INTRODUCTION

This is a quality improvement project aimed at the implementation of the SAMScore screening questionnaire as a part of the intake process in the primary care setting to improve identification of patients at high risk for skin cancer, specifically melanoma.

Background and Significance

- Skin cancer is the most prevalent form of cancer in the United States (U.S.) (Centers for Disease Control and Prevention [CDC], 2015).
- The incidence and mortality rate for other leading causes of cancer (breast, prostate, and colorectal) has decreased, and the incidence and mortality for melanoma of the skin continues to increase (Howlader et al., 2016).
- The cost of treating skin cancer in the United States is $8.1 billion annually (Stay Jr., Muhlin, Ekwonne, & Vehof, 2015).

Literature Review

- The USPSTF (2015) concluded there is insufficient evidence to support total body skin examinations (TBSE) as a method of skin cancer screening for the general population.
- Population based screenings have been found effective in reducing melanoma mortality in Schleswig-Holstein, Germany (Kandola et al., 2012; Kandola et al., 2012).
- Screening by physicians can lead to increased rates of thinner melanomas positively effecting patient outcomes (Kandola et al., 2015).
- Barriers exist in performing TBSE and include time constraints, competing comorbidities, and patient embarrassment (Olivier et al., 2014).

The SAMScore is a validated assessment tool providing healthcare providers a method of identifying patients with an increased lifetime risk of melanoma who could benefit from a TBSE (Quaresmi et al., 2015).

To detect a new case of melanoma using the SAMScore, it is necessary to screen 11.54 times fewer patients than compared to non-targeted screening (Quaresmi et al., 2012).

MATERIALS AND METHODS

Methods

Midwestern primary care clinic consisting of three providers saw 15-20 patients a day.

- Three-month retrospective chart review to establish baseline skin cancer screening methods
- Prospective data collection for two months after the implementation of the SAMScore to determine if there was a difference in screening rates

Intervention

- SAMScore assessment tool (Approval to use the SAMScore assessment tool was obtained from the SAMScore Department of Dermatology, Nancy France).
- SAMScore completed by the intake staff and results conveyed to provider.
- Patients identified at increased risk received an appropriate intervention (patient education, TBSE by provider, biopsy as indicated, dermatology referral and follow up).

Measures

- 5% margin of error, 95% confidence interval, a population size of 5000 with a 7.5% response distribution, a phi statistics of 0.21, a power of 0.80

RESULTS

Table 1: Direct and Indirect AT Risk Intervention

<table>
<thead>
<tr>
<th>Screened for Skin Cancer</th>
<th>AT Risk Intervention</th>
<th>No TBSE</th>
<th>TBSE by Provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>NO</td>
<td>68</td>
<td>0</td>
</tr>
<tr>
<td>YES</td>
<td>NO</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>AT Risk</td>
<td>2%</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>BIQ</td>
<td>4%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Table 2: Number of patients identified at increased risk

- Total patients screened: 1290
- Patients identified at increased risk (SAMScore): 21%
- Patients receiving appropriate intervention (TBSE, dermatology referral/follow up): 65%
- Patients having biopsy without additional intervention: 4%

CONCLUSIONS

- During the implementation period, there were 1290 patient encounters that met inclusion criteria, and 464 SAMScore questionnaires were completed resulting in a 35% completion rate, and 39% (n=181) were identified to be at an increased risk for developing melanoma.
- Systematic random sampling of 105 charts showed a SAMScore completion rate of 35% (n=37), and 40% (n=15) of those patients were identified to be at an increased risk.
- There was no documented screening for skin cancer risk in the baseline group (n=0), and 38.2% (n=37) of the follow up group received screening for skin cancer risk.
- There was a statistical significance between baseline and follow up groups with the implementation of the SAMScore had a large clinically significant effect, $t(1) = 4.43, p < .001, d = .66$.

REFERENCES


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