


| | | | | |
|---|---|---|------------------------------------|--------------|
|  | Commercial in Confidence GP2GP Supplementary Specification: Handling A-B-A Transfers | | | |
| | Programme | Programme & Service Delivery | DOCUMENT RECORD ID KEY | |
| | Sub-Prog / Project | GP2GP | <i>NPFIT-PC-BLD-0175.03</i> | |
| | Prog. Director | Kemi Adenubi | | |
| | Owner | Jill Hepworth | Version | V1.3 |
| | Author | Will Nossiter | | |
| | Version Date | 14th May 2014 | Status | Draft |

GP2GP Supplementary Specification Handling A-B-A Transfers

Commercial in Confidence

| | |
|-----------------------------|--|
| Subject | GP2GP: Handling A-B-A Transfers |
| Reference | GP2GP Issue |
| Supplier(s) | All |
| Summary | <p>This supplementary specification provides the detailed requirements for handling Returning Patient record transfers.</p> <p>The document defines clear rules for A-B-A processing for both Sending systems and Requesting/Receiving systems within the transfer process. It details how amendments, additions and deletions are handled as the record is passed from system to system.</p> |
| Justification | <p>Without the implementation of these requirements, a significant proportion (~10%) of electronic patient records transferred using GP2GP will not be allowed to be integrated. This is because the technical and clinical safety issues associated with integrating records demand unique identifiers to match elements of the original and returning health care record. This solution is step 2 of 4 towards the gold standard regenerative change solution.</p> |
| Rollout Dependencies | Conformance with GP2GP Compliance Specification V2.2b |

Amendment History:

| Issue | Version | Date | Amendment History |
|-------|---------|---------------------------|--|
| 01 | 0.1 | 5-Aug-2010 | This requirement was originally documented in the GP2GP Compliance Specification V2.2 specification published in October 2009 Release 6.1. This document was created as part of the 2010 specification review and rewrite. |
| 01 | 0.2 | 22-Nov-2010 | Updated with tabular requirements. |
| 01 | 0.3 | Jan 2011 | Various editing changes following initial review |
| 01 | 0.4 | 22 nd Jan 2011 | Various edits and drafting notes added following peer review. |
| 01 | 0.5 | 25 th Jan 2011 | Draft for approval as a starting point for a supplier workshop. |
| 01 | 1.0 | 25 th Jan 2011 | Approved |
| 02 | 1.1 | 20 th Dec | Re-drafted following endorsement of a roadmap |

Commercial in Confidence

| | | | |
|----|-----|---------------------------|---|
| | | 2013 | for the Returning Patient solution by the Joint GP IT Committee. |
| 02 | 1.2 | 5 th Feb 2014 | Re-instated GUID and ReplacementOf GUID tracking requirements |
| 03 | 1.3 | 14 th May 2014 | Clarified requirement on copying content from suppressed record in returning patient scenario |

Forecast Changes:

| Anticipated Change | When |
|--------------------|------|
| None | |

Reviewers:

This document must be reviewed by the following. Delegate as necessary.

| Name | Title / Responsibility | Date | Version |
|-----------------|---|------|---------|
| Aled Greenhalgh | GP2GP Technical Architect | | 1.3 |
| Mike Curtis | Patient Facing Systems Lead Architect | | 1.3 |
| Jill Hepworth | GP2GP Programme Manager | | 1.3 |
| Pete Turnbull | GP2GP Integration and Clinical Validation Manager | | 1.3 |
| Dave Bagnall | GP2GP Compliance Test Manager | | 1.3 |
| Ramsey Baker | GP2GP Deployment Manager | | 1.3 |
| John Williams | GP2GP Clinical Safety Lead | | 1.3 |
| GPSoC Suppliers | | | 1.2 |

Approvals:

This document requires the following approvals:

| Name | Signature | Title / Responsibility | Date | Version |
|---------------|-----------|----------------------------|------|---------|
| John Williams | | GP2GP Clinical Safety Lead | | |
| Jill Hepworth | | GP2GP Programme Manager | | |

Distribution:

Reviewers and approvers plus:

| Name | Title / Responsibility | Date | Version |
|-------------|----------------------------|------|---------|
| Alan Hassey | GP2GP Project Board Member | | 1.2 |

Commercial in Confidence

| | | | |
|--------------|-------------------------------|--|-----|
| Paul Cundy | GP2GP Project Board Member | | 1.2 |
| | GPSoc Release Managers | | |
| Kemi Adenubi | HSCIC GPIT Programme Director | | 1.3 |

Document Status:

This is a controlled document.

