

Health and life sciences skills report

December 2020



Introduction

Health and life sciences form one of the four areas of strategic importance set out in the North East Strategic Economic Plan due to the region's unique environment for health and life sciences innovation and strengths in medicines manufacturing.

This survey was commissioned by the North East Local Enterprise Partnership (LEP) on behalf of the North East Skills Advisory Panel (SAP), in response to the recommendations set out in the 'Profile and Importance of the North East Pharmaceutical Manufacturing Sector: Growing its Contribution' (2017) and ongoing feedback from industry, recognising the forecast growth potential of the sector identified in the Science Industry Partnership's 2030 Skills Strategy and future market opportunities identified by the North East LEP's Health & Life Sciences Steering Group.

Businesses were identified from a database using standard industrial classification codes and were invited to participate. In-depth one-to-one interviews with the businesses were completed over a period of 4 weeks in Autumn 2020.

The results from the survey will inform the SAP and the North East LEP to respond to industry needs and ensure education provision meets the sector's existing and future needs in terms of skills, training and employment.

Who was involved?

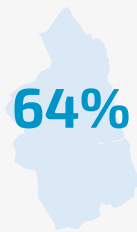
11 companies

were interviewed, mainly those who manufacture pharmaceutical products. A small number of companies also specialised in process development for pharmaceuticals and biotech.

250+ members

64% of those interviewed had over 250+ members of staff working at their base in the North East.

64%



of interviewees have their HQ based in the North East. Other locations of HQs include Teesside, Greater London in areas such as Harrow and Brentford alongside internationally, in countries such as India.

only 1

organisation has no other sites in the UK or abroad.

5 of 11

organisations have sites in the US (in North Carolina, Texas, Boston, Wisconsin for example)

5 of 11

organisations have sites in the UK

3 of 11

organisations have sites across Europe

Where this information was available, the current workforce is on average:



59% male



41% female

11%

aged 16 -24

77%

aged 25-54

16%

aged 55+



Across the region, we are seeing an increase in the number of contract development manufacturing organisations (i.e. a company that serves the pharmaceutical industry to provide clients with comprehensive services from drug development to drug manufacturing) which require more professional and technical occupations.

80% approx.

of jobs within these companies fall within 'better jobs' categories.

97%

UK citizen

3%

from EU

2%

rest of world

Of those who aren't a UK citizen, they are generally filling technical and professional roles, ranging from level 5 to level 8 (PhD).

Retention

There are number of job roles that these organisations face difficulties in retaining staff. For example, those linked to quality control (within labs; officers and managers); engineering graduates and technicians; biological scientists and analytical chemists.

In terms of the occupation that organisations have the most difficulty retaining staff, the most frequently cited response was analytical chemists.

The most cited response as to why it is difficult to retain staff is competition from other companies within the industry. Organisations cited that it can be challenging retaining staff due to geographical locations (graduates leaving for example); salary and progression opportunities within other regions.



Recruitment

In terms of current recruitment and number of vacancies per annum:

264 jobs are or have been recruited for in 2020. On average, this is about 24 jobs per organisation.



On average, organisations are likely to be recruiting at a degree level or postgraduate level.

In terms of the next 5 years and planned recruitment, most organisations have positively described that they intend to **grow their workforce**, recruiting more graduate level staff and expressed interest in increasing the number of apprenticeships they offer.



A small number of organisations have described that they will looking to **expand within specific roles** such as Chemists or Engineers.

just over 80% of organisations currently have vacancies at their North East site

Reasons as to why vacancies are difficult to fill include:

- Job role requires specialist and cross cutting skills and relevant experience which are difficult to find
- Competition for similar skills across the industry e.g. qualified maintenance technical or quality assurance.
- Furthermore, there is an increase in demand for quality assurance skills currently due to anticipated changes in the regulatory framework as a result of EU exit
- Geographical location also presents a challenge



55% of organisations have had trouble filling vacancies due to candidates lacking digital skills, experience of qualifications required for the job role. Examples included data analytics and information management systems within the regulatory environment.

All organisations have had trouble filling vacancies due to candidates lacking technical skills, experience or qualifications including:

- Understanding of regulatory environment
- Good Manufacturing Practice – process development, skills and behaviours particularly relevant within pharma due to regulatory constraints
- Project management capabilities
- Experience related to organisational field i.e. pharmaceutical manufacturing; bioconjugation and medicinal chemistry for example

Shortages

In order to overcome some of the difficulties finding candidates with appropriate skills, organisations are taking a number of approaches:



Internally focussed training i.e. using existing staff to upskill over staff internally; strengthened training programme for new staff; ongoing professional development



Externally focussed training to upskill staff for example using external trainers; university courses to improve skillsets



Recruitment processes i.e. using existing employee networks, directly approaching individuals with relevant experience and bringing in external recruitment expertise to address issues.



