



# PHC

Healthcare with Precision

PHC Holdings Group Profile

**PHC Holdings Group –  
Aiming to  
Take the Next Leap Forward**



**Healthcare with Precision**

At PHC Holdings group, we are entering an immensely exciting time for our business. Our ambition is to become a more global diversified healthcare company, which we will achieve by growing our existing business segments and identifying new ways to expand our products and services. We believe that this will enable us to successfully contribute to the wellbeing of society and build a future of better healthcare for people across the world.

The journey for PHC Holdings group started in 2014, when our business carved out from Panasonic group. In 2016 we acquired the diabetes care business from Bayer and established Ascensia Diabetes Care, and we continued our transformation in April 2018, when we changed our name from Panasonic Healthcare Holdings Co., Ltd. to PHC Holdings Corporation. We are now about to enter the next transformative phase in the development of our business.

We currently offer value-added products and services through three core businesses: Medical Devices, Healthcare IT, and Life Sciences, and our aim is to expand our portfolio by adding new areas of business to support our growth.

By working together with all stakeholders, we aim to continue to deliver new value to our customers and contribute to the wellbeing of society. We appreciate all of your support for the PHC Holdings group and look forward to working together to build a future of better healthcare.

## Michael Kloss

President  
Chief Executive Officer  
PHC Holdings Corporation



# From Past to Future. From Japan to the World. PHC Healthcare Solutions for Patients, Doctors and All Healthcare Professionals.



## Patients

Our products including blood glucose monitoring systems and a medication notebook app help patients manage their condition.



Blood Glucose Monitoring Systems



Medication Notebook App



Incubation Equipment



Preservation Equipment



Biosafety Equipment



Preservation Equipment



Sterilization Equipment



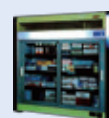
Automatic Tablet Counting & Dispensing System



## Researchers (Universities, Laboratories, Testing Institutes and Pharmaceutical Companies)

We offer equipment and services indispensable to drug discovery and research in life sciences including the field of regenerative medicine, which has grown remarkably.

1966



Pharmaceutical Refrigerator

1991



Blood Glucose Monitoring Systems



## Pharmacists (Pharmacies)

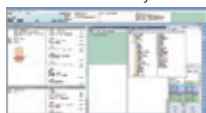
We provide solutions to improve quality and efficiency of pharmacy operations with products such as electronic medication history systems, a medication notebook app, and pharmaceutical dispensing equipment.



Electronic Medication History Systems



Integrated Electronic Patient Record Systems



Tablet Package Inspection Assistance System



Medical-receipt Computers



Food Catering Equipment



Preservation Equipment



Blood Glucose Monitoring Systems for Hospitals / Clinics



POC System



FeNO (Fractional-exhaled Nitric Oxide) Measuring Device



## Doctors (Hospitals, Clinics)

Our solutions including medical-receipt computers and electronic patient record systems contribute to enhancing the IT infrastructure of healthcare providers. Also, our measurement devices assist in early diagnosis as well as various treatments.



1972



Medical-receipt Computers

We trace our roots back to 1949 when we started our business in Japan. Since then, we have kept growing in the healthcare sector, expanding our business globally. Currently, our products are sold in over 125 countries. Leveraging our accumulated technological capabilities and pursuing manufacturing excellence, we are committed to supporting patients, doctors and all healthcare professionals. We continue to create new value and offer products and services with precision in the segments of Medical Devices, Healthcare IT, and Life Sciences.





Contributing to people's quality of life worldwide through development, manufacturing and sales of test / analysis devices including blood glucose monitoring systems.

## Medical Devices

With the incidence of diabetes and other lifestyle diseases on the rise, early diagnosis and effective response are more important than ever. Our user-friendly testing and analysis devices make it easy for patients and healthcare providers worldwide to accurately monitor and treat these conditions.

### Blood Glucose Monitoring Systems

- Featuring highly advanced, accurate proprietary technology that reduces the impact of interfering substances and hematocrit levels.
- Delivering high-quality products made possible by remarkable manufacturing capabilities.
- Providing integrated solutions by linking with PCs, smart devices, and insulin pumps.

