Associate Professor Amanda Oakley

Dermatologist

Hamilton

Professor H. Peter Soyer

Academic Dermatologist

The University of Queensland

Brisbane

Saturday, June 10, 2017 (Room 3)

8:30 - 9:25 WS #94: Teledermatology Case Reports

9:35 - 10:30 WS #106: Teledermatology Case Reports (Repeated)

Teledermatology case reports

Adjunct Associate Professor Amanda Oakley, University of Auckland
Waikato DHB
Professor Peter Soyer, University of Queensland
Princess Alexandra Hospital

My conflicts

- I diagnose hundreds of cases each week
- Consultant for MoleMap NZ
- Director of NZ Teledermatology
- Editor in chief DermNet New Zealand
  - Sponsored by Pharma

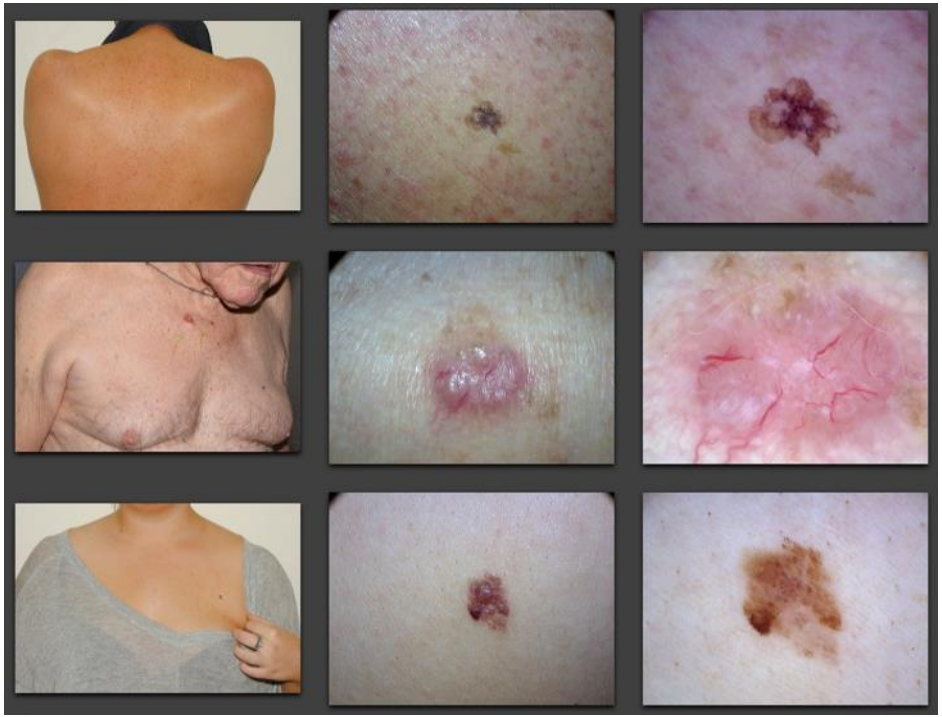
Outline

- Pathways to teledermatology - AO
- Impact of images on histopathological diagnosis – PS
- Cases – alternating AO and PS

Teledermatology / virtual dermatology

- Access to specialist dermatological knowledge by means of telecommunications and information technology
- Requires high quality patient info + images

Teledermatoscopy – digital dermatoscopy



Teledermatology

Benefits

- Patient gets Specialist care
  - Improves access, equitable
- Faster, more convenient
  - 75% fewer in-person consults
- Reduces consultation costs
  - Patient, organisation
- Reduces GP consultations
  - Fewer pharmaceuticals
  - Fewer investigations

Disadvantages

- Shifts burden to primary care
  - Imaging, on-going patient care
- Remains a burden to specialist
  - Requires funding
  - Requires timetabling
- Rarely incorporated in EMR
  - Hospital, GP
- DHBs struggle to understand it
  - Lack of funding stream

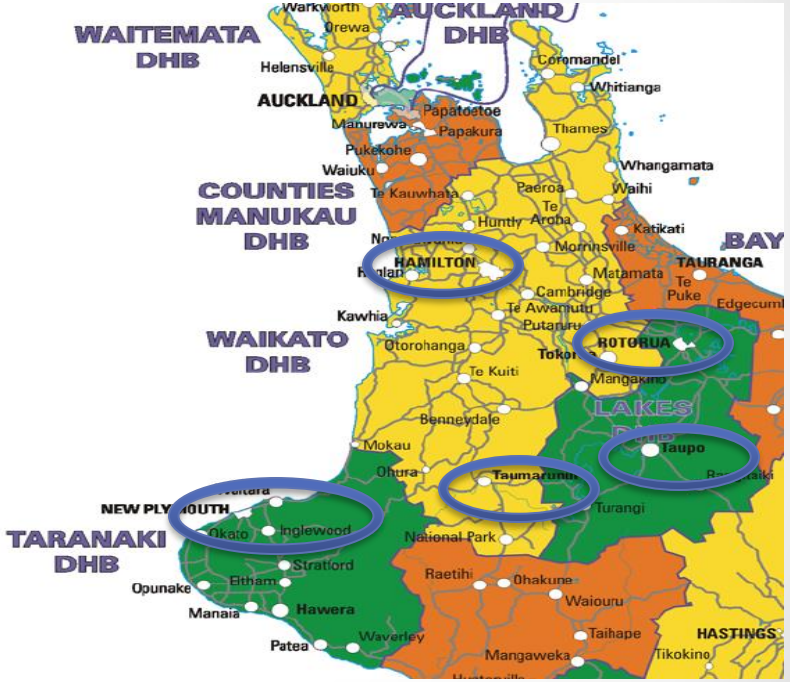
Video conferencing

TARANAKI DISTRICT HEALTH BOARD

Waikato District Health Board

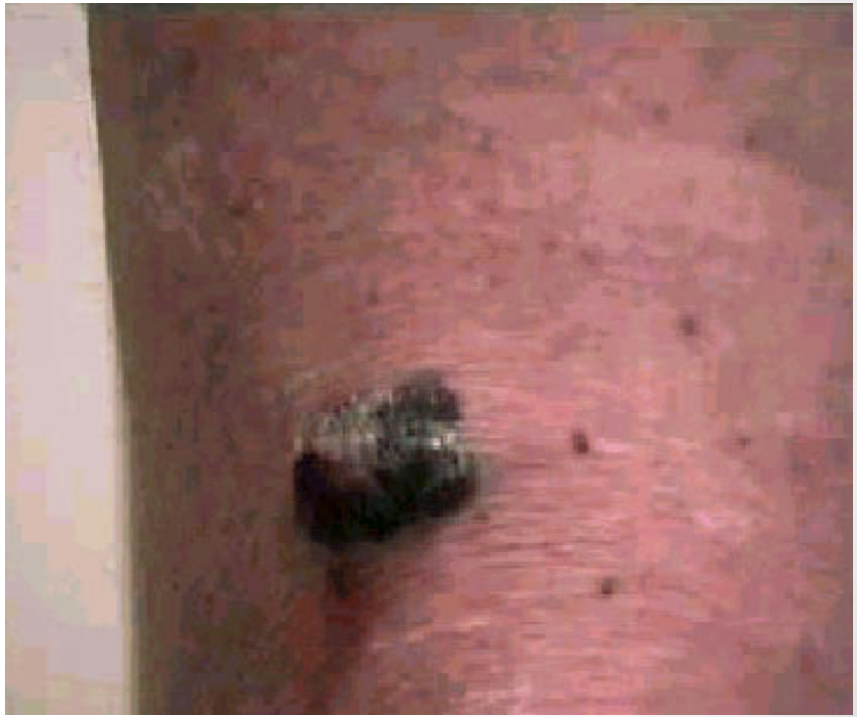
Video Consultations at Waikato

- 1995–2003:
  - Taumarunui, Taupo, Rotorua
  - 800 consultations
- 2010–2013:
  - Taranaki DHB
  - 300 consultations



Case 1: 1995

- Taumarunui company director in his 50s
- Too busy to go to the doctor before now
- Asymptomatic nodule growing over the last year or two
- Diagnosis?



Case 1: 1995

- Nodular melanoma
- Easy diagnosis
- Referred for surgery

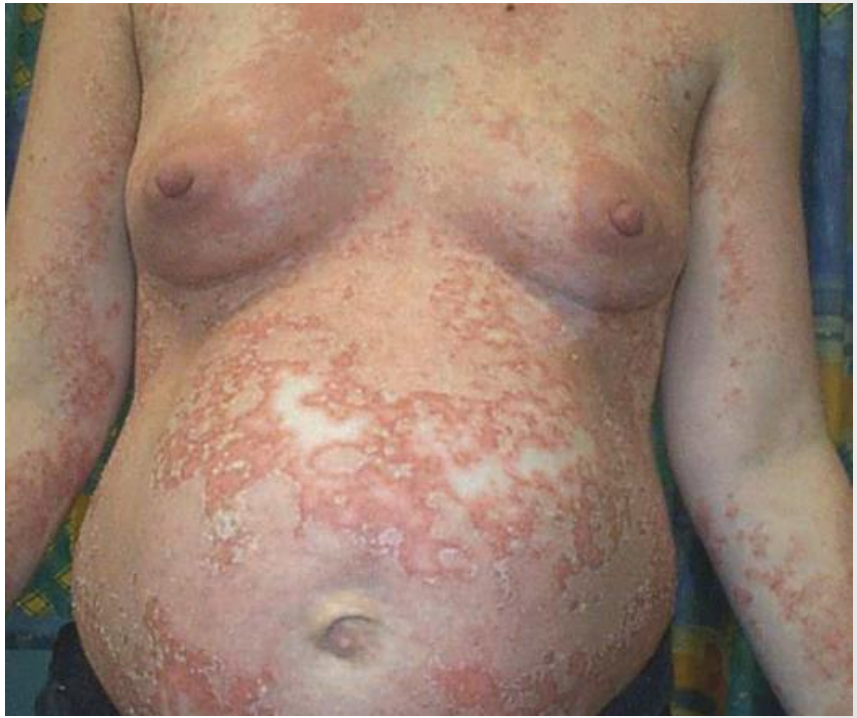
J Telemed Telecare. 1996;2(3):174-5.

Melanoma--diagnosis by telemedicine.

Oakley A[1], Duffill M, Astwood D, Reeve P.

Case 2: 1998

- Pregnant woman in Rotorua
- 2 month h/o spreading rash
- GP describes pustules, lack of response to topical steroid
- Diagnosis?



Case 2: 1998

- Generalised pustular psoriasis of pregnancy
- Rx systemic steroids + referral to obstetrician
- Normal delivery at 36 weeks
- Slow recovery as steroids weaned

DIAGNOSIS OF RARE DERMATOLOGICAL COMPLICATION OF PREGNANCY BY TELEMEDICINE

by NICK BRADFORD FRNZCGP, AMANDA OAKLEY FRACP, DERYCK PILKINGTON and RAEWYN TAYLOR, MIDWIFE

In 1998 two doctors at the Taupo Health Centre, namely Dr Peter Fleischl and myself, were involved in a Teledermatology research project in association with Waikato Hospital Dermatology Department. For the teledermatology sessions digital images were taken using a Kodak DC 210 Digital Camera with a resolution of 1.2 Megapixels, as well as real time teledermatology using both a fixed and mobile video camera system linking through VTEL Software and an ISDN telephone line to Waikato Dermatology.

During the year, a 26 year old patient presented at 29 weeks in her second pregnancy with a rash.This was initially a slightly itchy rash of annular plaques with superficial white pustules at the leading edge, occurring first on the abdomen and upper chest and was symmetrical. A week later the rash had become more florid. It had spread to the abdomen, it was more painful than itchy and there were small white lesions inside the buccal mucosa. By the following day, the arms and legs were involved proximally, the hands were spared at that stage, but the rash later spread to the hands. At that stage I took digital photographs of the rash and sent them as attachments by electronic mail to the dermatologist (AO), who felt the diagnosis could be acute generalised exanthematous pustular dermatitis (AGEP) . The diagnosis however was not certain even after a conventional consultation at Waikato Hospital. The rash continued to extend, becoming more painful. With the patient's permission further digital photographs were sent to Amanda Oakley for circulation to Rxderm-l, an Internet mailing list for dermatologists. Within two days there were three replies from dermatologists, two in the United States and one in Europe who had seen a similar rash previously. Their diagnosis was Impetigo herpetiformis, which was soon confirmed by biopsy.

Video consultation

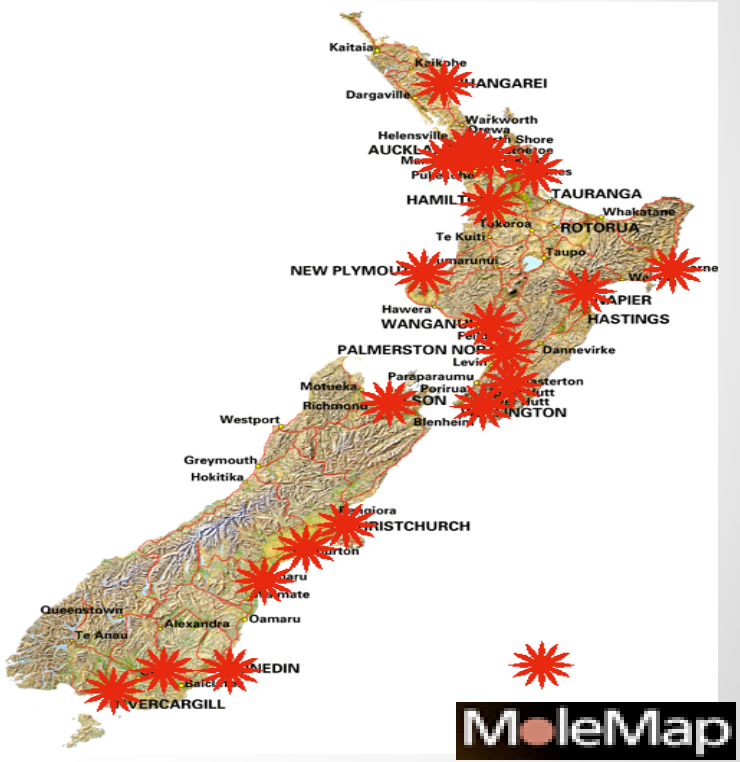
Benefits	Disadvantages
• Direct to patient • Can be as good as in-person consultation • Great for follow-up • Saves patient travel	• No full skin examination • Doesn't save specialist time • Doesn't reduce wait-lists

2016: weekly teleconferences

- Registrar training + CPD
- Case presentations
- MDMs – Taranaki, Christchurch

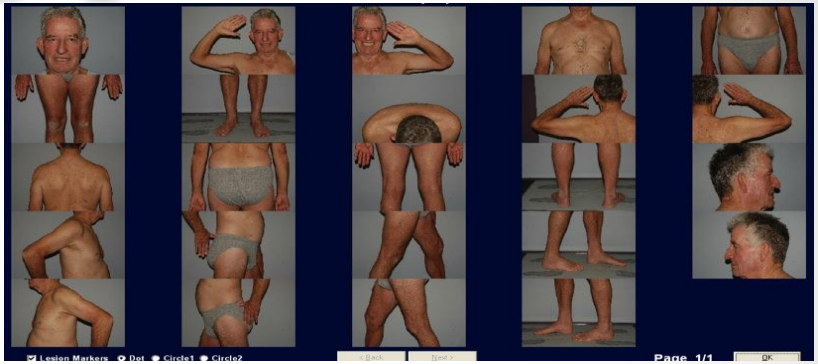
Private teledermatoscopy MoleMap NZ (2015)

- Patients: 192,327
- Patient visits: 345,746
- Bodyshots: 3,175,683
- Lesions: 2,786,418
- Lesion visits: 6,235,264
- Lesion Images: 11,821,615
- Visits in last year: 36,517

