The future of dermatology care in the community

Evaluation of a community dermatology Pilot and NHS savings October 17-18

There is a great need for change in the way we manage skin disease in primary care. With the huge increase in skin cancer and lesion awareness, referrals to secondary care have increased dramatically. It is estimated that 54 per cent of the UK population is affected by a skin condition in any given year, with 23-33% of the population with a skin condition that would benefit from dermatology care. Although the majority will self-care, skin conditions are the most common reason for GP consultations for a new problem. [1]

In Solihull between April 2013 and April 2018 there was a 20% rise in dermatology urgent cases referred to secondary care.[2]This rate is similar to other areas of the country.

The St Mary's Hospital teledermatology pilot found that only 6% of 2 week wait (2ww) referrals were found to be skin cancer, suggesting that a huge number of benign lesions were being referred.[3]

The *Solihull Proof of Concept Primary Care Dermatology Pilot* was commissioned by the Solihull Commissioning Service Delivery Team (SDT) in October 2017 to investigate the referral patterns and cost benefits in a community General Practice setting. This was led by an experienced GP with an extended role in Dermatology (GPwER) who was previously employed by the local hospital dermatology team. Solihull is a suburb of Birmingham with a population of 220,000 patients. The pilot was delivered by a single partnership of about 40,000 patients across 6 sites called GPS Healthcare.

The pilot was commissioned as an interim rapid learning pilot for 3-6 months (effective from October 2017) prior to plans to commence procurement of a community based service across all of the new Birmingham and Solihull CCG. This is similar to the '100 day' approach now being used by NHSE for their Elective Care High Impact Innovation work for a range of specialities. However it was so successful that it was continued and has now over 12 months of data.

Method

Each referral to dermatology including both routine and fast-track referrals were intercepted at Doctor or secretary level and sent to the GPwER for assessment. This was done by use of the secure messaging service called 'tasks' within Systmone. The GPwER triaged each referral, on an almost daily basis and managed each case accordingly. Some referrals were dealt with advice and guidance to the GP and others were booked an appointment to see the GPwER. Urgent cases were fitted in within 1week of the referral being done. Photos were taken when possible, of the skin conditions with cameras

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[1] Schofield J, Grindlay D, Williams H (2009). Skin conditions in the UK: A health care needs assessment. Nottingham: Centre of Evidence Based Dermatology, University of Nottigham.

[2] Sam Varghase, Health Informatics , Marker Share report UHB foundation Trust 30/10/2018.

[3] Thomas, L., et al. "The facts, figures and tribulations of a new teledermatology service: an update on the pilot study presented at the 97th British Association of Dermatologists annual meeting." *BRITISH JOURNAL OF DERMATOLOGY*. Vol. 179.

or via the *Consultant Connect Photosaf App*, which became available in the latter half of the pilot. These photos were used to aid triage.

The pilot commenced the middle of October 2017 and was first evaluated in March 2018. It was deemed to be so cost effective that it was continued and has now been running for over a year. The patients were seen by the GPwER or specialist nurse in specific joint clinics within GPS Healthcare. They were treated in house where possible and referred for in house biopsy or excision where necessary. A percentage of these were then referred to hospital.

Results

The results were analysed after the first 5 months then again after 7 months to make a total of 12 months data. The cost savings after 5 months with the Market Forces Factor added was calculated to be £82,224. The results for the first 5 months are shown in the table. However these were not used for the final calculations as a number of referrals had been missed.