This document version is only valid at the time it is retrieved from controlled filestore, after which a new approved version will replace it.

On receipt of a new issue, please destroy all previous issues (unless a specified earlier issue is base-lined for use throughout the programme).

Related Documents:

This document is supplemental to the GP2GP R2.2 Requirements Specification document and must be read in conjunction with this. This in itself forms part of the GP2GP R2.2 Compliance Baseline Index which contains a list of all documents relating to GP2GP R2.2 compliance.

Glossary of Terms:

The table below contains new terms introduced in this document.

| Term | Acronym | Definition |
|----------------------------|---------|--|
| | A-B-A | Indicates that the patient is returning to a practice where they have a previous medical record. This could include A-B-C-D-A, A-B-C-D-B, etc |
| Globally Unique Identifier | GUID | A globally unique number assigned by a system as an identifier for a data item (e.g. EHRComposition, EHRStatement) held in the system. |
| Human Generated Change | HGC | Change generated by a user through a user interface (see also MGC). |
| Machine Generated Change | MGC | Change generated by a computer system (not a user) when processing a record. |
| Original GUID | - | Used to mean the first GUID identifier assigned to a newly created EHRComposition or EHRStatement either upon creation or when it is first placed into an EHR Extract. |

Commercial in Confidence

| Term | Acronym | Definition |
|-----------------------|---------|---|
| ReplacementOf GUID | - | A logical GUID attribute of a StatementRef or CompositionRef identified within the ReplacementOf component within the message which is used to identify the Original GUID of the EHRComposition or EHRStatement that has undergone a HGC. |

Contents

- 1. Introduction7
 - 1.1. Stepwise approach7
- 2. System Requirements for Step 28
 - 2.1. Handling the Received EHR Extract8
- 3. System Requirements to support Step 4 10
 - 3.1. Generating the EHR Extract 10
 - 3.2. Tracking changes **Error! Bookmark not defined.**
 - 3.3. Changes to Link Sets..... 12

1. Introduction

A stepwise approach to delivering a “gold standard” Returning Patient solution was endorsed by the Joint GP IT Committee and the GP2GP Programme Board during 2013. This is in response to the difficulties identified (in supplier workshops during 2010/11) in delivering the proposed gold standard regenerative approach at this time.

1.1. Stepwise approach

The stepwise approach can be summarised as:

- 1) Re-activate the patient’s existing record on re-registration and the incoming EHR Extract must not be integrated. It may only be “filed as an attachment”.
- 2) Choose one of the records by either:
 - a. Integrating the incoming EHR Extract and suppressing the patient’s existing record (default), or
 - b. Reactivating the patient’s existing record, storing and suppressing the incoming EHR Extract.
- 3) Mandate integration (option 2a) to maximise unbroken chains of transfers.
- 4) Merge existing record and incoming EHR Extract tracking all changes, handling any broken chain heuristics for paper transfers.

Step 1 is the status of GP2GP in R1.1a live estate in England. This specification addresses the requirements for steps 2a and 2b. Step 3 will be taken based on utilisation figures at some point in the future. Step 4 will be addressed when regenerative change can be supported and the risk of broken chains of transfers has significantly reduced. There are a number of requirements included in this document to support step 4 which is generally referred to as the “gold standard” Returning Patient solution.

2. System Requirements for Step 2

The following requirements are specific to implementing step 2 of the stepwise approach.

