Healthcare Business (HCB)

VISION Going for ZERO, Preventive Care for the Health of Society

Ideas and Insights Shaping the SF2030 Vision

In the Healthcare Business, we have been promoting home blood pressure monitoring believing that measuring blood pressure at home is beneficial to people's health. Nowadays, blood pressure data measured at home is being used in the treatment of hypertension, and home blood pressure monitoring has a positive impact on the blood pressure control of hypertensive patients. However, as the population ages, the number of hypertensive patients is increasing globally, and onsets of cerebral and cardiovascular diseases attributable to hypertension are also on the rise. In addition, the number of patients with respiratory diseases is rising, especially in emerging countries. Chronic pain in the knees, low backs, and shoulders imposes a heavy burden on people in their daily lives, significantly reducing the quality of life (QOL).

Our SF2030 vision, "Going for ZERO, Preventive Care for Health of Society," expresses our strong determination to create a society in which people around the world can live healthy and comfortable lives.

By leveraging the technologies and insights we have cultivated so far, we address three business domains: Cardiovascular, Respiratory, and Pain Management and aim to achieve 3 Zeros within these domains: "Zero cerebrovascular and cardiovascular events," including stroke and heart



Managing Executive Officer OMRON Healthcare Co., Ltd. President and CEO

Isao Ogino

failure; "Zero aggravation of respiratory diseases," such as asthma and chronic obstructive pulmonary disease (COPD); and "Zero restrictions on daily activities due to chronic pain," regarding the knees and low back pains. In addition, we will introduce Preventive Care to prevent disease and the development of serious illness, thereby offering new value fulfilling the desire of people around the world to "stay healthy."

In 2021, cumulative global sales of home blood pressure monitors exceeded 300 million units. However, looking at the global big picture, the penetration rate of home blood pressure monitor is still low, and the market size is expected to grow from 61 million units in 2020 to 87 million units in 2024. We will be focusing on China and India whose markets are expected to expand further, while strengthening our core business. In addition, issues affecting healthcare, such as the increase in the number of patients with chronic diseases due to aging population, increasing workloads of healthcare professionals, and a shortage of doctors, are becoming more apparent globally. By realizing social implementation of services that connect vital data measured at home with the medical field to support treatment by physicians, we establish a set of systems for preventive care that reduces physicians' workloads and allows everyone to receive optimal medical care. Furthermore, we will strive to make recording of electrocardiogram (ECG) data at home common practice to promote early detection and treatment of atrial fibrillation (AFib), a major risk factor for stroke. "Visualization" of the invisible risk of AFib in hypertensive patients helps prevent cardiovascular events, such as stroke. We will also continue to develop devices that monitor and record indicators other than blood pressure that are related to the onset of events, such as ECG.

In recent years, there have been changes in the business environment that go beyond anything we had anticipated, such as disruptions to international logistics and semiconductor shortages during the COVID-19 pandemic and the intensifying Russia-Ukraine crisis. During fiscal year 2021, As part of our initiatives to meet customers' expectations without being influenced by the harsh business environment, we established the MTA (Make to Availability) production system to deliver products to the customers who need them, when they need them, based on global integrated management of all inventories from parts to products in the market. In fisical year 2022, we will refine our purchasing strategy, including standardization of electronic components and stocking of appropriate quantities of parts, and enhance our ability to procure parts and materials for stable product supply.

We will also vigorously promote initiatives for decarbonization and environmental impact reduction, such as the introduction of environmentally friendly paper packaging and carbon neutral manufacturing, to create a sustainable society where everyone in the world can lead a healthy and comfortable life.

SF 1st Stage



Under SF 1st Stage, we aim to expand sales of blood pressure monitors which are a pillar of our business globally aiming to achieve cumulative sales of 94 million units over the next three years. We also aim to expand the number of users of our new remote monitoring service to 600,000, thereby laying the foundation for the realization of our vision, "Going for ZERO, Preventive Care for Health of Society."

Focus Domains



Cardiovascular







Remote patient monitoring service

We will expand our business in China and India, which are huge markets with tremendous growth potential in the healthcare domain, thus building a strong business foundation. For the Digital Health business, we intend to create new services by building on the progress already achieved with the telemedicine services that we launched in the U.S. and the U.K. Furthermore, we will work to develop innovative devices necessary to realize the 3 Zeros (Zero Events) and utilize them in the Digital Health business.

