

Data Collection

The provision of a Consultancy Service as well as Business Intelligence and Data Warehousing solutions, in particular the potential to develop products and services which will enable NHS bodies to streamline, improve and deliver greater efficiencies to a call off authority's operational functions depending on its needs and requirements, for example; to develop a system or solution which links the Financial and Non-Financial information and in turn provides detailed reporting to enable it to intelligently manage its business. Lot 4 includes the following services:— Business Intelligence (including Reporting);— Service Line Reporting;— Patient Level Costing;— Data Warehousing.

Ref	Title	Description
B1	Data Warehouse	The ability for the Authority to have a data warehouse for its data will assist in its ability to undertake consistent performance and financial management across the organisation.
B2	Data Collections from identified systems	<ul style="list-style-type: none"> • Collection of data into the data warehouse from the Authority’s systems by way of upload or interface. • Collection from a variety of systems to be defined by the Authority e.g. Clinical Systems and Financial Systems • Ability for system to interface and map data before it is loaded into the Data Warehouse • All relevant reference tables (adhering to NHS data standards and definitions).
B3	Co-ordination of dependant parties	<ul style="list-style-type: none"> • Co-ordinate any necessary activity with relevant third parties that hold data to be loaded • Ask the right questions at the right time to achieve effective results.
B4	Ad hoc Collections	<ul style="list-style-type: none"> • The Authority sometimes manages data using manual collection systems e.g. Excel spread sheets / Access databases, and on occasion it may be required for data in these systems to be collected and added to the data warehouse and made available for reporting on.
B5	Whole Data Collections	The Authority requires the ability to report on any data fields available in the originating database and as such all data should be collected into the data warehouse (including all reference tables)
B6	New Collections	The Authority is likely to implement new IT systems that may contain data that needs to be reported on and as such needs the ability to request new standard data collections to be added to the data warehouse. As the systems will be new it might be necessary to map the fields in the system.
B7	Nightly Data Collections	The Authority needs to work with as close to real time data as possible and as such would like the data collecting no less frequently than nightly from core systems. External data sources to be refreshed as close to nightly as possible.
B8	Data from Non-Authority networks	Not all the data that needs to be collected is on systems that are hosted in the Authority’s network and are located on external or third party networks. The physical and logical location of the data should not result in data not being able to be collected.
B9	Single PMI	Long term requirement for a single patient master index (PMI) across the Authority. This will form part of a longer term joint development agenda.

Data Storage and Management

Data that has been collected needs to be stored and managed appropriately.

Ref	Title	Description
B10	Database	Provision of an appropriate database and associated infrastructure
B11	Field Mapping	Due to the range of systems that data is being collected it is reasonable to expect that fields that contain the same data may be called something different for example Surname and Family Name. The Authority needs to report consistently on both fields and as such the fields need mapping (to national Data Dictionary Standards where applicable) so the results of both fields are presented.
B12	Data validation	The solution should be able to run validation statements against the data collected and report any errors and omissions.
B13	GP checks and data completion	Staff who do not consistently collect which GP patients are registered with, which can cause issues with service charging. The service should be able identify this missing information and look up national systems to complete the missing details (using automated DBS). The solution should be able to provide similar validation and data completion for other systems the Authority defines.
B14	Point in time baselines	The Authority requires the ability to create baselines at agreed points that will freeze the data at that point and become a point in time picture of service.
B15	Data sharing capability	The Partnership Trust would like to improve patient care through the sharing of data with other agencies, health providers and sectors. (Subject to data sharing agreements and IG).
B16	System and database backups	In the event of data base corruption, configuration errors and other system failures the system needs to be able to be restored.

Reporting

The data collected is used to produce management information and reports. Some of these reports are standard and are used at regular intervals (weekly, monthly).

Ref	Title	Rationale
B17	Standard Reports	<ul style="list-style-type: none"> • The Authority requires a number of standard reports to be available at specified intervals. • Full technical specifications to be discussed for each report on a case by case basis.
B18	Ad-hoc Reports	The Authority requires the ability to create reports that interrogate and manipulate the data available in the data warehouse.
B19	Submissions of data	<ul style="list-style-type: none"> • The ability to submit pre-agreed data to Third Party organisations using data from the data warehouse. • Data will only be submitted with Trust sign-off • Submissions will include mandatory and required data sets.
B20	Changes to Standard Reports	From time to time the Authority may want to make changes to the format or data used in standard reports.
B21	Contract Reporting	The Authority may need to understand the activity details vs. what is detailed in the contract, for the purposes of service line reporting
B22	Real-time Information	<p>The Authority would like to have access to a quasi-real time dashboard that shows performance and other pre-agreed measures.</p> <p>This dashboard should be available to view on a PC, mobile device and tablet computer.</p>
B23	Developing an excellent integrated management information reporting landscape	<p>The Authority requires functionality that facilitates and supports an excellent financial and performance management information landscape. The exact shape and content of this will vary with local conditions and aspirations. However, a solution should be capable of enabling the architecture of financial, performance, human resources and quality data to be integrated and configured flexibly to meet those local needs. The outputs from the solution should represent an effective multi-dimensional and hierarchical reporting capability, with business intelligence presented in a variety of specified forms, to support a host of internal and external reporting needs. The structure and form of the business intelligence output from the solution will need to be designed with due regard to, but not necessarily restricted to, the principles, standards and approved national guidance in respect of Service Line Management, Reference Costing and Patient Level Information and Costing (PLICS).</p>

Data Accessibility

The ability to undertake analytic activity on the data held in the data warehouse.

Ref	Title	Rationale
B24	Access to data tables	The Authority will want to be able to directly interrogate, report and analyse any mart/view in the data warehouse, with the additional option of raw data tables by exception.
B25	Queries	<ul style="list-style-type: none"> The Authority wants to be able to query the data warehouse and as such there should be no restriction to the fields, view, or marts that they may want to run queries against. The supplier must be able to query data on the Authority's behalf due to reasons of technical skill or accessibility.
B26	Report Design	The Authority will require the ability to design new reports within the data warehouse and automate these as required.
B27	Multiple access	The Authority may have staff with a variety of different skills and as such they should be able to access the data using a compliant platform including Access and Crystal.
B28	Read only access	To protect the integrity of the data in the data warehouse the data should be controlled with permissions and as standard read only access is provided.
B29	Field Update	In some services very basic data is managed on spread sheets by clinical staff, this data would be better housed in a data warehouse and as such a front end that allows limited updating of specific fields can be designed and provided on request.
B30	Query warnings	Running highly complex large queries can impact the performance of the data warehouse service. It is helpful for a query checker to be in place to provide warning to the user that the query they are about to execute is not recommended.
B31	Extract data	From time to time the Authority may need to work on extracts of data without affecting the data warehouse and as such the ability to extract data is required.
B32	Accessibility	The Authority may work from a variety of locations. The system should be accessible from all of the Authority's locations.