

DEPARTMENT OF THE ARMY  
NORTH ATLANTIC REGIONAL MEDICAL COMMAND  
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NARMC Pamphlet  
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Medical Services  
**DIGITAL IMAGE RUNNING INJURY PREVENTION PROGRAM**

- 1. History** This is a new North Atlantic Regional Medical Command (NARMC) Publication.
- 2. Applicability** The Telemedicine Consult Management System – Digital Image Running Injury Prevention Program reduces lost time for military personnel who might need medical treatment not normally available within NARMC and to TRICARE Region 1.
- 3. Purpose** This clinical business practice is a guide to the successful implementation and operation of the Digital Image Running Injury Prevention Program.
- 4. References**
  - a. TRICARE Region 1 TeleShoe Clinic Consult System User's Guide.
  - b. TeleShoe Clinic Consult System On-Line Instruction.
- 5. Scope of Care** The Telemedicine Consult Management System – Digital Image Running Injury Prevention, through the use of this invention, establishes an injury prevention program that allows military health care providers anywhere in the world to submit electronically and download images of runners feet striking a treadmill, and attach these images to an electronic patient record. Consults are sent to an exercise physiologist in the Pentagon who provides the appropriate diagnosis and running shoe/training recommendations.
- 6. Responsibilities**
  - a. Referral and Consultant Facilities.
    - (1) Executes interview and makes video images of the patient's gait.
    - (2) Establishes and manages the site Running Shoe Clinic patient's record.
    - (3) Enters required data into the automated system and ensures that the entire TeleShoe Consult process is complete.
    - (4) May convert to a local or regional consultant site.

b. Local Consultant Facility

(1) Performs all duties of a Referral Facility and/or may diagnose and prescribe running shoes through the store-and-forward method.

(2) May diagnose and prescribe running shoes by store-and-forward method only within current facility or installation.

(3) May convert into a Regional Consultant Facility if qualified.

c. Regional Consultant Facility

(1) Will include all duties performed at Referral and Local Consultant Facilities.

(2) May diagnose and prescribe running shoes using the TeleShoe Consult System – not limited to current facility or installation.

d. Deployment Team. The Deployment Team is responsible for providing all technical support and training to the designated site.

e. System Administrator. The system administrator is responsible for all of the administrative functions (e.g., validating user authorization request, noting system problems and ensuring that regular scheduling backups are scheduled).

f. Project Manager

(1) Coordinates clinical, technical and operational requirements.

(a) Gathers and prepares necessary documentation for relevant training manuals, clinical business practices and system maintenance and support documentation.

(b) Monitors compliance with necessary legal and or ethical restrictions, including formulation and update of necessary privacy and/or security policies, as well as oversight on any intellectual property rights in the system that may be owned by the government or for which the government might be obligated/liable to third parties.

(2) Coordinates system deployment, maintenance and sustenance.

(3) Oversees development suggestions in order to ensure a uniform product.

(4) Performs application system administrator functions on a daily basis. These include:

(a) Maintaining user accounts, authorizing and deleting users from the system.

(b) Monitoring the system throughout, to ensure timely consult follow-up.

(c) Monitoring the overall system performance and availability.

(d) Monitoring to ensure scheduled backups are performed on data and software applications.

## 7. System Requirements

a. **Telemedicine Web Server Support.** The Telemedicine Consult Management System (TCMS) is a complex system using several software tools to create the communications link, input screens, and data security.

b. The following software packages were used in the development of the Telemedicine Consult Management System:

- (1) Allaire Cold Fusion 4.5.
- (2) Microsoft SQL Server Software 7.0.
- (3) HTML.
- (4) O'Reilly Web Server.
- (5) Sony DVGate.

c. **System Requirements**

- (1) Windows 95, 98, 2000, Windows NT (Any Web Browser capable OS).
- (2) Netscape 4.0, 4.01, 4.02, 4.03, 4.5 (all provide complete operation) Internet Explorer 4.0 (Complete operation).
- (3) Laser Printer (To print project forms).
- (4) Laptop with 64MB RAM Memory, PCMCIA Card Reader, 15" Monitor 800x600 BPI.
- (5) Sony I-Link capability.

