

	<b>Commercial in Confidence</b> <b>GP2GP Supplementary Specification</b> <b>Handling Attachment Types</b>			
	Programme	<i>NPFIT</i>	DOCUMENT RECORD ID KEY	
	SubProg / Project	<i>GP2GP</i>	<i>NPFIT-FNT-TO-TIN-0289.08</i>	
	Prog. Director	<i>Sandy Scales</i>		
	Owner	<i>Gareth Senior</i>	Version	<i>V2.1</i>
	Author	<i>David McAvenue</i>		
	Version Date	<i>13/08/07</i>	Status	<i>Approved</i>

Subject	<b>GP2GP Handling Attachment Types, Associated Text and Filenames</b>
Reference	TD Incidents 1976, 1982
Supplier	Common
Summary	<p>Different systems participating in GP2GP handle attachments in different ways.</p> <ul style="list-style-type: none"> <li>• Some products adopt a file based approach to attachment handling where file names are significant, others handle attachments entirely within the application database which makes filenames less significant.</li> <li>• Another difference is the extent to which attachments are typed within the system i.e. are they assigned a clinical/business meaning other than a purely technical description of the attachment media type.</li> <li>• Systems also differ in their support for additional user notes associated with an attachment type i.e. whether this takes the form of a title or more extensive notes.</li> <li>• Some systems may not support external filenames and may utilise internal conventions for the generation of filenames.</li> <li>• Some systems compute additional information from the information associated with documents e.g. .doc is annotated as a letter.</li> <li>• Systems generally handle different attachment types in different ways e.g. a distinction between clinical correspondence such as letters and external attached documents such as scans. While each forms part of the record the related documents appear in different places in the application. The expectation is that a receiving system will attempt to maintain these distinctions by applying the same rules to attachments received from foreign systems as they would apply to attachments received from the another instance of the same system. Failure to maintain the attachment type and placement within the receiving system does not present a patient safety risk and is a usability issue only.</li> </ul> <p>In addition to application differences the current GP2GP message has limited capacity to bridge these differences. For example it is difficult to maintain both the concepts of notes associated with a document and a title using the current message and existing vocabularies. Similarly the underlying terminologies do not support do not support the richness of the document types allocated by the participating systems.</p> <p>While reasonable attachment interoperability is observed in simple A to B transfer significant usability issues are found in onward propagation including:</p> <ul style="list-style-type: none"> <li>• Presentation of information in the wrong place e.g. free text notes appearing where an application supports only a limited piece of title text leading to distorted and confusing display.</li> <li>• Accumulation and interpolation of different types of attachment data within notes fields leading to unusable display in recipient systems.</li> </ul>

The following section summarises the key pieces of information associated with attachments, the differences between applications and issues in the transfer and propagation of this information.

Application Item	Item Description	Issues
Clinical/ Business Type	A meaningful code describing the clinical/business meaning of the attachment.	Diverse set of document types supported by applications.  Applications limited in their ability to display foreign document types e.g. dropdowns with fixed content.  Limited vocabulary and underlying terminology support for the document types actually used by applications.
Filename	The attachment filename represented via the referredToExternalDocument/text/reference element of the message	Some applications may not support external filenames and may not be able to preserve them in transfer.
Media type	The media type of the attachment represented via the Mime Type of the attachment.	
Notes	User entered free text notes associated with the attachment.	Not all applications support the entry of unconstrained free text directly associated with an attachment. These applications may however allow text to be indirectly associated with the attachment such as wider consultation text and this will be transferred and reproduced in receiving systems using existing mechanisms.
Title	A user specified document title distinct from the filename but generally more constrained than a notes field.	Not all applications support the notion of document title distinct from notes or filename.  Problems occur in message transfer between systems supporting titles and those that do not. For example an application that supports a title may have difficulties in displaying free text notes from another system in place of a title.  Difficult to accommodate the Clinical/Business Type of the attachment, notes and title separately within the message currently.

There is already a significant degree of standardisation around the message structures used for attachments however additional guidance is required to achieve the best interoperability result that accounts for the system differences described above.

This standardisation will include:

- Standard attachment structure.
- Standardisation around attachment linkages.
- Standardisation around the propagation of different pieces of attachment data e.g. filenames.
- Separation of data items e.g. avoiding the conflation between free text notes and document titles.