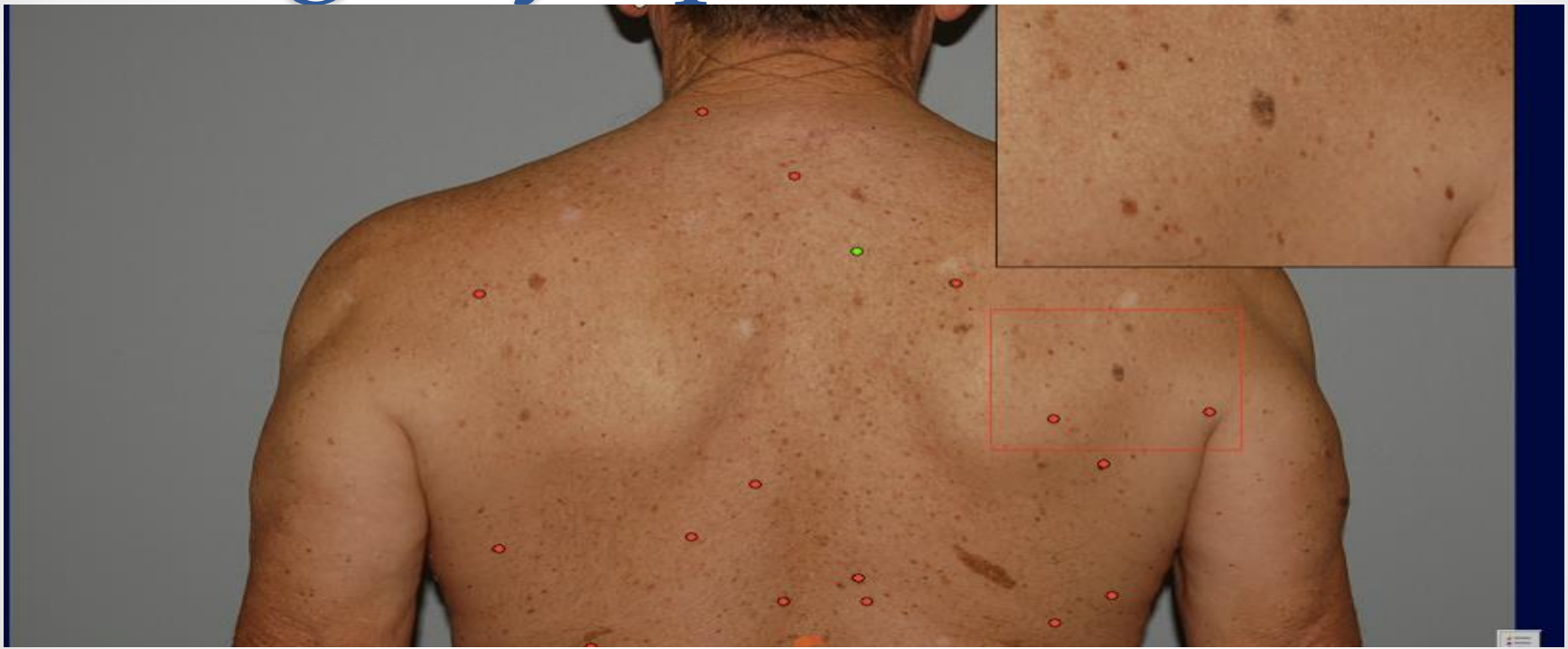


Mole mapping procedure

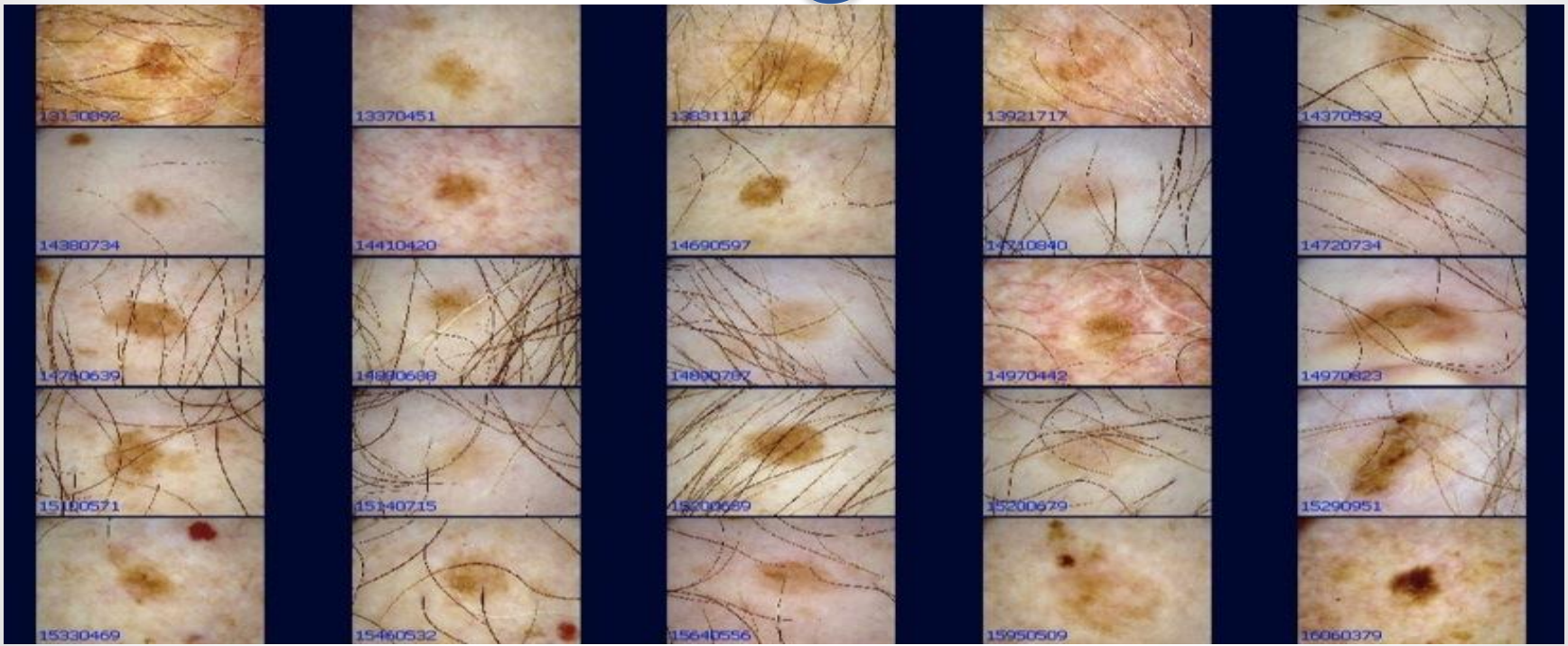
- Nurse takes history
- Full skin examination
- Whole body imaging
- Imaging of lesions of conce
    - To patient
    - To referring health professional
    - To melanographer



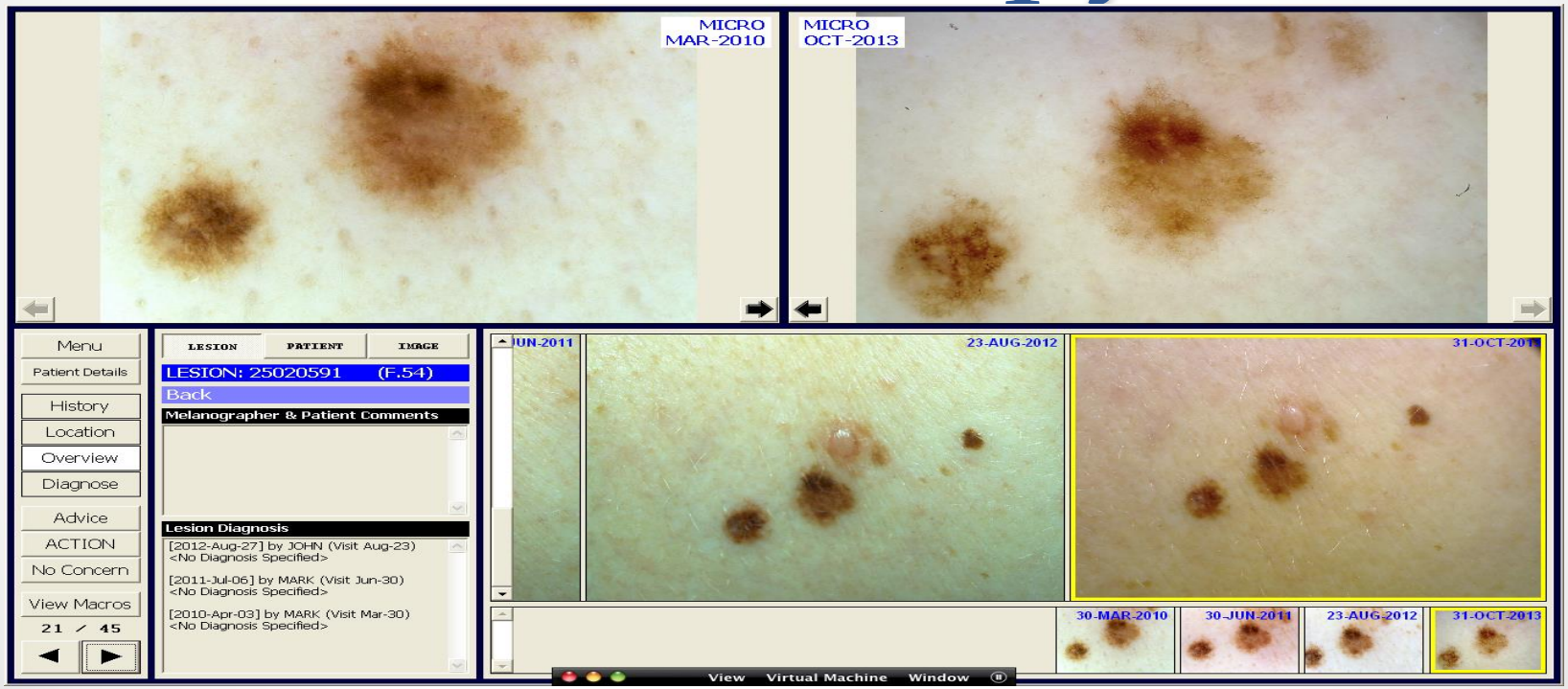
Magnify specific lesions



Review dermoscopy images



Sequential digital dermoscopy



Private teledermatoscopy service

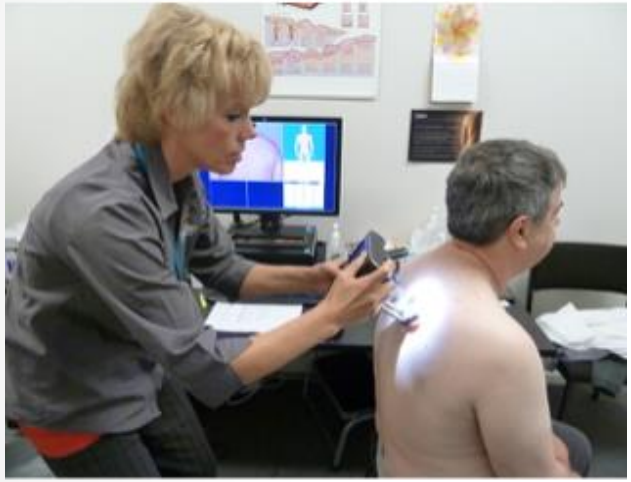
Benefits

- Patients may self-refer
- Full skin examination by trained nurse
- Ideal if multiple naevi
  - Total body photography
  - Annual sequential dermoscopic imaging
- Reduces unnecessary excisions in "worried well"

Disadvantages

- Usually self-funded
- Expensive
- Skin examination is not by dermatologist
- Unnecessary for low-risk patients
- Low uptake of repeat screening

Virtual lesion clinic

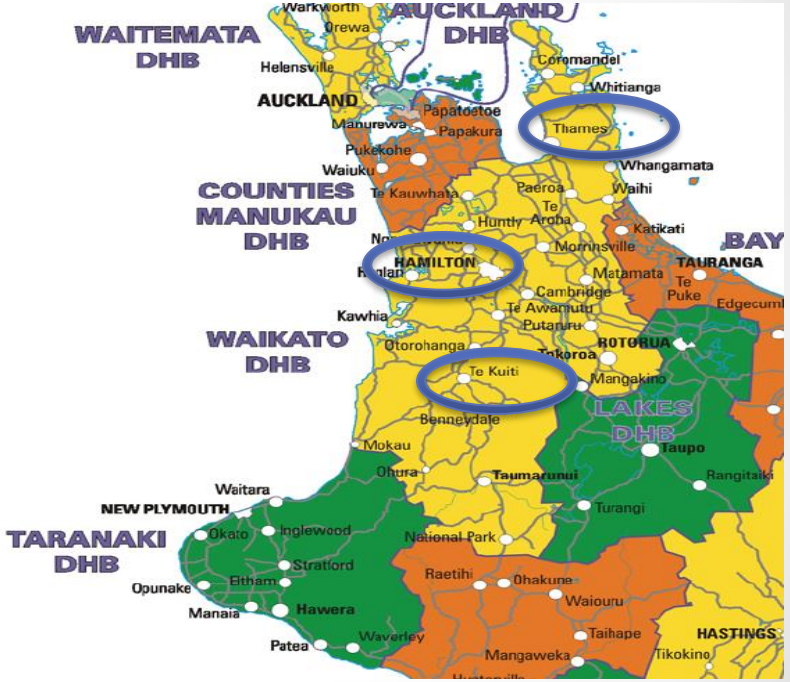


Waikato District Health Board

MoleMap

Waikato virtual lesion clinic

- Teledermatoscopy service 2010–2016
- Imaging sites
  - Hamilton, Thames, Te Kuiti
- 5718 visits, 9782 lesions (Dec 2016)

