

Materiality

Resolution of Medical Issues through Products and Services

Improvement in Accessibility to Medical Services by Means such as Familiarizing Products

People in some parts of the world have difficulty receiving proper healthcare because the systems that encompass healthcare environments and programs are underdeveloped.

Addressing one of its responsibilities as a company developing its business globally, Sysmex is working to improve access to healthcare so that as many people as possible can receive appropriate medical care.

Our Activities in Africa

Sysmex has established local subsidiaries in five African countries: South Africa, Ghana, Burkina Faso, Nigeria, and Egypt. We aim to engage in wide-ranging activities through these subsidiaries (e.g., opening educational facilities and collaborating with government agencies, research institutes, and NPOs), thereby helping raise local healthcare standards.

Helping to Raise the Healthcare Standards in the Republic of Ghana by Promoting the Dissemination of Automated Urinalysis Diagnosis Technology

In African countries, infectious diseases are still a major problem, whereas the numbers of people with non-communicable diseases (NCDs) such as cancer, diabetes, and renal disease are on the rise, especially in urban areas. Prevention, early detection, and early treatment are important to counter NCDs. However, urinalysis testing, which is an effective and simple screening method, has not been widely adopted. Furthermore, urinalysis testing performed manually may lead to unreliable test results.

Sysmex has promoted the Dissemination of Automated Urinalysis Diagnosis Technology project in Ghana since 2018 as part of the Japan International Cooperation Agency (JICA)'s Collaboration Program with the Private Sector for Disseminating Japanese Technology for the Social and Economic Development of Developing Countries. We introduced a fully automated urinalysis testing system to the Komfo Anokye Teaching Hospital (KATH), Ghana's national education hospital, and held seminars and symposiums for a total of 483 local healthcare professionals. Through such activities, we enlighten local health workers on the clinical value and effectiveness of automated urinalysis diagnosis as part of our efforts to help raise Ghana's healthcare standards.



Symposium at KATH

Helping Clinical Laboratories with Capacity Building

Sysmex opened a training center called the Sysmex Academy for each of the local subsidiaries in Africa in order to provide education on clinical value and expertise in equipment maintenance for local distributors and healthcare professionals. We also offer mentorship training that we developed independently to ensure that laboratories' quality management systems conform to ISO 15189.



Mentorship training session

Collaboration with Government Agencies and International Organizations

Sysmex worked with Burkina Faso's Ministry of Health to carry out a project for establishing and maintaining a nationwide network of blood tests. We installed about 100 pieces of equipment, each suitable for the size of the facilities, and we provided more than 650 laboratory technicians, engineers, and pediatricians with training to meet their professional needs. This project was presented as an example of a public-private partnership at the G20 Compact with Africa (CwA) held in Berlin in 2019.

In Gabon, the Japanese Embassy ran Grant Assistance for Grass-Roots Human Security Projects called the "Expansion Plans for the Functions of the Maternal and Child Health Department in Lambaréné" and the "Expansion Plans for the Functions of the Maternal and Child Health Department in Akebe Plaine." In these projects, we provided training on how to use and maintain Sysmex equipment for healthcare professionals at regional health departments in an effort to help with health worker development and improve the healthcare environment.

Sysmex also works with many other government agencies and international organizations, including national health departments across Africa and the World Health Organization (WHO).

Participating in the Japan-Africa Business Expo, an Official Event Held Concurrently with the 7th Tokyo International Conference on African Development (TICAD7)

When the 7th Tokyo International Conference on African Development (TICAD*7) was held, Sysmex was commissioned by the Ministry of Foreign Affairs of Japan to serve as a Special Envoy for the TICAD Public-Private Partnership as a Japanese company committed to public-private efforts for the further development of business relations between Japan and Africa. We also participated in the Japan-Africa Business Expo, an official event that was part of TICAD7, to present our marketing efforts, the services and support we offer, the public-private projects we have worked on, our human resource development program, and our response to infectious diseases.

* An international conference to discuss development in Africa. It is led by the Japanese government and co-hosted by the United Nations, the United Nations Development Programme, the World Bank, and the African Union Commission.



Sysmex exhibition booth

Our Efforts to Combat Infectious Diseases in Emerging and Developing Countries

Sysmex provides technologies and products to assist with the diagnosis of the world's three major infectious diseases, such as malaria and HIV, as part of its efforts to combat them.

Contribution to Malaria Elimination

Sysmex has taken up the challenge of finding solutions to testing and diagnostic issues in the area in which it operates. Such efforts serve to help eliminate malaria, one of the world's three major infectious diseases.

In June 2020, Sysmex obtained marketing approval for its Automated Hematology Analyzer XN-31 as a specially controlled medical device (Class III)¹ for use in the diagnosis of malaria for the first time in Japan. The company acquired the EU's CE certification for the device in 2019.

The current mainstream method of testing for malaria uses a rapid diagnostic kit or a microscope. But either option poses problems such as taking much time, ranging from about 15 to 30 minutes, including pretreatment, and requiring skilled techniques in microscopic testing. In contrast, the XN-31 can identify red blood cells infected with malaria parasites, etc. and measure the ratio of infected cells without pretreatment, executing both processes in about one minute² automatically and precisely.³

Malaria is a disease for which the number of deaths can be reduced by early detection and treatment. By providing the clinical front with a device that can swiftly and easily produce the outcome of testing useful for diagnosis, Sysmex contributes to measures against imported infectious diseases in Japan.

