1. Introduction

Your Health Centre

Your Health Centre clinic is located in Papatoetoe in South Auckland. Over the years it has been serving the diverse community. The clinic is committed to providing accessible yet high-quality medical services to individuals and families.

The clinic employs diverse staff with a patient-centered approach. The employees offer a wide range of services, from general practice consultations to specialized clinics, all designed to meet the different health needs of our Papatoetoe community.

At Your Health Centre, the employees understand the importance of cultural sensitivity and strive to create a welcoming environment for all clinic patients. The team of experienced healthcare professionals is dedicated to not just treating illnesses, but also promoting overall wellness and preventive care.

The clinic is constantly trying to improve its services and to adapt to the evolving healthcare landscape. This proposal outlines our vision for enhancing our capabilities and better serving the Papatoetoe community in the years to come.

2. Executive summary

**Purpose**: Start by clearly stating the purpose of the proposal. Explain what the document is about and its significance to Your Health Centre.

The purpose of this project proposal is to implement AI technology in a medical setting. In the short term, the solutions will simplify daily operations in a local clinic by eliminating repetitive tasks. Enhancing operational efficiency will reduce burnout and improve overall productivity for our healthcare team. It will be a game changer especially for the general practitioner, who works in excess of seventy hours each week. In the long term, which will be conditional to clinic expansion caused by increased number of new patients, the care provider may engage with AI company to get more cut-to-fit specific solutions that address scalability, efficiency and increase financial profitability.

**Highlights of the Introduction**:

Your Health Centre is located in Papatoetoe, South Auckland. The clinic has been serving the diverse Papatoetoe community for many years. Your Health Centre is committed to providing accessible, high-quality medical services to individuals and families. The clinic employs diverse staff with a patient-centered approach, offering a wide range of services from general practice consultations to specialized appointments. The team of medical professionals prioritizes cultural sensitivity and strives to create a welcoming environment for all patients. The focus is not just on treating illnesses, but also on promoting overall wellness and preventive care. Your Health Centre is constantly working to improve its services and adapt to the evolving healthcare demand. The proposal addresses enhancing the clinic's capabilities to better serve the Papatoetoe community by avoiding its staff burnout.

**Key Services**:

The clinic provides primary care, heart health, injury care, long term conditions, child health along with vaccination, occupational health, mental health and sexual health services.

**Cultural Sensitivity and Patient Care.**

The clinic focuses on cultural sensitivity and creating a welcoming atmosphere for all patients, underscoring the importance of a patient-centered approach.

**Commitment to Improvement.**

There are ongoing efforts of the clinic to improve its services and adapt to technological changes in the healthcare industry to better serve the community.

Optimizing telemedicine with additional layer of AI services presents a significant opportunity for Your Health Centre to address several critical challenges while improving overall healthcare delivery. Here's a summary of the key points and recommendations:

Addressing Burnout and Increasing Efficiency. By implementing advanced telemedicine solutions, we can significantly reduce the workload on our healthcare providers, particularly our general practitioner who currently works over 70 hours per week. Automated scheduling, virtual consultations, and AI-assisted administrative tasks can free up valuable time, allowing our staff to focus on patient care rather than paperwork. Attracting More Patients. Enhanced telemedicine capabilities will make our services more efficient to a wider range of patients, including those with mobility issues, busy schedules, or those living in more remote areas of South Auckland. This increased accessibility can lead to a growth in our patient base and improved community health outcomes. Integrating Technology and Improving Workflows. We recommend a phased approach to technology integration, starting with basic telemedicine platforms and gradually incorporating more advanced AI-assisted tools. This will allow for smoother adoption and help streamline workflows across all aspects of our clinic operations. Support for Clinicians and Patients. Implementing user-friendly interfaces for both healthcare providers and patients is crucial. We recommend investing in training programs to ensure all staff are comfortable with the new technologies, as well as providing patient education resources to facilitate smooth adoption of telemedicine services. Long-term Benefits: The adoption of these telemedicine solutions offers significant long-term benefits: Improved patient outcomes through more regular check-ins and easier access to care. Enhanced work-life balance for our healthcare providers, leading to better job satisfaction and retention. Increased efficiency and cost-effectiveness in clinic operations. Better management of chronic conditions through continuous monitoring and timely interventions. Potential for expansion of services without proportional increase in physical infrastructure. Cultural Sensitivity. Given our diverse community in Papatoetoe, we recommend ensuring that all telemedicine solutions are culturally sensitive and accessible in multiple languages to maintain our commitment to inclusivity. In conclusion, by embracing and optimizing telemedicine, Your Health Centre can significantly enhance its ability to serve the Papatoetoe community while simultaneously improving the work environment for our healthcare providers. This technology-driven approach aligns with our commitment to continuous improvement and adaptability in the evolving healthcare landscape. We strongly recommend moving forward with this initiative to secure a more efficient, accessible, and sustainable future for our clinic and the community we serve. Fact Finding ... get people to find things. reporting solutions elsewhere - relevant stuff - 3 to 4. real life or literature - should be on point - either positive or negative - tailored effective opportunities Implement AI-Assisted Tools: Utilize AI for scheduling, patient triage, and documentation to reduce administrative workload. Enhance Telemedicine Platform Usability: Ensure that the system is user-friendly, intuitive, and offers quick access to essential tools for healthcare professionals. Focus on Patient-Centric Features: Offer patients more self-service options (e.g., scheduling, virtual consultations) to improve engagement and satisfaction. AI-Powered Diagnostic Tools: Invest in cutting-edge AI tools that support clinicians in diagnosing conditions quickly and accurately, minimizing errors and improving patient outcomes. Benefit: Faster, more precise care means higher patient satisfaction and better clinical results. Conclusion A Path to Optimized Care. By integrating i-scribe from the Nebula Health platform, Your Health Centre can effectively combat clinician burnout, improve operational efficiency, and attract a larger patient base. It is imperative to leverage this innovative technology to enhance workflows and provide adequate support for both clinicians and patients. The long-term benefits of implementing these solutions will lead to improved patient outcomes and enhanced well-being for our workforce. Recommendations: Utilize i-scribe for Accurate and Efficient Documentation: Implement i-scribe from Nebula Health as the primary documentation tool within Your Health Centre. This will streamline notetaking, eliminate the need for manual transcription, and allow for accurate and consistent documentation across all patient interactions. Benefit: By leveraging i-scribe's AI-powered capabilities, clinicians can focus on patient care, reducing administrative burden and improving overall productivity. By following this framework, Your Health Centre can advance its services, fully supporting both its staff and the community it serves.