## 8. Consult Generation Process

a. **Consultant Management Process.** The TeleShoe Consult Management Process minimizes administrative procedures for the requesting health care provider. All required forms (including SF 600) for the automated system are available to the health care provider. However, the Consultant Manager must transfer all data into the TeleShoe Consultant Management System to complete the process.

b. **Initiate Consult**

(1) Once a health care provider decides a patient needs a TeleShoe consult, he or she submits the TeleShoe Consult System. Registration is available through the site Telemedicine Consult Manager or through the site Dilorenzo TRICARE Health Clinic.

<https://consult.wramc.amedd.army.mil/Shoe/fitw1n1.htm>

(2) The Online TeleShoe Packet consists of:

(a) Patient Registration.

(b) Worksheet.

(c) Interview Data Sheet.

(d) Shoe Recommendation.

(e) Running Shoe Report.

c. Patient Completes Running Worksheet Data.

(1) The Health Care Provider explains "Telemedicine" to the patient and asks the patient he or she would like to use the technology.

(2) If the patient elects to participate in the Telemedicine consult process, he or she is given a form with the Telemedicine Patient Registration Online instructions. The patient is requested to fill out the "Patient Running Worksheet Data" online before the patient visits the Consult Manager Site.

d. Patient is submitted into the TeleShoe Consult System. The Health Care Provider (HCP) will submit the patient as a New Patient Online.

e. Referring Health Care Provider completes Request Form (Interview Data). The HCP completes the interview of the TeleShoe Consult Request Form. Several of the form entries are checked off, circled, or filled in. The HCP inquires concerning information on training injuries due to running, running schedule, mileage, distance, speed, cross training, flexibility and strength training. Next, the HCP examines shoe TREAD-wear patterns, height of foot arch and obtains a tracing of the foot to determine its shape.

f. Video Tape Patient

(1) The Consult Manager takes the required digital images of the patient, which are then uploaded into the interview data sheet in the previous step.

(2) The Consult Manager site uploads the images, after the interview data sheet is submitted into the computer, reviews, and retakes them if necessary. Consultant sites document, prescribe running shoes, and diagnose patients, while referral sites are only to submit images and any notes taken.

g. Create Recommendation and Running Shoe Report

(1) The HCP at Consultant sites reviews images, diagnoses patients, and prescribes running shoes for their site and referral sites. A Specialist (see 9a) reviews and responds to any referral requests in the TeleShoe Consult System.

(2) Referral sites retrieve Shoe Recommendation and Running Shoe Report from the TeleShoe Consult System at a later time.

(3) If applicable, the referring site or the HCP notifies the patient and either sets up an appointment or notifies the patient to pick up records or e-mails the records to them.

(4) Process complete.

#### **9. Consult Response Flow**

a. **Shoe Clinic Specialist Assignments.** The TeleShoe Project Facilitator (a Senior Specialist) is responsible for assigning a specialist each day to review and respond to any consult request in the Telemedicine Consult Management System-TeleShoe.

b. **Responding to the consult request.** The specialist reviews and responds to both new and pending consult requests. (See TeleShoe Consult Guide for details on using the TeleShoe Web-Based system on how to respond to a consult request).

c. **Automated E-Mail.** The Telemedicine Consult Management System automatically sends the consult response in an e-mail message to the requesting site Consult Manager and Referring HCP.

d. **Site Notification.** The Consult Manager receives the consult response via e-mail, complete the process, prints a copy, and places it into the referring site's Telemedicine Patient Record and provides the referring site's Telemedicine Patient Record to the HCP.

#### **e. Patient Follow-Up**

(1) The HCP (at referral or consultant sites) notifies the patient and either sets up an appointment or notifies the patient to pick up the Shoe Recommendation and Running Shoe Report.

(2) Process complete.

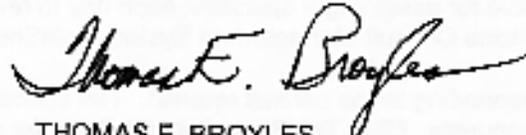
**10. Record Keeping** The Patient Medical Record will be maintained on the TeleShoe Consult Management System.

**NOTE:** All necessary forms used with the TeleShoe Consult System are available online within the system.

**11. Workload Credit** Individual clinics determine how to count for workload credit following local guidelines.

The proponent agency of this publication is the office of the North Atlantic Regional Medical Command, Walter Reed Army Medical Center, Telemedicine Directorate. Users are invited to send suggestions and comments on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, Walter Reed Army Medical Center, ATTN: MCAT-CL-T, 6900 Georgia Avenue NW, Washington, DC 20307-5001.

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