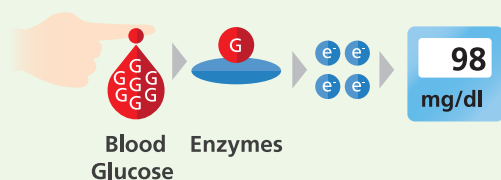
#### Blood Glucose Monitoring Systems



### Blood Glucose Monitoring Technologies

#### Measuring Principle (Electrochemical Method)

Blood glucose level is determined based on current flow caused by enzymatic reaction.



#### Reliable Technologies Improve Accuracy

Comprehensive technologies have improved measurement accuracy.

Unique Reagent Improves Accuracy

Reduces the impact of interfering substances

Test Strips Need Only a Small Blood Sample

Easy to use

Reliable Manufacturing Technology & Quality Control

Greater uniformity of test strip results



Blood Glucose Monitoring Systems for SMBG (Self Monitoring of Blood Glucose)

Supplied to: Arkray, Inc.



Blood Glucose Monitoring Systems for Hospitals / Clinics

Supplied to: SANWA KAGAKU KENKYUSHO CO., LTD.



Lancing Devices / Lancets

Supplied to: SANWA KAGAKU KENKYUSHO CO., LTD.



POC System - HbA1c and lipid testing

Supplied to: Roche Diagnostics International Ltd.

Supplied to:  
JCR  
Pharmaceuticals  
Co., Ltd.



Supplied to:  
Kyowa Hakko  
Kirin Co., Ltd.

Motorized Drug Delivery Devices



FeNO (Fractional-exhaled Nitric Oxide) Measuring Device

Supplied to: Circassia AB



## Ascensia Diabetes Care



Ascensia Diabetes Care is a global specialist diabetes care company, dedicated to improving the lives of people with diabetes through innovative solutions. It is part of the PHC Holdings group of companies and was established in 2016 from the acquisition of the Bayer diabetes care business.

Ascensia has marketed and sold blood glucose monitoring devices from PHC around the world for more than two decades. The team at Ascensia has a heritage of more than 70 years of developing innovative diabetes care products. Through innovation and specialist expertise in diabetes, our team at Ascensia provides high-quality solutions and tools that make a positive, daily difference for people with diabetes and meet the challenges they face each day.

Home to the renowned blood glucose monitoring systems that combine remarkable accuracy and user-friendly functionality, Ascensia's products support diabetes management for patients and healthcare professionals.



Our blood glucose monitoring systems help approximately 10 MILLION PEOPLE WORLDWIDE EVERY DAY

Our products are sold in more than 125 COUNTRIES around the world

Highly innovative product portfolio based on ACCURACY AND PATIENT NEEDS

### ■ Our Partnerships and Alliances

Ascensia has entered into partnerships and alliances with various companies to help facilitate better diabetes care. These partnerships are in two key areas of diabetes management:

- **Glucose Monitoring And Insulin Delivery**

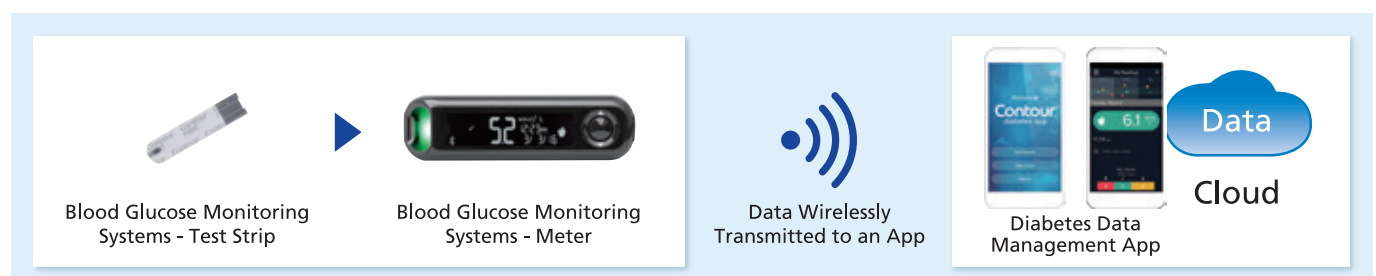
Partnerships with glucose monitoring and insulin delivery companies enable highly accurate blood glucose readings from our systems to be transmitted to partner devices for calibration and insulin dosing.

