abuse
2. Alcohol abuse
3. Nicotine abuse
4. Birth control evaluation
5. Communicable diseases

III. Complete History & Physical Examination

A. Comprehensive Medical History

B. Hospitalizations

C. Review of Current Symptoms

- D. Comprehensive physical exam, with additional emphasis on:
 - 1. Skin integrity
 - 2. Oral mucosa integrity/teeth health
 - 3. Vision capabilities
 - 4. Hearing capabilities
 - 5. Foot examination

- IV. Diagnostic Studies
 - A. Basic lab work
 - 1. Complete blood count
 - 2. Urinalysis & urine drug screen
 - 3. Automated chemistry panel
 - 4. Hepatitis Diagnostic Profile
 - 5. Prostate Specific Antigen (PSA), if indicated
 - B. Radiological studies
 - C. Tuberculosis screening
 - D. STD screening
 - E. HIV testing (with pre- & post-test counseling)
 - F. Immunization Assessment
 - 1. Influenza
 - 2. Tetanus
 - 3. Pneumococcal
 - 4. Hepatitis B, if indicated
 - G. Comprehensive GYN exam
 - H. Mammography, if indicated
 - I. Other tests, as needed & indicated

- V. Treatment of Physical Problem
 - A. Medications appropriate to diagnoses established
 - B. Referral to specialty services
 - 1. Psychiatry
 - 2. Orthopedic
 - 3. Podiatry
 - 4. Dental
 - 5. Others

- VI. Treatment of Emotional Problems
 - A. Medications appropriate to diagnoses established
 - B. Referral to In-house Mental Health Department
 - C. Referral to Adult Day Care
 - D. Referral to hospital, if indicated as necessary

- VII. Treatment of Psychosocial Problems
 - A. Referral to appropriate social agencies
 - 1. Housing Authority
 - 2. Department of Social Services

- 3. Department of Education's Homeless Coordinator
 - B. Referral to Case-Management Social Work agencies
 - C. Referral to Substance Abuse Treatment programs
 - 1. Through primary care provider
 - 2. Through In-house Mental Health Department
 - 3. Through outside In-patient services
- VIII. Treatment of Substance Abuse Problems - see extensive Substance Abuse Treatment Protocol and Substance Abuse Protocol Form including CAGE and MAST tool.
- IX. Treatment of Housing Problems
- A. Identification of shelter for the night while in primary care providers's office
 - B. Referral to City Housing Department for federally-subsidized housing, Section 8 housing, etc.
 - C. Referral to Department of Social Service for assistance with household expenses, including utilities
- X. Access appropriate Health Insurance
- A. Referral to Department of Social Services
 - B. Maryland Primary Care
 - C. Maryland Health Choice Program
 - D. Maryland Children Health Program
 - E. Others

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Sources:

1. Developed protocol based on our own clinical experience obtained by working with the Homeless for 35 years.
2. *The Health Care for the Homeless Information Resource Center*
3. *Homelessness in the United States: History, Epidemiology, Health Issues, Women, and Public Policy. Medscape Ob/Gyn and Women's Health 9 (2) 2004. Medscape 2004.*
4. *National Health Care for the Homeless Council, <http://www.nhchc.org/keyprevHealthmeds.pdf>*
5. *American Family Physician: The Homeless in America: Adapting Your Practice, 2006: 74:1132-8*

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11. Individuals with HIV/AIDS

- I. Treatment guidelines for HIV/AIDS change frequently. Updates can be found at <http://aidsinfo.nih.gov/contentfiles/lvguidelines/AdultandAdolescentGL.pdf>.
- II. HIV positive patients will be treated by the primary care providers with appropriate medication or referred to ID (e.g. Moore Clinic), depending on their comfort level.
- III. Regular follow-ups will be made with the primary care provider. The CD4 counts and viral load should be checked every 3-6 months at a minimum. Patients diagnosed with HIV/AIDS are reported to the local health department.
- IV. Indications for Antiretroviral Therapy
 - A. ART is now recommended for all HIV-infected patients.
 1. To reduce disease progression and virus transmission.
 2. Strength of recommendation varies by CD4 count: CD4 <350(AI); CD4 350–500 (AII); CD4 >500 (BIII).
 3. The decision to initiate ART should be individualized for each patient and may incorporate assessment of the following factors:
 - * Risk of progression to illness or death if untreated
 - * Readiness and willingness to adhere to therapy; potential barriers to adherence, psychosocial issues
 - * Co-morbidities and coexisting conditions
 - * Risk of HIV transmission to others if untreated
 - * Risk of toxicities and drug-drug interactions
 - B. Highest priority for ART treatment initiation:
 - * Pregnant
 - * AIDS-defining illness
 - * HIV associated nephropathy
 - * HIV associated dementia
 - * Hepatitis B co-infection
 - * Acute HIV-infection
- V. Recommended Treatment
 - A. Genotype testing should be performed at the time of diagnosis if the viral load is >1,000 copies/ml. Consider repeat testing when treatment is initiated.
 - B. Three antiretroviral drugs are used. Treatment needs to be individualized depending on the CD4 count, viral load, and the compliance of the patient
 - C. Goal of Treatment: Reduction in viral load below detectable levels.
 - D. Continue treatment without interruption to reduce resistance mutations.
 - E. Pregnancy – preferred ART:
 1. NRTI's: Lamivudine, Zidovudine,
 2. NNRTI: Nevirapine,
 3. PI's: Atazanavir/Ritonavir, Lopinavir/Ritonavir

Table 5a. Preferred and Alternative Antiretroviral Regimens for Antiretroviral Therapy-Naive Patients (Last updated February 12, 2013; last reviewed February 12, 2013)

A combination antiretroviral therapy (ART) regimen generally consists of two NRTIs plus one active drug from one of the following classes: NNRTI, PI (generally boosted with RTV), INSTI, or a CCR5 antagonist. Selection of a regimen should be individualized on the basis of virologic efficacy, toxicity, pill burden, dosing frequency, drug-drug interaction potential, and the patient's resistance testing results and comorbid conditions. Refer to [Table 6](#) for a list of advantages and disadvantages of the individual ARV agents listed below and to [Appendix B, Tables 1–6](#) for dosing information. The regimens in each category are listed in alphabetical order. For more detailed recommendations on ARV use in HIV-infected pregnant women, refer to the latest perinatal guidelines available at <http://aidsinfo.nih.gov/guidelines>.

Preferred Regimens Regimens with optimal and durable efficacy, favorable tolerability and toxicity profile, and ease of use. The preferred regimens for non-pregnant patients are arranged by chronological order of FDA approval of components other than nucleosides and, thus, by duration of clinical experience.	
<p>NNRTI-Based Regimen</p> <ul style="list-style-type: none"> • EFV/TDF/FTC* (AI) <p>PI-Based Regimens (in alphabetical order)</p> <ul style="list-style-type: none"> • ATV/r + TDF/FTC* (AI) • DRV/r (once daily) + TDF/FTC* (AI) <p>INSTI-Based Regimen</p> <ul style="list-style-type: none"> • RAL + TDF/FTC* (AI) 	<p>Comments</p> <ul style="list-style-type: none"> • EFV is teratogenic in non-human primates. A regimen that does not include EFV should be strongly considered in women who are planning to become pregnant or who are sexually active and not using effective contraception. • TDF should be used with caution in patients with renal insufficiency. • ATV/r should not be used in patients who require >20 mg omeprazole equivalent per day. Refer to Table 1.2a for dosing recommendations regarding interactions between ATV/r and acid-lowering agents.
Alternative Regimens Regimens that are effective and tolerable, but have potential disadvantages when compared with preferred regimens. An alternative regimen may be the preferred regimen for some patients.	
<p>NNRTI-Based Regimens (in alphabetical order)</p> <ul style="list-style-type: none"> • EFV + ABC/3TC* (BI) • RPV/TDF/FTC* (BI) • RPV + ABC/3TC* (BIII) <p>PI-Based Regimens (in alphabetical order)</p> <ul style="list-style-type: none"> • ATV/r + ABC/3TC* (BI) • DRV/r + ABC/3TC* (BII) • FPV/r (once or twice daily) + ABC/3TC* or TDF/FTC* (BI) • LPV/r (once or twice daily) + ABC/3TC* or TDF/FTC* (BI) <p>INSTI-Based Regimen</p> <ul style="list-style-type: none"> • EVG/COBI/TDF/FTC* (BII) • RAL + ABC/3TC* (BIII) 	<p>Comments</p> <ul style="list-style-type: none"> • RPV is not recommended in patients with pretreatment HIV RNA >100,000 copies/mL. • Higher rate of virologic failures reported in patients with pre-ART CD4 count <200 cells/mm³ who are treated with RPV + 2NRTI. • Use of PPIs with RPV is contraindicated. • ABC should not be used in patients who test positive for HLA-B*57:01. • Use ABC with caution in patients with known high risk of CVD or with pretreatment HIV RNA >100,000 copies/mL (see text). • Once-daily LPV/r is not recommended for use in pregnant women. • EVG/COBI/TDF/FTC should not be started in patients with an estimated CrCl <70 mL/min, and should be changed to an alternative regimen if the patient's CrCl falls below 50 mL/min. • COBI is a potent CYP 3A inhibitor. It can increase the concentration of other drugs metabolized by this pathway. Refer to Tables 15d and 16c for drug interaction information for concomitantly administered drugs. • EVG/COBI/TDF/FTC should not be used with other ARV drugs or with nephrotoxic drugs.

* 3TC may substitute for FTC or vice versa. The following combinations in the recommended list above are available as coformulated fixed-dose combinations: ABC/3TC, EFV/TDF/FTC, EVG/COBI/TDF/FTC, LPV/r, RPV/TDF/FTC, TDF/FTC, and ZDV/3TC.

Key to Abbreviations: 3TC = lamivudine, ABC = abacavir, ART = antiretroviral therapy, ARV = antiretroviral, ATV/r = atazanavir/ritonavir, COBI = cabotegravir, CrCl = creatinine clearance, CVD = cardiovascular disease, DRV/r = darunavir/ritonavir, EFV = efavirenz, EVG = emtricitabine, FDA = Food and Drug Administration, FPV/r = fosamprenavir/ritonavir, FTC = emtricitabine, INSTI = integrase strand transfer inhibitor, LPV/r = lopinavir/ritonavir, NNRTI = non-nucleoside reverse transcriptase inhibitor, NRTI = nucleoside reverse transcriptase inhibitor, PI = protease inhibitor, PPI = proton pump inhibitor, RAL = raltegravir, RPV = rilpivirine, RTV = ritonavir, TDF = tenofovir disoproxil fumarate, ZDV = zidovudine

Rating of Recommendations: A = Strong; B = Moderate; C = Optional

Rating of Evidence: I = Data from randomized controlled trials; II = Data from well-designed nonrandomized trials or observational cohort studies with long-term clinical outcomes; III = Expert opinion

Guidelines for the Use of Antiretroviral Agents in HIV-1-Infected Adults and Adolescents

Downloaded from <http://aidsinfo.nih.gov/guidelines> on 9/7/2013

VI. Monitoring ART (see table 3 below)

- A. Obtain VL within 2-4 weeks after initiation of therapy (1 log drop or greater indicates adequate response)
- B. Repeat VL q4-8 weeks until VL<200, then every 3-4 months if stable
- C. Repeat CBC, LFT's, and creatinine every 3-6 months after initiating therapy
- D. CD4 count can be checked every 6-12 months after virologic suppression met and above opportunistic threshold.

VII. Basic Prophylaxis Timetable

- A. When diagnosed with HIV initially
 1. Administer necessary vaccines
 2. Get baseline lab work (CBC, CMP, VL, CD4, genotype, G6PD, toxoplasma IgG, RPR, gonorrhea, chlamydia, Hepatitis A,B,C, CMV IgG, VZV IgG (if no Hx of chickenpox), PPD or Quantiferon TB Gold
 3. Do baseline physical, pap smear if due
 4. Assess for other needs (e.g.: counseling, housing, health insurance)
 5. Assess allergies
 6. Discuss advanced directives
- B. At CD4 of < 200, Prior AIDS-defining illness, or thrush
 1. Begin PCP prophylaxis
 - Most common prophylaxis is SMZ/TMP DS daily, every other day, or, 1 three times a week.
 2. If allergic to sulfa drugs, the patient should use Dapsone, Pyrimethamine, Leukovorin, Pentamidine, or Atovaquone.
- C. At CD4 of < 100
 1. Continue above therapies
 2. Begin prophylaxis for Toxoplasma
 - Prophylaxis is the same as for PCP, if taking Bactrim DS
 - Alternatives are Bactrim SS, Dapsone + Pyrimethamine + Leukovorin, and Atovaquone.
 - If using PCP prophylaxis that is not a preferred regimen for toxoplasma when CD4 drops <100, should change regimen if toxoplasma IgG antibodies are positive.
- D. At CD4 of < 50
 1. Continue above therapies
 2. Begin MAC Prophylaxis
 - Most common prophylaxis is Azithromycin 1200 mg weekly or Clarithromycin 500 mg B.I.D.
 - Alternative is Rifabutin

VIII. Selected Commonly Seen Complications & Their Prophylaxis/Treatment

A. Tuberculosis - PPDs should be administered yearly.

1. If the skin test is +, with ≥ 5 mm induration, but a chest x-ray is negative, referral to the Local Health Department should take place immediately and the patient should begin a 9 month course of INH and B6 therapy. Liver enzymes should be done regularly to monitor for elevation.
2. If the skin test is +, with a ≥ 5 mm induration, and the chest x-ray is positive, the patient should be sent immediately to the hospital so that a rigorous and extensive medication regimen can begin. The patient will likely be hospitalized for at least a month to ensure that medication is being administered properly and in a timely manner.

B. Diarrhea

1. Ensure hydration and appetite
2. Assess for associated symptoms, such as pain with swallowing or defecation
3. Obtain stool for cultures - look for parasites, WBCs, c.diff, etc.
4. Treat as appropriate from the culture results
5. Refer immediately to hospital if dehydrated, as evidenced by:
 - a. Orthostatic hypotension
 - b. Poor skin turgor
 - c. Dry oral mucosa or sunken, glassy eyes

C. HIV Wasting Syndrome

1. Ensure appetite and hydration
2. Assess for presence or lack of other GI or endocrine disease
3. Assess for malignancies
4. Assess for febrile symptoms
5. Megace, Marinol, and Nandrolone may be used as indicated.
6. Prescribe nutritional supplement, if covered, (e.g.: Ensure) 1 can three times a day with regular meals

D. Mental Health Needs, Including Substance Abuse

1. Identify and Diagnose the correct mental health problem
2. Treat medically, as able, and
3. Offer services of in-house counseling department
4. If the patient suffers from chemical addiction:
 - a. Manage detoxification and rehabilitation, if can meet patient's needs and patient is motivated.
 - b. Refer to another program for detoxification and continue to manage the patient's rehabilitation needs through counseling and palliative medical care.
(*See extensive Substance Abuse Protocol*)

E. Sexual Dysfunction

1. Identify cause: endocrine; substance abuse; cardiovascular
2. Hypogonadism is more common than in general population.

3. Sildenafil (VIAGRA) may be used where indicated
 - a. Concomitant use of the protease inhibitor RITONAVIR may substantially increase serum concentration of sildenafil (VIAGRA). Visual disturbances, decreased blood pressure, syncope, and prolonged erection were reported in volunteers exposed to high doses of sildenafil. To decrease the chance of adverse events in patients on ritonavir, 25 mg dose of sildenafil is recommended.
 - b. Safe sex counseling must be discussed.

F. Cervical Cancer

1. Consider initial screening within 1 yr of onset of sexual activity.
2. Pap Q6mon x2, then annual if normal.
3. HPV testing **alone** is not recommended for follow-up of abnormal

IX. Selected Situations for Referrals - See Referral Protocol

- A. Kaposi's sarcoma – ID, oncology
- B. CMV retinitis - hospital
- C. PCP, active - hospital or outpatient
- D. TB, active - hospital or outpatient
- E. MAC, active - hospital or outpatient
- F. Change in mental status or new seizures - hospital
- G. Severe Oral Candidiasis with Dysphagia - hospital or outpatient
- H. Positive RPR - Local Health Department
- I. Positive PPD & Positive chest x-ray - Local Health Dept and hospital
- J. Pneumonia - hospital

X. Recommended Immunizations

- A. Flu Vaccine - annual, inactivated only
- B. Pneumonia Vaccine
 1. If no prior PPV23->Give PCV13->after 8wk or more give PPV23 (option to wait for CD4 \geq 200 on ART before giving PPV23 dose).
 2. If PPV23 has been given->Give PCV13 after 1yr or more.
 3. Give 2nd PPV23 after 5 or more yr
- C. Hepatitis A vaccine if chronic liver disease, IVDA, and MSM populations
- D. Hepatitis B vaccine – preferably before CD4 falls to < 350
- E. The following live vaccines may be used if otherwise indicated, only if CD4 > 200:
 1. MMR
 2. Varicella
 3. Zoster
 4. Yellow Fever

Table 3. Laboratory Monitoring Schedule for Patients Before and After Initiation of Antiretroviral Therapy (page 1 of 2) (Last updated February 12, 2013; last reviewed February 12, 2013)

	Entry into care	Follow-up before ART	ART initiation or modification ^a	Follow-up 2–8 weeks post-ART initiation or modification	Every 3–6 months	Every 6 months	Every 12 months	Treatment failure	Clinically indicated
HIV serology	√ If diagnosis has not been confirmed								
CD4 count	√	√ Every 3–6 months	√		√	In clinically stable patients with suppressed viral load, CD4 count can be monitored every 6–12 months (see text).		√	√
HIV viral load	√	√ Every 3–6 months	√	√ ^c	√ ^d			√	√
Resistance testing	√		√ ^c					√	√
HLA-B*5701 testing			√ If considering ABC						
Tropism testing			√ If considering a CCR5 antagonist					√ If considering a CCR5 antagonist, or for failure of CCR5 antagonist-based regimen	√
Hepatitis B serology ^f	√		√ May repeat if HBsAg (-) and HBsAb (-) at baseline						√
Hepatitis C serology, with confirmation of positive results	√								√
Basic chemistry ^{g,h}	√	√ Every 6–12 months	√	√	√				√

Table 3. Laboratory Monitoring Schedule for Patients Before and After Initiation of Antiretroviral Therapy (page 2 of 2) (Last updated February 12, 2013; last reviewed February 12, 2013)

	Entry into care	Follow-up before ART	ART initiation or modification ^a	Follow-up 2–8 weeks post-ART initiation or modification	Every 3–6 months	Every 6 months	Every 12 months	Treatment failure	Clinically indicated
ALT, AST, T. bilirubin	✓	✓ Every 6–12 months	✓	✓	✓				✓
CBC with differential	✓	✓ Every 3–6 months	✓	✓ If on ZDV	✓				✓
Fasting lipid profile	✓	✓ If normal, annually	✓	✓ Consider 4–8 weeks after starting new ART regimen that affects lipids		✓ If abnormal at last measurement	✓ If normal at last measurement		✓
Fasting glucose or hemoglobin A1C	✓	✓ If normal, annually	✓		✓ If abnormal at last measurement	✓ If normal at last measurement			✓
Urinalysis ^b	✓		✓			✓ If on TDF ⁱ	✓		✓
Pregnancy test			✓ If starting EFV						✓

^a This table pertains to laboratory tests done to select an ARV regimen and monitor for treatment responses or ART toxicities. Please refer to the HIV Primary Care guidelines for guidance on other laboratory tests generally recommended for primary health care maintenance of HIV patients.

