What if

A Vision for the UK as a Life Sciences Superpower

Sanofi Asks **What if...?**

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Sanofi asks **What if?**

What if? brings to life the intrinsic curiosity that sits at the heart of our organisation, to encourage a culture of inquisitiveness and give us the courage to ask the big questions about how to improve human health.

The UK has vast potential in life sciences, through its health system infrastructure, world leading academic institutions, burgeoning bio-tech industry, and established reputation on the world stage for clinical innovation. These assets are the backbone of the Government's stated ambition for the UK to be a life sciences superpower and a global hub for inward investment into the life sciences sector.

Nonetheless, there are key challenges that threaten the UK's standing on the world stage and will, without action, engender a decline in investment that will see the UK forfeit any opportunity it has to claim superpower status. Global pressures, such as rising inflation and disruption to supply chains, sit alongside domestic policy challenges that require urgent resolution, including post-Brexit policy and NHS sustainability.

Right now, global executives are looking to the UK for reassurance that the life sciences industry remains a growth sector that will be supported by the Government. If the UK is to be a recognised life sciences superpower attracting global investment, the big questions surrounding how we value and support our life sciences industry must be answered.

As this vision will set out, by tackling these challenges and working together to provide solutions, there is great scope to deliver for patients and to drive the health and wealth of the UK forwards. For example, the UK economy could be enabled to achieve productivity gains amounting to approximately £17.9 billion through improved uptake of innovative medicines.[1]

What if? is a call-to-action – a platform from which we are inspired to be curious, to be inquisitive, and with our partners, take a step back and imagine the potential for innovation in the UK.

This vision is the start of our dialogue with Government, the healthcare system and others – our commitment to supporting solutions-focused thinking and applying the same curiosity to health policy that is applied in the world-leading science and research that drives medical innovation across the UK.

Moving forwards, we are committed to bringing these key players together through the **What if?** programme, facilitating open dialogue on how to improve outcomes for patients in the UK. So, whether you are a policymaker, healthcare professional, researcher or commissioner…

…What if you joined us in this mission, so that together, we could chase the miracles of science**?**

What if the UK was recognised globally as a life sciences superpower?

The publication of the UK Life Sciences Vision in 2021 set a strategic direction for the life sciences sector and a series of policy commitments that should support a world leading eco-system for innovation.

Our vision builds on these commitments, to imagine what could be achieved if the full potential of the life sciences sector were realised and to envision the UK as a globally recognised life sciences superpower.

Taking a step back from this ambition, we must first recognise why the mission to be a life sciences superpower is so important.

Our Vision Imperatives

Delivering for Patients

Above all, our vision for the UK as a life sciences superpower is an agenda for delivering improved outcomes for patients. We recognise that to be a life sciences superpower is not only vital to the economic health of the UK, it is also a crucial element of delivering world-leading patient care and health outcomes.

In asking **What if?** we are making clear our commitment to patients and challenging the status quo that sees UK patient outcomes lag behind those in other comparable nations – for example, the UK has the worst death rate for lung conditions such as asthma and chronic obstructive pulmonary disease (COPD) in western Europe,[2] ranks last out of 18 countries for outcomes related to colon cancer, and bottom of nine countries for ischaemic and haemorrhagic stroke and myocardial infarction, lagging behind Sweden and the Netherlands.[3] We want to help ensure that patients in the UK benefit from the true value and potential of medicines, with equitable access to new therapies.

The entire life sciences ecosystem impacts on the outcomes that we can achieve for patients – starting with opportunities to participate in clinical trials, to the time taken for medicines to be made available following license, and on to embedding best practice in frontline care. Our commitment to patients drives our desire to solve the major challenges facing life sciences and spurs our curiosity to ask the big questions about how to improve human health.

Driving Health and Wealth

Our vision recognises that a healthier nation is a wealthier nation, one that not only supports its people to live life to the fullest, but also unlocks capacity for economic productivity and growth.

It is estimated that the cost of lost productivity in the UK due to ill health sits at £150 billion per year – a sum that roughly equals the NHS budget.[4,5] This not only underlines the significant individual burden that will be felt by those experiencing poor health, but also the extensive economic burden that is felt by every UK citizen.

