



Clinical Partnership
SPECIALIST COMMUNITY CARE

Tele-dermatology

Dr Javed Mohungoo
Consultant Dermatologist
MBChB (Leeds)
FRCP (London)



Challenges in Dermatology

Challenge	Impact	Ideas	Actions
<p>Most services are under recruited: especially for clinical positions (doctors, consultants, nurses and HCAs). There are shortages with 100s of vacancies across the country for Dermatology specialists</p>	<ul style="list-style-type: none">• Services cannot see as many patients• Longer wait times for appointments for patients• High consultant/Agency fee's to cover gaps in service	<ul style="list-style-type: none">• Teledermatology allows us to use Dermatologists flexibly• It allows triages and management of referrals• It can lead to a reduction of more than 60-80% of referrals	<ul style="list-style-type: none">• Explore models• Involvement of local CCGs• Involvement of local clinical staff

Exploring Teledermatology



Aims of a Teledermatology service

- Provide an innovative approach to dermatology care
 - Ensure as many people as possible are treated in the right setting through the provision of prompt specialist advice and treatment options.
 - Prevent avoidable and inappropriate referrals to (face to face) dermatology.
 - Improve access to dermatology expertise for patients
 - Improve the quality of triage so that patients can see the correct specialist at the first appointment if a face to face appoint is required.
 - Reducing the time taken for patients to access specialist services.
 - Facilitate GP education through the provision of detailed diagnostic reports,.
 - Primary care clinicians can quickly and easily obtain a second opinion when required.
 - A specialist diagnosis and management plan for the great majority of patients is available within 48 hours, faster than would otherwise have been the case. The system has been proven to act as a safety net for suspicious lesions, with reporting consultants often identifying melanomas and small-cell carcinomas. In such instances, tele-dermatology facilitates the crucial fast tracking of patients to the cancer 2-week waiting list
-

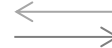
How does Teledermatology work?



1. Patient need



2. Primary Care



3. Telederm Triage Hub



4. Appropriate care setting

Steps

- Patient looks for self-help information online
- Patient attends GP appointment

- Patient referred by GP / nurse for Telederm using web camera and MeddApp software

- Telederm consultants review images and send back diagnosis within 48 hours along with any care notes for GP

- Patient sent a letter with results and either given all clear, given care advice or referred to Derm service in community or secondary care

Technology requirements

- Good website with self help information

- Quality camera/ dermatoscope that is CE marked and meets minimum standards for picture quality.

- Follow up letter to be produced and sent to patient advising them of next steps

Suitable conditions for Teledermatology?

Conditions suitable for teledermatology referral

- Benign skin lesions, for diagnosis, to exclude possibility of malignancy, or for advice as to whether treatment is available.
- Potentially malignant lesions, includes BCC but others only if low suspicion of malignancy (can be triaged directly to surgical treatment if necessary)
- Rashes with unknown diagnosis, or to confirm suspected diagnosis
- Rashes with known or strongly suspected diagnosis, where management advice is sought
- Any skin lesion
- Any rash

Conditions not suitable for teledermatology referral

- 2ww
- Genital rashes

Meet John...

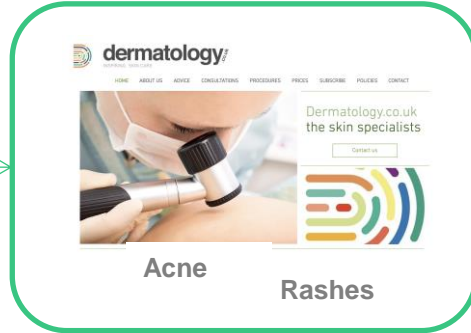


...a 43 year old male living in Epworth. He has always had good health. He has recently found a rash on his arm that is red, itchy and bumpy under the skin..

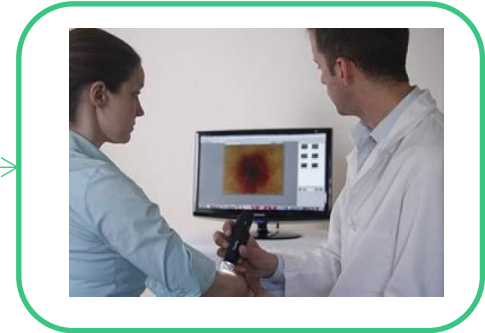
John's care journey A



"I have started getting a strange rash on my arms...I'm going to google it."