- **Diabetes Data Management**

Diabetes data management partnerships enable data to be collected and used by partner software and apps.

## Interconnected Diabetes Management from Ascensia Diabetes Care

The integration of blood glucose monitoring systems and mobile technologies has a critical role in supporting patients manage their diabetes. Ascensia offers interconnected diabetes management solutions that are easy to use, seamlessly connect the meter to a mobile device, and can help patients identify patterns and trends in their blood glucose readings.



Committed to optimizing healthcare IT infrastructure, "Medicom" supports people's healthcare, welfare and health with IT.

# Healthcare IT

# medicom

The demand for healthcare IT has been growing as it aims to promote the integration of community healthcare as well as improving the quality of healthcare through healthcare data utilization.

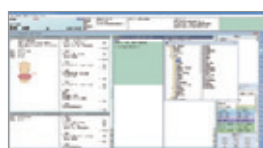
We at Medical Information Systems Division (also known as Medicom) launched Japan's first medical-receipt computer in 1972. Through leveraging accumulated experience and knowledge, we are committed to providing leading-edge healthcare IT solutions for hospitals / clinics and pharmacies.

## Healthcare Providers

### Clinics

One of Medicom's core businesses involves assisting with day-to-day clinic operations. We make key functions easier to use and link them with a variety of peripheral systems, helping medical staff work more efficiently.

#### medicom-HRV

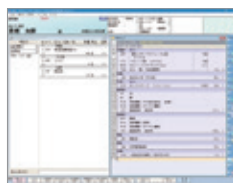


Integrated Electronic  
Patient Record Systems  
for Clinics

### Hospitals

In recent years, clinical specialization by hospitals has been progressing, and hospitals have had to focus on specific healthcare services as well as enhancing managerial efficiency. Our electronic patient record systems integrated with the medical-receipt computers support hospital management and operations, taking into account the evolving nature of hospitals.

#### medicom-HSi



Medical-receipt  
Computers for Hospitals

### Pharmacies

The role of pharmacies and pharmacists has expanded to encompass areas such as the dispensing of pharmaceuticals, prescription auditing, medication history management, and supervised administration.

Medicom's services facilitate the efficient flow of information between healthcare providers and pharmacies involved in home healthcare, making the pharmacist's job easier.

#### ファーマスV PharmesV-MX



Electronic Medication  
History Systems  
for Health Insurance Pharmacies



### Home Healthcare

Caring for patients at home requires close coordination between the local hospital and healthcare professionals including doctors, visiting nurses and pharmacists. Medicom offers a wide range of systems — such as a mobile app that provides easy access to patient records — as part of a total IT solution for home healthcare.



### Clinical Laboratories



### Home Instruction for Medication Adherence

Medicom's "home-visit care support app" allows healthcare providers to view medication histories and log details of instructions that can be given anytime, anywhere using a tablet device. In addition, the logged instruction data can be automatically sent to medication history systems for pharmacies, leading to improved efficiency.





## ICT-based Data Sharing Home Healthcare Data Sharing Systems

Healthcare / long-term care data from clinics, pharmacies and care facilities is shared in a secure cloud system environment. Smooth communication between professionals from different areas is supported by sharing various data including basic information on patients and users, daily life status updates, treatment / drug adherence records, and visit schedules.



## Care Facilities

With collective collaboration between healthcare and long-term care services now growing in importance, the use of IT has become essential. Medicom pursues IT solutions with high usability that anyone can find easy to use.



## Insurance Providers & Local Government

Under Japan's social and national health insurance programs, the "Data Health Plan" and other services have been implemented by insurance providers. Medicom offers solutions that promote a population approach\* and health guidance to help insurance providers offer better health services.