Medical innovation is crucial to addressing this challenge, with new therapies supporting people to live better for longer. By leveraging the full potential of these innovations – including earlier and easier access – we can advance both the health and the wealth of the nation.

Furthermore, at a time when the sustainability of the NHS is under intense scrutiny, it has perhaps never been more important to think creatively and ambitiously about the role of life sciences in sustaining a healthier and more productive society.

Our Measures Of Success

In recognition of these imperatives, we have four measures of success – tests by which we should assess whether the UK is a life sciences superpower, delivering for patients and strengthening the health and wealth of the UK.

In determining these measures, we have looked to other comparable nations, to set an ambitious benchmark against which the UK can assess itself as a global leader in life sciences.

Our vision sets out where the government must focus, to build on the UK's strengths, and progress against these measures, whilst imagining the benefits that could be achieved if we optimised the UK life sciences eco-system.

1. **Enhanced share of research and development**

2. **Increased number of innovative medicines available to patients on the NHS**

3. **Improved uptake of innovative medicines across the UK**

Improved patient outcomes


OLYMPUS
DP50

What if ?

Recognising the Value of the UK Life Sciences Sector

Jessamy Baird, Managing Director, Sanofi UK and Ireland

Our vision imperatives are the driving force behind our commitment to asking the big questions about life sciences. Delivering for patients, first and foremost and, in doing so, supporting the health and wealth of the UK.

Beyond these we recognise that there is a wider cost in failing to support the UK life sciences sector, potentially squandering the significant economic value and potential for growth that life sciences holds in the UK.

That is why Sanofi has supported efforts to work with the Government to find new solutions to key challenges in the life sciences space and develop a dynamic policy framework that prioritises growth and supports innovation to flourish.

The UK life sciences sector is already significant in its scale and impact within the UK, supporting the employment of over half a million workers, driving investment into local economies up and down the country, and connecting the UK into a global commercial network of pharmaceutical innovation.

We also know there is more potential to unlock and that when government, industry, and healthcare systems work together, we can maximise opportunities in life sciences. The experience of the pandemic is a blueprint for this. At a moment of unprecedented challenge, the UK life sciences sector worked with the Government, NHS and others to deliver critical innovations, with a singular purpose.

The model for vaccine development and delivery during the pandemic – including the regulatory flexibilities, collaborative approach, innovative clinical trials methods, and efficient distribution models – can be held up as a shining example of how the UK can fulfil the vision of being recognised as a global life science superpower.

We must learn from this collaborative approach to address other health challenges, from health inequalities to uptake of medicines for rare diseases. Indeed, looking at the ambitious missions in the Life Sciences Vision, such as those around tackling the major challenge of Chronic Obstructive Pulmonary Disease (COPD)6, the approach taken to addressing COVID-19 must be replicated and effectively embedded, becoming the status quo for how Government, industry and health systems work together to deliver improved health outcomes.

Key to the success of the pandemic response was:

1. **Leveraging the scale and reach of the NHS**
   100% of hospital trusts and 50% of general practice surgeries were involved in recruitment of patients.[7]

2. **Collaboration with system partners**
   Initiatives such as the Vaccine Taskforce and the RECOVERY trial established effective partnerships between the NHS, industry and Government.

3. **Building data infrastructure**
   A fit for purpose data infrastructure across health and social care was created to support assessment of outcomes and drive efficiency.

These measures and the resulting success in vaccine launches provide a glimpse of what the future could look like and a blueprint for Government, system partners and industry to follow in order to drive comparable agility and innovation into other disease areas.

Through **What if?** we are seeking to facilitate similar moments of true collaboration, creating opportunities to bring key stakeholders together to tackle the challenges we face.

We believe that in doing so – working together, breaking down barriers and developing cross-cutting solutions – we can find the answers to some of the most challenging questions surrounding human health today.

Measure One: Enhanced share of research and development

What if the UK was the destination of choice for life sciences investment?

