**1a)THE LINK BETWEEN OF HEALTH BELIEF AND ACCEPTED TREATMENTS**

 Health belief is a theoretical model that can be used to guide health promotion and disease prevention programmes. It is used to explain and predict individual changes in health behaviours. It is one of the most widely used models for understanding health behaviours among people.

 Key elements of the health belief model focus on individual beliefs about health conditions which predict individual health-related behaviours. The model defines the key factors that influence perceived suspectability, perceived severity, perceived benefits, perceived barriers, modifying variables, cues to action and self efficacy.

**PERCEIVED SUSPECTABILITY** refers to a subjective assessment of risk of developing a health problem or health problems. It predicts that individuals who perceive that they are suspectible to a particular health problem will engage in behaviour that will help them to reduce their risk of developing the health problem while people who believe that they are at low risk of developing an illness may indulge in risky or unhealthy acts e.g a man or woman with a low functioning liver will stay away from alchol

**PERCEIVED SEVERITY** refers to the subjective evaluation of the seriousness of a health problem and it’s potential consequences which will make them to engage in practices that will stop the health problem form occurring or reduce the severity of the health problem. E.g an individual may perceive that [influenza](https://en.wikipedia.org/wiki/Influenza) is not medically serious, but if he or she perceives that there would be serious financial consequences as a result of being absent from work for several days, then he or she may perceive influenza to be a particularly serious condition.

**PERCEIVED BENEFITS** refer to an individuals assessment of the value or efficacy of engagaing in a health-promoting behaviour to decrease the risk of a disease. If an individual believes that a particular action will reduce suspectibility towards a health problem or decrease its seriousness, he or she is likely to engage in that particular act. E.g people who believe that the benefit of using sun screen is prevention of skin cancer are more likely to use sunscreen

**PERCIEVED BARRIERS** refer to an individuals assessment of the obstacles to behaviour change. Even if an individual perceives a health condition as threatening and believes that a particular action will effectively reduce the threat, barriers may prevent engagement in the health-promoting behavior. In other words, the perceived benefits must outweigh the perceived barriers in order for behavior change to occur. Examples of those barriers include inconvenience, pain, discomfort, expenses e.t.c.

**MODIFYING VARIABLES** refers toIndividual characteristics, including demographic, psychosocial and structural variables, can affect perceptions (i.e., perceived seriousness, susceptibility, benefits, and barriers) of health-related behaviors. Demographic variables include age, sex, race, ethnicity, and education, among others. Psychosocial variables include personality, social class, and peer and reference group pressure, among others. Structural variables include knowledge about a given disease and prior contact with the disease, among other factors. The health belief model suggests that modifying variables affect health-related behaviors indirectly by affecting perceived seriousness, susceptibility, benefits, and barriers.

**CUES TO ACTION** are triggers that prompt engagement in health-promoting behaviours. Cues to action can be internal or external. Physiological cues (e.g., pain, symptoms) are an example of internal cues to action. External cues include events or information from close others, the media, or health care providers promoting engagement in health-related behaviors. Examples of cues to action include a reminder postcard from a dentist, the illness of a friend or family member, and product health warning labels. The intensity of cues needed to prompt action varies between individuals by perceived susceptibility, seriousness, benefits, and barriers. For example, individuals who believe they are at high risk for a serious illness and who have an established relationship with a primary care doctor may be easily persuaded to get screened for the illness after seeing a public service announcement, whereas individuals who believe they are at low risk for the same illness and also do not have reliable access to health care may require more intense external cues in order to get screened.

**SELF EFFICACY** refers to an individual's perception of his or her competence to successfully perform a behavior. Self-efficacy was added to the health belief model in an attempt to better explain individual differences in health behaviors. The model was originally developed in order to explain engagement in one-time health-related behaviors such as being screened for cancer or receiving an immunization. Eventually, the health belief model was applied to more substantial, long-term behavior change such as diet modification, exercise, and smoking. Developers of the model recognized that confidence in one's ability to effect change in outcomes (i.e., self-efficacy) was a key component of health behavior change. For example, Schmiege et al. found that when dealing with calcium consumption and weight-bearing exercises, self-efficacy was a more powerful predictors than beliefs about future negative health outcomes.

Rosenstock *et al.* argued that self-efficacy could be added to the other health belief constructs without elaboration of the model's theoretical structure. However, this was considered short-sighted because related studies indicated that key health belief constructs have indirect effects on behavior as a result of their effect on perceived control and intention, which might be regarded as more proximal factors of action.

