NOVO NORDISK DATA INSIGHTS ENGINE PLATFORM

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Project Description

Pharmaceutical companies consider clinical and commercial information to determine solutions for patients, but lack data-driven social insights to holistically capture their patient populations. Our team worked to design and create the UI/UX for a web-based tool to help NNI identify and understand previously undefined personas that can then provide novel and innovative healthcare solutions for Type II Diabetes.
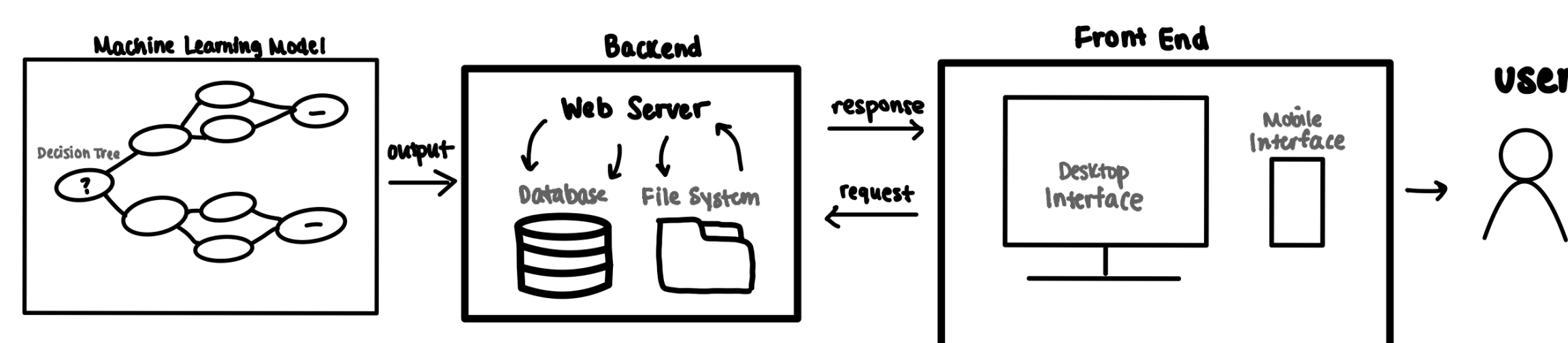
Requirements and User Research
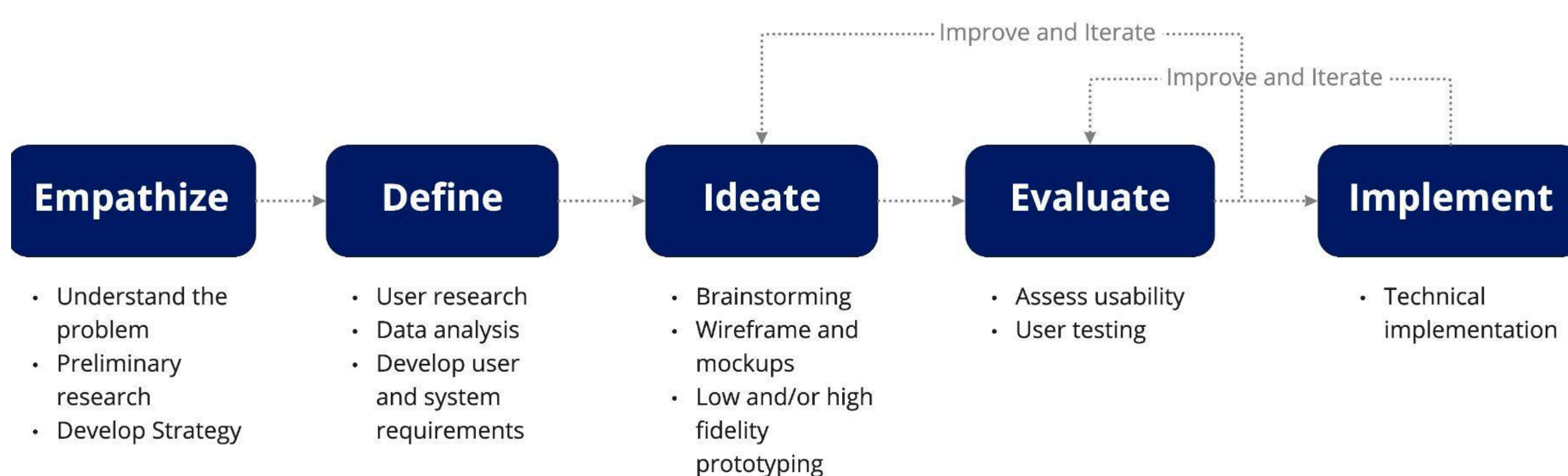
- NNI is currently working on a machine learning model which they hope to utilize to show meaningful insights regarding different Type II diabetic patient populations
- Followed UX process as outlined above to develop and define the tool UX/UI

