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GP Data Implementation Project

GPES Uplift

Supplier Requirements

**Document Management**

**Revision History**

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| --- | --- | --- |
| Version | Date | Summary of Changes |
| 0.14 | 30/03/2017 | Finalised document ready for baseline incorporating stakeholder comments |
| 0.15 | 26/04/2017 | Uplifted to incorporate final comments |
| 0.16 | 15/06/2017 | Initial draft shared with GPSSs for the ITSP process |
| 0.17 | 15/09/2017 | Uplifted post ITSP process to align requirements with supplier discussions & clarifications sought (All changes have been tracked for ease of identification) |
| 0.18 | 05/10/2017 | Reworded the authorisation requirements (section 6.1.4) to reflect the current S1N & S2N functionality  Added Appendix B for further clarification on authorisations  Updated Glossary with two new terms: “Participation Model” & “Pattern of Behaviour”  Revised version shared with GPSSs as part of on-going elaborations of the requirements. |
| 0.19 | 22/11/2017 | Document updated following further ITPS discussions with GPSSs  Key changes:   * Delivered (Definition amended) * Roll over (Definition amended) * GUL-Fnc-05.03 (Functional requirement retracted and replaced by GUL-NF-01.02) * GUL-Fnc-05.04.1 (Requirement amended to reflect current data retention period) * GUL-Fnc-14 (Requirement amended, and associated foot note removed as Roll over already defined in the Glossary) * GUL-Fnc-17 (New requirement added. This has enabled the Authority to retract GUL-Rept-03 ‘Messaging Report’) * GUL-NF-01.02 (New requirement to replace GUL-Fnc-05.03) * GUL-NF10 ((New requirement added. This has enabled the Authority to retract GUL-Rept-03 ‘Messaging Report’) * Section 5.1.3 opening statement – Final sentence reading ‘The Suppliers must ensure that the final QA process (not including pre QA checks) does not exceed 5 working days’. Statement removed as the supplier will have to deliver to the timeframes detailed with the replacement Schedule 10 process. * GUL-AUTH-03.04 (Requirement amended to reflect ‘review extracted data for their own practice.’) * GUL-AUTH-04 (Requirement amended to reflect current data retention period) * Appendix – Revised Reporting Pack |
| 1.0 | 23/11/2017 | Final Baseline Version |
| 2.0 | 27/02/2018 | Baseline document updated to reflect change of scope i.e. removal of Data Extraction Authorisation Requirements at Section 6.1.4 (including Appendix B) and associated Stage 1 and Stage 2 Notification processing requirements. Additionally, changes to the reporting pack to reflect the change. |
| 2.1 | 12/03/2018 | Baseline document uplifted to Version 2.1  Section 6.1.6 – GP Practice Management  MoSCoW classification amended from a ‘Must’ to a ‘Should’ following elaboration sessions with the GPSSs and the project team. |
| 2.2 | 19/03/2018 | Baseline document uplifted to Version 2.2  No changes to the baseline requirements.  Reporting pack updated to specify Data Viewer date/time field for inclusion in the ‘Extract Success Report’ |
| 2.3 | 20/02/2019 | Up versioned to include all the changes implemented as part of GPES Uplift Step 1 & Step 2. GPES Reporting Pack removed from appendix and included as a separate document |

**Reviewers**

This document has undergone extensive review with stakeholders identified on the Project RACI.