^b ART may be modified for treatment failure, adverse effects, or regimen simplification.

^c If HIV RNA is detectable at 2 to 3 weeks, repeat every 4 to 8 weeks until suppression to <200 copies/mL, then every 3 to 6 months.

^d Viral load typically is measured every 3 to 4 months in patients on ART. However, for adherent patients with suppressed viral load and stable immunologic status for more than 2 to 3 years, monitoring at 6 month intervals may be considered.

^e In ART-naïve patients, if resistance testing was performed at entry into care, repeat testing before initiation of ART is optional. The exception is pregnant women; repeat testing is recommended in this case. For virologically suppressed patients who are switching therapy for toxicity or convenience, viral amplification will not be possible and therefore resistance testing should not be performed. Results from prior resistance testing can be used to help in the construction of a new regimen.

^f If HBsAg is positive at baseline or before initiation of ART, TDF plus either FTC or 3TC should be used as part of the ARV regimen to treat both HBV and HIV infections. If HBsAg, and HBsAb, and anti-HBc are negative at baseline, hepatitis B vaccine series should be administered.

^g Serum Na, K, HCO₃, Cl, BUN, creatinine, glucose (preferably fasting). Some experts suggest monitoring the phosphorus levels of patients on TDF. Determination of renal function should include estimation of CrCl using Cockcroft-Gault equation or estimation of glomerular filtration rate based on MDRD equation.

^h For patients with renal disease, consult the Guidelines for the Management of Chronic Kidney Disease in HIV-Infected Patients: Recommendations of the HIV Medicine Association of the Infectious Diseases Society of America.²

ⁱ More frequent monitoring may be indicated for patients with evidence of kidney disease (e.g., proteinuria, decreased glomerular dysfunction) or increased risk of renal insufficiency (e.g., patients with diabetes, hypertension).

Acronyms: 3TC = lamivudine, ABC = abacavir, ALT = alanine aminotransferase, ART = antiretroviral therapy, AST = aspartate aminotransferase, CBC = complete blood count, CrCl = creatinine clearance, EFV = efavirenz, FTC = emtricitabine, HBsAb = hepatitis B surface antibody, HBsAg = hepatitis B surface antigen, HBV = hepatitis B virus, MDRD = modification of diet in renal disease (equation), TDF = tenofovir, ZDV = zidovudine

XI. Strategies to Improve Adherence to Antiretroviral Therapy

Table 12. Strategies to Improve Adherence to Antiretroviral Therapy

Strategies	Examples
Use a multidisciplinary team approach Provide an accessible, trusting health care team	• Nurses, social workers, pharmacists, and medications managers
Establish a trusting relationship with the patient	
Establish patient readiness to start ART	
Assess and simplify the regimen, if possible	
Identify potential barriers to adherence before starting ART	<ul style="list-style-type: none"> • Psychosocial issues • Active substance abuse or at high risk of relapse • Low literacy • Low numeracy • Busy daily schedule and/or travel away from home • Nondiscovery of HIV diagnosis • Skepticism about ART • Lack of prescription drug coverage • Lack of continuous access to medications
Provide resources for the patient	<ul style="list-style-type: none"> • Resources for mental health and/or substance abuse treatment • Resources to obtain prescription drug coverage • Pillboxes
Involve the patient in ART regimen selection	• For each option, review regimen potency, potential side effects, dosing frequency, pill burden, storage requirements, food requirements, and consequences of nonadherence
Assess adherence at every clinic visit	<ul style="list-style-type: none"> • Use a simple checklist that the patient can complete in the waiting room • Ensure that other members of the health care team also assess adherence • Ask the patient open-ended questions (e.g., "In the last 3 days, please tell me how you took your medications.")
Identify the type of nonadherence	<ul style="list-style-type: none"> • Failure to fill the prescription(s) • Failure to take the right dose(s) at the right time(s) • Nonadherence to food requirements
Identify reasons for nonadherence	<ul style="list-style-type: none"> • Adverse effects from medications • Complexity of regimen (pill burden, dosing frequency, etc.) • Difficulty swallowing large pills • Forgetfulness • Failure to understand dosing instructions • Inadequate understanding of drug resistance and its relationship to adherence • Pill fatigue • Other potential barriers
Resources allow select from among available effective interventions	• See http://www.cdc.gov/hiv/topics/prevention/assets/pdf/evidence_interventions.pdf

Key to Abbreviations: ART – antiretroviral therapy; ARTU – uninitiated

XII. Pre-Exposure Prophylaxis

CDC Interim Guidance on HIV Pre-Exposure Prophylaxis

Before Initiating PrEP

Determine eligibility:

- Document negative HIV antibody test immediately before starting PrEP medication.
- Test for acute HIV infection if patient has symptoms consistent with acute HIV infection or reports unprotected sex with an HIV-positive person in the preceding month.
- Determine if women are planning to become pregnant, are currently pregnant, or are breastfeeding.
- Confirm that patient is at ongoing, very high risk for acquiring HIV infection.
- If any sexual partner is known to be HIV-infected, determine whether receiving antiretroviral therapy, assist with linkage to care if not in care or not receiving antiretroviral therapy.
- Confirm that calculated creatinine clearance is ≥ 60 mL per minute (Cockcroft-Gault formula).

Other recommended actions:

- Screen for hepatitis B infection; vaccinate against hepatitis B if susceptible or treat if active infection exists regardless of decision regarding prescribing PrEP.
- Screen and treat as needed for sexually transmitted infections (STIs).
- Disclose to women that safety for infants exposed during pregnancy is not fully assessed but no harm has been reported.
- Do not prescribe PrEP to women who are breastfeeding.

Beginning PrEP medication regimen:

- Prescribe tenofovir disoproxil fumarate 300 mg (TDF) plus emtricitabine 200 mg (FTC) (i.e., one Truvada [Gilead Sciences] tablet) daily.
- In general, prescribe no more than a 90-day supply, renewable only after HIV testing confirms that patient remains HIV-uninfected. For women, ensure that pregnancy test is negative or, if pregnant, that the patient has been informed about use during pregnancy.
- If active hepatitis B infection is diagnosed, consider using TDF/FTC, which may serve as both treatment of active hepatitis B infection and HIV prevention.
- Provide risk-reduction and PrEP medication-adherence counseling and condoms.

Follow-up while PrEP medication is being taken:

- Every 2–3 months, perform an HIV antibody test (or fourth generation antibody/antigen test) and document negative result.
- At each follow-up visit for women, conduct a pregnancy test and document results; if pregnant, discuss continued use of PrEP with patient and prenatal-care provider.
- Evaluate and support PrEP medication adherence at each follow-up visit, more often if inconsistent adherence is identified.

- Every 2–3 months, assess risk behaviors and provide risk-reduction counseling and condoms. Assess STI symptoms and, if present, test and treat for STIs as needed.
- Every 6 months, test for bacterial STIs even if asymptomatic, and treat as needed.
- Three months after initiation, then every six months while on PrEP medication, check serum creatinine and calculate creatinine clearance.

On discontinuing PrEP (at patient request, for safety concerns, or if HIV infection is acquired):

- Perform HIV test(s) to confirm whether HIV infection has occurred.
- If HIV positive, order and document results of resistance testing, establish linkage to HIV care.
- If HIV negative, establish linkage to risk-reduction support services as indicated.
- If active hepatitis B is diagnosed at initiation of PrEP, consider appropriate medication for continued treatment of hepatitis B infection.
- If pregnant, inform prenatal-care provider of TDF/FTC use in early pregnancy and coordinate care to maintain HIV prevention during pregnancy and breastfeeding.

Recommendations in black apply to both adult MSM and heterosexually active men and women; items in blue are specific to heterosexual women.

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Sources:

1. *Human Immunodeficiency Virus Infection and its Complications: Marshall K. Kubota, M.D., University of California, San Francisco CA 1999.*
2. *John G. Bartlett, M.D.: Johns Hopkins School of Medicine, 2004 Medical Management of HIV Infection, Johns Hopkins School of Medicine Baltimore, MD 2004.*
3. *Department of Health and Mental Hygiene, parameters, 1999.*
4. *DHHS Guidelines, Accessed September 2013 (<http://www.aidsinfo.nih.gov>).*
5. *CDC Guidelines - <http://www.cdc.gov/hiv/prep/>*

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12. Individuals in Need of Substance Abuse Treatment

I. Identification & Definition of Substance Abuse Problem

A. Entrance into Program

1. According to DSM-IV criteria
2. Patient self-referral

B. Comprehensive History & Physical, focusing on:

1. Duration of substance abuse
2. General mental health
3. Presence of or Risk Factors for sexually transmitted &/or blood-borne diseases
4. Identify "self-treatment" for underlying issues, e.g. depression, schizophrenia

C. Use of the Substance Abuse Protocol form including CAGE & MAST Tool.

1. Define duration of abuse
2. Drug(s) of abuse
3. Route of administration
4. Desire for treatment and rehabilitation
5. General tract for treatment method

D. Comprehensive Lab work & Other Diagnostic Work

1. Automated chemistry panel
2. Hepatitis diagnostic profile
3. Urine drug screens
4. HIV testing (with pre- and post-test counseling)
5. PPD skin test for TB (annually)
6. Chest x-ray if anergic (no reaction to controls)
7. STD screening, including syphilis serology

II. Detoxification Resources

A. In-house Resources

1. Primary care providers
2. Mental Health Department

B. Outside Out-patient Resources

1. Baltimore Recovery Center
2. Baltimore Addiction Services
3. Glenwood Life Counseling Center
4. Jones Falls Counseling Center
5. Outpatient Addiction Services at GBMC

C. Outside In-patient Resources

1. Baltimore Addiction Services
2. Mercy Hospital
3. Other local hospitals (for alcohol withdrawal)

III. Detoxification Plan for In-house Treatment

- A. Tapering off abused substance - only possible with benzodiazepines (e.g.: Xanax, Ativan or Valium)
Gradual decrease of abused substance done by in-house primary care providers
- B. Substitution for abused substance
 - 1. Opiates (e.g.: heroin, morphine, demerol, percocet, etc.)
 - a. Drug of choice for detoxification is clonidine
 - b. Other drugs used for symptomatic relief
 - i. Motrin for aches and pains
 - ii. Doxepin for insomnia
 - iii. Imodium for diarrhea
 - iv. Bentyl for lower bowel cramps
 - v. Zantac for stomach aches
 - 2. Benzodiazepines (e.g.: Xanax, Valium)
 - a. Drug of choice is Phenobarbital
 - b. Primary care providers use an established conversion formula to establish dose
 - 3. Stimulants (e.g.: cocaine)
Drug of choice is a Tricyclic anti-depressant
 - 4. Depressants (e.g.: alcohol)
 - a. Drug of choice is Librium
 - b. Consider tegretol taper (it is non-sedating)
 - c. 5 days thiamine 100 mg PO QD and consider folic acid 1mg PO QD

IV. In-house Rehabilitation Services

- A. Regular medical follow-up
 - 1. Health maintenance
 - 2. Periodic drug screening
 - 3. Medications
 - a. To aid sleep.
 - b. To cope with pain
 - c. To supplement diet
- B. Mental Health follow-up
 - 1. Individual therapy
 - 2. Group therapy
 - 3. Support groups

V. Outside Rehabilitation Services

- A. Glenwood Life Counseling Center
- B. Baltimore Addiction Services
- C. Jones Falls Counseling Center
- D. Baltimore Recovery Center

E. Outpatient Addiction Services at GBMC

VI. Other Support Services

- A. Alcoholics Anonymous
- B. Narcotics Anonymous

VII. Tracking & Aftercare

- A. Primary care providers record all aspects of patient care in patient's chart
- B. Evaluate and Assess patient progress at each visit
- C. Review of client records weekly to:
 - 1. Ensure continuity of care
 - 2. Adherence to program protocols
 - 3. Assess and remind them that detox is not simply replacement (e.g. Suboxone or methadone)
- D. Long-term follow-up
 - 1. Physical health by primary care providers
 - 2. Mental health by in-house department

Sample Screening Tool:

**THE RAPID ALCOHOL
PROBLEMS SCREEN (RAPS)**

- Do you sometimes take a drink in the morning when you first get up?
- During the past year, has a friend or family member ever told you about things you said or did while you were drinking that you could not remember?
- During the past year, have you had a feeling of guilt or remorse after drinking?
- During the past year, have you failed to do what was normally expected of you because of drinking?
- During the past year, have you lost friends or girlfriends or boyfriends because of drinking?

NOTE: A positive answer to one of the questions is considered a positive test.
SOURCE: Adapted from Cherpitel 1995d.

The Rapid Alcohol Problems Screen (RAPS) asks questions similar as the CAGE test, but from a different perspective. One "yes" answer on the RAPS4 test indicates a possible alcohol abuse problem and the results have shown to be very accurate across gender and ethnic groups. (1997)

The RAPS4 Questions (2007)

The RAPS4 test has been found to be highly effective in detecting alcohol dependence in the past year across gender and ethnic groups-- white, black and Hispanic.

Research has also shown that the RAPS4 is more effective than the CAGE test, which has traditionally been the most widely used test in clinical settings.

The RAPS4 gets its name from the questions it poses to the patient which pertain to remorse (R), amnesia (A), performance (P), and starter drinking behavior (S). Each question pertains to the patient's behaviors in the past year.

- 1. Have you had a feeling of guilt or remorse after drinking?*
- 2. Has a friend or a family member ever told you about things you said or did while you were drinking that you could not remember?*
- 3. Have you failed to do what was normally expected of you because of drinking?*
- 4. Do you sometimes take a drink when you first get up in the morning?*

A "yes" answer to at least one of the four questions suggests that your drinking is harmful to your health and well-being and may adversely affect your work and those around you.

If you answered "no" to all four questions, your drinking pattern is considered safe for most people and your results do not suggest that alcohol is harming your health.

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Sources:

- 1. Michael Hays, M.D., Addiction Medicine Specialist, Maryland General Hospital*
- 2. Alcoholism: Stephen M. Jurd MB, BS, University of Sydney: Sydney, Australia, 1999.*
- 3. Drug Abuse: Cocain, Opioids, Benzodiazepines, Leslie K. Jacobsen, MD & Thomas R. Kosten, MD. Yale University School of Medicine, New Haven CT.*
- 4. Michigan Alcohol Screening Test*
- 5. Alcohol Concern. "Primary Care Alcohol Information Service - Screening tools for healthcare settings". Retrieved 2007.*

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13. Immunizations

The immediate goal of administering immunizations is the prevention of disease; the ultimate goal is eradication of disease. To accomplish these goals, physicians must maintain timely immunizations as a high priority in the care of children, adolescents, and adults. This is even more important in children in whom immunizations provide the best available defense against many dangerous childhood diseases. Physicians should ensure that the primary series of vaccinations are given before children are 2 years old in order for them to be protected during their most vulnerable period.

This protocol represents the current recommended Childhood Immunization Schedule from the American Academy of Pediatrics, the Center for Disease Control and the Maryland Department of Health and Mental Hygiene.

Primary Immunizations for Children Beginning Immunization Under 4 Months of Age

At Birth	Hep B ⁽¹⁾
2 Months	Hep B, DTaP ⁽²⁾ , Hib ⁽⁴⁾ , IPV ⁽⁵⁾ , PCV ⁽⁸⁾ , RV ⁽¹¹⁾
4 Months	DTaP, Hib, IPV, PCV, RV
6 Months	Hep B, DTaP, Hib, IPV, PCV, RV
12-15 Months	MMR ⁽⁶⁾ , Var ⁽⁷⁾ , DTaP, Hib, PCV, HepA ⁽¹⁰⁾
18 Months	Hep A
4-6 Years	DTaP, IPV, MMR, Var
11-12 Years	TdaP ⁽³⁾ , MCV4 ⁽⁹⁾ , HPV ⁽¹²⁾
16 Years	MCV4

Primary Immunizations for Children Beginning Immunizations Between 4 Months and 6 Years of Age

First Visit (>/ 4 months of age)	DTaP, IPV, Hib, Hep B, PCV, RV Var, MMR and HepA should be given as soon as child is 12 months
Second Visit (1 month after 1 st visit)	DTaP, IPV, Hib ⁽⁴⁾ , Hep B, RV
Third Visit (1 month after 2 nd visit)	DTaP, IPV, Hib, PCV, RV

Fourth Visit DTaP, Hib, Hep B, PCV
(6 months after 3rd visit)

Additional Visits DTaP⁽²⁾, IPV⁽⁵⁾, MMR, Var
(Age 4-6 years)

Age 11-16 Years Tdap, MCV4, HPV

Immunization Schedule for Persons 7 Years of Age and Older Who Were Not Vaccinated at the Recommended Time in Early Infancy

First Visit Tdap, IPV, MMR, Hep B, Hep A Var⁽⁷⁾

Second Visit Td⁽³⁾, IPV, MMR, Hep B, Var
(6-8 weeks after 1st visit)

Third Visit Td, IPV, Hep B, Hep A
(6 months after 2nd visit)

Additional Visits Tdap, MCV4, HPV (given once child is 11 years of age and older)

Notes

- 1) Hep B - All newborns should receive the first dose of Hep B vaccine at birth, before hospital discharge. Four doses of vaccine may be administered if combination vaccines are used. Children who have not previously received 3 doses of Hep B vaccines should initiate or complete the series. The second dose should be administered at least 1 month after the first; the third dose should be at least 4 months after the first dose and at least 2 months after the second.
- 2) DTaP - DTaP should be used in children less than 7 years of age. Use DT pediatric vaccine when Pertussis vaccine is contraindicated. The fourth dose of DTaP can be given as early as 12 months of age if administered at least 6 months after the third dose of DTaP. If the fourth dose of DTaP is given after the fourth birthday, a fifth DTaP is not necessary.
- 3) Tdap (Td) - Td should be used for children 7 years of age and older. Tdap should be substituted for a single dose of Td in the primary catch up series. Give a Tdap dose to adolescents 11-18 years who have not previously received a dose. Boost every 10 years with Td. Administer one dose of Tdap to pregnant adolescents during each pregnancy (preferred during 27 through 36 weeks gestation) regardless of years from prior Td or Tdap vaccination.
- 4) Hib - Four doses may not be needed if the Hib series is begun late in infancy; one dose at ≥ 15 months of age precludes the need for more doses. If child is 5 years of age or older, Hib is not indicated.
- 5) IPV - If the third IPV is administered after the fourth birthday, a fourth dose is not necessary.