Requirements

The data insights engine tool should:
- **Display actionable insights** about long-term outcomes for Type II diabetic patients based on input data
- **Receive input from the user** with data regarding Type II diabetic patients
- Have **good user experience**

Stakeholder Interviews

- Objective to gauge if a insights tool would be useful and identify necessary metrics
- Interviewed **8** users from Data Insights Team (marketing focused) and the Medical Affairs (client focused) groups to understand their needs and desired features
- Gathering stakeholder information was crucial for narrowing down the scope of the project which was initially too broad
- Created personas to best represent stakeholder groups and used them to synthesize the data gathered from the interviews
- Given time constraint, decided to focus on Medical Affairs Group for most immediate impact

Research Analysis

- Grouped interview answers into common themes and found several key findings:

1. Users wanted an **easy way to gain insights on different patient populations/personas**
2. Users were particularly interested in **exploring geographical social factors** and their effects on a patient population
3. Most users were not familiar with handling datasets and **preferred more tool restrictions over full customization**

- Discussed with NNI to confirm which insights were feasible in terms of securing enough data to generate desired insights in an ethical manner

Wireframing and Usability Testing

### Low Fidelity Prototype with Wireframes
- Wireframing allowed us to create low fidelity prototypes of our tool and iterate quickly and cheaply, focusing on the user experience and tool content without getting sidetracked by the visual design
- Went through two iterations of wireframes and feedback

User Test Scenarios
- Designed and conducted three different user testing scenarios to assess the user flow and navigability of the tool
- Analyzed survey feedback from 6 users on satisfaction and pain points

Results
- **50%** of users reported to be "Satisfied" and **33%** of the users reported to be "Very Satisfied" with the design and user experience of the Data Insights tool
- **Liked the easy usability**, the **overall design**, and **information hierarchy** of the tool.
- **Needed visual cues** and **accessible font size** to easily locate all the tool features

