

THE FUTURE OF THE INDONESIAN HEALTHCARE ECOSYSTEM

THE OUTLOOK TO 2030



EXECUTIVE SUMMARY

The Indonesian economy has been growing at a staggering pace in the past decades. Many typical consequences of a fast-developing economy can be seen: A drop in fertility and increased life expectancy and per capita income. However, health outcomes remain conspicuously poor and unevenly distributed, in large part due to an underdeveloped healthcare industry. This has led to multiple problems:

- Massive loss of economic output from low productivity due to non-communicable and communicable-diseases. These have caused an annual avoidable loss of \$130 billion of GDP.
- Lost revenue of about \$48 billion a year from outbound medical tourism due to a lack of trust in the local system and infrastructure.
- A lopsided healthcare provider industry, with underinvestment in preventive medicine and primary care. This has led to an expensive, hospital-led healthcare system.
- Highly uneven distribution of health outcomes across geography and income bands, exacerbated because the country is an archipelago.
- An underdeveloped payer market, resulting in misaligned incentives for the healthcare industry.
- An acute skills shortage in key healthcare professions.

We believe this creates both an unanswerable case for public investment and reform and a compelling market opportunity for private-sector participants with the right focus and imagination. A traditional healthcare solution, with expanded infrastructure and provision along western lines, is unsuitable for Indonesia. Such a system would be too expensive, take too long to develop, and be impractical for the country. Instead, we advocate four actions for the private and public sectors, working together.

- **Vertical integration:** The creation of vertically integrated healthcare systems, with either single players developing all aspects or closely coordinated partnerships.
- **Development of a more-interventionist payer segment:** The payer market needs to grow, and should take a more interventionist approach. This would bring about an alignment of incentives and force healthcare providers to adopt efficient solutions.
- **Digital innovation** in order to lower costs, expand access, and improve clinical quality.
- **Localise life science** offerings to unmet local patient needs, and consolidate local life science industries to create the required scale.
- **Focused and complementary public-sector** investment and regulatory development.

In this white paper, we explore the most critical pain points of the Indonesian healthcare ecosystem today. We then discuss the outlook for the healthcare ecosystem in 2030 through the lives of archetypal Indonesians. Finally, we conclude with a blueprint for how private- and public-sector players can act and cooperate for mutual and national benefit.

PAIN POINTS IN INDONESIA'S HEALTHCARE ECOSYSTEM

Indonesia is one of the world's great economic successes. It is already the 16th-largest economy in the world, with the third highest growth rate in the G20. At the current trajectory it will be one of the five biggest economies in the world by 2030. However, the current state of Indonesian's healthcare industry and health present one of the largest impediments to achieving the country's potential. It also presents a clear area of opportunity for healthcare providers that are able to tackle the opportunities and challenges.

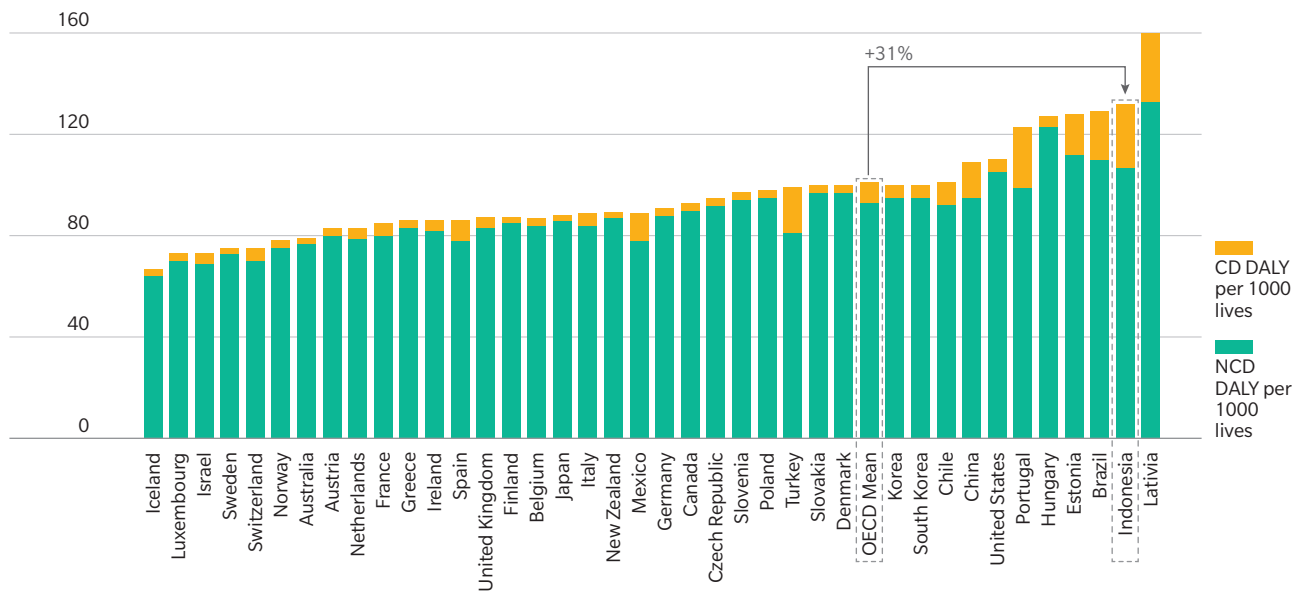
The scale of the challenge for Indonesia's healthcare industry is vast:

The productivity loss to disease is estimated at close to 30 percent of GDP annually.

