

Methods

EyeTel Phase I will require six steps:

- *Photographic technical assessment and training:*

Designated photographic technicians from the two sites will be temporarily assigned to DMEI for skills evaluation and further training if necessary. This will assure quality remote image acquisition throughout the project. Russ Burris, CRA in charge of photography at DMEI has extensive experience in training ocular photographers and will be responsible for completion of this step.

- *Communication set up*

T1 lines are the most economical communications link for Phase I initiation. The T1 transmission rate (1.544Mbps) will allow a single angiogram frame to be sent in 10 seconds. Although T1 implementation will not allow real time interaction, an entire angiogram sequence (35 to 45 frames) can be sent to DMEI in less than 7.5 minutes easily meeting our aim of same day image transfer and interpretation.

- *Site development*

The Ada and Claremore sites currently have 35mm based retinal fundus cameras. Modifications will be made to these cameras to physically integrate them with the digital system. Appropriate furniture to house the computer equipment will be acquired.

- *Equipment acquisition*

Macintosh Quadra 800 computer systems (32 MB RAM, 300 MB internal disk, magneto-optical archive disk, 16" display) will be used at the two sites. The Kodak Professional DCS (1280 x 1024 pixel, 8-bit grayscale) will be used for image acquisition. Imagination™ software integrates image acquisition, management, transmission and storage.

- *Installation & testing*

Dr. Fransen has developed the software and systems integration needed for digital fluorescein angiography. He will be responsible for installation and testing at the two sites.

- *Operation*

Operational costs include technical personnel salaries, fringe benefits, clinical supplies, digital line charges and physician interpretation fees.