

Heartland National Tuberculosis Center (HNTC) Regional Medical Consultation Services Plan

PURPOSE: This plan identifies roles and responsibilities and establishes guidelines for the delivery of HNTC medical consultation services within the Heartland Region. In addition, it addresses the associated issues of communication both within the HNTC and between the HNTC and individuals/organizations in the states that comprise the Heartland Region; the exchange of medical expertise as part of the medical consultation process and capacity development within the Heartland Region; regional marketing activities to increase awareness of consultation services; and evaluation of the quality of consultation services and their value to the end-user and the Heartland Region.

CORE REFERENCES:

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PERSONNEL STRUCTURE:

1. Medical Director/Primary Medical Consultant: Barbara Seaworth, MD
2. Assistant Medical Director/Alternate Medical Consultant: David Griffith, MD
3. Medical Consultant: Lisa Armitige, MD, PhD
4. Nurse Consultants: Catalina Navarro, RN, BSN; Debbie Onofre, RN, BSN

Note: Physicians and other health care practitioners with expertise in specific areas of tuberculosis prevention and control activities will be identified and form a “consultation network” that can be called upon by the Medical and Nurse Consultants to provide consultation and/or technical assistance in their particular areas of expertise. This process will be developed in collaboration with the HNTC Advisory Committee and the TB Medical Consultation Group.

RANGE OF SERVICES: Both physician and nursing consultation, as well as technical assistance in various aspects of TB prevention and control will be provided at no cost to physicians, nurses and other health care professionals in the nine states and one big city that comprise the Heartland Region. HNTC consultants will maintain expertise and the ability to respond to requests for physician and nursing consultation and/or technical assistance in the following areas:

1. Diagnostic evaluation of TB suspects
2. Treatment of LTBI and TB disease in adults, children, and adolescents
3. Treatment of drug resistant TB cases, including MDR and XDR
4. Diagnostic and treatment approaches to cases of delayed bacteriologic, clinical and/or radiographic response to therapy
5. Treatment failure
6. Relapse of TB disease
7. Adverse drug effects
8. Management of patients with significant coexisting conditions: HIV, renal insufficiency, hepatic disease, pregnancy, etc.
9. Non adherence with treatment
10. Investigation, evaluation and treatment of contacts to an infectious TB case
11. Responding to a tuberculosis outbreak
12. Infection control measures to reduce transmission of tuberculosis
13. Nurse case management

ACCESSING SERVICES: Health care providers may access consultation and technical assistance services by one of several methods:

1. Referral by the existing medical consultation process within each state

2. Referral from the CDC Call Center
3. Referral from other RTMCC's
4. Phone: Contacting HNTC directly via telephone by using the dedicated toll-free number in San Antonio, or by contacting a Nurse Consultant. Clinicians may also contact one of the HNTC Medical Consultants directly. Phone numbers are provided on the HNTC website.
5. Email: Contacting the Medical Consultants (barbara.seaworth@dshs.state.tx.us, david.griffith@uthct.edu, lisa.armitige@dshs.state.tx.us) or the Nurse Consultants (catalina.navarro@uthct.edu, or debbie.onofre@uthct.edu), directly via email. Email addresses are provided on the HNTC website.

HOURS OF OPERATION: Consultation services are staffed Monday – Friday, from 8:00 AM until 5:00 PM, Central Time. After business hours, voice mail service is available. Voice mail messages will be returned within one business day by a Medical Consultant or a Nurse Consultant.

CONSULTATION PROCESS: Although some requestors may prefer to contact the Medical Consultant directly by telephone or email as described above, it is anticipated that the majority of requests for consultation or technical assistance will be by telephone call or e-mail and will be routed first through a Nurse Consultant to facilitate collection of pertinent data and prioritizing of the request.

1. Calls and/or voicemail messages will be returned within one business day.
2. Requests may be referred back to the state or other RTMCC, if appropriate.
3. The extent of information to be collected will be based upon the complexity of the case and the reason for the consultation request:
 - a. Contact information for individual requesting consult, to include:
 - (1) Name
 - (2) Discipline

- (3) Organization
 - (4) Phone number
 - (5) Fax number
 - (6) Email address
 - (7) Mailing address
 - (8) If other than treating physician, the name of the treating physician and his/her contact information
- b. Patient's name and date of birth, if caller is willing to provide this information
 - c. Reason for consult request
 - d. History of present illness: review of events from patient's initial presentation proceeding chronologically up to the present time. Depending on the nature of the consult, this may be relatively uncomplicated or may be highly complex. As back-up documentation, request copies of state reporting forms, hospital admission history and physical, hospital discharge summary and any other consults completed.
 - e. Prior LTBI/TB history
 - f. Tuberculin skin test (TST) history, current TST date and results, and IGRA results and dates
 - g. Chest x-ray/CT/Other diagnostic imaging: request written reports
 - h. AFB smear and culture results, antibiotic sensitivity results and pathology results, if appropriate
 - i. Treatment regimen(s), to include start, stop and restart dates. Review the following information: directly observed therapy (DOT), self-administration, adherence, intolerance, adverse drug reactions, etc.