More than \$201 billion worth of economic output, nearly 19 percent of GDP, is lost annually due to low productivity caused by non-communicable diseases such as heart failure,

Exhibit 1: NCD and CD DALY per 1,000 lives

Non-Communicable Disease (NCD) and Communicable Disease (CD) impact on Disability-Adjusted Life Years (DALYs)

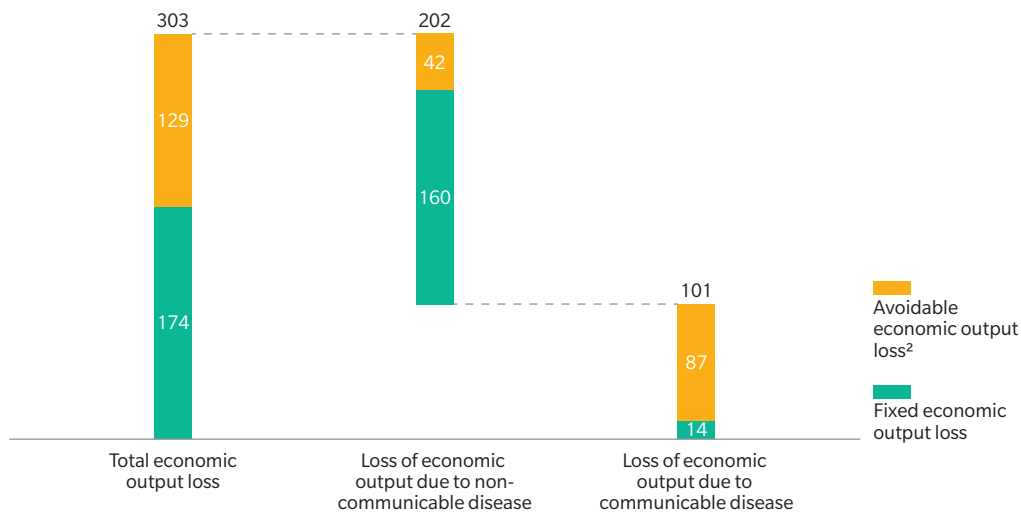


Source: Oliver Wyman analysis

respiratory problems, and cancer. A further \$101 billion is lost due to communicable diseases such as typhoid and malaria. Both numbers far exceed those in comparable developing countries: India loses eight percent of output to non-communicable diseases and China 12 percent. Another measure is the disability-adjusted life years (DALYs) lost to disease: Indonesia loses over 31 percent more than the OECD mean.

A substantial part of this economic loss is unavoidable: Environmental and demographic factors cause higher levels of productivity loss to non-communicable diseases than in OECD countries. However, around \$130 billion a year, or 14 percent of GDP, is avoidable. Examining avoidable losses also suggests that, despite the greater losses to non-communicable diseases, the avoidance of communicable diseases should be the priority.

Exhibit 2: Indonesia Economic Output Loss¹
2018, US\$ BN



1. Total economic output loss simulated using the WHO's EPIC model. This reflects the economic impact of diseases on aggregated economic output, by linking the value of economic output to quantities of labour and capital inputs, as well as technology

2. Avoidable economic output loss refers to losses that would be avoided if Indonesia reached OECD standards in top disease categories

Source: WHO, WEF, Harvard School of Public Health, OECD, IMF, Industry experts, Oliver Wyman analysis

Unaddressed healthcare needs represent a \$68 billion opportunity

We see poor health as both a pressing priority for the country and a compelling commercial opportunity for both private- and public-sector companies. Seizing that opportunity, however, will require that six substantial challenges be tackled:

Patients lack trust in the local system and infrastructure. More than 600,000 people a year travel to neighbouring countries for medical treatment. The direct cost of such medical tourism has grown at an annual rate of over 10 percent since 2006 and is now nearly \$1.9 billion a year. When indirect spending is included, the annual cost is nearly \$4 billion.

There is a shortage of health infrastructure – both physical infrastructure and medical talent. Indonesia still has a severe talent shortage: It needs 15 times its current number of doctors to meet OECD standards. The gap between supply and demand is estimated to be equivalent to an annual \$68 billion of unaddressed healthcare needs. There is also a shortage of physical healthcare centres, despite a recent increase in hospital building.

