

**DEPARTMENT OF VETERANS AFFAIRS
VETERANS HEALTH ADMINISTRATION
G.V. (SONNY) MONTGOMERY VA MEDICAL CENTER**

Program Policy Number: AC-36

March 22, 2013

FACILITY TELERETINAL IMAGING PROGRAM POLICY

- I. **PURPOSE:** To establish policy, responsibility, and procedures for the G.V. (Sonny) Montgomery VA Medical Center Teleretinal Imaging Program (TRIP).
- II. **POLICY:** The G.V. (Sonny) Montgomery VAMC will integrate TRIP into normal clinical operations.
- III. **DEFINITIONS:**
 - A. **Teleretinal Imaging:** A technology used to detect diabetic retinopathy involving the systematic assessment of diabetic eye disease in an “at risk” population. This assessment involves the capturing of adequate retinal images from the targeted population and transmitting them via a secure and reliable telecommunications network for reading. The stored image and associated report must then be available to the clinician(s) to assist in the care of the Veteran.
 - B. **Digital Retinal Camera:** A device used to image the retina and peri-orbital area.
 - C. **“At Risk” Population:** Those Veterans with diabetes mellitus, glucose intolerance or impaired fasting glucose who are “at risk” for developing diabetic retinopathy including, but not limited to those who:
 - 1. Have not had an eye evaluation with the past year;
 - 2. Have failed to keep VA eye clinic appointments or provide evidence of eye examination by a non-VA optometrist or ophthalmologist
 - 3. Have poorly controlled blood glucose on insulin, or HbA1c greater than 8 after 1 year of diabetes treatment;
 - 4. Have diabetes with proteinuria (greater than 300 mg/24h), elevated serum creatinine, are dialysis dependent or post transplant;
 - 5. Have poorly controlled blood pressure in conjunction with diabetes (e.g. greater than 140/90 mm Hg);
 - 6. Have vision impairment not associated with elevated blood glucose;

7. Are pregnant with diabetes.
 8. Have type 2 diabetes or Type 1 diabetes for more than 5 years or
 9. Have other diabetes-related vascular disease
- D. **Store-and-Forward Telehealth (SFT)**: During Store-and-Forward Telehealth visits, there is an asynchronous transmission of clinical data from one location to another over a secure connection. The interpretation of data by the provider does not happen simultaneously with the Veteran encounter.
- E. **Orphans**: SFT encounters require two appointments and two encounters: one for the provider end and one for the Veteran end. If there are not two properly coded encounters for each SFT visit, an orphan is created and workload is lost.
- F. **Teleretinal Image Readers**: Licensed independent eye practitioners (optometrists or ophthalmologists), not residents. Interpretation of remote teleretinal imaging studies is considered teleconsulting and full privileges are required only at the reading site with credentials shared with the acquisition site. No separate privileges are required by Readers at image acquisition sites remote to the Reader location.
- G. **Teleretinal Imager**: Staff member with comprehensive training throughout the Boston Store & Forward Telehealth Training Center on the important elements required to obtain accurate digital retinal images for the purpose of treating Veterans with diabetes.
- H. **Emergency Share Drive**: The Image Technician uses this pathway to send questionable images to the Reader for rapid interpretation and recommendations. Additionally, the Image Technician must call the Reader to advise them that the images are on the share drive. VISN requires that imagers must be mapped to the emergency share drive at each clinic for which they image to ensure access.

IV. **RESPONSIBILITY**:

The Chief of Ophthalmology and Associate Chief of Staff/Primary Care, in collaboration with the Chief of Staff, will insure all clinical staff providing TRIP services comply with applicable credentialing and/or privileging requirements, licensure requirements, practice within Scope of Practice or Collaborative Practice Agreement, maintain educational requirements, and maintain documentation of core competencies.