Currently, the UK lags behind other comparable OECD nations, with its global share of R&D falling behind that of countries such as Germany, Switzerland, and Sweden.[8] The European market accounts for 29% of overall investment and, with the UK's departure from the European Union, there is an imperative to restore the international competitiveness of our life sciences ecosystem and stimulate inward R&D investment.

The current picture of R&D investment in the UK is sobering. The number of clinical trials initiated per year in the UK fell by 41% between 2017 and 2021.[9]

When compared to other nations, the UK is lagging behind on initiation of clinical trials. For example, in 2021 the UK ranked last out of ten comparable countries, including France, Poland and Italy, for Phase III trial initiation.10 Urgent action is required to reverse this decline.

Increasing the UK's share of R&D is a key element of delivering for patients and driving the health and wealth of the nation. Research into new therapies and investment in clinical trials provide patients with earlier access to lifesaving and life-changing medicines.

At Sanofi, we are driven by the needs of our patients and passionate about playing our part in innovation to improve patient outcomes and drive the health and wealth of the UK. Sanofi invested £48 million in R&D in the UK in 2021 to support clinical innovation that has a direct impact on UK patients.[11] However, with a 22% decline in Sanofi-led clinical trials between 2020-22,[12] further investment rests on finding solutions to the challenges facing the UK's life sciences environment.

UK-based R&D also drives economic growth, employing UK workers and injecting funding into local economies. It is estimated that in 2019 the UK life sciences sector supported 584,000 jobs, 79,000 of which are those directly working in pharmaceutical manufacturing.[13] This contribution supports the wealth of the UK and, ultimately, sustains capacity in public finances that can be invested into our public services, including the NHS.

Attracting investment in UK-based R&D will serve to not only deliver on the Life Sciences Vision, but also on the achievement of the Government's stated ambition for R&D investment to reach 2.4% of GDP by 2027.[14] These missions require a strategic approach that cuts across different Government departments, as well associated organisations such as the MHRA and NICE.

What if

Commercial agreements designed for growth

Since its introduction, the Voluntary Scheme for Branded Medicines Pricing and Access (VPAS) has been a critical determinant of how competitive the UK market can be when it comes to life sciences investment.

The current approach to medicines procurement has seen price controls that are high both by international comparison and in the context of how medicines have historically been reimbursed in the UK.[15] There has been a steep rise in the rebate payment expected from industry in 2023, increasing to 26.5% from 15% in 2022.[16]

Recent modelling has underlined that this approach, if continued, poses a threat to the competitiveness and sustainability of the UK life sciences environment and to overall R&D investment. For example, it is expected that a 20-30% payment rate could lead to a 20% decline in R&D investment by 2028, as compared to current rates.[15]

This has further consequences for the UK economy overall, with forecasts that the current approach could ultimately lead to a loss of economic output over 30 years' worth over £50 billion.[15]

The current approach to medicines pricing presents a 'false economy' that overlooks the opportunities to design a scheme that is orientated around economic growth and that supports reinvestment into life sciences to build capacity and unlock access to cutting edge infrastructure through a pioneering Voluntary Access Scheme for Pricing, Access and Growth (VPAG), which has been outlined and called for by leading industry bodies.[17]

Increased placement of and participation in clinical trials

is disincentivised from considering a market for clinical trial placement if there is not a realistic prospect of uptake of that therapy at the end of the process. This is, in part, on account of companies needing to secure a return on their investment into developing new therapies.

But beyond this commercial consideration, there are also ethical challenges that would arise from recruiting patients for clinical trials without a prospect of patients having continued access to the therapy at the conclusion of a successful trial.

This means that all elements of the therapy's 'pathway' to patients being able to receive the treatment can impact on whether clinical trial placement is a viable option in the UK, from the way the therapy is likely to be reimbursed, through to the prospect of effective uptake across health services.

Creating a life sciences environment that values and incentivises innovation across the entire pathway from laboratory to patient is vital for the UK to be the destination of choice for R&D investment and clinical trial placement.

Spotlight On: The future of clinical trials regulation

The UK's departure from the European Union provides an opportunity for regulatory divergence that could develop into a competitive edge in R&D for the UK. The significant potential for leveraging the NHS infrastructure as part of clinical research has been a focus of recent policy development in this area.

