

## Executive Summary

### The Report: Context and Introduction

- i. This report responds to Priority Area 3.2 of the *'Life Sciences in Scotland Industry Leadership Group Digital & Data Subgroup Opportunities and Priorities'* report, commissioned by Scottish Enterprise (SE) on behalf of the Digital and Data subgroup of the Life Sciences Scotland Industry Leadership Group (ILGDD). Priority Area 3.2 is to *'Complete a review of health and care procurement spend (digital and data)'*.
- 1.1 The ILGDD Opportunities and Priorities report notes that *"establishing a baseline of health and care procurement spend for digital and data opportunities will ensure the accurate evaluation of some of the work of the ILGDD and other key partners. The analysis will provide an efficient, accurate and ongoing perspective of this information as well as creating one of the key performance indicators against which the ILGDD could evaluate some of its activities"* i.e., what percentage of the identified health and care market opportunity has been procured from Scottish companies.
- ii. This report, prepared by Context Economics in association with Additional Research, explores the **feasibility** of establishing a baseline of current health and social care data expenditure on Digital and Data and whether there is sufficient *merit* in developing a baseline for Digital and Data spend i.e., will it enable accurate evaluation of the work of the ILGDD and key partners.

### Report Findings

- iii. Several data sources have been reviewed as part of the work, covering either health, or social care, or both, and covering both public and private expenditure. None provides a complete picture of Digital and Data expenditure; although some sources are of greater utility (and are easier to gather and analyse) than others.
  - iv. The review identifies that the key data source is the Scottish Procurement Information Hub (SPIH). This covers both health data spend (NSS Central Procurement Team data, national e-health contracts and NHS Regional Health Boards) plus local authority direct spend on social care. It also focuses on actual spend on suppliers, as opposed to contracts issued. The ILGDD should seek to work in collaboration with the SPIH team to gain access to and interrogate the data.
  - v. The advantages in utilising SPIH relate to the breadth of information provided, that it positively covers (public) spend on health and social care, that it is consistent (produced annually) and that there is a process of supply (by public sector) and verification (by the Hub). There are limitations with the SPIH (including a classification based on a supplier's main business type as opposed to type of specific goods or services provided; limited drill down to relevant spend categories; and it does not fully identify re-sellers). However, in terms of the scope of this study the SPIH is considered to represent the 'cleanest' dataset available with the greatest level of information on suppliers, when compared to alternative sources of procurement spend from public sector bodies. Access to the Hub data, requires authorisation from Scottish Government procurement team.
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- vi. Chapter 3 of the report explores the SPIH in some depth. In summary, the Hub site can provide a range of insights and will be an important source in establishing the footprint of the public sector around procurement spend by supplier business category (i.e., Health and Social Care spend). The site can also be a useful tool for discussing/ assessing opportunities for efficiencies and collaboration between public sector buyers (a main purpose of the site); and the extent to which this is already taking place within public sector bodies.
  - vii. What the SPIH does not cover is local authority ‘contracted out’ social care to private social care providers who then purchase goods and services, including Digital and Data. However, via Social Care, as the key member organisation that covers private care providers, it may be possible – at relatively low cost – to design and survey members in terms of their Digital and Data spend.
  - viii. Whilst challenging to do so, the authors estimate that these two sources (the SPIH which captures the majority of public sector spend on health and social care (Digital and Data), plus a member survey of private social care providers on their Digital and Data spend), may represent as much as 80% of all spend on health and social care in Scotland on suppliers of Digital and Data services (both Scottish and non-Scottish suppliers). The remaining 20% is estimated to include an element of public sector spend which cannot be identified via the sources above plus expenditure on private healthcare providers. Note: Coverage also does not include spend outside Scotland (see below).
  - ix. Chapters 3 and 4 of the report contain the operational guidance which will be helpful should the ILGDD subgroup wish to develop the actual base line at a future date (either in-house or contracted out). Interrogation and analysis of the two sources is estimated to require resource in the region of 10-15 days.
  - x. Datasets on expenditure by private health care providers on Digital and Data do not exist. A database of providers would need to be assembled, and a survey undertaken. Whilst possible, additional resources would be needed to capture this data which could outweigh the value of the analysis obtained.
  - xi. Similarly, datasets on Scottish supplier expenditure on Digital and Data on health and social care outside Scotland do not exist, and so a database of providers would need to be assembled, and a survey undertaken. Private care providers may be able to provide this data (via the survey above). However, the resource implications of gathering this spend data are also high and could outweigh the value of analysis obtained.
  - xii. Finally, the report situates the sources of data in context. The authors of this report note the ILGDD subgroup objective in establishing a digital and data procurement spend baseline, namely, to provide an efficient, accurate and ongoing perspective of this information as well as creating a key performance indicator against which the ILGDD and partners could evaluate the success of some of their activities.
  - xiii. However, whilst the SPIH and survey of local authority contracted out social care sector providers will give one measure for the ILGDD subgroup to measure the success of its/partner activities, this is a small fraction of the overall spend on Health and Social Care (and the spend on Scottish suppliers of services within this is even smaller).
  - xiv. Increasing spend on Digital and Data from Scottish suppliers may bring some economic and health benefits to Scotland **but on its own, it will not achieve the transformational or**
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**breakthrough change required.** This is why the ILGDD and partners are considering a range of synergistic activities including transformational change in health and social care that puts digital and data (patient and person-centred data) more firmly at the heart of the system.