- A. Under the direction of the Associate Chief of Staff/Primary Care, the Facility Telehealth Coordinator (FTC) will assume responsibility for the oversight of the coordinated development, implementation, and integration of TRIP into the daily operations of the facility. The FTC ensures that the Imagers follow established policies and procedures of the Office of Telehealth Services (OTS), VISN 16 TRIP program, and all local policies. Responsibilities include:

1. Policy and procedure development;

2. Staff training, oversight to insure the medical center TRIP develops and operates in compliance with Conditions of Participation as defined by the Office of Telehealth Service (OTS);
 3. Program support, monitoring of key quality/performance indicators at the facility level;
 4. Identification of performance improvement needs; and
 5. Developing and monitoring the outcomes of performance improvement plans.
- B. **Facility Eye Care Providers**: The eye care specialist will notify the Teleretinal Imager regarding any recommendations for imaging outside of normal guidelines or if follow-up differs from the most recent Reader recommendation (i.e. Veteran to have teleretinal imaging in 3 months).
- C. **The Patient Centered Care Teams (PACT)**: Collaborates with the Teleretinal Imaging Clinic to ensure Veterans with clinical reminders for TRI are sent to the imaging clinic when the Veteran is present for appointments with the PACT team.
- D. **The Facility Telehealth Coordinator (FTC)**:
1. Supports the overall planning, development, implementation, management, and evaluation of the facility telehealth program and works collaboratively with the internal and external stakeholders;
 2. Works with the clinical and administrative leadership and strategic planning committee to align telehealth program planning with facility needs and prioritizes to ensure goals and priorities are complementary and in congruence with the overall facility and VISN strategic plan;
 3. Is knowledgeable of facility, VISN telehealth and national performance measures, growth targets, funding sources and methodologies, and works with all involved to ensure monitoring is in place to meet assigned goals and monitor appropriate obligation of funds;
 4. Conducts/assists with needs assessments, as necessary, as well as ongoing planning to continually identify new opportunities to expand and/or enhance existing telehealth program capabilities in conjunction with Veteran and facility needs with particular emphases on improving access to underserved populations including Veterans identified as “rural” and “highly rural”;
 5. Serves as a consultant to the various clinical, administrative, and technical staff to assure support for the development of new TRIP programs, and to ensure that they meet Veteran and program needs and that they are compliant with local and national standards and expectations;

6. Ensures that telehealth programs establish and utilize appropriate VHA coding, workload reporting and data management systems and works with the VISN telehealth lead, facility Lead TRIP imager, and/or appropriate staff to set up systems for appropriate workload tracking and reporting;
 7. Develops knowledge and expertise in the retrieval and analysis of telehealth related data from the various local, VISN and VHA data sources;
 8. Maintains a regular system of data validation and assures a mechanism for review of data accuracy;
 9. Collaborates with the Office of Information Technology (OI&T) and Biomedical Engineering to ensure that an adequate local information systems technology infrastructure, bandwidth and technical support system is in place to fully maintain the telehealth programs to ensure smooth and efficient Veteran encounters among all network telehealth sites;
 10. Collaborates with Lead TRIP Imager to ensure that clinical pathways, templates and DICOM and VistA configurations at Veteran and provider sites are appropriately established for each imaging consult when required for clinical pathways;
 11. Collaborates with Lead TRIP Imager to ensure that responsible individuals are designated at each Veteran site to coordinate equipment, space, scheduling, workload capture and Veteran management;
 12. Ensures a systematic telehealth technologies inventory and equipment tracking process is in place and assists with equipment management/procurement
 13. Develops an in-depth knowledge of Office of Telehealth Services (OTS) Conditions of Participation and ensures that the facility telehealth programs are in compliance; and
 14. Ensures that the Teleretinal Imagers complete training and maintain competencies for the TRIP program.
- E. The **Lead Teleretinal Imager** will be certified as a TRIP Master Preceptor. Where possible, it is preferred that this individual will have experience in diabetic teleretinal imaging. The Lead TRIP Imager will serve as the central point of contact for the facility and CBOC TRIP imagers, Chief of Ophthalmology, the FTC and the Reading Center Team. Additionally, this individual will be responsible for:
1. Overseeing the work of the imager(s) including review of performance improvement data and appropriate follow-up with imagers as needed;
 2. Working with service line managers, Quality Management and Information Technology to improve TRIP program;

