



Waikato DHB / Pinnacle – Practice Guidelines

Guidelines for the Processing of Patient Images – for Transmission for Service Referral

For use by:
Practice Managers
General Practitioners
Practice Liaison



Version History

Version	Date	Changed By	Revision Description
1.0	22 Jan 2009		Release Version

1. Introduction

The availability of low cost high resolution digital cameras has increased the likelihood that digital patient images will be taken, and stored electronically within GP practices.

Hospital services, particularly dermatology and plastics, are increasingly likely to request digital images to accompany patient referrals to assist with triage.

Before an image can be sent as part of a service referral the image may need to be resized, cropped or manipulated to improve the lighting or contrast to assist visibility of the lesion and help triage.

Most recently the technology available with newer cameras has resulted in files of significant size and which may need their file size reduced for electronic transmission.

This document has been created to assist GP practices processing images for service referral and transmission electronically.

This guideline has been informed by:

- Image management issues identified during pilot of electronic referrals
- Waikato DHB dermatology guidelines for referral
- Waikato DHB image management policies and procedures

This document is intended to provide guidance for General Practice which may be adapted to local conditions, depending upon the availability and use of digital cameras and configuration of practice IT systems.

2. Processing Images

Getting the Images to a Computer

There are a variety of ways to transfer images from the camera to your computer system via cable and disk readers, and drag a copy of the image, or use the software that came with the computer or camera.

Save the original image to the location in your practice where images are stored, saving the filename according to your practice's storage guidelines. For example it is always useful for identification purposes to name the image and the directory for storage using the patient's NHI. If there are multiple images keep them in the same folder, add a suffix e.g., "ABC1234a.JPG". For more detail on naming conventions refer to "Guidelines for the Storage of Clinical Images."

Processing Images

Always make a copy before starting as any manipulation of the image should be done on a copy. Errors are not always recoverable.

You will need image editing software. This is usually provided with the camera and/or with the computer and/or you may purchase or download for free many different systems. Archiving software is also invaluable to aid in finding the image at a later date.

Open up your images. Choose the best selection of pictures and save these with a new name.

Crop the image if appropriate, so that only the part of interest is retained.

Alter brightness and contrast if necessary. It shouldn't be necessary if you followed the instructions above.

If the images are to be transmitted electronically, reduce the dimensions or resolution of each one (minimum 640x480 pixels at 72 ppi). (make it clear in your communication that a larger size image is available if required). A good or maximum compromise between size and quality JPG – the image size should be between 100kB – 300kB.

It is useful for identification purposes to name the image using the patient's NHI. If there are multiple images, add a suffix e.g., "ABC1234a.JPG".

Instead, you may print your images and attach them to a standard referral letter. The print should be standard size e.g.. 6x4" this will require the resolution to be at least 1600 x 1200.

Practice Support for Image Processing

If there is a practice staff member with some experience with image processing, they could assist with processing of images, or training others in the practice.