"I google 'bumpy rash on arm' and my local Dermatology website comes up. They advise me to see my GP because it's red and itchy."

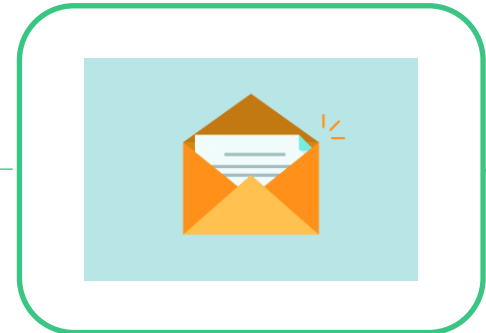


"I visit my GP who asks me about my medical history and takes a photo of my rash using a digital camera. He told me I will get advice from a consultant dermatologist within 48 hours and my GP will get then back to me"



"I attend the Skin Clinic and am prescribed a cream for my rash which clears very promptly"

VARIABLE WAIT

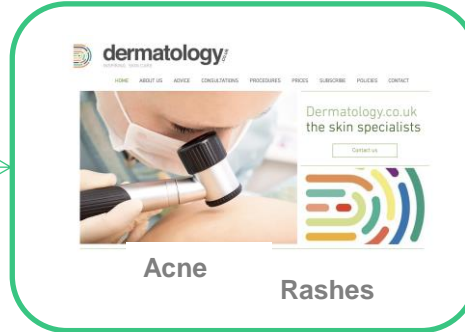


"I am sent a letter with an appointment to see the Skin Clinic with time and a number to call if I want to rearrange. I also receive a text message reminder 48 hours before"

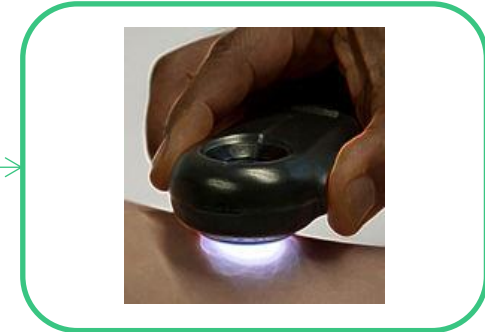
John's care journey B



"I have started getting a strange rash on my arms...I'm going to google it."

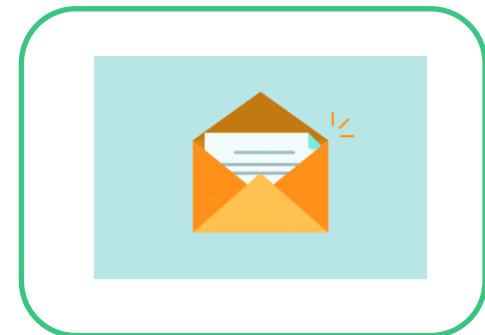


"I google 'bumpy rash on arm' and my local Dermatology website comes up. They advise me to see my GP because it's red and itchy."



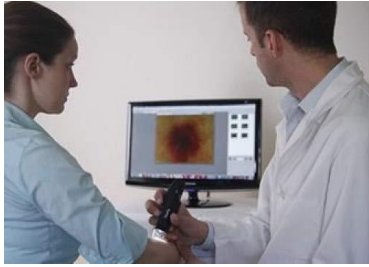
"I visit my GP who asks me about my medical history and takes a photo of my rash using a digital camera. He told me I will get advice from a consultant dermatologist within 48 hours and my GP will get then back to me"

24- 48 Hours

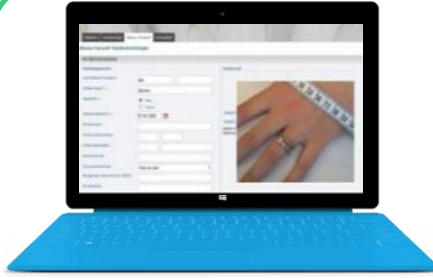


"The rash is reviewed and a treatment plan is sent back to the GP on how to treat the patient. This works promptly and the patient is then discharged from this pathway. This has saved me from having to visit my local hospital"

The GP journey



" John comes into the GP practice with a rash but I am not sure if it could be something more serious. I take a picture of the rash and upload it into my Teledermatology system. I have told John that the Tele-Dermatology service will give us an opinion within 48 hours and I will get back to him. This will either be a treatment plan I can carry out or he will need to be seen face to face.