- 6) MMR - MMR should be administered on or after the first birthday. The second dose of MMR is routinely recommended at 4-6 years of age. It may be administered at any visit >12 months of age, provided at least 1 month has elapsed since receipt of first dose.
- 7) Var - Varicella may be administered to susceptible children, i.e. those who lack a reliable history of chicken pox disease, at any time at or after the first birthday. A second dose of varicella is recommended routinely at 4-6 years. Give a routine second dose to all older children and adolescents with history of only one dose.
- 8) PCV - PCV13 has replaced PCV7. PCV13 is recommended as a series of 4 doses at 2, 4, 6 and 12-15 months of age. If the first dose is administered at 2-6 months of age, 4 doses should be given. All additional doses can be given at least 6 weeks apart. If the first dose is given at 7-11 months of age, 3 doses are recommended. For immunization beginning at 12-23 months, 2 doses are required. If the vaccine is given after 24 months, only one dose is necessary. Children who have begun the series with PCV7 should complete it with PCV 13. Children < 5 years of age who have completed the series with PCV7 should get one additional dose of PCV13. Pneumococcal vaccine is recommended for children at moderate to high risk of invasive pneumococcal disease up to 59 months of age. This vaccine is not required for children > 5 years of age.
- 9) MCV4 - MCV4 is recommended for 11-12 years with a booster dose at 16 years. MCV4 may be given to younger children at high risk for invasive disease.
- 10) Hepatitis A - Hepatitis A vaccine is recommended for all children 12-23 months of age. Two doses should be administered, given at least 6 months apart. Older unvaccinated children should be vaccinated.
- 11) RV - The Rotavirus (Rotateq) vaccine is recommended for all children between 6 and 12 weeks of age. Do not start the series later than 14 weeks, 6 days. All three doses should be received by 32 weeks of age. Do not administer after 32 weeks. The doses should be administered at 4 to 10 week intervals. The two dose vaccine (Rotarix) should be administered at 2 and 4 months.
- 12) HPV- Two HPV vaccines are available: a quadrivalent vaccine (Gardasil) for cervical, oral, and anal cancer and genital warts and a bivalent vaccine (Cervarix) for prevention of cervical cancer. Administer the Human Papilloma Vaccine to adolescent females and males 11 years of age and older. Three doses should be administered with the second dose given at least 2 months after the first and the third dose at least 6 months after the first. Gardasil should be administered to males.
- 13) The seasonal influenza vaccine is recommended for all children 6 months of age and older. Children under 9 years who are receiving that vaccine for the first time should receive 2 doses, 4 weeks apart. Healthy children 2 years and older may receive the live attenuated influenza vaccine (Flumist).

Recommended Adult Immunizations

Adults 19 years and older should receive the following vaccines if age appropriate or because of medical conditions or risk factors:

Influenza vaccine
Tdap/Td vaccine
Varicella vaccine
HPV vaccine
Herpes Zoster vaccine
MMR vaccine
Pneumococcal vaccine (PPSV23 and PCV13)
Meningococcal vaccine
Hep A vaccine
Hep B vaccine

Notes

- 1) The influenza vaccine is recommended for all adults. Adults younger than 50 years without high risk medical conditions may receive the intranasal live attenuated influenza vaccine.
- 2) Administer a 1-time dose of Tdap to all adults who have not received Tdap previously. Administer one dose of Tdap to pregnant women during each pregnancy (preferred during 27-36 weeks gestation), regardless of number of years since prior Td or Tdap vaccination. Boost with Td every 10 years.
- 3) All adults without evidence of immunity to varicella should receive 2 doses of the varicella vaccine unless medically contraindicated.
- 4) HPV vaccination with either quadrivalent (HPV4) or bivalent (HPV2) is recommended for females and males up to 26 years.
- 5) A single dose of zoster vaccine is recommended for adults 60 years or older.
- 6) Adults born before 1957 generally are considered immune to measles and mumps. All adults born in 1957 or later who lack documentation of measles, mumps or rubella immunity should receive 2 doses of MMR vaccine unless contraindicated.
- 7) Vaccinate all persons with PPSV23 with the following indications: Chronic lung disease, chronic cardiovascular disease, diabetes mellitus, chronic alcoholism, chronic liver disease, chronic renal failure, functional or anatomic asplenia and immunocompromising conditions. Vaccinate all adults aged 65 and older.
- 8) Adults aged 19 years or older with immunocompromising conditions including chronic renal failure, functional or anatomic asplenia, and who have not previously received PCV13 or PPSV23 should receive a single dose of PCV13 followed by a dose of PPSV23 at least 8 weeks later. Adults aged 19 or older with the aforementioned conditions who have previously

received one dose of PPSV23 should receive a dose of PCV13 one or more years after the last PPSV23 dose was received.

- 9) Meningococcal vaccine should be administered to adults with anatomic or functional asplenia, complement deficiencies or HIV infection.
- 10) Vaccinate any person seeking protection from hepatitis A and those with the following indications: men who have sex with men, intravenous drug users or persons with chronic liver disease.
- 11) Vaccinate any person seeking protection from hepatitis B or any person with the following indications: health care personnel, diabetics, persons with HIV, end-stage renal disease or chronic liver disease, sexually active persons not in long term monogamous relationships, men who have sex with men and intravenous drug users.

Vaccine abbreviations:

Hep B - hepatitis B

Hep A - hepatitis A

DTaP - diphtheria and tetanus toxoids and acellular pertussis

Td - tetanus toxoid (full dose) and diphtheria toxoid (reduced dose)

Tdap - tetanus and diphtheria toxoids and acellular pertussis

Hib - haemophilus influenza type B conjugate

IPV - inactivated poliovirus

MMR - measles, mumps, rubella

Var - varicella

PCV - pneumococcal conjugate vaccine

MCV4 - meningococcal conjugate vaccine

HPV - human papilloma vaccine

PPSV- pneumococcal polysaccharide vaccine

Written By:

Frances Bird, M.D., Staff Physician

Sources:

1. *Advisory Committee on Immunization Practices(ACIP) Recommended Immunization Schedule for Persons Aged 0 through 18 Years- Unites States, 2013, Morbidity and Mortality Weekly Report MMWR February 1,,2013/62(01);2-8*
2. *Advisory Committee on Immunization Practices(ACIP) Recommended Immunization Schedule for Adults Aged 19 Years and Older _ United States, 2013, Morbidity and Mortality Weekly Report MMWR February 1,2013/62(01); 9-19*

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14. Pediatric and Adult Asthma

Asthma is a chronic disease whose prevalence, morbidity, and mortality have continued to increase despite our understanding of its pathophysiology and the development of new pharmacologic agents. The highest incidence is in the pediatric population, where it affects approximately 7% of children, yet a large population of adults also struggles with asthma. Additionally, asthma is a leading cause of pediatric emergency room visits and hospitalizations.

This protocol represents updated guidelines on the diagnosis and management of asthma. It also revises the asthma severity classification and recommendation therapy.

- I. At the initial visit, a comprehensive history and physical examination should be performed. Essential elements of the history that should be documented include:
 1. Symptom frequency during both the day and the night
 2. Precipitating triggers of symptoms
 3. Pattern and frequency of medication used to control symptoms
 4. Age of onset of wheezing
 5. # of E.R. visits and hospitalizations for asthma exacerbations
 6. # of days absent from school/work
 7. Family history of asthma
 8. Interference with normal activity
 9. Exacerbations requiring oral systemic corticosteroids
 10. Screen for GERD
 11. Smoking history/environmental tobacco smoke exposure

- II. Diagnosis of asthma:
 1. Presence of recurrent symptoms of airway obstruction by history/exam.
 - a. Recurrent cough, wheezing, chest tightness, difficulty breathing.
 - b. Symptoms occur/worsen at night, with exercise/URI/allergen exposure/stress
 2. In all patients ≥ 5 , use spirometry to document at least partial reversibility of airway obstruction
 3. Consider other causes of obstruction

- III. Pulmonary function testing should be done in any child able to perform reliable (usually 5 years and older):
 1. Peak flow measurement
OR
 2. Spirometry

- IV. The severity of asthma should be classified:
 1. Intermittent
 - Daytime symptoms ≤ 2 times per week
 - Nighttime symptoms ≤ 2 times per month
 - FEV1 or PEF $\geq 80\%$ predicted

 2. Mild Persistent
 - Daytime symptoms > 2 times per week

-Nighttime symptoms – 3-4 times per month
-FEV1 or PEF \geq 80% predicted

3. Moderate Persistent -Daily symptoms
 -Nighttime symptoms > 1 time per week, but not nightly
 -FEV1 or PEF > 60% but < 80% predicted

4. Severe Persistent -Continuous symptoms
 -Often or nightly nighttime symptoms
 -FEV1 or PEF \leq 60% predicted

V. Step-wise approach to pharmacologic management (**First check adherence to medications, appropriate inhaler technique, environmental triggers, and comorbidities**):

1. Intermittent -Short acting Beta 2 Agonists

2. Mild Persistent -Short acting Beta 2 Agonists
 -Low doses of Inhaled Corticosteroids (preferred)
 -Leukotriene Modifiers (alternative)

3. Moderate Persistent -Short acting Beta 2 Agonists
 -Inhaled Corticosteroids (medium dose)
 - \pm long acting Beta 2 Agonists (preferred)
 - \pm Leukotriene Modifiers (alternative)

4. Severe Persistent -Short acting Beta 2 Agonists
 -Inhaled Corticosteroids (high doses)
 -+ long acting Beta 2 Agonists
 -Consider Oral Corticosteroids
 -Consult asthma specialist

5. Step down if possible – if asthma has been well controlled for at least three months.

VI. Care Management:

- < Educate on disease process, medication use, inhaler/spacer technique, and peak flow monitoring; offer educational handouts on asthma, available in each physician office.
- < Develop an individualized Asthma Care Plan with the patient, reviewing treatment goals, self-monitoring results, medication lists, and barriers to meeting goals at each visit. One copy of the Asthma Care Plan should go home with the patient and one copy should be retained in the chart behind the Wellness Plan. The patient should be instructed to bring the Asthma Care Plan back with them to subsequent office visits with self-monitoring results recorded in the appropriate section and progress towards goals should be assessed. Asthma Care Plans should be reviewed at each appropriate visit and up-dated as necessary to improve asthma control and patient adherence.
- < Discuss avoidance of environmental triggers, including tobacco smoke

- < Stress importance of follow-up visits
- < Need for compliance to minimize exacerbations and improve quality of life
- < Document patient's/family's understanding of disease process and management.

VII. Follow Up:

- < Visit PCP at least every 3 months
- < Complete history and physical annually
- < Complete Asthma Flowsheet at least once annually, more frequently if asthma status is changing
- < Review the Asthma Care Plan at least annually after it is initially completed with the patient. Updates to the Asthma Care Plan can be made more frequently if asthma status is changing
- < Review control of symptoms; modify medications if necessary; re-discuss asthma action plan; monitor growth and quality of life
- < If the patient is achieving good outcomes, document this in continuation notes
- < Track # of acute asthma episodes: office and ER visits and hospitalizations
- < Annual influenza vaccine recommended, and for adults 19-64 years of age, a single pneumococcal polysaccharide vaccination is recommended.

VIII. Please note: HEDIS quality assurance guidelines require Rx of a controller medication for persistent asthma if:

1. Prescribing asthma medication on four occasions
OR
2. Two outstanding asthma visits and two asthma medications prescribed
OR
3. One emergency room visit for asthma
OR
4. One hospitalization for asthma

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Sources:

1. Kwong, K. and Jones, C. 1999. *Chronic asthma therapy. Pediatrics in Review, 20: 327-333.*
2. Demper, K. 1997. *A practical approach to chronic asthma management. Contemporary Pediatrics. 14: 86-111.*
3. US Department of Health and Human Services. 1997. *National Asthma Education and Prevention Program: Expert Panel Report II: Guidelines for the Diagnosis and Management of Asthma, 97:4051.*
4. NIH Asthma Guidelines obtained from www.nhlbi.nih.gov/guidelines/asthma/index.com, 3/8/11, Revised Sept, 2012

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15. LYME DISEASE

Lyme Disease

Lyme disease was first recognized in the United States in 1975, after a **mysterious outbreak of arthritis near Lyme, Connecticut**. Since then, reports of Lyme disease have increased dramatically, and the disease has become an important public health problem in some areas of the United States.

Lyme disease is an infection caused by the corkscrew-shaped bacterium *Borrelia burgdorferi*, a member of the family of spirochetes.

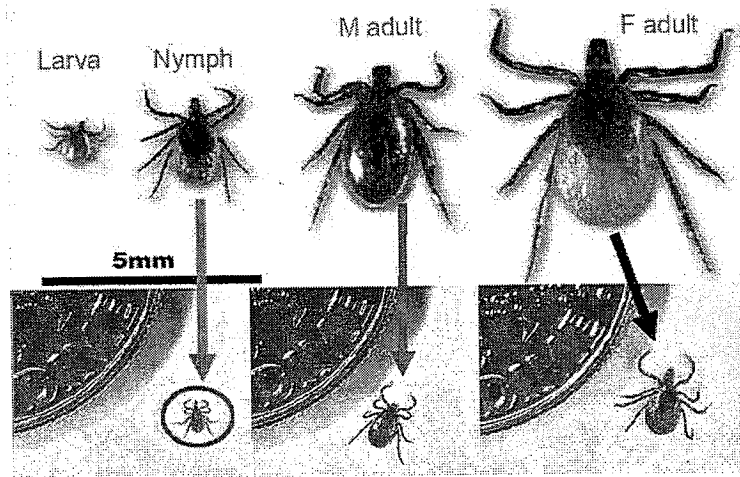
How Ticks Spread the Disease

The bite of ticks spreads the bacterium that causes Lyme disease. The black-legged deer tick, *Ixodes scapularis*, which normally feeds on the white-footed mouse, the white-tailed deer, other mammals, and birds, is responsible for transmitting Lyme disease bacteria to humans in the northeastern and north-central United States.

Nymphal ticks are the primary source for transmitting Lyme disease bacteria to humans, probably because nymphs are more likely to feed on people and are rarely noticed because they are tiny, less than 2mm. Thus, nymphs have the necessary time to feed and transmit the bacteria, typically after feeding for 2 or more days, but it can happen more quickly. Also, nymphal ticks feed during the spring and summer months when people spend the most time outdoors.

Ticks can attach to any part of the human body but are often found in hard places to see and hairy areas such as the groin, armpits, and scalp. In many cases, the tick must be attached for 48 hours or more before the bacteria can be transmitted. Not all deer ticks are infected with the bacteria that cause Lyme disease, and only a small percentage of people bitten by deer ticks actually become sick.

Ixodes ticks are much smaller than the common dog or cattle ticks. In their larval and nymphal stages, they are no bigger than the eye of a common sewing needle. Adult ticks are larger, about the size of a small apple seed.



Adult ticks can also transmit the bacteria, but because adult ticks are larger and more noticeable, they are more likely to be removed from a person's body within a few hours, and therefore are less likely to have sufficient time to transmit the bacteria. Moreover, adult *Ixodes* ticks are most active during the cooler months of the year, when people spend less time outdoors and additional clothing may provide added protection.

Ticks search for host animals from the leaf litter of the forest floor, especially during the nymph stage, or from the tips of grasses and shrubs, during the adult stage, and crawl onto animals or persons they contact. Ticks found on the scalp usually have crawled there from the lower parts of the body. Ticks can feed on blood by inserting their mouthparts into the skin of a person or animal. They are slow feeders: a complete blood meal can take several days. As they feed, their bodies slowly enlarge.

Campers, hikers, outdoor workers, and others are commonly exposed to ticks when frequenting wooded, brushy, and grassy places. People living in houses built in wooded areas where infected ticks are common may also have increased exposure to the Lyme disease bacteria. The risk of exposure to ticks is greatest in the woods and in the edge area between lawns and woods of properties, but ticks can also be carried by animals into lawns and gardens.

Geographic Distribution

Lyme disease has a wide distribution in northern temperate regions of the world. In the United States, the highest incidence occurs in the following regions:

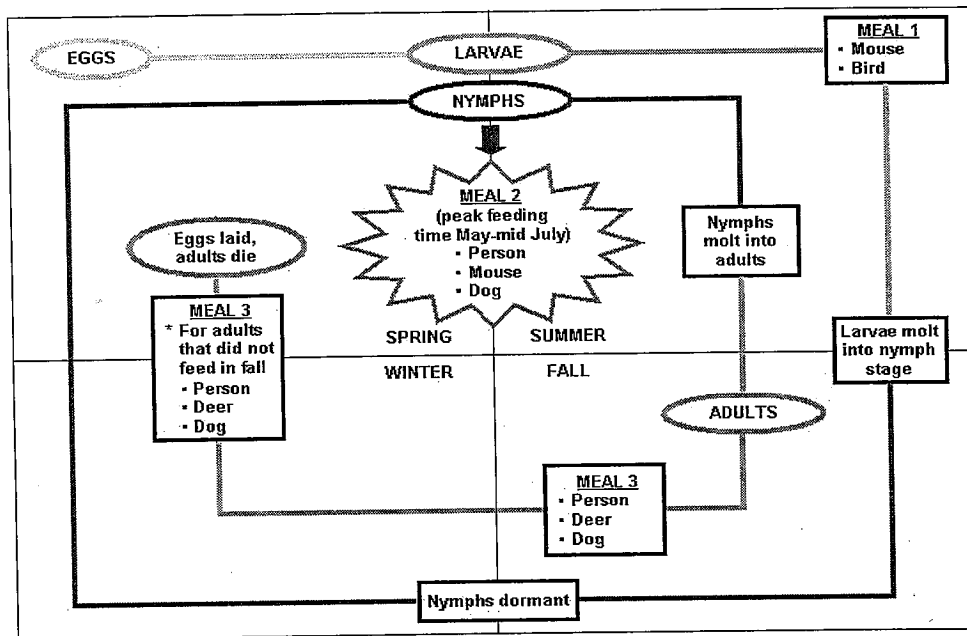
- Northeast, from Massachusetts to Maryland
- North-central states, mostly limited to Wisconsin and Minnesota
- West coast, particularly northern California

For Lyme disease to exist in an area, three closely interrelated elements must be present in the natural environment: (1) animals that carry Lyme disease bacteria, (2) ticks that can transmit the bacteria, and (3) mammals, such as mice and deer, that provide food for

the ticks in their various life stages. In highly endemic areas, as many as 50 percent of deer ticks may carry Lyme disease bacteria (*Borrelia burdorferi*).