Investment in health education and preventive medicine is insufficient and inefficient. International research consistently suggests that the highest return on investment in health comes from preventive medicine and primary care. Indonesia's disease profile – in particular its high prevalence of avoidable communicable diseases – suggests this is especially true there. The country has a low level of basic infant immunity coverage: Just 79 percent, compared to 85 percent or more in most developing ASEAN countries. Maternal and infant mortality continue to be a problem: More than 80 percent of cases are considered avoidable according to OECD criteria.

Health results show a vast disparity according to geography and income. There is a 15-year difference in life expectancy between urban and rural areas, illustrating Indonesia's geographical healthcare challenge. This is an almost uniquely Indonesian challenge: The country's archipelago structure and a wide income distribution create regional issues that compound other factors. Transport infrastructure is also a limiting factor: We believe it challenges conventional approaches to developing healthcare and calls for radical innovation.

Payer-provider incentives are misaligned, leading to poor health outcomes relative to spending. Indonesia has replicated the pay-for-service approach adopted in most predominantly private healthcare systems in the West, and it suffers many of the same problems of over-spending and misaligned incentives. Meanwhile, many Indonesians remain uninsured and a large proportion of healthcare costs are paid out of pocket. The advent of the national health insurance scheme (BPJS) is an important step forward towards wider healthcare coverage. But to date it has done little to address this challenge. Instead, it has forced pricing on healthcare providers and pharmaceutical companies that they are ill-equipped to meet while maintaining levels of quality and access. A clear approach to cooperation with private insurers has not been developed. There is a need for dramatic improvements in outcomes on a limited budget, so a different economic model is desperately needed.

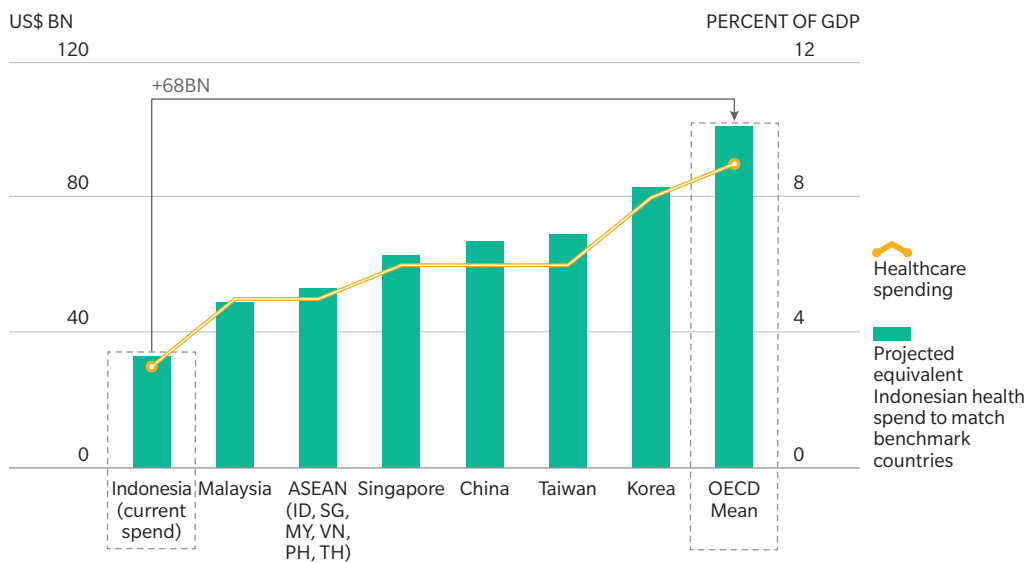
The regulatory environment hinders foreign investment. For a variety of reasons, Indonesia’s healthcare regulation creates challenges for private providers. These include financing (imposition of low prices via BPJS), recruitment (tough restrictions on hiring foreign doctors), and restrictions on intellectual property and ownership. Cumulatively, these factors hinder foreign investment in the sector at a cost to health and economic development.

In summary, an estimated **\$303 billion**-worth of healthcare opportunity cost is lost annually. The sum of economic output lost from diseases and outbound medical tourism has a heavy impact on the economy. However, **\$130 billion** of this opportunity cost could potentially be recovered by addressing unmet healthcare needs. Indonesia’s healthcare ecosystem is in dire need of a transformational change to recover this massive economic loss.

Today’s traditional healthcare ecosystem model is inconvenient for patients. It is a traditional supplier-oriented, volume-driven, high-touch model. In addition, unique Indonesian characteristics pose their own challenges. These include the scale of the supply-demand gap, the dispersion of the population throughout the archipelago, and vast disparities in income.

Exhibit 3: Potential Unaddressed Healthcare Need

Health spend percent of GDP & difference with Indonesia (US\$ BN)



Source: Oliver Wyman analysis

KEY DESIGN PRINCIPLES FOR 2030

We believe Indonesia needs something different. The best international practices and the possibilities of digital innovation could serve as inspiration to design something uniquely suited to the population. To design a system for 2030, we believe Indonesia should focus on the following points.

