

**Reference Number:** FOI202324/286  
**From:** Other  
**Date:** 21 September 2023  
**Subject:** Technical Informatics Solutions

**Q1** What are the core patient administration system(s) used by your organisation?

**A1** Silverlink, EMIS, CRIS, Allscripts

**Q2** Do you have a data warehouse solution in place to extract, transform and load data from your patient administration system(s) into a central repository for secondary use?

**A2** Yes

**Q3** What systems/software/programmes/applications does your informatics teams use to:

- Manage workload, incorporating receiving requests internally and externally, managing work in progress and communicating to customers through to task/product completion?
- Provide regularly available information to customers, including patient data, reports, dashboards, scorecards and other visual representations of data?
- Analyse data, including descriptive, diagnostic, predictive and prescriptive analysis (as defined in table 1 below).

*Table 1 Types of analysis, adapted from Gibson (2021)*

Descriptive analysis	This is the simplest and most common use of data in business today. Descriptive analysis answers the "what happened" by summarizing past data, usually in the form of dashboards. The biggest use of descriptive analysis in business is to track Key Performance Indicators (KPIs).
Diagnostic analysis	Diagnostic analysis takes the insights found from descriptive analytics and drills down to find the causes of those outcomes. Organizations make use of this type of analytics as it creates more connections between data and identifies patterns of behaviour.
Predictive analysis	Predictive analysis uses the data we have summarized to make logical predictions of the outcomes of events. This analysis relies on statistical modelling, which requires added technology and manpower to forecast. It is also important to understand that forecasting is only an estimate; the accuracy of predictions relies on quality and detailed data.
Prescriptive analysis	Prescriptive analysis utilizes state of the art technology and data practices, such as Artificial Intelligence (AI) systems to consume a large amount of data to continuously learn and use this information to make informed decisions, communicating these decisions and even putting those decisions into action.

**A3**

- Outlook, MS Forms, Azure DevOps, Power BI, Power Automate
- SharePoint, SQL Server Reporting Services (SSRS), Power BI, Excel
- SSRS, Excel, Power BI, R, SPSS, Python

**Q4** For the next section of questions, please provide an answer for each system included in response to question 3 (i.e. for parts a, b & c). A matrix has been provided for convenience.

How long have these systems been in place/used for?

- 3a

- 3b
- 3c

A4	<b>3a: SSRS</b>	<b>3b: Power BI</b>	<b>3c: Excel</b>
	5<10 years	0<1 years	10 years or more

Q5 For the next section of questions, please provide an answer for each system included in response to question 3 (i.e. for parts a, b & c).

What are the annual costs to use these systems?

- 3a
- 3b
- 3c

A5	<b>3a: SSRS</b>	<b>3b: Power BI</b>	<b>3c: Excel</b>
	Information not held – no cost	Information not held – no cost	Information not held – no cost

Q6 For the next section of questions, please provide an answer for each system included in response to question 3 (i.e. for parts a, b & c).

Were there any initial set up costs to implement these systems? Is so what costs were incurred?

- 3a
- 3b
- 3c

A6	<b>3a: SSRS</b>	<b>3b: Power BI</b>	<b>3c: Excel</b>
	No	No	No

Q7 For the next section of questions, please provide an answer for each system included in response to question 3 (i.e. for parts a, b & c).

Have these systems been assessed for their return on investment? If so, what was the outcome?

- 3a
- 3b
- 3c

A7	<b>3a: SSRS</b>	<b>3b: Power BI</b>	<b>3c: Excel</b>
	No	No	No

Q8 For the next section of questions, please provide an answer for each system included in response to question 3 (i.e. for parts a, b & c).

Do you intend to continue to use these technological solutions in the next 3-5 years? If not, what other solutions are you considering?

- 3a
- 3b
- 3c

- A8
- | 3a: SSRS | 3b: Power BI | 3c: Excel |
|----------|--------------|-----------|
| Yes      | Yes          | Yes       |
- Q9 On average (excluding Freedom of Information requests), how many requests in total do you receive per week or month from both internal and external colleagues/customers for:
- Information provision
  - Regular reports
  - Analysis
- A9
- 75<100 per month
  - 100>150 per month
  - 20>30 per month
- Q10 On average (excluding Freedom of Information requests), how long does it take from a request being received to completion (i.e. turnaround/process time) for:
- Information provision
  - Regular reports.
  - Analysis.
- A10
- 5<10 days
  - 15<20 days
  - 20<30 days
- Q11 How many staff (whole time equivalents) are employed in any capacity to service these types of requests?
- Information provision
  - Regular reports
  - Analysis
- A11
- 10<15 Total WTE across the three categories provided
  - 10<15 Total WTE across the three categories provided
  - 10<15 Total WTE across the three categories provided
- Q12 Do you use business intelligence cubes / OLAP (Online Analytical Processing) cubes to standardise, consolidate or aggregate relevant data for fast and efficient analysis?
- Have you implemented or experimented with the use of artificial intelligence or machine learning?
- If so, what has this been used for?
  - How often is this type of analysis conducted?
- A12
- Somewhat
  - Anomaly Detection, Natural language processing
  - Continuously
- Q13 Would you be willing to provide more information and discuss these points on a one-to-one basis? If so, please can you provide your details below:
- A13 Having considered this question we do not deem that it meets the criteria for a valid request for information under the FOIA, as it is asking for perspective and opinion rather

than recorded data or information held by the Trust i.e. it does not 'describe the information being requested'.

Q14 Do you have any other comments you would like to add?

A14 Having considered this question we do not deem that it meets the criteria for a valid request for information under the FOIA, as it is asking for perspective and opinion rather than recorded data or information held by the Trust i.e. it does not 'describe the information being requested'.