Life Cycle of Ticks That Cause Lyme Disease

Knowing the complex life cycle of the ticks that transmit Lyme disease bacteria is important in understanding the risk of getting Lyme disease and in preventing it.



The life cycle of the deer tick requires 2 years to complete. Adult ticks feed and mate on large animals, especially deer, in the fall and early spring. Female ticks then drop off of these animals to lay eggs on the ground. By summer, eggs hatch into larvae.

Larvae feed on mice and other small mammals and birds in the summer and early fall. The larvae are inactive until the next spring when they change into nymphs.

Nymphs feed on small rodents and other small mammals and birds in the late spring and summer and molt into adults in the fall, completing the 2-year life cycle.

Larvae and nymphs typically become infected with Lyme disease bacteria when they feed on small animals infected with Lyme bacteria, particularly the white-footed mouse. The bacteria remain in the tick as it changes from larva to nymph to adult. Infected nymphs and adult ticks then bite and transmit Lyme disease bacteria to other small rodents, other animals, and humans.

Lyme Disease in Domestic Animals

Domestic animals may become infected with Lyme disease bacteria and some of these animals; dogs for instance, may develop arthritis. Domestic animals can carry infected ticks into areas where humans live. Studies of a possible increased risk of Lyme disease among pet owners is inconclusive.

Symptoms and Signs of Lyme Disease

Early Lyme Disease: The early stages of Lyme disease is usually marked by one or more of the following symptoms and signs:

- Fatigue
- Chills and fever
- Headache
- Muscle and joint pain
- Swollen lymph nodes
- A characteristic skin rash shaped like a bull's eye, called erythema migrans

Erythema migrans rash is a red circular patch that appears at the site of the tick bite usually within 3 days to 1 month after the bite of an infected tick. The patch then grows larger. Sometimes many patches appear, in varying shapes and sizes, depending on their location. Common sites are the thighs, groin, trunk, and armpits. The center of the rash may clear as it enlarges, resulting in a "bull's-eye" appearance. The rash may be warm, but it usually is not painful. However, not all rashes that occur at the site of a tick bite are due to Lyme disease. An allergic reaction to tick saliva often occurs at the site of a tick bite. The resulting allergic reaction rash can be confused with the rash of Lyme disease. Allergic reactions to tick saliva occur within hours after the tick bite, usually do not expand, and disappear within a few days.

Late Lyme Disease: Some symptoms and signs of Lyme disease may not appear until weeks, months, or years after a tick bite:

- Arthritis is most likely to appear as brief bouts of pain and swelling, usually in one or more large joints, especially the knees.
- Nervous system abnormalities can include numbness, pain, nerve paralysis (often of the facial muscles), and meningitis (fever, stiff neck, and severe headache).
- Pericarditis.
- In some persons the rash never appears; in some, the first and only sign of Lyme disease is arthritis, and in others, nervous system problems are the only evidence of Lyme disease.

Lyme Disease and Pregnancy

Rarely, Lyme disease acquired during pregnancy may lead to infection of the placenta and possibly to stillbirth, but studies of women infected during pregnancy have found no

adverse effect to the fetus when the mother received appropriate treatment for her Lyme disease. Please see the Antibiotic Section for the appropriate treatment of pregnant women.

Diagnosis

Many of the symptoms of Lyme disease are similar to those of other diseases. The fever, muscle aches, and fatigue of Lyme disease can be mistaken for viral infections, such as influenza or infectious mononucleosis. Joint pain can be mistaken for other types of arthritis, such as rheumatoid arthritis, and neurologic signs can mimic those caused by other conditions, such as multiple sclerosis. On the other hand, other types of infections, arthritis, or neurologic disease can be misdiagnosed as Lyme disease.

Diagnosis of Lyme disease should take into account the following:

- History of possible exposure to ticks in areas where Lyme disease is known to occur,
- Symptoms and signs of the illness, and
- The results of blood tests used to detect whether the patient has antibodies to the Lyme disease bacterium.

Laboratory tests for Lyme disease must be interpreted in relation to the patient's clinical presentation. Both false-positive and false-negative test results may occur. Two tests that measure the body's production of antibodies to the Lyme disease bacterium are recommended: (1) an enzyme-linked immunosorbent assay, ELISA, or indirect immunofluorescence assay, IFA, followed by (2) a Western immunoblot of positive or equivocal samples. These tests do not detect infection until the body begins to produce detectable levels of antibodies to Lyme disease bacteria, usually 2-4 weeks after an infected tick bite. Even then, however, the tests aren't entirely foolproof. History and physical findings become ever so important.

Treatment and Prognosis

Lyme disease is treated with antibiotics. Several antibiotics are effective and are usually given by mouth but may be given intravenously in more severe cases. Patients treated in the early stages with antibiotics usually recover rapidly and completely. Most patients who are treated in later stages of the disease also respond well to antibiotics. A few patients who are treated for Lyme disease may have persistent or recurrent symptoms, and may require additional antibiotic treatment. Varying degrees of permanent damage to joints or the nervous system can develop in patients with late chronic Lyme disease. Typically these are patients in whom Lyme disease was unrecognized in the early stages or for whom the initial treatment was unsuccessful.

Antibiotics

<u>Antibiotic</u>	<u>Adults</u>	<u>Children</u>	<u>Duration</u>
<u>Early Infection Lyme Disease (Local and Disseminated)</u>			
Doxycycline (Vibramycin)	PO: 100 mg bid	2-4 mg/kg/d in two divided doses	14 to 21 days
Amoxicillin	PO: 500 mg tid	40-50 mg/kg/d in three divided doses	14 to 21 days
Cefuroxime axetil (Ceftin)	PO: 500 mg bid	30 mg/kg/d in two divided doses	14 to 21 days

Arthritis

Doxycycline	PO: 100 mg bid	2-4 mg/kg/d in two divided doses	28 days
Amoxicillin	PO: 500 mg tid	40-50 mg/kg/d in three divided doses	28 days

Pregnant Women and Nursing Mothers

Amoxicillin*	PO: 500 mg tid	40-50 mg/kg/d in three divided doses	14 to 21 days
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*No medication is absolutely safe during pregnancy, therefore the physician should consult with the obstetrician before beginning any treatment. Doxycycline has toxic effects on the development of bone in the fetus. Doxycycline is not recommended for pregnant women and nursing mothers unless there is no other appropriate antibiotic available.

Other Forms of Lyme Disease Such as Late Arthritis, Pericarditis, and Meningitis

Please refer to Conn's Current Therapy 2009 or other up-to-date reliable source.

Prevention

Tick Control: Removing leaves, leaf litter, and clearing brush around houses and at the edges of lawns may reduce the numbers of ticks that transmit Lyme disease. This is particularly important in the eastern United States, where most transmissions of Lyme disease are thought to occur near the home.

A relationship exists between the abundance of deer and the abundance of *Ixodes* ticks in the eastern United States.

Reducing and managing deer populations in geographic areas where Lyme disease occurs can reduce tick abundance. Removing plants that attract deer and constructing physical barriers may help discourage deer from coming near homes.

Personal Protection From Tick Bites

You can decrease the chance of being bitten by a tick by following a few precautions.

- Avoid tick-infested areas, especially in May, June, and July. Many local health departments and park or extension services have information on the local distribution of ticks.

- Wear light-colored clothing so that you can spot ticks more easily.
- Tuck pant legs into socks or boots and shirt into pants.
- Tape the area where pants and socks meet so that ticks cannot crawl under clothing.
- Wear a long-sleeved shirt for added protection.
- Spray insect repellent containing a 20-30% concentration of DEET on clothes and on exposed skin other than the face, or treat clothes, especially pants, socks, and shoes, with permethrin, which kills ticks on contact.
- Walk in the center of trails to avoid contact with over-grown grass and brush at trail edges.

Removal of Ticks

After being outdoors, remove your clothing and wash and dry it at a high temperature: inspect your body carefully and remove attached ticks with tweezers, grasping the tick as close to the skin surface as possible and pulling straight back with a slow steady force: avoid crushing the tick's body.

Preventive Antibiotic Treatment

A controlled study has demonstrated that a single dose of 200 mg of Doxycycline effectively prevents Lyme disease if given within 72 hours of a tick bite. Physicians must determine whether the benefits of using antibiotics outweigh the risks in any particular instance.

Lyme Disease Vaccine

The LYMERix vaccine has been withdrawn, after studies showed it to be ineffective in some cases and to occasionally cause Lyme disease and/or potentially harmful side effects. There are no other vaccines available for Lyme disease at this time. However, research on new vaccines against Lyme disease continues.

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Sources:

1. *Centers for Disease Control and Prevention*
2. *National Center for Infectious Diseases*
3. *Division of Vector-Borne Infectious Diseases*
4. *Mayo Clinic*
5. *Conn's Current Therapy 2009*

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16. INDIVIDUALS WITH DIABETES MELLITUS

Diabetes is a chronic illness that requires continuing medical care and patient self-management education to prevent acute complications and to reduce the risk of long-term complications.

Classification

In 1997, the ADA issued new diagnostic and classification criteria; in 2003, modifications were made regarding the diagnosis of impaired fasting glucose (IFG). The classification of diabetes includes four clinical classes:

- **Type 1 diabetes** (results from β -cell destruction, usually leading to absolute insulin deficiency).
- **Type 2 diabetes** (results from a progressive insulin secretory defect on the background of insulin resistance).
- Other specific types of diabetes (secondary to other causes, e.g., genetic defects in β -cell function, genetic defects in insulin action, diseases of the exocrine pancreas, drug or chemical induced).
- Gestational diabetes mellitus (GDM) (diagnosed during pregnancy).

Diagnosis

Criteria for Diagnosis

- i. Type 1 typically present with acute symptoms of diabetes and markedly elevated blood glucose levels
- ii. Type 2

A1C \geq 6.5%	The test should be performed in a laboratory using a method that is NGSP certified and standardized to the DCCT assay.*
OR	
FPG \geq 126mg/dl (7.0mmol/l)	Fasting is defined as no caloric intake for at least 8 hours.*
OR	
2-h plasma glucose \geq 200mg/dl (11.1mmol/l) during an OGTT.	The test should be performed as described by the WHO, using a glucose load containing the equivalent of 75g anhydrous glucose dissolved in water.*
OR	
Random plasma glucose \geq 200mg/dl (11.1mmol/l)	In a patient with classic symptoms of hyperglycemia or hyperglycemic crisis

*In the absence of unequivocal hyperglycemia, criteria 1-3 should be confirmed by repeat testing

- iii. Pre-diabetes includes impaired fasting glucose (IFG) and impaired glucose tolerance (IGT). Both categories are risk factors for future diabetes and cardiovascular disease (CVD). Modest weight loss and regular physical activity can reduce the rate of progression to Type 2 diabetes:
 - IFG = FPG 100 – 125 mg/dl
 - IGT = 2-h plasma glucose 140 – 199 mg/dl
 - HgA1c 5.7 –6.4%
- iv. Gestational diabetes

Detection and diagnosis of Gestational Diabetes Mellitus

Risk assessment for GDM should be undertaken at the first prenatal visit. Women with clinical characteristics consistent with a high risk for GDM (those with marked obesity, personal history of GDM, glycosuria, or a strong family history of diabetes) should undergo glucose testing as soon as possible. An FPG ≥ 126 mg/dl or a casual plasma glucose ≥ 200 mg/dl meets the threshold for the diagnosis of diabetes and needs to be confirmed on a subsequent day unless unequivocal symptoms of hyperglycemia are present. High-risk women not found to have GDM at the initial screening and average-risk women should be tested between 24 and 28 weeks of gestation. Testing should follow one of two approaches:

Screening for and diagnosis of GDM

Perform a 75-g OGTT ,with plasma glucose measurement fasting and at 1 and 2h, at 24-48 weeks of gestation in women not previously diagnosed with overt diabetes	
The OGTT should be performed in the morning after an overnight fast of at least 8h	
The diagnosis of GDM is made when any of the following plasma glucose values are exceeded	
	Fasting: ≥ 92 mg/dl (5.1 mmol/l)
	1h: ≥ 180 mg/dl (10.0 mmol/l)
	2h: ≥ 153 mg/dl (8.5 mmol/l)

- One-step approach: perform a diagnostic 100-g OGTT
- Two-step approach: perform an initial screening by measuring the plasma or serum glucose concentration 1 h after a 50-g oral glucose load (glucose challenge test [GCT]) and perform a diagnostic 100-g OGTT on that subset of women exceeding the glucose threshold value on the GCT.
- Diagnostic criteria for the 100-g OGTT are as follows: ≥ 95 mg/dl fasting, ≥ 180 mg/dl at 1 h, ≥ 155 mg/dl at 2 h, and ≥ 140 mg/dl at 3 h. Two or more of the plasma glucose values must be met or exceeded for a positive diagnosis. The test should be done in the morning after an overnight fast of 8–14 h.
- Low-risk status requires no glucose testing, but this category is limited to those women meeting all of the following characteristics:

- Age <25 years.
- Weight normal before pregnancy.
- Member of an ethnic group with a low prevalence of GDM.
- No known diabetes in first-degree relatives.
- No history of abnormal glucose tolerance.
- No history of poor obstetric outcome.

Screening

Generally, people with type 1 diabetes present with acute symptoms of diabetes and markedly elevated blood glucose levels. Type 2 diabetes is frequently not diagnosed until complications appear, and approximately one-third of all people with diabetes may be undiagnosed. Criteria for testing for diabetes in asymptomatic, undiagnosed adults are listed in below. The recommended screening test for non-pregnant adults is the FPG. The OGTT is more sensitive for the diagnosis of diabetes and pre-diabetes, but is impractical and expensive as a screening procedure.

Criteria for testing for diabetes in asymptomatic adult individuals

1. Testing for diabetes should be considered in all individuals at age 45 years and above, particularly in those with a BMI > 25 kg/m², and, if normal, should be repeated at 3-year intervals.
2. Testing should be considered at a younger age or be carried out more frequently in individuals who are overweight (BMI > 25 kg/m²) and have additional risk factors:
 - are habitually physically inactive
 - have a first-degree relative with diabetes
 - are members of a high-risk ethnic population (e.g., African American, Latino, Native American, Asian American, Pacific Islander)
 - have delivered a baby weighing >9 lb or have been diagnosed with GDM
 - are hypertensive (>140/90 mmHg)
 - have an HDL cholesterol level < 35 mg/dl and/or a triglyceride level > 250 mg/dl
 - have PCOS
 - on previous testing, had IGT or IFG
 - have other clinical conditions associated with insulin resistance (e.g. PCOS or acanthosis nigricans)
 - have a history of vascular disease

Evaluation

Complete medical evaluation should be performed to classify the patient, detect the presence or absence of diabetes complications, assist in formulating a management plan, and provide a basis for continuing care. If the diagnosis of diabetes has already been made, the evaluation should review the previous treatment and the past and present degrees of glycemic control. Laboratory tests appropriate to the evaluation of each patient's general medical condition should be performed.

Components of the comprehensive diabetes evaluation

Medical history

- Symptoms, results of laboratory tests, and special examination results related to the diagnosis of diabetes
- Prior A1C records
- Eating patterns, nutritional status, and weight history; growth and development in children and adolescents
- Details of previous treatment programs, including nutrition and diabetes self-management education, attitudes, and health beliefs
- Current treatment of diabetes, including medications, meal plan, and results of glucose monitoring and patients' use of data
- Exercise history
- Frequency, severity, and cause of acute complications such as ketoacidosis and hypoglycemia
- Prior or current infections, particularly skin, foot, dental, and genitourinary infections
- Symptoms and treatment of chronic eye, kidney, nerve, genitourinary (including sexual), bladder, and gastrointestinal function (including symptoms of celiac disease in type 1 diabetic patients), heart, peripheral vascular, foot, and cerebrovascular complications associated with diabetes
- Other medications that may affect blood glucose levels
- Risk factors for atherosclerosis: smoking, hypertension, obesity, dyslipidemia, and family history
- History and treatment of other conditions, including endocrine and eating disorders
- Assessment for mood disorder
- Family history of diabetes and other endocrine disorders
- Lifestyle, cultural, psychosocial, educational, and economic factors that might influence the management of diabetes
- Tobacco, alcohol, and/or controlled substance use
- Contraception and reproductive and sexual history

Physical examination

- Height and weight measurement (and comparison to norms in children and adolescents)
- Sexual maturation staging (during pubertal period)
- Blood pressure, including orthostatic measurements when indicated, and comparison to age-related norms
- Fundoscopic examination
- Oral examination
- Thyroid palpation
- Cardiac examination
- Abdominal examination (e.g., for hepatomegaly)
- Evaluation of pulses by palpation and with auscultation
- Hand/finger examination
- Foot examination, including evaluation of dorsalis pedis pulses, monofilament sensation, and reflexes)
- Skin examination (for acanthosis nigricans and insulin-injection sites)
- Neurological examination
- Signs of diseases that can cause secondary diabetes (e.g., hemochromatosis, pancreatic disease)

Laboratory evaluation

- A1C
- Fasting lipid profile, including total cholesterol, HDL cholesterol, triglycerides, and LDL cholesterol
- Test for microalbuminuria in type 1 diabetic patients who have had diabetes for at least 5 years and in all patients with type 2 diabetes; some advocate beginning screening of pubertal children before 5 years of diabetes
- Serum creatinine in adults (in children if proteinuria is present)
- Thyroid-stimulating hormone (TSH) in all type 1 diabetic patients; in type 2 if clinically indicated
- Electrocardiogram in adults, if clinically indicated
- Urinalysis for ketones, protein, sediment

Referrals

- Eye exam, to an optometrist or ophthalmologist (at least once yearly)
- Family planning for women of reproductive age
- MNT, as indicated
- Diabetes educator, if not provided by physician or practice staff
- Behavioral specialist, as indicated
- Foot specialist, as indicated
- Other specialties and services as appropriate

Management

Develop an individualized Diabetes Care Plan with the patient, reviewing treatment goals, self-monitoring results, medication lists, and barriers to not meeting goals. One copy of the Diabetes Care Plan should go home with the patient and one copy should be retained in the chart behind the Wellness Plan. The patient should be instructed to bring the Diabetes Care Plan back with

them to subsequent office visits with self-monitoring results (including blood sugars) recorded in the appropriate sections. Diabetes Care Plans should be reviewed at each appropriate visit, progress towards goals should be assessed, and the plan should be up-dated at least annually, or more frequently as necessary to improve diabetes control and patient adherence. The care plan should be formulated as an individualized therapeutic alliance among the patient and family and the physician. Any plan should recognize diabetes self-management education as an integral component of care. In developing the plan, consideration should be given to the patient's age, school or work schedule and conditions, physical activity, eating patterns, social situation and personality, cultural factors, and presence of complications of diabetes or other medical conditions.