HEALTH, NOT HEALTHCARE

The health of the population should be maintained through preventive care instead of episodic and acute care. Improved health levels and innovative ways for people to stay healthy should be the mainstream.

DIGITAL INNOVATION TO WIDEN ACCESS

Digital technology can help healthcare providers overcome their current accessibility issues. Services will be delivered more widely and reach remote rural regions.

ONSHORE EXCELLENCE: BECOMING A NET EXPORTER OF HEALTHCARE

Providers should improve clinical and service quality to a level at which they gain the trust of the local population and thereby reduce – or reverse – outbound medical tourism. The local health workforce should be able to meet specialist demands and customize treatment for diseases.

PAYERS AS DRIVERS FOR IMPROVED CARE AND EFFICIENCY

Public and private financing schemes should broaden affordable care. Financial risk protection and healthcare financing should change the behaviour of both healthcare consumers and providers.

REGULATION AIMED AT POPULATION HEALTH

The 2030 healthcare ecosystem will be fair, efficient, and coordinated. Regulatory governance and related technologies, such as health information systems, will improve efficiency and responsiveness. This may require some tough trade-offs in the short term.

In the rest of this paper we work back from the future. Firstly, we paint a picture of Indonesian healthcare in 2030, comparing and contrasting the healthcare experiences of three archetypal Indonesians: Agus, Putri and Budi. Secondly, we discuss the actions required to achieve this vision for 2030, as well as the implications for public and private sectors today.

Exhibit 4: Key Design Principles of the 2030 Healthcare Ecosystem



Focus on health and preventive care instead of care after sickness



Leverage **digital technology** to give remote rural areas **access** to healthcare



Improve domestic clinical and service quality to win the trust of local healthcare consumers



Affordable spending through **public-private** cooperation



Population health management as the core focus of a **fair, efficient, and coordinated healthcare ecosystem**

Source: Oliver Wyman analysis

A VISION OF INDONESIA'S HEALTHCARE ECOSYSTEM IN 2030

Fast forward to 2030, and Indonesian's health and healthcare look radically different from today for the whole patient journey – from identifying health concerns to diagnosis, treatment, and post-treatment coordinated care. For a clearer view, we deep-dive into the lives of Agus, Putri, and Budi to understand how they navigate differently the healthcare ecosystems of today and 2030, as they strive to remain healthy and productive.



AGUS

Generally healthy, but with a history of type-2 diabetes in his immediate family
Mid-twenties, call centre associate, lower-income group
Lives in rural Manado Sulawesi, where the availability of health services is limited



PUTRI

Early tuberculosis symptoms and third trimester of second pregnancy
Mid-thirties, textile worker and primary caregiver, middle-income family
Lives in a very rural region in Bandung, central Java, with limited access to physical in-person healthcare services beyond Puskesmas



BUDI

Advanced-stage cardiovascular disease
Early-sixties, retired lawyer, mid-to-high-income group
Lives in Jakarta with high access to a spectrum of healthcare services

TODAY

PATIENT JOURNEY & MEDICAL EXPERIENCE

- Has limited to no access to health education programmes or campaigns
- Does not take any proactive measures to prevent onset of diabetes
- Has an unhealthy lifestyle with poor nutrition (high sugar) and fitness habits
- Is at a high risk for type-2 diabetes onset
- Needs to rely on his own diligence to understand and seek preventive measures
- Most preventive measures are not covered or subsidized by BPJS – all expenses are out-of-pocket
- Experiences high loss of productivity at work
- Relies on midwives from her district to receive ob-gyn care
- Has low effective access to care:
 - Does not receive continuous care throughout pregnancy due to the lack of HCPs and accessibility to diagnostics in Puskesmas
 - Increased chance of infant mortality due to poorly coordinated prenatal care
 - Needs to travel long hours for comprehensive health consultations and treatment, which is unsustainable in her condition
- Seeks cutting-edge healthcare consultations and treatment abroad
- All healthcare expenses are out of pocket
- Local specialist talent is scarce or prohibitively expensive/inaccessible
- Lacks long-term post-care management
- Lacks coordinated home monitoring in the event of emergencies

IMPLICATIONS ON INDUSTRY

- High risk of numerous, expensive treatment because of failure to prevent onset of type-2 diabetes
- Costly expenditure for public insurance
- Low frequency of interaction with healthcare ecosystem players (limited to district Puskesmas)
- Middle- to high-income groups' expenditure is lost to overseas healthcare markets