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**Glossary of Terms**

| Term / Abbreviation | Description |
| --- | --- |
| Aggregated Data | Means data combined from several records containing totals rather than data traceable to an individual. Data is provided through analyses, statistical measures (e.g. mean, standard deviations), reports and summary tables. Aggregate data can be compiled from a number of sources including anonymised data from record level data. |
| Attribute Identifier (AID) | An Attribute ID (AID) in GPES terms is a unique id in UUID (Universally Unique Identifier) format used to identify elements of the Run-Time Parameter (RTP) and Query Result (QR) messages. |
| Changed Service | Changed service   * Issue new Business Rules to GPSS (for new Read2/CTV3/SNOMED codes and any other minor changes) * Issue new schedule to GPSS * Issue new “Run time dates” to GPSS * Issue Extraction Specification defining the new/ retired AID’s and any changes to other collection return GUIDs, version number, etc. for the changed service so that it can talk to CQRS   Note: The revised Business Rules and Run time dates will be supplied in a revised Extraction Specification |
| Cluster | A Cluster is a Read2/CTV3/SNOMED code or list of Read2/CTV3/SNOMED codes used within technical extraction specifications. These are used (alongside logic) to help establish if a patient meets the criteria specified by an indicator or count.  Clusters are typically used to define conditions, diagnoses, diseases, interventions and/or treatments amongst other elements sought by the extraction specification (Business Rules). |
| Component System | See description at GP Data Extraction System (GPDES) |
| CQRS | Calculating Quality Reporting Service |
| Data Delivery Window (DDW) | The Data Delivery Window is the period within which the Supplier must extract data from GP clinical systems and return a Data Extraction File to the Authority. The dates within this window will be communicated to the Supplier via the Data Extraction Schedule.  The Service Levels will be measured from when the Supplier Delivered the Data Extraction File to the Authority. |
| Data Extract File | The Data Extract Files (also referred to as the Query Result, or QR) are those files that are produced by the Supplier and sent to the Authority containing the Extract Data. |
| Data Extract File transfer mechanism | This is the secure messaging exchange mechanism for Health and Social Care e.g. MESH |
| Data Extraction Logic | The Data Extraction Logic is the Suppliers interpretation of Extraction Specification to facilitate collection of Extract Data specified by the Authority. |
| Data Extraction Schedule | The Data Extraction Schedule is maintained by the Authority and instructs the Suppliers when GP clinical data needs to be extracted to meet specific Extraction Specifications. The schedule contains the information relating to the Data Delivery Window. |
| Delivered | Delivered means that the data sender has received an acknowledgement confirming receipt of all applicable data from the intended recipient following the sending of a message (e.g. Data Extract File). |
| DME | Data Management Environment |
| Each extract instance | Examples of ‘each extract instance’ are 1 month extract of a 12 month extract cycle, quarterly extracts, etc. |
| ER | Extraction Requirement |
| ERP | Extended Resolution Period  The ERP is to allow Suppliers, where applicable, to return data post expiry of the RP End Date and to recoup a percentage of the Service Points that they otherwise would have incurred.  In order to facilitate data returns within the ERP the Supplier must be able to return data to:  - the original RTP past the cut-off date.  - an Adhoc RTP where the Authority determines this is required. |
| Extract Data | The Extract Data is the data produced by the Supplier in accordance with the Extraction Specification requirements. |
| Extraction Specification | The Extraction Specification is a combination of pre-defined data collection parameters e.g. Business Rules, etc. that are used to instruct Suppliers what Extract Data is required from GP clinical systems.  It also provides information on the frequency at which the extract needs to be run. |
| GP Data Extraction Service (GPDES) | The GP Data Extraction Service will become one of the Component Systems within GPSoC. It will be used by the Supplier to extract and deliver data to the Authority. |
| GPDIP | GP Data Implementation Programme |
| GPDfSU | GP Data for Secondary Uses |
| GPES | General Practice Extraction Service |
| GPET-E | General Practice Extraction Tool - Extraction |
| GPET-Q | General Practice Extraction Tool - Query |
| GPs | The term GPs refers both to General Practitioners and support staff within the practice e.g. Practice Manager, Practice Administrator, etc. |
| GPSoC | GP Systems of Choice |
| GPSS | GP System Supplier |
| IG | Information Governance |
| Incident | An Incident is an Event affecting a GPSoC Service that has been Deployed |
| MESH | Messaging Exchange for Social Care and Health |
| New Service | New service   * Issue new Business Rules to GPSS * Issue new schedule to GPSS * Issue new “Run time dates” to GPSS * Issue Extraction Specification defining the AID’s, version number etc. for the new service so that it can talk to CQRS   Note: The new Business Rules, Run time dates, defining of the collection return GUID, etc. will be supplied in a revised Extraction Specification |
| Participation Model | A set of attributes governing a GP Practice’s participation in an Extract Specification which are required when processing the Data collection authorisation. |
| Pattern of Behaviour (PoB) | The system and human behaviour associated with a Participation model. |
| Primary Care Data Model | There are variations between the database structures of the GP Systems developed by different GPSS. This poses a significant problem for the collection of comparable information. The Primary Care Data Model represents a simplified subset of some elements of patient-related information so as to provide a common reference by which Extraction Requirements can be expressed and which GPSS can support. |
| Practice Participation | Practice Participation refers to the list of GP practices that need to be included in a Service Request for Extract Data. The Practice Participation is a dynamic list. |
| QA | Quality Assurance |
| QR | Query Result |
| QRA | Query Result Acknowledgement |
| QS | Query Specification |
| Resolution Period | The Resolution Period means the period of 2 to 4 days in which the Supplier will carry out Incident Resolution in the provision of data from each predefined Data Delivery Window buckets. The Resolution Period can only be initiated once the Authority and the Supplier have a shared understanding that and Incident has occurred with a specific Data Extract File or its content post receipt.  Note: Where the Supplier has submitted a Data Extract File before the Data Delivery Window expiration, the Supplier shall be permitted to use the remaining Data Delivery Window timeframe and the associated Resolution Period to undertake corrective action and resend the Data Extract File. There are no limits to the number of times the Supplier can resend the Data Extraction File during the Resolution Period. Data Extraction Files submitted after the Resolution Period will be deemed to have failed.  The Resolution Period must NOT be used as an extension of the Data Delivery Window unless advised by the Authority post processing of an initial Data Extract File that has been received and failed processing within the Data Delivery Window timeframe.  The Resolution Period is only applicable for whole calendar days i.e. if the Authority informs the Supplier there was an issue at 15:30 on the 8th calendar day of the month for Bucket 2 extracts, the Supplier would have from 15:30 on 8th to the end of the 9th day to return Extract Data i.e.by 23:59:59 of the 9th calendar day of the month.  If the Supplier has re-submitted a Data Extract File and the Authority identifies an Incident with this file, the Resolution Period will not be reset and the Suppler must take corrective action and re-send the affected Data Extract File before expiry of the Resolution Period. |
| RTP | Run Time Parameter |
| RTPR | Run Time Parameter Response |
| Roll over | A Rollover is an existing service that the Authority wish to continue running in the next Financial Year with minimal change (e.g. update to clinical codes within existing clusters, dates for next financial year and version number. No requirement to add or remove indicators).  Rollover:   * Issue new Business Rules to GPSS (for new Read2/CTV3/SNOMED codes * Issue new schedule to GPSS * Issue new “Run time dates” to GPSS * Run Quality Assurance on the extract for the new FY   Note: The revised Business Rules and Run time dates will be supplied in a revised Extraction Specification |
| The Authority | The term ‘the Authority’ refers to the Health and Social Care Information Centre (trading as NHS Digital) acting as agent of the Secretary of State for Health. |
| The Supplier | The Supplier refers to the four principle GP System Suppliers (GPSSs). |
| TMS | Transaction Messaging Service |