Q1 Overall, how satisfied are you with the tool?
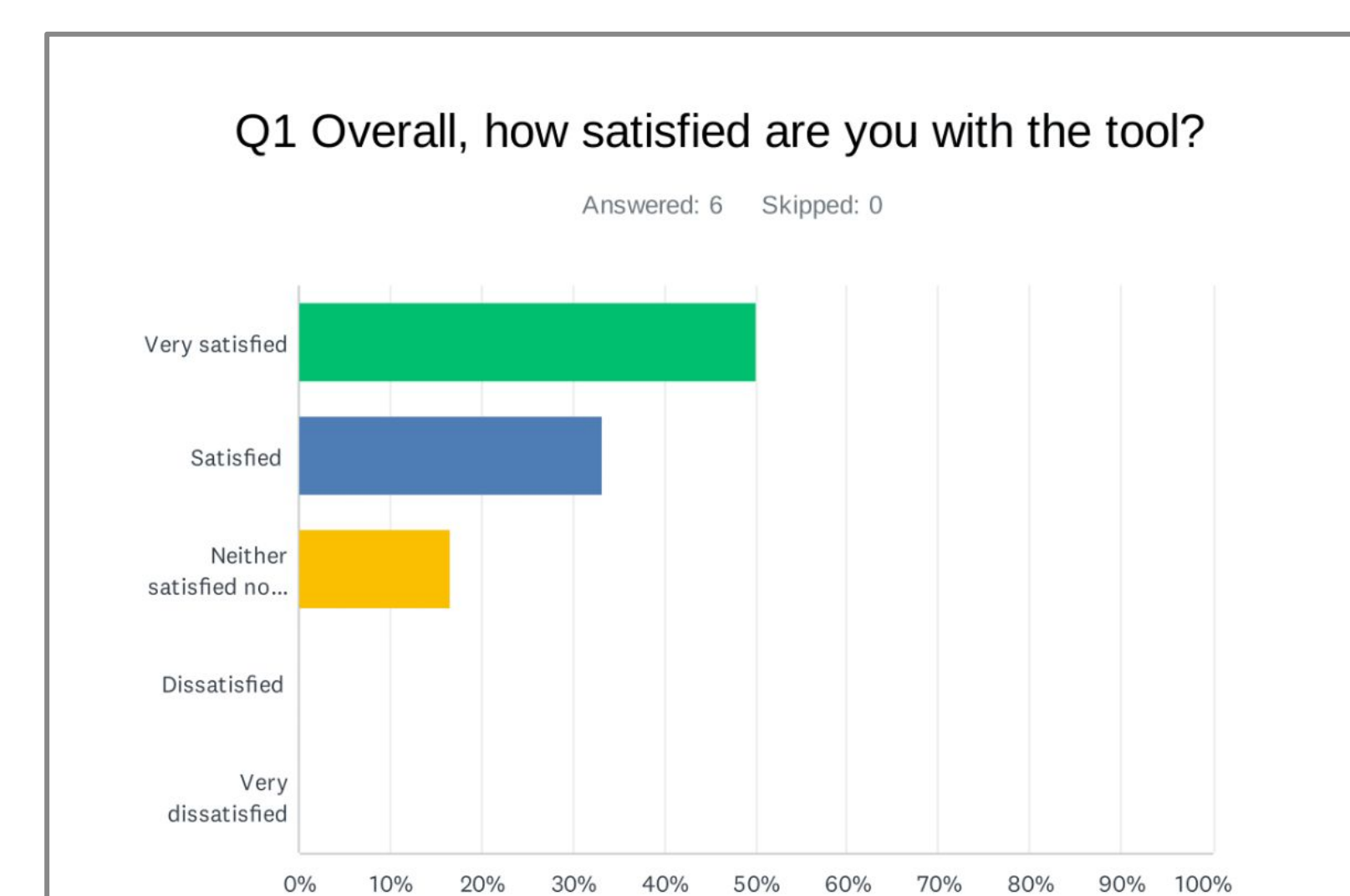