PUTRI 2027

PATIENT JOURNEY & MEDICAL EXPERIENCE

- Has high access to care through digital channels
- Uses telemedicine to receive high-quality medical consultations and care from highly experienced specialists
- E-prescriptions allow her to refill her medicines online with direct home delivery
- Receives remote prenatal care programme (e.g., ultrasounds) with smartphone acting as a point-of-care medical device
- Symptoms of tuberculosis are reduced, resulting in a higher chance of healthy birth
- Uses prenatal smart-home health platform for real-time health tracking as she nears labour or in case of emergency

IMPLICATIONS ON INDUSTRY

- Fully engages multiple traditional and innovative players, adding to demand in the healthcare market
- Innovative consumer-centered solutions cover Indonesia's dispersed population

AGUS 2024

PATIENT JOURNEY & MEDICAL EXPERIENCE

- Uses smartphone applications, wearables, and IoT sensors to track and manage his health to prevent onset of diabetes
- Significantly lowers chances of getting diabetes
- Receives regular robotoc consultations to analyze his EHR and ePRO to predict potential health concerns
- Private insurance premiums are dynamically lowered to incentivize a healthy lifestyle
- Has limited to no out-of-pocket expenses in a highly-integrated payer-provider system, in which incentives for public and private payers and for providers are aligned to patient-centred, value-based care
- Leverages public health education programmes and applies for virtual diabetes management programmes through BPJS and his private-payer network

IMPLICATIONS ON INDUSTRY

- Payers invest a small up-front cost to avoid large expenditures down the line for acute care
- Healthcare providers are more profitable and more sustainable in the long run and have better health outcomes
- Health plans are designed around patient-centered, value-based healthcare

BUDI 2030

- Has access to personalised treatment in Jakarta with coordinated public and private insurance coverage
- Comprehensive personal health records used to develop personalised coordinated care programmes
- Biochips, robotic surgery, AI diagnostics and other hi-tech medical devices raise quality of treatment
- Only a small percentage of expenses out of pocket
- Remote home monitoring station used for chronic disease management
- Access to digital coordinated care to ensure immediate medical attention in urgent situations
- Connects to social media to share common experiences

- Overseas spending is brought back to Indonesia, increasing size of the healthcare market
- Increased demand for cutting-edge medical science and technology, as well as personalized treatments

THE LIVES OF AGUS, PUTRI, AND BUDI TODAY

AGUS

Agus is well aware of the history of diabetes in his immediate family and is knows that treatment is expensive. However, in today's healthcare ecosystem, he is not aware of the different ways in which he can prevent the early onset of diabetes. He has a poor lifestyle. He eats too many high-sugar foods and does not take regular exercise, both of which contribute to weight gain and his chances of becoming diabetic.

After noticing symptoms such as frequent urination and extreme thirst, Agus goes to the hospital to seek help for his condition. This results in costly treatment and a large amount of travel, as the nearest hospital is far away. The treatment costs are paid in part by public insurance, but a considerable amount comes out of his own pocket, which Agus struggles to fund. Moreover, Agus' productivity continues to fall, which leads to salary cuts. Eventually, he can no longer afford his treatment. His health situation has become a vicious circle.

PUTRI

Putri is a mother of a 12-month-old boy in her mid-thirties. She is a textile worker in Bandung and she and her husband are middle class. Putri is on high alert after a recent bout of active-lung tuberculosis. She is concerned that this may affect her pregnancy as she looks forward to giving birth to a baby girl. She lives in Bandung, Central Java, where healthcare resources are scarce, and her main physical sources of healthcare services are women's health centres and Puskesmas, government-mandated community health clinics located across Indonesia.

Puskesmas are the primary source of health services in Indonesia, and they are ill-equipped to manage her condition. She receives basic obstetrics and gynaecology care from midwives in the district, and she visits a perinatal specialist in a larger, developed city as she enters the third trimester. However, the travel time is long and the transport conditions unsuitable, which is risky for both her and her baby. This poorly-managed maternal and perinatal care increases the likelihood of birth complications.

BUDI

Budi is a retired lawyer in his early sixties, living in Jakarta. He has a rare form of advanced-stage cardiovascular disease and travels abroad to seek reliable consultations and cutting-edge treatments. He doesn't have Insurance, so all his healthcare expenditure for both local and foreign healthcare providers is out of pocket. After the overseas medical consultations and treatment, he finds it hard to set up long-term post-care management. It is prohibitively expensive and he has to travel frequently due to a lack of options nearby. Budi's condition is treated well, but at very high cost and low convenience, and he bears all the associated costs.

WHAT SHOULD BE DONE TO HELP THEM...

The three examples show some of the challenges in Indonesia's healthcare system today.

