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|  | Tele-I-CARE |
|  | Connecting individuals to vision-saving care. |
| 6/17/16 | Operations Manual |
|  | How to incorporate Tele-I-CARE seamlessly into your practice. Rochester Area Tele-I-CARETM (Tele-I-CARE) is a store and forward telemedicine service owned by the Flaum Eye Institute at University of Rochester Medical Center. |

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Tele-I-CARE

Operations Manual

# Purpose

While the gold standard for diabetic eye health is for each patient to see an eye care provider for a diabetic retinal exam (DRE), barriers exist that prevent proper eye care for many diabetic patients. The primary barriers for diabetic patients in accessing timely eye care include lack of awareness of needing eye exams, inequitable distribution of eye care providers, and additional costs (in terms of travel, time off from work, and medical fees of seeing another care provider).1 Screening with a non-mydriatic camera in the primary care setting can overcome these barriers and help to identify patients most at risk for vision-threatening disease. Once you have established the need for remote DR screening in your practice, this manual will help you implement the Tele-I-CARE service into your clinic.

# Overview

The Tele-I-CARE service is a store and forward teleophthalmology system. The images captured in the primary care setting will be analyzed and read by an eye care provider in order to check for the presence of diabetic eye disease and other abnormalities. Since these images are taking the place of a live visit, the quality of these images is tantamount to the eye care provider’s ability to determine the level and severity of eye disease. The purpose of this document is to provide guidelines for implementing the Tele-I-CARE service into the primary care setting. An overview of the Tele-I-CARE service is as follows:

Further details at each step of the service are diagrammed below:

This document is designed to help the primary care clinic seamlessly integrate the Tele-I-CARE service into practice. Therefore, this manual focuses on Steps 1 and 3.

# Getting Started

## Recommendations for Success

Successful clinics have found the following tips key to using the Tele-I-CARE service.

### Tele-I-CARE Champions

Identify Administrative and Clinical Champions to guide the implementation of Tele-I-CARE at your clinic. Each level of management at the primary care clinic should have a Tele-I-CARE Champion.

Among administrators, one person needs to champion the push towards incorporating DR screening. The Administrative Champion is key in gaining approval to implement the Tele-I-CARE service. This person should be a decision-maker at the clinic and have the respect of fellow providers at the clinic.

To successfully execute the Tele-I-CARE service, the primary care clinic must also identify an on-site Clinical Champion from the clinic staff. The Clinical Champion will be a super user. This means that the Clinical Champion is well versed in all details of the Tele-I-CARE service. The Clinical Champion is the contact person for the Tele-I-CARE team, is an expert in using the camera, and can train other staff members to use the Tele-I-CARE service. The Clinical Champion should have a long-standing role at the clinic and substantial experience of the clinic’s functioning. The person selected as Clinical Champion should already have the confidence and respect of the staff in order to successfully lead a new program.

### Designated Eye Exam Room

Using one exam room to store the camera and perform screening provides each diabetic patient with access to the camera and privacy during screening. There should be enough room for two chairs and the table, which includes the laptop computer and camera. The room must be able to have the lights turned on and off with ease. The room should have a lock to store the camera and prevent theft.

If it is not possible for your clinic to reserve one exam room for the Tele-I-CARE service, place the camera in a location that is accessible to all staff members but protected against theft.

### Training Photographers

A trainer from the Tele-I-CARE team will come to your clinic to train the Clinical Champion in a series of sessions. Volunteers will be needed to practice photography with the trainer’s guidance. Once the photo reader approves the Clinical Champion’s photograph quality, the Tele-I-CARE trainer certifies the Clinical Champion screen patients. Then, the Clinical Champion can then teach other staff at the primary care site to use the Tele-I-CARE service. Refer to the Tele-I-CARE: Training & User Manual for further information.

### Multiple Photographers

Once the Clinical Champion is certified to screen patients and has outlined the best workflow for the clinic, more photographers should be trained. This maximizes the number of patients that can be screened and minimizes the burden on each photographer.