In order to realise this potential, the Government must ensure that the regulatory environment supports easier and faster trial set-up, reducing the burden on those involved whilst ensuring that participant safety is of paramount importance.

Recent consultation has underlined the need to develop a more flexible approach that moves away from a 'one size fits all' system and in which proportionate measures can be taken in relation to the risk associated with clinical trials.[18]

The forthcoming legislative reforms for clinical trials must be balanced to deliver effective divergence from the European Union, whilst also maintaining the much needed interoperability with other regulatory systems that is valued by global companies.[18]

Recent announcements on measures to rationalise the approval process for clinical trials by the MHRA, such as integrating the regulatory and ethics review, and to facilitate the UK as a contender location for global multisite trials, are welcome.[19] Such measures underline the need for the UK to keep pace in a globally competitive environment and emphasise the need for engagement with industry and other system partners to secure a proportionate and agile approach that fosters innovation.

What if the UK was the destination of choice for life sciences investment?

Delivering for Patients

- Patient recruitment into UK clinical trials could exceed the levels achieved in 2017, with streamlined opportunities for patients to engage in trials for innovative therapies. Clinical trials have the potential to improve patient outcomes, 80% of clinicians stating that they participate in research to improve patient care.[19]

Driving Health and Wealth

- Reformed incentives for R&D capital investment could lead to increased R&D investment of £1.2 billion each year.[20]
- £32 million cost savings annually to the NHS could be achieved from greater UK share of global commercial clinical trial enrolment.[13]

Our roadmap to make the UK a destination of choice for life sciences investment

Urgent action is needed to re-establish the attractiveness of the UK as a life sciences destination for investment. Our vision for the UK rests on the Government making progress with the following actions:

Negotiate a new voluntary scheme that takes a sustainable approach to medicines provision, bringing industry payments in line with comparator countries to ensure the latest medicines are available for NHS patients, unlock investment and deliver economic growth in the UK.

Respond to the declining position of the UK identified by the Life Sciences competitiveness indicators and set out a strategy to increase the UK share of global R&D investment and improve patient access to medicines in relation to comparator countries.

Develop a strategy to ensure the UK maximises the full potential of clinical trials from bench to bedside. This should include opportunities for industry to support the NHS workforce with awareness of the latest clinical trial developments, alongside rewarding successful UK clinical trials with a simpler route to patient access and reimbursement. These incentives would provide a globally competitive offer to industry.

Capitalise on the opportunity to utilise the exceptionally detailed health data set of the NHS, to improve the speed, diversity and efficiency of recruitment into clinical trials.

Measure Two: Increased number of innovative medicines available to patients

What if the UK realised the true value of medicines?

Innovative medicines have the potential to transform patient outcomes and the sustainability of the UK health system. Globally, a wide range of new technologies offer significant promise in improving our health and reducing the burden of disease across our society. As well as improving the lives of patients, medicines have a wider positive value. Innovative medicines support people to play a more active role in the economy through better management of conditions. Studies have also shown that improving patient functioning, for example around self-care, increases carer time – could have implications on informal carers' ability to undertake day-to-day activities and impact their quality of life.[22]

However, the wider value of medicines is often not fully captured in health technology appraisals.[21] In addition, the longer-term benefits of medicines are discounted and undervalued in NICE's current valuation methods. This limits the extent to which the true value of medicines to society over their entire life-cycle can be realised.

Moving forward, the UK has an opportunity to seize this moment and become the natural home of medical innovation, but currently lags behind many comparator countries in relation to metrics on access to innovation.

For example, for every 100 patients that get a new medicine in its first year of launch in EU countries, just 21 patients in the UK will.[23]

Decisions by global pharmaceutical companies on where to launch a medicine are based on several factors. Typically, a company will undertake an assessment of the number of patients that will likely benefit from the new medicine in that market and the anticipated value that can be achieved to reinvest in future medicines development following the launch.

The UK is one of many countries vying to be a first launch market for new medicines in an international marketplace. Restoring the UK's competitiveness is critical to bringing approved medicines to patients as quickly as possible.