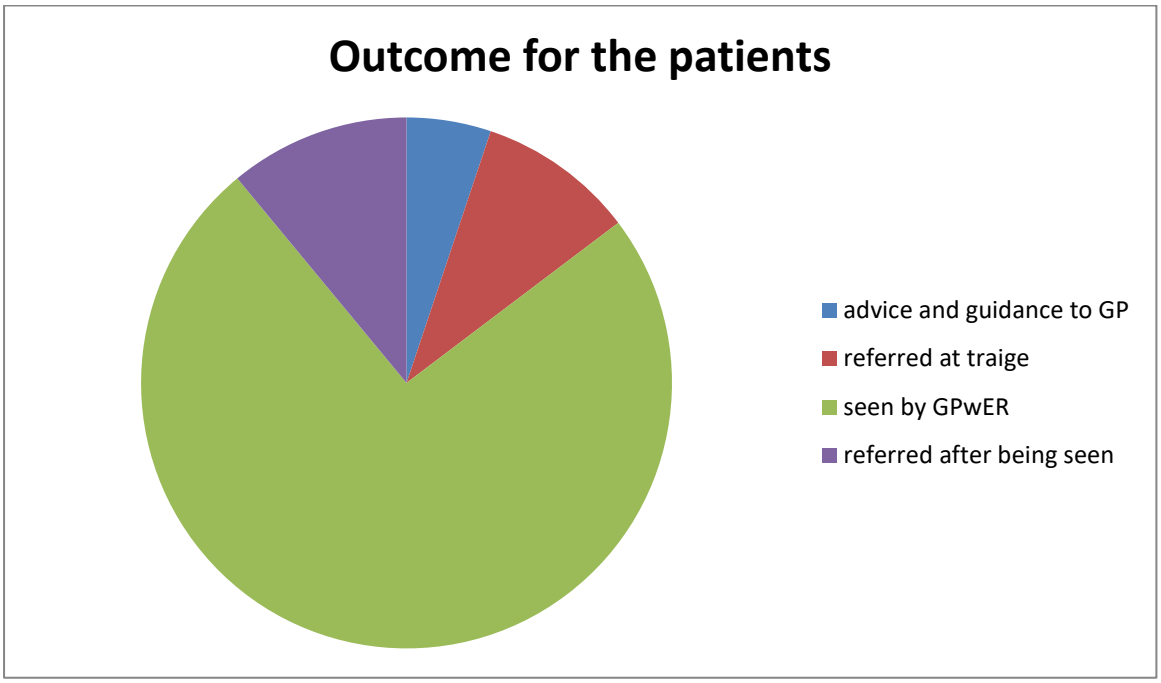
As seen in the tables, most referrals were for skin cancer, 13 for BCCs and 7 fast-track referrals.

Results in first 5 months	No	%	
Total pts triaged	331	100%	
Pts triaged and continued pathway to secondary care	12	3.6%	
Pts triaged and sent back to GP with A&G	23	6.9%	
Number seen in community service	196	89.5%	
Referred to secondary care after seen in the service	22	7.4%	
Total onward referral to secondary care	34	10.2%	
Total number deflected from secondary care		89.8%	

Reason for referral	No	Notes
BCC	13	10 referred after biopsy
SCC	3	2 Unexpected on biopsy
Melanoma	1	2 referred on photo triage and 1 an unusual presentation on biopsy
2ww pathway	3	Diagnosis suspected
Patch testing/Allergy	4	Not available in service
Roaccutane	3	Not available in service
Adult dermatology	2	Second line therapy needed
Paediatrics derm	2	More specialist care needed
Other eg urology/ private	3	

Results second 7 months, March to October 18		
Total number of patients	761	100%
Patients triaged and not seen Advice and guidance to GP Continued their pathway to secondary care 2ww referrals BCC referrals Allergic/derm inc. Paeds, UVB, roaccutane Other, private, plastics , urology	129 17% 43 6.4% 81 10.6%	 48% 15% 32% 5%
Seen in the comm pilot by GPwER or specialist nurse, (some DNAs and a few went private)	624	82%
Had as biopsy Had an excision of lesion Had cryotherapy Had medication Nil needed	17% 6% 26% 39% 12%	
Onward referral after being seen in the service	77	12.2%
2ww/SCC after histology confirmation BCC after histology Other, private , plastics	29 23 25	38% 30% 32%
Total onward referral at triage and after being seen	158	20.7%

In the second half of the pilot almost twice as many patients were referred into the service. Not all fast-track referrals were sent for triaged in the first 5 months and some patients did not attend their appointment within the service.



Of

Of the 761 patients triaged, 17% were triaged and not seen and of those 10.6% were referred to hospital at triage and 5.7% were sent back to the GP with advise on management. The hospital referrals were mainly for 2ww lesions, but some also for roaccutane, UVB and allergy testing which is currently not available in the service.

82.4% were seen by the GPwER or nurse and of those 12.2% were referred after being seen, almost all for skin cancers. 106 biopsies and 38 excisions were done in total. The total onward referral in the second half of the pilot was 20.7% from triage and the clinic. The follow-up rates appeared quite low but not all were recorded.

Discussion

The pilot was evaluated on the QIPP Savings Quantified for 7 months and estimated up to 12 months. The final gross savings during this time measured on the average price of each Dermatology patient at hospital of £372.