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# Introduction

The purpose of this document is to present the business requirements to the Supplier(s) to provide continued support of providing data collections. These collections are currently commissioned by the Authority using the General Practice Extraction Service (GPES). The requirements within this document will enable the Authority to transition from the current GPET-E process and use an alternative service to request and process the Extract Data.

This document sets out the requirements as aligned to the scope set out in the GP Data for Secondary Uses Outline Business Case (OBC).

# Summary

This document comprises the requirements to deliver a service for the Authority to collect both patient-level data and aggregate data from GP clinical systems provided by GP System Suppliers (GPSSs) across England to support clinical professionals, commissioners, GP payment calculation service and researchers’ legitimate need to use patient-level data to inform decision-making and provide insight into the health and care of England’s citizens.

This service has been uplifted between October 2019 and May 2019 in line with these uplifted requirements. The service uplift was required because:

* The contracting arrangements with GPES suppliers come to an end by July 2018.
* There were limitations in the previous service’s ability to meet customer demand and requirements. As a consequence a range of tactical alternative solutions, which usually incurred additional cost to the NHS, existed for dealing with those requirements GPES cannot meet, and many requirements had no alternative solution.

# Objectives of Change

The requirements within this document have supported the following outcomes:

1. Ensure that a stable operational service for the reporting of patient data for national and local secondary uses from GP clinical systems is in place beyond July 2018, when the contracts for the current GPES service will have expired.
2. Reduce the operational costs of reporting patient data from GP clinical systems.
3. Improve the governance required to be able to manage the delivery of high quality solutions from all suppliers ensuring that the data is provided accurately, reliably, timely and cost effectively.
4. Provision of increased capacity to service more primary care data requests in a timely manner.

# Scope of Change



## In-scope

The in-scope items were required to ensure the Authority continued to offer a data extraction service for both existing and future data extraction demands. The implementation of the items will either be managed by the GP Data Implementation Programme (GPDIP) team or assigned to an appropriate work programme within the Authority / Supplier(s) to manage delivery.

* The ability to request and receive GP patient level data (including both patient identifiable and confidential) and/or aggregated data.
* Provision of functionality and processes to support the Authority’s Information Governance (IG) principles.
* Operational and management reporting.

# Data Flow Overview



## Data Flow Diagram



## Uplifted State Overview

The uplifted GPES has seen a simplification with regards to how data collection requests are scheduled and has seen a reduction in the number of messages exchanged.

Messages are now exchanged over MESH. The move to MESH has removed complex message exchanges that took place over TMS (MCCI responses). Furthermore, there is no longer a need for the GPET-Q 4000 series messages, as enhancements to the reporting solution and direct interaction with the Spine Directory Service (SDS) has negated the need for these message exchanges.

Furthermore, the Authority has been authorised to remove the need to support Stage 1 and Stage 2 notifications. The removal of these message exchanges has simplified the uplifted GPES solution..

Annual schedules will be shared with GPSSs in advance to allow better forward planning. Practice Participation information continues to be sent immediately prior to extracts being run via the MESH RTP.

The Suppliers continue to be responsible for testing their Data Extraction Logic in response to the Extraction Specification and will continue to liaise with the Authority to confirm that the proposed logic has fully met the requirements to satisfy the rules supplied. Once supplier testing is complete the Authority will undertake Quality Assurance (QA) of the Supplier’s extract.

