

## Written evidence submitted by The Association of the British Pharmaceutical Industry (ABPI), relating to the Investment in Northern Ireland inquiry (INI0026)

### About the ABPI

The Association of the British Pharmaceutical Industry (ABPI) exists to make the UK the best place in the world to research, develop and use new medicines and vaccines. ABPI Northern Ireland represents our members of all sizes in Northern Ireland who invest in discovering the medicines of the future. The ABPI is part of the wider life sciences sector, one of five sectors identified by the Department of the Economy as having the highest growth potential.

### Executive Summary

The Pharmaceutical sector is a vital component of Northern Ireland's economy, and with a supportive policy environment is in a strong position to leverage and attract additional investment. [Analysis](#) on the sector's economic contribution shows:

- The direct impacts of the wider pharmaceutical industry, supporting 2,800 FTE jobs, generating £310 million in GVA.
- Due to spill-over effects, the activities of suppliers and those employed throughout the supply chain, i.e. the indirect and induced effects, supports further jobs and economic growth across Northern Ireland, equating to 13,900 FTE jobs and £910 million in GVA.
- The Northern Ireland life sciences sector directly supports 5,000 FTE jobs and generates £430 million in GVA.
- Activities across the whole life sciences supply chain contribute to a total economic impact in Northern Ireland of 18,000 FTE jobs and £1.1 billion in GVA.
- Between 2015 and 2017, Northern Ireland saw increases in employment of 6% in pharmaceutical manufacturing and wider pharmaceuticals and 14% in life sciences

Northern Ireland has demonstrated success across the Life Sciences Sector and attracts global attention through centres of excellence such as the [Precision Medicine Centre](#) and the [Clinical Translational Research & Innovation Centre](#). The ABPI works towards creating an environment in Northern Ireland where patients are able to quickly access the latest medicines and vaccines, and where Industry continues to positively contribute to economic growth and employment.

## Introduction:

The ABPI is pleased to be able to submit evidence to this inquiry and would welcome the opportunity to give oral evidence to the Committee should further information be of value.

Our submission seeks to provide evidence in the following areas:

1. Findings and action points from the 2020 Economic Impact Report on the contribution of the Pharmaceutical Sector to the Northern Ireland economy
2. Education and Skills development
3. City Deal opportunity – access to innovation for patients
4. Sustainability and working towards a greener life sciences sector
5. Re-evaluation of the 2015 Northern Ireland Life & Health Science Strategic Action Plan 2016-2020
6. Accessing health data

### 1. Findings and action points from the 2020 Economic Impact Report on the contribution of the Pharmaceutical Sector to the Northern Ireland economy

1.1. In 2020 the ABPI released an [Economic Impact Report on the contribution of the Pharmaceutical Sector to the Northern Ireland economy](#),<sup>1</sup> Conducted by the Fraser of Allander Institute at the University of Strathclyde the report highlighted the importance of the pharmaceutical industry to Northern Ireland's economy, and areas where greater support is needed to encourage investment.

1.2. Three key drivers which will impact Northern Ireland's ability to attract and expand inward and indigenous life sciences investment were identified:

- Access to talent, with strategies to attract and retain senior talent
- Ease of doing business, including commitments from stakeholders and a joined-up system with collaboration built on commitment, partnership, and expertise
- Value of the market and the ability to scale up successful pilot projects

1.3. A panel of leading Industry representatives developed six recommendations towards building growth in the life sciences sector:

- Leveraging the ongoing City Deals as a means of galvanising relationships especially in the areas of health analytics, clinical research, precision medicine and connected health.
- Continuing demonstration of collaborative and swift responses to national and global needs, building on existing strengths.

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<sup>1</sup> Contribution of the pharmaceutical sector to Northern Ireland's economy <https://www.abpi.org.uk/publications/contribution-of-the-pharmaceutical-sector-to-northern-ireland-s-economy/#cb51aa7b>

- Identifying opportunities arising from EU exit, recognising the potential uniqueness of Northern Ireland to drive supply chain innovation, access to global markets and access to talent.
- Alignment on where Northern Ireland can lead, recognising and endorsing scientific and clinical excellence and leadership and having ambition to accelerate health system transformation.
- A comprehensive, global promotion strategy for existing successful areas of Northern Ireland's research and life sciences assets to generate future growth and investment.
- Recognition of the potential positive impact on patient outcomes created by a dynamic, pro-innovation health and life science ecosystem that facilitates participation in clinical research and more consistent access to innovation.

1.4. The ABPI has commissioned an update to the 2020 Report, which will be available in early 2022. The ABPI would be pleased to share this with the Northern Ireland Affairs Committee as supplementary evidence when published.

