



PreMedicus® LLC

Digitally Humanizing & Optimizing Emergency Care

www.premedicus.com

Non-Confidential Executive Summary for Hospital Systems

The Company:

PreMedicus® LLC is an Atlanta digital medicine startup founded by Pulmonary and Critical Care physician Dr. Tony Kimani. While in China with his Georgia Institute of Technology MBA class, he saw patients waiting long hours for ER care with advanced smartphones in hand. He was inspired to design and commercialize patient-friendly mobile apps for critical healthcare needs. We are pioneers in the emerging field of **digital precision population health**, which takes inputs from clinical medicine, public health, social determinants of health, wearables, natural language processing and AI to generate highly individualized disease prediction, prevention and early diagnosis. We are a portfolio company of the Advanced Technology Development Center at Georgia Institute of Technology and members of the Global Accelerator Network in Denver, and University of California San Francisco's ADviCE digital health ecosystem.

Our Business:

We have built a highly secure precision population health cloud platform that creates value for major healthcare stakeholders by digitally streamlining critically important medical and business functions. Our digital tools engage patients in their own care, expedite virtual or in-person evaluation, increase workplace safety, optimize staff workflow, provide clinical decision support, shorten reimbursement cycles and provide strategic data insights in the fast paced telemedicine, urgent and emergency care environments.

The Problem:

The Covid-19 pandemic cruelly laid bare the deficiencies of healthcare systems everywhere, causing pandemonium worldwide. The urgent need for accurate, easily accessible and user-friendly digital tools that can identify at-risk individuals and communities, educate them using reliable medical sources, and triage symptomatic people to the right care site early in the disease course so that health resources are utilized optimally cannot be overstated.

Our Solutions:

In the post-pandemic era, the paradigm is rapidly shifting to favor digitally-enabled, patient-centered, inter-connected healthcare technologies that help clinicians safely deliver personalized, high quality, cost-effective and efficient care. **PreMedicus®** solves the need for rapid and accurate evaluation and disposition of a mixed population of worried well, sick and injured people contemplating ER care. By bringing order to the fear and confusion associated with acute illness, our digital assistants reduce the potential for medical errors from incorrect information, improve care quality and reduce ER congestion. **PreMedicus® PH** is our unique cloud-based platform designed to accomplish the healthcare **Quadruple Aim; increase quality, lower costs and improve patient and provider experience** in urgent and emergency care. Whether in "peace time" or during a large scale healthcare emergency, we deliver accurate acuity-based digital triage and demand-based patient-facility matching that improves health outcomes and decreases burden on health care providers and facilities. We **liberate and empower the patient-provider relationship**, literally and figuratively giving patients a voice in their healthcare, and freeing providers to be fully engaged by pre-organizing clinical information. This contextually rich data from our user-facing mobile apps is stored, analyzed and securely accessed by our enterprise customers using a user-friendly dashboard.



PreMedicus® LLC

Digitally Humanizing & Optimizing Emergency Care

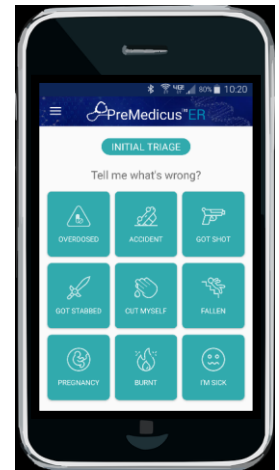
www.premedicus.com

PreMedicus® PH boldly re-imagines Emergency and Urgent Care with the following software:

1. **PreMedicus® ER**, a patient-operated Android or iOS mobile app that works independently or within a telemedicine system to generate over 100 personalized self-diagnoses, real-time triage advice, patient education, a shareable medical record, and a disease risk factors profile using proprietary clinical algorithms.

Please follow this link to watch a short demonstration video:

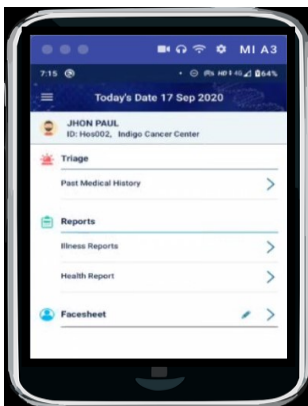
<https://drive.google.com/file/d/1QsLjk3nDRh8H4-WlW7jibiYRmVR-TUxv/view?usp=sharing>.



PreMedicus® ER

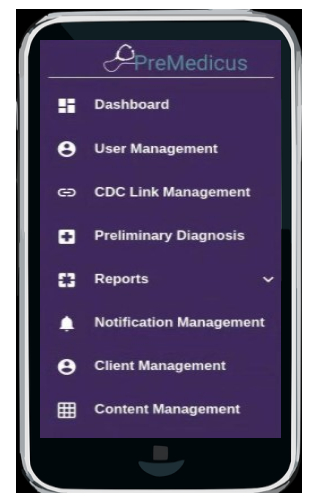
2. **PreMedicus® ASV**, an acute care management Android or iOS mobile app with clinical decision support that automates most aspects of the in-person visit. This multi-user system drives value by asynchronously collecting patient and provider information, and organizing and reformatting clinical and billing data in real time to increase staff productivity. Our work flow minimizes infection exposure while humanizing the patient experience by allowing her to tell her story in her own words, and preparing her for a much more meaningful interaction with a provider undistracted by clerical tasks. Please follow this link to watch a short demonstration video:

<https://youtu.be/jRGQeOdNMPg>



PreMedicus® ASV

3. An **integrated Health Library** that delivers patient-specific education and clinical information for providers through partnership with leading medical organizations.
4. A **customizable Client Dashboard** for reviewing population health data.
5. A **cloud Machine Learning Engine** that will use traditional and generative artificial intelligence to optimize our clinical algorithms, enhance user experience and provide our enterprise customers with **strategic predictive analytics**.