All completed Data Extracts will flow to the NHS Digital solution (known as the General Practice Data Collector (GPDC)) for processing. GPDC will validate the data against extract specific business rules. Where the extract fails validation checks the high level reason for the failure(s) will be conveyed to the originating Supplier system by the NHS Digital solution. Further details will be communicated by the GPES business team directly with the Supplier. All extracts that pass the validation checks will be available to have data collected, as per customer requirements, and the resulting data will be disseminated to either CQRS or the Data Management Environment (DME).

In addition, the GPES Uplift has resulted in improved commercial and performance management arrangements with GPSS, providing:

* additional extraction capacity
* improved reporting and monitoring of each GPET-E solution by the Suppliers

# 

# Requirements

The requirements within this section have been prioritised using MoSCoW prioritisation technique.

For clarification:

* **MUST (M)**

Defines a requirement that has to be satisfied for the final solution to be acceptable.

* **SHOULD (S)**

This is a high-priority requirement that should be included if possible, within the delivery time frame. Workarounds may be available for such requirements and they are not usually considered as time-critical or must-haves.

* **COULD (C)**

This is a desirable or nice-to-have requirement (time and resources permitting) but the solution will still be accepted if the functionality is not included.

* **WON’T (W)**

This represents a requirement that stakeholders want to have, but have agreed will not be implemented in the current version of the system. That is, they have decided it will be postponed till the next round of developments.

## GPES Uplift

This section includes both the functional and non-functional requirements for the various components of the GPES Uplift solution.

### Overarching Requirements

#### Functional Requirements

| **HLR Ref** | **MoSCoW** | **Functional Requirements** |
| --- | --- | --- |
| **GUL-Fnc-01** | **Must** | The Supplier must provide Data Extract Files for those Extraction Specifications currently supported by the Authority. |
| **GUL-Fnc-02** | **Must** | The Supplier must support the addition of new[[1]](#footnote-2) Extraction Specifications as defined by the Authority. |
| **GUL-Fnc-03** | **Must** | The Supplier must conform to the latest published version of the Primary Care Data model. |
| **GUL-Fnc-03.01** | **Must** | The Supplier solution must be fully compliant with the latest published version of GPES-I. |
| **GUL-Fnc-04** | **Must** | The Supplier must provide the Extract Data defined at GUL-Fnc-01 in accordance with the Data Extraction Schedule.  See Appendix A for a preliminary example of the Data Extraction Schedule which will be further elaborated during Supplier engagement. |
| **GUL-Fnc-04.01** | **Must** | The Supplier must utilise the dates and practice cohort (and where applicable patient cohort) information supplied in the RTP prior to running any Data Extracts. |
| **GUL-Fnc-04.02** | **Must** | The Supplier must ensure they send Extract Data within the Execution and Cut-off dates communicated to the Supplier by the Authority via the RTP. |
| **GUL-Fnc-04.03** | **Must** | The Supplier must ensure their proposed solution can return Extract Data beyond the Cut-off date provided within the RTP to enable data returns with the RP and ERP. |
| **GUL-Fnc-04.04** | **Must** | The Supplier must ensure their proposed solution is capable of handling RTPs that no longer contain clinical codes, as this information will be phased out from the message and instead supplied via the ER specification documentation. |
| **GUL-Fnc-05** | **Must** | The Supplier must be capable of receiving the success or failure of Data Extract File processing by the Authority and take appropriate action. |
| **GUL-Fnc-05.01** | **Must** | Where the Data Extract File processing is successful the Supplier must take the appropriate action to delete the file, on receipt of an acknowledgment of successful processing by the Authority. |
| **GUL-Fnc-05.02** | **Must** | Where the Data Extract File processing has resulted in failures the Supplier must take the appropriate action to remedy the Incidents and re-submit the corrected Data Extract File to the Authority for re-processing within the Data Delivery Window and/or Resolution Period. |
|  |  |  |
| **GUL-Fnc-05.04** | **Must** | The Supplier must retain the Data Extract File until the Authority sends back an acknowledgement that it has received and validated the message. |
| **GUL-Fnc-05.04.1** | **Must** | If the Data Extract File is successfully processed the Supplier is free to delete the Data Extract File, subject to the retention rules defined by applicable legislation, it is currently 6 years. The period must be configurable. |
| **GUL-Fnc-05.05** | **Must** | If the Authority fails to acknowledge receipt of a Data Extract File by the end of the Data Delivery Window the Supplier records an incident against the Authority and remedial activities are undertaken to address the Incident(s). |
| **GUL-Fnc-06** | **Must** | The Supplier must limit Extract Data requests to those practices identified in Practice Participation information provided by the Authority via the RTP. |
| **GUL-Fnc-06.01** | **Must** | The Supplier must utilise the latest Practice Participation information from the Authority prior to generating the Extract Data. |
| **GUL-Fnc-07** | **Must** | The Supplier must ensure they are capable of returning extract data for a specific patient(s)[[2]](#footnote-3) from a specific practice[[3]](#footnote-4) notified by the Authority. |
| **GUL-Fnc-08** | **Must** | The Supplier must develop the Data Extraction Logic in accordance with the information supplied within the Extraction Specification. |
| **GUL-Fnc-11.01** | **Must** | The Supplier must ensure that data for a single practice in the Data Extract File is not split across multiple files. |
| **GUL-Fnc-11.02** | **Must** | The Supplier must ensure Data Extract File(s) are returned to the Authority to a predesignated end point destination, as defined within the Extraction Specification. |
| **GUL-Fnc-11.02.1** | **Must** | The Supplier must be able to configure the end point destination. |
| **GUL-Fnc-14** | **Must** | The Supplier must be capable of rolling over a service from one financial year to the next within the timescales defined by them for the development of Rollovers. |
| **GUL-Fnc-16** | **Must** | The Supplier must implement mechanisms within their service to include controls and checks to assure their data extract release management process. |
| **GUL-Fnc-16.01** | **Should** | The Suppler should consider automating this process to enable them to provide evidence, by way of reporting, to the Authority. |
| **GUL-Fnc-17** | **Must** | The Supplier must log all messages sent to the Authority associated with an extract at practice level including date, time and message type sent to enable Incident resolution. |
| **GUL-Fnc-18** | **Must** | The Supplier must provide a facility to enable GPs to view data extracted per service. |
| **GUL-Fnc-18.01** | **Must** | The Supplier must ensure the data presented to the GPs is the data that has been extracted and that will be provided to the Authority. |
| **GUL-Fnc-18.02** | **Must** | The Supplier must ensure that GPs are only able to review extracted data for their own practice. |
| **GUL-Fnc-18.03** | **Must** | The Supplier must ensure all user activity within their data viewer facility is audited i.e. access, view, export of file. |

