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### Impact of Dermoscopy Training for PCPs on NNB to Detect Melanoma

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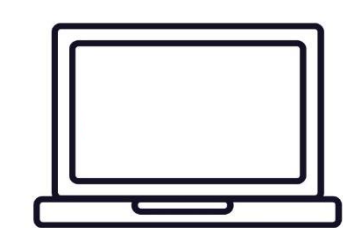
## Introduction

Primary care providers (PCPs) play a critical role in skin cancer detection. Dermoscopy improves the user's ability to differentiate benign melanocytic nevi from melanoma. A needs assessment at our institution found fewer than 10% of PCPs were trained to use dermoscopy. To address this training gap, a multimodal dermoscopy curriculum was created, implemented, and disseminated across our health system. 267 (of 412) PCPs were trained. The curriculum included:

- Hands-on 90-minute dermoscopy workshop (15 completed)
- Monthly 60-minute tele-mentoring dermoscopy sessions using Extension for Community Health Outcomes (ECHO)

**The goal of this project was to analyze the impact of dermoscopy training on the number of melanocytic nevi needed to biopsy (NNB) to detect a melanoma in the primary care setting.**

## Methodology



**Biopsy data extracted from electronic medical record** using Epic BI Portal to filter time frame and provider specialty. *Inclusion Criteria:* Performed by MaineHealth PCP between 11/05/2013-11/06/2021. *Exclusion Criteria:* Performed by dermatologist or surgeon