Offer educational handouts on diabetes, available in each physician office, at each visit.

Refer all patients who are not meeting diabetes goals or who would benefit from further diabetes education to the Diabetes Education Classes.

Complete the Diabetes Flow Sheet at each visit where diabetes is discussed to gather longitudinal data on diabetes control

If the patient is achieving good outcomes, document this in continuation notes.

Glycemic control

Glycemic control is fundamental to the management of diabetes. Prospective randomized clinical trials such as the Diabetes Control and Complications Trial (DCCT) and the U.K. Prospective Diabetes Study (UKPDS), which targeted fasting blood glucose, have shown that improved glycemic control is associated with sustained decreased rates of retinopathy, nephropathy, and neuropathy. In these trials, treatment regimens that reduced average A1C to ~7% (~1% above the upper limits of normal) were associated with fewer long-term microvascular complications; however, intensive control was found to increase the risk of severe hypoglycemia and weight gain.

An A1C test should be performed quarterly in patients whose therapy has changed or who are not meeting treatment goals. It should be checked at least twice a year in those with stable glycemic control.

Recommended glycemic goals for non-pregnant individuals are shown below.

Summary of recommendations for adults with diabetes

Glycemic control	
A1C	<6.5%
Pre-prandial plasma glucose	90–130 mg/dl
Postprandial plasma glucose	<140 mg/dl
Blood pressure	<130/80 mmHg
Lipids	
LDL	<100 mg/dl (<70 if CAD)
Triglycerides	<150 mg/dl
HDL	>40 mg/dl

Monitoring

- Self Monitoring Self Monitoring
 - Three times daily for Type 1 diabetics and pregnant women and those on insulin therapy
 - Unclear frequency for Type 2 diabetes on non-insulin therapy
- HbA1c
 - Twice annually if treatment goals are met
 - Quarterly for individuals with unmet treatment goals or changes in therapy
 - Point of care testing as needed to guide therapy

CVD: Management of Risk Factors and Screening for Coronary Artery Disease

CVD is the major cause of mortality for persons with diabetes. Type 2 diabetes is an independent risk factor for macrovascular disease, and its common coexisting conditions (e.g., hypertension and dyslipidemia) are also risk factors. Studies have shown the efficacy of reducing cardiovascular risk factors in preventing or slowing CVD.

A. Blood Pressure Control

Recommendations

Screening and Diagnosis

- Blood pressure should be measured at every routine diabetes visit. Patients found to have systolic blood pressure ≥ 130 or diastolic blood pressure ≥ 80 mmHg should have blood pressure confirmed on a separate day.

Goals

- Patients with diabetes should be treated to a systolic blood pressure <130 mmHg.
- Patients with diabetes should be treated to a diastolic blood pressure <80 mmHg.

Treatment

- Patients with hypertension (systolic blood pressure ≥ 140 or diastolic blood pressure ≥ 90 mmHg) should receive drug therapy in addition to lifestyle and behavioral therapy.
- Multiple drug therapy (two or more agents at proper doses) is generally required to achieve blood pressure targets.
- Patients with a systolic blood pressure of 130–139 mmHg or a diastolic blood pressure of 80–89 mmHg should be given lifestyle and behavioral therapy alone for a maximum of 3 months and then, if targets are not achieved, in addition, be treated with pharmacological agents that block the renin-angiotensin system.
- Initial drug therapy for those with a blood pressure >140/90 mmHg should be with a drug class demonstrated to reduce CVD events in patients with diabetes (ACE inhibitors, ARBs, β -blockers, diuretics, and calcium channel blockers).
- All patients with diabetes and hypertension should be treated with a regimen that includes either an ACE inhibitor or ARB. If one class is not tolerated, the other should be substituted. If needed to achieve blood pressure targets, a thiazide diuretic should be added.
- If ACE inhibitors, ARBs, or diuretics are used, monitor renal function and serum potassium levels.
- In elderly hypertensive patients, blood pressure should be lowered gradually to avoid complications.
- Patients not achieving target blood pressure despite multiple drug therapy should be referred to a physician experienced in the care of patients with hypertension.

B. Lipid Management - Dyslipidemia

Patients with type 2 diabetes have an increased prevalence of lipid abnormalities that contributes to higher rates of CVD. Lipid management aimed at lowering LDL cholesterol, raising HDL cholesterol, and lowering triglycerides has been shown to reduce macrovascular disease and mortality in patients with type 2 diabetes, particularly those who have had prior cardiovascular events.

Recommendations

Screening

- In adult patients, test for lipid disorders at least annually and more often if needed to achieve goals. In adults with low-risk lipid values (LDL <100 mg/dl, HDL >50 mg/dl, and triglycerides <150 mg/dl), repeat lipid assessments every 2 years.

Treatment Recommendations and Goals

- Lifestyle modification focusing on the reduction of saturated fat and cholesterol intake, weight loss, increased physical activity, and smoking cessation has been shown to improve the lipid profile in patients with diabetes.
- Patients who do not achieve lipid goals with lifestyle modifications require pharmacological therapy.
- Lower LDL cholesterol to <70 mg/dl as the primary goal of therapy for adults.
- Lowering LDL cholesterol with a statin is associated with a reduction in cardiovascular events.
- In people with diabetes over the age of 40 with a total cholesterol ≥ 135 mg/dl, statin therapy to achieve an LDL reduction of $\sim 30\%$ regardless of baseline LDL levels may be appropriate.
- Lower triglycerides to <150 mg/dl and raise HDL cholesterol to >40 mg/dl. In women, an HDL goal 10 mg/dl higher may be appropriate.

C. Anti-platelet Agents in Diabetes

Aspirin has been recommended as a primary and secondary prevention therapy to prevent cardiovascular events, including stroke and myocardial infarctions, in diabetic and non-diabetic individuals.

Recommendations

- Use aspirin therapy (75–162 mg/day) as a secondary prevention strategy in those with diabetes with a history of myocardial infarction, vascular bypass procedure, stroke or transient ischemic attack, peripheral vascular disease, claudication, and/or angina.
- Use aspirin therapy (75–162 mg/day) as a primary prevention strategy in those with type 2 diabetes at increased cardiovascular risk, including men over 50 and women over 60 years of age with one additional risk factors (family history of CVD, hypertension, smoking, dyslipidemia, albuminuria) or individuals who have a 10 year risk of CVD of $>10\%$.
- Use aspirin therapy (75–162 mg/day) as a primary prevention strategy in those with type 1 diabetes at increased cardiovascular risk, including those who are over 40 years of age or who have additional risk factors (family history of CVD, hypertension, smoking, dyslipidemia, albuminuria).
- Daily aspirin is not recommended for low risk patients including women < 60 yrs, men < 50 yrs without any cardiac risk factors, or those whose 10 yr risk is $< 5\%$.
- Daily aspirin not recommended for individuals < 21 yrs because of increased risk of Reye's Syndrome.
- In patients with aspirin allergies, history of bleeding or can not tolerate aspirin, clopidigrel may be used.

D. Smoking Cessation

The routine and thorough assessment of tobacco use is important as a means of preventing smoking or encouraging cessation. Special considerations should include assessment of level of nicotine dependence, which is associated with difficulty in quitting and relapse.

Recommendations

- Advise all patients not to smoke.
- Include smoking cessation counseling and other forms of treatment as a routine component of diabetes care.

E. CHD Screening and Treatment

Recommendations

- Known CHD should be treated with an ace inhibitor, aspirin and a statin
- Refer patients with signs and symptoms of CVD or with positive noninvasive test for CAD to a cardiologist for further evaluation.
- Metformin may be used in stable CHF with normal renal function abut should be avoided in unstable or hospitalized individuals.
- Caution in prescribing thiazolidinediones in the setting of known congestive heart failure or other heart disease as well as in patients with pre-existing edema or concurrent insulin therapy. Avoid this medication in symptomatic CHF
- In patients >55 years of age, with or without hypertension but with another cardiovascular risk factor (history of CVD, dyslipidemia, microalbuminuria, smoking), an ACE inhibitor (if not contraindicated) should be considered to reduce the risk of cardiovascular events.
- In patients with a prior myocardial infarction or in patients undergoing major surgery, β -blockers, in addition, should be considered to reduce mortality.

G. Nephropathy Screening and Treatment

Diabetic nephropathy occurs in 20–40% of patients with diabetes and is the single leading cause of end-stage renal disease (ESRD). Intensive diabetes management with the goal of achieving near normoglycemia has been shown to delay the onset of microalbuminuria and the progression of micro- to macroalbuminuria in patients with type 1 and type 2 diabetes.

Recommendations

General Recommendations

- To reduce the risk and/or slow the progression of nephropathy, optimize glucose control.
- To reduce the risk and/or slow the progression of nephropathy, optimize blood pressure control.

Screening

- Perform an annual test for the presence of microalbuminuria in type 1 diabetic patients with diabetes duration of ≥ 5 years and in all type 2 diabetic patients, starting at diagnosis.
- Monitor creatinine annually and eGFR to stage CKD

Treatment

- In the treatment of both micro- and macroalbuminuria, either ACE inhibitors (for Type 1 diabetic patients) or ARBs (for Type 2 diabetic patients) should be used.
- Decrease protein intake to 0.8 – 1 g/kg body weight

H. Diabetic Retinopathy Screening and Treatment

Diabetic retinopathy is a highly specific vascular complication of both type 1 and type 2 diabetes. The prevalence of retinopathy is strongly related to the duration of diabetes. Diabetic retinopathy is estimated to be the most frequent cause of new cases of blindness among adults aged 20–74 years. Intensive diabetes management with the goal of achieving near normoglycemia has been shown in large prospective randomized studies to prevent and/or delay the onset of diabetic retinopathy.

Recommendations

General Recommendations

- Optimal glycemic control can substantially reduce the risk and progression of diabetic retinopathy.
- Optimal blood pressure control can reduce the risk and progression of diabetic retinopathy.
- Aspirin therapy does not prevent retinopathy or increase the risks of hemorrhage.

Screening

- Adults and adolescents with type 1 diabetes should have an initial dilated and comprehensive eye examination by an ophthalmologist or optometrist within 3–5 years after the onset of diabetes.
- Patients with type 2 diabetes should have an initial dilated and comprehensive eye examination by an ophthalmologist or optometrist shortly after the diagnosis of diabetes.
- Subsequent examinations for type 1 and type 2 diabetic patients should be repeated annually by an ophthalmologist or optometrist who is knowledgeable and experienced in diagnosing the presence of diabetic retinopathy and is aware of its management. Less frequent exams (every 2 years) may be considered with the advice of an eye care professional in the setting of a normal eye exam. Examinations will be required more frequently if retinopathy is progressing.
- When planning pregnancy, women with preexisting diabetes should have a comprehensive eye examination and should be counseled on the risk of development

and/or progression of diabetic retinopathy. Women with diabetes who become pregnant should have a comprehensive eye examination in the first trimester and close follow-up throughout pregnancy and for 1 year postpartum. This guideline does not apply to women who develop GDM because such individuals are not at increased risk for diabetic retinopathy.

Treatment

- Promptly refer patients with any level of macular edema, severe NPDR, or any PDR to an ophthalmologist who is knowledgeable and experienced in the management and treatment of diabetic retinopathy.

I. Neuropathy

The diabetic neuropathies are heterogeneous with diverse clinical manifestations. They may be focal or diffuse. Most common among the neuropathies are chronic sensorimotor, DPN, and autonomic neuropathy. Although DPN is a diagnosis of exclusion, complex investigations to exclude other conditions are rarely needed. The early recognition and appropriate management of neuropathy in the patient with diabetes is important for a number of reasons: 1) nondiabetic neuropathies may be present in patients with diabetes and may be treatable; 2) a number of treatment options exist for symptomatic diabetic neuropathy; 3) up to 50% of DPN may be asymptomatic, and patients are at risk of insensate injury to their feet; 4) autonomic neuropathy may involve every system in the body; and 5) cardiovascular autonomic neuropathy causes substantial morbidity and mortality.

J. Foot Care

Amputation and foot ulceration are the most common consequences of diabetic neuropathy and major causes of morbidity and disability in people with diabetes. Early recognition and management of independent risk factors can prevent or delay adverse outcomes. The risk of ulcers or amputations is increased in people who have had diabetes >10 years, are male, have poor glucose control, or have cardiovascular, retinal, or renal complications.

Recommendations

- The foot examination can be accomplished in a primary care setting and should include the use of a Semmes-Weinstein monofilament, tuning fork, palpation, and a visual examination.
- Educate all patients, especially those with risk factors, including smoking, or prior lower-extremity complications, about the risk and prevention of foot problems and reinforce self-care behavior.
- Refer high-risk patients to foot care specialists for ongoing preventive care and life-long surveillance.
- Initial screening for PAD should include a history for claudication and an assessment of the pedal pulses. Consider obtaining an ABI, as many patients with PAD are asymptomatic.

- Refer patients with significant claudication or a positive ABI for further vascular assessment and consider exercise, medications, and surgical options.

Perform a comprehensive foot examination annually on patients with diabetes to identify risk factors predictive of ulcers and amputations. Perform a visual inspection of patients' feet at each routine visit.

K. Preventive Care

Immunization

Influenza and pneumonia are common, preventable infectious diseases associated with high mortality and morbidity in the elderly and in people with chronic diseases.

Recommendations

- Annually provide an influenza vaccine to all diabetic patients 6 months of age or older.
- Provide at least one lifetime pneumococcal vaccine for adults with diabetes. A one-time revaccination is recommended for individuals >64 years of age previously immunized when they were <65 years of age if the vaccine was administered >5 years ago. Other indications for repeat vaccination include nephrotic syndrome, chronic renal disease, and other immuno-compromised states, such as after transplantation.

Written by:

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Adrienne Flowers, M.D., Internal Medicine

Sources:

1. American Diabetes Association. *Diabetes Care* 27:S15-S35, 2004.
2. http://care.diabetesjournals.org/content/33/Supplement_1/S3.full.pdf+html
3. National Diabetes Information Clearinghouse, 2011; <http://diabetes.niddk.nih.gov/>
4. *Diabetes Care*. Volume 35, Supplement 1, January 2012

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17. Lead Screening

Significant exposure to lead is a preventable environmental threat to optimal health and developmental outcomes for young children. An estimated half a million children aged 1 - 5 years have elevated blood lead levels (BLL). In 2012, the CDC revised the guidelines for childhood lead poisoning and reduced the acceptable blood lead level to less than 5 micrograms per deciliter (mcg/dl). This was based on evidence from studies that showed that the effects of lead are irreversible and can occur at levels < 10 mcg/dl. The major source of lead exposure is lead-based paint and lead contaminated dust found in deteriorating buildings. Lead based paints were banned for use in housing in 1978. However, approximately 24 million housing units have deteriorated lead paint and elevated level of lead contaminated dust. Children of all socioeconomic levels can be affected, although children in low-income households who live in older homes are at greatest risk. The highest rates are among African-American and urban children. Other sources of lead include costume jewelry and toys.

The detrimental effect of lead on cognitive functions has been well documented. In general, approximately a half "IQ" point is lost, possibly permanently, for each 1 mcg/dl increase in BLL. Research has also shown an association with lead exposures and problems with attention, aggression, and antisocial and delinquent behaviors. Fewer than 5% of children are diagnosed as having lead poisoning based on clinical presentation. Gastrointestinal related symptoms include anorexia, nausea, vomiting, abdominal pain and constipation. At very high levels, some children may develop encephalopathy with changes in mental status, ataxia, seizures or coma.

The diagnosis can be suspected if responses to routine questions are affirmative for sources of exposure such as peeling paint in old housing and behaviors such as pica and placing non-food items in the mouth. Ultimately, the diagnosis depends on the results of blood testing.

The goal of screening is to ensure that children at risk of exposure to lead are tested. A brief community-specific risk assessment questionnaire should be administered during well childcare visits continuing until 6 years of age. If answers indicate risk, BLLs should be measured. All questionnaires should include the following 3 risk assessment questions:

- 1) Does your child live in or regularly visit a house built before 1950?
- 2) Does your child live in or regularly visit a house built before 1978 that is being renovated or remodeled?
- 3) Does your child have a sibling or playmate who has lead poisoning?

It is recommended that a blood lead test be administered to all children at risk at ages 12 & 24 months; children who have not previously been screened should be tested at ages 36-72 months. If children are exposed to lead, BLLs tend to increase during 0 to 2 years and peak at 18-24 months as the toddler gains mobility and practices hand to mouth behavior.

Screening is thus recommended at both ages 1 and 2 years to identify children who need medical and environmental management. Identifying a child with an elevated BLL at age 1 year might prevent additional increases during ages 1-2 years. In addition, a child with a normal BLL at 1 year might have an elevated level by age 2, underscoring the importance of rescreening at age 2

years. Screening is recommended for previously untested children < 6 years to rule out subclinically elevated BLLs during critical stages of development.

The standard to determine BLLs requires a properly collected venous sample. A capillary blood sample may be a practical screening alternative.

Children identified with elevated BLLs should be evaluated and treated in accordance with approved guidelines from the CDC, AAP and DHMH.

Few children will have levels high enough to warrant intensive medical treatment (e.g. chelation therapy). However, many children with elevated BLLs will need follow up services, including more frequent blood lead testing, environmental investigation and case management.