#### Non Functional Requirements

| **Requirement Ref** | **MoSCoW** | **Non Functional Requirements** |
| --- | --- | --- |
| **GUL-NF-01** | **Must** | The Supplier must ensure that Data Extract Files are Delivered[[4]](#footnote-5) to the Authority within the Data Delivery Window as defined within the Data Extraction Schedule. |
| **GUL-NF-01.02** | **Must** | The Supplier must log an Incident with the Authority for any data submissions that have not been acknowledged by the Authority. |
| **GUL-NF-02** | **Must** | The Supplier must be capable of running an agreed number of Extract Data based on the Complexity and Capacity model defined by the Authority. |
| **GUL-NF-03** | **Must** | The Supplier solution must conform to file compression requirements stipulated in the latest published version of the GPES-I. |
| **GUL-NF-04** | **Must** | The Supplier must ensure the data passes validation in accordance with the schema. |
| **GUL-NF-07** | **Must** | The Supplier must ensure that the collection of data does not have an adverse effect on business operational services. |
| **GUL-NF-08** | **Must** | In the event of the Supplier returning no data or incorrect data, the Supplier must notify affected practices to provide them with resolution information. |
| **GUL-NF-08.01** | **Must** | The Supplier must agree communications destined for GPs with the Authority before they are sent. |
| **GUL-NF-09** | **Must** | The Supplier must adhere to the Authority’s Audit requirements as outlined in Information Governance: IG Audit & Alerts Gold Standard document. |
| **GUL-NF-10** | **Must** | The Supplier must ensure logs associated with an extract at practice level must be made available to the Authority on demand to support incident resolution (See Functional Requirement GUL-Fnc-17) |

### Re-Use of Attribute Identifier

The purpose of this requirement will enable AIDs to be re-used across multiple separate data collection requests. The primary benefit being, where a data collection request moves from one year to another the AID set does not need to be replaced.

|  |  |  |
| --- | --- | --- |
| **Requirement Ref** | **MoSCoW** | **Requirements** |
| **AID-Fnc-01** | **Must** | The Supplier must support the use of the same AIDs across multiple Data Extraction Specifications to facilitate the rollover of data collection activity from one year to the next. |

### Extract Testing and Authority’s Quality Assurance

The purpose of these requirements is to provide the Suppliers with more scope to undertake detailed testing of Data Extraction Logic prior to submitting test results to the Authority for QA. The Quality Assurance Process consists of two steps:

1. Pre-QA
2. QA

Prior to Pre-QA , the Authority will provide the Suppliers with a test pack consisting of a set of test data and expected results, where the expected results are generated using “end of year” dates.

During pre-QA, Suppliers use the test pack to test that their system produces the same output as the expected results. Issues discovered with test packs and with the Supplier extract logic are corrected during pre-QA.