"I get an email from the Teledermatology system the next day and was interested to learn that it could be a rare type of eczema. They advised that John needs to be seen face to face.



"A pdf output is received at the practice with a summary of John's Telederm referral. This is scanned into the record by the admin team at the practice"



An appointment is then made for John to be seen face to face in the right location. This can be arranged directly with John or the GP can refer for a face to face consultation

MeddApp deployed at over 100 practices

North Lincolnshire CCG

North East Lincolnshire CCG

Bassetlaw CCG

Rotherham CCG

Deployment involves

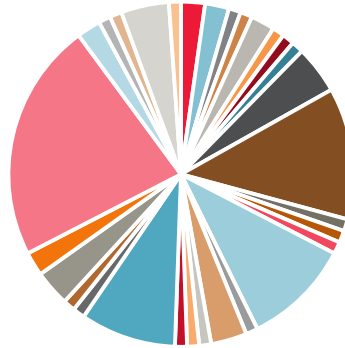
- onsite training
 - telephone training
 - telephone support
-

Rapid growth of service

Month	CCG – 1&2	CCG - 3	Total
Sep-17	64	NA	64
Oct-17	89	146	235
Nov-17	125	69	194
Dec-17	86	53	139
Jan-18	146	58	204

Detailed clinical information

Problems managed June 2017



- | | |
|-------------------------------|----------------------------|
| ■ Acne Vulgaris | ■ Actinic Keratosis |
| ■ Actinic Porokeratoses | ■ Atopic Dermatitis |
| ■ Atopic Eczema | ■ Campbell De Morgan Spots |
| ■ Comedone | ■ Darriers Disease |
| ■ Dermatofibroma | ■ Eczematous Dermatitis |
| ■ Fibroepithelioma | ■ Idiopathic Urticaria |
| ■ Irritant Contact Dermatitis | ■ Melanocytic Naevus |
| ■ Melasma | ■ Molluscum Contagiosum |
| ■ Naevus Of Ito | ■ Nail Infection |
| ■ Nasel Cartilage | ■ No Diagnosis made |
| ■ Pityriasis Versicolor | ■ Psoriasiform Eczema |

Telemedicine stand – images streamed so NO local image





- Home
- Search
- Daily Schedule
- Referrals**
- Tests
- Inpatients
- Reports
- Admin manager
- Help
- Logout
- Register new patient

Referral Received							
Referred date	Name of patient	Urgency	From	Reason	Funding	Status	
06-OCT-2016 1...	Miss D Bus	ROUTINE	Nurse Davey,Newland Group Practice	Advice on tre...	CCG	OUTCOME MADE	

Today Today Yesterday Last Week Last Month Status View letter View images Reset Re Assign



- Home
- Search
- Daily Schedule
- Referrals**
- Tests
- Inpatients
- Reports
- Admin manager
- Help
- Logout
- Register new patient

Miss D Bus

Home
Timeline
DashBoard
Video Consultation
Refresh
Patient Admin
Help
Documents
Out come

Viewing Last 1 Week
 (none)

Referrals & telefollow up
Make referral
View images
View letter
Update notes
TeleFollow up

Tuesday, Feb 28, 2017 Close... Open ...

