Providing access to healthcare for all those who need it is a significant and complex global challenge. We are making it easier for people to afford our medicines, especially in Emerging Markets. We also focus on developing strong collaborations with a wide range of partners to strengthen healthcare capabilities, particularly in developing economies.

**Sustainable access**

We aim to improve access to healthcare around the world by tailoring our programmes to the communities they will serve in a way that is commercially sustainable and with an aim of providing lasting health benefits. As access to healthcare can also vary within a country, our activity is tailored locally to meet the needs of different patient populations.

**Health systems development**

Providing medicines is beneficial, but setting up long-term health systems that will have a lasting impact on the communities they serve brings benefits for generations. Through our initiatives such as Healthy Heart Africa and working with partners on the ground, we are able to improve screening, diagnosis and treatment for health conditions.

**Intellectual property**

Our intellectual property is the result of research and we actively protect our inventions. Our intellectual property strategy includes a commitment not to file for patents in a range of least developed and lowest income countries.

**Highest climber**

from 15th in 2014 to 7th in 2016 in the Access to Medicine Foundation global index

**2.7 million**

patients screened for hypertension in Kenya as part of our Healthy Heart Africa programme

**‘Best practice’**

identified in the Access to Medicine Index for our intellectual property strategy

**$10 million**

five-year global public–private partnership with the US President’s Emergency Plan for AIDS Relief (PEPFAR)
Our approach

At AstraZeneca, we research, create, manufacture and market medicines and treatments for the whole world. We believe everyone should have access to these medicines, regardless of where they live or income. We work hard to improve access to medicines for all, particularly those who have traditionally been underserved by the industry.

Access to healthcare is one of our sustainability priorities and a fundamental element of our corporate strategy. We made significant progress in broadening the access to our products by making medicines more affordable. We are working towards greatly increasing access, particularly in low-income countries, through our patient access programmes.

Our efforts to improve affordability are particularly focused on patient ability to pay based on disposable household income and healthcare budgets in a particular country. We continue to grow our capabilities and build on the experience of wellbeing initiatives and patient access programmes, which provide discounts on our medicines and other patient services.

AstraZeneca has extensively expanded and updated their access strategy identifying those areas where they are best placed to provide support and are now well positioned for future progress.”
The barriers to improving access to healthcare are complex and varied and require long-term, comprehensive solutions. Such challenges require a joined-up suite of global solutions. One company working alone can’t address access to healthcare alone. Instead we are working with local and international partners to improve understanding, education and availability of products and services.

In developing countries, many people live in rural areas with inadequate infrastructure and little access to transport. A lack of health education means there can be a poor understanding of prevention, symptoms, self-care and appropriate medical care for various conditions. Affordability remains a significant issue, with many patients having to self-fund healthcare from their limited incomes. As a global company, we are ideally placed to take the necessary steps to address some of these issues through our innovative and collaborative strategy. We have made significant changes to product pricing and intellectual property. We have developed an affordability-based pricing strategy for self-pay patients, which bases our retail prices on a percentage of the average disposable income in the country in which we are working. We also committed to not filing for patents in a range of low-income, lower-middle-income and upper-middle-income countries.

Beyond the walls of our offices and research facilities, we are working on the ground with a wide range of local and global partners, including governments, NGOs, charities, community groups and schools to break down barriers to healthcare through education, community schemes and infrastructure projects. The biggest of these schemes is our Healthy Heart Africa programme, through which we are tackling hypertension in Kenya and Ethiopia and providing affordable AstraZeneca hypertension medicines to those prescribed them.

**In Focus:**

How is AstraZeneca broadening access to healthcare?

As a global company, we are ideally placed to take the necessary steps to address some of these issues through our innovative and collaborative strategy. We have made significant changes to product pricing and intellectual property. We have developed an affordability-based pricing strategy for self-pay patients, which bases our retail prices on a percentage of the average disposable income in the country in which we are working. We also committed to not filing for patents in a range of low-income, lower-middle-income and upper-middle-income countries.