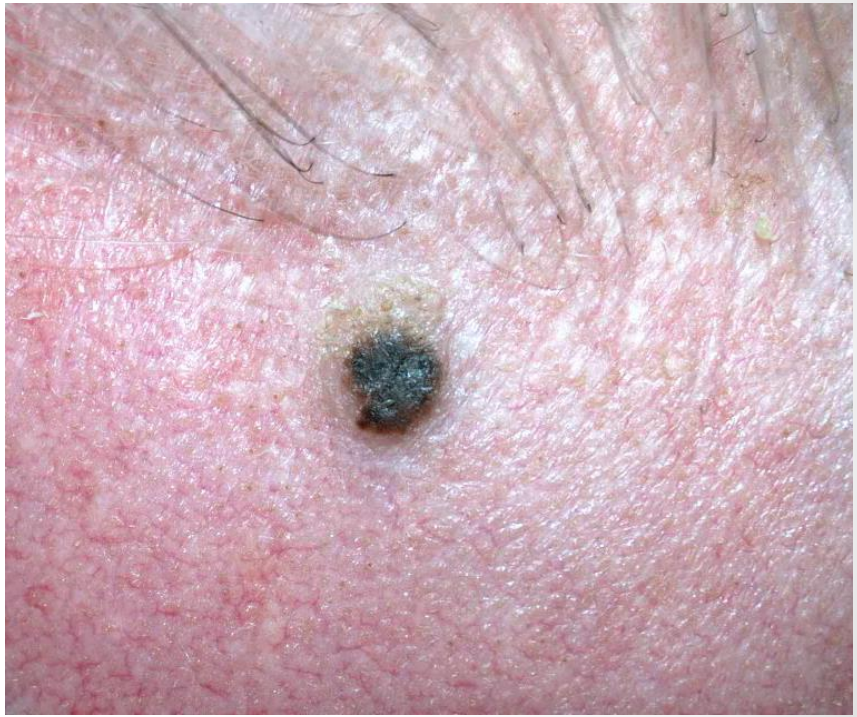


VLC: melanomas

- 605 excisions → 302 melanomas
- NNT = 2
- B:M = 1
- MM:MIS = 103:199 = 0.3

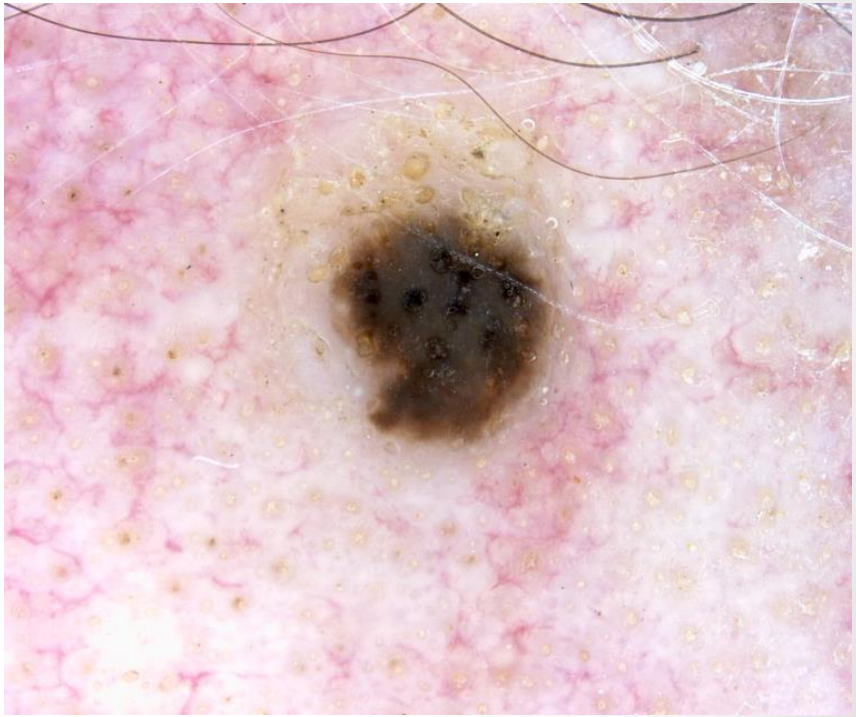
Case 3: 2011

- 75 yo male
- Referred re black papule on forehead ?melanoma
- ?Diagnosis



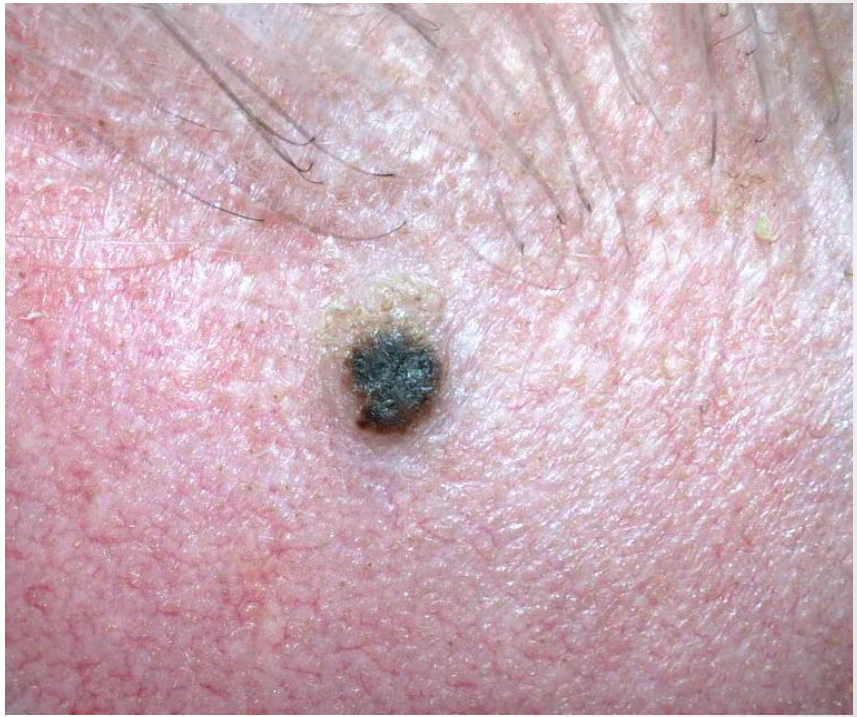
Case 3: 2011

- ?Diagnosis



Case 3: 2011

- Seborrhoeic keratosis
- No reason for concern

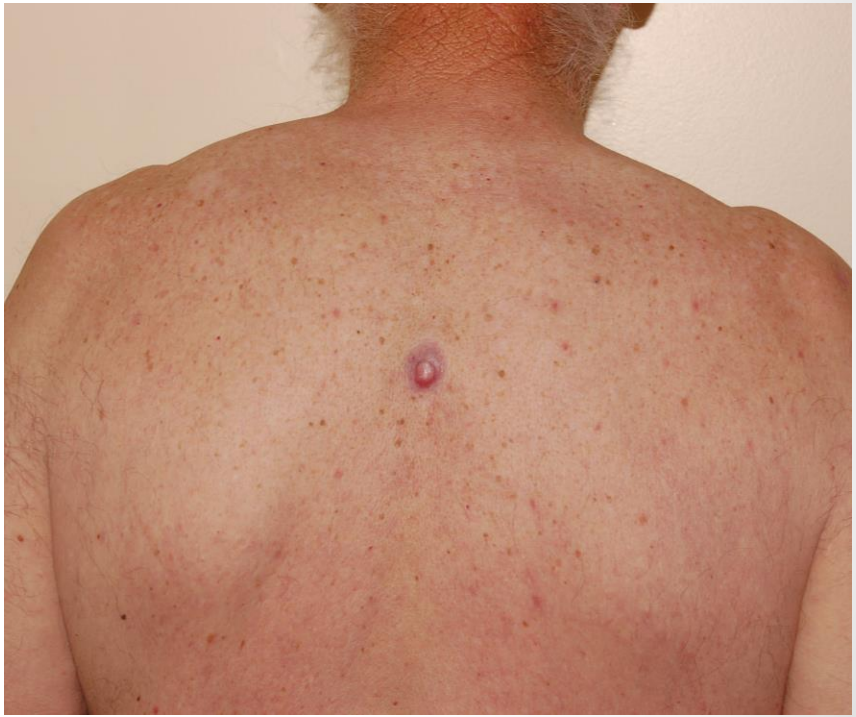


Case 3: 2011

- Nurse asked, do you have any other lesions you'd like me to look at?
- Response, no.
- Nurse, shall I take a look at your back while you're here?

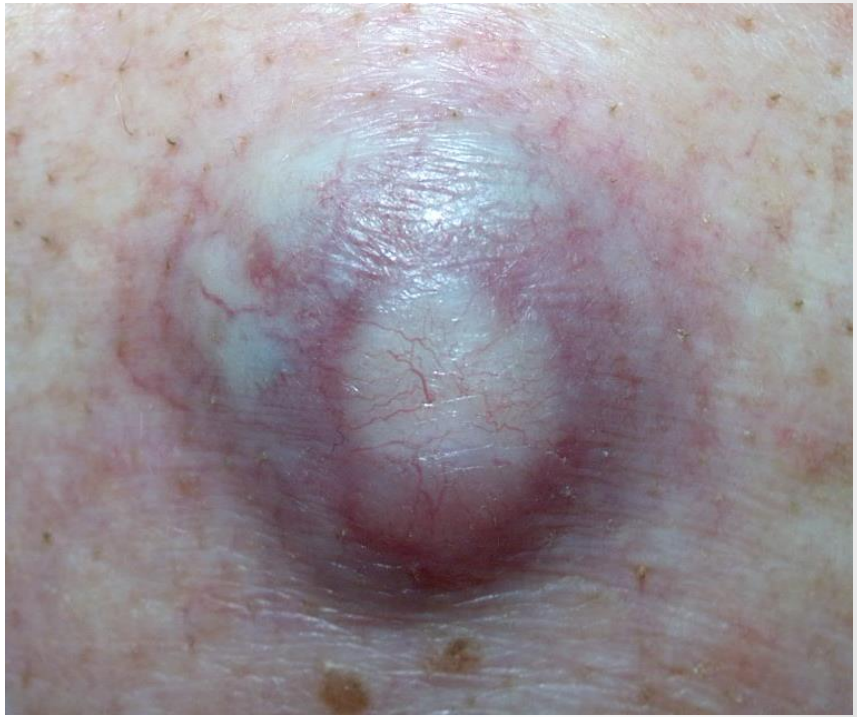
Case 3: 2011

- Diagnosis?



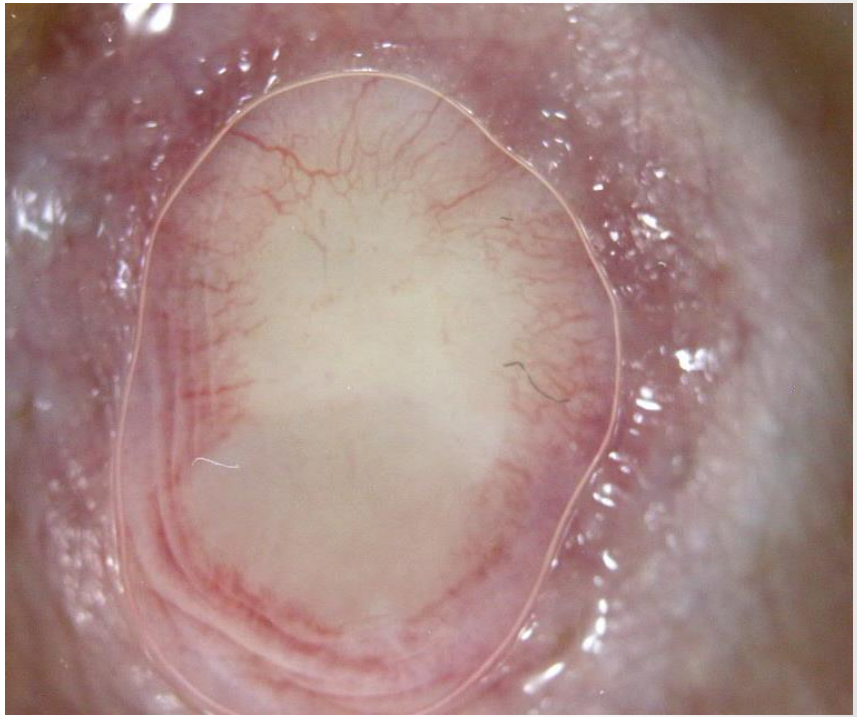
Case 3: 2011

- Diagnosis?



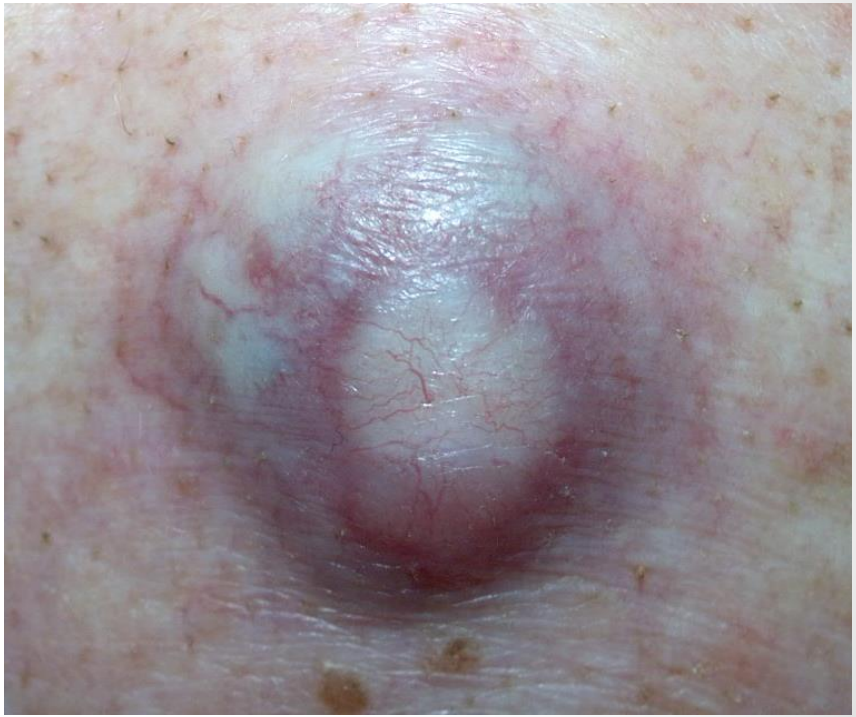
Case 3: 2011

- Diagnosis?



Case 3: 2011

- Nodular melanoma
- Breslow thickness 20 mm
- Excised
- Patient died 14 months later



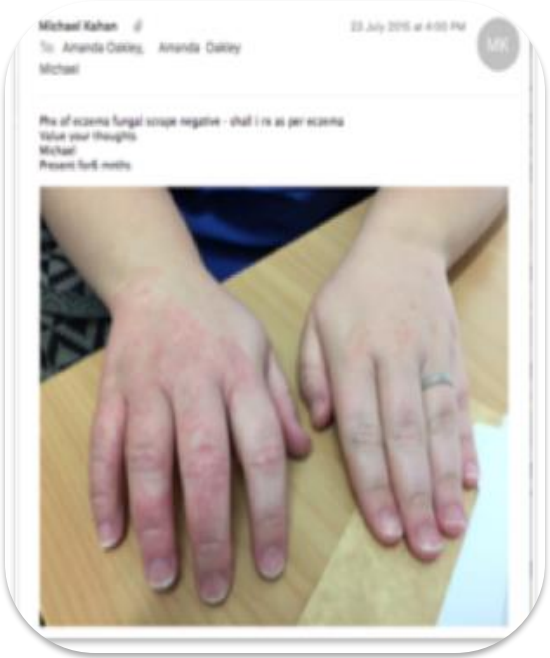
Waikato VLC

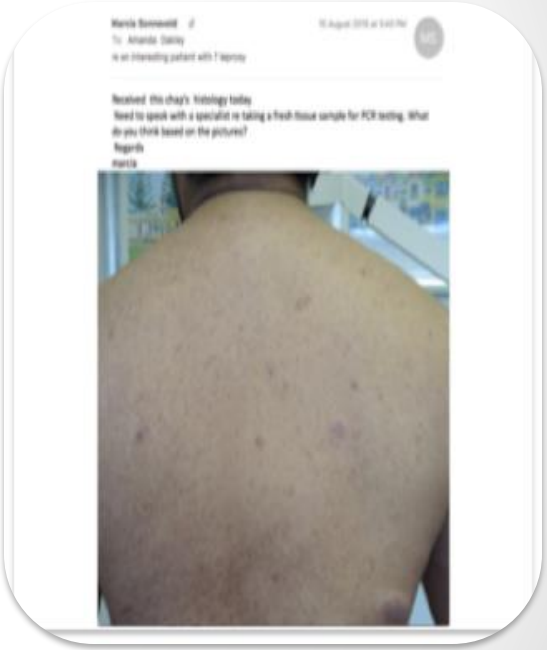
Benefits	Disadvantages

• High quality history, images
• Accurate diagnoses
• Reduces wait time
  ○ Consultation
  ○ Surgery
• Reduces costs
	• Patient travel
	• Communication difficulties
	• Long wait times

Email


Lydia Chan
Dear Amanda


Michael Kahan
To: Amanda Oakley, Amanda Oakley
Michael
Rhs of eczema fungal scrape negative - shall i rx as per eczema
Value your thoughts
Michael
Present for6 months


Received this chap's histology today
Need to speak with a specialist re taking a fresh tissue sample for PCR testing. What
do you think based on the pictures?
Regards

Registrar audit 2016

- 3 month review of 461 calls → 100 emails
  - GPs, hospital doctors
- Photographs adequate in 85%
  - Reduced OP appts by 67%
- Response time ~ 4 hours

Audit identified problems

- Lack of history – eg, phone call several days earlier
- Images could be improved
- Consent status unknown

Audit led to a protocol

- Dermatology registrar receives phone call
- Asks caller for email address
- Sends caller the protocol
- Caller emails with completed template + images
- Registrar forwards to consultant of the day
- They discuss what to do
- Registrar phones or emails the caller with a plan

Image instructions

Images (SEE ATTACHED pictures and consent)

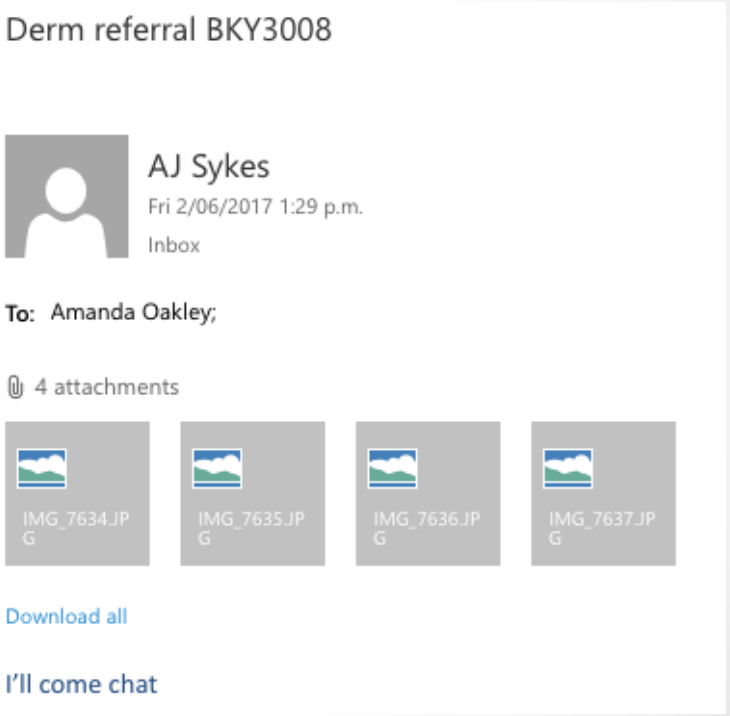
Obtain written consent for clinical purposes, education and publication as a routine. Explain that you are going to email it to Dermatology. Use Medical Photography's blue form — read the front page of the pad of forms. Whenever practical, get a medical photographer to take the photos and send them to dermatology. However, we will accept other photographs taken by health professional, patient or relative.

You can use a digital camera or cell phone but make sure you comply with WDHB image policy.

- ~ 2000 x 1500 px JPG images
- Use flash
- Ensure the background is neutral coloured (eg surgical green, blue or grey), and plain
- Remove extraneous items (jewellery, dirty dressings etc)
- Take several images showing location or distribution shots (upper trunk, 2 legs, entire face etc) and several close-ups to demonstrate morphology (at a distance of 20 cm).
- Add images of both sides of the entire consent form

Case 4: June 2017

- Medical registrar called dermatology registrar
- Emailed completed template + images
- Derm reg + consultant discussed the case



Case 4: June 2017

Skin lesions:

- Date of onset/duration: 1/6/17
- Whether single or multiple: Multiple:
- Location/s on body: Forehead and Right and Left lateral face
- Changes in size, shape, colour: Raised, red, non-blanching
- Any bleeding and/or ulceration: Isolated left groin open lesion (underneath skin flap) - no discharge or cellulitis, no pain or redness around - has now been dressed
- Symptoms: Tender and itchy superficially, and even more tender to palpation
- Any personal and/or family history of skin cancers: Nil
- Other risk factors, ie excessive sun exposure, fair skin, large number of naevi, immunosuppression, outdoor occupation etc.
- Repeat and recent medications: Atorvastatin 40mg, Omeprazole 40mg , Citalopram 40mg, Diltiazem CD 180mg, Aspirin EC 100mg (all medications long term). Given IV Ceftriaxone on admission to cover for sepsis of unclear source (rash may have appeared after ceftriaxone)
- Other medical conditions: IHD with stents (20 years ago), HTN, Dyslipidemia, GORD, Pre-diabetes