Received from (Outcome Made) Kate Davey-Newland Group Practice Dated 06-OCT-2016 14:31

- ▶ Undiagnosed symptoms (1)
- Undiagnosed Examination findings (0)
- Injury / accident (0)
- ▶ Systematic enquiries and Care packages (0)
- ▶ Examinations (0)
- ▶ Tests and Investigations (0)
- Diagnoses (0)
- ▶ Prescriptions and medications (0)
- Vaccinations (0)
- ▶ Procedures operations and anaesthetics (0)
- Allergies (0)
- Past Medical History (0)
- ▶ Social History (0)
- Family History (0)
- ▶ Diet (0)
- ▶ Appointments, admissions and referrals (1)
- Notes and Summary (2)
- ▶ MeddRecord access and Messages (2)
- Obstetric and gynaecological history (0)
- Monitoring, therapy and care management (0)
- Notes added by patient - to validate



- Home
- Search
- Daily Schedule
- Referrals**
- Tests
- Inpatients
- Reports
- Admin manager
- Help
- Logout
- Register new patient

Miss D Bus

Home
Timeline
DashBoard
Video Consultation
Refresh
Patient Admin
Help
Documents
Out come

Viewing Last 1 Week
 (none)

Tuesday, Feb 28, 2017
Close...
Open ...

Use below link to add clinical data to MeddRecord

Symptom	Injury	Diagnosis	Past Procedures	Social History	Past Tests
Medication	Vaccinations	Allergies	Diet	Medical History	Note
Systematic Enquiry	Examinations	Past Images	Investigations	Family History	Care Plan

Use below link to view clinical data

Reports	Medical History	Family History	Prescriptions	Consultations	Laboratory
Vitals		Referrals	Appointments	Procedures	Admission

- ▶ Undiagnosed symptoms (1)
- Undiagnosed Examination findings (0)
- Injury / accident (0)
- ▶ Systematic enquiries and Care packages (0)
- ▶ Examinations (0)
- ▶ Tests and Investigations (0)
- Diagnoses (0)
- ▶ Prescriptions and medications (0)
- Vaccinations (0)
- ▶ Procedures operations and anaesthetics (0)
- Allergies (0)
- Past Medical History (0)
- ▶ Social History (0)
- Family History (0)
- ▶ Diet (0)
- ▶ Appointments, admissions and referrals (1)
- ▶ Notes and Summary (2)
- ▶ MeddRecord access and Messages (2)
- Obstetric and gynaecological history (0)
- Monitoring, therapy and care management (0)
- Notes added by patient - to validate



Search for symptom



Type keyword & press enter

Select a symptom and click Next

General Commonly added Remove

Changing Mole
 Clamminess Of Skin
 Mole
 Rash Around Eyes
 Skin Lesion
 Skin Lump
 Skin Rash
 Skin Rash In Sun

Symptom that will be added

Remove

Skin Lesion

Can't find? Type in your own and click add A...

Next

Close window



Viewing Last 1 Week

(none)

Tuesday, Feb 28, 2017

Close... Open ...

Use below link to add clinical data to MeddRecord



Symptom



Injury



Medication



Vaccinations



Systematic Enquiry



Examinations

Use below link to view clinical data



Reports



Medical History



Vitals

Add patient symptom

Symptom Definition

Skin Lesion

Start date

Ongoing

Stop date

Save

Add picture

Draw on Image

Close



Viewing Last 1 Week

(none)

Tuesday, Feb 28, 2017

Close... Open ...

- Undiagnosed symptoms (1)
- Undiagnosed Examination findings (0)

Use below link to add clinical data to MeddRecord



Symptom



Injury



Medication



Vaccinations



Systematic Enquiry



Examinations

Use below link to view clinical data



Reports



Medical History



Vitals

Dr Charles Darwin

Add patient symptom

Symptom

Skin Lesion

Select start date

Recording time in past as a

Just now
Time ago
e.g. 3 weeks ago
Date & time
12 pm 14th Jan 2005

Enter Number ago

1	2	3	Minutes	Hours
4	5	6	Days	Weeks
7	8	9	Months	Years
x	0	.		
/	*	-		
%	+	C		

Draw on Image

Close



Viewing Last 1 Week (none)

Tuesday, Feb 28, 2017 Close... Open ...