Client Dashboard

Our Technologies/Special Know-how:

In times of acute illness, our apps take the patient through a brief targeted interview, quickly render a reliable Preliminary Diagnosis and accurate Triage Decision, and then present the organized clinical information to a live or telemedicine provider. Patients learn more about the Preliminary Diagnosis using an in-app link to highly reputable websites, and receive an electronic Illness Report when the visit is completed. Healthcare data is securely uploaded to a HIPAA compliant cloud server. The PreMedicus® mobile apps collect, encrypt and store detailed user health information as a reference point for crafting the Preliminary Diagnosis and suggesting personalized health maintenance advice.



PreMedicus® LLC

Digitally Humanizing & Optimizing Emergency Care

www.premedicus.com

Aggregated patient generated data are delivered to our analytics subsystem, and used to improve our AI training models and to demonstrate cost reduction and value creation. The business customer accesses the analytics results via a custom Client Dashboard that provides direct visibility to their population metrics, and quantifies the business advantages delivered by our platform.

Uniquely, the PreMedicus® PH software interacts directly with the patient in real time, providing personalized guidance in the dynamic and fluid environment that precedes or follows the decision to seek medical care. Symptom checkers and AI chat bots also attempt to play this role. They essentially assemble key words to best match a database diagnosis and generate an associated triage directive. IBM Watson failed in making accurate diagnoses because human disease manifestations vary and overlap in a wide variety of conditions with vastly different consequences, making purely AI based approaches extremely challenging. AI based triage can change patient perceptions on their acute care options, but triage accuracy remains unproven.

In a significant process innovation, we use key elements of the health profile to contextualize each patient's responses to a short series of carefully designed questions regarding the chief complaint to simulate a concise physician interview. Our proprietary algorithms weight and score responses, quickly leading to a reliable personalized Preliminary Diagnosis and an accurate Triage Decision. Our platform is complementary to telemedicine using APIs, providing a faster and lower-cost path to a Triage Decision in routine cases, while offering a virtual physician visit to patients with more complex or incongruent symptoms.

PreMedicus® PH is developing models that identify disproportionately high cost patients even before they are symptomatic, allowing them to receive focused attention to prevent or minimize the impact of an illness event. For example, in patients with chronic lung diseases, we can prevent expensive acute flares leading to ER visits or hospital admissions by reporting poor air quality in their specific location and advising them when to limit outdoor physical activity. The continuously improving PreMedicus® PH platform is a unique diagnostic and interventional precision population health management solution.

Cybersecurity & Privacy:

PreMedicus® PH uses background tools to scrub, aggregate, collate and analyze all collected data. The PreMedicus® website, software and database are hosted on a HIPAA compliant server at Amazon Web Services, an enterprise level cloud platform that provides security services and extensive scaling capacity. We are working towards attaining key industry certifications.

The company's software has been developed in a highly secure environment and designed to comply with the new EU Privacy Policy, General Data Protection Regulation 2016/679 (GDPR) and healthcare data security standards. We hired a leading AWS partner specializing in healthcare cloud architecture, data integrity, privacy and cybersecurity, to migrate and maintain our software repositories in the AWS Cloud.



PreMedicus® LLC

Digitally Humanizing & Optimizing Emergency Care

www.premedicus.com

Regulatory Oversight:

1. Final FDA Guidance “Clinical Decision Support Software, Sep 28, 2022”:
<https://www.fda.gov/regulatory-information/search-fda-guidance-documents/clinical-decision-support-software>
 - a. PreMedicus ASV app is NOT a medical device.
 - b. PreMedicus ER app is a medical device.

2. Final FDA Guidance “Policy for Device Software Functions and Mobile Medical Applications” issued September 28, 2022:
<https://www.fda.gov/regulatory-information/search-fda-guidance-documents/policy-device-software-functions-and-mobile-medical-applications>
 - a. PreMedicus® ER app is software as a medical device (SaMD).
 - b. PreMedicus® ER app qualifies as low risk SaMD with enforcement discretion: no need for clinical trial or regulatory clearance.
 - c. Strong support in this Guidance for all PreMedicus® ER functions.

Value Proposition:

Hospital networks

- ✓ Improving quality, saving costs and increasing efficiency with integrated digital clinical and business workflows that enhance patient care and revenue cycle management.
- ✓ Creating high user engagement with an intuitive user interface to raise patient and provider satisfaction.
- ✓ Reducing patient and staff infection risks by digitizing activities that do not require face to face contact.

Clinical Validation:

We seek a forward-leaning health system to pilot our mobile apps to validate these hypotheses:

1. **PreMedicus® ASV** can measurably improve ED patient engagement in their own care.
2. **PreMedicus® ASV** can objectively improve ED Provider and staff work flow and job satisfaction.
3. **PreMedicus® ER** can accurately deliver an accurate differential diagnosis and reliable triage recommendation.

Inquiries:

Tony Kimani, MD, MBA

President & CEO, PreMedicus® LLC

ceo@premedicus.com