**Manual Review of Pathology Reports** Categorized by pathologic diagnosis. Inclusion criteria: melanocytic growth



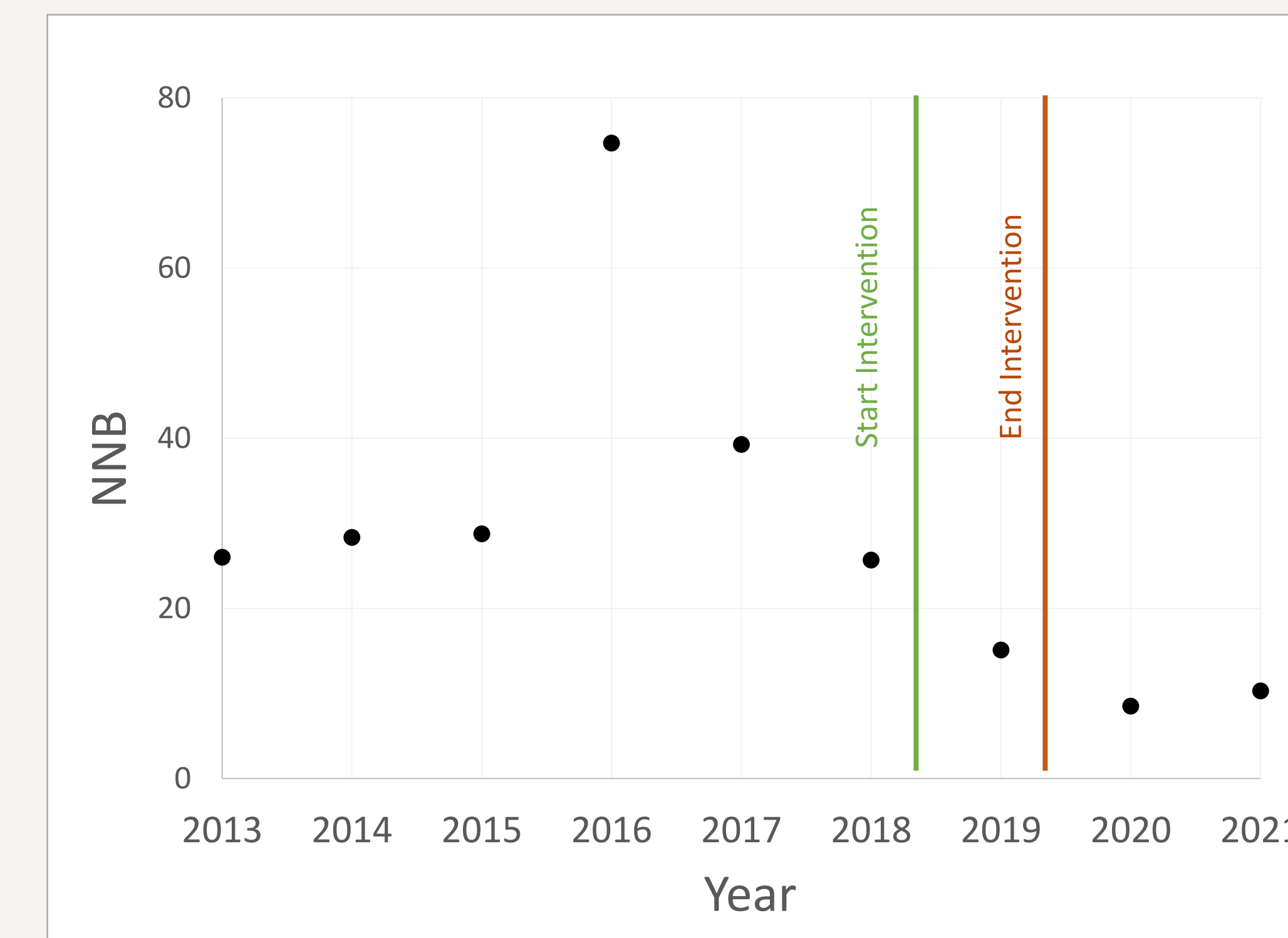
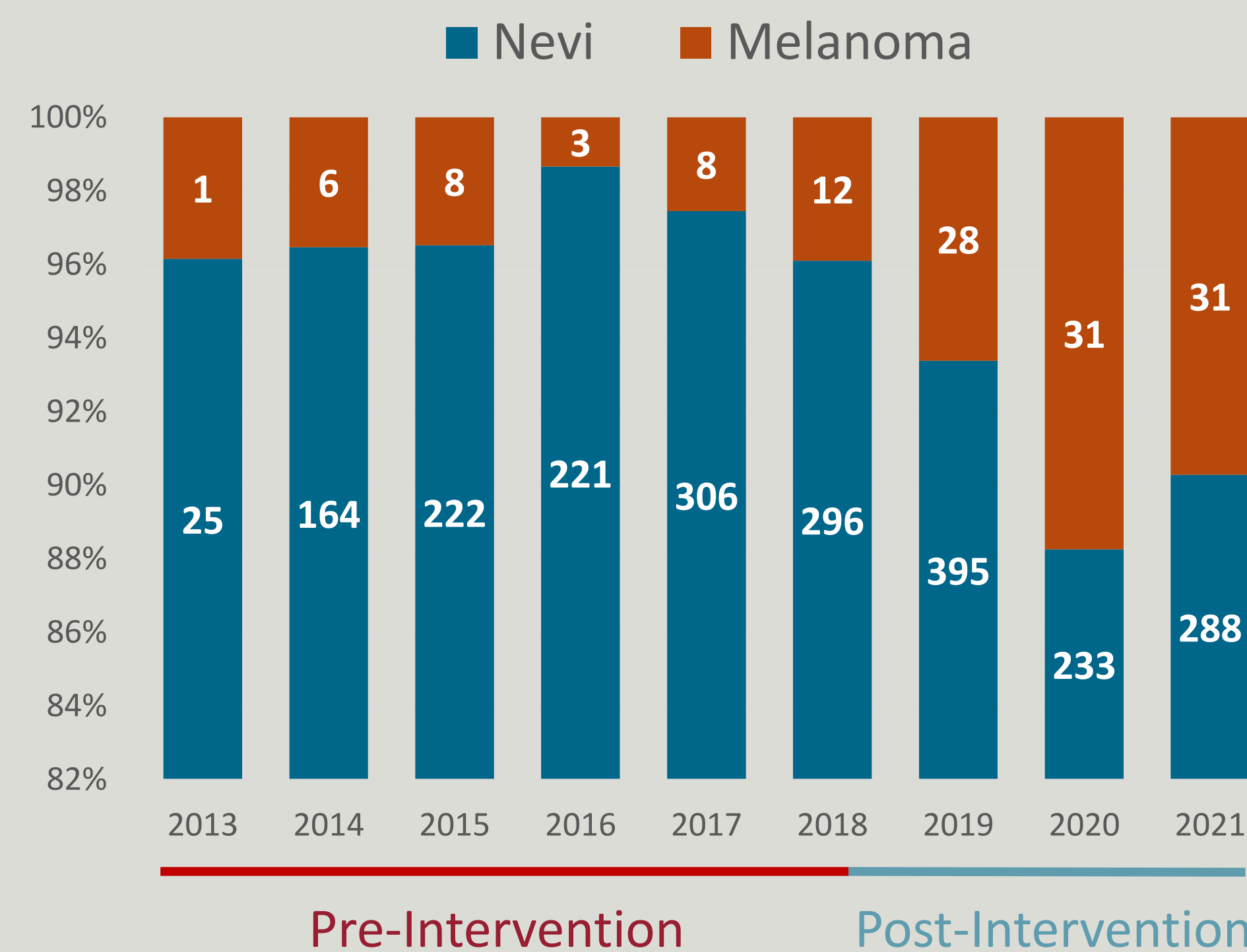
**Data Analysis** Data stored in REDCap Database. NNB calculated in R (Version 3.6.2)