Use below link to add clinical data to MeddRecord

- Symptom
- Injury
- Diagnosis
- Past Procedures
- Social History
- Past Tests
- Medication
- Vaccinations
- Allergies
- Diet
- Medical History
- Note
- Systematic Enquiry
- Examinations
- Past Images
- Investigations
- Family History
- Care Plan

- Undiagnosed symptoms (2)
 - Skin Lesion
 - Mole
- Undiagnosed Examination findings (0)
- Injury / accident (0)
- Systematic enquiries and Care packages (3)
- Examinations (0)
- Tests and Investigations (0)
- Diagnoses (3)
- Prescriptions and medications (0)
- Vaccinations (0)
- Procedures operations and anaesthetics (0)
- Allergies (5)

Use below link to view

- Reports
- Medical History
- Vitals

Medssystemonline Security warning

Please choose service to use?

Cancel Upload from device Take picture from Built-in / USB camera

- Referrals
- Appointments
- Procedures
- Admission

Notes added by patient - to validate



Home

Search

Daily Schedule

Referrals

Tests

Inpatients

Reports

Admin manager

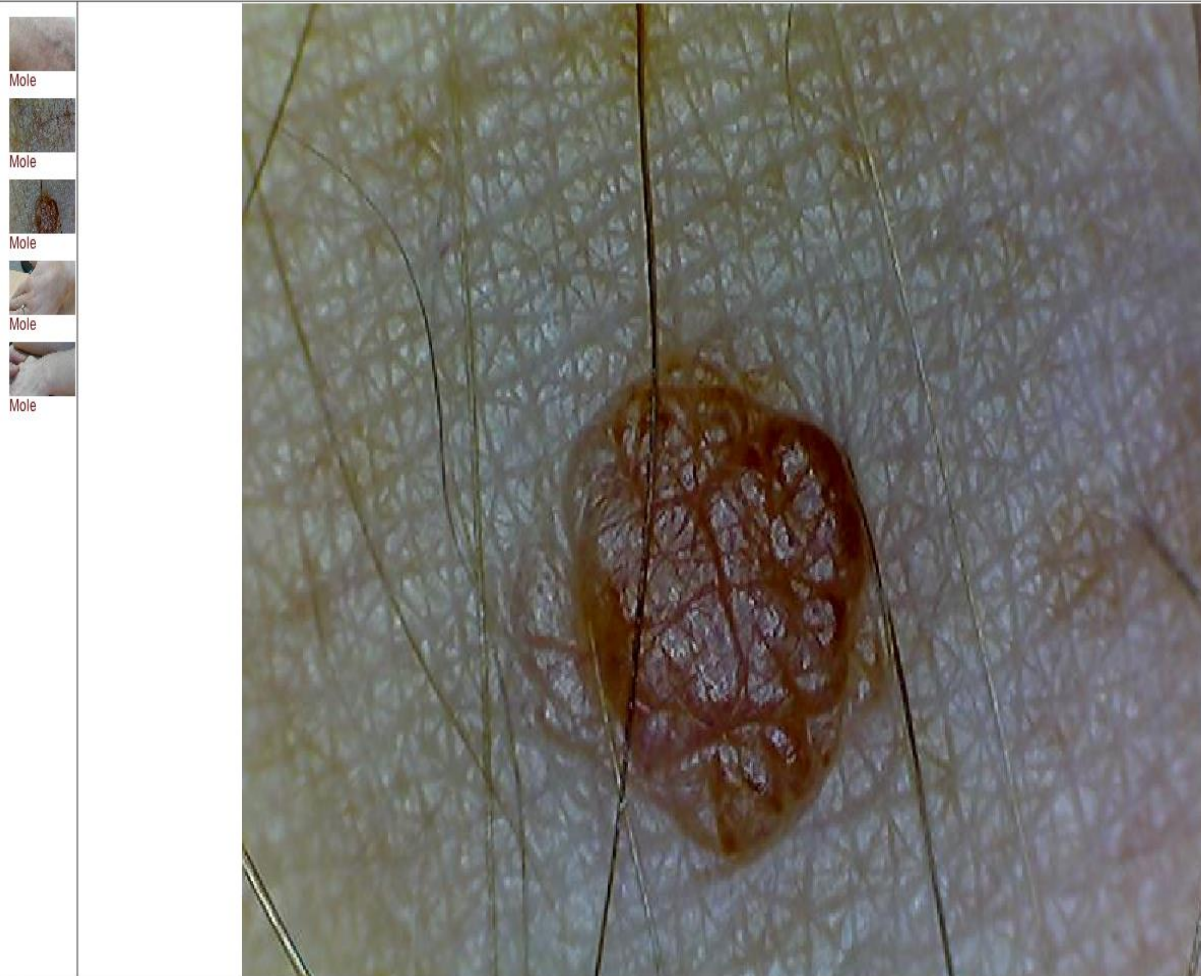
Help

Logout

Register new patient

meddrecord

Dr Charles Darwin



Mole



Mole



Mole



Mole



Mole

ROTATE RECORD & LISTEN TO VOICE MESSAGES ZOOM DRAW COMMENTS Brightness: 1 Contrast: 110

255 0 255 0 255



- Home
- Search
- Daily Schedule
- Referrals
- Tests
- Inpatients
- Reports
- Admin manager
- Help
- Logout
- Register new patient

Dr Charles Darwin

Home
Timeline
DashBoard
Video Consultation
Refresh
Patient Admin
Help
Documents
Out come

Viewing Last 6 Mon...

(none)

Tuesday, Feb 28, 2017 Close... Open ...

- ▼ Undiagnosed symptoms (2)
 - ▶ Skin Lesion
 - ▶ Mole
- Undiagnosed Examination findings (0)
- Injury / accident (0)
- ▶ Systematic enquiries and Care packages (3)
- ▶ Examinations (0)
- ▶ Tests and Investigations (0)
- ▶ Diagnoses (3)
- ▶ Prescriptions and medications (0)
- Vaccinations (0)
- ▶ Procedures operations and anaesthetics (0)
- Allergies (5)
- Past Medical History (0)
- ▶ Social History (0)
- Family History (0)
- Diet (0)