 Accepted treatments are treatments that are generally believed or recognized to be valid or correct. They consist of actions medicines that have been approved. For example, ibuprofen or paracetamol are accepted treatments for headaches and body pains. Antibiotics are accepted treatments for the elimination of the bad bacteria in someones body. Surgery is the accepted treatment for a broken bone or a gunshot wound. Anti-depressants and meditation are acceptable treatments for General Anxiety Disorder or Depression.

 The link between the health belief and accepted treatment is that they both refer to the actions that individuals take in order to eliminate or reduce the seriousness or severity of a disease or health problem or condition. The health belief model was based on an assumption that people fear diseases, and that health actions are motivated in relation to the degree of fear (perceived threat) and expected fear-reduction potential of actions, as long as that potential outweighs practical and psychological obstacles to taking action which would then lead the people to get or practice the accepted treatments for whatever health condition they want to reduce or eliminate.

**1b)HOW CULTURE AFFECTS BIOLOGICAL PROCESSES.**

First off, what is a Biological Process?

 Biological processes are those processes that are vital for an organism to live and that shape its capacities for interacting with its environment. Biological processes are made of many chemical reactions or events that are responsible foor the persistence and transformation of life forms. A biological process is a process of a living organism. Biological processes are made up of any number of chemical reactions or other events that results in a transformation. Regulation of biological processes occurs where any process is modulated in its frequency, rate or extent. Biological processes are regulated by many means; examples include the control of gene expression, protein modification or interaction with a protein or substrate molecule. Physiological process, those processes specifically pertinent to the functioning of integrated living units: cells, tissues, organs, and organisms. Reproduction, digestion, response to stimulus: a change in state or activity of a cell or an organism as a result of a stimulus, Interaction between organisms. the processes by which an organism has an observable effect on another organism of the same or different species. Also: fermentation, fertilisation, germination, tropism, hybridisation, metamorphosis, photosynthesis, transpiration.

 Culture is an umbrella term which encompasses the social beaviour and norms found in human societies, as well as the knowledge, beliefs, arts, laws, customs, capabilities, and habits of the individuals in these groups.

Humans acquire culture through the learning processes of enculturation and socialization, which is shown by the diversity of cultures across societies.

A cultural norm codifies acceptable conduct in society; it serves as a guideline for behavior, dress, language, and demeanor in a situation, which serves as a template for expectations in a social group. Accepting only a monoculture in a social group can bear risks, just as a single species can wither in the face of environmental change, for lack of functional responses to the change. Thus in military culture, valor is counted a typical behavior for an individual, as are duty, honor, and loyalty to the social group are counted as virtues or functional responses in the continnum of conflict. In the practice of religion, analogous attributes can be identified in a social group.

**EXAMPLES OF SOME BIOLOGICAL PROCESSES AND HOW CULUTRE AFFECTS THEM.**

**REPRODUCTION:** Reproduction can be defined as the ability of a living organism either asexually from a single parent or sexually from two different parents. Culture has affected reproduction in so many ways and the following are some examples.

1. The act of Female Genital Mutilation (circumcision in women) is a cultural act in some societies that has definitely affected reproduction because when many women are circumcised, they lose interest in sexual acts making them not to even have interest in reproducing their own children thereby making them adopt children instead of giving birth to them.
2. Some cultures are against the birth of twins, they believe that twins are witches so whenever twins are conceived in those societies, they end up getting killed. This fear will make women who have given birth to twins not to wan to give birth again because of fear of having their children killed incase they are twins.
3. In some societies, they have a limit for the number of children that should be given birth to from a particular parent so as to control population, some say two children ore 3 children is the limit. This affects reproduction in the sense that parents will not be able to reproduce as many children as they want to.
4. The culture in some areas is not against homosexual behaviours or sexuality ( sexual relations between two people of the same sex either male ore female). Two people of the same sex cannot reproduce so this affects reproduction.

**HOMEOSTASIS:** Homeostasis refers to any self-regulating process by which biological systems tend to maintain stability while adjusting to conditions that are optimal for survival. If homeostasis is successful, life continues; if unsuccessful, disaster or death ensues. The stability attained is actually a dynamic equilibrium , in which continuous change occurs yet relatively uniform conditions prevail.

According to Antonnio Damasio, homeostasis is what connects us to our ancestors. Homeostasis according to him ensures that organisms do not only endure but prevail. Prevailing not only has to do with survival in the present, it also involves looking forward to what is yet to come the way human culture carries society forward even as individuals live and die.