If issues are discovered with the test packs the Authority would re-generate the expected results (and underlying test data files if necessary) and re-issue the test data pack. The pre-QA period will be deemed complete once the Supplier and Authority are satisfied that the test packs are correct and the Supplier can demonstrate that their system-generated data match the expected results. The Supplier will then be ready to begin QA.

During QA, the Supplier is required to produce a set of results using the test data pack available at the end of the pre-QA activity with “end of year” dates and a set of results using the same test data files but with “mid-year” dates (where we do not publish the “mid-year” expected results).

Only when the test results have been QA’d by the Authority, can Suppliers proceed to full data extraction.

|  |  |  |
| --- | --- | --- |
| **Requirement Ref** | **MoSCoW** | **Requirements** |
| **GUL-QA-01** | **Must** | The Supplier must use NHS Digital generated test data in a pre-QA environment to verify the Data Extraction Logic for each Extraction Specification prior to formal QA. |
| **GUL-QA-01.04** | **Must** | The Supplier must provide pre-QA test evidence in the form of a DEF meeting the pre-QA test scenario. |
| **GUL-QA-02** | **Must** | The Supplier must upload the test data files provided by the Authority to the Supplier Test Environment(s). |
| **GUL-QA-02.01** | **Must** | The Supplier must be capable of supporting the Authority’s QA process for multiple data extracts simultaneously. |
| **GUL-QA-02.01.1** | **Must** | The Supplier must inform the Authority if there are any issues or changes required to the Test Data provided. |
| **GUL-QA-03** | **Must** | The Supplier must provide a QA output for Extract Data to the Authority’s test environment. |
| **GUL-QA-04** | **Must** | The Supplier must check the QA results and resolve any Incidents within the Authority defined development period. |
| **GUL-QA-05** | **Must** | The Supplier must implement a dedicated test environment to undertake pre-QA and QA activity. |
| **GUL-QA-05.01** | **Must** | During pre-QA the Supplier must be capable of reviewing resulting QR without any interactions with the GPDC test instance. |
| **GUL-QA-06** | **Must** | The Supplier must ensure their test environments have a dedicated end point to facilitate data exchanges via the Authority’s Data Extract File transfer mechanism. |
| **GUL-QA-07** | **Must** | The Supplier must generate their own RTP during the pre-QA process. |
|  |  |  |

### Reporting Requirements

In order to support the Authority’s business processes the following reports will need to be made available for use by the Authority’s business units and Service Management teams.

| **Requirement Ref** | **MoSCoW** | **Requirements** |
| --- | --- | --- |
| **GUL-Rept-01** | **Must** | The Supplier must provide the Service Management and Business reports detailed within the GPES Uplift Reporting Pack. |
| **GUL-Rept-01.01** | **Should** | The Supplier should automate those reports which are required to be delivered during the extract process. |
|  | **Must** | The Supplier must ensure the reports (Rep-01 & Rep-02) consolidate data gathered from each individual practice.  (Need to get the wording right for this!) Personally, I think this statement needs to be on the spreadsheet for each report. |

### GP Practice Management

|  |  |  |
| --- | --- | --- |
| **Requirement Ref** | **MoSCoW** | **Requirements** |
| **GPPM-01** | **Should** | The Supplier should notify the Authority where practices are in the process of transition from one supplier to another or merging. |
| **GPPM-02** | **Should** | Where a practice moves to a new GP System, the Supplier shall work with the supplier of the replacement GP System to ensure continuity of Extract Data. |

### File Transfer Mechanism

| **Requirement Ref** | **MoSCoW** | **Requirements** |
| --- | --- | --- |
| **FTM-01** | **Must** | The Supplier must conform to the Authority’s Data Extract File transfer mechanism. |
| **FTM-02** | **Must** | The Supplier must send all data securely. |
| **FTM-03** | **Must** | The Supplier must utilise the Authority’s Data Extract File transfer mechanism for sending the Data Extract File. |
| **FTM-04** | **Must** | The Supplier must compress the Data Extract Files using gzip compression prior to submission over the Data Extract File transfer mechanism, i.e. not to rely on the Data Extract File transfer mechanism’s file compression functionality. |
| **FTM-05** | **Must** | The Supplier must monitor failures to send Data Extract Files across the Data Extract File transfer mechanism interface. |
| **FTM-06** | **Must** | The Supplier must use the Integration Environment Data Extract File transfer mechanism for all testing and submissions for QA. |
| **FTM-07** | **Must** | The Supplier must undertake malware checks of all Data Extract File prior to submission to the Authority. |

### Monitoring

| **Requirement Ref** | **MoSCoW** | **Requirements** |
| --- | --- | --- |
| **MON-01** | **Must** | The Supplier must update their Performance Monitoring Solution and associated Performance Monitoring Solution Document (PMSD) to enable them to report against the required service levels and deliver any regular Service Management Reports. |
| **MON-02** | **Must** | The Supplier must monitor and be alerted to events leading to Incidents with the collection of Extract Data from their practices. |