## Results



|                   | Nevi | Melanoma | NNB         |
|-------------------|------|----------|-------------|
| Pre-Intervention  | 1200 | 36       | <b>34.3</b> |
| Post-Intervention | 950  | 92       | <b>11.3</b> |

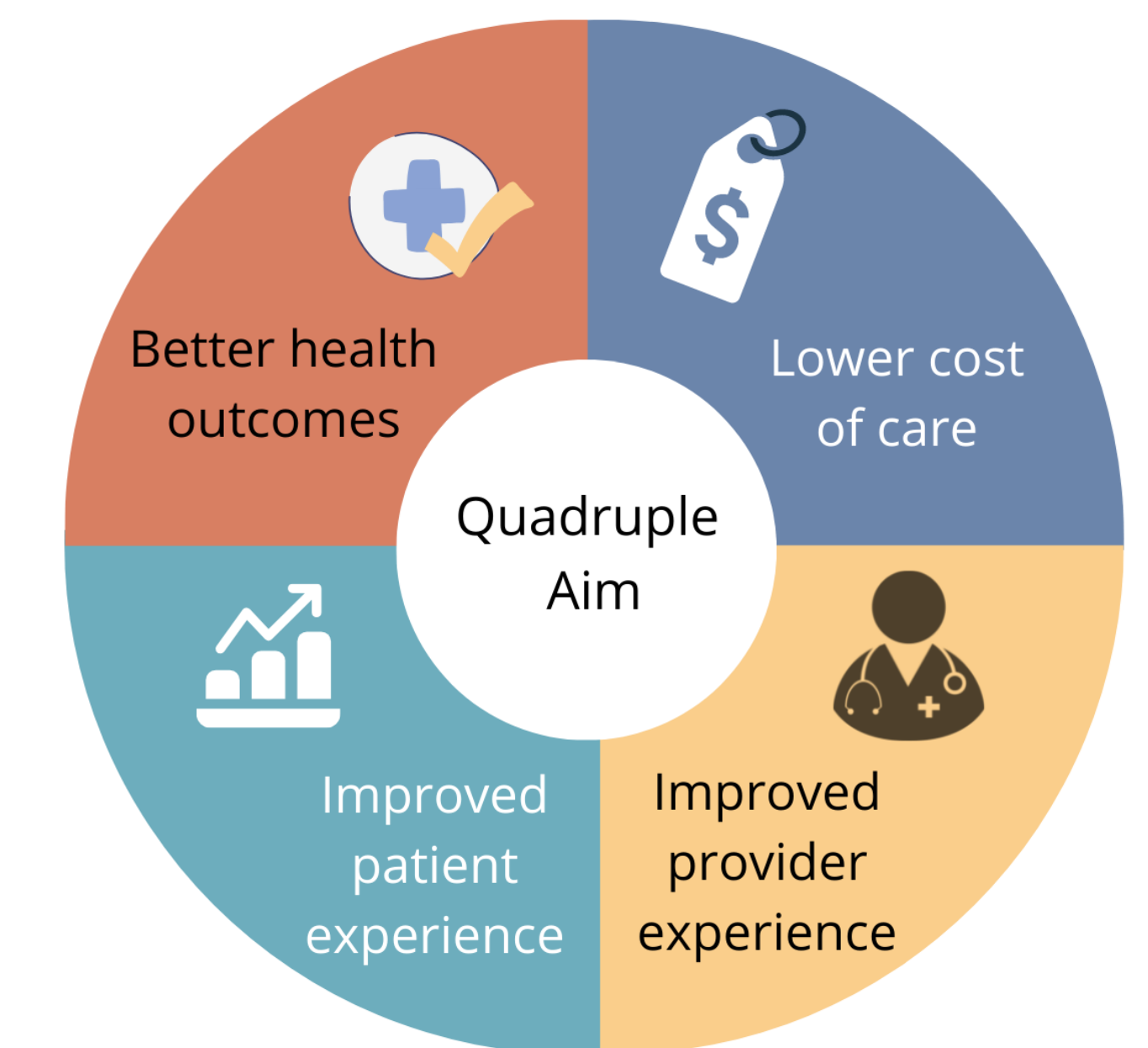
**Figure 1.** Relative percent of melanomas detected per year with melanoma and nevi count listed respectively



**Figure 2.** Average NNB per year with dermoscopy training intervention start and end date indicated

## Conclusions

- Following dermoscopy training there were meaningful reductions in NNB to detect a melanoma in the primary care setting
- Dermoscopy training for PCPs hits on all aspects of the quadruple aim: improves diagnostic accuracy, reduces cost per melanoma diagnosed and fosters provider engagement.



## Next Steps

- Reduce barriers to dermoscopy use and training in primary care setting
- Cohort sub-analysis of PCPs trained vs untrained
- Recognize the risk of skin cancer overdiagnosis and focus on optimizing dermoscopy to improve quality and diagnostic accuracy