- ▶ Appointments, admissions and referrals (43)
- ▶ Notes and Summary (45)
- ▶ MeddRecord access and Messages (45)
- Obstetric and gynaecological history (0)
- Monitoring, therapy and care management (0)
- ▶ Notes added by patient - to validate



Home

Search

Daily Schedule

Referrals

Tests

Inpatients



Reports

Admin manager

Help

Logout

Register new patient


Dr Charles Darwin


Home
Timeline
DashBoard
Video Consultation
Refresh
Patient Admin
Help
Documents
Out come

Select followup

Face2Face in person
Face2Face remote
Face 2 face joint

Tele follow up
Discharge From care ...
Open Followup

Resubmit photos

followup selected

Book for Face2Face
Book for procedure
Select path... ▾

Consultation outcome letter dictation

Authoris...
 (none)

Symptoms reviewed Add Remove

Rash Around Eyes
 Rash Around Eyes - New
 Skin Lesion
 Mole

Medications reviewed Add Remove

Procedure Add Remove

Diagnosis reviewed Add Remove

Atopic Dermatitis(Eczema, Besniers Pruri
 Malaria
 Atopic Eczema

Investigation requested A... Remove

Education support Play Add Remove

Referrals & telefollow up View ref images View ref lett...

Outcome Letter to

Book for Admission
Admit Directly
HP Feedback
Patient Feedback
Save & Close

Teledermatology Examples



Rash...





Rash - Outcome

Hi

Thanks for the follow up images - this is another one I saw with Dr Britton as well for a second opinion.

It will need to be referred to secondary care services - most likely CHH - it looks more like psoriasis and would benefit from a face to face review to confirm and then phototherapy as a treatment.

Best Wishes

Javed

Lip Lesion



Thank you for the referral and for the good quality images.

This does not now look like a cyst now - in fact it looks more like a BCC - it could even be an SCC. It is one of those that needs to be seen face to face and will need a biopsy.

In view of the uncertainty and this is a high risk area - I would suggest a 2ww referral for further assessment.. Please kindly organise.