Beyond the walls of our offices and research facilities, we are working on the ground with a wide range of local and global partners, including governments, NGOs, charities, community groups and schools to break down barriers to healthcare through education, community schemes and infrastructure projects. The biggest of these schemes is our Healthy Heart Africa programme, through which we are tackling hypertension in Kenya and Ethiopia and providing affordable AstraZeneca hypertension medicines to those prescribed them.

**Access to Medicine Index 2016**

The Access to Medicine Index independently analyses and ranks the top 20 research-based pharmaceutical companies on how they make medicines, vaccines and diagnostics more accessible in low and middle-income countries. It is funded by the Bill & Melinda Gates Foundation and the UK and Dutch governments and has been published every two years since 2008.

Our performance on improving access to healthcare is assessed by the Access to Medicine Foundation in its bi-annual Index. In the latest index report, AstraZeneca moved up from 15th to 7th.

The Index is broken down into seven technical areas:

- General Access to Medicine Management
- Market Influence Compliance
- Research and Development
- Pricing, Manufacturing and Distribution
- Patents and Licensing
- Capacity Building
- Product Donations.

Of these, AstraZeneca became the biggest riser in Access to Medicine Management, Research and Development, Pricing, Manufacturing and Distribution, Patents and Licensing, Capacity Building and Product Donations. In Research and Development we are aware that we need to consider sustainable access earlier in our research programmes. We did not score higher on Product Donations, as we do not have a publicly stated global donation strategy, preferring to make donations on an ad hoc basis to best meet patient need.
Sustainable access

We aim to meet patient needs across the world, ranging from those for whom healthcare is readily available and who can afford our medicines, to those in Emerging Markets who may need help to access our medicines and those in developing economies where barriers to healthcare are not always price related.

Product affordability
We rely on sales of medicines in our established markets to help us generate the revenue we need to provide our shareholders with a return, to invest in continued innovation and to expand the availability and affordability of our medicines.

We are working to make our medicines affordable to more people on a commercially and socially sustainable basis. Our strategy is based on an in-depth understanding of the economic conditions of the populations in emerging countries and an aim to reduce the economic burden of health on those who have limited incomes. We do this through our mainstream operations, but also via patient programmes and a targeted pricing strategy that takes into account ability to pay, particularly in Emerging and Developing Markets, where up to 45% of funding for healthcare is paid by patients out of their own pocket.

Currently our strategy focuses on chronic conditions, such as respiratory and cardiovascular disease. It is aimed at markets where there is significant unmet patient need and reflects two of our core therapy areas.

We developed an ability to pay evaluation framework to identify affordable price points for those who pay for their own healthcare by assessing household budgets and the economic impact of medicines on a country-by-country basis, using World Health Organization and other economic data sources.

We recently analysed our biggest-selling brands in emerging countries and the 13 biggest out of our pocket markets in our International Region (Russia, China, Australia, Africa and South America). As a result, we calculated that by pricing our medicines at no more than 5% of national disposable household income we can make our current respiratory and cardiovascular portfolio affordable for around 70% of the population. This includes the median income groups for which this represents increased access to medicines, plus those already in a position to pay full price. We expect to expand this methodology significantly.

“AstraZeneca rose eight spots from being 15th in 2014 and 7th this year, making AstraZeneca the highest climber in the 2016 Index. Compared to 2014, AstraZeneca has significantly increased the number of products with equitable pricing strategies. It has conducted an in-depth analysis of the abilities of different population segments in a subset of countries to pay for its products. The results have been used to shape its new pricing policy, and will continue to inform pricing adjustments. The policy has already been implemented for certain products and countries in scope. AstraZeneca has also created an Affordability Centre of Excellence to train staff on this new policy.”

Access to Medicine Index – Pricing, Manufacturing and Distribution
Sustainable benefits
Wherever possible, we integrate a wide range of localised support services for patients, ranging from disease education, health awareness and preventive measures, to discounted or free healthcare services, dietary advice and nurse counselling. We also partner directly with NGOs and governments to improve the underlying healthcare infrastructure and improve access to medical treatment.