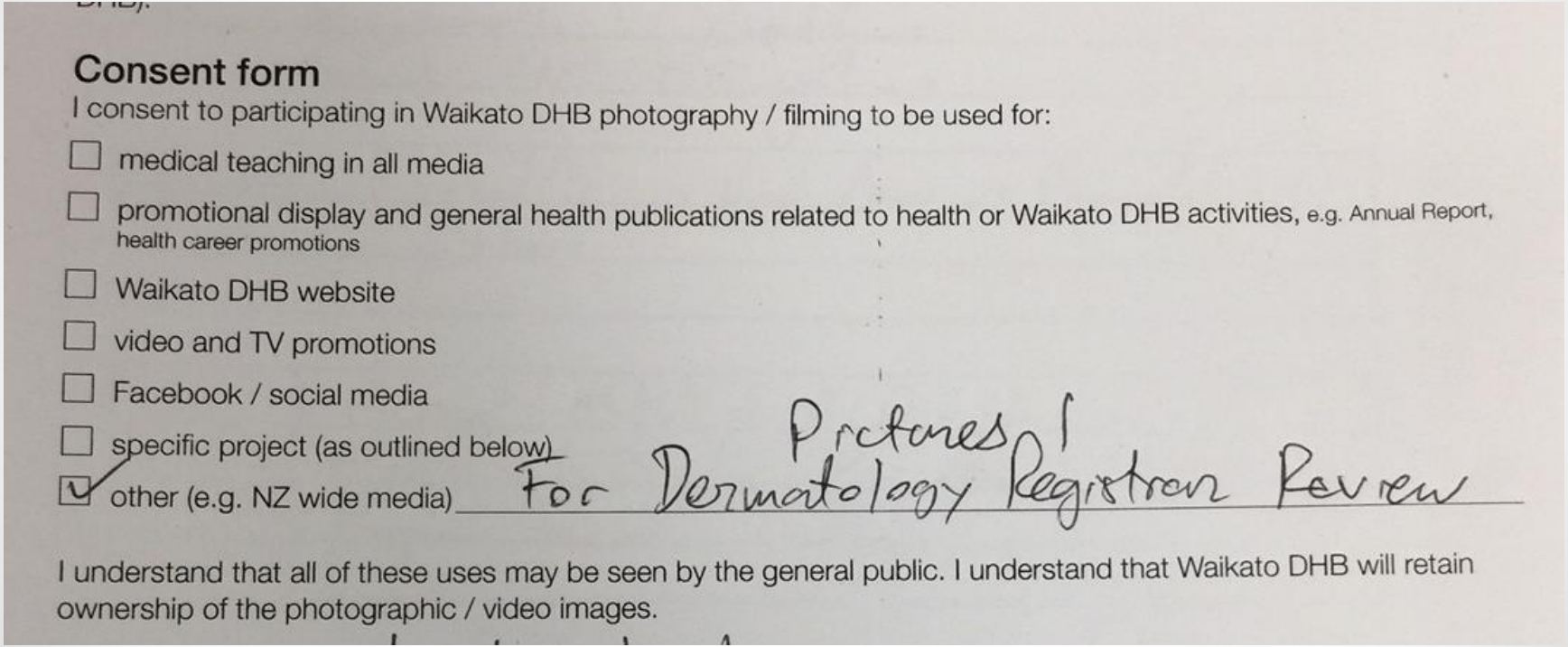
WRONG TEMPLATE

Case 4: June 2017

Inflammatory dermatosis:

- Date of onset/duration: 1/5/17
- Location/s on the body: Face and lateral face (same as above), GP noted bilateral cubital fossa and left thigh rash 2/52 ago. Seen by GP and told it was eczema. No treatment offered, but that rash has now resolved.
- Symptoms: Tender and itchy, increased tenderness to palpation.
- Previous treatment for this condition and its response to medications: None
- Personal and family history of skin disease: None
- Personal and family history of atopy: ?possibly as above? - GP assessment 2/52 ago.
- Relevant medical history (see above)
- Known allergies: NKDA
- Repeat and recent medications (see above)
- Active problem list: 76 year old patient presented to gen med with 5/7 history of increasing weakness, lethargy, generalized muscle aches. Noted to be febrile 38.5C with BP 95/50, HR 105bpm. Given IV Ceftriaxone, however septic screen negative. Viral swabs sent.

Case 4: June 2017



Consent form

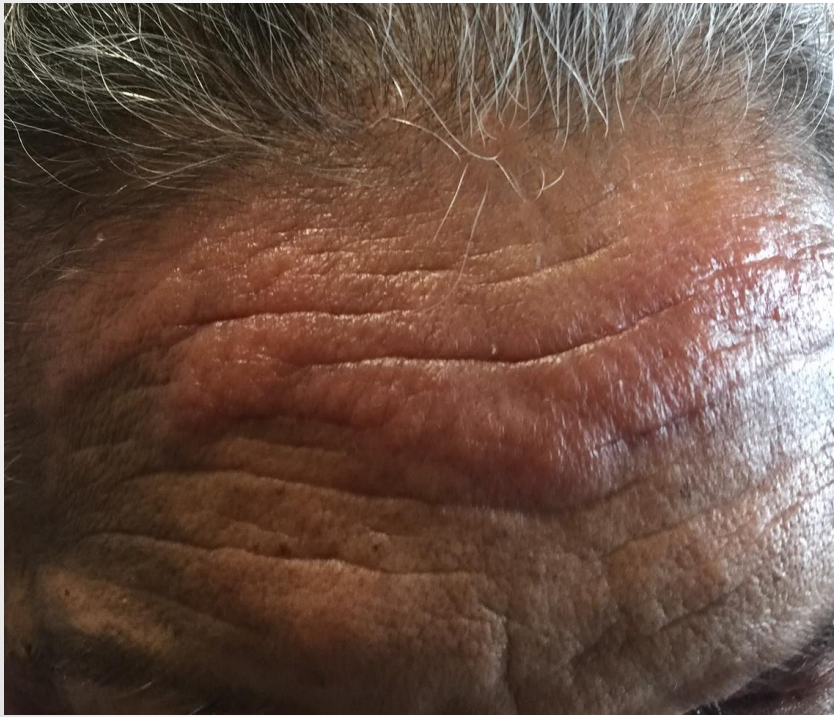
I consent to participating in Waikato DHB photography / filming to be used for:

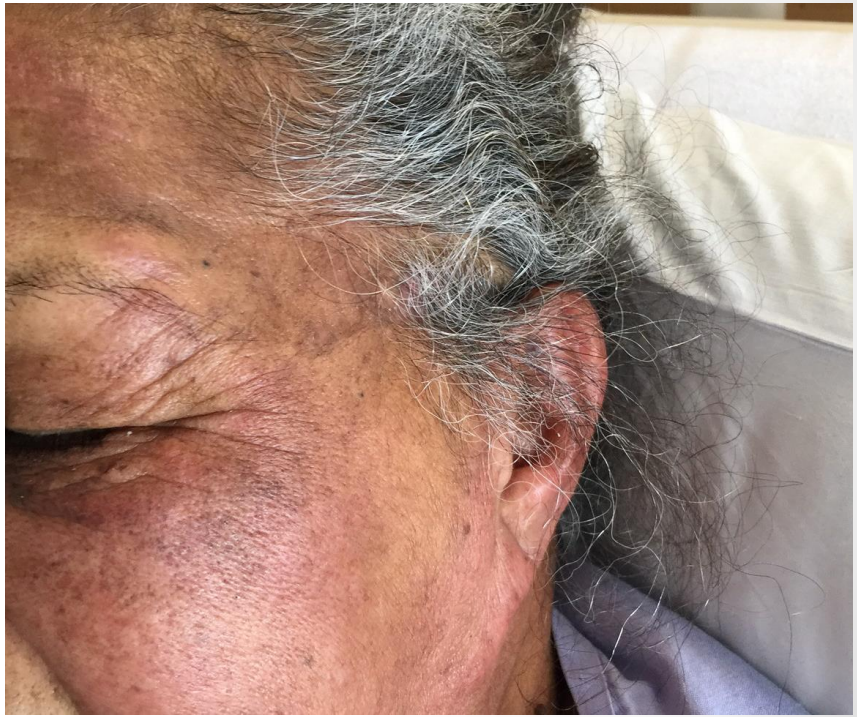
- ☐ medical teaching in all media
- ☐ promotional display and general health publications related to health or Waikato DHB activities, e.g. Annual Report, health career promotions
- ☐ Waikato DHB website
- ☐ video and TV promotions
- ☐ Facebook / social media
- ☐ specific project (as outlined below)
- ☑ other (e.g. NZ wide media) Pictures for Dermatology Registrar Review

I understand that all of these uses may be seen by the general public. I understand that Waikato DHB will retain ownership of the photographic / video images.

WRONG FORM

Case 4: June 2017

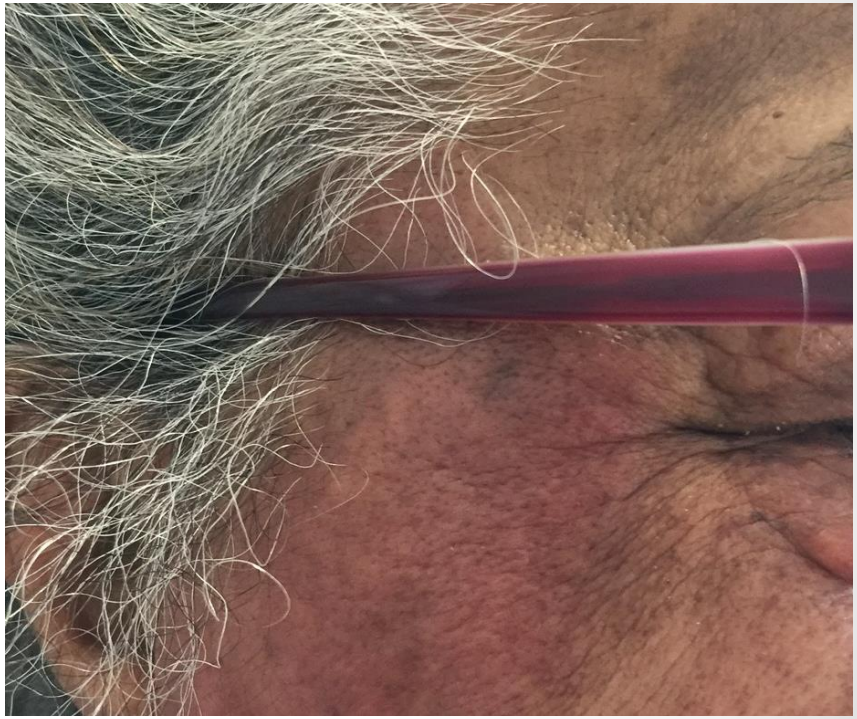




NO FLASH

Case 4: June 2017

- Febrile + tender rash (1 day)
- Ulcer in groin
- (duration unknown)
- Rash cubital fossae
  GP dx eczema
  (2 weeks ago, resolved)
- Diagnosis?



DIDN'T REMOVE GLASSES

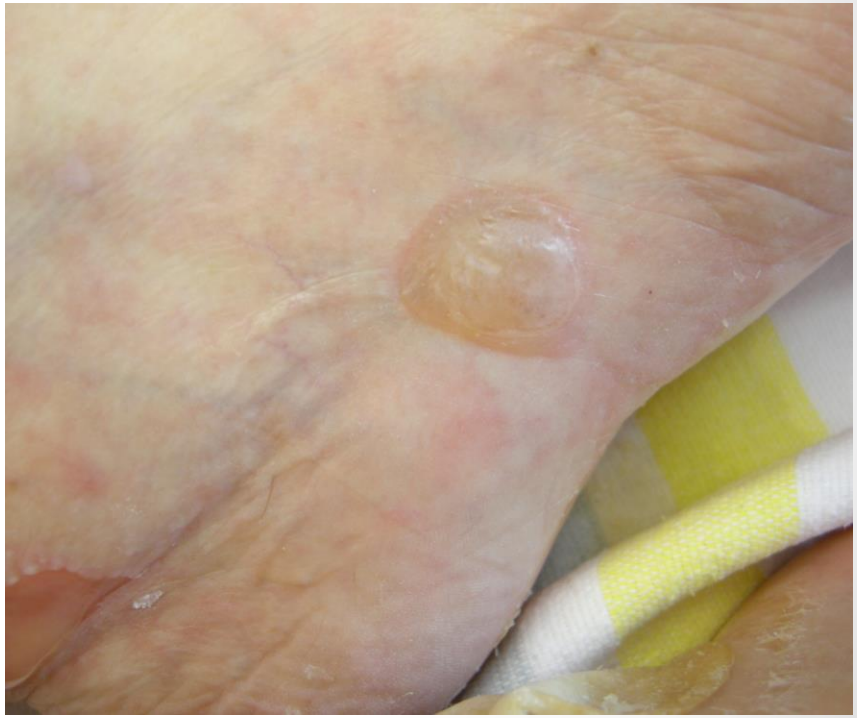
Case 4: June 2017

- We didn't have a clue
- Went to ward
- Patient told us she had bullous pemphigoid for 2 years, tx discontinued 6 months ago
- Blisters noted right forearm + groin
- Bullous pemphigoid diagnosed
- Tx advised

Lessons

For effective teledermatology, we require:

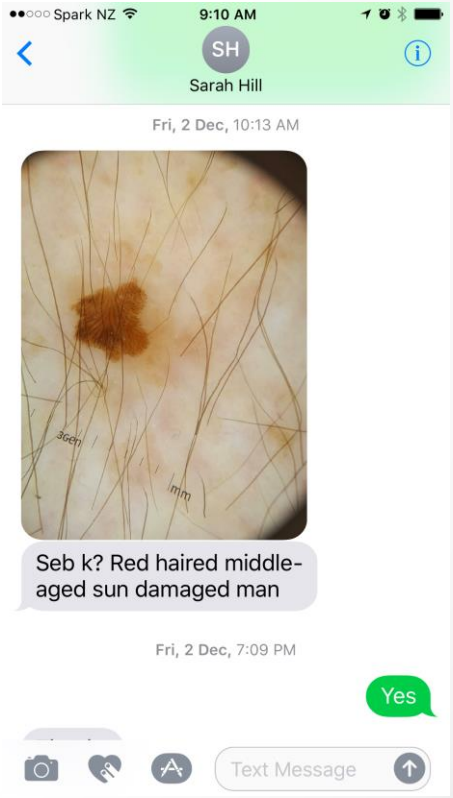
- Excellent history
- Excellent images



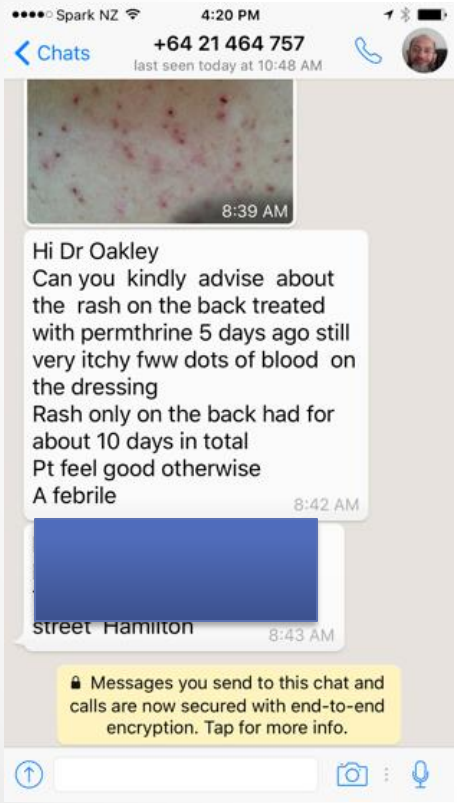
Another patient with similar ulcer, blistering

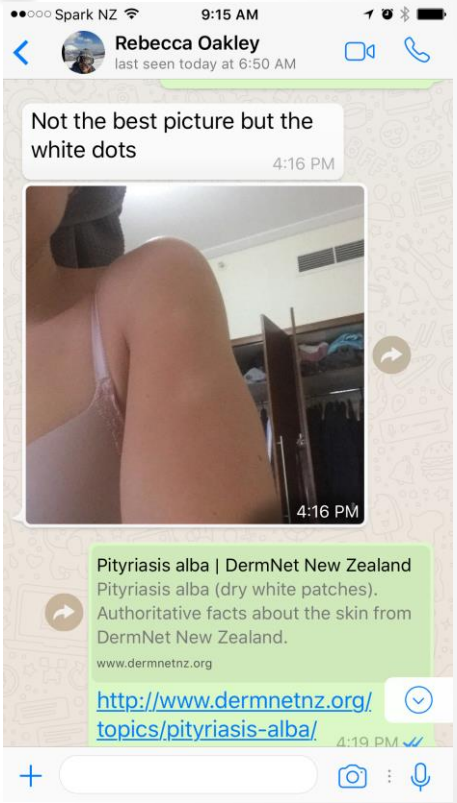
Multimedia messaging service

When urgent care needed



WhatsApp


Spark NZ
4:20 PM
Chats
+64 21 464 757
last seen today at 10:48 AM
8:39 AM
Hi Dr Oakley
Can you kindly advise about the rash on the back treated with permthrine 5 days ago still very itchy fww dots of blood on the dressing
Rash only on the back had for about 10 days in total
Pt feel good otherwise
A febrile
8:42 AM
street Hamilton
8:43 AM
Messages you send to this chat and calls are now secured with end-to-end encryption. Tap for more info.


Spark NZ
9:15 AM
Rebecca Oakley
last seen today at 6:50 AM
Not the best picture but the white dots
4:16 PM
4:16 PM
Pityriasis alba | DermNet New Zealand
Pityriasis alba (dry white patches). Authoritative facts about the skin from DermNet New Zealand.
www.dermnetnz.org
http://www.dermnetnz.org/topics/pityriasis-alba/
4:19 PM

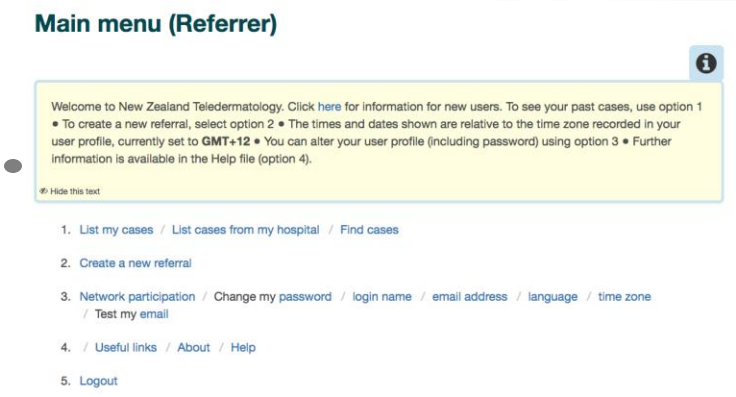
Social media consultation

Benefits	Disadvantages
• Easy • Rapid response • Inexpensive • Reduce referrals	• Unstructured • Undocumented • Intrusive • No holiday relief • May be insecure

Collegium Telemedicus

New Zealand Teledermatology

NZ Teledermatology



www.NZTeledermatology.com
CollegiumTelemedicus.org

New Zealand Teledermatology

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This page

Google™ Custom Search
Search

- What is NZT?
- Aims of NZT

Map of New Zealand

Welcome to New Zealand Teledermatology

News: 10 April 2016

New Zealand Teledermatology is proud to announce that its specialist dermatologists have conducted more than 1000 consultations with 74 referring health practitioners. In March 2016, average response time was under 4 hours. Contact us if you'd like to join our network!