Major Initiatives

1. Cultivation of the Chinese and Indian markets

We will focus on the Chinese and Indian markets where further market expansion is expected due to the increasing number of hypertensive patients and patients with respiratory disease in line with economic growth and population aging, in order to strengthen the revenue base.

The blood pressure monitor market in China is expected to increase from approximately 21 million units in 2020 to 30 million units in 2024. Our targets are Tier 3 and Tier 4 cities in China, which are experiencing rapid economic growth. GDP of such cities is expected to surpass that of Tier 1 and Tier 2 cities by 2024. We will expand the offline/online channels that we have established in 1st and 2nd Tier cities to 3rd and 4th Tier 4 cities. By strengthening collaboration with partners, we will expand points of contact with customers through the OMRON Health Convenience Stores where customers can experience OMRON products. Regarding the respiratory business, we have strengthened the product lineup of nebulizers, which are in high demand in the market. We have launched WheezeScan, a wheeze detector, that detects wheezing sounds of asthma patients. In collaboration with medical professionals specializing in pediatric asthma, we will establish an in-hospital model that provides one-stop optimal treatment by specialized medical staff to provide better care for asthma patients.

Replacement of mercury thermometers, whose withdrawal from the market by 2025 is mandatory, with digital thermometers will gain momentum. By communicating the benefits of high-speed, predictive digital

thermometers to healthcare professionals, we encourage their introduction in hospitals. Capitalizing on the confidence in OMRON digital thermometers cultivated through their use in hospitals, we will promote them for temperature measurement at home.

India, with an estimated 300 million hypertensive patients, is a market with huge potential, however, the penetration rate of blood pressure monitor is only about 3% at present. The need to make blood pressure monitoring at home common practice is an issue. In the area of respiratory diseases, the diffusion of nebulizers is still in its infancy.



OMRON Health Convenience Store

Therefore, we are working to expand the market by cultivating demand in the blood pressure monitor and respiratory categories. We will roll out Experience Centers with customer support contact points in major cities in India to provide consumers with hands-on experience of OMRON products to raise consumer awareness about the importance of home blood pressure monitoring and the effectiveness of nebulizers. Moreover, we will promote the OMRON Academy, an educational program for healthcare professionals, to raise awareness of the importance of home blood pressure monitoring in the treatment of hypertension and use of the nebulizers for respiratory diseases in the medial filed.

2. Creation of a "culture of ECG recording at home"

In order to achieve Zero Events, as set out in SF2030, we have been promoting devices and services for early AFib detection at home, which is one of the factors for the onset of cardiovascular events. Adding to this, "early detection of ischemic heart diseases" and "prevention of aggravation of heart failure and detection of signs" have also been on our top priority. In the 1st Stage, we will work to establish a business model that raises awareness for both physicians and patients about the risks of AFib and the importance of ECG recording at home, thus promoting the creation of a "culture of ECG recording at home."



Drugstore in India



Portable ECG, HCG-8060T

3. Expansion of the number of users of remote monitoring services

In the U.K. and the U.S., remote monitoring services are being covered by insurance and these markets are emerging. With VitalSight^{*1} in the U.S. and Hypertension Plus^{*2} in the U.K., the effectiveness of telemedicine services in lowering blood pressure and reducing medical costs has been verified. On the other hand, issues such as the need for continued treatment support for patients and the increased on-site workload during new patient registration have also become apparent. Therefore, we will strengthen internal systems such as planning, development, and sales, and focus on reducing the frontline workload through business support systems such as customer management and billing operations. In the U.K., we are also working with Dorset, one of the Integrated Care Systems (ICS) that operates community health care, to collect both physician and patient feedback on the clinical effectiveness and usefulness of Hypertension Plus. We already have attracted inquiries from many medical institutions, by publicizing feedback from Dorset Clinical Commissioning Group, which has great influence on the decision-making of general practitioners who are considering the introduction of the service.

By demonstrating the benefits of telemedicine services such as clinical efficacies and reduced healthcare costs both in the U.S. and the U.K., we will increase the number of users and establish the foundation for our Digital Health business.