Recent initiatives such as the Innovative Medicines Fund (IMF) show a clear drive by the UK to boost innovation and access, yet a failure in practice to achieve this objective. So far, the IMF is not used optimally, and creates significant disincentives to launching new medicines.

As science unlocks new approaches to treating disease, many new medicines offer the potential to treat multiple conditions. Unfortunately, our system of valuing and introducing new medicines is struggling to keep up, leaving the true value of medical innovation unrealised and significant barriers to patient access unaddressed.

What if

Realising the true value of medicines

Increasingly, new medicines have the potential to be effective in more than one disease or condition and can be used in combination to deliver improved outcomes. As of March 2023, 54.3% NICE appraisals "in development" were medicines with multiple potential indications, 46% of which have already been recommended for one indication.[24]

Currently, the NHS adopts uniform pricing arrangements that prevent companies from varying prices to match the value offered by each indication.[25]

These rigid pricing arrangements create disincentives for launching indications where the patient populations are smaller or where the medicine has lower (but still significant) patient benefit. This prevents the UK from realising the full value of innovations and means patients lose out on promising new treatments.

Providing greater flexibility in pricing will enable the NHS to recognise the value of a medicine in each indication. This will allow the true potential of innovative new technologies to be realised and will restore UK competitiveness as a destination for first wave launches of medicines with multiple indications.

World leading regulation

With the UK's departure from the European Union, and the freedom this permits to diverge from the European Medicines Agency (EMA), there is an opportunity for the MHRA to establish itself as a world-leading regulatory body and a distinguishing feature of the UK's superpower life sciences environment.

This potential was clearly evidenced during the pandemic, which saw the MHRA act with agility and expertise to facilitate access to vaccinations.

However, there is an overarching challenge in how effectively the MHRA can leverage this opportunity, as sufficient resource will be required to support the agility shown during COVID-19 across the wide range of medicines and technologies that the MHRA considers. The recent funding commitments to support the regulator are welcome,[26] but there remains a need for Government to outline how the lessons learned from the pandemic will be embedded to leverage the value of world-leading regulation and make the UK a destination of choice for new medicine launches.

Rapid access to new medicines after approval

The Innovative Medicines Fund (IMF), which should support earlier access to new medicines, is currently under-used due to structural barriers, namely the expenditure control mechanism.

This mechanism seeks to cap costs for innovative medicines, duplicating the affordability control measure that is already applied to all medicines spend through the VPAS scheme. It further disincentivises industry participation by requiring that companies supply free of charge treatment to patients if NICE does not recommend uptake.

Other initiatives, like the Cancer Drugs Fund (CDF), have sought to provide early access to patients. This fund makes medicines available to patients whilst further evidence is gathered and allows for a later reconsideration of cost-effectiveness by NICE. Despite providing access, uncertainty often remains over whether the NHS will go on to routinely commission a therapy once it is no longer eligible for the CDF, which is a disincentive to bringing these therapies to the UK.

Corresponding initiatives, such as the Innovative Licensing and Access Pathway (ILAP) could adopt more integrated ways of working across the system partners involved, including NICE and the MHRA, to embed better ways of working with the NHS and create a more seamless pathway for patients to access innovative medicines that have not yet been recommended by NICE.


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Spotlight On: Securing access for combination therapies

Combination therapies are important in a number of disease areas, with around 300 active UK clinical trials being for medicines used in combination.[27] They are a rapidly advancing area of oncology therapies – combination therapies are a critical element of innovation to improve the effectiveness of treatment and drive better outcomes, yet multiple problems place barriers in the way of access.

Under current NICE methods, combination therapies are often found not to be cost-effective, even when the 'add-on' therapy that is used in combination with another medicine is priced at zero.[28] This means that many innovative therapies are not viable in the UK market.

These issues are difficult to resolve.

Firstly, the NHS England policy of uniform pricing prevents a combination-specific price being agreed. This inflexibility in approach means the therapy is very rarely found to be cost-effective for the specific indication it has been combined with another therapy to treat.

Secondly, the lack of clear guidance around competition laws discourages developers from working together to reach an agreed price for the therapies that are to be used in combination. This leaves the burden of price reduction on the manufacturer, that has invested in development of the add-on, creating a disincentive to bring new combinations to market.