Recommended Follow Up Services According to BLLs

BLL / Action

- | | |
|---------------|---|
| <5 | Continue to assess for lead exposure every well child visit. |
| 5-14 | Obtain a confirmatory venous lead level within three months ; if still in this range, provide education to decrease lead exposure.
Repeat BLL within three months until < 5 for 6 months. |
| 15-29 | Obtain a confirmatory venous lead level within one week ; if still in this range, conduct a complete medical history including environmental and nutritional assessment, and physical exam.
Provide education to decrease lead exposure.
Refer the patient to local health department or provide case management that should include a detailed environmental investigation with lead hazard reduction and appropriate referrals for support services.
Repeat BLL at 1-2 month intervals until <5 for 6 months. |
| 30-44 | As above |
| 45 -69 | Obtain a confirmatory venous lead level within 48 hours ; if still in this range, perform a complete medical history and physical exam.
Provide educational services.
Refer Patient to local health department and case management.
Begin chelation therapy in consultation with clinician experienced with lead toxicity therapy.
Retest monthly until BLL is <5 for 6 months. |
| >70 | Hospitalize the patient and begin medical treatment immediately in consultation with a clinician experienced with lead toxicity therapy.
Obtain a confirmatory BLL within 24 hours .
Consult with special care center for follow up. |

Environmental health specialists from the health department are essential in providing environmental assessment, lead abatement or alternative housing. Retest monthly until BLL is < 5 for 6 months.

Lead poisoning and its sequelae can be prevented by blood lead screening followed, when appropriate, by education, case management, environmental abatement and referrals for social services and medical management as needed.

Written By:

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Sources:

1. *Preventing Lead Poisoning in Young Children: A Statement by the Centers for Disease Control.* Atlanta, GA: CDC, United States Department of Health and Human Services; 1991
2. *Screening Young Children for Lead Poisoning. Guidance for State and Local Public Health Officials.* Atlanta, GA: CDC, United States Department of Health and Human Services; 1997
3. *Screening for elevated blood lead levels.* Committee on Environmental Health, American Academy of Pediatrics. 1998; 101: 1072-1078
4. *Recommendations for blood lead screening of young children enrolled in Medicaid: targeting a group at High risk.* MMWR Recomm Rep 2000 Dec 8; 49:1-13
5. Lane WG, Kemper AR. *American College of Preventive Medicine Practice Policy Statement. Screening for elevated blood lead levels in children.* Am J Prev Med 2001 Jan; 20(1): 78-82
6. <http://mde.maryland.gov/programs/Land/LeadPoisoningPrevention/Pages/LandPrograms/leadcoordinationindex.aspx>
7. *Center for Disease Control & Prevention/National Center for Environmental Health. Publications List.* November 25, 2011.

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18. Obesity Guidelines

Obesity is an epidemic in the United States:

- Two-thirds of the population is classified as overweight or obese
- Poor diet and physical inactivity are the two greatest risk factors
- Rates of obesity are highest among African Americans and less economically affluent, less educated populations
- Health consequences of obesity are myriad, including but not limited to:
 - Diabetes mellitus
 - Hypertension
 - Dyslipidemia
 - Myocardial infarction
 - Cerebrovascular accidents
 - Fertility problems
 - Liver disease
 - Pulmonary disease
- Mortality increases significantly in overweight and obese populations and directly correlates with the degree of obesity

Classification:

Adults: Obesity is classified according to body mass index (BMI), which is calculated by taking a person's weight in kilograms and dividing it by the square of the person's height in meters (kg/m^2). BMI can also be measured by taking the person's height in inches squared divided into the person's weight in pounds multiplied by 703. Obesity is categorized as follows:

Classification	BMI	Disease Risk*
Normal	18.5 – 24.9	Normal
Overweight	25 – 29.9	Increased
Obesity		
• Class I	30 – 34.9	High
• Class II	35 – 39.9	Very High
• Class III (morbid obesity)	40+	Extremely High

* for type 2 diabetes, high blood pressure, and coronary vascular disease

Children: Obesity is classified slightly differently for children two years of age and older. BMI is first calculated and then plotted on sex-specific BMI-for-age growth charts to give a BMI percentile. BMI percentiles take into account the fact that percentage of body fat changes with age and the fact that body fat content differs between boys and girls. Obesity is then classified according to BMI percentile, as below:

Classification	BMI Percentile Range
Normal	5 th to 85 th percentile
Overweight	85 th to just under 95 th percentile
Obese	95 th percentile and above

Screening:

Both the National Institutes of Health and the U.S. Preventive Services Task Force (USPSTF) recommend screening for obesity at regular intervals.

Diagnosis:

At the initial clinical visit, weight and height should be measured and BMI calculated (online free BMI calculator available at <http://www.nhlbisupport.com/bmi/>). At each subsequent office visit, weight should be taken and BMI re-calculated and tracked on the appropriate form. Though a patient may not appear to be overweight or obese, BMI should be calculated for every patient at each visit.

A full history and physical examination should be undertaken and the patient should be asked questions regarding:

- Diet (types of foods, frequency of meals, snacking, eating out, access to healthy foods, portion sizes, cultural traditions, etc.)
- Exercise
- Complications noted from obesity
- Family history of obesity, diabetes, and cardiovascular disease
- Previous weight loss efforts
- Presence of eating disorder symptoms (such as bingeing, purging, etc.)
- Symptoms of possible secondary causes of obesity (such as oral contraceptive use, pregnancy, smoking cessation, medications, and symptoms consistent with endocrinopathies)

Diagnostic Evaluation:**I. Screening for:**

- Diabetes
- Dyslipidemia
- Liver dysfunction

II. Further diagnostic work up should be patient-specific, based on history and physical examinations:

- Signs/symptoms of hypothyroidism: check TSH and free T4
- Signs/symptoms of Cushing syndrome: check 24-hour urinary free cortisol level

Physical examination:

- Full vitals
- Waist circumference (optional)
- Full examination
- Subsequent office visits: full set of vitals and focused exam based on co-morbidities

Management:

Many patients do not know or understand that they are considered overweight or obese, but increased awareness has been shown to lead to more attempts at weight loss and the USPSTF recommends offering intensive counseling and behavioral interventions to obese patients.

Physicians should:

- Alert patients to their overweight or obese status
- Counsel regarding food choices:
 - Eliminate non-nutritive calories like fried foods, fast foods, added sugars, sodium, and refined grains
 - Emphasize eating nutrient-dense foods such as fruits, vegetables, whole grains, legumes (beans, peas, nuts), low-fat milk products, and lean meats
- Discussions on healthy eating should include any additional family members when possible, as meal preparation may not be solely in the hands of the patient
- Advise patients to start an exercise regimen that they find sustainable (and that requires little to no equipment) and that incorporates both aerobic and anaerobic exercise; goal: 30-60 minutes of exercise approximately five times per week
- Offer educational handouts at each visit: brochures on exercise, healthy eating, and weight control are available in each physician office
- Refer all obese or overweight patients to Jai Medical Center's Obesity/Weight Loss class and document this in the chart. In the Obesity/Weight Loss Class, patients write individualized diet, exercise, and/or weight loss goals with plans for attaining these goals and they are given tools to assess their progress and better understand the barriers they face if treatment goals are not attained
- Develop an individualized Weight Management Care Plan with the patient annually, reviewing treatment goals, self-monitoring results, medication lists, and barriers to not meeting goals at each visit; one copy of the Weight Management Care Plan should go home with the patient and one copy should be retained in the chart behind the Wellness Plan
- Instruct the patient to bring the Weight Management Care Plan back with them to subsequent office visits with self-monitoring results recorded in the appropriate section
- Start a Weight Management Flow Sheet to record in a longitudinal fashion the patient's height, weight, and weight loss goals; track weight management information during each visit where the physician and patient discuss weight management issues and goals

Other Treatments

- Several commercial weight loss programs are available; however, if a patient chooses to participate in one, encourage them to choose one with a maintenance phase of at least two years after the end of the program to be successful
- Many weight loss programs and fad diets undertake weight loss in a manner that is neither healthy nor lasting
- Weight loss goals should be reasonable and sustainable and should focus on enduring lifestyle changes, not on quick fixes; a maximum of 0.9 – 1.5 kg/week (or 2-3 pounds/week) of weight loss is usually medically safe; however, weight loss goals should be individualized, taking into consideration the patient's co-morbidities, family life, and cultural background
- Weight loss should be closely monitored by a physician, as sudden loss of large amounts of weight can lead to complications including cardiac arrhythmias, electrolyte derangements, hyperuricemia, and possibly even the development of eating disorders
- Few medications for weight loss are approved by the FDA: none of the medications available have proven long-term effectiveness; several weight loss medications have been

pulled off of the market; physicians should use caution if considering prescribing weight loss medications

- Bariatric surgery is the only therapeutic modality which has been associated with sustained weight loss in morbidly obese patients; consider referring patients with a BMI of >40 or a BMI 35- 40 with significant co-morbidities to a bariatric surgeon for further consideration

Follow Up

- Assess progress towards goals at each appropriate follow-up visit and review and update the Weight Management Care Plan as needed
- Complete the Weight Management Flow Sheet during each visit where the physician and patient discuss weight management issues and goals
- If the patient is achieving good outcomes, document this in the continuation notes
- Encourage patients to visit their PCP at least every 3 months and to complete an annual history and physical

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Sources:

1. Barclay L. Physician counseling may help overweight, obese patients confront weight issues. *Medscape Education Clinical Briefs*. Released 03/07/11. <http://www.medscape.org/viewarticle/738493?src=cmemp>. Accessed 03/14/11.
2. Bray GA. Screening for and clinical evaluation of obesity in adults. *UpToDate*. Last updated June 10, 2010. http://www.uptodate.com/contents/screening-for-and-clinical-evaluation-of-obesity-in-adults?source=search_result&selectedTitle=2%7E150. Accessed 03/14/2011.
3. Classification of overweight and obesity by BMI, waist circumference, and associated disease risks. *National Institutes of Health; National Heart, Lung, and Blood Institute* website. http://www.nhlbi.nih.gov/health/public/heart/obesity/lose_wt/bmi_dis.htm. Accessed 03/03/11.
4. Dietary guidelines for Americans. *United States Department of Agriculture Center for Nutrition Policy and Promotion*. <http://www.cnpp.usda.gov/Publications/DietaryGuidelines/2010/PolicyDoc/ExecSumm.pdf>. Accessed 03/02/2011.
5. Fujioka K, Lebovitz H. Why don't we recognize obesity as a treatable disease? *Medscape CME Diabetes & Endocrinology*. http://www.medscape.org/viewarticle/725826_print. Accessed 03/02/2011.
6. Puhl RM. Motivational interviewing of obese patients. *Medscape Public Health & Prevention: Hot Topics in Public Health*. http://www.medscape.com/viewarticle/737775_print. Accessed 03/02/2011.
7. Screening for obesity in adults. U.S. Preventive Services Task Force. Release Date Dec 2003. <http://www.uspreventiveservicestaskforce.org/uspstf/uspsobes.htm>. Accessed 03/14/2011.
8. Uwaifo GI, Arioglu E. Obesity. *eMedicine*. Last updated Jan 25, 2011. <http://emedicine.medscape.com/article/123702-print>. Accessed 03/02/2011.

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CITY of BALTIMORE
METROPOLITAN MEDICAL RESPONSE SYSTEM
Annex D—Medical Treatment Protocols

Biological Agents:

Anthrax:

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Treatment Protocol page D-26

Botulinum Toxins

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Treatment Protocol page D-28

Cholera

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Treatment Protocol page D-30

Plague

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Q Fever

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Salmonella

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Staphylococcal Enterotoxin B

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CITY of BALTIMORE
METROPOLITAN MEDICAL RESPONSE SYSTEM
Annex D - Medical Treatment Protocols

ANTHRAX

Fact Sheet

Description of Agent: Inhalation anthrax is a highly lethal infection caused by inhalation of aerosols of the spore form of the bacteria *Bacillus anthracis*. In naturally occurring cases, spread may be by entry through skin wounds, causing a localized infection.

Signs and Symptoms: Incubation period of inhalation anthrax is 1 to 6 days. Fever, malaise, fatigue, cough, and mild chest discomfort are followed by severe respiratory distress with dyspnea, diaphoresis, stridor, and cyanosis. Shock and death occur within 24 to 36 hours of severe symptoms.

In cutaneous anthrax, a papule develops, then vesicles, followed by a black eschar surrounded by moderate to severe edema. The lesions are usually not painful. Without treatment, the disease may progress to septicemia and death, with a case-fatality rate of 20%. With treatment, fatalities are rare.

Diagnosis: Physical findings are nonspecific in inhalation cases with initial complaints of malaise, fever, headache, and possibly some substernal chest pain. A widened mediastinum is often seen on x-ray. Detectable by Gram stain of the blood and by blood culture late in the course of illness.

Treatment: Although usually not effective for inhalation cases after symptoms are present, high-dose antibiotic treatment with penicillin, ciprofloxacin, or doxycycline should be undertaken. Without antibiotic sensitivities, treatment should be started with IV ciprofloxacin (400 mg q 8 to 12 h) or IV doxycycline (200 mg initially, followed by 100 mg q 12 h). Supportive therapy may be necessary.

Prophylaxis: A licensed vaccine for use in those considered at risk of exposure. Vaccine schedule is 0, 2, and 4 weeks for the initial series, followed by boosters at 6, 12, and 18 months and then a yearly booster. Oral ciprofloxacin (500 mg PO b.i.d.) or doxycycline (100 mg PO b.i.d.) for known or imminent exposure. After confirmed exposure, all unimmunized individuals should have two 0.5-mil doses of the vaccine 2 weeks apart, and those vaccinated with less than 3 doses prior to exposure should have a single 0.5-mil booster. Anyone vaccinated with the initial 3-dose series in the previous 6 months does not need any boosters. Everyone exposed should continue antibiotics for 4 weeks. If no vaccine is available, antibiotics should be used beyond 4 weeks and withdrawn under medical supervision.

Decontamination: Secretion and lesion precautions should be practiced. Anthrax has not been transmitted by the aerosol route person to person. After an invasive procedure or autopsy is performed, the instruments and area used should be thoroughly disinfected with a sporicidal agent (iodine or 0.5% sodium hypochlorite).



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METROPOLITAN MEDICAL RESPONSE SYSTEM
Annex D - Medical Treatment Protocols

ANTHRAX

Treatment Protocol

1. General

Anthrax is a highly lethal infection spread by inhalation or entry through skin wounds. The inhalation form progresses rapidly and is more dangerous than the skin form. Incubation period is 1 to 6 days. Fever, malaise, fatigue, cough, and mild chest discomfort are followed by severe respiratory distress with dyspnea, diaphoresis, stridor, and cyanosis. Shock and death occur within 24 to 36 hours of severe symptoms.

2. Treatment

- a. Evaluate patient for fever, cyanosis, and respiratory distress.
- b. Administer oxygen during transport, as needed.
- c. All patients should receive cardiac monitoring and evaluation of oxygenation saturation via pulse oximeter.
- d. Obtain IV access with lactated Ringers at a rate to KVO.

e. Although usually not effective after symptoms are present, high-dose antibiotic treatment with penicillin, ciprofloxacin, or doxycycline should be undertaken. Without antibiotic sensitivities, treatment should be started with IV ciprofloxacin (400 mg q 8 to 12 h) or IV doxycycline (200 mg initially, followed by 100 mg q 12 h). Supportive therapy may be necessary.

f. Before transporting, check for additional victims.

g. Transport patient to medical facility as directed by dispatcher.

h. Secretion and lesion precautions should be practiced. Anthrax has not been transmitted by the aerosol route person to person. After an invasive procedure or autopsy is performed, the instruments and area used should be thoroughly disinfected with a sporicidal agent (iodine or 0.5% sodium hypochlorite). Wiping the ambulance interior with a 70% alcohol or other disinfectant is probably unnecessary, but would not be unreasonable; that need not be completed before the next run.

i. Public health officials may recommend that others who may have been initially exposed take prophylactic antibiotics and immunizations before they show signs of illness. If a registry is established, all emergency personnel should identify themselves and indicate when, where, and to what extent they might have been exposed.



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BOTULINUM TOXINS

Fact Sheet

Description of Agent: Botulinum toxins are poisonous substances produced by a bacterium, *Clostridium botulinum*. They are usually formed in canned foods and eaten but can be spread by aerosol and inhalation. The toxin blocks acetylcholine release at the neuromuscular junction and in the central and peripheral nervous systems.

Signs and Symptoms: Ptosis, generalized weakness, dizziness, dry mouth and throat, blurred vision and diplopia, dysarthria, dysphonia, and dysphagia followed by symmetrical descending flaccid paralysis and development of respiratory failure. Symptoms begin as early as 24 to 36 hours but may take several days after inhalation of toxin.

Diagnosis: Clinical diagnosis. No routine laboratory findings. Bio-warfare or terrorist attack should be suspected if numerous co-located casualties have progressive descending bulbar, muscular, and respiratory weakness.

Treatment: Intubation and ventilatory assistance for respiratory failure. Tracheostomy may be required. Administration of botulinum antitoxin as soon as possible - trivalent licensed product made by the Centers for Disease Control and Prevention (CDC) or heptavalent investigational new drug (IND) product - may prevent or decrease progression to respiratory failure and hasten recovery. Skin testing must be performed before administration of the antitoxin.

Prophylaxis: Pentavalent toxoid (types A, B, C, D, and E) is available as an IND product for those at high risk of exposure. The dosage schedule is 0, 2, and 12 weeks, with yearly boosters.

Decontamination: Hypochlorite and/or soap and water. Toxin is not dermally active and secondary aerosols are not a hazard from patients.



CITY OF BALTIMORE
METROPOLITAN MEDICAL RESPONSE SYSTEM
Annex D - Medical Treatment Protocols

BOTULINUM TOXIN

Treatment Protocol

1. General

Botulinum toxin is a poisonous substance produced by a bacterium, *Clostridium botulinum*. It is usually formed in canned foods and eaten but can be spread by aerosol and inhalation. Onset of symptoms is hours to days after taking the poison into the body, so there is virtually no chance that the poison carried by a victim would endanger emergency responders. Symptoms typically include drooping eyelids, blurred or double vision, trouble swallowing, dry mouth, and sore throat followed by a flaccid limp paralysis that begins near the head and moves downward. Death most often results from respiratory failure, so respiratory support is the most important aspect of pre-hospital care. Symptoms begin as early as 24 to 36 hours, but may take several days after inhalation of toxin.