What is New Zealand Teledermatology?

New Zealand Teledermatology provides dermatology services to health providers in New Zealand via a store-and-forward telemedicine network (Collegium Telemedicus).

Established in March 2015, New Zealand Teledermatology contracts with GP organisations, District Health Boards and other healthcare providers in New Zealand that require clinical advice from a dermatologist. For example:

- For diagnosis where this is uncertain
- For triage prior to referral to face-to-face service
- For tips regarding investigations or management

The aims of New Zealand Teledermatology

The aims of New Zealand Teledermatology are:

- To provide a clinical resource for General Practitioners and other health practitioners in New Zealand in support of diagnosis and management of skin diseases in their patients
- To employ dermatologists and, as appropriate, other specialists that are vocationally registered by the Medical Council of New Zealand
- To endeavour to promptly respond to requests for advice from our clients
- To ensure confidentiality, privacy and security of consultations
- To adhere to the recommendations of the Medical Council of New Zealand regarding telemedical activities
- To adhere to other national or regional telehealth guidelines

We invite District Health Boards, PHOs, Integrated Health Centres, Elderly care organisations, institutions, and individual General Practitioners in New Zealand to contact us if they are interested in establishing a teledermatology contract.

Please note, New Zealand Teledermatology does not provide a direct-to-patient consultation service. Please see your own General Practitioner or other healthcare professional to find out how you can access a dermatologist. New Zealand Dermatologists are listed on the New Zealand Dermatological Society's website.
For further information about skin diseases and their treatment, refer to DermNet New Zealand at www.dermnetnz.org.

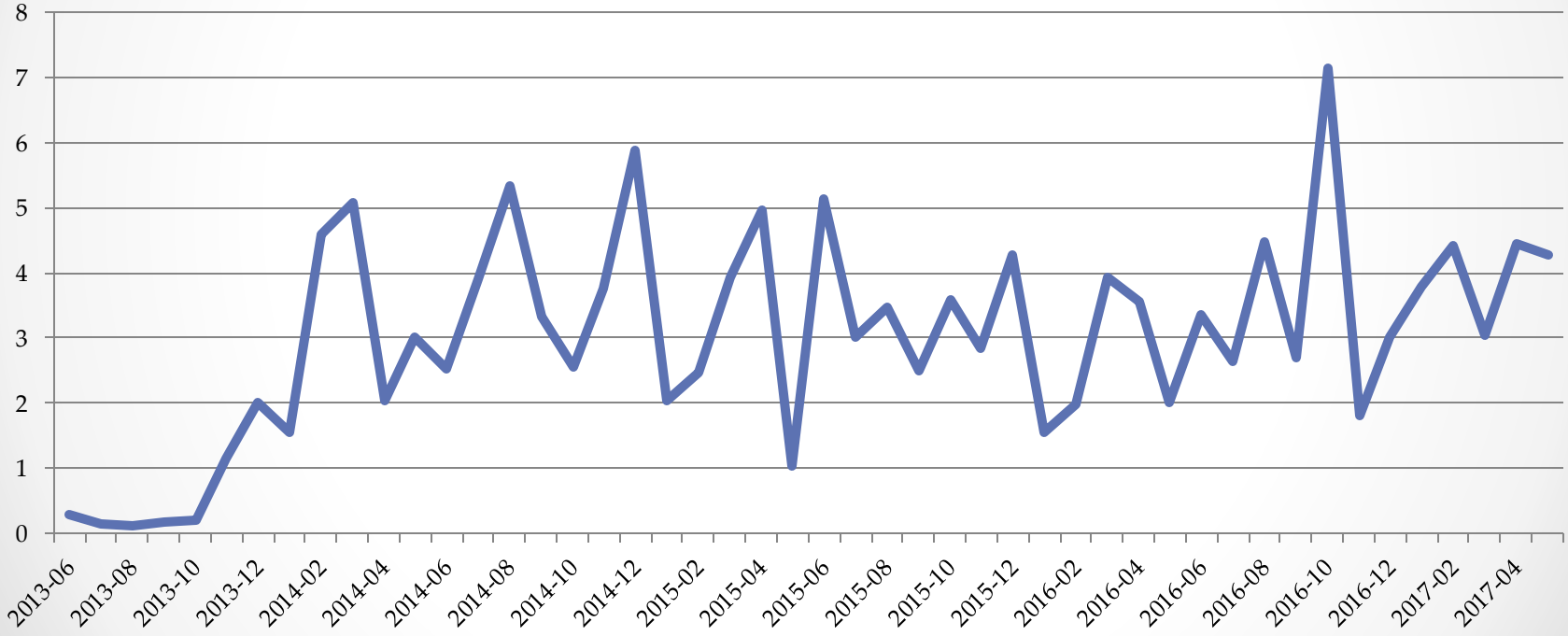
Collegium Telemedicus platform

- Secure browser-based telemedicine system
- Designed for international teleconsultations
- Specialists have holiday option
- Built-in performance monitoring, quality assurance, progress reporting

New Zealand Teledermatology

- 144 active referrers from 92 clinics
  - 1–187 referrals
  - 23 have each referred >20 cases

Time to first response: avg 4 hr

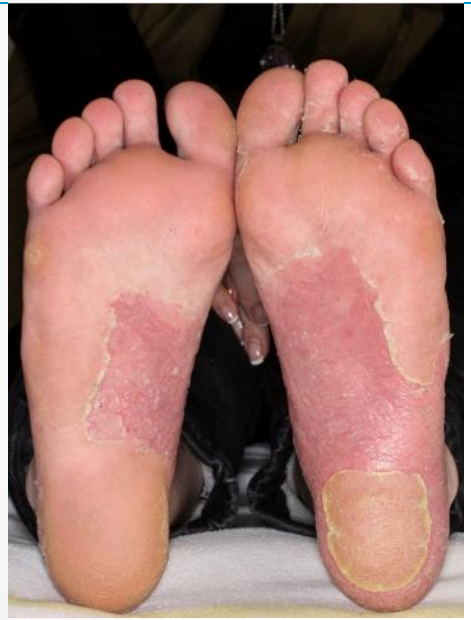


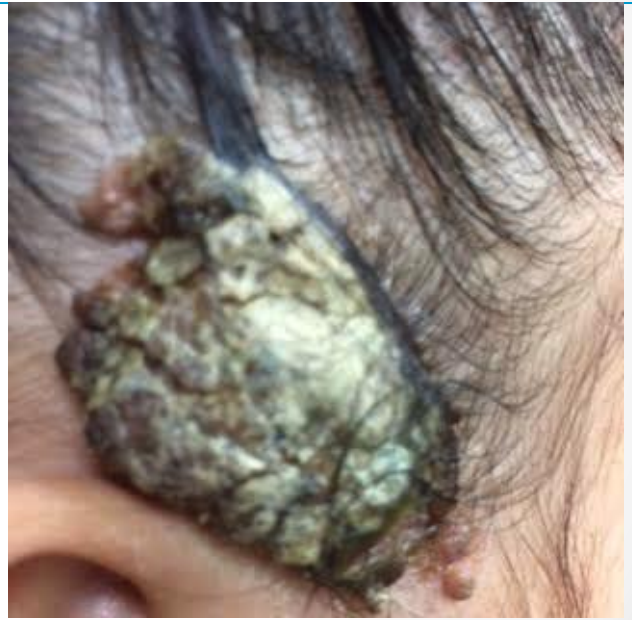
New Zealand Teledermatology

- 2073 cases completed since June 2013 (4 June 2017)
  - 10,535 messages
  - 8,590 attachments
    - Avg size 1.1 MB
    - File storage 9.7 GB

Quality varies …

Medical photographer	GP + cell phone





Case 4: May 2017

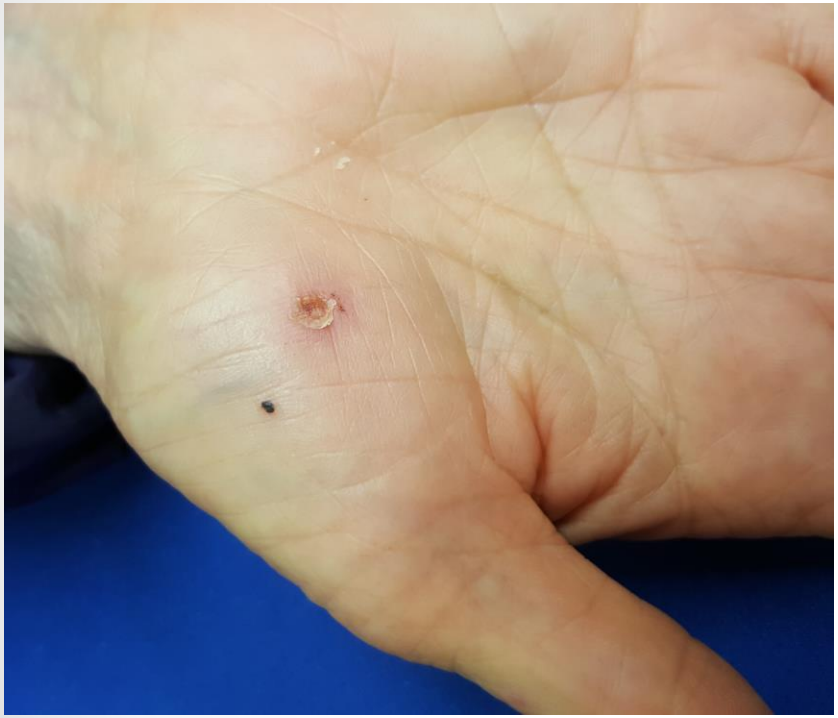
1. CHIEF COMPLAINT
New mole on right hand 2 months

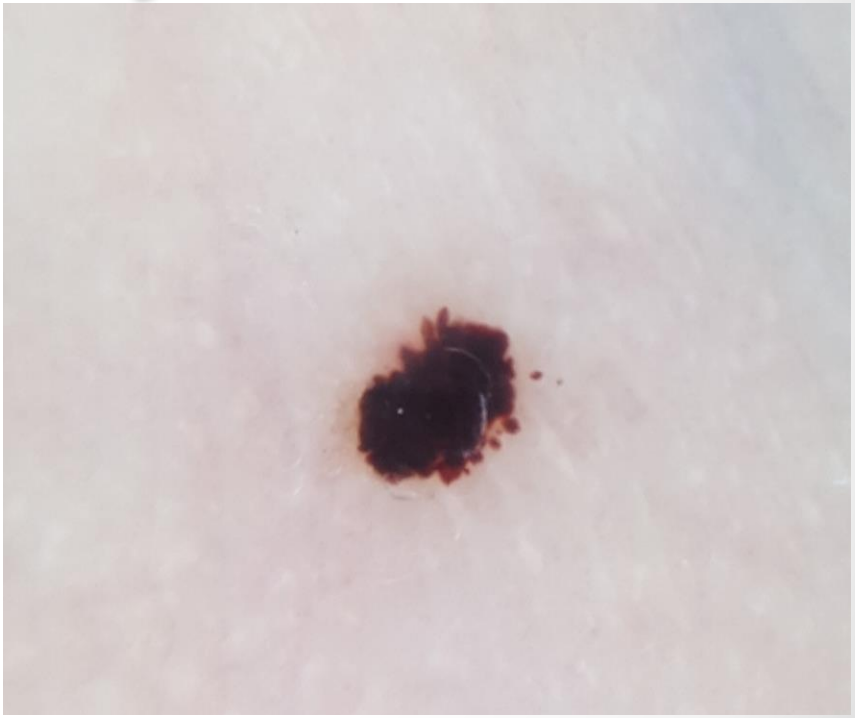
4. EXAMINATI
4a.DISTRIB
hand,
4b.MORPHOLOGY
Dermoscopically: radial lines in places and peripheral dots in others

7. CURRENT MANAGEMENT / TREATMENT
I was wondering if we could do a punch biopsy as an 8mm punch would give 2 to 3 mm margins and ensure I got to the subcutaneous fat

5. WORKING DIAGNOSIS
Melanocytic ? Reed naevus. However I am inclined to excise given new lesion in an adult in her 60s

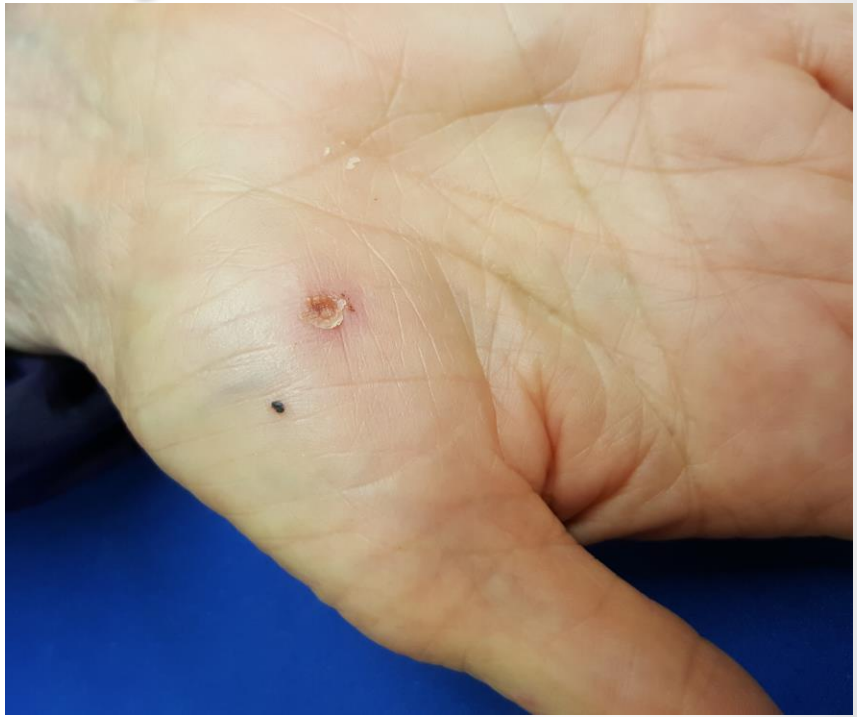
Case 4: May 2017





Case 4: May 2017

- Diagnosis?

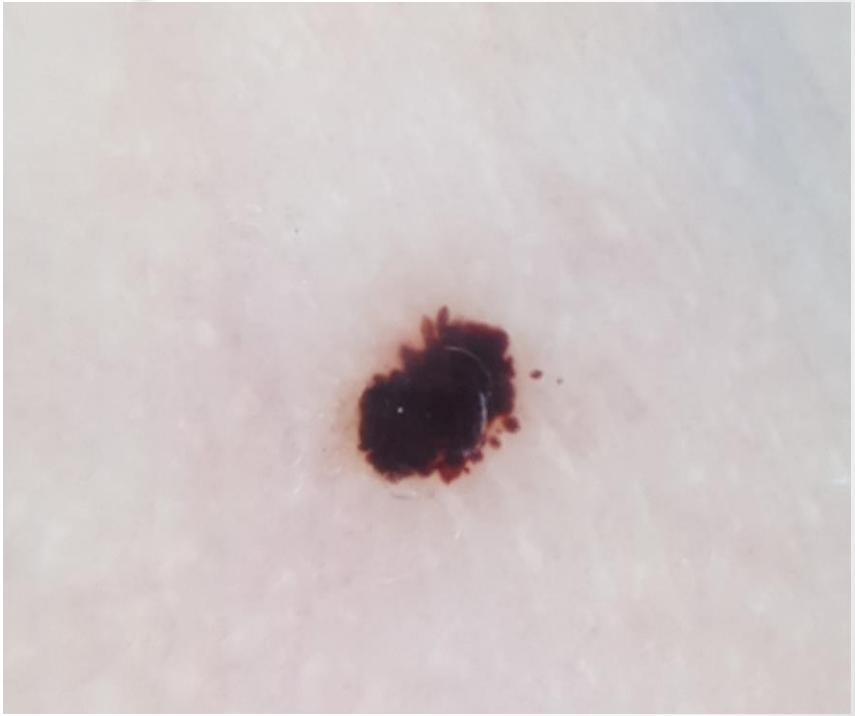


Case 4: May 2017

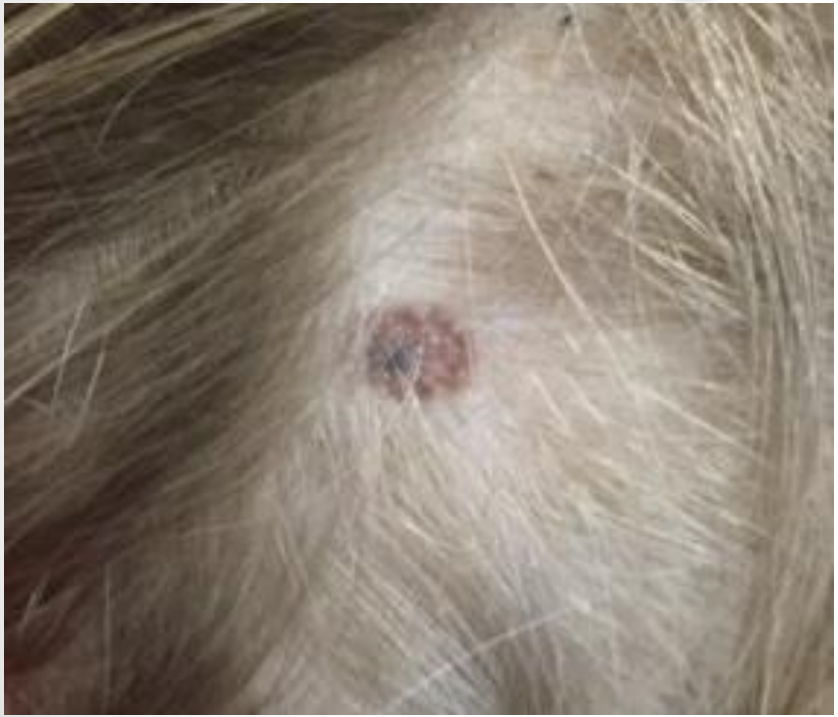
Date: 23-May-2017 18:57:32
From: Dr Amanda Oakley
Message type: Response - to Dr Mark Taylor **Case details**
Text: Hi The little black spot is subcorneal haemorrhage and will be gone in a couple of weeks. I can see why you thought Reed naevus, but it's the wrong colour and quite typical of subcorneal haemorrhage. I suspect the lesion 2 months ago was another similar spot (perhaps the one that is now a scab)