- **Lack of focus on prevention:** Agus is neither aware of how to prevent the onset of diabetes nor empowered to do so in today's healthcare system. Incentives for preventive care are greatest in the payer market but because of its lack of sophistication, no part of the healthcare system provides incentives or assistance other than that run by the government. BPJS operates on a pay-for-service model, while private health insurers lack the scale to invest.
- **Lack of local access:** Both Putri and Agus struggle to reach healthcare services as these are not available in their districts. As today's healthcare relies entirely on physical meetings, both are compelled to travel for consultations. This results in long travel, high expenses, and poor treatment.
- **Over-reliance on foreign healthcare:** Budi spends large amounts on overseas healthcare and travel. He receives a high standard of care, but it is not available quickly, and it costs him a large amount – money that is spent overseas rather than in Indonesia.
- **Lack of access to health insurance:** While public health insurance provides for most of Agus' needs, the lack of private health insurance creates a financial risk for all three.



THE LIVES OF AGUS, PUTRI, AND BUDI IN 2030

AGUS

It's 7:35 a.m. on a Friday. Agus looks at the latest notification on the fitness wearable that he received through his employee health benefit program. "Congratulations! You've completed your third run of the week. We've lowered your monthly insurance premium by 0.5%. Keep up the good work!". Agus is a healthy young man in his mid-twenties in his first year working at a customer service call centre. Given his family history, his health insurance scheme equips him with devices to manage the possible onset of diabetes. This dramatically reduces the likely lifetime cost of treatment and improves his chances of avoiding diabetes.

With financial aid from BPJS, he applies for general screenings, immunization programmes, and preventive virtual diabetes management programmes. He frequently uses an AI-based digital therapy chatbot for coaching to maintain his level of mental health. As his healthy status continues, Agus continues his routine bi-annual primary-care physician consultations and monthly robotoc consultations. These use deep-learning analytics to examine his electronic health record and electronic patient-reported outcome in order to predict potential health concerns.

PUTRI

Putri wipes off the ultrasound gel as she closes the teleconference window on her tablet. She has just completed a remote live ultrasound session with her doctor as part of a prenatal care programme as she enters the third trimester. Physical, face-to-face specialist care is hard to come by for Putri, but she can get timely, high-quality care effectively through remote channels – that is, telemedicine and bioengineered precision medicine. Putri can choose an experienced specialist to consult via an app. Her remote medical consultations are then relayed to local physicians and nurses, who treat Putri in person at the Puskesmas.

Outside the local medical centres, Putri obtains e-prescriptions on her smartphone. These are automatically pushed to her preferred online pharmacy for direct same-day delivery to her home. Putri has followed this routine for a few months now and is expected to give birth to a healthy baby in a few weeks. Given that she is only a few weeks away from delivery, she has subscribed to a smart prenatal home-health platform. This helps Putri to keep track of her health in real time. She will be able to automatically notify her husband and local healthcare professionals when she is nearing labour or in case of emergency.

BUDI

Budi scans his detailed medical health record, which contains his sequenced genome, on his mobile device to check if any new personalised treatments are available. He used to go abroad for medical consultations and treatment, but now he prefers to stay in Jakarta, where he can access similar cutting-edge treatments at high-quality hospitals accredited by the Joint Commission International (JCI). His public and private insurance schemes save

him from paying excessively-high fees and from worrying about the future affordability of treatment.

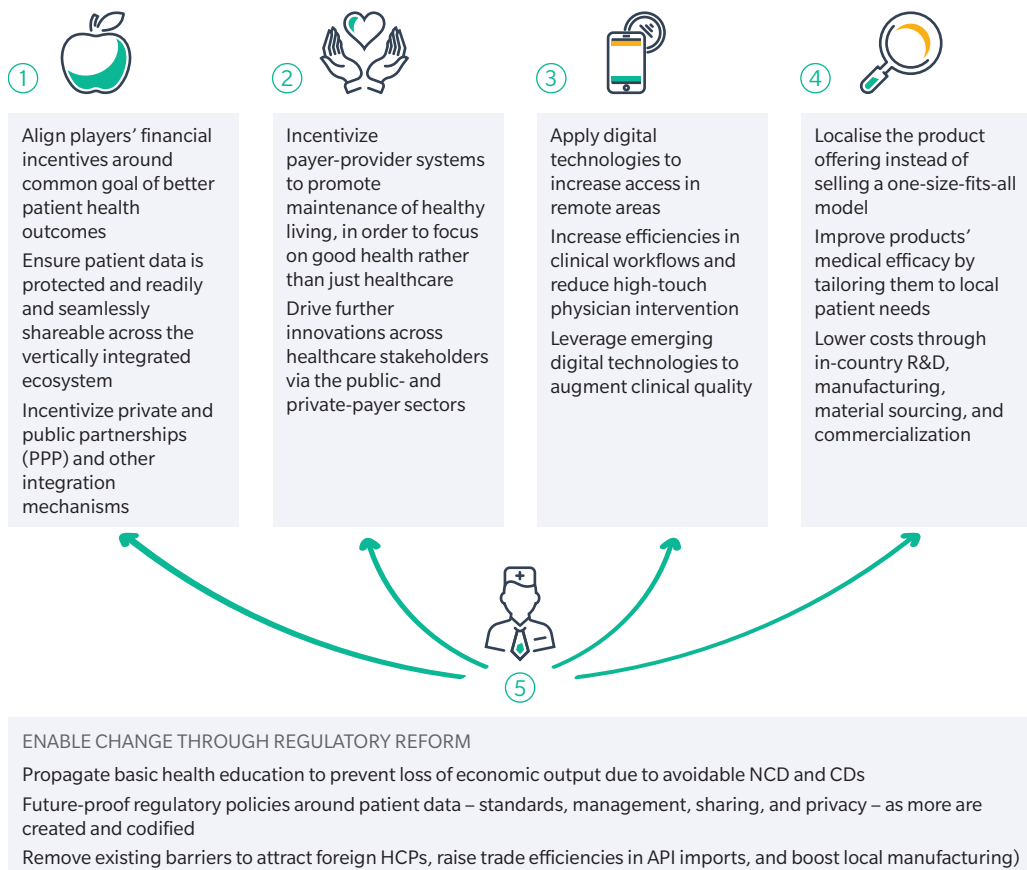
Budi still seeks consultations from top doctors around the world. They regularly supplement and refine their consultations with AI diagnostic tools such as smart MRI imaging, so that they can understand Budi's condition as accurately as possible and administer effective, coordinated care. Doctors implant biochips through robotic surgery and prescribe personalised treatments. In the background, healthcare providers carry out adaptive clinical trials to research Budi's unusual condition and prescribe personalised precision medicine.