Homeostasis drives the behaviour of living organisms e.g search for food, choosing a mate, moving away from or towards heat, fighting for survival.

Feelings are the mental expressions of homeostasis. Feelings result from the action of chemical molecules in the blood and nerves — cortisol, serotonin, dopamine, endogenous opioids, oxytocin, and others. The functioning of our internal organs affects these chemicals, which in turn shape our feelings, giving us a “moment-to-moment report on the state of life in the interior of an organism,”.

Feelings are “motives, monitors, and negotiators of human cultural endeavours,” writes Damasio. This includes the arts, philosophical inquiry, moral systems, religious beliefs, justice, governance, economic institutions, technology, and science. Ultimately, these all help us maintain our internal environment, the way bacteria seek out chemical energy or ants cooperatively build a bridge over a chasm.

Culture passes beliefs, norms, rules, laws to people which affects their behaviour. An example would be in a Yoruba family, the culture passed has made a Yoruba boy to know that he has to bow down to greet an elder, this cultural norm has affected the boys homeostasis and it is now part of his behaviour. On the other hand, a Western would not need to lie down on the ground to greet an elder just because it is not in their culture.

**ADAPTATION: Adaptation**, in biology is the process by which a species becomes fitted to its environment; it is the result of natural selection’s acting upon heritable variation over several generations. Organisms are adapted to their environment in a great variety of ways: in their structure, physiology, andgenetics, in their locomotion or dispersal, in their means of defense and attack, in their reproduction and development, and in other respects.

 In sociology, adaptation is the adjustment of both individual and group behaviour to conform with the prevailing systems of norms in a given society, class or social group.

Culture affects adaptation in the area of “cultural adaptation”. **Cultural adaptation** is the process and time it takes a person to integrate into a new **culture** and feel comfortable within it. A person in this position may encounter a wide array of emotions that the theory describes in four different stages which are:

1.) **Honeymoon phase**. Excitement and fascination with the new culture. This is where they will overlook minor problems and look forward to learning new things.

2.) **Crisis period (culture shock)**. This is where excitement turns to disappointment and there are more and more differences that occur. Problems start to be overwhelming and irritating and may use the "fight-back" technique by saying rude remarks or making jokes.

3.) **Adjustment phase**. This is where they learn to accept the culture and to change their negative attitude to a positive one.

4.) **Acceptance and Adaptation phase**. This is where they will feel at home and become involved in activities and may enjoy some of that countries customs.

5) **Reentry shock**. This is experienced upon returning to the home country and the return may follow with initial euphoria, crisis or disenchantment. It may be hard to readjust and may feel like they are not accepted.

 Culture affects adaptation through these stages.

**INTERACTION BETWEEN ORGANISMS:** Interaction can be defined as the process by which an individual or group has an observable effect on another individual or group. Cultural interaction can be both negative and positive and has influenced interaction in the following ways

1. Culture has brought about social change in different societies. Many groups have been able to influence other groups with their own cultural values and norms. An example is festivals, different cultures show their own traditions and values through their festivals and this makes people to learn new cultural values.
2. Culture has also influenced interaction negatively in the area of leadership. Most people from a particular culture will only accept to be led from someone with their same tradition and culture alone and if someone from another culture wants to to rule them, it an lead to conflict.
3. Culture also influences interaction in the area of marriage. Culture makes people to indulge in inter-cultural interaction. Many people are now allowed to get married to people from other tribes and not just keep the marriages between on particular society.

**1c)WHAT HAPPENS WHEN WESTERN MEDICINE IS INTRODUCED INTO A FOREIGN CULTURE (USING NIGERIA AS A CASE STUDY)**

Western medicine was not formally introduced into Nigeria until the 1860s, when the Sacred Heart Hospital was established by Roman Catholic missionaries in Abeokuta. Throughout the ensuing colonial period, the religious missions played a major role in the supply of modern health care facilities in Nigeria. The Roman Catholic missions predominanted, accounting for about 40 percent of the total number of mission-based hospital beds by 1960. By that time, mission hospitals somewhat exceeded government hospitals in number: 118 mission hospitals, compared with 101 government hospitals.

