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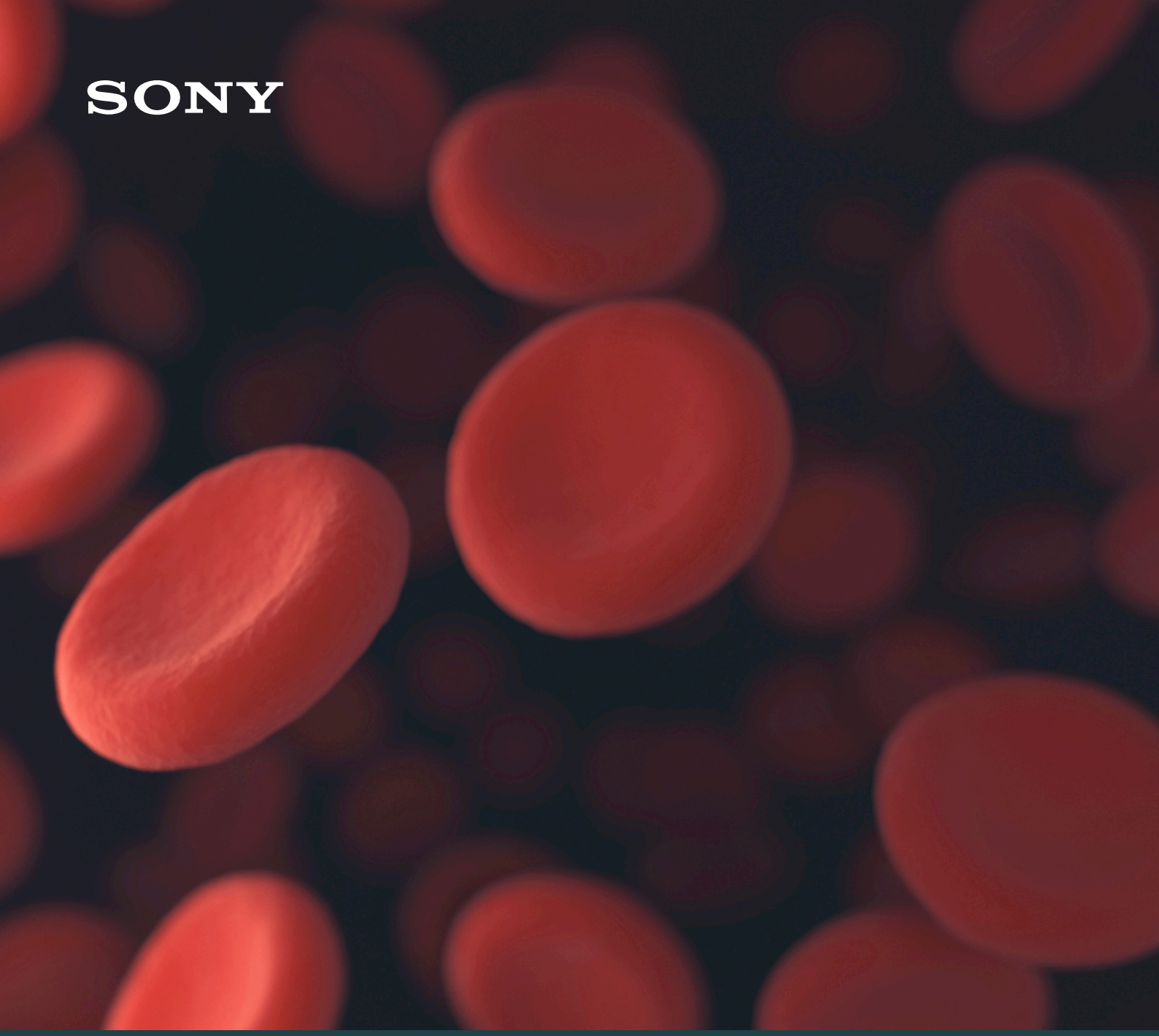

CUSTOMER STORY

General Prognostics uses mSafety to make blood test information more accessible than ever

PUBLISHED: January 2023

mSafety

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General Prognostics (GPx) is a digital therapeutics company headquartered in Boston, USA. The company was founded by Javier Echenique, Sean Matsuoka and Sidhant Jena who bring together expertise in remote monitoring, medical devices and diagnostics. They are on a mission to revolutionise blood testing.

GPx is dedicated to transforming the standard of care of cardiorenal diseases and enabling patients to better understand their condition. That is why they are developing a service that can deliver vital information to care providers about blood diagnostics through the convenience of a wearable on a patient's wrist. In other words, access to blood information without drawing a drop of blood.

Much like the continuous glucose monitor has transformed diabetes care, GPx is built on the belief that intuitive, accessible technologies have the power to change lives. Read about the General Prognostics story – and how mSafety is supporting the development of their Bloodless Blood Tests.

The GPx service

GPx is developing a service for patients with chronic conditions, such as heart failure and kidney failure. Their service will deliver information about blood biomarkers without needing to draw a drop of blood. This is possible by applying their proprietary algorithms to digital biomarkers – collected with a wearable – that correlate with underlying blood biomarkers. GPx is currently developing and refining a portfolio of algorithms to be approved by the FDA.