**Evidence of AI capabilities and improved performance in medical settings.**

1. AI-Assisted Diagnosis and Treatment Planning: A study published in Nature Medicine (2019) showed that an AI system developed by Google Health could detect breast cancer in mammograms with greater accuracy than human radiologists. The AI reduced false positives by 5.7% and false negatives by 9.4% in the US, and by 1.2% and 2.7% respectively in the UK (Alowais et al., 2023).
2. Deep learning algorithms have been used to diagnose heart attacks with accuracy comparable to cardiologists. AI networks trained on clinical images have shown high accuracy in dermatological diagnoses, classifying skin lesions effectively (“10 Innovative”, 2024).

Relevance: This demonstrates the potential for AI to improve diagnostic accuracy and efficiency in healthcare settings, which could be particularly beneficial for Your Health Centre's diverse patient population.

1. Telemedicine and Patient Satisfaction: A 2021 study in the Journal of Medical Internet Research found that patient satisfaction with telemedicine services during the COVID-19 pandemic was high, with 94.9% of patients reporting they would use telemedicine again. Patients appreciated the convenience and time-saving aspects of virtual consultations.

Relevance: This indicates that implementing robust telemedicine services could increase patient satisfaction and loyalty at Your Health Centre, potentially attracting more patients.

1. AI in Administrative Tasks: A case study by Olive AI reported that their AI solution helped Tufts Medical Center save $480,000 annually by automating repetitive tasks in the revenue cycle management process. The AI solution processed over 350,000 transactions per day, reducing human error and freeing up staff time.

Relevance: This shows the potential for AI to significantly reduce administrative burden and costs at Your Health Centre, allowing staff to focus more on patient care.

1. Cultural Sensitivity in Telemedicine: A 2022 study in the Journal of Medical Systems explored the use of AI-powered language translation in telemedicine consultations. The system improved communication between healthcare providers and patients with limited English proficiency, increasing patient satisfaction and reducing misunderstandings.

Relevance: Given the diverse community in Papatoetoe, implementing such a system could enhance Your Health Centre's ability to provide culturally sensitive care through telemedicine.

These examples demonstrate both positive outcomes and potential challenges in implementing AI and telemedicine solutions in healthcare settings. They support the recommendations for Your Health Centre to adopt these technologies; while also highlighting the importance of careful implementation and ongoing evaluation to ensure they meet the specific needs of your clinic and community.

Recommendations:

Short term:

IScribe

## Scribe: Revolutionizing Medical Documentation for Small Clinics

iScribe is a doctor-led, Australian-developed software designed to transform the way medical professionals manage their paperwork. It acts as a virtual assistant, listening to conversations during patient consultations and automatically generating accurate notes, letters, and summaries. Its user-friendly interface and advanced features make it an ideal solution for small medical clinics seeking to streamline their workflows, improve efficiency, and enhance patient care.