Our medicines play an important role in treating unmet medical need and, in doing so, they also bring therapeutic as well as economic benefits. Effective treatments can help lower healthcare costs by reducing the need for more expensive care, such as hospital stays or surgery, or through preventing patients from developing more serious or debilitating diseases. They also contribute to increased productivity by reducing or preventing the incidence of diseases that keep people away from work.

Further patient access programmes which provide discounts on our medicines, and other patient services include Disfruto Mi Salud in Central America and the Caribbean, A2Yo (AstraZeneca and You) in Chile and Karta Zdrorovia in Russia. We have significantly expanded our initiatives across Latin America, the Middle East and Africa, and Asia Pacific, and the number of patient access programmes in Emerging Markets has more than doubled since 2013, reaching 4.9 million patients in total by the end of 2016.

In Central and Eastern Europe, we offer Patient Access Card programmes to provide discounts on some of our key medicines, along with educational materials that help people understand their disease and the importance of sticking to their treatment plans. For example, in Romania, a Patient Access Card is distributed by doctors to appropriate patients to enable co-payment reductions. Typically, a separate card is required for each treatment, but we are simplifying the process by making a single card apply to reductions on a range of our key products, making it easier for patients to manage and reducing the administrative burden on pharmacists. Patients in rural areas are also benefiting from a new dedicated call centre. By the end of 2016, we had reached an additional 30,000 cardiovascular patients through this single card programme and distributed over 295,000 cards.

Brazilian Mosaic makes medicines affordable
Brazil is one of the many countries in which we operate where there are huge socio-economic disparities within the population and, despite the universal healthcare system, the private sector remains the main source of funding for medicines. The relative investment in medicines is also lower than in comparable countries and the percentage of private expenditure is on a par with economies without universal healthcare. This has an impact on household disposable income and the ease of access to medicines.

To address this disparity, AstraZeneca Brazil has tried to understand how to apply the right discount to the right population groups, as well as determining how to incentivise people to continue with the treatment they need. We did so by identifying economic patient profiles through an innovative and customised approach called Mosaic Segmentation.

The starting point is to use economic data supplied by data provider Experian to compile profiles across the population. These profiles incorporate the income segment linked to patients’ national ID numbers. When a patient registers on the programme they are automatically assigned a discount level based on their ability to pay. This link between individual levels of affordability and access to medicines has helped more than 150,000 patients since February 2016. It is the latest development in AstraZeneca Brazil’s Faz Bem programme, which helped a total of almost 2.5 million patients since it was launched in 2008.

AstraZeneca considers five socio-economic factors when setting prices for a first-line heart disease medicine.
AstraZeneca’s intra-country equitable pricing strategy for ticagrelor (Brilinta®): (1) disease burden, (2) the availability of public financing, (3) levels of inequality, (4) supply chain conditions and (5) patient awareness. The strategy targets 27% of priority countries. In India, China and Brazil, it targets multiple population segments. This strategy is particularly important as ticagrelor is used first line in the prevention of atherothrombotic events. It is also on patent, and AstraZeneca is the only manufacturer.”

Access to Medicine Index
Healthy Heart Africa

AstraZeneca’s Healthy Heart Africa (HHA) is an innovative programme committed to tackling hypertension and the increasing burden of cardiovascular disease across Africa.

Aligned with AstraZeneca’s broader sustainability goals, our commitment to addressing hypertension is part of our access to healthcare strategy and based on our expertise, with over a century of experience in treating cardiovascular diseases, and an extensive portfolio of anti-hypertensive medicines.

Given our product portfolio we are in a position to make a major contribution and impact to SDG 3.4.1. According to estimates from 2012, over three-quarters of premature deaths were caused by cardiovascular disease, cancer, diabetes and chronic respiratory disease.

HHA was established with the ambition to be a sustainable programme. We sell the AstraZeneca medicines at, or close to, a 90% price reduction to the patients, which is achievable with a no-profit/no-loss business model.

Supporting local healthcare systems

HHA aims to support local health systems by increasing awareness of the symptoms and risks of hypertension and by offering education, screening, reduced-cost treatment and control. In developing a programme to address hypertension in Africa, we realised that we needed to customise our approach to suit conditions on the ground, in order to ensure the sustainability of the programme. Recognising the significant barriers to access, HHA’s model is based on three key pillars:

- Increasing education and awareness
- Training providers and supporting the development of guidelines that are appropriate for community-based implementation
- Developing a supply chain and distribution model that ensures access and affordability.