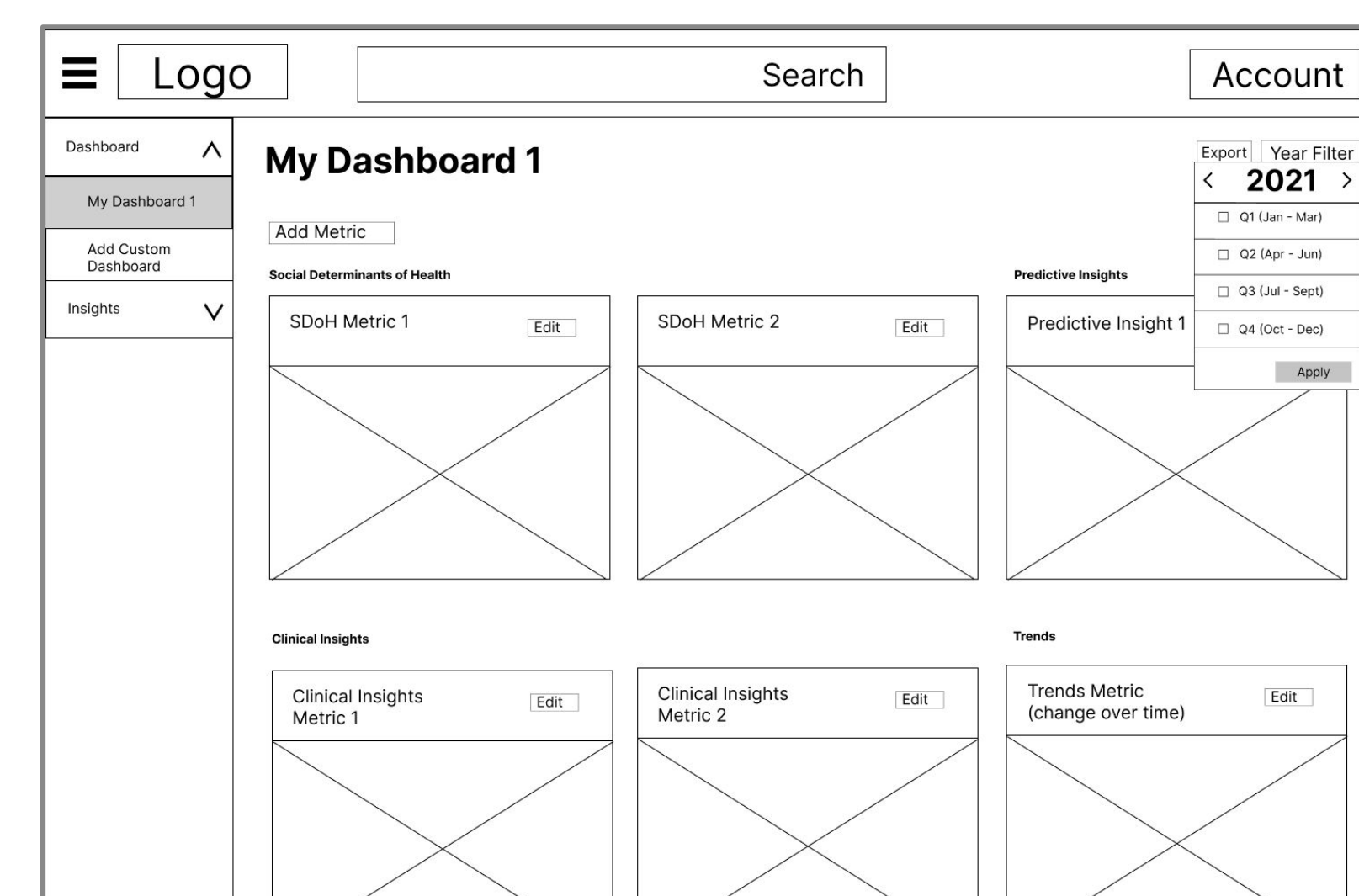
Final Prototype