2.1. Handling the Received EHR Extract

The following requirements apply to handling the received EHR Extract on a R2.2b or later compliant system at the point it is presented to a user for processing. These are in addition to other requirements stated elsewhere in the R2.2 specification.

| Req ID | Requirement Text |
|--------|---|
| AB01 | <p>On receipt of the EHR Extract, the Requesting system shall check if the patient is a Returning Patient and therefore in a Returning Patient scenario.</p> <p>If a Returning Patient scenario, the following requirements apply.</p> |
| AB02 | <p>The Requesting system shall provide the user with the ability to view both the received EHR Extract and any of the patient’s previous records including ones that have been archived or suppressed.</p> |
| AB02.1 | <p>The Requesting system should provide the user with the ability to compare the received EHR Extract and any of the patient’s previous records including ones that have been archived or suppressed.</p> |
| AB02.2 | <p>The Requesting system shall provide the user with the ability to copy content added to the returning patient’s record since the record last left the practice. The Requesting system must only permit copying from the patient’s suppressed record to the patient’s active current record where the user has chosen to Store and suppress the received EHR Extract and reactivate the patient’s previous record as described in AB03.1 option 1.</p> <p>This facility shall be available indefinitely after integration or suppression of the incoming EHR Extract.</p> <p>Note that the supplier must implement this in cooperation with the Authority’s GP2GP interoperability team.</p> |
| AB02.3 | <p>The Requesting system shall, when copying content added to a returning patient’s record since the patient’s record last left the practice, copy additions to the patient’s record based on comparing date of the addition with date of the record leaving the practice.</p> |
| AB02.4 | <p>The Requesting system may, when copying content added to a returning patient’s record since the patient’s record last left the practice, copy modifications to the patient’s record based on replacement semantics described in GS01 to GS16. This must only be possible where the EHR Extract ID of the received EHR Extract matches the EHR Extract ID of the EHR Extract originally sent then the patient left the practice.</p> |

Commercial in Confidence

| Req ID | Requirement Text |
|--------|--|
| AB03 | <p>The Requesting system shall provide the user with the options to:</p> <ol style="list-style-type: none"> 1) Reject the received EHR Extract because it is for the wrong patient or is the wrong record – Response code 17 2) Integrate the received EHR Extract 3) Defer until a later time <p>If option 1 is selected, the Requesting system shall send an Application Acknowledgement containing the response code for option 1.</p> <p>For the avoidance of doubt, the Requesting system shall not provide any other options to the user.</p> |
| AB03.1 | <p>If the user selected to integrate in AB03 (option 2), the Requesting system shall provide the user with further options to:</p> <ol style="list-style-type: none"> 1) Store and suppress the received EHR Extract and reactivate the patient's previous record – Response code 15 2) Integrate the received EHR Extract and suppress the patient's previous record – Successful GP2GP transfer outcome. 3) Defer until a later time <p>If option 1 is selected, the Requesting system shall send an Application Acknowledgement containing the response code for option 1.</p> <p>If option 2 is selected, the Requesting system shall send an Application Acknowledgement <u>without</u> a response code.</p> <p>For the avoidance of doubt, the Requesting system shall not provide any other options to the user.</p> |
| AB04 | <p>If the Requesting system fails to complete the user's chosen option in AB03/AB03.1, it shall send an Application Acknowledgement containing response code 11.</p> |
| AB04.1 | <p>The Requesting system should automatically log the issue and notify the supplier.</p> |
| AB04.2 | <p>The Requesting system shall inform the user of the issue and what they should do to resolve it. This shall be either:</p> <ul style="list-style-type: none"> - If AB04.1 has been provided, inform the user of this. - If AB04.2 has not been provided, inform the user to contact the supplier with their contact details and appropriate information to identify the fault and transfer. |

3. System Requirements to support Step 4

The following requirements apply to support a future Step 4 of the stepwise approach to the Returning Patient solution. This is known as the “gold standard” solution.

3.1. Handling the Received EHR Extract

The following requirements apply to handling the received EHR Extract on a R2.2b or later compliant system at the point it is presented to a user for processing. These are in addition to other requirements stated elsewhere in the R2.2 specification.

| Req ID | Requirement Text |
|--------|--|
| AB05 | The Requesting system shall store the ID of the EHR Extract for future use in the “gold standard” regenerative change Returning Patient solution. See the GP2GP R2.2 Requirements Specification S44, S45 |
| AB06 | The Requesting system shall store the ID and ReplacementOf ID of each statement in the EHR Extract for future use in the “gold standard” regenerative change Returning Patient solution. See the GP2GP R2.2 Requirements Specification S93 |