To ensure local capacity is being built throughout the process, we joined forces with eight local partners in Kenya at every level of care, to create a demonstration model that works for the country. These partners work across the private, public and faith-based sectors, and include: AMREF, AMPATH, Christian Health Association of Kenya, PSI, and the Kenyan Catholic Conference of Bishops, PATH, Kenya’s Mission for Essential Drugs and Supplies, to establish secure supply chains for antihypertensive medicines, and Savannah, a Kenyan data management company, which we have partnered with to allow for continuous monitoring of programme outputs and patient-level data capture.

HHA’s approach dedicates extensive time and investment in monitoring, evaluation, data management and evidence generation. Learning by doing and evolving approaches based on data from the field is critical to continuously improving and tailoring our business model, as we plan for expansion across Africa.

HHA achievements

HHA aims to reach 10 million hypertensive patients across Africa by 2025. Since launching HHA in 2014, we have:

- Conducted over 2.7 million hypertension screenings
- Activated over 404 health facilities
- Trained over 3,000 healthcare workers across 31 counties in Kenya
- Identified over 500,000 people with elevated blood pressure
- Diagnosed 100,000 patients with high blood pressure.

Broadening access in Ethiopia

In February 2016, following the successful launch of the HHA programme in Kenya, we developed a partnership and signed a memorandum of understanding with the Federal Ministry of Health (MOH) in Ethiopia. The agreement is to integrate HHA into the Ethiopian healthcare system and facilities, with a specific focus on hypertension. This was done in support of the Government of Ethiopia’s National Strategic Action Plan for Non-Communicable Diseases.

The goal for our Ethiopia HHA partnership is to decentralise and scale up high-quality hypertension care and treatment across health facilities in and around Addis Ababa, with eventual expansion to 12 hospitals and 36 health centres across seven regions.

Despite a challenging environment in Ethiopia due to a state of unrest, our dedicated HHA team on the ground has been able to achieve some key milestones in the first year of implementation, including:

- Developing the first hypertension protocol and training materials in Ethiopia, together with the MOH and the Ethiopian Cardiology Society
- Training more than 900 health workers, including clinicians, nurses and health extension workers
- Fully mobilising 37 health facilities.

Key data will be reported as the programme progresses.
Tackling HIV/AIDS with PEPFAR

In September 2016, we announced a $10 million five-year global public–private partnership with the US President’s Emergency Plan for AIDS Relief (PEPFAR) that will expand access to HIV/AIDS and hypertension services by offering them in an integrated manner at existing PEPFAR-supported HIV/AIDS sites, beginning in Kenya.

Beginning with an initial one-year pilot programme in Western Kenya and working with the Kenyan Ministry of Health, the PEPFAR–HHA partnership will leverage PEPFAR’s existing HIV infrastructure in Homa Bay and Kisumu. The pilot will be implemented by PATH, a current PEPFAR partner with extensive expertise implementing both HIV and NCD programming. The partnership will work closely with the Government of Kenya, a key partner for both AstraZeneca and PEPFAR through existing initiatives, to contribute to both the HIV and NCD programming priorities of the country.

Together, we have made remarkable progress in the global response to HIV/AIDS. Yet, we need innovative approaches to better identify and serve harder to reach populations, including men, who too often only present for care when they are very ill. Through this new partnership with AstraZeneca we will enhance our ability to deliver earlier and more effective HIV/AIDS testing and treatment for working-age men in two high-prevalence counties in Kenya.”

Ambassador Deborah L. Birx, MD, US Global AIDS Coordinator and Special Representative for Global Health Diplomacy

AstraZeneca shares PEPFAR’s vision of improving the health and lives of underserved communities in Sub-Saharan Africa. Increasing rates of hypertension and cardiovascular disease in the region threaten individuals, families and communities, and burden already-stressed health systems. We are honoured and proud to join with PEPFAR to improve access to vital testing and treatment which help stem the tide of both hypertension and HIV/AIDS.”