Overall Design Patterns
- The design of the Data Insights Engine tool abides by Novo Nordisk branding guidelines, including font, color scheme, buttons, and icons
- Design consistency is established across all prototyped screens
- Ensuring design consistency is crucial in the product design process as it provides a framework for future designers to iterate and manage design updates, as well as giving our users a sense of structure that makes the user flow/experience more organized, intuitive, and easy to navigate
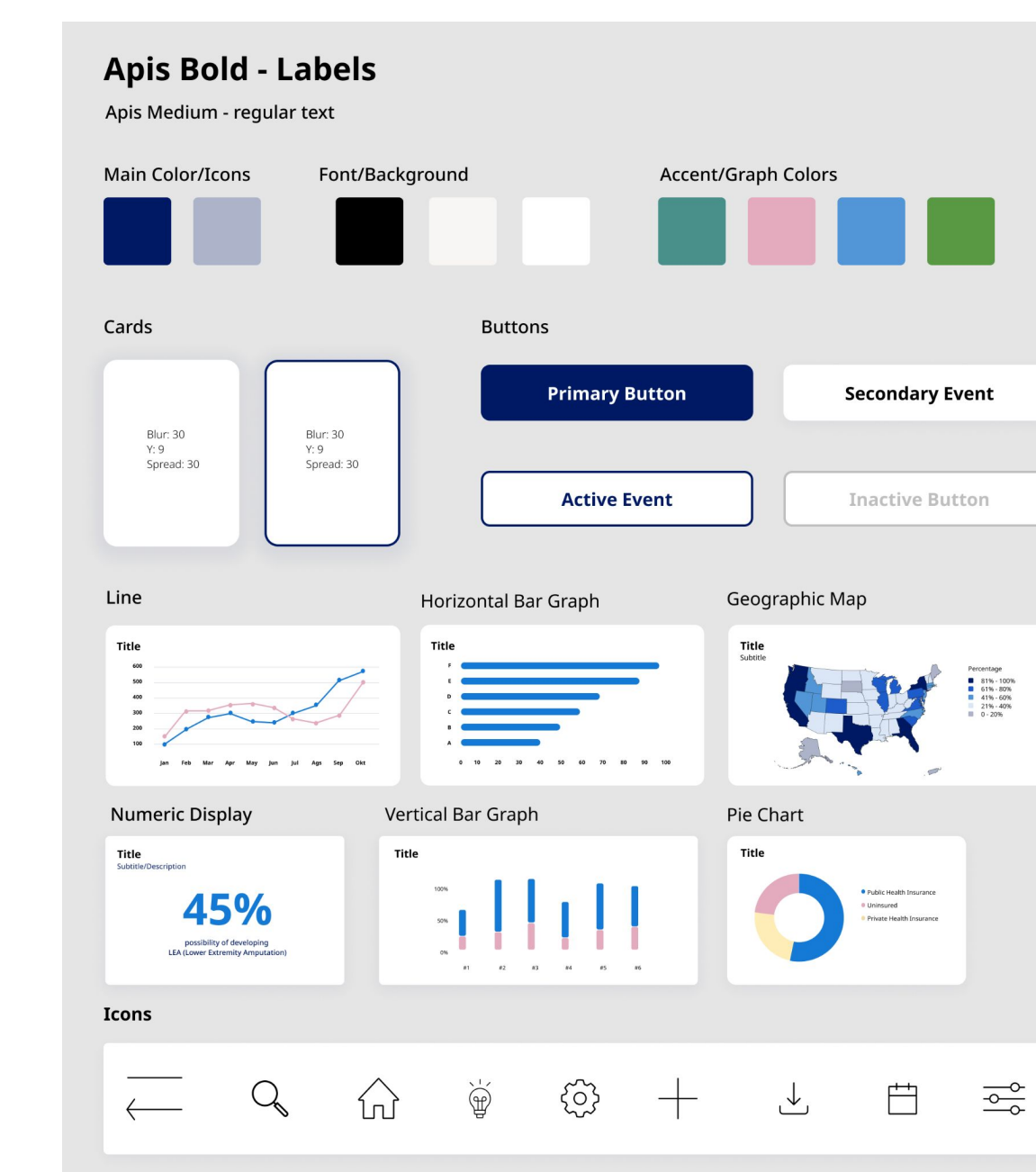
High Fidelity Prototype
- Utilized Figma (prototyping software) to develop an interactive high fidelity prototype of the Data Insights Engine tool which contains all screens complete with visual components