## 2. Education and Skills development

2.1. The [2021 UK Life Sciences Vision](#) includes the ambition to “*develop a strong talent pool across industry, academia, and the NHS*”. In the [2021 Northern Ireland Skills Strategy](#), Life and Health Sciences was identified as a priority cluster with the potential for Northern Ireland to be a global hub of innovation and knowledge. Addressing this, the major policy objectives that were part of the [Northern Ireland Economic Recovery Action Plan](#) launched in February 2021 are welcome recommendations namely, **addressing skills imbalances**; **creating a culture of lifelong learning**; and **enhancing digital education and inclusion**.

2.2. The ABPI will shortly publish an update to our regular analysis of skills gaps for the sector in a report: ‘*Bridging the skills gap in the biopharmaceutical industry: Maintaining the UK's leading position in life sciences*’. The report will conclude that there are areas where skills gaps have started to narrow and, in some areas, such as biological and chemical science, we are seeing rapid improvements. Core skills – such as scientific knowledge, communication and problem solving – have also improved. However, some areas of concern remain, with major skills shortages reported in areas such as computational and digital skills. In particular, it is the combination of these skills with scientific knowledge which is particularly in demand. The ABPI will share the report with the Committee on publication.

2.3. The ABPI has a leading role to play in ensuring the life and health sector rises to meet the challenges across the UK. The ABPI is committed to skills attainment and development, as a partner in the [Medicines Manufacturing Industry Partnership \(MMIP\)](#) we seek to ensure that the UK has an adaptive workforce with relevant skills to sustain the future requirements of the UK medicines manufacturing industry.

- 2.4. In Northern Ireland the ABPI support a large number of STEM Ambassadors from our member companies who develop a range of STEM initiatives in schools. We partner with Armagh, Banbridge and Craigavon Area Council and brought the first ever [Enthuse Partnership](#) to Northern Ireland. The ABPI is a long-standing supporter of the Northern Ireland Healthcare Leadership Forum (NIHLF) which brings emerging healthcare leaders currently studying at both Northern Ireland universities together to develop skills and share learning.
- 2.5. The ABPI developed and shares a dedicated platform of free, high quality, up-to-date STEM resources supporting all key stages for UK curricula, [ABPI Interactive Resources for schools](#) is fully accessible to families, teachers and students. The ABPI recently provided a pharmaceutical awareness session to the Northern Ireland STEM All Party Group where the platform and information on initiatives were shared.
- 2.6. The ABPI welcomes the creation of the Skills Board as part of the Northern Ireland Skills Strategy and recommend that the **Life Sciences Sector is represented on the Skills Board** to ensure skill shortages can be addressed and future-proofing action plans are in place.

### 3. [City Deals opportunity- access to innovation for patients](#)

- 3.1. Research has underpinned our response to COVID-19, supporting the rapid and effective development and rollout of diagnostic testing, treatments and vaccines for COVID-19. Northern Ireland's contribution to the global COVID-19 effort has been exemplary, carried out with unprecedented speed and efficiency, along with over 2000 participants in COVID trials. [With the pharmaceutical industry investing heavily in UK R&D](#) and delivering some of the most productive jobs in the economy, we fully support the measures that would **secure funding through the Levelling Up agenda** to continue to be a driving global force in R&D.

**Broadening opportunities for patients to participate in research across all five HSC Trusts** will significantly enhance Northern Ireland's attractiveness as a place to conduct clinical research. Health research is a global endeavour, generating substantial return on investment, as stated in the 2012 report, [Evaluation of the Impact of HSC R&D Funding](#) in Northern Ireland for every single pound of public funds invested in Health and Social Care R&D it brings a return of £4.14. Yet Northern Ireland invests just under £8 per capita from public funds into research every year - about half as much as the rest of the UK.

- 3.2. The benefits for patients treated in research-active NHS organisations are well documented, with evidence from England showing that patients treated in these settings have improved [outcomes](#), lower mortality rates and [increased](#) confidence in the care being delivered, with NHS organisations seeing improved Care Quality Commission ratings.

3.3. The UK has sent a strong signal of intent in the significant increase in science spending announced at the recent Spending Review, putting UK science investment at a more comparable level with international competitors. Northern Ireland should seek to gain from this and bring Northern Ireland into line with other UK jurisdictions.

3.4. According to the [Northern Ireland Research Statistics Agency](#), total Northern Irish R&D spending in 2020 was £913 million in 2020, compared with £937m in 2019 after adjusting for inflation. Real-term falls were seen across all R&D spending by business, higher education and government. The biggest falls were seen in government spending (8.9 per cent) and higher education (5.4 per cent). Business R&D, which makes up nearly three-quarters of R&D spending in Northern Ireland, fared better, with a 4.7 per cent rise in 2020 compared with 2019.