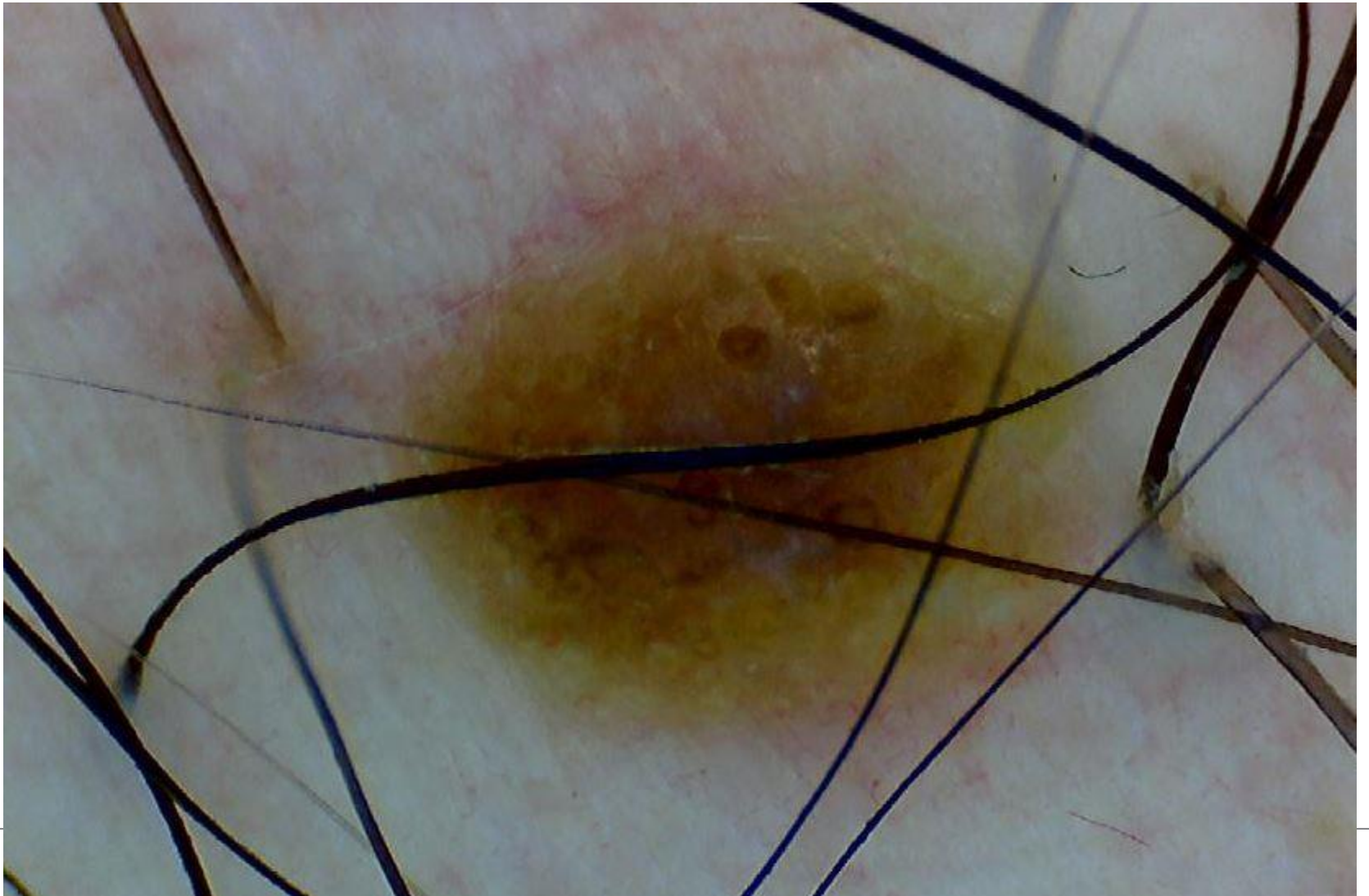
Javed

Discharge from care

Added by Mrs Colette Kipling on 19-04-2017 08:16

History: 4-5 years lesion above upper lip.
it was small and it has slowly grown bigger.
time to time it does scab over
not painful.
in past been treated with a/b as infected cyst.
Examination: noted not a cyst
raised lesion and approx 6 x 10 mm in size.
Plan: not sure BCC.
for teledermatology please.
Cigarette consumption (Ub1tI) 20 cigarettes / day
Medication review done (XaF8d)

Lesion on Chest



New Lesion



New Lesion



New Rash



New Lesion



New Rash



New Rash



New Rash



Questions?