Mission-based facilities were concentrated in certain areas, depending on the religious and other activities of the missions. Roman Catholic hospitals in particular were concentrated in the southeastern and midwestern areas. By 1954 almost all the hospitals in the midwestern part of the country were operated by Roman Catholic missions. The next largest sponsors of mission hospitals were, respectively, the Sudan United Mission, which concentrated on middle belt areas, and the Sudan Interior Mission, which worked in the Islamic north. Together they operated twenty-five hospitals or other facilities in the northern half of the country. Many of the mission hospitals remained important components of the health care network in the north in 1990.

The missions also played an important role in medical training and education, providing training for nurses and paramedical personnel and sponsoring basic education as well as advanced medical training, often in Europe, for many of the first generation of Western-educated Nigerian doctors. In addition, the general education provided by the missions for many Nigerians helped to lay the groundwork for a wider distribution and acceptance of modern medical care.

The British colonial government began providing formal medical services with the construction of several clinics and hospitals in Lagos, Calabar, and other coastal trading centers in the 1870s. Unlike the missionary facilities, these were, at least initially, solely for the use of Europeans. Services were later extended to African employees of European concerns. Government hospitals and clinics expanded to other areas of the country as European activity increased there. The hospital in Jos, for example, was founded in 1912 after the initiation there of tin mining.

World War I had a strong detrimental effect on medical services in Nigeria because of the large number of medical personnel, both European and African, who were pulled out to serve in Europe. After the war, medical facilities were expanded substantially, and a number of government-sponsored schools for the training of Nigerian medical assistants were established. Nigerian physicians, even if trained in Europe, were, however, generally prohibited from practicing in government hospitals unless they were serving African patients. This practice led to protests and to frequent involvement by doctors and other medical personnel in the nationalist movements of the period.

After World War II, partly in response to nationalist agitation, the colonial government tried to extend modern health and education facilities to much of the Nigerian population. A ten-year health development plan was announced in 1946. The University of Ibadan was founded in 1948; it included the country's first full faculty of medicine and university hospital, still known as University College Hospital. A number of nursing schools were established, as were two schools of pharmacy; by 1960 there were sixty-five government nursing or midwifery training schools. The 1946 health plan established the Ministry of Health to coordinate health services throughout the country, including those provided by the government, by private companies, and by the missions. The plan also budgeted funds for hospitals and clinics, most of which were concentrated in the main cities; little funding was allocated for rural health centers. There was also a strong imbalance between the appropriation of facilities to southern areas, compared with those in the north.

By 1979 there were 562 general hospitals, supplemented by 16 maternity and/or pediatric hospitals, 11 armed forces hospitals, 6 teaching hospitals, and 3 prison hospitals. Altogether they accounted for about 44,600 hospital beds. In addition, general health centers were estimated to total slightly less than 600; general clinics 2,740; maternity homes 930; and maternal health centers 1,240.

Ownership of health establishments was divided among federal, state, and local governments, and there were privately owned facilities. Whereas the great majority of health establishments were government owned, there was a growing number of private institutions through the 1980s. By 1985 there were 84 health establishments owned by the federal government (accounting for 13 percent of hospital beds); 3,023 owned by state governments (47 percent of hospital beds); 6,331 owned by local governments (11 percent of hospital beds); and 1,436 privately owned establishments (providing 14 percent of hospital beds).

The problems of geographic maldistribution of medical facilities among the regions and of the inadequacy of rural facilities persisted. By 1980 the ratios were an estimated 3,800 people per hospital bed in the north (Borno, Kaduna, Kano, Niger, and Sokoto states); 2,200 per bed in the middle belt (Bauchi, Benue, Gongola, Kwara, and Plateau states); 1,300 per bed in the southeast (Anambra, Cross River, Imo, and Rivers states); and 800 per bed in the southwest (Bendel, Lagos, Ogun, Ondo, and Oyo states). There were also significant disparities within each of the regions. For example, in 1980 there were an estimated 2,600 people per physician in Lagos State, compared with 38,000 per physician in the much more rural Ondo State.

In a comparison of the distribution of hospitals between urban and rural areas in 1980, Dennis Ityavyar found that whereas approximately 80 percent of the population of those states lived in rural regions, only 42 percent of hospitals were located in those areas. The maldistribution of physicians was even more marked because few trained doctors who had a choice wanted to live in rural areas. Many of the doctors who did work in rural areas were there as part of their required service in the National Youth Service Corps, established in 1973. Few, however, remained in remote areas beyond their required term.