<p>Detail</p>	<p>The canonical form of a document attachment is via <b>NarrativeStatement</b> and associated <b>referredToExternalDocument</b> element linking to the SWA attachment.</p> <p>Individual applications may need to express additional linkages between attachments and other constructs referral statement to referral letter for example. Such linkages may be represented by the use of <b>reason</b> or other mechanism. There is no requirement to make such linkages interoperable at present not least because of application differences and the fact that the presence of a referral and attachment in the same composition will provide a looser but adequate linkage.</p> <p>The following binding should be applied for these elements. Existing message conventions for other message elements apply.</p> <table border="1"> <thead> <tr> <th>Message Element</th> <th>Notes</th> </tr> </thead> <tbody> <tr> <td>NarrativeStatement/referredToExternalDocument/code</td> <td>As per MiM 3.1.10</td> </tr> <tr> <td>NarrativeStatement/referredToExternalDocument/code/originalText</td> <td>Will either hold the actual clinical/business type of the attachment or in the case of systems supporting titles the document title. This originalText is required to propagate consistently in onward transmission</td> </tr> <tr> <td>NarrativeStatement/referredToExternalDocument/text/reference@value</td> <td>Holds the filename in the form file://localhost/&lt;GUID&gt;_&lt;filename&gt;. Note that applications may not accommodate externally supplied filenames therefore these may not propagate in onward transmission.</td> </tr> <tr> <td>NarrativeStatement/text</td> <td>Holds free text notes associated with the attachment.</td> </tr> </tbody> </table> <p>Applications should not merge these fields either in export or import and they should remain distinct.</p> <p>Applications should apply native behaviours to incoming messages.</p> <ul style="list-style-type: none"> <li>• If an application does not generally associate free text notes directly with an attachment then the default behaviour for incoming NarrativeStatement text should be applied e.g. displayed as consultation text.</li> <li>• If an application does not generally display attachment filenames then it should not do so for incoming records.</li> <li>• If an application generates document types from file extensions then it should continue to do so for incoming records.</li> <li>• If an application cannot display the incoming document type (or title) it should not do so for example document type is a restricted dropdown list</li> </ul>	Message Element	Notes	NarrativeStatement/referredToExternalDocument/code	As per MiM 3.1.10	NarrativeStatement/referredToExternalDocument/code/originalText	Will either hold the actual clinical/business type of the attachment or in the case of systems supporting titles the document title. This originalText is required to propagate consistently in onward transmission	NarrativeStatement/referredToExternalDocument/text/reference@value	Holds the filename in the form file://localhost/<GUID>_<filename>. Note that applications may not accommodate externally supplied filenames therefore these may not propagate in onward transmission.	NarrativeStatement/text	Holds free text notes associated with the attachment.
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<p>Implementation Profile</p>	<p>This section provides examples according to the known behaviour of participating systems.</p> <p><b><u>Vision</u></b></p> <ul style="list-style-type: none"> <li>• Supports free text notes directly associate with the attachment.</li> <li>• Does not support externally supplied filenames</li> <li>• Does not support a document title</li> <li>• Does not display filenames other than when opening the attachment.</li> <li>• Clinical/Business type document type is specified by a constrained drop down list. This list is poorly supported by the EhrAttachmentCode vocabulary and underlying terminologies.</li> </ul> <p><b><u>Emis LV</u></b></p>										

	<ul style="list-style-type: none"> <li>• Supports document title.</li> <li>• Free text notes are not directly associated with the attachment but may exist in the surrounding consultation.</li> <li>• Supports a constrained set of document types which are poorly supported by the EhrAttachmentCode vocabulary and the underlying terminologies e.g. letter, patient file attachment which are auto-generated from document file type and context.</li> <li>• Supports external filenames.</li> <li>• Filenames are sometimes displayed in particular views.</li> </ul> <p><b><u>iSoft Synergy</u></b></p> <p><b><u>iSoft Premiere Synergy</u></b></p>																					
<p>Examples</p>	<p><b><u>Vision to Emis to Vision</u></b></p> <p><b><u>A-&gt;B</u></b></p> <table border="1"> <tr> <td><i>Clinical/Business Type</i></td> <td>Referral</td> <td>referredToExternalDocument/code @code = 25821000000100 @displayName = "Original Text Document" /originalText = Referral</td> </tr> <tr> <td><i>Filename</i></td> <td>0003N000.doc</td> <td>referredToExternalDocument/text/reference @value = file://localhost/9DA074DB-7AB4-4AF2-82DA-E7D2810C732F_0003N000.doc</td> </tr> <tr> <td><i>Media Type</i></td> <td>application/msword</td> <td>Content-Type of SWA attachment</td> </tr> <tr> <td><i>Notes</i></td> <td>These are my referral notes</td> <td>NarrativeStatement/text = "These are my referral Notes"</td> </tr> <tr> <td><i>Title</i></td> <td>n/a</td> <td></td> </tr> </table> <p><b><u>B-&gt;C</u></b></p> <table border="1"> <tr> <td><i>Clinical/Business Type</i></td> <td>Letter</td> <td>referredToExternalDocument/code @code = 25821000000100 @displayName = "Original Text Document" /originalText = Referral</td> </tr> <tr> <td><i>Filename</i></td> <td>0003N000.doc</td> <td>referredToExternalDocument/text/reference @value = file://localhost/676D4075-A853-4B1E-</td> </tr> </table>	<i>Clinical/Business Type</i>	Referral	referredToExternalDocument/code @code = 25821000000100 @displayName = "Original Text Document" /originalText = Referral	<i>Filename</i>	0003N000.doc	referredToExternalDocument/text/reference @value = file://localhost/9DA074DB-7AB4-4AF2-82DA-E7D2810C732F_0003N000.doc	<i>Media Type</i>	application/msword	Content-Type of SWA attachment	<i>Notes</i>	These are my referral notes	NarrativeStatement/text = "These are my referral Notes"	<i>Title</i>	n/a		<i>Clinical/Business Type</i>	Letter	referredToExternalDocument/code @code = 25821000000100 @displayName = "Original Text Document" /originalText = Referral	<i>Filename</i>	0003N000.doc	referredToExternalDocument/text/reference @value = file://localhost/676D4075-A853-4B1E-
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		92B0-D0943FA4663F_0003N000.doc
<i>Media Type</i>	application/msword	Content-Type of SWA attachment
<i>Notes</i>	"These are my referral notes" (in consultation rather than in direct association with attachment.	NarrativeStatement/text "" (the original notes will be exported from the consultation in the normal manner)
<i>Title</i>	Referral	See Clinical/Business Type
<b><u>C</u></b>		
<i>Clinical/Business Type</i>	Referral <i>Vision attempts to populate the AttachmentType document using the referredToExternalDocument/code/originalText and code.</i>	
<i>Filename</i>	System generated	
<i>Media Type</i>	n/a	
<i>Notes</i>	"These are my referral notes" (in separate note pad entry within same consultation as attachment)	
<i>Title</i>	n/a	
<b><u>Emis to Vision to Emis</u></b>		
<b><u>A-&gt;B</u></b>		
<i>Clinical/Business Type</i>	Letter	referredToExternalDocument/code @code = 25821000000100 @displayName = "Original Text Document" /originalText = "OP Hip Referral"
<i>Filename</i>	JM_Hip_Referral.doc	referredToExternalDocument/text/reference @value = file://localhost/676EFD2E-CED1-4D57-AC6C-0C534466CB92_JM_Hip_Referral.doc
<i>Media Type</i>	application/msword	Content-Type of SWA attachment