The NHS reimbursement policy and concerns surrounding competition law combine to mean that therapies are often not viable in the UK market once they are assessed under current NICE methods. In recent years, welcome efforts have been made to evolve the UK's pricing and reimbursement framework to support more timely access to innovative medicines on the NHS. The Cancer Drugs Fund is one example of this. However, the evolution of the UK's pricing and reimbursement framework has not always kept pace with advances in medical innovation such as the development of novel combinations.

The net impact of this is multifaceted, but one consequence is that clinical trials for combination therapies are less likely to be placed in the UK, as the prospect of them being viable in the UK market following completion is limited.

It is therefore notable that there has been a fall in oncology trials between 2017-2021[30] when we consider the fact that the UK is one of the worst performing nations for major cancers.[3] There is an evident need to address how innovation can be facilitated and made more accessible in the UK, including clinical trials for combination therapies in oncology.

What if the UK realised the true value of medicines?

Delivering for Patients

- Bringing time to access new medicines into line with Germany could cut each UK patient's waiting times for new medicines by 244 days.[30]
- Studies show that patients benefit from faster access to innovative medicines in comparable countries using multi-year multi-indication (MYMI) agreements. For example, the use of MYMI agreements in Belgium reduced the average time to access for oncology medicines from 395 to 30 days.[31]

Driving Health and Wealth

- Recent analysis underlines that delivery of the health missions in the Life Sciences Vision could reduce the burden of disease in the UK by 40%.[13]
- Securing fast access to new medicines for COPD offers potential to reduce the burden of this disease, which is the second largest cause of emergency hospital admission in the UK[32] and costs £1.9 billion per year.[33]
- Improving the health of the nation could reduce the overall cost of lost productivity due to ill health, currently estimate at £150 billion per year – a sum that roughly equals the NHS budget.[4,5]

What if

Our roadmap to increasing the number of innovative medicines available to patients

To place the UK at the cutting edge of medical innovation, ambitious changes are required in how we value medicines and enable priority access to innovative medicines. We believe the following changes are required to deliver better patient outcomes through innovation:

The UK Government should develop a specific mechanism for emerging technologies with a wide range of potential applications, both as single treatments or in combination with other therapies. This mechanism must ensure medicines reimbursement is flexible enough to recognise the true value of a treatment in each indication.

NICE should set out a clear schedule for iterative review of the NICE methods and process review. This should include evidence-based refinement of HTA methods, including the appropriate discount rate for medicines, and the impact of recent changes on rare disease medicines.

The UK Government must respond to the declining position of the UK identified by the Life Sciences competitiveness indicators and set out its strategy to increase the UK share of global R&D investment and improve patient access to medicines in relation to comparator countries.

The UK Government should continue to develop opportunities to streamline access to innovative medicines, with reform to the Innovative Licensing and Access Pathway and the Innovative Medicines Fund, to ensure they incentivise and enable rapid access to new medicines while balancing risks.

Measure Three: Increased uptake of innovation

What if everyone had access to the right treatment at the right time?

There are significant benefits to be gained through rapid adoption of innovation, for individual patients and for the health system more broadly.

Yet, uptake in the UK is lower and slower than in comparable European nations, with significant regional variation.

For new medicines licenced and launched here between 2016-2020, UK uptake was around half (58%) of the average of 15 comparator countries, rising to 81% after 5 years.[34]

Not only does this present a disincentive to industry, by reducing the value that can be realised from medicines that are launched in the UK, more importantly, it limits the extent to which patients can benefit from innovative medicines, with consequences for the health of individual citizens and for the overall disease burden in the UK.

NHS Sustainability

NHS sustainability is a central consideration in the context of UK uptake of innovation, as rising demand on health services and increasing disease burden exacerbate the difficulties experienced by the NHS, including economic pressures and workforce capacity challenges.

Through improving uptake of innovation and, as a consequence, patient outcomes, the overall demand on the NHS could be reduced.

This principle applies both to primary prevention, as well as secondary prevention, supporting patients with long term health condition to enjoy life to the fullest through effective disease management.

