

Dear informatics lead, please can you provide a response to the following questions:

Section 1:

1. What are the core patient administration system(s) used by your organisation?
PARIS, PC-MIS
2. 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?
Yes (If a relevant option is not available, then enter your own)
3. What systems/software/programmes/applications does your informatics teams use to:
 - a. Manage workload, incorporating receiving requests internally and externally, managing work in progress and communicating to customers through to task/product completion?
ServiceNow, JIRA, MS excel & project
 - b. Provide regularly available information to customers, including patient data, reports, dashboards, scorecards and other visual representations of data?
BI solution (SPIKE2 – SQL database with Javascript and Angular front-end)
 - c. Analyse data, including descriptive, diagnostic, predictive and prescriptive analysis (as defined in table 1 below).
BI solution, R programming and excel

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.

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.

	3a	3b	3c
4. How long have these systems been in place/used for?	5<10 years	5<10 years	5<10 years
5. What are the annual costs to use these systems?	None	SQL licencing – rest are open source	SQL licencing – rest are open source
6. Were there any initial set up costs to implement these systems? Is so what costs were incurred?	7k	125k	125k
7. Have these systems been assessed for their return on investment? If so, what was the outcome?	Yes	Yes	Yes
8. Do you intend to continue to use these technological solutions in the next 3-5 years? If not, what other solutions are you considering?	Yes	Yes	Yes

Section 2:

9. 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:
 - a. Information provision 40<50 or comment here [Click here to enter text.](#)
 - b. Regular reports 10<20 or comment here [Click here to enter text.](#)
 - c. Analysis 10<20 or comment here [Click here to enter text.](#)
10. 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:
 - a. Information provision 5<10 days or comment here [Depending on backlog](#)
 - b. Regular reports 10<15 days or comment here [Depending on backlog](#)
 - c. Analysis 10<15 days or comment here [Depending on backlog](#)
11. How many staff (whole time equivalents) are employed in any capacity to service these types of requests?
 - a. Information provision 1<5 or comment here [Click here to enter text.](#)
 - b. Regular reports 1<5 or comment here [Click here to enter text.](#)
 - c. Analysis 1<5 or comment here [Click here to enter text.](#)
12. Do you use business intelligence cubes / OLAP (Online Analytical Processing) cubes to standardise, consolidate or aggregate relevant data for fast and efficient analysis? *Yes (If a relevant option is not available, then enter your own)*
 Have you implemented or experimented with the use of artificial intelligence or machine learning? *No (If a relevant option is not available, then enter your own)*
 - a. If so, what has this been used for? [Click here to enter text.](#)
 - b. How often is this type of analysis conducted? [Click here to enter text.](#)
13. 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:

Table 2 Contact details

Name:	Click here to enter text.
Job title:	<i>Head of Information, Business Intelligence and Systems delivery</i>
Email address:	Click here to enter text.
Phone number:	Click here to enter text.

In an effort to ensure that the Trust does not receive unsolicited communications and/or any potential malicious malware, the Trust does not routinely publish the names or contact details of staff other than those publicly available through our Trust website.

14. Do you have any other comments you would like to add?

Click here to enter text.

References

Gibson, P (2021). *Types of Data Analysis*. Available from: <https://chartio.com/learn/data-analytics/types-of-data-analysis/> (Accessed 19/09/2023)