2. Treatment

a. Evaluate patient for paralysis, cyanosis, respiratory distress, and signs of pneumonia superimposed on paralysis.

b. Patient may require artificial respiration during transport.

c. All patients should receive cardiac monitoring and evaluation of oxygenation saturation via pulse oximeter.

d. Patient should be given oxygen during transport, as needed, but mechanical ventilation may be more important than oxygen.

e. IV access is not critical, but will be helpful in the hospital setting where a specific antitoxin will be administered and where the patient will probably remain for a few days to several weeks. If desired, obtain IV access with lactated Ringers at a rate to KVO.

f. Intubation and ventilatory assistance may be necessary for respiratory failure. Tracheostomy may be required. Administration of botulinum antitoxin - trivalent licensed product made by CDC or heptavalent IND product - may prevent or decrease progression to respiratory failure and hasten recovery. Skin testing must be performed before administration of the antitoxin.

g. Before transporting, check for additional victims.

h. Transport patient to medical facility as directed by dispatcher.

i. Decontaminate with hypochlorite and/or soap and water. Toxin is not dermally active and secondary aerosols are not a hazard from patients.



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CHOLERA

Fact Sheet

Description of Agent: Cholera is a bacterial infection causing severe diarrhea and fluid loss. The causal organism, *Vibrio cholerae*, is spread through water or food. IV fluids may be exhausted in a hospital or an isolated community during an epidemic.

Signs and Symptoms: Incubation period is 1 to 5 days. Asymptomatic to severe with sudden onset. Vomiting, abdominal distention, and pain with little or no fever followed rapidly by a profuse watery diarrhea with a "rice water" appearance. Fluid losses may exceed 5 to 10 liters per day. Without treatment, death may result from severe dehydration, hypovolemia, and shock.

Diagnosis: Clinical diagnosis. Watery diarrhea and dehydration. Microscopic exam of stool samples reveals few or no red or white cells. Can be identified in stool by darkfield or phase contrast microscopy, and can be grown on a variety of culture media.

Treatment: Fluid and electrolyte replacement. Often can be accomplished by the use of oral rehydration salts or dilute Gatorade™, with the need for IV fluids for severe dehydration. Antibiotics will shorten the duration of diarrhea and thereby decrease fluid loss - tetracycline (50 mg q 6 h x 3 days) or doxycycline (30 mg once or 100 mg q 12 h x 3 days). There is widespread tetracycline resistance and ciprofloxacin (500 mg q 12 h x 3 days), or erythromycin (500 mg q 6 h x 3 days) should also be considered.

Prophylaxis: A licensed, killed vaccine is available, but provides only about 50% protection. Vaccine schedule is 0 and 4 weeks, with booster doses every 6 months.

Decontamination: Personal contact rarely causes infection; however, enteric precautions and careful handwashing should be employed. Gloves should be used for patient contact and specimen handling. Bacterial solutions (hypochlorite) would provide adequate decontamination.



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METROPOLITAN MEDICAL RESPONSE SYSTEM
Annex D - Medical Treatment Protocols

CHOLERA

Treatment Protocol

1. General

Cholera is a bacterial infection causing severe diarrhea and fluid loss. The causal organism, *Vibrio cholerae*, is spread through water or food. When growing in the intestines, the organism releases a toxin. The toxin, not the infection itself, is the cause of diarrhea. Fluid loss through watery diarrhea is profound and may exceed 5 to 10 liters per day. IV fluids may be exhausted in a hospital or an isolated community during an epidemic. Without treatment, death may result from severe dehydration, hypovolemia, and shock.

2. Treatment

- a. Evaluate patient for rehydration and shock.
- b. Obtain IV access with a large-bore needle and run lactated Ringers at a rate sufficient to correct volume loss and replace fluids.
- c. Telemetered electrocardiogram (ECG) may provide information on electrolyte balance.
- d. Protect yourself and others from contact with diarrheal fluids; they are highly infectious.

(1) Don gloves and aprons or other protective garments.

(2) Try to contain stools, to minimize contamination of the ambulance.

Blanket rolls may be used to create a dike, and plastic or other sheeting may be used to contain fluid within the dike.

(3) Change contaminated clothing and wash hands thoroughly.

e. Before transporting, check for additional victims.

f. Transport patient to medical facility as directed by dispatcher.

g. Fluid and electrolyte replacement should be undertaken and often can be accomplished by the use of oral rehydration salts or dilute Gatorade™. IV fluids are needed with severe dehydration. Antibiotics will shorten the duration of diarrhea and thereby decrease fluid loss - tetracycline (50 mg q 6 h x 3 days) or doxycycline (30 mg q 12 h x 3 days). There is widespread tetracycline resistance and ciprofloxacin (500 mg q 12 h x 3 days), or erythromycin (500 mg q 6 h x 3 days) should also be considered.

h. Personal contact rarely causes infection; however, enteric precautions and careful handwashing should be employed. Bactericidal solutions (hypochlorite) would provide adequate decontamination. Wash the ambulance interior, if necessary, and wipe with a 70% alcohol, dilute chlorine bleach, or other disinfectant. If practical, complete the decontamination before the next run.



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Annex D - Medical Treatment Protocols

PLAGUE

Fact Sheet

Description of Agent: Plague is an infectious disease caused by the bacteria *Yersinia pestis*. In nature, fleas that feed on infected rodents, then incidentally bite humans most often spread plague. When spread by that route, it classically causes a local abscess with formation of very large, abscessed, regional lymph nodes called buboes. Plague can also spread by aerosol and inhalation of sputum droplets from a coughing patient. In that manner, a primary pneumonic form develops and progresses rapidly to death without treatment. Person-to-person spread from a pneumonic plague patient can occur.

Signs and Symptoms: Pneumonic plague incubation period is 2 to 3 days. High fever, chills, headache, hemoptysis, and toxemia progress rapidly to dyspnea, stridor, and cyanosis. Death results from respiratory failure, circulatory collapse, and a bleeding diathesis. Bubonic plague incubation period is 2 to 10 days. Malaise, high fever, and tender lymph nodes (buboes); may progress spontaneously to the septicemic form, with spread to the CNS, lungs, and elsewhere.

Diagnosis: Clinical diagnosis. Gram or Wayson stain of lymph node aspirates, sputum, or CSF can make a presumptive diagnosis. Plague can also be cultured.

Treatment: Early administration of antibiotics is very effective, but must be started within 24 hours of onset of symptoms in pneumonic plague. Treatment of choice is streptomycin, 30 mg/kg/day IM in two divided doses x 10 days. Intravenous doxycycline, (200 mg, then 100 mg q 12 h x 10 to 14 days) is also effective. Chloramphenicol is necessary for plague meningitis. Supportive therapy for pneumonic and septicemic forms is required.

Prophylaxis: A licensed, killed vaccine is available. Initial dose followed by a second smaller dose 1 to 3 months later, and a third 3 to 6 months later. A booster dose is given at 6, 12, and 18 months, and then every 1 to 2 years. This vaccine does not protect against aerosol exposure. After face-to-face contact with a pneumonic plague patient or after a confirmed or suspected attack with aerosolized plague, doxycycline (100 mg PO b.i.d. x 7 days or for the duration of exposure, whichever is longer) should be used.

Decontamination and Isolation: Secretion and lesion precautions with bubonic plague. Strict isolation of patients with pneumonic plague. Respiratory isolation with the use of a filtered respirator for those with direct contact with patients, and secretion precautions are necessary until the patient has been on antibiotics for at least 48 hours and there has been a favorable response to treatment. Heat, disinfectants, and exposure to sunlight render the bacteria harmless.



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Annex D - Medical Treatment Protocols

PLAGUE

Treatment Protocol

1. General

Plague is an infectious disease caused by the bacteria *Yersinia pestis*, (formerly *Pasteurella pestis*). In nature, fleas that feed on infected rodents, then incidentally bite humans most often spread plague. When spread by that route, it classically causes a local abscess with formation of very large, abscessed, regional lymph nodes called buboes (hence the term "bubonic plague"). Incubation period is 2 to 10 days. Symptoms of malaise, high fever, and tender lymph nodes may progress spontaneously to the septicemic form, with spread to the CNS, lungs, and elsewhere. Plague can also spread by aerosol and inhalation of sputum droplets from a coughing patient. In that manner, a primary pneumonic form develops and progresses rapidly to death without treatment. Person-to-person spread from a pneumonic plague victim can occur; protective measures are needed to protect against plague as well as other, more common, disease.

Pneumonic plague incubation period is 2 to 3 days. High fever, chills, headache, hemoptysis, and toxemia progress rapidly to dyspnea, stridor, and cyanosis. Death results from respiratory failure, circulatory collapse, and a bleeding diathesis.

2. Treatment

a. Wear a well-fitting mask with a high-efficiency particulate (HEPA) filter, following the guidelines for control of tuberculosis.

b. If breathing allows, the patient should be masked to stop as many of the cough droplets as possible before they evaporate to form small-diameter droplet nuclei, which are harder to filter out.

c. Evaluate patient for fever, cyanosis, and respiratory distress.

d. Administer oxygen during transport, as needed.

e. All patients should receive cardiac monitoring and evaluation of oxygenation saturation via pulse oximeter.

f. Obtain IV access with lactated Ringers at a rate to KVO.

g. Early administration of antibiotics is very effective, but must be started within 24 hours of onset of symptoms in pneumonic plague. Treatment of choice is streptomycin, 30 mg/kg/day IM in two divided doses x 10 days. Intravenous doxycycline, (200 mg, then 100 mg q 12 h x 10 to 14 days) is also effective. Chloramphenicol is necessary for plague meningitis. Supportive therapy for pneumonic and septicemic forms is required.



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PLAGUE

Treatment Protocol

- h. Before transporting, check for additional victims.
- i. Transport patient to medical facility as directed by dispatcher.
- j. Secretion and lesion precautions should be observed with bubonic plague. Strict isolation of patients with pneumonic plague is needed. Respiratory isolation and secretion precautions are necessary until the patient has been on antibiotics for at least 48 hours and there has been a favorable response to treatment. Heat, disinfectants, and exposure to sunlight render the bacteria harmless.
- k. Wiping the ambulance interior with a 70% alcohol or other disinfectant must be done if there is gross contamination with secretions or pus; this is a reasonable precaution in all cases. The organisms do not survive well outside a host; therefore, in an emergency with heavy demand on transport resources, decontamination need not be done before the next run unless there is gross contamination.



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Annex D - Medical Treatment Protocols

Q FEVER

Fact Sheet

Description of Agent: Q fever is an infectious disease caused by a rickettsial organism, *Coxiella burnetii*. It is usually spread by aerosolized organisms from infected animal products, such as the placenta, but could be made into an aerosol and disseminated as a terrorist weapon. Person-to-person transmission rarely, if ever, occurs. Case fatality rates are usually below 1%.

Signs and Symptoms: Fever, chills, sweats, cough, headache, weakness, and pleuritic chest pain may occur as early as 10 days after exposure. Onset may be sudden or insidious and present as a "fever of unknown origin". Pneumonia is present in some cases, but pulmonary syndromes are usually not prominent. Patients are not generally critically ill, and the illness lasts from 2 days to 2 weeks.

Diagnosis: Q fever is not a clinically distinct illness and may resemble a viral illness or other types of atypical pneumonia. The diagnosis is confirmed serologically.

Treatment: Q fever is generally a self-limited illness even without treatment. Tetracycline (500 mg/kg q 6 h) or doxycycline, (100 mg q 12 h) are the treatments of choice and are given orally for 5 to 7 days. Q fever endocarditis (rare) is much more difficult to treat.

Prophylaxis: Treatment with tetracycline or doxycycline, starting between the 8th to 12th day post-exposure and continued for 5 days, should prevent the onset of symptoms. An inactivated whole cell vaccine (investigational) is effective in eliciting protection against exposure, but severe local reactions to this vaccine may be seen in those who already possess immunity.

Decontamination: Patients who are exposed to Q fever by aerosol do not present a risk for secondary contamination or reaerosolization of the organism. Decontamination is accomplished with soap and water or by the use of weak (0.5%) hypochlorite solutions.



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Q FEVER

Treatment Protocol

1. General

Q fever is an infectious disease caused by a rickettsial organism. Rickettsias are smaller than bacteria but larger than viruses. They usually live within cells, but have more complete metabolic systems than viruses. The organism that causes Q fever is called, *Coxiella burnetii*. The organism is robust, and infection occurs via inhalation of organisms. After an incubation period, which may require from 10 days to 3 weeks, onset may be sudden with chills, a headache behind the eyes, weakness, malaise, and severe sweats, or onset may be insidious and present as a "fever of unknown origin". Pneumonia is present in some cases, but pulmonary symptoms are usually not prominent. Person-to-person transmission rarely, if ever, occurs. Case fatality rates are usually below 1%.

2. Treatment

a. Evaluate patient for dehydration and shock (which would suggest an alternate diagnosis). If effects are mild, it might be practical to send the patient for medical care via private conveyance; hospitalization may not be necessary.

b. IV fluids are not usually necessary, but if the patient's condition suggests dehydration or the possibility of some other diagnosis, obtain IV access and run lactated Ringers as a rate sufficient to correct volume loss and replace fluids.

c. Universal precautions should be practiced with respect to body fluids.

d. Q fever is generally a self-limited illness even without treatment. Tetracycline (500 mg/kg q 6 h) or doxycycline, (100 mg q 12 h) are the treatments of choice and are given orally for 5 to 7 days starting between the 8th to 12th day postexposure. Q fever endocarditis (rare) is much more difficult to treat.

e. Before transporting, check for additional victims.

f. Transport patient to medical facility as directed by dispatcher.

g. Patients who are exposed to Q fever by aerosol do not present a risk for secondary contamination or reaerosolization of the organism. Decontamination is accomplished with soap and water or by the use of weak (0.5%) hypochlorite solutions. Wash the ambulance interior if necessary and wipe with dilute (0.5%) chlorine bleach or other appropriate disinfectant. Decontamination is not absolutely necessary before the next run unless there has been unusually heavy contamination.



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Annex D - "Medical Treatment" Protocols

SALMONELLA

Fact Sheet

Description of Agent: Several distinct bacteria within the group *Salmonella* cause diarrheal illnesses, sometimes with a septicemia. *Salmonella typhimurium*, which causes a typhoid fever-like illness in mice and rats but usually only a diarrheal illness in humans, in 1984 was used by terrorists in Oregon to contaminate foods in restaurants (720 people became ill as a result). *Salmonella* illnesses are not rare and cannot be distinguished on the basis of clinical signs from other causes of diarrhea. The illness would typically be less profound than with cholera. Infants are at greatest risk of severe illness and death.

Signs and Symptoms: Acute onset of headache, abdominal pain, bloody diarrhea, nausea, and sometimes vomiting 6 to 72 hours after exposure to contaminated food; incubation is usually 12 to 36 hours. Fever is usually present. Diarrhea and anorexia often last several days. Dehydration may be severe, especially in infants.

Diagnosis: Fecal Gram stain and culture; serologic tests are not useful. *Salmonella* is a commonly occurring disease in the United States with an estimated 5 million annual cases.

Treatment: For uncomplicated cases, oral rehydration therapy alone is indicated. IV fluids may be needed with severe dehydration. Antibiotics may prolong the carrier state, but should be considered with infants, the elderly, or those with underlying illnesses. Ciprofloxacin (500 mg q 12 h x 3 days) is effective.

Prophylaxis: No immunization available.

Decontamination: Enteric precautions should be practiced. Hypochlorite and/or soap and water are effective. Destroy any remaining contaminated food. Wear gloves for patient contact and specimen handling.



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METROPOLITAN MEDICAL RESPONSE SYSTEM
Annex D - Medical Treatment Protocols

SALMONELLA

Treatment Protocol

1. General

Several distinct bacteria within the group *Salmonella* cause diarrheal illnesses, sometimes with a septicemia (where organisms are also multiplying in the blood and other tissue). *Salmonella typhimurium*, which causes a typhoid fever-like illness in mice and rats but usually only a diarrheal illness in humans, in 1984 was used by terrorists in Oregon to contaminate foods in restaurants (720 people became ill as a result). *Salmonella* illnesses are not rare and cannot be distinguished on the basis of clinical signs from other causes of diarrhea. The illness would typically be less profound than with cholera. Infants are at greatest risk of severe illness and death. Signs and symptoms include acute onset of headache, abdominal pain, bloody diarrhea, nausea, and sometimes vomiting 6 to 72 hours after exposure to contaminated food; incubation is usually 12 to 36 hours. Fever is usually present. Diarrhea and anorexia often last several days. Dehydration may be severe, especially in infants.

2. Treatment

a. Evaluate patient for dehydration and shock. If the patient has only mild effects, it might be practical to send them for medical care via private conveyance; hospitalization may not be necessary.

b. Obtain IV access with a large-bore needle and run lactated Ringers at a rate sufficient to correct volume loss and replace fluids.

c. Telemetered ECG may provide information on electrolyte balance.

d. Protect yourself and others from contact with diarrheal fluids; they are highly infectious.

(1) Don gloves and aprons or other protective garments.

(2) Try to contain stools, to minimize contamination of the ambulance. Blanket rolls may be used to create a dike, and plastic or other sheeting may be used to contain fluid within the dike.

(3) Change contaminated clothing and wash hands thoroughly.

e. For uncomplicated cases, oral rehydration therapy alone is indicated. IV fluids may be needed with severe dehydration. Antibiotics may prolong the carrier state, but should be considered with infants, the elderly, or those with underlying illnesses. Ciprofloxacin (500 mg q 12 h x 3 days) is effective.



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SALMONELLA

Treatment Protocol

- f. Before transporting, check for additional victims.
- g. Transport patient to medical facility as directed by dispatcher.
- h. Enteric precautions should be practiced. Hypochlorite and/or soap and water are effective. Destroy any remaining contaminated food. Wear gloves for patient contact and specimen handling. Wash the ambulance interior, if necessary, and wipe with a 70% alcohol, dilute chlorine bleach, or other disinfectant. If practical, complete the decontamination before the next run.



CITY of BALTIMORE
METROPOLITAN MEDICAL RESPONSE SYSTEM
Annex D - Medical Treatment Protocols

STAPHYLOCOCCAL ENTEROTOXIN B

Fact Sheet

Description of Agent: Staphylococcus enterotoxin B (SEB) is one of several toxins produced by the bacteria *Staphylococcus aureus*. SEB is a common contributor to staphylococcal food poisoning but can also be disseminated as an aerosol and inhaled.

Signs and Symptoms: From 3 to 12 hours after aerosol exposure, sudden onset of fever, chills, headache, myalgia, and nonproductive cough. Some patients may develop shortness of breath and retrosternal chest pain. Fever may last 2 to 5 days, and cough may persist for up to 4 weeks. Patients may also present with nausea, vomiting, and diarrhea if they swallow toxin. Higher exposure levels can lead to pulmonary edema and, rarely, death.