### Incident Resolution

| **Requirement Ref** | **MoSCoW** | **Requirements** |
| --- | --- | --- |
| **IR-01** | **Must** | The Supplier must resolve Incidents including validation failures at Data Extract File level in line with GPSoC Incident Management. |
| **IR-02** | **Must** | The Supplier must resolve Incidents including validation failures at Extract Data level in line with GPSoC Incident Management. |

### Testing

| **Requirement Ref** | **MoSCoW** | **Requirements** |
| --- | --- | --- |
| **TEST-01** | **Must** | The Supplier must adhere to the GPSoC schedules applicable to their existing commercial arrangements with the Authority. |
| **TEST-01.01** | **Must** | The Supplier must adhere to Schedule 6.2 (End to End Assurance) v7.0. |
| **TEST-02** | **Must** | The Supplier must adhere to the testing requirements referenced within the GPES Uplift Service Outline Assurance Approach that are above and beyond those already defined in the afore mentioned GPSoC Schedules. |

### GPSoC Standards

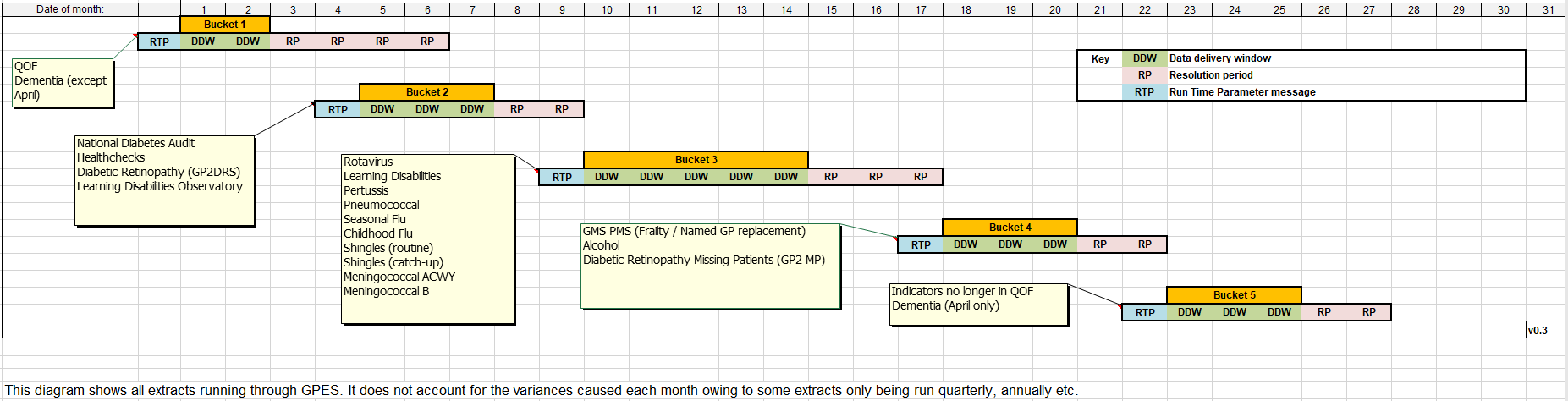
| **Requirement Ref** | **MoSCoW** | **Requirements** |
| --- | --- | --- |
| **GPSoC-01** | **Must** | The Supplier must adhere to Security and Access requirements as outlined in Schedule 2.5, GPSoC Security Management Plan. |
| **GPSoC-02** | **Must** | The Supplier must deliver Capacity Management function as outlined in Schedule 2.2, GPSoC Service Level Specification. |
| **GPSoC-03** | **Must** | The Supplier must provide support during Service Hours in line with Schedule 2.2, GPSoC Service Level Specification. |
| **GPSoC-04** | **Must** | The Supplier must maintain the GP Data Extract System component so as to provide Service Availability in line with Schedule 2.2, GPSoC Service Level Specification. |
| **GPSoC-05** | **Must** | The Supplier must adhere to Schedule 8.6, Business Continuity and Disaster Recover to provide service continuity following a Disaster or the likelihood of a potential Disaster. |
| **GPSoC-06** | **Must** | The Supplier must provide a function to resolve any Incidents identified during the monitoring process within Schedule 2.2, GPSoC Service Level Specification. |
| **GPSoC-07** | **Must** | The Supplier must adhere to applicable Service Levels within Schedule 2.2, GPSoC Service Level Specification. |
| **GPSoC-07.01** | **Must** | The Supplier must adhere to the Service Level requirements referenced within the Service Level Specifications that are above and beyond those already defined in the afore mentioned GPSoC Schedules. |

For a list of retracted requirements, see Appendix B – Retracted requirements.