Mark Mallon, Executive Vice President, International, member of the Senior Executive Team and HHA sponsor at AstraZeneca
Health systems development

Access to healthcare depends on having a functional healthcare system and the right allocation of resources to make sure that medicines are used appropriately as part of overall health management.

Partnering to strengthen health systems

For people in communities with limited healthcare infrastructure, we partner with others to help strengthen healthcare frameworks and capabilities. As well as helping to increase the extent of the work we do, it helps us to break down barriers to healthcare, particularly those around infrastructure and religious or cultural barriers. We work with local partners to gain insight into the local community and how we can work most effectively while remaining culturally sensitive.

Tackling breast cancer in South Africa

Breast cancer is the most common cancer and greatest cause of cancer death among women in South Africa. Poor education and lack of awareness of breast health issues, cultural barriers and lack of access to healthcare facilities have hindered efforts by the government to combat the disease among low-income communities.

Phakamisa is our breast cancer partnership programme in South Africa. Phakamisa means ‘to uplift’ in Zulu or ‘elevate’ in Xhosa. This programme is now in its fifth year of operation, bringing together different organisations to help raise breast cancer awareness, increase early diagnosis, and improve access to treatment and effective support networks.

In collaboration with South Africa’s Foundation for Professional Development, we are providing accredited courses in cancer diagnosis, treatment and care to doctors, nurses and other healthcare professionals. Since the launch of Phakamisa, more than 600 healthcare professionals have been provided with courses. AstraZeneca is also working to ensure that our comprehensive range of hormonal treatments is made available to the health service in a cost-effective way.

In partnership with the Cancer Association of South Africa and the Breast Health Foundation, we are training Phakamisa ‘Navigators’: teams of volunteers and counsellors to go out into the community, raising awareness and supporting patients. Since the start of the programme 400 people have been trained as Navigators. Continued education for the Navigators has also covered socially relevant issues such as cervical cancer, HIV, gender-based violence and child abuse.

As of the end of 2016, over 1.6 million women have been reached by Navigators across the country. The primary objective of these Navigators is to support patients who are diagnosed with breast cancer in the public system. Their interaction with people when raising awareness of breast health in their communities made it possible for close to 3,800 malignant lumps to be identified and referred for effective treatment, something which might not have been discovered if the services of the Phakamisa Navigators were not available. During the four years since the programme started, a monthly average of 2,501 patients have been supported by Phakamisa Navigators in the public health sector.

Addressing prostate cancer

Prostate cancer affects one in six men in South Africa. Although it is not as widely addressed as breast cancer, the mortality of prostate cancer is much higher than that of breast cancer. With this reality facing South African communities, Phakamisa embarked on another challenge during 2016 and started to implement the aspects of the breast cancer model so that prostate cancer patients can also be supported when diagnosed.

Phakamisa Prostate is currently being rolled out in three of the country’s nine provinces, with implementation in the rest of the country planned for 2017. Phakamisa Prostate offers the same service as the breast cancer programme through the collaboration of NGOs and private entities that join Phakamisa in the worthy cause to change and impact the lives of cancer patients and their families in South Africa.
Disease prevention

Preventing disease is far more cost effective than curing disease. By focusing on prevention, we support the development of healthier communities, schools and workplaces and increase the likelihood that people will live long and productive lives. This has a positive impact on healthcare costs and on the overall health of national economies.

One such example is AstraZeneca’s Young Health Programme. Launched in 2010, the programme has reached 1.6 million young people and worked with over 30 expert organisations in 21 countries, combining on-the-ground programmes, research and advocacy to target the four most prevalent risk factors for NCDs: tobacco use, the harmful use of alcohol, lack of exercise and unhealthy eating. We continue to expand the Young Health Programme to new countries and participate globally and locally in the effort to increase investment in NCD prevention programming for youth.

Read more about the ongoing success of our Young Health Programme here and in the Community investment section of the full 2016 sustainability update.

NCDs are those conditions often caused by lifestyle factors and have a much bigger global death toll than bacterial and viral infections.