**Addressing the Challenges Faced by Small Clinics:**

Small clinics often struggle with:

* **Paperwork burden:** Manual note-taking and letter writing consume valuable time, taking away from patient care.
* **Communication breakdowns:** Language barriers can hinder effective patient communication and understanding.
* **Limited resources:** Small clinics may have limited staff and resources for administrative tasks.

**iScribe's Unique Advantages:**

iScribe addresses these challenges head-on, offering a compelling solution:

* **Automated Documentation:** iScribe eliminates the need for manual note-taking, freeing up nurses and doctors to focus on patient interaction.
* **Accurate and Efficient:** Its AI-powered engine ensures accurate and comprehensive documentation, reducing errors and improving consistency.
* **Multilingual Capabilities:** With its support for over 100 languages, iScribe bridges language barriers, fostering better communication with patients from diverse backgrounds.
* **Customizable Workflows:** iScribe's interface allows customization to match individual clinic workflows, ensuring seamless integration.

**Cost-Effectiveness and Value Proposition:**

At a competitive monthly subscription cost of $250, iScribe offers significant value for small clinics:

* **Reduced administrative overhead:** Automation streamlines workflows, reducing the need for additional administrative staff.
* **Improved efficiency:** Doctors and nurses can focus on patient care, leading to higher productivity and a better patient experience.
* **Enhanced patient satisfaction:** Improved communication and timely care lead to increased patient satisfaction and loyalty.

**Beyond Documentation:**

iScribe goes beyond basic documentation, offering additional features:

* **Medical Report Summarization:** iScribe can quickly summarize complex medical reports, enabling GPs to quickly understand key findings and make informed decisions.
* **Appointment Scheduling:** It can help schedule follow-up appointments based on urgency, optimizing clinic schedules and ensuring timely care.

**Conclusion:**

iScribe is a game-changer for small medical clinics, offering a powerful and affordable solution for streamlining documentation, enhancing patient care, and improving overall clinic efficiency. By eliminating administrative burdens, fostering clear communication, and enabling better patient management, iScribe empowers small clinics to thrive in today's competitive healthcare landscape.

**Long term:**

We contacted Andrew Moseley from SupaHuman AI company and met with him on premises in GridAKL on September 9 and September 25. SupaHuman is a startup company based in Auckland that leverages cutting-edge generative AI and Natural Language Processing (NLP) technologies to streamline and enhance operational efficiency across various industries. Our mission is to provide innovative solutions that automate repetitive tasks, allowing businesses to focus on strategic priorities.

**Project Assessment Criteria in SupaHuman office:**

To evaluate potential projects, SupaHuman employs a two-variable framework:

**Feasibility:**

**High:** Easy to implement

**Low:** Challenging to implement

**2) Value to the Business:**

**High:** Significant impact on operations

**Low:** Minimal impact Projects categorized as high feasibility and high value are prioritized for immediate implementation. In contrast, projects assessed with low value and low feasibility may be considered for future engagement, contingent upon advancements in technology. Projects with feasible execution but low value – where minimal employee engagement is expected – will not be endorsed for implementation by SupaHuman.

**Evaluation Framework:**

SupaHuman evaluates potential AI projects in the following order:

**People or Operational Efficiency:**

Assessing the number of employees involved in current processes. A larger number justifies investment in AI solutions to alleviate workload.

**Percentage of Time Spent:**

Evaluating the amount of time employees dedicate to tasks that could be automated.

**Cost per Person:**

Establishing a quantifiable metric to understand the financial implications of current workflows.

**Risk Assessment:**

Analyzing the types and magnitudes of risks associated with each project, including the likelihood of occurrences and future risks. Investing in AI can help future-proof the company against potential challenges.

**Revenue Generation:**

Identifying opportunities for AI to generate revenue, thereby offsetting costs. Our approach emphasizes that AI projects primarily aim to save time and effort, reduce risks, create new revenue opportunities, and lower operational costs. Ultimately, our solutions enable businesses to generate unparalleled value.

**Investment and Implementation Timeline:**

The initial capital investment required for AI projects exceeds $50,000, with an estimated implementation timeline of 4-6 weeks for our engineering team to integrate AI capabilities into existing company software. Ongoing support costs are projected to be over $5,000 per month. SupaHuman focuses on delivering ideal solutions for companies with annual revenues ranging from $5 million to $50 million, ensuring a strong return on investment and enhanced operational performance.

References

Alowais, S. A., Alghamdi, S. S., Alsuhebany, N. (2023). Revolutionizing healthcare: the role of artificial intelligence in clinical practice. *BMC Medical Education.*

<https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-023-04698-z>

10 Innovative Examples of AI in Medicine. (2024). *St. George’s University School of Medicine.*

<https://www.sgu.edu/blog/medical/ai-in-medicine-and-healthcare/>