Also, domestic marketing approval as a specially controlled medical device is listed in the procurement criteria⁴ of international funds and funding from other organizations which are working to improve access to healthcare in emerging and developing countries. Through partnerships with such organizations, we aim to introduce the product to countries and regions, either emerging or developing, where medical resources are limited, and to global malaria elimination.

Sysmex has been involved in initiatives by, and the operation of, the Malaria Consortium, which consists of research institutes and enterprises that have been combating malaria since 2016. In the field of testing and diagnosis, we contribute to project activities conducted through industry-government-academia partnerships in Asia and Africa. At the 6th Nikkei Asia Africa Conference on Communicable Diseases held after TICAD7, we presented information on industry-government-academia initiatives by, the Malaria Consortium to participants from African nations.

1. Specially controlled medical device (Class III): Medical device considered to pose relatively high risk to the human body in the event of malfunction
2. Time from specimen setting to judgment of outcome
3. Testing by the XN-31 does not mean replacement of malaria diagnosis by microscopic testing. Nor does it mean, which diagnosis can be made with the outcome of XN-31 testing alone. Diagnostic confirmation is based on a doctor's comprehensive judgment that includes other clinical information.
4. Procurement criteria of international funds and other organizations: The WHO and international funds permit a simplified examination process for high-risk products if those products have obtained approval from a rigorous examination body that those organizations designate, with a view toward accelerating the introduction of various products to emerging countries and developing countries. This is stated in their procurement criteria, and regulatory approval as a Specially Controlled Medical Device (Class III) in Japan qualifies as one of these rigorous examination criteria.

Our Contributions to the Quality of HIV Diagnosis and Treatment

Sysmex provides the CyFlow™ Counter System, a CD4+ lymphocyte testing system developed and produced by Sysmex Partec, in emerging markets and developing countries. This system measures, within three minutes, the number and percentage value of CD4+ lymphocytes in the blood. In addition to being compact and portable, the system is easily maintained, facilitating testing that is simple, swift, and stable.

The system has received prequalification* from the WHO. This prequalification facilitated the introduction of a system in countries with limited healthcare resources, which has enabled us to help improve the quality of HIV diagnosis and treatment in emerging markets and developing countries.



CyFlow™ Counter

* WHO prequalification aims to ensure that diagnostics, medicines, vaccines, and immunization-related equipment and devices for high-burden diseases meet global standards of quality, safety, and efficacy, in order to optimize the use of health resources and improve health outcomes. The system was established in 2001 in response to the HIV/AIDS pandemic. Today, it is used in emerging markets and developing countries as a reference list for purchasing. Organizations such as the Global Fund give purchasing priority to products with this prequalification.

Participating in the Global Health Innovative Technology Fund (GHIT Fund)

Since 2015, Sysmex has participated in the Global Health Innovative Technology Fund (GHIT Fund), which states its vision for action as “one in which the crushing burden of infectious disease no longer prevents billions of people in the developing world from seeking the level of prosperity and longevity now common in the industrialized world.” The GHIT Fund has entered its second phase of activity (2018–2022), shifting from its initial focus on product development to activities to provide products to the people who need them. We will continue to participate in the Fund’s second-phase efforts. By promoting initiatives aimed at developing and providing new reagents for infectious diseases through Japanese technological innovation, we will contribute to the eradication of infectious diseases in developing countries.

Conducting Scientific Support Activities to Standardize and Raise the Quality of Clinical Testing

To date, Sysmex has provided scientific support activities in Mongolia, Cambodia, Myanmar, Thailand, and the Philippines. In Mongolia, Sysmex continues to provide support activities in the fields of hematology, clinical chemistry, and immunochemistry. In 2017, we expanded this support to include the field of blood morphology testing. In addition to making technological and academic expertise available to local clinical laboratory technologists, Sysmex contributes to the improvement of the level of healthcare in Mongolia by supporting the construction and operation of a nationally implemented external quality control framework for blood morphology testing. Moreover, in China, our Sysmex Reference Counter has been employed since 2002 as a national standard device* for blood cell count screening. For all blood cell counters in China, registration/inspection of such devices and their external accuracy control are based on this Sysmex device. Sysmex has also lent China the latest model of its Reference Counter, starting in fiscal 2019, as well as offering continued support for technological transfers and exchanges of blood testing/reference measurement methods, and for formulation of national guidelines for clinical examination. Sysmex is thus contributing to improving blood cell count accuracy and testing standardization in China.

* A device for specifying national standards for blood cell count examination

Other Forms of Support for the Education of Healthcare Professionals

In addition to preparing healthcare infrastructure, having appropriately trained healthcare professionals is an essential part of improving access to healthcare. Sysmex provides educational support to raise the quality of clinical laboratories and to standardize and increase the quality of clinical testing. We also conduct seminars and study sessions imparting leading-edge scientific information to healthcare professionals.

▶ [Click here for information on scientific seminars.](#)