Hospitals were divided into general wards, which provided both outpatient and inpatient care for a small fee, and amenity wards, which charged higher fees but provided better conditions. The general wards were usually very crowded, and there were long waits for registration as well as for treatment. Patients frequently did not see a doctor, but only a nurse or other practitioner. Many types of drugs were not available at the hospital pharmacy; those that were available were usually dispensed without containers, meaning the patients had to provide their own. The inpatient wards were extremely crowded; beds were in corridors and even consisted of mattresses on floors. Food was free for very poor patients who had no one to provide for them. Most, however, had relatives or friends present, who prepared or brought food and often stayed in the hospital with the patient. By contrast, in the amenity wards available to wealthier or elite patients, food and better care were provided, and drug availability was greater. The highest level of the Nigerian elite frequently traveled abroad for medical care, particularly when a serious medical problem existed.

In the early 1980s, because of shortages of fuel and spare parts, much expensive medical equipment could not be operated. Currency devaluation and structural adjustment beginning in 1986 exacerbated these conditions. Imported goods of all types doubled or tripled in price, and government and public health care facilities were severely affected by rising costs, government budget cuts, and materials shortages of the late 1980s. Partly as a result of these problems, privately owned health care facilities became increasingly important in the late 1980s. The demand for modern medical care far outstripped its availability. Medical personnel, drugs, and equipment were increasingly diverted to the private sector as government hospitals deteriorated.

Government health policies increasingly had become an issue of policy debate and public contention in the late 1980s. The issue emerged during the Constituent Assembly held in 1989 to draft a proposed constitution. The original draft reported by the assembly included a clause specifying that free and adequate health care was to be available as a matter of right to all Nigerians within certain categories. The categories included all children younger than eighteen; all people sixty-five and older; and all those physically disabled or handicapped. This provision was, however, deleted by the president and the governing council when they reviewed the draft constitution.

**2.) WAYS THE CORONA VIRUS PANDEMIC HAS IMPACTED THE GLOBAL HEALTH.**

What is Corona virus?

 The **2019–20 coronavirus pandemic** is an ongoing pandemic of the corona virus disease 2019 (COVID-19) caused by severe acute respiratory syndrome corona virus 2 (SARS-CoV-2). The outbreak was identified in Wuhan, China, in December 2019, declared to be a Public Health Emergeency of International Concern on 30 January 2020, and recognized as a pandemic by the World Health Organization on 11 March 2020. As of 17 April 2020, more than 2.16 million cases of COVID-19 have been reported in 210 countries and territories, resulting in more than a number of one hundred and forty-five thousand (145,000) deaths. More than five hundred and fifty thousand (550,000) people have recovered, although there may be a possibility of relapse or reinfection. The deaths per diagnosed cases varies significantly between countries.

The virus is primarily spread between people during close contact, often via small droplets produced by coughing, sneezing, oreven talking. While these droplets are produced when breathing out, they usually fall to the ground or onto surfaces rather than being infectious over long distances. People may also become infected by touching a contaminated surface and then touching their eyes, nose, or mouth. The virus can survive on surfaces up to 72 hours. It is most contagious during the first three days after the onset of symptoms, although spread may be possible before symptoms appear and in later stages of the disease. Common symptoms include fever, cough and shortness of one’s breath. Complications may include pneumonia and acute respiratory distress syndrome. The time from exposure to the virus to the onset of the symptoms is typically around five days, but may range from two to fourteen days. There is no known vaccine or specific antiviral treatment. Primary treatment is symptomatic and supportive therapy.

Recommended preventive measures include hand washing, covering one's mouth when coughing, maintaining distance from people (about 6 feet), and monitoring and self-isolation for people who suspect they are infected. Authorities worldwide have responded by implementing travel restrictions, quarantines, curfews and stay at home orders, workplace hazard controls, and facility closures.

The pandemic has led to severe global socio-economic disruption, the postponement or cancellation of sporting, religious, political and cultural events, and widespread shortages of supplies caused by panic buying. The pandemic has caused the largest global recession in history, with more than a third of the global population being inlockdown. Schools, Universities and Colleges have closed either on a nationwide or local basis in 197 countries, affecting approximately 99.9 per cent of the world's student population. Misinformation about the virus has spread online, and there have been incidents of xenophobia and discrimination against Chinese people and against those perceived as being Chinese or as being from areas with high infection rates. Due to reduced travel and closures of heavy industry, there has been a decrease in air pollution and carbon emissions.

