

# Improvements for PROACT

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Fig. 1. Include teaser picture above.

**Abstract**—PROACT (PROgnosis Assessment for Conservative Treatment) is a tool that helps patients figure out the prostate cancer health risks. We are aiming to come up with a way to visualize the adverse effects that patients may come across through various treatments. [insert results here]

**Index Terms**—PROACT, Cancer, and Visualization.

## 1 INTRODUCTION

PROACT (PROgnosis Assessment for Conservative Treatment) is a tool created and tested by Anzu Hakone, Lane Harrison, Alvitta Ottley, Nathan Winters, Caitlin Gutheil, Paul K. J. Han, Remco Chang to communicate risk information to individuals suffering from prostate cancer. “PROACT utilizes two published clinical prediction models to communicate the patients personalized risk estimates and compare treatment options” [1, p. 1]. With a primary goal of transmitting information across to emotionally charged individuals, the tool’s design is backed by user studies of prostate cancer survivors and urologists from the Maine Medical Center. Through their study, they found an appropriate design required a easy to read bits of information that could likewise be easily comprehended with little effort. Specifically, listed in their *findings* section, the team found a **temporal visualization with narrative sequence** worked best to communicate with varying **emotional states** [1, p. 8]. This led the initial designs to use simple visualizations, such as pie and bar charts, minimal labeling, and present the data in a positive lens; noting “adding interactions to either simple or complex visualizations had an adverse effect” [1, p. 2]. We aim to improve this tool by adding visualization tools for side effects for various treatments that doctors prescribe.

## 2 RELATED WORK

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## 3 IMPLEMENTATION

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## 4 RESULTS

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## 5 FUTURE WORK

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## ACKNOWLEDGMENTS

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## REFERENCES

- [1] A. H. L. H. A. O. N. W. C. G. P. K. J. Han, and R. Chang. Proact: Iterative design of a patient-centered visualization for effective prostate cancer health risk communication, 2016.

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