\*An approach to raise people's health consciousness



### Population Approach Systems

Solutions for total health management / "Data Health" initiatives by insurance providers



## Health Screening Centers

Health screening centers play an important role in promoting disease prevention. Medicom offers IT solutions including patient management in medical examinations / health guidance, guidance support, and creation of invoicing data files.



### HealthCare Note Service

An electronic medication notebook app with linkage to the electronic medication history systems

"PHCbi" is a new brand for our life sciences business that has globally supported cutting-edge research and healthcare for over 50 years.

# Life Sciences

**phcbi**

Since 1966, when we launched Japan's first pharmaceutical refrigerator, aiming to support cutting-edge research in life sciences, we have provided equipment and services required for sample preservation and bacterial / cell culture as well as maintenance of cleanroom environments. Also, we are offering solutions to enhance the quality and efficiency of healthcare and long-term care services by providing pharmaceutical dispensing and food catering equipment, contributing to the wellbeing of society.

**We provide a wide range of products to globally support pioneering research and healthcare in about 110 countries.**



## Universities & Laboratories / Testing Institutes



### Preservation

Ultra-Low Temperature Freezer



Our preservation equipment provides various temperature ranges suitable for storage of samples, research materials, culture media, pharmaceutical drugs, and blood as well as long-term storage of biological resources such as cells by freezing.

Our equipment enables a preservation environment satisfying both reliability and environmental requirements. We have developed the dual cooling system comprised of two individual compressors to reduce risks of damaging valuable biological samples in addition to the inverter system using natural hydrocarbon refrigerant. Also, our equipment has received industry-first certification of an international standard to certify energy-efficient consumer electric products.

## Hospitals & Clinics



### Incubation



CO<sub>2</sub> Incubator

Our incubation equipment provides various environments suitable for bacterial and cell culture, plant growth, and food testing.

For cell culture, our incubators achieve efficient and repeatable environment through rapid decontamination by hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) which is also used for regenerative medicine, dry heat sterilization that requires a shorter time than conventional models, and UV lamp decontamination, as well as integrated shelf supports that make cleaning easier and allow more capacity.

### Biosafety



Biological Safety Cabinet

Our biosafety equipment ensures an ideal operating environment, protecting lab workers, the surrounding workspace, and samples.

### Sterilization



Laboratory Autoclave

Our sterilization equipment ensures sterilization of laboratory and testing equipment by autoclaving (high-pressure steaming).



## Pharmaceutical Companies



## Food / Cosmetics Companies

### Pharmacy Equipment



Automatic Tablet Counting & Dispensing System

We provide automation equipment that minimizes dispensing errors and increases efficiency. We also offer solutions to support hospital and pharmacy operations with various systems.



Medication Picking Systems

### Food Catering



Food Catering Cart for keeping food at the optimum temperature

Our food catering equipment featuring advanced functions including power-assistance contributes to safe and efficient catering in healthcare and long-term care facilities by enabling delivery of meals at the appropriate temperature.



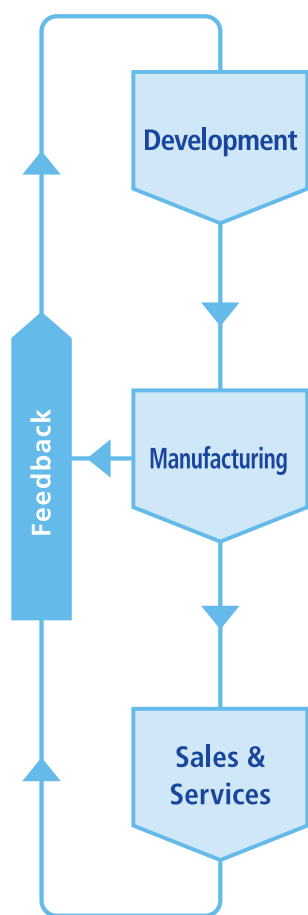
## Hospitals & Pharmacies



## Hospitals & Nursing Care Facilities



From development and manufacturing through sales & services, our integrated supply chain and quality management allow us to provide high-quality, attractive and cutting-edge products / services, satisfying our customers around the world.