How blood biomarkers are accessed today

1. Traditional blood tests at the clinic

- Expensive for patients and providers
- Travel time and costs for the patient
- Painful for many patients
- Doesn't provide a continuous picture of blood diagnostics

2. Monitoring other biomarkers, like weight fluctuation

- Still time-consuming for patient and providers
- Not nearly as predictive for most conditions
- Noticeable fluctuation could mean it is too late to intervene
- Isolated measurements don't provide a continuous picture

3. Implantable pressure sensors

- Invasive surgery
- Expensive device and procedure
- Many patients don't qualify due to health risks

ADVANTAGES TO BLOODLESS BLOOD TESTS FROM GPX

Pain-free and non-invasive
A simple wearable can deliver all the necessary information.

Accessible price
Since there is no implant, the cost of the monitoring service is low, and fully reimbursed in the US.

Continuous insights
Constant health monitoring supports early detection of patient deterioration for more proactive care.

Remote collection
Remote care saves time, resources and money for patients and providers alike.

The development

How GPx chose to develop on mSafety

GPx designed their custom application to be simple and accessible – for both patients and care staff. Their goal was that any patient wearing the device would not feel inconvenienced during their daily activities. To GPx, an important part of creating that convenience was that the device is a hub in and of itself and requires no companion smartphone. That means that users don't have to worry about anything besides wearing the wearable.

GPx made important customisations for their specific service:

- On the mSafety wearable display, GPx created a simple interface that only displayed essential information that the end user needed to know.
- In the mSafety wearable application, GPx created custom features, such as a continuous beeping reminder once fully charged to remind users to put the wearable back.
- With mSafety, GPx designed their service to seamlessly communicate with external sensors, such as their digital weight scales, devices to measure vocal biomarkers and other patient monitoring peripherals.

WHY DID GPX CHOOSE MSAFETY?

To develop their algorithm-based blood tests, GPx needed digital biomarkers. But to access digital biomarkers and offer their service, GPx needed a wearable. They chose mSafety for a number of reasons.

For full control

They customised the wearable application, own the wearable, can integrate the solution seamlessly into their service and control the data once it is collected.

To optimise for simplicity and accessibility

A simple, intuitive device was vital for their broad target demographic. For starters, mSafety does not require a smartphone to connect to the cloud.

For data security

As a data-based service in the medical field, data security and privacy are critical. Dependence on a third party when it came to their data wasn't an option. And thanks to end-to-end encryption, Sony plays no part in the data collected on mSafety.

Sean Matsuoka, COO of GPx, explained the three biggest advantages to their service on mSafety:

1

"First, with mSafety there is no need to pair a companion smartphone. This removes unnecessary technical complexity."

2

"Second, the superior battery life makes life simpler for everyone. We're easily getting a week between charges. The less often patients have to charge their wearable, the better."

3

"Reliable data collection is a third important advantage. Strong cellular connections and effortless Bluetooth Low Energy pairing to external sensors means all our data arrives seamlessly. This is critical of course, because no connection means no data."

Service operation

How GPx operates their service with mSafety

By leveraging mSafety for their service, GPx can conduct clinical trials to develop their proprietary algorithms for Bloodless Blood Tests. During the trials, periodic blood samples are used to train their algorithms to correlate digital biomarkers with blood diagnostics.

Before each clinical trial, care providers onboard patients about using mSafety. Patients then wear the wearable over the course of the trial. With mSafety, this process is smooth and patients are very willing to use the health-dedicated device. Javier Echenique explains how mSafety has led to high compliance in their trials:

"We hear time and again from nurses how easy the system is to use. Onboarding patients is a breeze. We have extremely high compliance thanks to mSafety."

Javier Echenique, CEO and Co-Founder of GPx

Sony enables a wearable service for GPx that gives patients and care staff no trouble whatsoever – no matter the age or digital literacy of the patients. On top of that, care providers have a medical service that doesn't rely on a personal device with private data – stored on third-party apps susceptible to data breaches and exposure. This means a simpler care experience without extra steps to protecting personal health information.

A GPX CLINICAL TRIAL:

Bloodless Blood Tests for heart failure patients

In one GPx clinical trial, 150 heart failure patients were monitored over the course of six months. They wore the mSafety wearable device running GPx's service. The device itself measured biomarkers, and communicated automatically with peripheral devices to collect additional biomarkers, such as weight and vocal biomarkers. During the study, blood samples were collected every two weeks. The pool of biomarkers collected during the trial provided a unique set of data to train GPx's algorithms.

Vision

GPx wants to enable simple access to life-saving blood diagnostics

GPx is on a mission to make blood test information more accessible. Around the world, people struggle with chronic conditions. To monitor these conditions effectively, doctors prescribe regular bloodwork. Blood diagnostics provide a unique window into a patient's overall health and are extremely predictive of a patient's condition. Unfortunately, blood testing has big downsides that limit how often, how affordable and how predictive those blood tests are.

By fast-tracking their service on mSafety, GPx is on their way to delivering value to the entire world. Algorithmic blood tests are not only the easy and convenient option to blood monitoring, but they also come at a relatively low cost. Beyond the upfront cost of the wearable, a care provider using GPx can access blood diagnostic information with few recurring expenses. This makes it easier than ever for communities around the world to access life-saving blood diagnostics.

mSafety from Sony

mSafety is the perfect springboard for innovation in remote health monitoring. It consists of a development platform and a connected wearable, which can be built upon by any health & service provider looking to offer remote care. mSafety helps companies unlock digital, proactive and responsible health services. it.

Find out more about mSafety on https://sonynetworkcom.com/msafety/

Contact us to learn more about partnership with Sony's mSafety and how to make the wearable platform work for you.

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