If the treatment is successful as expected, Budi plans to return home for post-care management. He has installed a remote monitoring station at home for remote chronic disease management. Digital coordinated care ensures that he can receive immediate medical attention in urgent situations, daily coaching from his nurse, and social media connection with peers who have received similar treatment and can share their experiences.

Exhibit 5: Path to Indonesia 2030

Five key imperatives to achieve the 2030 Indonesian Healthcare vision

ALL FIVE IMPERATIVES CAN IMMEDIATELY BE ACTED ON INDEPENDENTLY



Source: Oliver Wyman analysis

THE PATH TO INDONESIA HEALTHCARE 2030

The idealised 2030 vision we have described is far from today's reality. As Indonesia designs a blueprint for a healthcare ecosystem for the new era, it will need to manage the triple aims of high quality, low cost, and greater patient access. As it does this, we see five areas of particular priority. These are both the most important developments and the areas of greatest opportunity for private-sector players.

Integrate Vertically

We see the fragmentation of healthcare provision as a barrier to progress. It separates payers, primary- and secondary-care providers, and the life sciences, which creates misaligned incentives. It also hinders the economic functioning of important elements of the system. A vertically integrated company – or a set of companies connected through partnerships – would be more economically efficient.

New entrants or existing players could build a vertically-integrated solution that performs the roles of traditional stakeholders – policymakers, providers, payers, pharma and biotech companies, and investors – as well as those of new health innovators. In other countries, leading private-sector participants have broken through the inherent conflicts of interest in healthcare. In China, PingAn Group has been consolidating its financial, healthcare, and technology services companies into a one-stop platform for all health-related services. It provides an integrated online-to-offline experience. In the United States, Berkshire Hathaway, Amazon, and J.P. Morgan have set up a joint healthcare alliance.

The Payer Market – Health Before Healthcare

Payers are the keystone in health services. They drive patients' financing capabilities and behaviour, which in turn drive the effective utilization of health services. When they function well, payers incentivize investment in prevention and primary care, which are efficient ways to promote health; and they avoid wasteful and unnecessary hospital treatment that come via managed-care policies. For example, Taiwanese private insurance companies such as Cathay Life have designed health plans that dynamically reward policy holders if they meet certain conditions – such as an amount of daily exercise, which the insurer measures using digital sensors.

The payer market in Indonesia is enormously under-developed at present, so there's a need for greater private participation alongside a better-developed public fund. Both private payers and BPJS should adopt a much more interventionist managed-care approach, which will yield superior economic results and make healthcare provision more cost-efficient.

The government could further encourage this by incentivising public-private cooperation. Many countries provide incentives for private insurance policies that cover diseases not covered by public insurance in exchange for tax reductions. In China, for example, a Critical Disease System was started in 2012 to provide secondary reimbursement for out-of-pocket spending over the reimbursement ceiling of standard basic medical insurance. Private insurance companies bid for desired coverage and policy holders may use public funds to buy private group insurance.

Leverage Digital Technologies

Digital technologies are essential for achieving good health outcomes and strong healthcare player economics in the face of Indonesia's unique healthcare challenges. Digitally enabled applications will become increasingly sophisticated and improve the access, quality, and cost of healthcare.