Since launching Japan's first pharmaceutical refrigerator in 1966, through cutting-edge technologies pursuing energy efficiency and environmental sustainability as well as reliability, we have developed products to improve quality of life sciences research and health-care / long-term care services. We always listen to the opinions of customers who are using our products.



Our long history of manufacturing excellence has earned us the respect of our customers throughout the world. We apply strict quality management such as product examinations in mass production lines and checks before shipment in our global manufacturing system including our core manufacturing sites in Japan. And we are now further optimizing our production locations to more promptly meet customer needs.



Our global distribution system has expanded beyond Japan to the U.S., Europe, China, the rest of Asia, and the Middle East. This extensive network, along with our well-developed sales channels, helps us meet the diverse needs of our global customers. We have also gained the trust of our customers in our full-fledged service network.



### Global regulatory compliance for pharmaceutical affairs, safety, and environment

We are committed to compliance with the laws and regulations for pharmaceutical affairs, safety and environmental protection. For example, our products adhere to the Pharmaceuticals and Medical Devices Act in Japan for ensuring quality and safety of pharmaceuticals and medical devices, and regulations of the US Food and Drug Administration (FDA), as well as the Medical Device Directive (MDD) in Europe. In addition, we comply with fluorinated gases regulations (US: Significant New Alternatives Policy, Europe: F-gas Regulation), pursuing environmentally-friendly manufacturing.



# R&D Initiatives

## Creating New Value through Technological Innovation

Aiming at creating new value in healthcare, we carry out R&D initiatives globally through R&D centers in the US and in Japan. We have developed innovative products that have transformed the market, including blood glucose monitoring systems now being used for diabetes care throughout the world, in addition to medical-receipt computers, electronic patient record systems and ultra-low temperature freezers. We are now focused on three segments: Medical Devices, Healthcare IT, and Life Sciences. And we will continue our efforts to make an even greater contribution to patients and healthcare professionals in the world.

### Medical Devices

Leveraging our technologies that can detect minute changes in body constituents using simple but highly accurate and sensitive techniques, we offer innovative diagnostic solutions.



### Healthcare IT

Serving a wide range of healthcare providers including hospitals, clinics, pharmacies, and health insurance providers, we deliver solutions for efficient operation, healthcare data integration / utilization, etc., tailored to their needs.



### Life Sciences

Through our excellent technologies including ultra-low temperature freezers with industry-leading energy-saving performance as well as incubators with unique decontamination / sterilization processes, we are at the forefront of providing products and solutions for research and drug discovery.



# Quality Initiatives

## Guiding Principles

In line with our mission, we aim to provide safe and reliable healthcare products customers can comfortably keep using as well as high-quality services.

Through responding to customer needs and applying strict compliance, we are committed to ensuring sound management as well as promoting the health and wellbeing of society.