- xv. Considering the wider range of ILGDD/partner activity, one of the other KPIs which the ILGDD is invited to consider, in conjunction with tracking procurement spend, is tracking productivity improvement.
  
- xvi. By way of example, the rising cost of labour is a significant issue in the health and social care sectors. Social care, in particular, is a labour-intensive sector characterised by low wages and low skilled jobs often utilising manual (sometimes paper-based) processes. Productivity is complex and is the output of a range of inter-related activities. However, in addition to improved patient outcomes and cost efficiencies, the introduction of more digital and data-driven solutions can lead to increased productivity and the creation of more high-value jobs. GVA per employee is typically used to assess productivity in a sector and is a measure which could provide additional insight into the success of the activities of the ILGDD and partners. Productivity statistics for both health and social care are readily available, for example, via Skills Development Scotland's (SDS) Sector Skills Assessments. SDS notes that healthcare productivity in Scotland in 2021 was £45,700 (GVA per employee)<sup>1</sup>, below the average for all sectors in Scotland of £53,000. These figures are forecast to rise to £47,900 and £60,300 respectively by 2031. For social care, SDS quote productivity at £29,700<sup>2</sup> in 2021 compared to the all-sector average in Scotland of £53,000. These figures are forecast to rise to £31,200 and £60,300 respectively by 2031.

## Recommendations

- 1) The key conclusion from the review is that there is merit in gathering and analysing the Scottish Procurement Information Hub (SPIH) for the best-fit categories of Digital and Data spend by Scottish public sector buying entities. **(Recommendation 1)**.
  - a. In practical terms, this is likely to be Level 2 High Level Spend Categories i.e., ICT Software etc., which allows comparison across geographies, change over time and which brings together data from across the regional Health Boards, national health agencies and Local Authority spend on social care (Data & Digital).
  - b. Identifying this Level 2 data would provide some broad upper limits of spend in Health/IT/Care established by buying organisations and allow for identification of Scottish suppliers (by purchase value). The procedure outlined in the report can be applied to generate the report **(Recommendation 1a)**. It would be beneficial for any appointed consultant or in-house team to work closely with the SPIH in accessing the data.
  - c. Further, it is worth interrogating the SPIH for Level 3 data (i.e., more detailed spend categories than Level 2) to ascertain what has been provided at this level of granularity. The vCode Level 3 categories suggested in this report may be a useful starting point.
  - d. At Level 3, there could be selective investigation in some selected buying organisations to see what is relevant/ included for individual purchases **(Recommendation 1b)**.

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<sup>1</sup> [SDS Sector Skills Assessment: Healthcare](#)

<sup>2</sup> [SDS Sector Skills assessment: Social Care](#)

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Where relevant Level 3 detailed spend is verified/ ascertained via manual follow-up investigation (for selected bodies) these benchmark values could then feasibly be applied to the whole cohort of public sector bodies in health and social care. It should be stressed, however, that there may be limited use of Level 3 coding by public sector bodies supplying data to SPIH.

- 2) There are, arguably, more gaps in relation to social care expenditure, given the extent to which there is considerable private care provision (and so this will not be captured in the SPIH). Therefore, a survey of the 400+ social care providers members of Scottish Care would be valuable in identifying spend on Digital and Data (**Recommendation 2**). Although only a proportion of members are likely to respond to such a survey, this can be extrapolated to the full provider base; and it will also provide useful intelligence on the nature of R&D and telecare spend within the sector.
- 3) Further, there is considerable merit in broadening the debate about how the ILGDD/partners measure success into a wider view on productivity improvements that can be made in health and social care as a result of the increased deployment of digital and data driven approaches. Therefore, in tandem with tracking procurement spend, this review invites the ILGDD to consider productivity improvement as an indicative measure of transformational change in health and social care (**Recommendation 3**).
- 4) In addition, there is merit in following closely the work of National Services Scotland and what the authors understand to be its work (linked to Scotland Innovates) to gather innovation (Research and Development) procurement spend (**Recommendation 4**). Whilst this spend will not be exclusively Digital and Data spend, the expenditure on innovation is likely to be a close match to the types of spend of interest to the ILGDD. The work, at the time of reporting, is due in the autumn/winter of 2023.
- 5) This review has also highlighted that there would be benefit in bringing together innovative Digital and Data product service providers/companies with procurement managers in the NHS and social care sectors (**Recommendation 5**); this could take the form of 'meet the buyer' style events, with suppliers handpicked for their innovative, forward-looking approaches.