What if

Earlier detection and diagnosis

Government must enable investment in early detection so that patients can benefit from clinical intervention at an earlier stage.

This is needed across many disease areas, including major health challenges such as diabetes, cancer and cardiovascular disease, but also in rare disease where the 'diagnostic odyssey' can leave patients waiting years for a diagnosis and effective clinical management.[35] For example, the Rare Disease UK survey showed that, on average, patients had three misdiagnoses during the time from first symptom presentation to formal diagnosis.[36]

These delays and misdiagnoses prevent patients from being offered effective care, potentially causing psychological impacts, risking a deterioration in their condition and putting a strain on NHS resources.[36]

If we improve health system capability to identify, treat and support patients as early as possible, we can reduce the overall burden of disease on individual patients and the wider societal and economic burdens that are associated with health.

Secondary prevention

Secondary prevention, supporting patients to manage their condition and live as healthily as they can following diagnosis, is a crucial aspect of reducing the overall burden of disease on patients and also on the health system as a whole.

To enable effective management of health conditions, health systems should be supported to adopt new therapies rapidly after they are approved.

Many innovative medicines offer significant potential to reduce the exacerbation of long-term conditions such as asthma, diabetes and cardiovascular disease, supporting to reduce the overall burden of disease on the NHS. It is estimated that improved uptake of medicines would make significant productivity gains for the UK economy.[1]

Vaccine strategy

The UK needs a vaccines strategy that provides leadership, responsibility and accountability, that builds on best practice from the pandemic and prioritises consistent and routine immunisation programmes.

The UK has historically been a leader in vaccination coverage, but recently uptake of vaccines has dropped – often below the levels recommended by the World Health Organisation. For example, the UK has recently lost its measles elimination status, after briefly obtaining it in 2016.[37]

The Government should look to ensure that there is strategic leadership for vaccines, instilling necessary accountability within the Department of Health and Social Care for the overall strategic direction of vaccination policy and enhancing transparency on how and why decisions on immunisation programmes are made.

A key aspect of supporting better adoption of innovation is the capacity of health systems to support uptake and adhere to best practice. Somewhat paradoxically, pressures on health services can often impede the ability of the system to adopt innovation, even when innovation can play a significant role in reducing the burden of disease and increasing system capacity.

Moving forward, it is important that health systems are empowered and resourced to follow best practice, including the implementation of effective pathways that identify patients earlier and support effective long-term management of conditions. This brings into scope the full range of community, primary, secondary and tertiary care services that may have a role in disease management for an individual patient and demands that each part of the system is equipped to meet patient need.

The current context of pressure on services, including backlogs in care and capacity issues within services,[1] is significant and underlines the numerous barriers that must be addressed to support healthcare professionals in delivering best practice.

Moving forward, reforms to the NHS through the operationalisation of Integrated Care Systems, should include the aim of driving better uptake of innovation and reducing the variation that can be seen across the country. Current health missions, such as the NHS Core20PLUS5 agenda to tackle health inequalities[38] and the Our Future Health initiative[39], are also important, providing a framework for health improvement at a national level that can be applied to local populations across the country.

Spotlight On: Supporting uptake through world leading institutions

NICE is a globally recognised organisation that is looked to by the world as a benchmark for the appraisal of new medicines. It is bodies such as NICE that enable the UK to compete with larger markets, by delivering unique value to companies who launch their medicines in the UK.

Truly recognising the value of NICE as an institution includes better adherence to the decisions made by NICE, as well as ongoing collaboration around the institute's methods.

Ongoing challenges with NICE methods include delivery of timely approval, current cost-effectiveness thresholds and uncertainty around resolving pricing arrangements. These have an impact on medicine launches in the UK. It is significant that 48 NICE appraisals were terminated by the manufacturer between 2018 and Q2 2022, and nearly 40% of these were terminated in 2021/22.[40] A significant proportion of terminated appraisals were in oncology, which is a notable trend when considered in the context of the UK's poor cancer outcomes.[3]

A lack of flexibility around pricing schemes (34% of terminated appraisals) and cost-effectiveness issues for combination therapies (24% of terminated appraisals) are leading reason for companies terminating appraisals.[41]

The impacts of the NICE methods review must now be closely monitored, with ongoing dialogue between NICE and industry, as well as opportunities to refine and adapt the ways in which NICE appraises new medicines so that systems in the UK keep pace with clinical innovation.