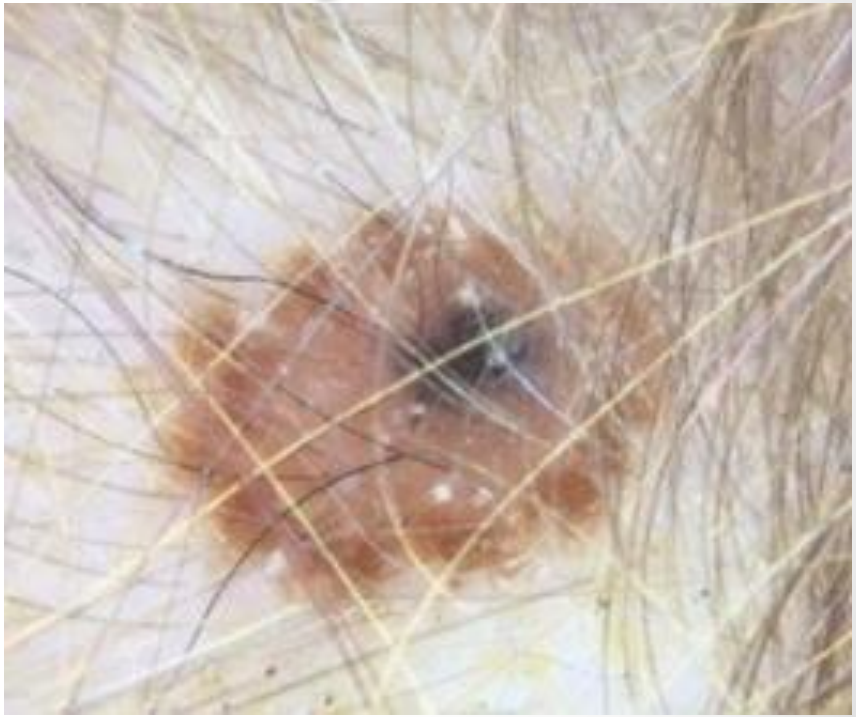
Case 4: May 2017

- Subcorneal haemorrhage
- Saved referral
- Saved biopsy
- Reassured the patient



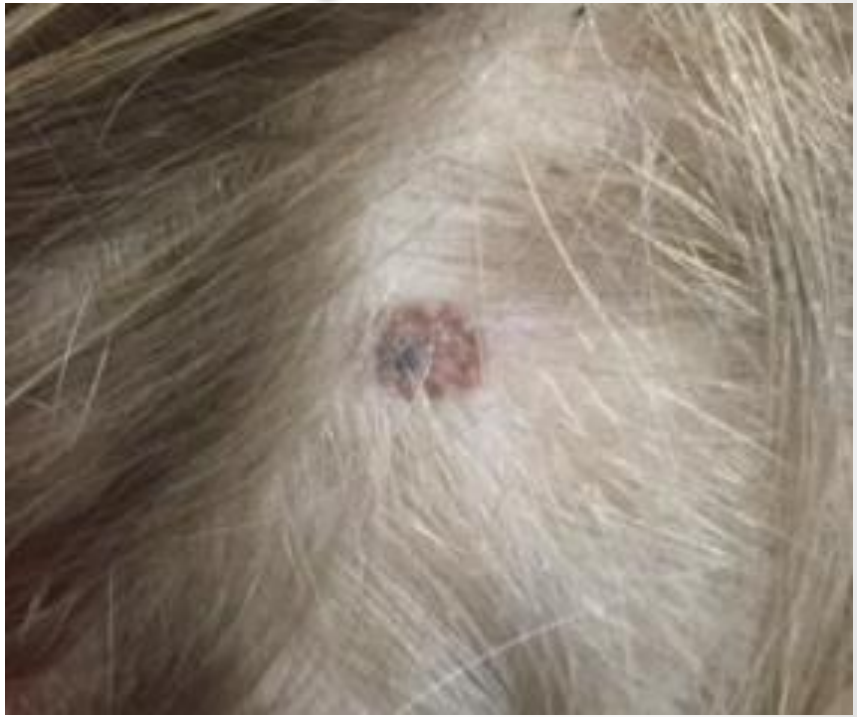
Case 5 age 2: May 2017





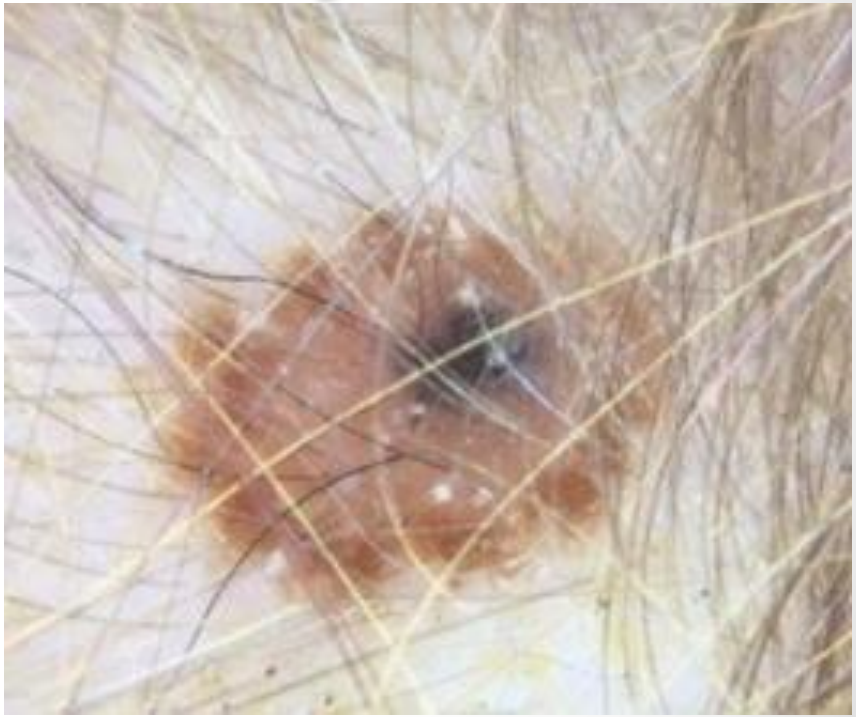
Case 5 age 2: May 2017

- Diagnosis?



Case 5 age 2: May 2017

- Combined naevus
- Congenital or congenital-type (tardive) naevus + blue naevus

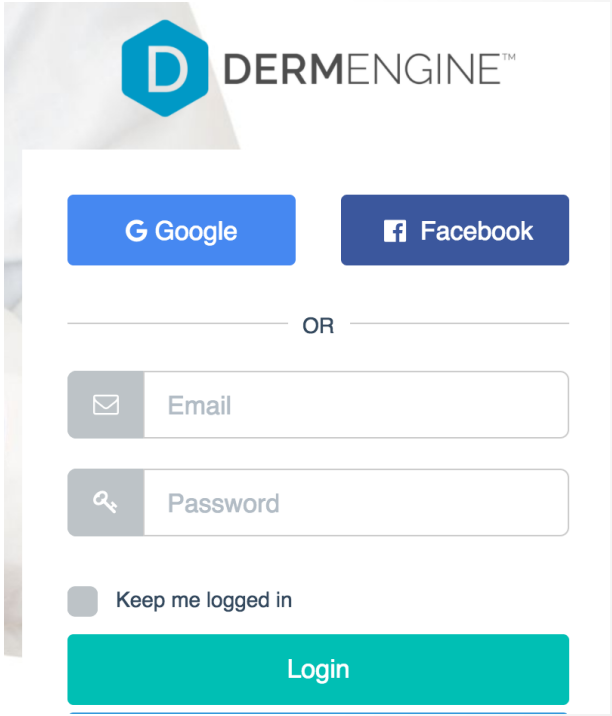


NZ Teledermatology consultations

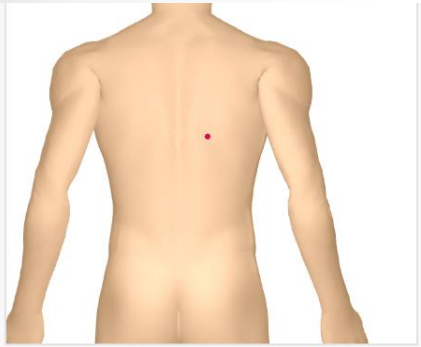
Benefits	Disadvantages
• Fit for purpose • Easy • Rapid response • Inexpensive • Reduce referrals	• To date, minimal funding • Non-compliant • Not part of GP EMR ○ Must copy PDF record • Not part of WDHB EMR

Dermengine.com

- Teledermatoscopy platform in private sector
- Mobile app
- Includes pathology module
- 12 mths free with Molescope 2

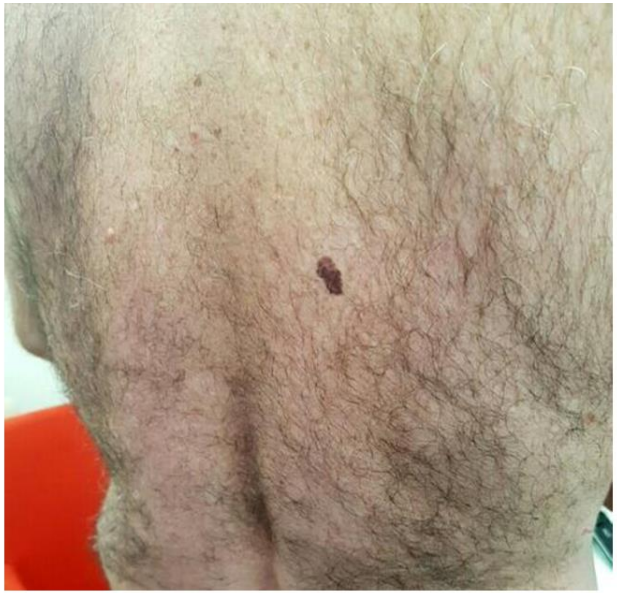


Case 6: 2016

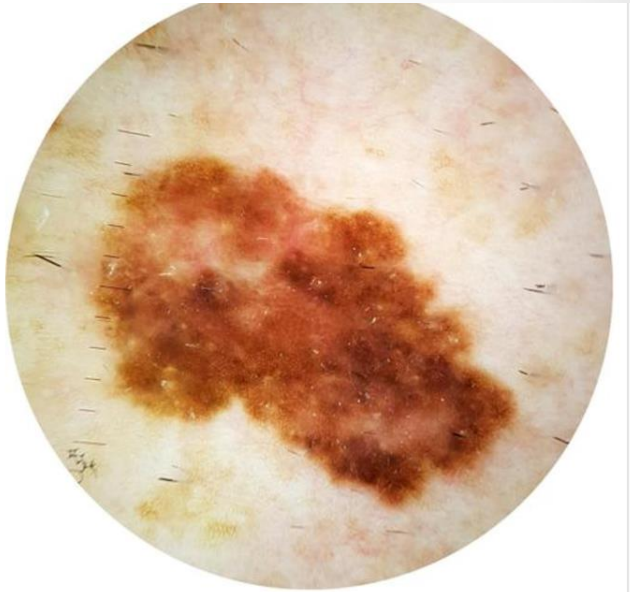


MoleBox

Mole 1 - Back

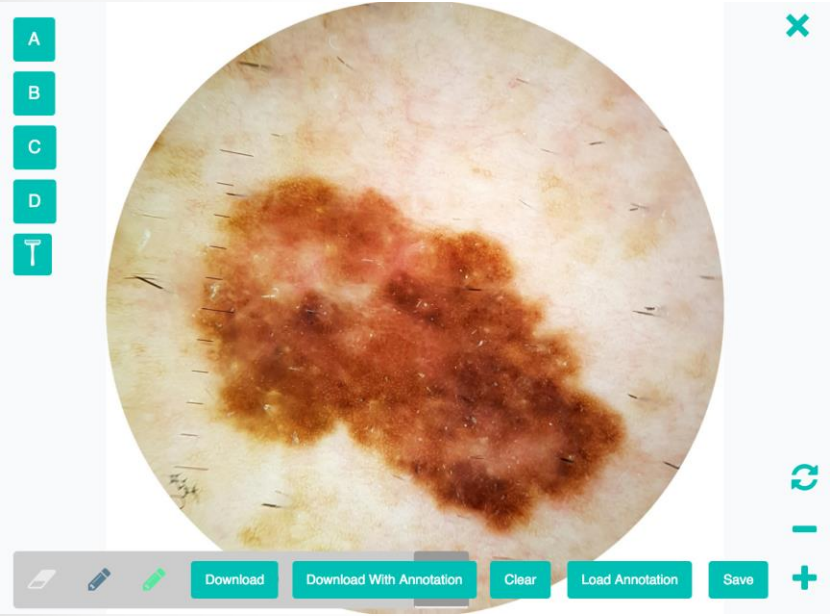


Mole image tags



Mole image tags

Case 6: 2016



Clinical | Pathology

Visit Type

Clinical Diagnosis (In Office) | Tele-consult (eTriage)

Diagnosis (Optional)

Primary Diagnosis

Action (Optional)

Referral

Requires an in-office visit

Biopsy/Excision

Other

Follow Up

Select Interval

Notes

Case 6: 2016

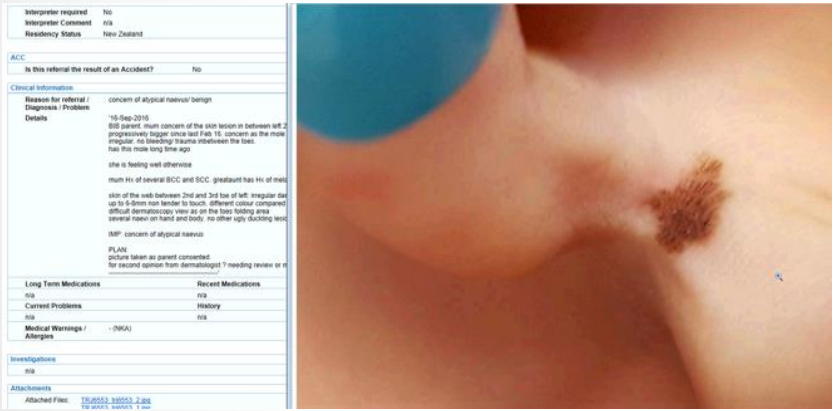
- Diagnosis?

Case 5: 2016

BACK Gross Description. The specimen consists of a skin ellipse 53 x 12 x 10 mm with a central brown patch 12 x 7 mm. The entire lesion has been processed. 4 R 3L Microscopy. Sections show skin with a melanocytic lesion composed of melanocytes with a pale cytoplasm and enlarged, hyperchromatic nuclei. The melanocytes proliferate singly and in nests at the dermoepidermal junction. Single melanocytes are present at all levels of the epidermis in a buckshot scatter. There is no evidence of dermal invasion. The lesion is 2mm from the closest resection margin. MALIGNANT MELANOMA IN SITU, SUPERFICIAL SPREADING TYPE

2016 12 15 07:17 PM

e-Triage



Interpreter required No
Interpreter Comment n/a
Residency Status New Zealand

ACC
Is this referral the result of an Accident? No

Clinical Information
Reason for referral / Diagnosis / Problem: concern of atypical naevus/ benign
Details: '16-Sep-2016
BIB parent. mum concern of the skin lesion in between left 2
progressively bigger since last Feb 16. concern as the mole
irregular. no bleeding/ trauma inbetween the toes.
has this mole long time ago

she is feeling well otherwise

mum Hx of several BCC and SCC. greataunt has Hx of mel

skin of the web between 2nd and 3rd toe of left: irregular da
up to 6-8mm non tender to touch. different colour compared
difficult dermatoscopy view as on the toes/ folding area
several naevi on hand and body. no other ugly duckling lesi

IMP: concern of atypical naevus

PLAN:
picture taken as parent consented
for second opinion from dermatologist ? needing review or r

Long Term Medications: n/a
Recent Medications: n/a
Current Problems: n/a
History: n/a
Medical Warnings / Allergies: - (NKA)

Investigations
n/a

Attachments
Attached Files: TR16553 3W553 2.jpg
TR16553 3W553 1.jpg

Accept | Decline | Other

- ACC related. Please consider a referral to a private provider
- Cannot be seen within current resources and capacity
- Incomplete information provided. Please re-refer with the following:
- Does not meet service criteria at this time. Re-refer if condition deteriorates
- Patient resides outside Waikato DHB area for aligned services. Refer to:
- Referral has been directed to:
- With Advice: Letter being dictated from the service
- (•) With Advice:
- With Advice: Refer to Map of Medicine Regionalised Pathway

Notes (Internal Use Only)

Notes to Referrer

Decline With Advice: Thanks for the image of the naevus between this child's toes. It's an awkward area to photograph. The mole is harmless; it has a uniform parallel furrow pattern. The lesion will persist. If it loses its uniform structure, we'd like to take another look, but there is no specific need for medical monitoring.