- j. Laboratory monitoring/HIV status: baseline and periodic laboratory monitoring results. Copies of laboratory reports may be requested, if indicated. If HIV seropositive, request viral load(s) and CD4 count(s)
 - k. Medical history/Co-morbid conditions/Surgical history, if applicable
 - l. Medication history (prescription, over-the-counter, folk, herbal), concentrating on medications that increase risk of progression to active TB disease, cause significant drug-drug interactions or increase risk of TB medication toxicity
 - m. Social and individual risk factors for LTBI and/or TB disease
 - n. Current weight, to include gain or loss in response to therapy
 - o. Summary of contact investigation if pertinent to consult
 - p. How the caller became aware of HNTC consultation services (CDC website, HNTC website, referral from state or local health department, etc.)
4. Prepare case summary, attach accompanying documentation and forward to a medical consultant for review and discussion.
- a. Summarize case orally or via e-mail for Medical Consultant
 - b. If more than one consult request is pending, determine priority of request with input from the Medical Consultant
 - c. Organize and coordinate collection of additional information as requested by the Medical Consultant
5. Upon receipt of requested data, complete initial entry in the Medical Consultation Database. Initial entry will include:
- a. Date of consult request
 - b. Method of contact (phone, e-mail, fax, written)
 - c. Name and credentials of requestor

- d. Requesting agency, city and state
 - e. How the caller became aware of HNTC consultation services
 - f. Patient's initials
 - g. Brief narrative case description
 - h. Date of initial response to consult request
6. Once the Medical Consultant has contacted the requestor, the HNTC response to the inquiry is determined by the nature of the request and the stated preference of the requestor. Recommendations may take the form of a written consult, an email reply or telephone consultation:
- a. Written consult:
 - (1) Written responses will be prepared within three to five business days following the date of the initial request (within three days for at least 80% of requests)
 - (2) Once the consult is signed by the Medical Consultant, the Administrative Specialist makes distribution by faxing or scanning copies to, as appropriate, the requestor, the treating physician or other health care provider, the local health department and the TB Controller or other appropriate public health authority of that state. The original consult is mailed to the requestor (Note: see "End-User Satisfaction" described below). A copy of the consult is retained for the patient's consult record, and a copy is forwarded to the Nurse Consultant for review (this is also done via email prior to medical consultant signature).
 - (3) If a case is judged by the Medical Consultant to be of significant public health importance, e.g., an extensive contact investigation surrounding a case of multi-drug resistant TB, he/she may elect to communicate directly with the State TB Control Program to facilitate the public health response.
 - b. Email reply: The Medical Consultant incorporates the recommendations in an email to the requestor. A copy of the email is sent to the TB Controller or other appropriate public health authority of that state and to the Nurse Consultant for review and eventual inclusion in the patient's consult record.

c. Telephone consultation: The Medical Consultant will summarize the discussion and recommendations on the telephone consult worksheet. A copy of the worksheet is forwarded to the Nurse Consultant for review and eventual inclusion in the patient's consult record, if applicable an email will be sent to the TB Controller or other appropriate public health authority of that state to inform them of the recommendations made.

7. Each nurse consultant is responsible for opening and maintaining records as identified (complex cases, MDR-TB cases, etc.). This record includes all documentation received or developed in the process of preparing the consult and the HNTC reply (written consult, email reply, telephone consult worksheet).

CONFIDENTIALITY: All patient information is maintained and communicated in a secure and confidential manner.

REPORTING:

1. CDC reporting: semi-annual (January, July) reporting will be in the format required by the CDC and will be based primarily upon analysis of the data entered in the MCD.

STATE SPECIFIC CONSULTATION PROCESSES: Each state within the Heartland Region maintains some level of capability to provide medical consultation and technical assistance for TB control activities and the medical management of TB patients within the state's jurisdiction. A number of state TB Control Programs have a salaried TB Physician Consultant, who often serves as the State TB Controller/Control Officer. Other states have identified and entered into formal or informal agreements for consultation services with physicians in various academic and/or private practice settings who have expertise in the medical management of TB patients.

The goal of the HNTC medical consultation service is to compliment and not supplant the existing state consultation and technical assistance process. In that light, HNTC medical consultation staff will align their activities with the state specific processes described in the State Specific Consultation Processes.

MEDICAL CONSULTATION REGIONAL MARKETING ACTIVITIES: General and targeted marketing activities are instrumental in increasing awareness and utilization of HNTC medical consultation services in the Heartland Region. Ongoing marketing activities will include:

1. Excellence in Customer Service and Meeting Customer Expectations: although activities geared to increasing awareness of services are important, developing the processes

necessary to respond in a timely manner to the needs of our customers and instilling credibility and confidence in our medical consultations are crucial to endorsement of our services and referral of cases for consultation by TB Control Program staff in the Region, particularly TB Physician Consultants. As the Regional Medical Consultants Group is formed, and networking activities are developed, its members will validate the value of the consultation service and communicate this to other clinicians within their states.