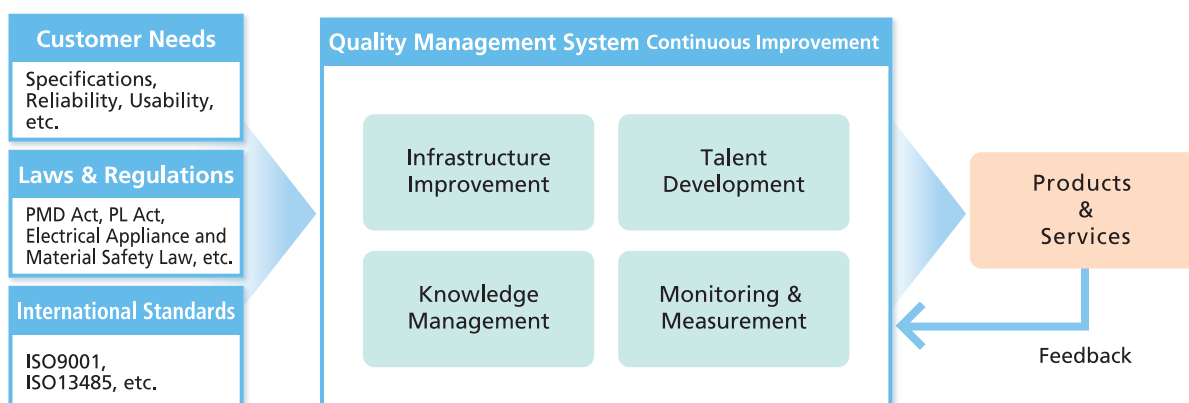


## Action Principles

**"Customer-centric"**  
Manufacturing

**"Quality-first"**  
Awareness and Action

**"Build Quality from the Planning / Design Phase"**  
Quality Management





# | Our People & Culture

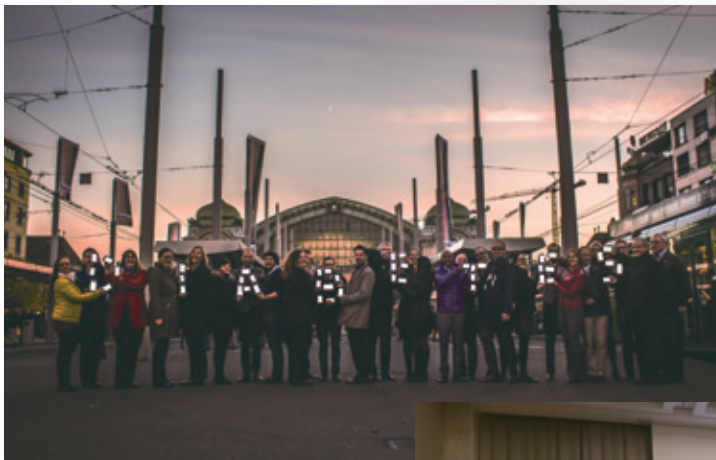
## Talent Development & Diversity

We believe that people are our most important assets; the growth of PHC Holdings Group as a business depends on the personal growth of each employee. For that reason, aiming to promote talent development, we've designed a human resources framework based on individual performance where achievement of each employee is valued.

"Collaboration" is one of our corporate values. The driving force behind collaboration is leadership that guides the team toward their goal. Having defined leadership as a quality to be possessed and exercised by every single employee, we have made it the core of talent development and other human resources management initiatives.

To ensure the fulfillment of our talent development philosophy that embraces diversity, we make every effort to help all staff members reach their potential, regardless of nationality, gender, age, etc. We promote a wide variety of talent development initiatives so that everyone — whatever role they play — is prepared to address the challenges we face, including coaching programs for senior management, training programs focusing on manufacturing excellence and action learning programs that offer opportunities to tackle actual corporate issues as a training process.

In this way, by firmly supporting "Diversity" and "Collaboration" through our diversity-focused talent development initiatives, we are cultivating a corporate culture that embodies our mission.



Supporting World Diabetes Day



# Global Network

PHC Holdings Group is developing its business throughout the world including North America, Asia, and Europe. Our aim is to develop products and services of remarkable quality that bring joy to our customers and contribute to the wellbeing of society.



PHC Europe B.V.  
[Etten-Leur / Netherlands]



Ascensia Diabetes Care  
Holdings AG  
[Basel / Switzerland]



PHC Corporation (Shanghai) Ltd.



PHC Corporation Singapore Pte. Ltd.



PT PHC Indonesia

## Europe

- Ireland
- UK
- Norway
- Finland
- Sweden
- Denmark
- Portugal
- Spain
- France
- Switzerland
- Netherlands
- Belgium
- Germany
- Austria
- Italy
- Greece
- Poland
- Russia

## North America and Latin America

- Canada
- US
- Mexico

## The Middle East and Africa

- Turkey
- Algeria

## Asia and Oceania

- India
- Malaysia
- Singapore
- Hong Kong
- China
- Taiwan
- Australia



PHC Corporation of North America [Chicago]



Ascensia Diabetes Care US, Inc.  
[Valhalla]



Ascensia Diabetes Care US, Inc.  
[Parsippany]



### Tokyo

- PHC Holdings Corporation
- PHC Corporation
- PHC Medicom Networks Corporation

### In Japan



### Gunma

- PHC Gunma Site



### Matsuyama

- PHC Matsuyama Site
- PHC Associates Corporation



### Wakimachi

- PHC Wakimachi Site
- PHC Manufacturing Corporation