3. Completion of annual competency for II facility and CBOC TRIP imagers;
 4. Ensuring compliance with all regulations, policies, performance measures, data collection and Conditions of Participation as established by OTS; and
 5. Facilitating communication between the imager, biomedical engineering staff, local OI&T staff and Topcon personnel to ensure that the workstations are configured appropriately for the imagers to delete eye images after confirmation of transmission to the Reader.
- F. **Imagers or Teleretinal Imaging Technicians** will assume responsibility for imaging of Veterans and will provide assistance to the Lead TRIP imager as required. Duties include:
1. Take retinal images and upload them into VistA Imaging in accordance with program requirements and policies and work closely with Readers to ensure image quality;
 2. Work with Primary Care to ensure that Veterans are being appropriately referred to the Teleretinal Program;
 3. Properly follow-up with Veterans on the recommendations of the Readers and ensure that Reader's recommendations are communicated to the referring provider;
 4. Coordinate with the eye care providers to arrange for appropriate follow-up of Veterans to the clinics;
 5. Regularly participate in VISN teleretinal conference calls regarding the program;
 6. Serve as a liaison between image readers, referring providers, eye care providers at acquisition and reading sites, Veterans and other VA personnel. Function in the role of care coordination helping educate Veterans and other practitioners regarding the TRIP program;
 7. Ensure compliance with informed consent policies;
 8. Provide basic information and education to Veterans regarding diabetes and eye care, normal retinal structures, and abnormal lesions of diabetic retinopathy to Veterans, and
 9. Exercise timely and appropriate action on behalf of the Veteran, based on consult reports, and act on the report from the digital retinal imaging reviewer.
- G. **Teleretinal Readers** (located in Little Rock) must be trained and certified for reading by the OTS, Store-and-Forward National Training Center, or as stipulated by conditions of the Memorandum of Understanding between the Office of Care Coordination, Department of Veterans Affairs Central Office and VISN 16. Readers must be attending

licensed optometrists or ophthalmologists and not residents in training. The Teleretinal Readers are responsible for:

1. Evaluating images on a daily basis;
2. Respond to interfacility consults with evaluation findings and recommendations regarding follow-up care;
3. Communicate urgent/emergent findings directly to the imager, primary care provider, or eye clinic, as necessary;
4. Track diabetes-related diagnoses, non-diabetes related diagnoses, and
5. Track Veterans with inadequate images, and Veterans with no diabetic retinopathy.

H. **Facilities**: Both Veteran and reader facilities will utilize telehealth equipment and connections which are compliant with VA and HIPPA security and privacy guidelines.

V. **PROCEDURE**:

- A. **Space Requirements**: As a general rule, roughly 100 square feet should be allocated for the imager, workstation, and for Veteran care activity. There must be adequate space for special needs Veterans and/or employees to navigate using wheelchairs. Rooms require darkening, and if cannot be located in a windowless location, accommodations should be made to provide appropriate shield over windows.
- B. **Identification of Eligible Veterans**: The TRIP Imagers will assist with the identification of “at risk” Veterans eligible for inclusion into the program by utilizing inclusion criteria using CPRS, reminder reports, or by soliciting referrals from primary care providers. In general, non-insulin dependent Veterans with controlled diabetes and no vision complications should be imaged every two (2) years; Veterans with H₁C greater than 8 and/or if they are insulin dependent should be imaged annually. **The Reader recommendation should be followed, unless the on-site eye care provider orders a different follow-up.**
- C. **Clinical Exclusions**: Clinical exclusions for TRIP requiring direct care by an eye care provider include:
1. Evidence of prior retinal laser for diabetes;
 2. Monocular status of Veterans;
 3. Advanced eye disease (any) requiring live face-to-face examinations;
 4. Less than 18 years of age or older than 75;

5. Veterans enrolled in VHA or a community based hospice program, and

6. If the Veteran refuses.

D. **Screening and Imaging:** Veterans are screened for eligibility for TRIP using the criteria provided by OTS. The process of care is as follows:

1. Consult for Veterans meeting the criteria for TRIP is entered by the provider, nurse and/or the Teleretinal imager. **Note:** Teleretinal imagers may initiate a consult request on behalf other primary care provider (PCP) for Veterans meeting the criteria for teleretinal imaging. **PCPs will be named on all consults and will receive notification of any modification by imagers and results from readers. Teleretinal imagers are to be restricted to only those consults/orders required by the teleretinal program.**
2. If the Veteran is a “walk-in”, the imager will schedule an appointment in the TRIP clinic if not able to provide the service with open access;
3. The imaging technician then collects clinical information and captures images of the retina with a fundus camera **without dilating the Veteran’s eyes.**
4. The Imager documents the following:
 - (a) Veteran verbal consent to imaging;
 - (b) If Veteran refuses after education regarding TRIP, the Imager will send a consult to the eye clinic indicating the Veteran’s refusal to complete TRIP eye appointment;
 - (c) Education given to Veteran;
 - (d) Veteran’s eyes are not dilated;
 - (e) Any difficulty obtaining images (i.e., Veteran could not maintain required position, Veteran could not follow instructions, small pupils, etc.);
 - (f) If the Emergency Share Drive or contingency plan is used, include the name of the eye care provider or Reader notified;
 - (g) Documentation of the eye care provider’s recommendation for urgent/emergent eye care and any coordination of follow-up care performed by the Imager; and that the Primary Care Provider (PCP) remained informed (via view alert, phone call, etc.);

5. TRIP imagers will be responsible for entering the follow-up note for teleretinal imaging results in CPRS. (See related Standard Operation Procedure- SOP for details).
 6. The Imager uses the OR ELSE key in VistA to release the consult and images to the teleretinal Readers.
 7. The Imager performs quality assurance check for the image study to verify that images have completely transferred to VistA Imaging in the Veteran's CPRs chart.
 8. The Imager then deletes the images from the IMAGE net computer hard drive as per national policy. All images will be deleted from local Topcon hard drives once verification of successful Digital Imaging and Communications in Medicine (DICOM) transmission to VistA Imaging occurs. Biomedical Engineering, with assistance from OI&T (VistA Imaging Support Team) and Topcon personnel (OI&T Imaging Support Team), is responsible for configuring the workstation to delete images. **Note: Topcon IMAGE net tools will be used at all times to manage image on Topcon systems. Windows Explorer will not be used.**
 9. Images are saved to the Veteran's chart and sent electronically via secure connection to be reviewed and recommendations made within 72 hours by an eye care provider (non-emergent). **Emergent images will be read within 2 hours.**
 10. If the imaging technician notes possible anomalies requiring more immediate results, the technician will load the pictures into the Veteran chart and the Emergency Share Drive which allows the Readers to access the images immediately. Additionally, the imaging technician will call the Reader and inform them of the emergent images for review while the Veteran remains in the TRIP clinic with the imager/ technician.
 11. In the event that the Emergency Share Drive is not available, the imager/technician will load the images as usual; contact the eye clinic in Jackson for review by an eye care provider while the Veteran remains in the TRIP clinic with the TRIP imager.
 12. The Imager responsible for cleaning the digital retina camera between Veterans using standard precautions and hand hygiene practices in accordance with the SOP related to cleaning the TRIP camera.
 13. The Reader enters the results and/or recommendations into the Veteran's electronic medical record.
 14. The TRIP imager receives all results and arranges required follow-up appointments related to TRIP, **including the placement of consults to the eye clinic for emergent or follow-up needs based on the recommendations of the Reader. The PCP and eye care specialist will be named on all consults.**
- E. **Scheduling:** Veterans meeting criteria will be accepted on a walk-in bases and/or scheduled in conjunction with the primary care appointment, or when convenient for the

Veteran. Imagers will schedule for their clinics. Encounters will be completed and coded per national policy.