*1 VitalSight: A remote patient monitoring service launched in North America in September 2020. Sharing patients' data measured at home with physicians realizes efficient and effective treatment.

*2 Hypertension Plus: A remote patient monitoring service launched in the U.K. in April 2021 that features recommendation of customized medication plans to patients, for which purpose it uses blood pressure data measured at home.

4. Initiatives for decarbonization and environmental impact reduction

By identifying the environmental impacts of our business activities, we will accelerate various initiatives aimed at reducing our environmental impact.

One of the initiatives is to replace the plastic blister packages for thermometers sold in Japan with paper packages that have less environmental impact. Going forward, we will expand the scope of products to include electric toothbrushes, activity monitors, and low-frequency therapy equipment (TENS), as well as prepare to replace packaging for products worldwide with paper packaging to achieve zero use of plastics.

Furthermore, by visualizing the energy consumed in manufacturing processes at production sites, we will identify energy reduction potential and use energy efficiently and without waste with the aim of doubling energy productivity. Through these initiatives, we aim to realize carbon neutral factories.



(Left) Former plastic package (Right) Environmentally friendly paper package

Initiatives in 2022 (Partners for Collaborative Creation)

Communicating the Significance of Recording ECG at Home with Partners to Realize the vision of Zero Events

To realize the vision of Zero Events, we focused on atrial fibrillation (AFib), which is a risk factor for stroke and likely to occur in combination with hypertension. Early detection and treatment of AFib can reduce the risk of events. However, AFib is easily overlooked because the patient is unaware of the condition and may not be detected during regular health checkups or other physical examinations.

Therefore, we have developed an upper arm blood pressure monitor with built-in ECG function that can simultaneously record an electrocardiogram when measuring blood pressure at home. The recorded ECG is analyzed by the dedicated "OMRON connect" app and a message notifies the user of the possibility of AFib. To facilitate detection of AFib in more hypertensive patients at an early stage, OMRON formed a partnership

with the Smart HealthCare Association this fiscal year. In Japan, we are implementing a Pharmacists Recommendation Model, an ECGbased medical consultation recommendation model using an upper arm blood pressure monitor with ECG and a check sheet at dispensing pharmacies and drugstores.

OMRON's upper arm blood pressure monitors with ECG are installed in stores and consumers can take their blood pressure and record ECG. Based on the measurement results and using a check sheet, pharmacists recommend people with the possibility of AFib to seek medical consultation.

This is an initiative to prevent events by increasing opportunities for early detection of AFib in daily life and encouraging treatment.



Drugstore where the Pharmacists Recommendation Model has been introduced

Employee Comments

OMRON launched Japan's first upper arm blood pressure monitor with ECG in March 2022. Our challenge was how to communicate the new value we are offering to consumers, namely, that recording ECG at home can assess the risk of AFib, which may cause stroke. During discussions with the project team members, the idea of the collaboration with the Smart HealthCare Association (SHCA) was suggested. SHCA is a general incorporated association that is working to create new business models and environments for offering services at pharmacies and drugstores. We developed a model for recommending medical examinations using dispensing pharmacies and SHCA agreed to work with OMRON on this initiative. In collaboration with them, we intend to apply this model to pharmacies and drugstores nationwide to achieve early detection of AFib and Zero Events.



East Japan Sales, Healthcare Product Sales Dept. **Takashi Iga**

Comments from Our Partner

To respond to people's desire to stay healthy, we support health promotion activities at pharmacies and drugstores that are close to consumers. The number of patients with AFib in Japan is expected to exceed 1.08 million by 2030, but people have little awareness of what kind of condition AFib is and the risk it poses. We believe that it is the role of pharmacies and drugstores to notice changes in consumers' health conditions and contribute to disease prevention and health promotion, encouraging them to seek medical consultation when necessary. In collaboration with OMRON, we urged pharmacies and drugstores to introduce the Pharmacists Recommendation Model, prepared materials for operation of the model, and trained pharmacists and other staff. We will continue to contribute to enhancing the value that pharmacies and drugstores offer through their support of the health of society.



Smart Health Care Association (SHCA) Ph.D., Pharmacist Mitsuhiro Okazaki

Initiatives in 2022 (Partners for Collaborative Creation)

Prevalence of Home Blood Pressure Monitoring in India

Due to changes in lifestyles associated with economic growth and aging population, the number of hypertensive patients in India continues to rise and the blood pressure monitor market is projected to reach approximately 14 million units in fiscal 2030, making it the second largest market in the world, following China.