Diagnosis: Diagnosis is clinical. Patients present themselves with a febrile respiratory syndrome without CRX abnormalities. Large numbers of people presenting themselves with typical symptoms and signs of SEB pulmonary exposure would suggest an intentional attack with this toxin.

Treatment: Treatment is limited to supportive care. Artificial ventilation might be needed for very severe cases, and attention to fluid management is important.

Prophylaxis: Use of protective mask. There is currently no human vaccine available to prevent SEB intoxication.

Decontamination: Hypochlorite (bleach) and/or soap and water are effective. Destroy any that may have been contaminated.



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METROPOLITAN MEDICAL RESPONSE SYSTEM
Annex D—Medical Treatment Protocols

STAPHYLOCOCCAL ENTEROTOXIN B

Treatment Protocol

1. General

Staphylococcus enterotoxin B (SEB) is one of several toxins produced by *Staphylococcus aureus*. SEB is a common contributor to food borne enteritis outbreaks but can also be disseminated as an aerosol and inhaled. Symptoms usually follow inhalation by 3 to 12 hours and include sudden onset of fever, chills, headache, pain in the muscles, and a nonproductive cough. Nausea, vomiting, and watery diarrhea may be accompanied by heavy fluid losses and a feeling of profound malaise leading to incapacitation; higher doses can lead to toxic shock syndrome and death. Reddening of the eyes is common. Overall, the mortality rate from an attack would be lower than that from many other biological agents.

2. Treatment

- a. Evaluate patient for dehydration and shock.
- b. Obtain IV access with a large-bore needle and run lactated Ringers at a rate sufficient to correct volume loss and replace fluids.
- c. Telemetered ECG may provide information on electrolyte balance.
- d. ~~Diarrheal fluids are not dangerous, but you may not know whether you are dealing with SEB, cholera, or Salmonellosis. Therefore, treat diarrheal fluid as highly infectious.~~
 - (1) Don gloves and aprons or other protective garments.
 - (2) Try to contain stools, to minimize contamination of the ambulance.
Blanket rolls may be used to create a dike, and plastic or other sheeting may be used to contain fluid within the dike.
 - (3) Change contaminated clothing and wash hands thoroughly.
- e. Treatment is limited to supportive care. Artificial ventilation might be needed for very severe cases, and attention to fluid management is important.
- f. Before transporting, check for additional victims.
- g. Transport patient to medical facility as directed by dispatcher.
- h. Decontaminate with hypochlorite (bleach) and/or soap and water. Destroy any food that may have been contaminated. Wash the ambulance interior, if necessary, and wipe with a 70% alcohol, dilute chlorine bleach, or other disinfectant. If practical, complete the decontamination before the next run.

Attachment I:
Maryland Medicaid
Mental Health Formulary

Maryland Medicaid Mental Health Formulary Effective January 1, 2013

Listed on the following pages are mental health drugs which are carved out of the Managed Care Organization (MCO) pharmacy benefit. Some of these drugs are subject to prior authorization requirements of the Preferred Drug List.

Refer to <http://mmcp.dhmr.maryland.gov/pap/SitePages/druglist.aspx> for a complete listing of all drugs subject to preferred drug list requirements.

All drugs from American Hospital Formulary Service (AHFS) therapeutic classes included in the Mental Health Formulary, including specific drugs that may not be listed below, are carved out of the MCO pharmacy benefit and are payable as fee-for-service through Maryland Medical Assistance, *unless otherwise noted*.

The following seven drugs, which may be used for some mental health indications, are not payable fee-for-service (unless otherwise noted) and are the responsibility of the HealthChoice MCOs for their enrollees, regardless of the prescriber.

Leuprolide acetate*	Naltrexone	Liothyronine
Clonidine**	Medroxyprogesterone*	Disulfiram
Guanfacine**		

*When leuprolide acetate or medroxyprogesterone are used for the treatment of adult males with certain diagnosed behavioral disorders, these two drugs will be paid fee-for-service, but will require preauthorization (PA) through the University of Maryland School of Pharmacy CAMP program at 410-706-3431.

** Generic guanfacine (Tenex) and clonidine (Catapres) remain drugs for which coverage is the responsibility of the member's Managed Care Organization. For recipients 6 – 17 years old, the extended release form of guanfacine (Intuniv) and clonidine (Kapvay) will be added to the mental health formulary and be billed fee-for-service. For individuals not in this age range, Intuniv and Kapvay will continue to be part of the MCO pharmacy benefit.

Please note: Brand drugs which currently do not have a generic equivalent are listed by brand name in italics. Those drugs currently available generically are listed by generic name. All brand drugs, which are available as multi-source generics, require prior approval and completion of a Maryland Medwatch Form unless otherwise noted on the Maryland Medicaid Preferred Drug List.

Therapeutic Class	Drug
Central Alpha-Agonist AHFS Class No. 240816	<i>Kapvay</i> Kapvay is the only drug carved out fee-for-service (for recipients 6 – 17 years old) in this AHFS drug class
Benzodiazepines (Anticonvulsants) AHFS Class No. 281208	clonazepam Onfi
Miscellaneous Anticonvulsants AHFS Class No. 281292	<i>Banzel</i> carbamazepine carbamazepine XR <i>Felbatol</i> <i>Fycompa</i> gabapentin <i>Gabitril</i> <i>Gralise</i> <i>Horizant</i> <i>Keppra XR</i> lamotrigine levetiracetam

	<p><i>Lyrica</i> oxcarbazepine <i>Sabril</i> <i>Stavzor</i> topiramate valproate/divalproex valproate/divalproex ER <i>Vimpat</i> zonisamide</p>
<p>Antidepressants AHFS Class No. 281604</p>	<p>amitriptyline amoxapine <i>Aplenzin</i> bupropion bupropion SR bupropion XL citalopram clomipramine <i>Cymbalta</i> - Clinical criteria apply see http://mmcp.dhmf.maryland.gov/pap/SitePages/paphome.aspx desipramine doxepin <i>Effexor XR</i> escitalopram <i>Fetzima</i> fluoxetine fluvoxamine <i>Forfivo XL</i> imipramine <i>Luvox CR</i> maprotiline <i>Marplan</i> mirtazapine mirtazapine Soltab nefazodone nortriptyline <i>Olepto</i> <i>Parnate</i> paroxetine <i>Paxil CR</i> <i>Pexeva</i> phenelzine <i>Pristiq</i> protriptyline <i>Prozac Weekly</i> <i>Sarafem</i> sertraline <i>Silenor</i> <i>Surmontil</i> <i>Symbyax</i> trazodone venlafaxine venlafaxine ER <i>Viibryd</i></p>
<p>Antipsychotic Agents AHFS Class No. 281608</p>	<p><i>Abilify</i> - Clinical criteria apply see http://mmcp.dhmf.maryland.gov/pap/SitePages/paphome.aspx chlorpromazine</p>

	<p>clozapine <i>Fanapt</i> <i>FazaClo</i> fluphenazine haloperidol <i>Invega</i> <i>Invega Sustenna</i> <i>Latuda</i> Loxapine olanzapine <i>Orap</i> perphenazine quetiapine risperidone <i>Risperdal Consta</i> <i>Risperdal M-Tab</i> <i>Saphris</i> <i>Seroquel XR</i> <i>Symbyax</i> thioridazine thiothixene trifluoperazine ziprasidone <i>Zyprexa Relprevv</i> - Clinical criteria apply see http://mmcp.dhmf.maryland.gov/pap/SitePages/paphome.aspx <i>Zyprexa Zydis</i> - Clinical criteria apply see http://mmcp.dhmf.maryland.gov/pap/SitePages/paphome.aspx</p>
<p>Amphetamines AHFS Class No. 282004</p>	<p>amphetamine <i>Desoxyn</i> dextroamphetamine dextroamphetamine/amphetamine dextroamphetamine/amphetamine XR methamphetamine <i>ProCentra</i> <i>Vyvanse</i></p>
<p>Respiratory and Cerebral Stimulants AHFS Class No. 282032</p>	<p><i>Concerta</i> <i>Daytrana</i> dexmethylphenidate <i>Focalin XR</i> <i>Metadate CD</i> methylphenidate methylphenidate ER <i>Quillivant XR</i> <i>Ritalin LA</i></p>
<p>Wakefulness-Promoting Agents AHFS Class No. 282080</p>	<p><i>Nuvigil</i> <i>Provigil</i></p>
<p>Anxiolytics, Sedatives and Hypnotics – Benzodiazepines AHFS Class No. 282408</p>	<p>alprazolam chlordiazepoxide clorazepate <i>Diastat</i> diazepam <i>Doral</i> estazolam flurazepam lorazepam</p>

	midazolam oxazepam temazepam triazolam
Miscellaneous Anxiolytics, Sedatives and Hypnotics AHFS Class No.282492	buspirone chloral hydrate droperidol hydroxyzine <i>Intermezzo</i> <i>Lunesta</i> meprobamate <i>Rozerem</i> zaleplon zolpidem zolpidem CR <i>Zolpimist</i>
Antimanic Agents AHFS Class No. 282800	lithium
Anticholinergic Agents AHFS Class No. 283608	benztropine trihexyphenidyl
MAO Inhibitors AHFS Class No. 283632	<i>Emsam</i> Emsam is the only drug carved out fee-for-service in this AHFS drug class
Central Nervous Systems Agents Misc. AHFS Class No. 289200	<i>Intuniv</i> <i>Strattera</i> – Clinical criteria apply see http://mmcp.dhmh.maryland.gov/pap/SitePages/paphome.aspx Intuniv (for recipients 6 – 17 years old) and Strattera are the only drugs carved out fee-for-service in this AHFS drug class.

Attachment J:
Mental Health Diagnoses
for which Jai Medical Systems
is Responsible

Mental Health Diagnoses for which Jai Medical Systems is Responsible

ICD-9-CM Code	Description
294.0	Amnestic Syndrome
294.8	Other specified organic brain syndromes (chronic)
294.9	Unspecified organic brain syndromes (chronic)
299.00-299.91	Psychoses with origin specific to childhood
301.7	Antisocial personality disorder
302.70-302.79	Psychosexual dysfunction
306.0-306.9	Physiological malfunction arising from mental factor
307.0	Special symptoms or syndromes, not elsewhere classified (NEC)
307.2	Tics
307.40-307.49	Specific disorders of sleep of nonorganic origin
307.09	Other and unspecified special symptoms or syndromes, NEC
316	Psychic factors associated with disease classified elsewhere.

Attachment K:
Provider Grievance /
Appeal Form

JAI MEDICAL SYSTEMS MANAGED CARE ORGANIZATION, INC.

PROVIDER GRIEVANCE/APPEAL FORM

Date _____

Name _____

Provider _____

Address _____

Phone # _____

Detailed Explanation of Complaint Issue _____

Reason(s) for filing Formal Grievance/Appeal _____

Note: You will be contacted within the next 3 to 5 business days regarding the scheduling of a convenient date and time for your grievance hearing. If you have any questions, please contact Jai Seunarine at 410-433-2200 or 1-888-JAI-1999. We regret any inconvenience to you and look forward to working with you to address your concerns. Thank you!

Attachment L:
Request for Fair Hearing Form

REQUEST FOR A FAIR HEARING

To: Susan Tucker, Executive Director
Attention: Dina Smoot
Office of Health Services
201 W. Preston Street, Room 127
Baltimore, Maryland 21201

Name: _____

Address: _____

Telephone Number: _____

Medical Assistance Number (found on your Medicaid card) _____

I disagree with my Managed Care Company's decision because: _____

Please schedule my fair hearing within 20 days of the date you receive this request.

Thank you,

Signature

Attachment M:
Required Elements of
Jai Medical Systems' Adverse
Action for Appeal Letter

Required Elements of an Adverse Action Letter

- A. Explanation of the requested care, treatment, or service.
- B. Clear, full, and complete factual explanation of the reasons for the denial, reduction, or termination in understandable language.
 - Conclusive statements such as “services included under another procedure” and “not medically necessary” are not legally sufficient.
- C. Clear explanation of the criteria, standards, and interpretive guidelines MCO used to make the decision. Use of the phrase “nationally recognized medical standards” is acceptable.
- D. Description of any additional information MCO needs for reconsideration.
- E. Statement that the enrollee has access to his/her medical records.
- F. Direction to the enrollee to call the Enrollee Health Line (EHL) to discuss the enrollee’s right to appeal if he/she disagrees with the MCO decision. This direction should appear prior to any direction to call the MCO.
- G. Explanation to the enrollee that if he/she calls the EHL or the MCO within 10 days of receiving the adverse action letter, he/she may continue to receive the on going services that he/she is currently receiving and may have to pay for.
- H. Statement that the enrollee may represent self or use legal counsel, a relative, a friend, or other spokesperson.
- I. An explanation that it is assumed an enrollee received the letter 5 days after it is dated unless he/she shows evidence otherwise.
- J. An explanation that the EHL staff will investigate the MCO decision, resolve within 10 days, or provide information about how to request a Fair Hearing.
- K. There is evidence that the letter is copied to the PCP.
- L. A statement explaining the availability of the expedited review process.
- M. A statement providing the availability of the letter in other languages and alternate formats.

Attachment N:
Provider Quick Reference Guide

JAI MEDICAL SYSTEMS

Provider Quick Reference Guide

MCO Member Card

JAI MEDICAL SYSTEMS MANAGED CARE ORGANIZATION

A Maryland HealthChoice MCO Member Services Hotline 1-888-JAI-1999

Name:

Effective Date:

DOB:

Member ID#:

PCP:

Office Phone:

Group #: Q9016

PRESENT THIS CARD FOR ALL SERVICES

IMPORTANT INFORMATION

Members

- All covered health care services must be coordinated by your Primary Care Provider (PCP).
- To reach your PCP after hours or on weekends, call the office number on the front of the card.
- Always contact your PCP for approval before receiving care outside of the service area.

Providers

- Please call the EVS hotline at 866-710-1447 to verify eligibility prior to rendering services.
- Call Jai Medical Systems at 410-433-5600 prior to any inpatient admission or within 48 hours of any urgent/emergency inpatient admission.
- For coordination and pre-authorization of coverage for outpatient and inpatient care, call (410) 433-5600.

Phone Numbers

- Jai Medical Systems Member Services: 1-888-JAI-1999
- Jai Medical Systems Utilization Review: 410-433-5600
- Pharmacist Help Line: 1-800-213-5640
- HealthChoice Enrollee Action Line: 1-800-284-4510

Eligibility

Call the State's Eligibility Verification System (EVS) at 866.710.1447 on the date of service to verify member eligibility.

If you have any questions about a member's eligibility after using EVS, call the Jai Medical Systems Customer Services Department at 410.433.2200.

Participating Hospitals

Johns Hopkins Hospital
Johns Hopkins Bayview Medical Center
Sinai Hospital of Baltimore
St. Joseph Medical Center
Maryland General Hospital
Good Samaritan Hospital
Franklin Square Hospital
Harbor Hospital Center
Mt. Washington Pediatric Hospital
Union Memorial Hospital
Northwest Hospital Center

Important Phone & Fax Numbers

Phone Numbers

Main Number	888.JAI.1999
Provider Relations	410.433.2200
Utilization Management/Pre-Certification	410.433.5600
Customer Services	410.433.2200
Eligibility Verification System (EVS)	866.710.1447
Claims Information	888.JAI.1999
Pharmacist Help Line	800.213.5640
Prescription Help Line for Providers	800.555.8513
Mental Health System/MAPS MD	800.888.1965
HealthChoice General Questions	410.767.5800

Fax Numbers

Main Number	410.433.4615
Referral Fax Line	717.703.6826
Provider Relations	410.433.4615
Utilization Management	410.433.8500

Main Phone Number - 1.888.JAI.1999

JAI MEDICAL SYSTEMS

Provider Quick Reference Guide

Claims Information

Please attach a copy of the referral to each claim if applicable.

Send Paper Claims to:

Jai Medical Systems
5010 York Road
Baltimore, MD 21212
Attn: Claims Department

For Electronic Claims Submissions,
please contact Stephanie Scharpf, HIPAA
EDI Coordinator @ 410.433.2200.

Referrals

PCP Responsibilities

Please use the Jai Medical Systems referral form.

Complete the referral form legibly.

Fax all referral forms to Jai Medical Systems at
717.703.6826.

Only refer members to participating providers listed in
the Jai Medical Systems Provider Directory.

Call Jai Medical Systems at 410.433.2200 if you have
any questions about the referral process.

Laboratory

Refer all lab work to LabCorp.

If you have any questions, please contact LabCorp
at 1.800.859.0391.

Radiology

Please refer patients to Baltimore Imaging Centers or Ameri-
can Radiology for MRI and Diagnostic Radiology services.

If you have any questions, please contact
Baltimore Imaging Centers at 410.764.0912 or American
Radiology at 410.356.8186.

Specialist Responsibilities

Send reports to the PCP on clinical findings and **follow up** with the PCP on the referral results and future needs of the patient.

Follow up with the PCP if additional services are needed for diagnostic radiology, diagnostic testing, or treatment.

Refer all lab work to LabCorp.

Call Jai Medical Systems at 410.433.2200 if you have questions.

Pre-Authorization

The following services require pre-authorization from the Utilization Management Department:

Organ Transplants	Arthroscopic Procedures	Corrective Surgery
Radical Surgeries (planned)	Endoscopic Procedures	Hallux-Valgus Corrections
Bypass Resections (planned)	Laposcopic Procedures	Tendon Release
Non-Emergent Cardiac Catheterization	Grafts or Implants (including Shunt Placement)	Ophthalmologic Corrections
Amputations (planned)	Plastic/Reconstructive Surgery -	Auditory Corrections
Neurosurgical Procedures (planned)	- Replacements/Repairs/Revisions (including Orthopedic Surgeries-planned)	DME-Orthotic
		Braces, Supports
		Motorized Wheelchairs
		ASO, TLSO
		Prosthetics

For Pre-Authorization, please **contact** the Utilization
Management Department at 410.433.2200.

Pharmacy

Prescribe only the medications listed in the Jai Medical Systems Therapeutic Formulary, unless medically necessary circumstances dictate non-formulary prescriptions.

Medications marked with a "PA" require prior authorization. Please refer to the Therapeutic Formulary for complete instructions.

Requests for non-formulary medications must be submitted on the "Request for Non-Formulary Medication Form" and faxed or mailed to BioScrip, Jai Medical Systems' Pharmacy Benefits Manager, attention Jai Medical Systems for approval.

BioScrip
2787 Charter Street
Columbus, OH 43228
Fax: 800.583.6010