RCC Use Only

Patient Details ☐ NZ Residency Query ☐ Out Of Area: ____ DHB

Referral Details ☐ ACC Query

Waikato District Health Board

E-Triage: decline referral

Clinical Information

Reason for referral / Diagnosis / Problem	multiple pigmented lesions
Details	30yo female presented today for mole check O/E multiple small lightly pigmented 2-3mm lesions over back and arms and neck, larger one under left breast she is concerned abt one on her back that has recently become itchy also multiple small pink raised lesions I would appreciate review in virtual lesions clinic pls ? any need biopsy/excision thanks

Notes to Referrer

Decline Insufficient information. The virtual lesion clinic accepts up to 5 lesions for an opinion, but these must be clearly identified by the referring clinician. We do not see patients at the skin clinic for "skin checks" due to capacity problems.

Efficiency gains of eTriage

- Paper triage: 589 referrals June/July 2015
- eTriage: 626 referrals June/July 2016
- Time to triage ⬇ 4.8 to 1.9 working days
- Referrals with images ⬆16 to 59
- eAdvice⬆ x 4

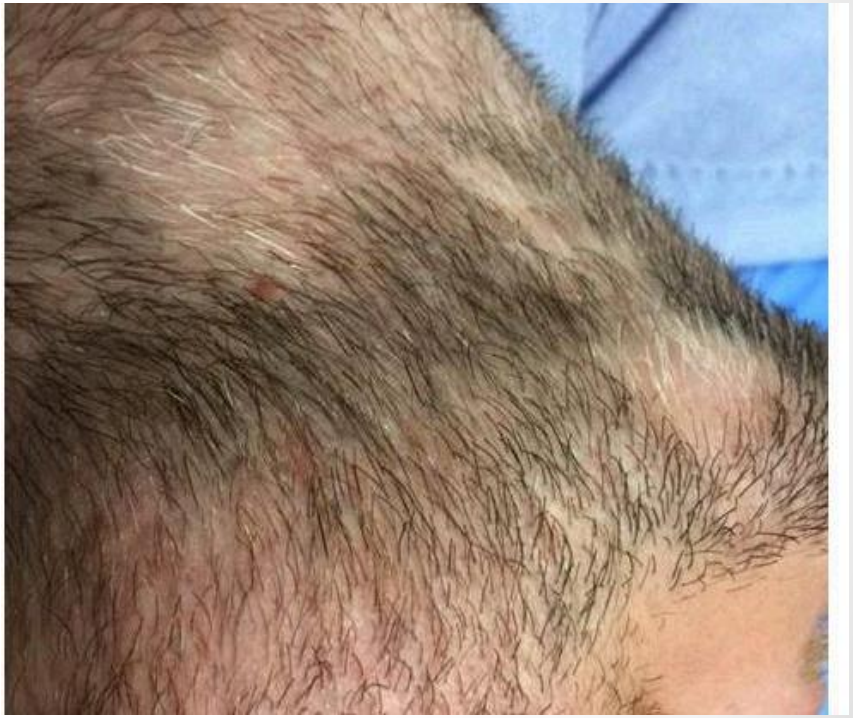
Case 7: June 2017

Clinical Information

Reason for referral / Diagnosis / Problem	?Poliosis
Details	'This 29 y/o patient had a virtual DHB consult with one of the GPs from town as he was complaining fo patch white hair and skin in some areas. He was diagnosed with posible poliosis and was tol to be referred to dermatology. He came in has patchy rounded patches of white /grey hair around beard area, no obvious areas of lighter skin colour. Does this need any management??'

Case 7: June 2017

- Diagnosis?
- Management?



Confirmed Cancer ○ Yes ○ No

High Suspicion of Cancer ○ Yes ○ No

Accept | Decline | Other

- ○ Below capacity threshold
- ○ Insufficient information
- ○ Not eligible for publicly funded care
- ○ Patient current to service
- ○ Patient not medically fit for service
- ◉ Return to referrer advice/guidelines/clinical pathways
- ○ Service not required:
- ○ Transferred to another organisation:
- ○ Transferred to another specialty:

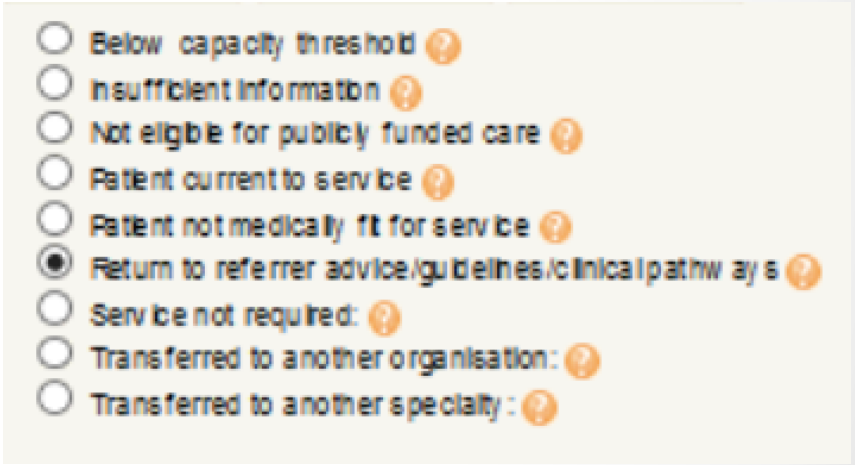
Notes (Internal Use Only)

Notes to Referrer

Decline Return to referrer advice/guidelines/clinical pathways. This patient with poliosis (white hair) may have vitiligo, alopecia areata, or conceivably, a combination. Check the affected areas to see if hair growth is sparse, if so, AA is suspected and check out scalp for other areas. If not, perform full body skin examination for vitiligo (including eyelids, lips, axillae, hands feet). Either way, offer topical steroid eg betamethasone valerate lotion, applied accurately to affected areas daily for 6 weeks then two days per week for 3 months. Dyeing can be done (precaution, hair dye allergy is common). We don't offer appointments

Options to decline referral

- Ministry of Health
- National patient flow project



Triaging Clinician BPAC Decline Reason Definitions v1.0

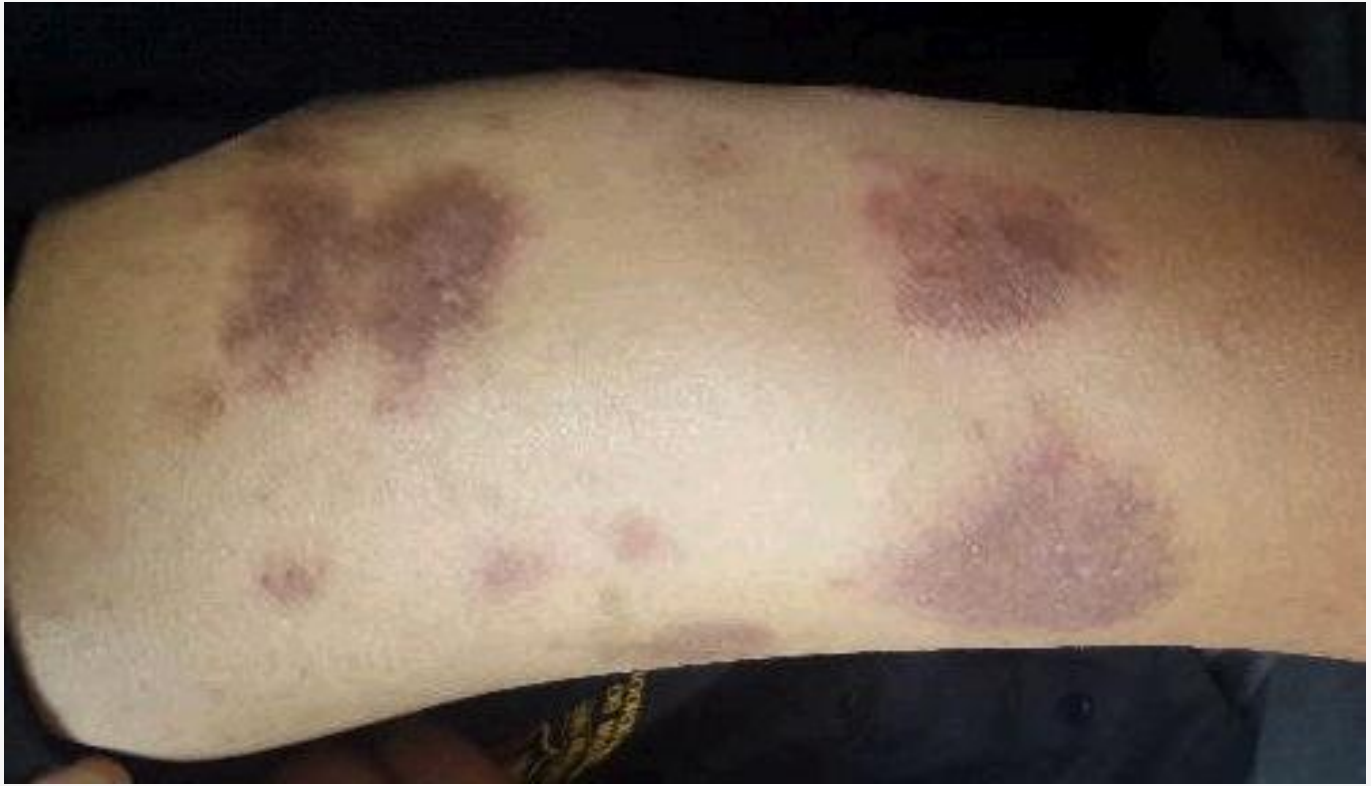
Decline reason	Definitions
Below capacity threshold	The referral is appropriate and the patient would benefit from the Service but the referral is below the Waikato DHB capacity threshold
Insufficient information	The triaging clinician determines that there is insufficient information available to prioritise the referral, for example, a diagnostic test is required prior to a decision and it is expected that the referrer will arrange this. A new referral will be generated if and when additional information is provided
Not eligible for publicly funded care	It is determined at the point of prioritisation that the patient is not eligible for publicly funded care and Waikato DHB elects not to provide the requested Service
Patient current to service	The triaging clinician determines that the patient is already under the care of the service being referred to i.e. referral is for information only or an update of the patient's status
Patient not medically fit	The referral is appropriate and the patient would benefit from the Service but the patient is not medically fit for the referred for Service e.g. hip replacement referral for patient with severe COPD
Return to referrer advice/guidelines/clinical pathways	The triaging clinician determines that they do not need to see the patient and replies to the referrer with advice on managing the patient, which may include reference to guidelines such as Map of Medicine
Service not required - Below clinical threshold	The referral is appropriate and the patient would benefit from the Service but the referral is below the WDHB clinical threshold for treatment
Service not required - Can be offered an equivalent or more suitable service in Primary Care	The triaging clinician determines that the patient is likely to be managed more appropriately by an equivalent or more suitable service in Primary Care
Service not required - Does not require referred services input	The triaging clinician determines that the patient does not require any input from the service they have been referred to
Service not required - Not suitable for referred service	The triaging clinician determines that the patient is not suitable to be managed by the service they have been referred to
Service not required - Patient circumstances not appropriate for referred service	The triaging clinician determines that the patient's circumstances mean that they are not appropriate for input from the service they have been referred to
Service not required - Patient unlikely to benefit from referred service	The triaging clinician determines that the patient is unlikely to benefit from input from the service they have been referred to
Transferred to another organisation	Patient is domiciled in the catchment area of another DHB or requires input from an external service (e.g. Ministry of Education) and will not be seen by Waikato DHB
Transferred to another specialty	Redirect to an internal WDHB service e.g. incorrect service selected, more appropriate service available

The triaging clinician determines that they do not need to see the patient and replies to the referrer with advice on managing the patient, which may include reference to guidelines such as Map of Medicine

mapofmedicine®

A case of discoid eczema

Clinical Information	
Reason for referral / Diagnosis / Problem	Discoid eczema
Details	"He appears to have quite bad discoid eczema and it has not responded well to treatment with topical steroids. We have attached photographs to this Rash has not cleared up since then. Improved with ABs and ointment but never clears. Still very itchy. New spots are still coming up. Start off as a small spot and and end up being 2-3cm in diameter. No fevers. No one else at home has the rash."



A case of psoriasis

Triaging Clinician BPAC Decline Reason Definitions v1.0

Decline reason	Definitions
Below capacity threshold	The referral is appropriate and the patient would benefit from the Service but the referral is below the Waikato DHB capacity threshold
Insufficient information	The triaging clinician determines that there is insufficient information available to prioritise the referral, for example, a diagnostic test is required prior to a decision and it is expected that the referrer will arrange this. A new referral will be generated if and when additional information is provided
Not eligible for publicly funded care	It is determined at the point of prioritisation that the patient is not eligible for publicly funded care and Waikato DHB elects not to provide the requested Service
	The triaging clinician determines that the patient is already
circumstances not appropriate for referred service	circumstances mean that they are not appropriate for input from the service they have been referred to
Service not required - Patient unlikely to benefit from referred service	The triaging clinician determines that the patient is unlikely to benefit from input from the service they have been referred to
Transferred to another organisation	Patient is domiciled in the catchment area of another DHB or requires input from an external service (e.g. Ministry of Education) and will not be seen by Waikato DHB
Transferred to another specialty	Redirect to an internal WDHB service e.g. incorrect service selected, more appropriate service available

Replied: 04-Jun-2017 10:08 Decline Below capacitythreshold. Yes, this is discoid eczema. At the moment, not exudative so fucloxacillin not required. Betamethasone valerate is suitable potency. When lesions dryuse ointment, when oozy use cream. Provide info http://www.dermnetnz.org/topics/discoid-eczema/. Get patient to use liberallybut preciselyon the plaques dailyx2 weeks then twice weekly. As he's alreadydone this, also please prescribe prednisone 40 mg dailyuntil clear (likely2 weeks) then half dose for same duration progressively. Encourage emollient++ when itchyor skin is dry. If has breakthrough extensive disease, refer back for phototherapyor second line systemic therapy. Amanda Oakley

Psoriasis: no images. Advice + FSA.

Accept Priority 3. We are short of appointments. Often strep-related psoriasis settles on its own. If it does, please cancel appointment. We will arrange phototherapy if it remains extensive when we see her. In the mean time, ensure she applies Dawivebetonlyto plaques and no more than 30 g per week for 2 weeks then 30 g for 2 further weeks then stop ??? ultrapotent topical steroid is unsuitable for widespread small plaques or guttate psoriasis and an emollient would be more suitable.

eTriage request for advice

Benefits

GP

- Usual system
- PMS populates fields
- Easy

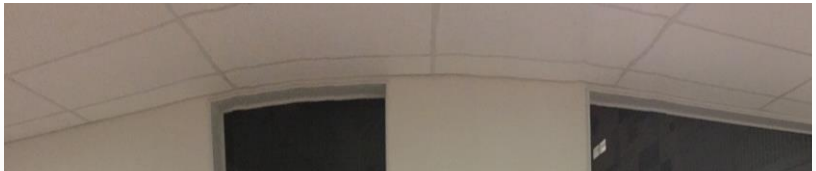
Dermatologist

- Referral centre delay (2–4 days)
- Record retained in CWS
- Reduces FSAs

Disadvantages

- Triage takes longer
- Not job-sized
- Referrals may not contain appropriate information
- Images are variable in number and quality

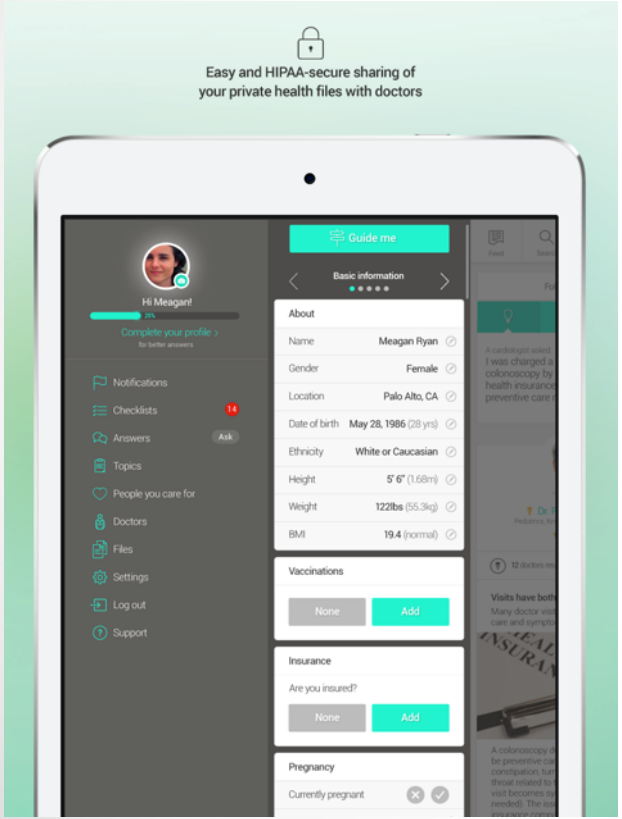

Virtual DHB –
the FREE app that puts your health in your hands
Find out more
The Virtual
powered by
HealthTap
Virtual DHB: healthcare wherever you are