- F. **Workload Reporting:** TRIP clinics are developed using the approved standardized clinic structures for all medical center TRIP programs to promote accurate and consistent utilization of TRIP workload reporting mechanisms.
- G. **Coding:** The primary stop code for TRIP is 718 and is to be used with the secondary credit stops of 695 (CBOC) or 696 (main site) when using Store-and-Forward telehealth.
- H. **Non-Readable Images:** The teleretinal Readers will periodically encounter images that are not readable. The Reader will recommend that Veterans with unreadable images be rescheduled using the template CPRS progress note that will be used to respond to the Teleretinal Imaging Consult.
 - 1. Notifications to the Primary Care Provider (PCP) and Imager at the remote imaging sites will occur automatically. The Imager will notify the eye care provider regarding the Reader recommendations by completing the follow-up CPRS note to the Diabetic Surveillance Consult and sending a view-alert to the eye care specialist. The imaging technician receives all results and arranges required follow-up appointments related to TRIP, **including the placement of consults to the eye clinic for emergency or follow-up needs based on the recommendations of the Reader. The PCP and eye care specialist will be named on all consults.**
 - 2. The Imager will then arrange for the follow-up care of the Veteran through local scheduling procedures as per the Reader recommendations, keeping the PCP and eye care specialist informed.
- I. **Resetting of Diabetic Eye Exam Clinic Reminders:** The diabetic eye exam clinical reminder is critical to aid providers in appropriate referral to TRIP. Clinical reminders that are not reset when appropriate eye care has been provided will result in unnecessary referrals for teleretinal imaging and secondary over recommendation of Veterans for local eye care. Appropriate documentation of both VA and non-VA dilated diabetic eye care and the associated resetting of the diabetic eye exam clinical reminder will be done at the local imaging facility.
- J. **Performance Measurement and Improvement:** The performance measurement system for TRIP ensures the standardization of the TRIP process throughout the Network and nationwide. These performance monitors include, but are not limited to:
 - 1. Number of Veterans imaged per site;
 - 2. Number of inadequate images and appropriate follow-up;
 - 3. Adherence to national Conditions of Participation, and

4. Compliance with conditions of the Memorandum of Understanding between VISN 16 and the Office of Care Coordination, and VACO as it relates to teleretinal imaging.
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K. **Quality and Performance Monitoring:** The core quality and performance measures, compliance with Conditions of Participation and compliance with established clinic and coding structures for all medical center TRIPs will be monitored by the facility. Templates have been developed nationally and are standardized to allow for the gathering of statistics on a national level. To allow for the gathering of national statistics, templates may be added to, but items are not to be removed from the templates unless permission is granted by the OTS.

L. **DICOM or Imaging Malfunction:** On occasion the DICOM or Gateway may malfunction and images cannot be transferred to the chart via VistA and/or release the consult and images to the teleretinal Readers. The following applies:

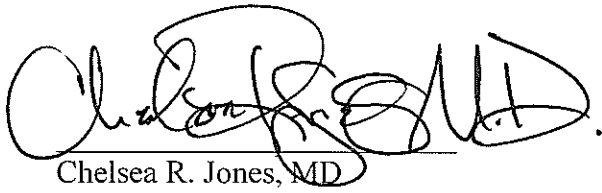
1. Immediate service ticket to IT;
2. Send high priority email with the service ticket number to the chief and assistant chief of IT as well as the information technology specialist responsible for managing the VistA Imaging gateway;
3. Depending on the problem, all images may have to be purged to ensure correct images are loaded onto the Veteran's charts. In this situation, the Veterans will need to be re-imaged.

M. **Disaster Management:** The TRIP Disaster Management Plan will be implemented immediately in situations of catastrophic events, including, but not limited to, tornadoes, flooding, hurricanes, earthquakes or terrorist attack.

VII. **REFERENCES:**

- A. VHA Office of Telehealth Services Clinic Based Telehealth Operations Manual; Clinical Video Telehealth, Store-and-Forward Telehealth 2/2012;
- B. VHA Office of Telehealth Service Teleretinal Operations Manual March 2011;
- C. VHA South Central VA Health Care Network Policy Memorandum No. F-DS-5, Feb 2008;
- D. Topcon Instructional Manual for the TRC-NW* Non Mydriatic Retinal Camera; 2008

VII. **RESCISSION:** Revision of TRIP Policy Memorandum No. AC-36; Dated Dec.13, 2010



Chelsea R. Jones, MD

Acting Associate Chief of Staff/Primary Care Services

ATTACHMENTS: none

EXPIRATION DATE:

RESPONSIBLE OFFICE: **Primary Care Services**