- Interactions on the prototype simulate a complete app without being fully coded
- Incorporated user feedback and presented content in a direct way using minimalist design
- Final prototype consists of design elements such as collapsible sidebar for page navigation, cards for visualization layout, search bar, and buttons for export and year filter
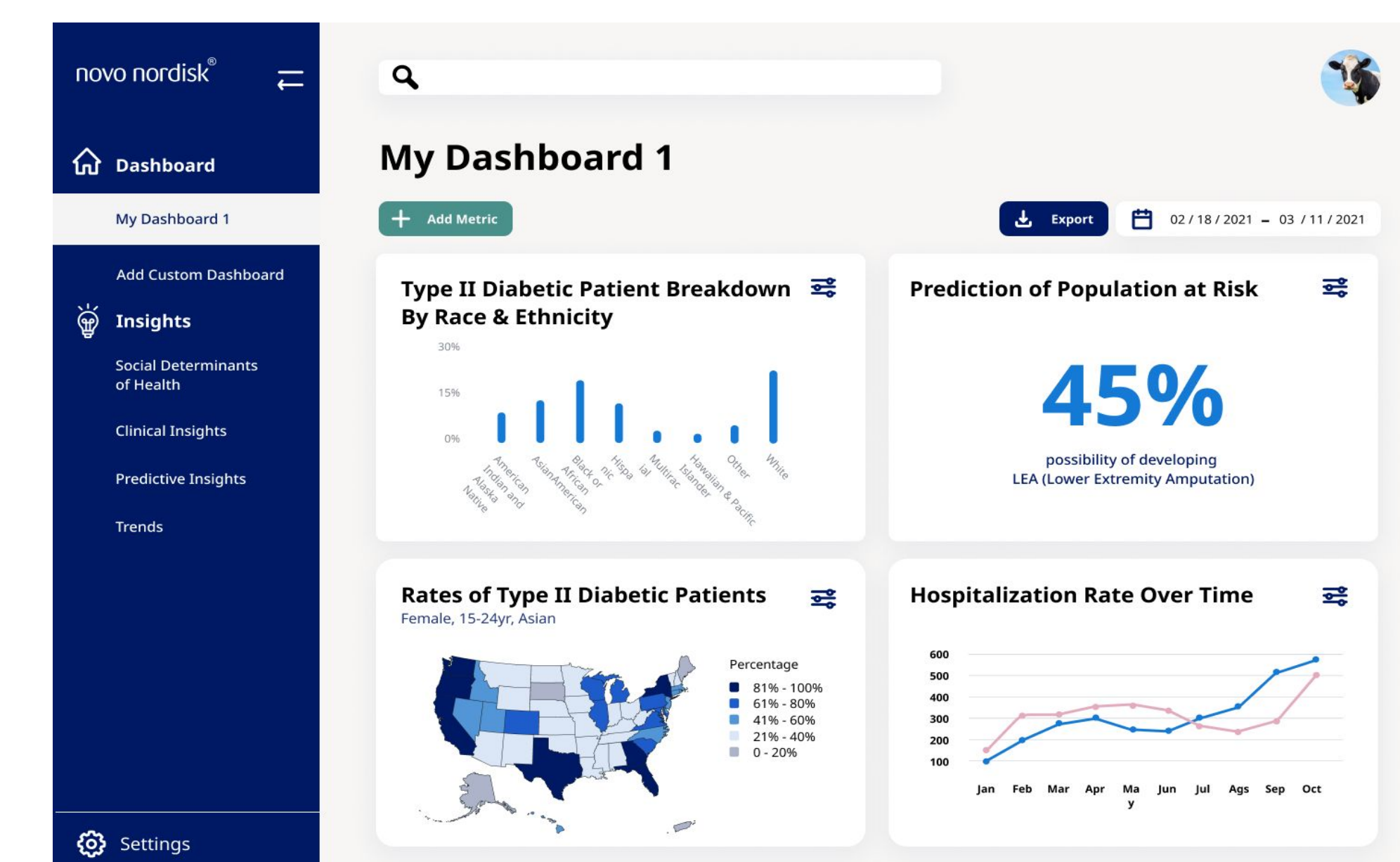
Future Work, References, and Acknowledgments

- Wireframes and design library allow for further iteration as tool develops and increases in complexity
- Full design package will be handed over to NNI Data Insights Team to connect the UI/UX interface with usable clinical and social determining data
- Post development, the tool can be used by NNI Medical Affairs team to provide individualized treatments to patients