However, the use of home blood pressure readings in medical treatment and the practice of patients measuring their blood pressure at home have yet to become common practice. We are increasing our efforts to raise awareness among doctors and patients of the importance of home blood pressure monitoring and to

instill a "culture of measuring blood pressure at home" in India.

One of our initiatives is a business alliance with Terrals Technologies Pvt. Ltd., an online medical service provider in India that offers chronic disease management services, such as for diabetes and hypertension. Firstly, OMRON's blood pressure monitors will be introduced for Terrals' online medical services to expand hypertension management using home blood pressure monitoring while also raising awareness of the OMRON brand and OMRON's home blood pressure monitors among both doctors and patients.



Employee Comments

As the number of people in India who are diabetic or suffer from hypertension continues to grow, this is becoming a social issue. Efforts to address chronic diseases are rapidly gaining momentum, with the government strengthening telemedicine services for patients with chronic diseases. I also feel that COVID-19 has raised public health awareness. With the aim of achieving Zero Events in India, where monitoring blood pressure at home has yet to become common practice, we will work with Terrals, which shares our aspirations, to heighten doctors' and patients' recognition of the usefulness of home blood pressure monitoring and contribute to the health of the Indian people.



OMRON Healthcare India Katsuyuki Yamamoto

Comments from Our Partner

In India, low quality of medical care and poor access to healthcare are social problems. To deliver our services to one billion Indians, we are collaborating with OMRON to develop a platform for comprehensive services for management of chronic disease patients. OMRON's vision is aligned with the direction in which we are heading. Through our partnership with OMRON, we will step up efforts to resolve social issues in India.



Co-Founder and CEO, Terrals Technologies Pvt. Ltd. Sumit Sinha

Terrals Technologies Pvt. Ltd. (Head office: Bangaluru, India. Founded in 2017.) Develops and provides an online medical care platform for physicians dealing with chronic diseases, such as diabetes and hypertension.

Fiscal 2021 Business Highlights

In fiscal year 2021, demand for blood pressure monitors continued to grow globally in line with increased awareness of the need to prevent the progression of serious chronic diseases due to the COVID-19 pandemic. Demand for nebulizers continued to recover as patients had more opportunities to visit hospitals. Demand for thermometers experienced a decline in reaction to the previous-year surge in demand. Despite factory operation restrictions in the first half of the year due to the COVID-19 pandemic and supply chain disruptions beginning in the third quarter, we steadily captured robust demand by implementing product design changes and switching transportation routes rapidly. As a result, net sales increased year on year. Despite efforts to control fixed costs and increase added value, operating income declined compared to the previous fiscal year due to soaring component and logistics costs. As a result, net sales for fiscal 2021 were ¥132.9 billion, an increase of 7.9% compared with the previous fiscal year, and operating income totaled ¥18.5 billion, a decrease of 9.9% compared with the previous fiscal year.

Sales Composition by Business Domains



• Trust earned from the medical community and healthcare professionals around the world OMRON's blood pressure monitors have been used for 200 research papers, accounting for 65% of all research papers on home blood pressure monitoring *From 2000 to November 2018. Survey by OMRON

INPUT

- Growth investment*: Total ¥200 million
- R&D cost: Total ¥7.9 billion
 Capital expenditure: Total ¥4.4 billion (Results for FY2021)
- Invested in Micromed Biotecnologia Ltda. (Brazil), a provider of an ECG analysis platform

OUTPUT

- Net sales: ¥132.9 billion (+7.9% YoY) Operating income: ¥18.5 billion (-9.9% YoY)
- Cumulative global sales of blood pressure monitors exceeded 300 million units
- Started remote monitoring service in the UK. Also, formed a business alliance with an online medical service provider in India
- Launched a blood pressure monitor with ECG and a portable ECG worldwide

OUTCOME

Helped to extend healthy life expectancy and reduce medical expenditures to contribute to healthier and more comfortable lives for people around the world

- Global blood pressure monitor sales: 25 million units (FY2021)
- Number of remote monitoring service users: 10,000 users (FY2021)

*Including M&A