3.2. Tracking Changes and Generating the EHR Extract

The following requirements apply to generating the EHR Extract for a R2.2b or later system and are in addition to other requirements stated elsewhere.

| Req ID | Requirement Text |
|--------|--|
| GS01 | All requirements in this section shall only apply to patient records that have previously been the subject of a GP2GP Transfer, i.e. the record originated from an EHR Extract that was integrated into the patient’s record previously. |
| GS02 | A data item imported into the system with an existing ‘ReplacementOf’ GUID shall not have that GUID changed or deleted, i.e. it shall be perpetuated throughout the existence of that data item. |
| GS03 | An EHR Extract imported into the system shall have its ID preserved (under requirement AB05) and any future export of a new EHR Extract shall re-use this ID. If an Extract ID doesn’t already exist, the Sending system shall generate a new GUID, store it and populate the Extract ID of the EHR Extract message with it. |

Commercial in Confidence

| Req ID | Requirement Text |
|--------|--|
| GS04 | <p>A new data item added to a record shall either have a GUID assigned to it on creation or when a subsequent EHR Extract is created. It shall not have the 'ReplacementOf' GUID populated at any time.</p> <p>If a GUID is added when the item is created and has never been included in an Extract since that time, there is no need to change it if the item is changed or deleted.</p> |
| GS05 | <p>If an existing data item is changed as a result of a Human Generated Change (HGC), one or more times, the system shall ensure that when the data item is included in a subsequent EHR Extract that:</p> <ul style="list-style-type: none"> • The 'ReplacementOf' GUID contains the GUID the item had when it was originally imported from the previous received EHR Extract (stored under requirement AB06) unless a ReplacementOf GUID is already present, and • The 'GUID' field contains a new GUID assigned by the system. Note that it is not necessary to keep assigning or changing GUIDs if multiple changes are made to the item – it is only necessary to have a single new GUID generated when the data item is included in the next EHR Extract, and • The data item's attributes in the EHR Extract are the current values and that previous values (before a change was made) are not included. |
| GS06 | <p>If an existing data item is changed as a result of a Machine Generated Change (MGC) the system shall not change the GUID and shall not change the ReplacementOf GUID.</p> |
| GS07 | <p>The GP system shall utilise the DCE GUID format only for the generation of GUIDs</p> |
| GS08 | <p>If any part of an EhrComposition is edited by the end user (HGC) the system shall allocate a new GUID to the Composition and, if there is no ReplacementOf element, copy the original GUID to a new ReplacementOf element.</p> |
| GS09 | <p>If any part of an EhrStatement is changed or deleted the parent EhrComposition shall also be marked as changed, i.e. given a new GUID and, if there is no ReplacementOf element, copy the original GUID to a new ReplacementOf element.</p> <p>Where nested CompoundStatements are present it is not necessary to update each ancestor CompoundStatement – it is only necessary to update the parent EhrComposition.</p> |
| GS10 | <p>If an EhrStatement is deleted it shall be replaced by an EhrEmpty statement type with a new GUID and its ReplacementOf value being that of the original EhrStatement that was deleted.</p> <p>Note that if a CompoundStatement is deleted all child EhrStatements shall also be regarded as deleted. Note also that it is not possible to nest EhrEmpty components.</p> |

| Req ID | Requirement Text |
|--------|--|
| GS11 | If an EhrComposition is deleted on the system each of its child EhrStatements shall be individually marked as deleted (using the EhrEmpty statement) and the statusCode of the EhrComposition shall be set to 'NULLIFIED'. |

3.3. Changes to Link Sets

| Req ID | Requirement Text |
|--------|---|
| GS14 | If the subject of a Link Set is deleted (e.g. a problem is deleted) the EhrEmpty statement shall be used to convey the deletion. |
| GS15 | If a member of a Link Set is deleted: <ul style="list-style-type: none"> • the member element (e.g. EhrStatement) shall be marked as deleted in the usual way (i.e. EhrEmpty used on any subsequent extract) and • the ID of the removed item shall be removed from the set and the LinkSet statement processed as an edit (i.e. new GUID and if blank, ReplacementOf GUID Set) |
| GS16 | If a link is deleted but the member element has not been deleted, the LinkSet Statement shall be updated as an edit. |