3.5. ABPI member companies have the experience, knowledge, and facilities to provide research support across healthcare in Northern Ireland and are committed to contributing to this. The ABPI is part of the Northern Ireland Recovery, Resilience and Growth Taskforce for Clinical Research, part of a [UK wide vision](#) with Departments of Health with the key aims to not only restore pre-COVID clinical research but to build back better. **This vision for clinical research delivery in Northern Ireland must be supported by a fully-costed multi-year implementation plan.**

3.6. Commercial clinical research contributes significant economic benefits, generating an estimated income of £355 million for the NHS in England in 2018/2019, as stated in the September 2021 ABPI clinical research report [Clinical research in the UK: an opportunity for growth](#). The [Institute of Research Excellence for Advanced Clinical Healthcare](#) (iREACH) aspect of the Belfast Region City Deal presents an opportunity to enhance commercial clinical research in Northern Ireland. This will bring the dual benefits of increased engagement of the Northern Ireland population in clinical trials and attracting industry collaboration and investment. In turn this should enhance productivity and create high-value jobs/skills in clinical trial operations. This will help provide the ecosystem for development of spinout companies and attracting investment into the health and life sciences sector in Northern Ireland.

#### 4. Sustainability and working towards a greener life sciences sector

4.1. As part of the life sciences sector, the pharmaceutical industry is working towards environmental and sustainability goals. From early phase research right through to eventual delivery, management and disposal of medicines, the pharmaceutical industry is committed to playing the biggest possible role in the drive to net-zero and continues to innovate towards creating an environmentally sustainable industry. The **ABPI anticipates the Northern Ireland 'Circular Economy' Strategic Framework due to be launched in March 2022 and would welcome the opportunity to**

**contribute and share learnings on the opportunities and barriers we have identified in the drive to become a more sustainable sector.** This work will deliver quality-based, healthy and green outcomes while positively impacting on the lives of patients. The ABPI recognises that environmental issues require collaboration and shared solution, we are committed to working with partners to achieve this.

4.2. The UK can show leadership on the global stage, developing and rewarding green innovation opportunities within life sciences to overcome existing sustainability challenges and barriers to deliver net zero healthcare. The ABPI recommend:

4.2.1. **Investment in technology, regulation, “kite-mark” standards and accreditation to develop recyclable, then recycled materials at scale. This will need to happen firstly as food-grade, then pharmaceutical grade in order to provide the economic incentive for plastics packaging manufacturers.**

4.2.2. **Explore where challenge funding and incentives can be used to overcome barriers – by bringing together partners in industry, academia and others in the research and innovation ecosystem (e.g. development of more sustainable pharma grade packaging).**

4.2.3. **Assuring ethical, safe and traceable global medicines ecosystem, which tracks emissions data.**

4.2.4. **Develop technologies and processes to remove pharmaceuticals (derived from correct use) from waste streams, by joining international best practice initiatives such as [IMI Premier](#).**

4.2.5. **Build on the existing Catapult infrastructure, regulatory and science centres of excellence to pilot new materials and recycling technologies and the supporting regulatory policies.**

4.2.6. **Adoption of COVID-derived regulatory “flexibilities” in Clinical Trials, such as:**

- **Use of remote monitoring and electronic data capture through devices and wearables in trials, to reduce travel for both clinical professionals and patients (as adopted by the Danish Medicines Agency)**
- **Appropriate remote delivery of patient care.**

## 5. Re-evaluation of the 2015 Northern Ireland Life & Health Science Strategic Action Plan 2016-2020

5.1. In 2015 the Northern Ireland Life & Health Science Strategic Action Plan 2016-2020 was drawn up by a cross-sector working group of officials, academics and industry. Chaired by Matrix NI and jointly led by the Department of Health and the Department of the Economy the vision document drew on a range of existing plans from across the Life and Health sector and detailed an opportunity for the NI Assembly, Health and Social (HSC) organisations, academia, Non-Governmental Organisations and industry to work together to create a Northern Ireland-wide 'Living Lab'. The Living Lab concept envisaged a virtuous circle of healthcare innovation, improved patient health outcomes, savings to the health and social care system due to the adoption of innovative technologies/ processes, industry investment/ sharing of cutting-edge best practice and NI economic growth.

## 6. Accessing Health Data

6.1 Northern Ireland has one of the most developed integrated health and social care databases in the world. However, the access to this data is limited to approved researchers, health planners and policy makers only. **A structured and defined path to access the data for academia and business would create an engine for major scientific investment and advancement.** Critically, this needs to go alongside maintaining the trust of the public and HSC staff. Industry is committed to measures that will improve trust, confidence and skills around health data.

6.2 The ABPI understands that access to health data is dependent on the **development of regulations emerging from the 2016 Health and Social Care (Control of Data Processing) Bill that would facilitate secondary use of health data.** The ABPI recommends this takes place, not only to bolster potential investment it will also facilitate effective planning of health and social care services, improvements in diagnosis and treatment, and evaluation of the impact of health and care transformation.

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