In future, it is also important that the priorities outlined in NICE's strategic ambitions are effectively applied, to support better understanding of and adherence to NICE's guidelines.[42] Where innovation is recommended, it is crucial that faster uptake follows, so that patients can benefit as early as possible from the recommended therapies and follow a pathway that supports earlier detection and intervention.

What if

A measure of the UK as a life sciences superpower is the extent to which patients can in fact receive innovative treatments through their health services.

Truly unlocking the potential of the UK and leveraging the miracles of science demands that barriers to healthcare are reduced – be that the time it takes to travel to a specialist treatment centre, implementation of NICE standards by your local clinician, or removing the barriers that some patients face in engaging with health services, particularly patients from marginalised communities.

Tackling these challenges will in turn support a more sustainable approach to healthcare investment, creating more system capacity and allowing more resource for research, development and future innovation.

What if everyone had access to the right treatment at the right time?

Delivering for Patients

- If the UK were to increase uptake across just four types of innovative medicines to cover the full NICE-recommended eligible patient populations, it would afford them a total of 429,000 additional years living in perfect health.[21]

Driving Health and Wealth

- The UK economy could be enabled to achieve productivity gains amounting to approximately £17.9 billion through improved uptake of innovative medicines.[1]

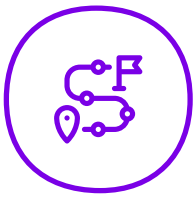
Our roadmap to increasing the uptake of innovation

Realising the full value of innovation in our health system requires significant change in how we view new technologies and treatments. Greater adoption of innovation could have a transformative impact on our health landscape, improving efficiency and patient outcomes relative to comparator countries. The UK should:

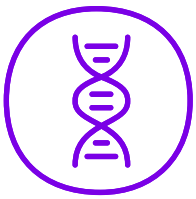
Empower and facilitate the NHS to lead a partnership effort with patients and industry to tackle the big health challenges of embedding innovation, reducing inequality, and accelerating care pathways.

Implement a prevention strategy to ease the burden on the NHS, that includes self-care, vaccines, and a strategy to better manage long-term conditions.

Identify short-term priority targets for boosting uptake of innovation, where they offer significant potential for reducing pressure on the NHS compared with existing treatment pathways.



Set out a longer-term strategy to initiate priority rollout of new medicines immediately following an NHS reimbursement decision.



Improve the diagnosis pathway for a host of diseases, expanding existing tools such as newborn screening as well as innovative approaches such as genomic profiling, to reduce the additional burden of disease caused by late diagnosis.

What if

Next Steps for What If?

What if? is a call-to-action and a platform to bring people together to consider the major challenges and opportunities we face in life sciences.

This vision is the start of a dialogue that we want to have with policymakers, commissioners, health system leaders, healthcare professionals, patients and others.

As we move forward, we will facilitate moments of open dialogue and partnership – with the aim of embedding the collaboration that took place in response to the pandemic and sustaining the 'mission' based approach to tackling major health challenges.

Through events, workshops and other What if? platforms we will work with others to continue our culture of curiosity and look more deeply into the themes set out in our vision for the UK as a life sciences superpower.

At this pivotal moment for the UK, we need a partnership approach between government, the healthcare system and the pharmaceutical industry if we are to tackle the significant challenges we all face. We have an opportunity to transform the way we work together as system partners, to deliver tangible health and economic benefits to everyone living in the UK. At Sanofi, we are ready to play our part.

Rippon Ubhi

General Manager UK & Ireland, Sanofi

The UK has incredible foundations for a successful life sciences industry – demonstrating its ability to adapt and innovate during the pandemic to efficiently deliver the COVID-19 vaccine. The collaborative approach of the Vaccines Taskforce can be used as a shining example of best practice and UK's leadership in the vaccines space. We can now learn from these approaches and work jointly to tackle important health challenges to deliver for the patients, the economy, and the NHS.

Rebecca Catterick

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