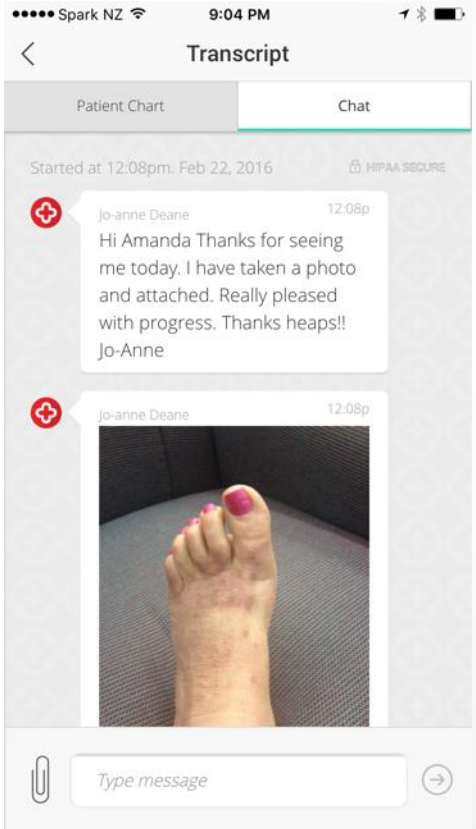


Virtual DHB® via HealthTap®

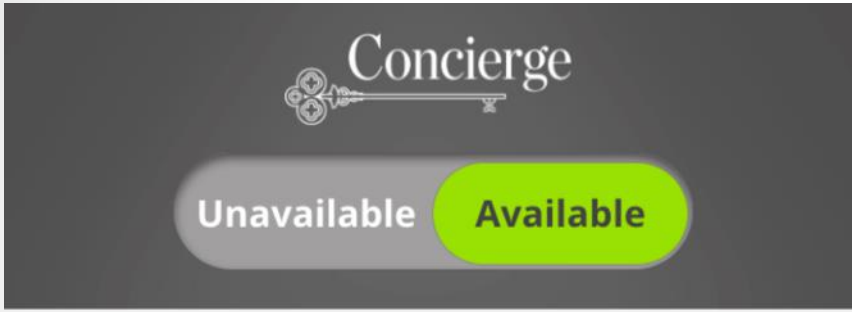
Actions	Platforms
• Banked Q&A • Active Q&A • In-box consultations • Live consultations • Curb-side consultations • Peer review • Grand rounds	• Desktop • Tablet • Smartphone • Integrated with EHR

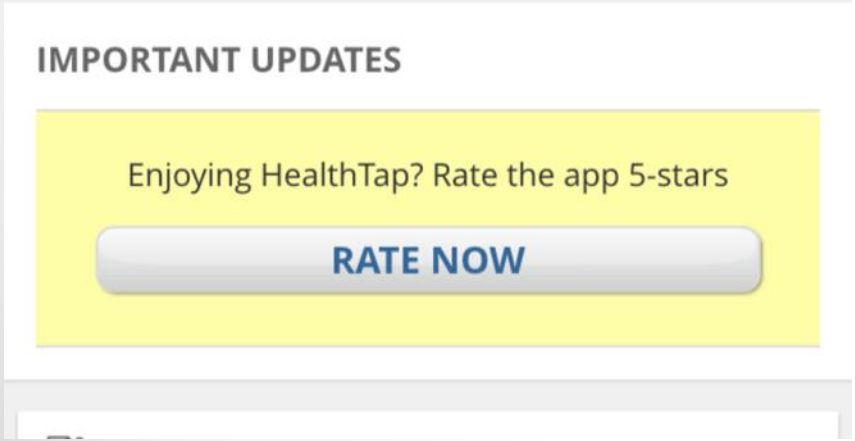
Virtual DHB in-box consult

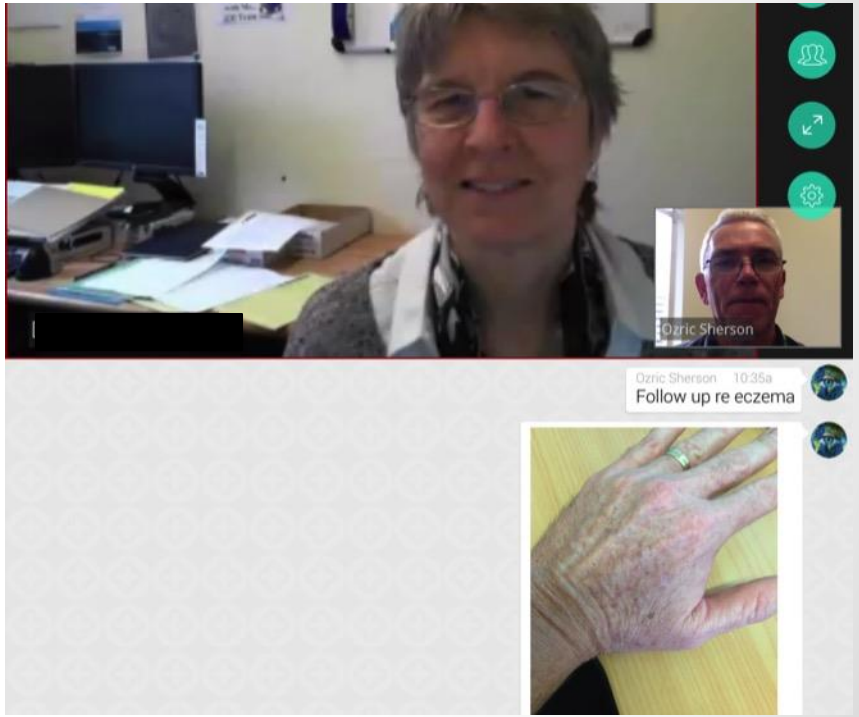




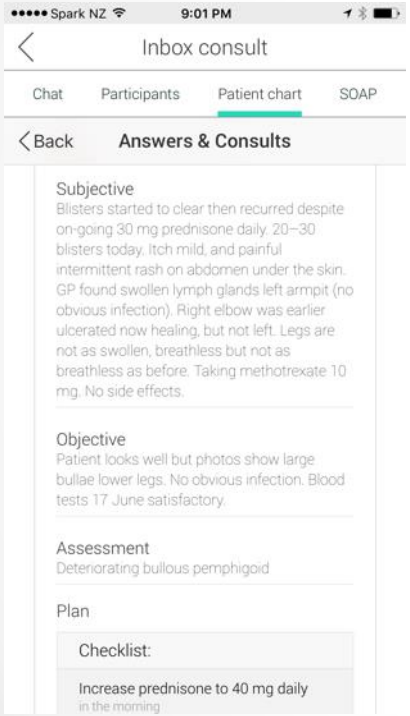
Virtual DHB live consult

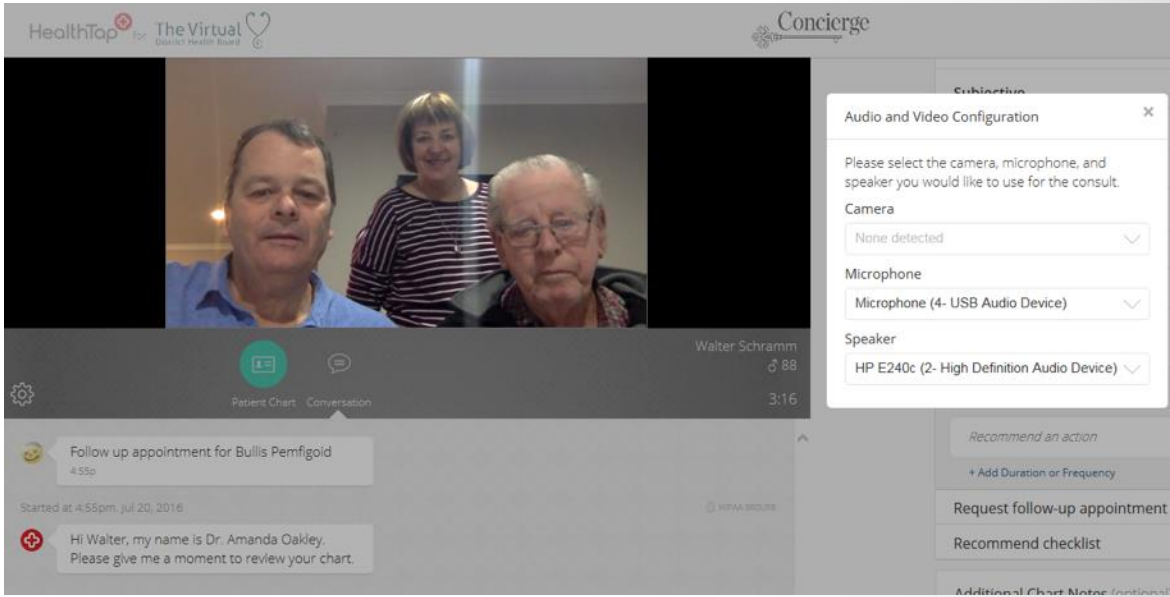




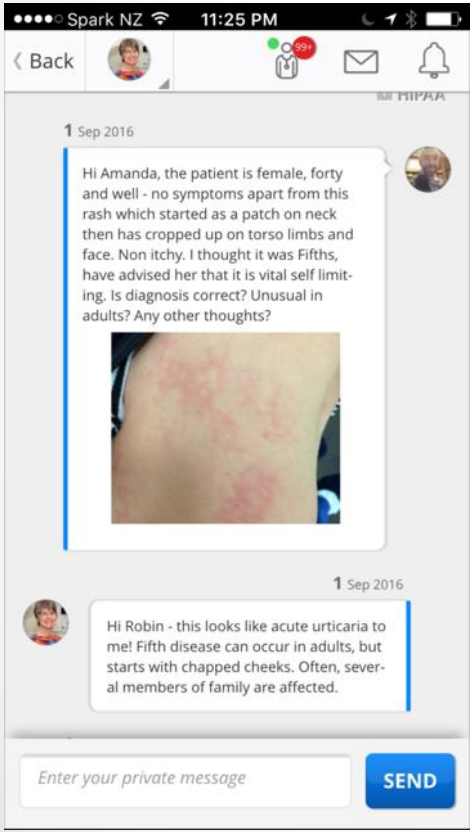


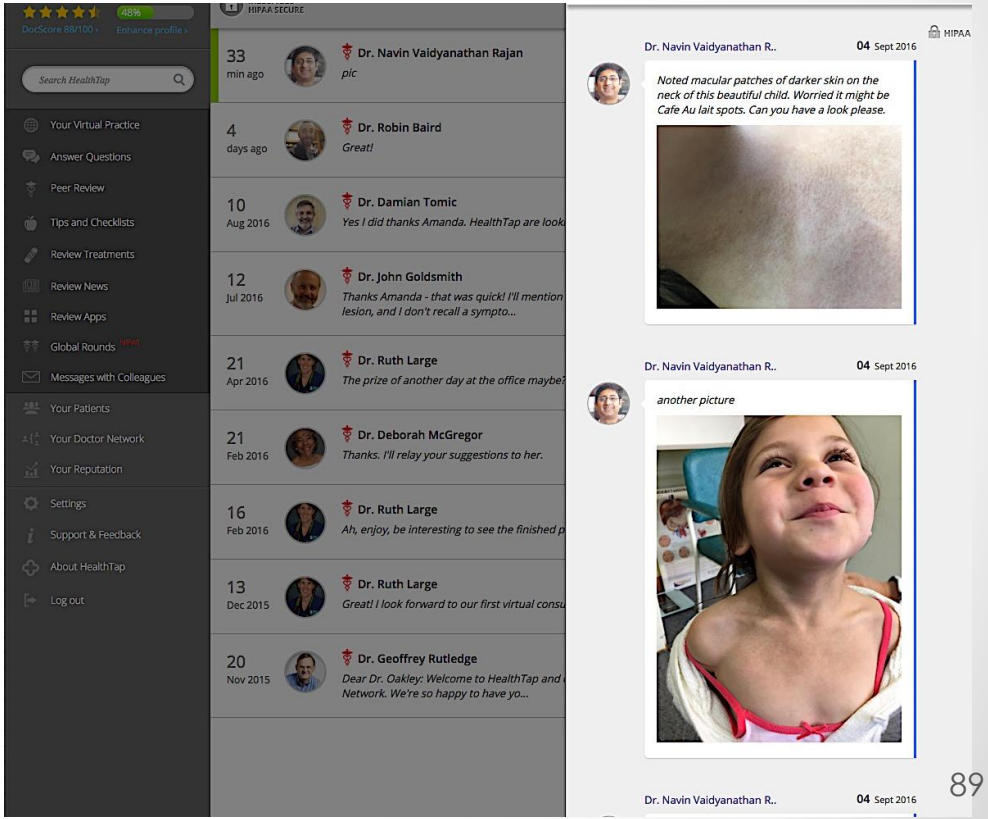
Virtual DHB live consult





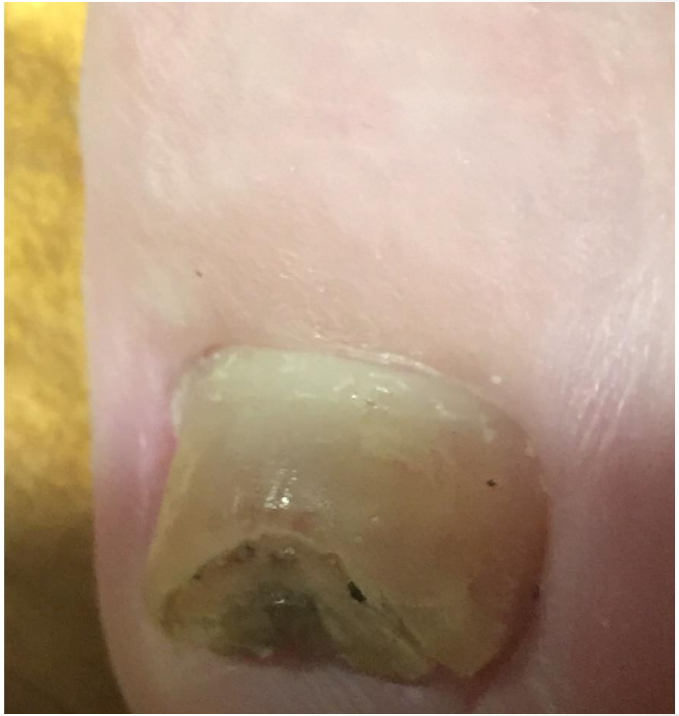
Virtual DHB curbside consult





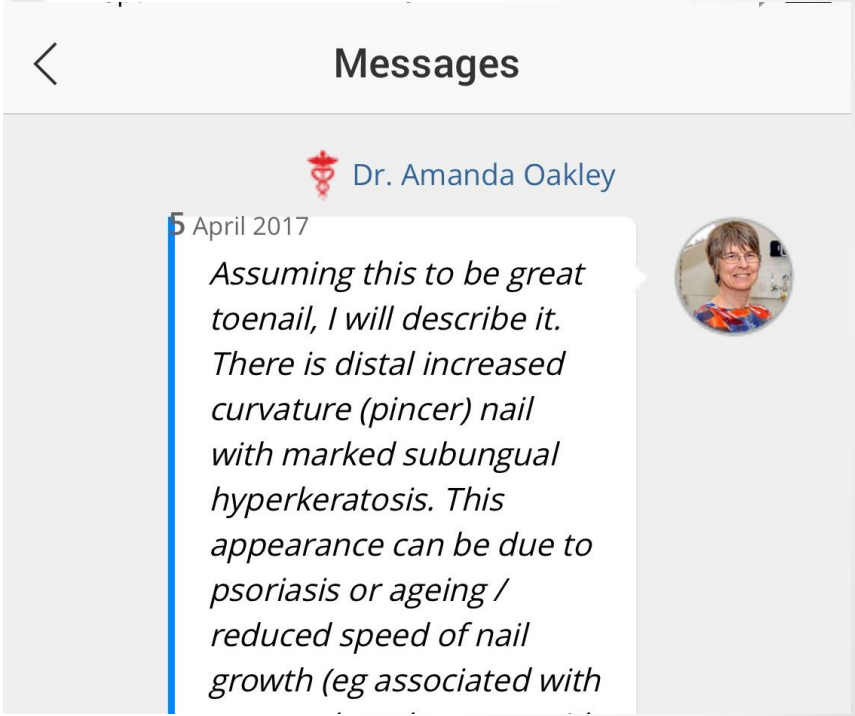
Case 8: April 2017

- Possible SLE
- Nail abnormal 2 yrs
- Fungal clippings neg
- Diagnosis?



Case 8: April 2017

- Psoriasis or ageing
- No tx



Virtual DHB: benefits over v/c

- Convenient for doctor and patient
- Scheduling easier
- No "special" equipment
- Easy to attach images
- Permanent record of consultation – SOAP note
  - Online
  - Clinical Work Station
  - Soon on GP's record too

Virtual DHB: benefits over NZT

- Direct to doctor or direct to patient
- Designed for mobile
- Documentation
  - Clinical Work Station
  - Soon on GP's record too

Virtual DHB - disadvantages

- No built-in audit / case follow-up
- More difficult to conduct research

Future of teledermatology

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Maturing technology & systems

- Dermatology as usual
- Consolidation of standards and protocols
- Establishment of funding streams
- Increasingly mobile
- Artificial intelligence --- intelligent assistance