Once the Clinical Champion has been trained, it is recommended to train more photographers at the primary care clinic. Most clinics select photographers from existing staff: nurses, diabetic care coordinators, data coordinators, and medical assistants. A photographer should have the following qualities:

* Strong eye-hand coordination and fine motor skills
* Comfortable with new technology and computers
* Detail-oriented
* Good interpersonal and communication skills
* Self-motivated

### Visual Acuity Screening

Tele-I-CARE values the incorporation of checking distance visual acuity into DR screening. Many patients with Diabetes may not yet have damaged retinas, however they may have significant visual impairment. Therefore, it is important for clinics using the Tele-I-CARE service to screen for visual acuity.

The Clinical Champion will learn how to perform Visual Acuity Screening during training with the Tele-I-CARE team. We recommend performing Visual Acuity Screening in the Tele-I-CARE Exam room before taking the photographs. This way, the Clinical Champion can remove the time burden of visual screening from the physician while providing more information to both the patient and the eye care provider reading the photographs.

### Ownership

If your clinic owns its own camera, you can maximize the number of patients screened. Each time DR screening is indicated, the camera and trained photographer would be available to perform the required screening.

Though, your clinic may consider sharing your camera with other clinics. For example, American Diabetic Association (ADA) recommends a quarterly HbA1c lab for diabetic patients whose therapy has changed or who are not meeting glycemic targets.2 Therefore, the camera can be rotated among other clinics in accordance with this schedule.

### Workflow

As the Clinical Champion, you have knowledge of how the clinic runs and can identify the best point in a diabetic patient’s visit to incorporate the Tele-I-CARE service. To guide you, we have identified some potential options for implementation in the “Examples” section. The goal is to identify where there are time gaps in a patient’s typical visit. Then, chose the time gap that best works for your clinic to use the Tele-I-CARE service.

## Getting Started Checklist

Once your Administrative Champion has identified the need for DR screening, follow this checklist to get started!

This checklist serves to guide the Clinical and Administrative Champions through the process of implementing the Tele-I-CARE service into the clinic.

### Prepare

Both Administrative and Clinical Champions must work together to:

* **Identify Need for DR Screening with Tele-I-CARE**. Understand the needs of your patient population and if Tele-I-CARE can help you care for those patients.
* **Identify Administrative and Clinical Champions**. For implementation to succeed, Tele-I-CARE needs to be promoted at each level of your clinic’s organization.
* **Outline How Tele-I-CARE Fits Into Overall Clinic Workflow**. Identify time gaps in your patient encounters to perform screening without disturbing overall workflow. Your clinic may decide to screen patients before or after each patient has seen the physician. Alternatively, your clinic may decide that the most patients can be screened on a monthly, dedicated diabetic screening day. See below for “Examples.”
* **Create Process to Identify Patients in Need of Screening**. To maximize the number of patients screened, be sure that all clinicians in your practice are trained to identify patients in need screening.
* **Select clinic staff.**  Identify staff members that possess the qualities of successful photographers (as noted above in the “Recommendations” Section). These staff members will participate as volunteers in the training process. See the “User Manual” for a more detailed description of the training process.

### Set Up

Both Administrator and Clinical Champions should work together to Set Up the Tele-I-CARE service.

* **Select Designated Eye Exam Room**. A single exam room maximizes opportunity to screen diabetic patients. If your clinic cannot designate one room, then find a central location that the camera can be rolled too and from.
* **Purchase Camera, Laptop, and Eye Chart from Tele-I-CARE.** You may own your own equipment or share with other primary care clinics.
* **Schedule Training**. The Clinical Champion and volunteers will learn how to perform the entire patient encounter in a series of training sessions. Training will include operating the camera and navigating the Tele-I-CARE website.
* **Gain User Access to Tele-I-CARE website**. You will receive access to the Tele-I-CARE website at your first training session. The website allows you to share patient information and photos with the eye care provider and download the corresponding screening report**.**

### Practice

The Clinical Champion and trained staff practice screening.

* **Clinical Champion Practices Photography with Volunteers**. The Clinical Champion will get comfortable taking volunteers through the entire patient encounter and taking quality photographs.
* **Tele-I-CARE Trainer Certifies Clinical Champion to Screen Patients**. Once the Clinical Champion has learned to take quality photographs, the trainer will certify the Clinical Champion as ready to screen patients.