2. Activities at Workshops and Conferences:

- a. Brochures describing training, product development and medical consultation services will be available at each HNTC-sponsored training event. These will be reinforced by announcements by HNTC staff and accompanying PowerPoint presentations. Similar activities will be conducted at national and regional programmatic conferences as these opportunities arise (NTCA, National Unidos, Four Corners TB Controllers, etc.).
- b. TB Program staff throughout the Region will be encouraged to provide information about HNTC services when they appear before groups within their jurisdiction (local health department staff, physician groups, infection control practitioners, laboratorians, school nurses, correctional health care personnel, etc.).

3. Web-Based/Internet Activities:

- a. HNTC has developed and will maintain an extensive website describing available medical consultation services. This is the primary responsibility of the HNTC Website Coordinator with input from the Medical and Nurse Consultants. Included will be a link to each state's TB Control Program website and the consultation services available there. TB Controllers/Control Officers are encouraged to post a link to the HNTC website on their state's TB Control Program website, as well as on the websites of academic partners and other stakeholders in their state.

4. Products and Tools: wide dissemination of products such as the TB Core References Set on CD-ROM and clinical tools to assist in the medical management of patients with latent TB infection or TB disease serves to market HNTC medical consultation services by highlighting the nursing and medical expertise available through the Heartland Center. In addition, the collaborative relationships which develop between HNTC staff and

partners within the Region during the development and field testing of these products also highlights and broadcasts the expertise and services available through HNTC.

5. Clinical and Programmatic Mini-Fellowships: although primarily intended to enhance the skills of clinicians and other TB Program staff, these fellowships also serve to increase the awareness and the utilization of consultation services as attendees interact with HNTC staff and TCID clinicians and develop the basis for an ongoing consultative relationship once they return to their home state.

MEDICAL CONSULTATION SERVICES EVALUATION: The evaluation of medical consultation services occurs in three separate but interrelated realms of activity, (1) internal assessment of the quality of the consult and the process which produced it, (2) measurement of end-user satisfaction with the consultation services received, and (3) evaluation of overall value to the Heartland Region.

1. Quality Assurance:

- a. The Medical Consultation Database is the primary tool used to assess timeliness of responses to requests for consultation and technical assistance. Database data entry is described above in "Consultation Process". The database provides aggregate data for determining average time to initial and final responses. The HNTC goal is to provide an initial response within one business day of the initial request for consultation and a written response, when requested, within 3-5 business days. The Nurse Consultant will compile this metric as a component of the required CDC semiannual reporting. The database also allows the Nurse Consultant to track the progress of individual consults through the consultation process, as needed.
- b. TB Medical Consultants from the component states and other physicians providing expertise in the medical management of TB patients in the Region are networked into an informal group referred to as the Heartland Regional Medical Consultants Group. Members of this group are targeted for distribution of products and clinical tools, the HNTC e-newsletter, clinical updates, and are invited to participate in periodic case teleconferences and the MDR-ENM webinars. Selected members of this larger group also attend periodic meetings/targeted training in San Antonio with the HNTC Medical Consultants. One focus of this group will be the establishment of an informal peer review process using a case review format in which cases consulted by the State and Regional Medical Consultants will be discussed.

- c. A sampling of written consults generated by the HNTC Medical Consultants will be reviewed twice a year by selected Texas Center for Infectious Disease staff physicians. This review will consider measures such as completeness of recommendations, usefulness of recommendations, and adherence of recommendations to accepted guidelines and/or best practices. The reviewer's comments will be documented on a cover sheet attached to the consultation, returned to the HNTC Medical Consultant for review. The cases reviewed will be noted in the Medical Consultation Database as required by CDC for external reporting.

- d. The quality of pediatric consultations is enhanced by incorporating the expertise of four pediatric specialists, Dr. Lisa Armitige, Dr. Jeff Starke, Dr. Andrea Cruz, and Dr. Kim Smith when complex pediatric cases are encountered by the HNTC Medical Consultant. As necessary, the HNTC Medical Consultant asks these pediatric specialists to review the case and offer opinions prior to final recommendations being made by the HNTC Medical Consultant.

HEARTLAND REGION MEDICAL CONSULTATION CAPACITY DEVELOPMENT: Efforts to increase medical consultation capacity within the Region are focused primarily on the Regional Medical Consultants Group (RMCG), whose members are identified by TB Controllers/Control Officers and through requests for medical consultation. These activities include:

1. HNTC clinical mini-fellowships conducted at the Texas Center for Infectious Disease or off-site in coordination with one of our partner states

2. TB Intensive Course

3. Electronic distribution of the HNTC e-newsletter, clinical updates, clinical tools and other products to facilitate the medical management of TB patients

4. Distribution of the core TB References Set on CD-ROM with HNTC website updates

5. Periodic case review teleconferences (MDR-ENM)

6. Periodic meetings of selected members of the RMCG to identify and prioritize activities for capacity development and make recommendations to the HNTC Advisory Committee

7. Targeted training for Medical Consultants at regional meetings