The first evaluation was measured on tariff for 1st outpatients and follow up tariff only. This gave a potential final gross savings for 12 months of the pilot with the MMF (Market Forces Factor) of 4.9% added to calculation of £455,000.

However some patients were transferred to secondary care after management in the service and the cost of the pilot was £63,000 so the total net savings were estimated to be £363,000.

The NHSE DES payments for minor surgery for this pilot have not been included.

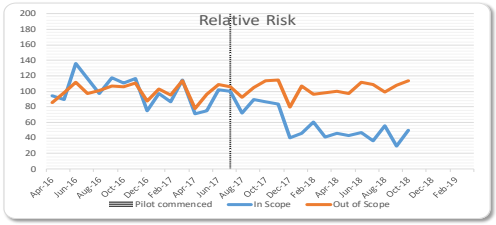
Quality, innovation, productivity and prevention (QIPP) savings for the 6months period before the pilot compared with current year.

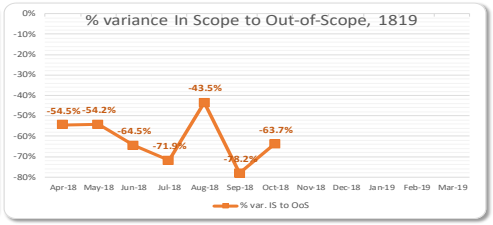
- **This shows a 46% reduction in 2ww referrals** referral from 227 to 121 with rates per 1000 of GP registered population from 5.69 to 2.99

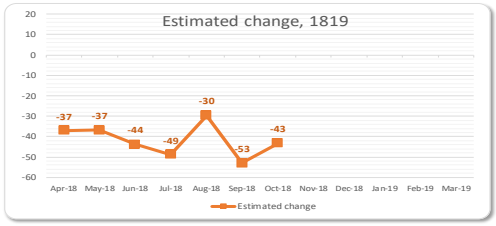
- **and a 50% reduction in routine referrals** with rates per 1000 of GP registered population reducing from previous year of 4.46 to 2.17

The graph below shows the reduction on referrals from GPS Healthcare (blue line) from the start of the pilot which was mid October 2017 compared to the referrals for the whole of Solihull (orange line). The increase in referrals for August 2018 occurred because of annual leave of the GPwER and no available cover.

Primary Care Dermatology Pilot compared to all other BSOL GP Practices







Savings Calculator:	OPNEW	OPFU	OP Proc	DC
Cost	£133	£59	£101	£571
No.saved	1	1.2	1.05	0.11
£ saving per unit	£372			

** Based on average cost for BSOL commissioned activity for FY 2017/18*

Conclusions

The increase in numbers in the second half of the pilot reflected a greater awareness of the service by both patients and doctors and the ease at which advice could be obtained within one practice. The convenience of Consultant Connect Photosaf which enabled photo triage was realised in the second half of the pilot also contributed to the increase in numbers. In the initial 6 months there was evidence that some referrals were slipping through the net and being sent to hospital without prior triage, but this was significantly reduced in the second 6 months, so it likely the figures were more realistic in the second 7 months.

The use of triage enabled management in 17% of cases, so most patients required seeing within the service. It is possible that the development of a referral protocol along with photos may be able to increase the triage rate. However, one must bear in mind the potential consequences of a missed cancer diagnosis. A large number of patients required a clinic appointment so pathways must be reliable to ensure patients are dealt efficiently. The assistance of consultant oversight would be of benefit here.

The total onward referral rate to secondary care was 20% mainly for skin cancer. Other services which are not available in primary care at present like roaccutane, UVB, and DMARDS also featured in the referrals but many were weeded out at triage. It is possible that roaccutane would be prescribed in primary care with the support of a consultant.

The QIPP was higher than expected at the start of the pilot but the project was done at cost and no profit was made. Some aspects of the service e.g. room rental and reception/secretarial time was not charged. Any expansion of the service would be more expensive.

During the course of the pilot there was evidence of education of the other GPs within GPS Healthcare. It was found that, once the GPs had understood the concepts of management of the pre-cancers they were prepared to treat it themselves. They were also more comfortable to arrange biopsy and interpret the results themselves with the advice from the GPwER.

The pilot has shown that triage of all referrals by an experienced GPwER has reduced referrals by almost 50% and that it has the potential to make big savings.