Supporting the development of futures skills pipeline through working with local schools, universities, etc.



Recruiting apprentices within certain areas such as engineering and digital/data to address aging workforce



Opened new international site to attract candidates with skills



Use of social media to increase brand awareness

45%

of organisations have recruited or tried to recruit workers that are non-UK nationals for specialist and technical roles such as chemists and engineers.



COVID-19 has impacted on recruitment for many of these businesses. For some, they have delayed recruitment and growth plans for the foreseeable future whilst others have continued to recruit but have transitioned to remote recruitment and induction procedures. For a small number of businesses, recruitment has increased during COVID-19 period.

A range of skill shortages were highlighted by businesses, ranging from project management, leadership and business development through to specialist and technical skills such as data analytics; Good Manufacturing Practice; biologics manufacturing skills; isotope labelling for example.

20%

of organisations recruited non-UK nationals to address skills gaps.

27%

of businesses feel that the UK exiting from the EU may affect their ability to recruit key posts within their businesses.

Some organisations have witnessed a reduced number of applications from European candidates due to uncertainty around visas. One organisation cited that there will be an increased demand across the industry for quality managers to address changing regulatory environment as a result of EU Exit, and this is already a competitive field which will further be acerbated.



36%

of businesses feel that EU Exit may affect their ability to attract the right talent for their business in the future.

Reasons as to why they feel this way included:

- Changes to the regulatory system
- Lack of guidance on recruitment, visas and immigration system
- Changes to access to funding, specifically for SMEs
- Concerns around impact on diversity of the workforce
- Impact on supply chain

Future Skills

With regards to COVID-19 and changing working practices, businesses highlighted additional skills needs required by their workforce:

- Working remotely – transitioning onto virtual conferencing platforms such as Teams.
- Managing teams remotely – some challenges with lack of experience
- Increased need for digital marketing and developing an online presence
- Company culture – some working remotely/on site created challenges
- Focus on company internal communications



Not one business thought their workforce would decrease over the next five years.

72% of businesses expected employment in their business to increase. 28% expected it to stay the same. Organisations will be recruiting across a range of skillsets and roles including professional, technical and managerial roles.

In terms of future skills and those that are likely to become more important over the medium term (5 to 10 years):



Digital skills including digitalisation of processes; automation, AI, data analytical skills, etc.



Quality assurance, technical and regulatory management



Entrepreneurial skills including business leadership, communication



Softer skills such as communication and problem solving, collaboration across departments



Specialist skills such as GMP process development; viral and gene therapy development; drug development capabilities; biopharma

Future Pipeline

90%

of businesses are currently working with education providers to develop their future workforce.

The majority seem to be working with our regional universities and ones close in proximity such as York and Edinburgh. Some businesses are working with local schools for example STEM ambassador or Enterprise Advisor.

55%

of businesses are aware of the new Institute of Technology and T-Level qualifications, with 2 businesses being involved in their development. 45% of businesses are not aware of this development.

All businesses have arranged or funded on or off-the-job training or development for their employees. These training opportunities are focussed on the needs of the individuals and organisation. Some examples include training opportunities linked to apprenticeships; leadership training for management team; training in technical skills such as use of lab equipment and oncology; organisational training such as GDPR compliance; good practice in manufacturing, etc.

COVID-19 and resource constraints have been reasons as to why more training has not been provided by organisations. Businesses are struggling managing competing business priorities, capacity and time alongside finances. One organisation cited that there have been redundancies at some training providers which has caused a shortage of supply.

COVID-19 has resulted in:

- **Increased remote training**
- **Digital skills training has been prioritised**
- **Some plans have been delayed but the need remains the same**

Apprenticeships

72%

of businesses are an Apprenticeship Levy paying organisation. All levy payers expressed an interest in exploring how to make better use of their levy by increasing the number of apprenticeships they offer.

55%

offer apprenticeships to up-skill existing staff

75%

offer apprenticeships to recruit new staff

27%

do not offer apprenticeships

Variety of apprenticeships available across a range of levels:

- IT degree apprenticeships
- Business admin
- Health and safety
- Lab technician
- Engineering
- Maintenance and process technicians

70%

of organisations plan to upskill staff through apprenticeships in the future, whilst 80% plan to recruit staff through apprenticeships in the future

Not one organisation offers a traineeship as it was felt that the traditional traineeships are too low in terms of a skill level for the needs of the industry

36%

In terms of current Government support, 36% have accessed the apprenticeship incentive payments and funding.