<table>
<thead>
<tr>
<th>NCDs</th>
<th>Lifestyle factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart disease</td>
<td>Tobacco</td>
</tr>
<tr>
<td>Cancer</td>
<td>Drugs and alcohol</td>
</tr>
<tr>
<td>Type 2 diabetes</td>
<td>Lack of exercise</td>
</tr>
<tr>
<td>Respiratory disease</td>
<td>Unhealthy diet</td>
</tr>
</tbody>
</table>

Working with partners to increase capacity

AstraZeneca partners with Tianjin University to address manufacturing skills gaps at the industry level in China. This is an example of best practice. AstraZeneca has a long-term partnership with Tianjin University that aims to improve manufacturing safety standards at the industry level in China. Rather than training individual manufacturers, AstraZeneca provides funding, training and other support to the university’s Process Safety Laboratory to fill local skills gaps. The company’s expertise is shared more widely via the university’s connections with manufacturers, to build industry-wide capacity.

Source: Access to Medicine Index

Building on success

Building on the successful and ongoing Phakamisa collaboration in South Africa, in 2012 we set up a new partnership in Kenya, where breast cancer is a particular issue. During the year, we trained 150 healthcare practitioners and 60 volunteers through a series of workshops in four major Kenyan cities. The programme was successfully introduced to Ghana in 2013. Support to prostate cancer patients will also be given from 2016 in Kenya and Ghana. In 2016, AstraZeneca is extending the programme to more countries in Sub-Saharan Africa such as Nigeria, Angola and Ethiopia.
**Intellectual property**

**Intellectual property (IP) rights are the lifeblood of the biopharmaceutical industry, providing the incentives required to conduct the research and development (R&D) that produces new medicines to treat patients and improve patients’ lives. AstraZeneca proactively makes patent information in the Index Disease space available on its website and is also willing to consider granting patent licences in certain areas.**

It takes approximately 10 to 15 years to develop a new medicine, and for every one medicine that reaches patients, there are thousands of drug candidates that fail. The ability to obtain patent protection for innovations in R&D, under a robust IP protection and enforcement framework, is one of the main incentives for innovation and provides a sustainable framework for the innovative, pharmaceutical R&D that produces life-saving medicines.

AstraZeneca seeks to protect innovations worldwide. We have developed an IP strategy that means we don't file patent applications in a number of low-income and developing countries. We have prioritised the countries where we seek patent protection for our products and accept that we cannot file patent applications in every country of the world. In Sub-Saharan Africa, AstraZeneca does seek patents for invention for new chemical entities in Angola, Ethiopia, Gambia, Ghana, Kenya and Nigeria. We also seek them for new chemical entities and other types of inventions in South Africa.

Unless constrained by contract, AstraZeneca proactively abandons all patent property that does not support a product, or an actual or potential pipeline asset, and is therefore of no value to us. As a result, other research organisations can use what we have learned to conduct the research and development (R&D) that produces new medicines to treat patients and improve patients' lives. It takes approximately 10 to 15 years to develop a new medicine, and for every one medicine that reaches patients, there are thousands of drug candidates that fail. The ability to obtain patent protection for innovations in R&D, under a robust IP protection and enforcement framework, is one of the main incentives for innovation and provides a sustainable framework for the innovative, pharmaceutical R&D that produces life-saving medicines.

AstraZeneca will license any patent rights covering medicines on the Essential Medicines List for supply of those Essential Medicines to LICs, LDCs and LMICs, and would also consider licensing any patent rights to third parties for supply of such medicines in or to Medium Human Development Countries (MHDCs).

AstraZeneca supports the Bolar research exemption (or safe harbour exemption) under which a third party may prepare for and obtain regulatory approval so that a generic product can be available on patent expiry; but this does not mean that the company interprets Bolar as extending to commercial manufacture, importation or stockpiling during the lifetime of a patent.

**Best practice: Clarity in approach to IP management**

AstraZeneca clearly states the countries where it holds patents, where it will not file for patents, where it is prepared to license and for which products, and gives an indication of the term.

Source: Access to Medicine Index