

# Insights and Intelligence Framework

# **Executive Summary**

As a regulator of 15 different professions, our work enables us to collect a wealth of information about our professions: the effectiveness of their education; their diversity and demographics; their working locations and approach to practise; and the risks that they present.

Our vision is to be a high performing, adaptable and caring regulator that ensures public protection through strong, evidence-based regulation. Our <u>Corporate Strategy 2021-26</u> includes an aim to learn from data and research to inform our decision-making and share insights to protect, promote and maintain the health, safety and well-being of the public. To achieve this aim, we must develop our ability to identify, capture, extract, analyse and share our learning from the data and information we hold.

Whilst we hold rich sources of data across the organisation, there are gaps in our data capture and we have not yet developed systems and processes to facilitate integration across functions. Our current infrastructure supports the production of descriptive analysis, such as the performance reports produced by our Assurance and Development team. It does not, however, support the production of diagnostic, predictive and prescriptive analytics, which would be required to deliver the new data driven approach set out in our Corporate Strategy.

Being able to achieve our aim is, therefore, dependent on this groundwork. The Framework at Annex A identifies the developments we aim to achieve over the next two years (2021/22 – 2022/23) to enable us to begin to deliver against our aim.

Council is asked to approve the approach set out in the Framework at Annex A.

Previous consideration	The Executive Leadership Team has considered and approved the approach.
Decision	The Council is asked to approve the approach set out in the Framework at Annex A.
Next steps	A Head of Insights and Analytics will be appointed to lead the delivery of this work
Strategic priority	Develop insight and exert influence - Aim: learning from data and research to inform our decision-making and share insights to protect, promote and maintain the health, safety and well-being of the public.

	Corporate plan 2021-22 provides for the production of an insight and intelligence framework, which sets out our approach to analysing our regulatory data and understanding the trends so that we can act on them. It identifies the priority to undertake internal analysis of our fitness to practise data, including identifying the risks areas and trends and/or links to continuing professional development.
Financial and resource implications	We have one Analyst in post and are recruiting a Head of Insights and Analysis, who should be in post before the end of Q3 2021/22.
	Funding for the two posts (Analyst and Head) is taken from the Policy and Standards budget.
	The framework provides for the Head to identify the resourcing requirements needed to establish a stand-alone analytical function with relevant in-house expertise. This will include a financial and people plan, which will need to be approved by ELT and Council. The delivery of much of our future analytical work is also dependent on the availability of data architecture (e.g. via a data platform/lake) that allows linkages of our datasets in ways not currently possible.
Author	Kellie Green, Head of Professionalism and Upstream Regulation <u>kellie.green@hcpc-uk.org</u>
Sponsor	Naomi Nicholson, Executive Director of Professional Practice and Insight naomi.nicholson@hcpc-uk.org

## DRAFT

# Insights and intelligence framework

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#### Introduction

- 1. As a regulator of 15 different professions, our work enables us to collect a wealth of information about our registrants: the effectiveness of their education; their diversity and demographics; their working locations; their approach to practise; and the risks that they present.
- Our vision is to be a high performing, adaptable and caring regulator that ensures public protection through strong, evidence-based regulation. Our <u>Corporate Strategy 2021-26</u> includes an aim to learn from data and research to inform our decision-making and share insights to protect, promote and maintain the health, safety and well-being of the public.
- To achieve this aim, we must develop our ability to identify, capture, extract, analyse and share our learning from the data and information we hold. This framework identifies the developments we will achieve over the next two years (2021/22 – 2022/23) to begin to fulfil our aim.

#### Where we are now

4. Our <u>Digital Transformation Strategy</u> identifies that our current approach to data lacks an integrated operational or analytical reporting capacity. Most reporting is driven from application silos using operational data, as identified here:

Registration data	Fitness to practise data	Education data	Ad-hoc data*
Held in Dynamics 365 Owned by Registration	Held in Nexus CMS Owned by Fitness to practise	Held in Dynamics 365 (a separate instance from the registration database) Owned by Education	Data stored in spreadsheets across shared drives, and different survey tools Owned by different teams across HCPC

\*e.g. registration forecasting data; feedback and complaints about HCPC service; EDI data.

- 5. Whilst we hold rich sources of data across the organisation, there are gaps in our data capture and we have not yet developed systems and processes to facilitate integration across functions. We need to ensure our organisational data capture and categorisation is consistent, of good quality, and is accessible to those who need it.
- 6. Our current infrastructure supports the production of descriptive analysis, such as the performance reports produced by our Assurance and Development team. It does not, however, support the production of diagnostic, predictive and prescriptive analytics (fig. 1), which would be required to deliver the new data driven approach set out in our Corporate Strategy.



- 7. We do not have sufficient statistical expertise within HCPC to promote and deliver new and innovative data initiatives and technologies, such as interactive visualisations, automation, data science, big data and open data approaches. Insights and Intelligence work has been delivered from within our Policy team, which already has a very wide brief and high workloads.
- 8. Top level data analysis needs and requirements have been identified in some areas within the organisation. To ensure that our limited people and financial resource is used most effectively, a collective, strategic approach needs to be developed to ensure that the priorities for data analysis and reporting are determined and agreed.

### **Our priorities**

Fig 1

- 9. Our priorities for the next two years are to:
  - A. build the in-house capacity and expertise needed to promote and deliver new and innovative data initiatives and technologies
  - B. support the delivery of the Digital Transformation Strategy, including the development of the data architecture
  - C. improve the quality and consistency of our organisational data capture
  - D. develop a collective, strategic approach for data analysis and reporting
  - E. deliver identified top level data analysis
- A. Building in-house capacity and expertise
- 10. We do not have sufficient analytical capacity within HCPC to deliver our ambitions to be a data-driven regulator, with just one analyst currently in post.