The simplest use of digital technology would be to make existing healthcare processes more efficient. This would also have an effect on cost and, therefore, access. ZocDoc in the US and Ping An Wanjia in China have both developed online services for making appointments, which decrease the hassle and cost of accessing primary care. Beyond this, we think telemedicine and web- or mobile-enabled platforms could help expand access and lower the unit cost of healthcare across the vast Indonesian archipelago. One such platform has been developed by Medgate Switzerland, which has recently expanded into the Philippines, another country with many islands.

Better clinical quality will also require the development of digital technologies that are still nascent today. AI, for instance, can aid physicians and help address a critical skills shortage. Algomedica, a California-based AI medical imaging start up, is developing a deep-learning algorithm that reduces noise in CT scans. This helps increase diagnostic accuracy beyond typical human capabilities and reduces standard exposure times to CT radiation, increasing patient safety and reducing the cost to providers. As such technologies mature, they will improve clinical quality and also increase technical efficiency, by boosting the clinical workflow and lowering the cost of operating expensive machinery. Ultimately they will raise the effective availability of health services.

Consolidate and Localise Life Sciences

As Indonesian healthcare demand grows, so too will demand for pharmaceutical and biotech products. At present, however, the high cost of many products developed and manufactured overseas is prohibitive for large parts of the Indonesian population.

To lower costs – as well as to increase their products’ effectiveness and safety – foreign pharmaceutical and biotech companies will need to localize their offerings. Global life science players will need to better understand the clinical needs of local healthcare and the process of care delivery, instead of simply importing standardized products from other developed markets. AstraZeneca has done this in China, reformulating some of its key therapeutic areas as well as developing new innovative biologics to address unmet Chinese patient needs. It has built its own local manufacturing facilities and also formed strategic alliances with local companies, such as WuXi AppTec, a leading Chinese biologics manufacturer and contract research organization. AstraZeneca is a leading example of a multinational player trying to control the entire value chain of its products in China – from a dedicated R&D platform and locally sourced materials to manufacturing centres and commercialization. Chinese regulators are creating a conducive environment for localization and collaboration efforts, including fast-track review through the country’s new “green pass” process.

In Indonesia, local players will increasingly be called on to meet local consumption needs. At present the local pharmaceutical industry is too fragmented and consequently lacks the scale to invest. So it should consolidate and focus on localized innovation and differentiation, which are needed for local production to grow. Revisions to trade regulations on application programming interfaces (APIs) could further help local players compete effectively against foreign manufacturers.

Coordinated Government Action

The case for improved health in Indonesia is compelling – as is the purely economic case for greater investment. The government has the most scope of any stakeholder to effect a sea-change in national health and should see this as a high priority. We see several potential areas for government involvement:

- Large-scale health education and preventive medicine
 - It is imperative to encourage healthy lifestyles through mass health education that also reaches the least affluent members of society. Evidence shows that health education can be more effective than healthcare alone.
 - Government policies to reduce avoidable communicable diseases (for example through raising or better-enforcing food hygiene standards) can also pay quick dividends.
 - Given the huge economic costs of poor health, we expect such initiatives to be self-funding over the medium term.

- A future-proof regulatory framework for health-tech innovation
 - The regulatory framework needs at least to keep pace with, and ideally go ahead of, digital innovation. It should cover such diverse topics as the protection of patient data, health apps and AI-driven diagnostics, digital access to foreign doctors, and ethical health insurance. Given the potential to increase the quality and access of healthcare in Indonesia, we believe an overly permissive regulatory regime would be preferable to an overly restrictive regime.
 - A regulatory sandbox, as launched in 2018 for telemedicine in Singapore, could be an effective interim measure.
- Regulation to alleviate the skills shortage
 - As highlighted in the first section of this report, Indonesia still has a severe skills shortage in healthcare, hurting the quality, cost, and availability of service. The country needs 15 times its current number of doctors to reach the level of OECD countries.
 - Regulators should consider two strategies. For the long term, they should encourage greater investment in teaching institutions to produce the next generation of local healthcare professionals. For nearer-term results, regulators could consider making it easier for foreign physicians to work in Indonesia, so that they can fill gaps where there are insufficient specialists and serve remote areas where patients often find it difficult to reach a doctor. Programmes to hire foreign medical staff have been successful in such diverse countries as the UK, Saudi Arabia, and Australia. They have had no notable harmful effects on the local medical profession and brought substantial benefits to the local populations.

CONCLUSION

There is a clear need to improve healthcare in Indonesia. A reformed system would present a compelling market opportunity for private-sector players. Improved health would generate national economic benefits. And there is an ethical case for improved health outcomes for the local population.

Private-sector players with the right ambition and approach could make a significant contribution to the nation while developing successful businesses. But this requires imagination and an approach that breaks with Indonesia's current models. In particular, private-sector companies will need greater vertical integration, innovative payer models, digital innovation, and the localisation of life sciences. The public sector should act in parallel. It should focus in particular on health education and preventive medicine and should aim to upgrade regulatory frameworks and address critical skills shortages.

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