Assessing the Impact of Integrating DermaSensor™ into Primary Care for Skin Cancer Detection and Management

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Validated, FDA-cleared device to non-invasively test skin lesions for cancer[1,2]

The DermaSensor Device
This non-invasive, handheld device captures and records spectral samples of skin lesions and, using a proprietary algorithm, classifies the given lesion's spectral properties against those of known malignant and benign lesions.

- Validated to detect melanoma, basal cell carcinoma, and squamous cell carcinoma[1,2]
- Assesses skin lesions between 2.5 to 15 mm in diameter in <30 seconds[1,2]
- Device classifies lesions as "Investigate Further" or "Monitor"
- An "Investigate Further" result is accompanied by a spectral score of 1–10, with higher scores having greater similarity to malignant lesions. A "Monitor" result is interpreted as low risk of malignancy[1,2,3]
- Utility studies show the potential to reduce missed cancer assessments performed by PCPs by half[3]

Skin check visits and cancers diagnosed increased in the subsequent three-month period after introduction of the device

Implementation of DermaSensor into a Primary Care Practice
Drs. Goisse and Thomas reviewed skin lesion evaluations and metrics for the 12 months prior to implementing DermaSensor into their practice compared to these same measures for the subsequent 3 months with use of the device. Data analyses were conducted using the practice's EHR data and billing records.

- Documented skin lesion evaluations increased from zero being the primary concern prior to introduction of the device to 34 primary skin lesion evaluations with use of the device
- Referrals to dermatology decreased 13%, from an average of 1.5 per month to 1.3 per month
- After device implementation, the clinic's rate of patients with eventually confirmed skin cancer diagnosis increased 150% among the reviewed population. The ultimate lesion diagnoses were provided via pathology following a biopsy procedure
- Given the 13% decrease in monthly dermatology referrals with the 150% increase in diagnosed skin cancers, the increase in skin cancer diagnoses were driven by an increase in PCP skin cancer sensitivity and an increase in their skin exam frequency. These findings suggest device use increases skin cancer detection while not increasing unnecessary referrals to dermatology

Over the three months of device use, there were an additional 34 visits for skin checks

Insights into Billing Information in Visits With DermaSensor
The billing information analyzed found there were 34 skin lesion evaluations documented over the 3 months of device use with other billing insights as follows:

- These visits were billed as skin assessments alone (6) or in combination with other visit codes (28). Claims for these services were paid by various payers
- Of the 34 skin check visits, 12 were reported using a modifier 25 with an annual wellness visit

The device use has been found to improve PCP confidence in studies and in this real-world evaluation[3]

Physicians Satisfaction and Confidence
Physicians' self-reported satisfaction with their skin exam capabilities increased from 40% and 50% prior to implementing DermaSensor into their practice to both being 90% with use of the device, using a scale of 0% being no satisfaction and 100% being complete satisfaction.

Their self-reported confidence in their skin exam capabilities similarly increased from 20% and 30% prior to device implementation to both being 100% with use of the device, using a scale of 0% being no confidence to 100% being complete confidence. A perceived anecdotal improvement in patient referral compliance was also reported.

Indications for Use: The DermaSensor™ device is indicated for use to evaluate skin lesions suggestive of melanoma, basal cell carcinoma, and/or squamous cell carcinoma in patients aged 40 and above to assist in the decision regarding referral of the patient to a dermatologist. The DermaSensor device should be used in conjunction with the totality of clinically relevant information from the clinical assessment, including visual analysis of the lesion, by physicians who are not already expertly trained in the diagnosis and management of skin cancer.

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References:

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