 Global health is the understanding of health care in an international and interdisciplinary context. It includes the study, research, and practice of medicine with a focus on improving health and health care equity for populations worldwide. Global health initiatives take into account both medical and non-medical disciplines, such as epidemiology, sociology, economic disparities, public policy, environmental factors, cultural studies, etc.

 The global health issues to be aware of are environmental factors, pandemics, political factors, economic disparities and access to health care, non communicable diseases and animal health.

It is becoming clearer that the effect on COVID-19 upon health and care systems goes beyond the disease it produces as health systems have to somehow contemporaneously cope with the existing levels of non-communicable diseases. This is an enormous challenge since in all too many cases, the systems cannot cope with the volume of patients needing care as a result of COVID-19, even if there were no other calls associated with cardiovascular, pulmonary and metabolic diseases and cancer.

The effect of this has varied from country to country but some patterns are emerging. For example, primary care has long held the promise that problems like access and care could be delivered digitally, but to date the scale of actual digital adoption has been disappointing, and the aspirations we have all had around digital transformation have had to be tempered by the reality of slower speeds of adoption than anticipated. This well could be changing and the 2020s could be remembered not only as the age of COVID-19 but also as the age when digital transformation started to come of age and become the mainstream solution.

History also teaches us that it is difficult to put the “genie back in the bottle” once it is released and the challenges of a diminishing and ageing workforce and consumer pressure makes it very unlikely that the post COVID-19 era will be similar to the pre COVID-19 era.

The effect of COVID-19 upon digital solutions around delivery of healthcare has been and continues to be very significant and it is accelerating as fast as COVID-19 is moving across the globe. Thus, considering this new post COVID-19 world, they can be thought of as:

1. **DIRECTLY ASSOCIATED WITH THE EPIDEMIC**

There are many lessons to be learnt from the use of technology in public health surveillance, from the linking of data in sentinel labs to the development of technological solutions to immediately link testing in various geographical locations, thus enabling insights to be drawn around spread

When it comes to the use of technology around contact tracing, some countries like South Korea have developed the use of smartphone technology to assist in better managing contacts with quite exceptional results.

From the perspective of health provision, issues like central dashboards to better manage bed and care availability within hospital settings have been shown to significantly improve efficient bed utilisation, as demonstrated by some systems in Germany.

The use of telemedicine for direct patient care for public health emergencies has been well described. A central strategy for health care surge control for patients suspected with COVID-19 is forward triage for patients before they attend emergency departments. The utilisation of a digital first approach around access could deliver this with a personalisation and consistency we could not otherwise deliver.  There are plenty of examples in the US that use personalised online screening that are already delivering this.

 The potential for telemedicine that is also limited by our imagination. From delivering better solutions in terms of disaster planning, like a scenario where a whole health workforce is quarantined after infection or exposure and then able to be deployed digitally from home, to the better care of affected patients by dynamically being able to communicate with them remotely at scale and in real-time, irrespective of their geographic location.

1. **AS A RESULT OF THE EPIDEMIC**

The post-COVID world is likely to be remembered as the time when the care of other medical interactions like the provision of primary care or the management of non-communicable diseases shifted to digital modalities as the default rather than the exception. This new post COVID-19 age is also likely to then enable all the other technologies we have been celebrating, like insights associated with AI, and the potential that 5G gives us in terms of the Internet of things to all converge in a whole variety of ways. We are seeing this happen in real-time and at a pace we could never have imagined. In England, primary care at scale has now finally started to embrace telehealth and has deployed a new digital first pathway as a route to managing streaming of care to the appropriate place. This would have been beyond the limits of the possible only a few weeks ago.

There is much we need to do. We need to incorporate appropriate and robust governance in the deployment of these new modalities and also include robust clinical decision support within our deployments as a rule rather than as an exception.

Our scope and scale of our challenges is changing. We have been encouraging the adoption of digital transformation and this needs to continue. We also now need to assist our members in managing the complexities of governance and clinical decision support.

The other significant change we can already see accelerating is the adoption of precision health both in more personalised and predictive public health, but also in utilising digital technology in empowering people to better self-manage in non-communicable disease.

Furthermore, we need to understand that this new health and care world will look very different to the world we have been used to, but the likelihood is that by adoption of these new digital modalities in the care of people we can get closer to delivering what is our mission at HIMSS, the delivery of better care to everyone, everywhere.

 The responses to the corona virus pandemic are traveling restrictions, evacuation of foreign citizens and International Aid in the area of funding the treatment of countries being heavily consumed by the coronavirus.