### Screen

* **Put Plan into Action!** See Training & User Manual for more details of screening.

# Examples

The best time to add Tele-I-CARE service to the patient visit depends on the general workflow of your clinic. Start by outlining the steps of a diabetic patient’s visit to your clinic. **Identify the time gaps** between steps during a typical patient encounter. To minimize disruption to the overall workflow, select the longest time gap at your clinic. The goal is to choose a time that does not interfere with the overall patient visit workflow.

Consider both the Typical Visit and the Diabetic Clinic Day to get an idea of what might work for your clinic. These examples may help the Administrative and Clinical Champions outline the best ways to incorporate Tele-I-CARE into the primary care clinic. The DR screening should add just 10-15 minutes to a typical diabetic visit and does not put any extra burden on the physician’s time because screening can be performed by any HIPAA trained clinic staff member.

## Workflow: Typical Visit

Consider a typical diabetic patient visit to the primary care clinic.

A typical visit for a diabetic patient includes several steps. The patient must first check in with the front desk. Then, a nurse will take a patient through Intake, collecting vital signs, height, and weight. After intake, the nurse will lead the patient to wait in the exam room for the physician. The physician will examine the patient, being sure to heed requirements of diabetic patients. The physician reviews the most recent lab values and urinalysis to quantify the patient’s control of his diabetes. The physician must check for ailments common to diabetic patients, paying close attention to signs of peripheral neuropathy and health of the feet.

In addition to these parts of the diabetic visit, the Tele-I-CARE service would ensure that the nurse or doctor asks about the diabetic patient’s most recent dilated eye exam. DR screening is indicated for diabetic patients who have:

* Never had an eye exam
* Cannot remember the date of the last eye exam
* Not had an eye exam in over a year.

If DR screening is indicated, the nurse or doctor notifies the clinic’s photographer. Before the photographer sees the patient, certain information must be collected from the patient’s chart. Information includes, most recent HbA1c and most recent blood pressure. After the physician’s exam is complete, the photographer will lead the patient to the designated eye exam room. In that room, the photographer will take the photos and send them to the eye care provider. Finally, the photographer will lead the patient to check out with the front desk.

ProTip: It is recommended that the photographer reviews the diabetic patient’s chart the day before the patient’s scheduled visit. This way the photographer is prepared with time and relevant patient information to perform the Tele-I-CARE screening at that visit.

## Diabetic Clinic Day

Since screening for Diabetic Retinopathy is important for preventing blindness, it is important to screen every diabetic patient in your practice. Yet, primary care clinics have reported many diabetic patients unwilling to miss work in order to visit the doctor. To ensure that diabetic patients are screened, we recommend that you open the clinic on Saturday or chose one day of the week to keep the clinic open late to specifically screen diabetic patients with weekday jobs. This way you can concentrate the number of diabetic patients you see to one day and maximize the number of screens your clinic can perform. The diagram below would place the Diabetic Clinic Day at “Day 3.”

## Sequence of Events

#### Prior: Identify Patient + Review Patient Chart

Identifying patients that may need DR screening is a key step in the Tele-I-CARE service. Your clinic may identify patients at a routine visit or by systematically reviewing patient charts. Then, you can schedule those patients for the specified Diabetic Clinic Day.

To ensure that Diabetic Clinic Day runs smoothly, the photographers should review the patient charts ahead of time. The photographer checks for the patients a) most recent HbA1c and date and b) most recent blood pressure

#### Screen: Diabetic Clinic Day

The Diabetic Clinic Day is dedicated to maximize the number of patients screened for DR. The Clinical Champion and trained photographers will lead patients through the screening process.

# References

1. Mukamel BD, Bresnick GH, Wang Q, Dickey C. Barriers to compliance with screening guidelines for diabetic retinopathy. Ophthalmic Epidemiology. 1999, Vol. 6, No. 1 , Pages 61-72.

2. “Diabetes Management Guidelines.” *National Diabetes Education Initiative.* Ashfield Healthcare Communications, January 2016. Web. 12 July 2016.

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