# Appendix A

## Example of a pre-defined Data Delivery Window

The following picture illustrates the Data Delivery Windows by each service.



Each Financial Year there are a set of extracts to be developed. Depending on NHS England requirements some may be rollovers, some may have considerable changes and others may be new services.

The process will be slightly different depending on the level of change:

**Rollover:**

* Issue new Business Rules to GPSS (for new Read2/CTV3/SNOMED codes
* Issue new schedule to GPSS
* Issue new “Run time dates” to GPSS
* Run Quality Assurance on the extract for the new FY

Note: The revised Business Rules and Run time dates will be supplied in a revised Extraction Specification

**New service**

* Issue new Business Rules to GPSS
* Issue new schedule to GPSS
* Issue new “Run time dates” to GPSS
* Issue Extraction Specification defining the AID’s, version number etc. for the new service so that it can talk to CQRS

Note: The new Business Rules, Runtime dates, defining of the collection return GUID, etc. will be supplied in a revised Extraction Specification

**Changed service**

* Issue new Business Rules to GPSS (for new Read2/CTV3/SNOMED codes and any other minor changes)
* Issue new schedule to GPSS
* Issue new “Run time dates” to GPSS
* Issue Extraction Specification defining the new/ retired AID’s and any changes to other collection return GUIDs, version number, etc. for the changed service so that it can talk to CQRS

The revised Business Rules and Run time dates will be supplied in a revised Extraction Specification.

Extraction specifications can be issued as ER (Extraction Requirements Packs (for new extracts and changed services) or as SCR (Service Continuation Request) Packs for rollovers. Note that the format of the files included is the same for both ER and SCR Packs.

The sample provided is for the Rotavirus FY19/20 SCR Pack:



# Appendix B – Retracted requirements

**Functional requirements:**

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| --- |
| **GUL-Fnc-05.03** |
| **GUL-Fnc-06.02** |
| **GUL-Fnc-06.03** |
| **GUL-Fnc-06.04** |
| **GUL-Fnc-06.05** |
| **GUL-Fnc-06.05.1** |
| **GUL-Fnc-09** |
| **GUL-Fnc-10** |
| **GUL-Fnc-11** |
| **GUL-Fnc-11.01.1** |
| **GUL-Fnc-12** |
| **GUL-Fnc-12.01** |
| **GUL-Fnc-12.02** |
| **GUL-Fnc-12.03** |
| **GUL-Fnc-12.04** |
| **GUL-Fnc-12.05** |
| **GUL-Fnc-12.06** |
| **GUL-Fnc-12.07** |
| **GUL-Fnc-13** |
| **GUL-Fnc-15** |

**Non Functional Requirements**

|  |
| --- |
| **GUL-NF-01.01** |
| **GUL-NF-05** |
| **GUL-NF-06** |

**Extract Testing and Authority’s Quality Assurance**

|  |
| --- |
| **GUL-QA-01.01** |
| **GUL-QA-01.02** |
| **GUL-QA-01.03** |

**Data Extraction Authorisation Requirements**

Requirements retracted following confirmation from the NHS Digital - Primary Care Domain that extracts will be subject to directions, therefore there is no requirements to seek permission for the collection and dissemination of GP Data.

|  |
| --- |
| **GUL-AUTH-01** |
| **GUL-AUTH-01.01** |
| **GUL-AUTH-01.02** |
| **GUL-AUTH-01.03** |
| **GUL-AUTH-01.04** |
| **GUL-AUTH-01.05** |
| **GUL-AUTH-01.05.01** |
| **GUL-AUTH-01.06** |
| **GUL-AUTH-01.07** |
| **GUL-AUTH-02** |
| **GUL-AUTH-02.01** |
| **GUL-AUTH-02.02** |
| **GUL-AUTH-02.03** |
| **GUL-AUTH-03** |
| **GUL-AUTH-03.01** |
| **GUL-AUTH-03.02** |
| **GUL-AUTH-03.03** |
| **GUL-AUTH-03.04** |
| **GUL-AUTH-03.05** |
| **GUL-AUTH-03.06** |
| **GUL-AUTH-03.07** |
| **GUL-AUTH-03.08** |
| **GUL-AUTH-04** |

# Appendix C – Functional Requirements Specification

The functional requirements specification provides business context for the high level requirements included in this document, and can be used in partnerships with the GPES-I technical specification.



1. Information relating to the support of new Extraction Specifications is set out in the Invitation to Submit Proposal document. [↑](#footnote-ref-2)
2. Patient Cohort is used in specific extracts such as Diabetic Retinopathy (Missing Patients). [↑](#footnote-ref-3)
3. A specific practice can either be the current GMS registration practice for the patient(s) and/or past practice(s) as defined by the Authority. [↑](#footnote-ref-4)
4. Please refer to the glossary [↑](#footnote-ref-5)