In addition, we do not have the statistical expertise to develop and deliver new and innovative data initiatives and technologies, such as interactive visualisations, automation, data science, big data and open data approaches.

- 11. In 2021, we will recruit a Head of Insight and Analytics who will develop and lead the delivery of our Insights and Intelligence framework. A priority for the new Head will be to identify the resourcing requirements needed to establish a stand-alone analytical function with relevant and necessary in-house expertise to deliver against our strategy and build our capability and capacity.
- 12. The resourcing requirements will be identified by Q4 2021/22, subject to recruitment of the Head of Insight and Analytics. Subject to budget approval, the development of the team will commence in Q1 2022/23.
- B. Supporting delivery of digital transformation
- 13. Our current approach to data means that there is no integrated operational or analytical reporting capacity. Most reporting is driven from application silos using operational data. A significant volume of internal reporting is delivered using Excel reporting, with statistics published to the website as static snapshots that are manually updated and refreshed.
- 14. Delivery of our Digital Transformation Strategy will ensure that we have the technical capability to extract insights and produce analysis from the data we hold, and develop our capacity to share data with internal and external stakeholders in flexible and efficient ways. Delivery of sophisticated analysis combining different organisational datasets (for example, analysis of the impact of our fitness to practise processes on different groups) is contingent on the delivery of an integrated data platform / data lake.
- Subject to budget agreement for development of a data platform, from Q3 2021/22, we will take a prominent role in guiding the functional development of a new platform to meet the analytical needs of the organisation.
- 16. From Q4 in 2021/22, we will begin development of dashboards that provide data on registrants, fitness to practise and continuing professional development. These dashboards will be published on our website.
- C. Improving the quality and consistency of our organisational data capture
- 17. We hold rich sources of data across the organisation, but there are gaps in our data capture, and we have not yet developed systems and processes to facilitate integration across functions. We need to ensure our data capture and categorisation is robust and that this information is accessible to all those who need it.
- 18. To ensure that future analysis and insight projects are not limited by a lack of good quality data, we will:
  - identify gaps in current data collection processes and historic data captured in key areas (equality diversity and inclusion, fitness to practise

and continuing professional development), and develop processes for continued data quality and an approach for logging and correcting existing errors (from Q4 2021/22)

- ensure a co-ordinated capture of equality, diversity and inclusion data across the organisation, including the capture of registrant data at point of registration/renewal (from Q3 2021/22)
- develop an organisation data dictionary, data catalogue and business glossary (from Q1 2022/23)
- establish a single survey tool (Q3 2021/22)
- develop an organisational approach to the anonymisation of data (from Q4 2021/22)
- develop a centralised approach to the response for data sharing and requests from external organisations (from Q4 2021/22)
- D. Develop a collective, strategic approach for data analysis and reporting
- 19. Data analysis needs and requirements have been identified in some areas within the organisation. To ensure that our limited people and financial resource is used most effectively, a collective, strategic approach needs to be developed to ensure that the priorities for data insight, analysis and reporting are determined and agreed.
- 20. We will, through collaboration across the organisation, develop a clear plan for the delivery of future insights projects that are to be delivered from Q2 2022/23.
- E. Deliver identified top level data analysis
- 21. To support upstream regulation and deliver a preventative approach, we need to understand the root causes of unprofessional behaviours and risk of harm and how these can be managed and prevented. Identifying and assessing the risks that arise from the different kinds of professional practice we regulate will enable us to focus our efforts and resources in addressing these identified risks.
- 22. Our new approach to the quality assurance of education, which has been supported by insights and analysis, is a good example of taking a risk-based approach to regulation.
- 23. While developing a collective, strategic approach for future insights projects, in the medium term, we will in the meantime:
  - continue to support the development of the Education risk-based quality assurance process through the development of reporting dashboards and analysis (Q4 2021/22)
  - deliver analysis to:

- develop our understanding of the risks that arise from different kinds of professional practice and root causes of unprofessional behaviours (Q4 2021/22)
- establish the characteristics of registrants who are at greater risk of being subject to fitness to practise referral or progression (scoping Q4 2021/22, delivery Q3 2022/23, subject to development of suitable data architecture)
- inform the review of our current approach to the random sampling of registrants for continuing professional development audits (Q4 2021/22)
- understand the perceptions of our stakeholders and measure our performance at our strategies (Q3 2021/22)

#### Success measures

24. We will achieve:

- a stable team comprising sufficient analytical capacity within HCPC to deliver our ambitions to be a data-driven regulator
- delivery of a modern data platform that contains the correct component parts to enable the generation of data insight and analysis
- creation of a suite of public dashboards that support the timely and consistent sharing of data with key stakeholder groups
- an ability to use insights derived from the data we hold to support decisionmaking and future planning
- a clear plan for the delivery of future insight projects.

### Monitoring and review

- 25. This framework aims to set our priorities over the next two years (2021-2023). It will be reviewed on a regular basis as our work plan and capabilities develop. The framework will be flexible and responsive to changes in the internal and external environment. We will review progress and report to Council annually on delivery of our insights and analytical work.
- 26. The lifespan of our corporate strategy goes beyond the lifetime of this framework. We will refresh and extend this framework as our work in this area develops. In line with our ambitions on regulatory reform and subject to available resource, work in years beyond this framework (i.e. from 2023) is likely to cover more ambitious areas such as online applications, data visualisations (see GMC's '<u>Data Explorer'</u> tool), sharing data to support the management of risks to patient safety more widely within the health system and working more collaboratively with other regulators to support system learning.