Notes	n/a (free text notes may be present in surrounding consultation or associated referral)	NarrativeStatement/text = ""
Title	OP Hip Referral	See Clinical/Business Type
<b><u>B-&gt;C</u></b>		
Clinical/Business Type	Other Attachment <i>Vision issue as to how to map to and from 'Type of Attachment' dropdown as there is a poor match between EhrAttachmentCode vocabulary and dropdown list. Options to do more sophisticated mapping, extend the list or extend the vocabulary but underlying terminologies are also poor in this respect.</i>	referredToExternalDocument/code @code = 25821000000100 @displayName = "Original Text Document" /originalText = "OP Hip Referral"
Filename	0003N002.doc (auto generated)	referredToExternalDocument/text/reference @value = file://localhost/69526AF0-89A1-4883-87DD-4404835AECF9_0003N002.doc
Media Type	application/msword	Content-Type of SWA attachment
Notes	n/a (will be present associated with referral or as notepad entries in consultation)	NarrativeStatement/text "" (the original notes will be exported from the consultation in the normal manner)
Title	n/a	See Clinical/Business Type
<b><u>C</u></b>		
Clinical/Business Type	Letter <i>Vision attempts to populate the AttachmentType document using the referredToExternalDocument/code/originalText and code.</i>	
Filename	0003N002.doc	
Media Type	n/a	
Notes	As per other related referral text or other narratives in message	

	Title	OP Hip referral	
Alternatives	<p><i>There may be some merit in using ObservationStatement or a surrounding CompoundStatement structure in instead of a standalone NarrativeStatement for conveying attachment information. The advantage is the availability of an additional code in addition to referredToExternalDocument/code. This would potentially allow conveyance of both title and document type separately. However due to application differences it is unlikely that this information would be supported consistently in receiving systems nor be propagated consistently.</i></p>		
Future Changes	<ul style="list-style-type: none"> <li>• In a future message version explicit support for document title will be added.</li> <li>• An activity to enhance terminology support for the range of document types in use is required.</li> <li>• Possible increased formalisation of attachment linkages.</li> <li>• There is a need to increase application commonality in handling attachments, attachment linkages and attachment types.</li> </ul>		

**Amendment History:**

Issue	Version	Date	Amendment History
01	0.1	13/07/2005	First draft for comment
02	0.2	19/07/2005	Updated following internal review. Ready for supplier review.
03	0.3	02/09/2005	Clarification added around referredToExternalDocument/text/reference
04	1.0	27/09/2005	Changes to approved status – no change
05	1.1	01/12/2005	Revised draft version for ABC Issue Resolution
06	1.2	04/01/2006	Updated version for approval incorporating review comments.
07	2.0	18/01/2006	Approved.
08	2.1	13/08/2007	Updated for new file reference convention <a href="file://localhost/&lt;GUID&gt;_filename">file://localhost/&lt;GUID&gt;_filename</a> . Minor change for consistency only therefore not formally reviewed.

**Forecast Changes:**

Anticipated Change	When

**Reviewers:**

This document must be reviewed by the following. Indicate any delegation for sign off.

Name	Title / Responsibility	Date	Version
Gareth Senior	GP2GP Project Manager		
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**Approvals:**

This document requires the following approvals:

Name	Signature	Title / Responsibility	Date	Version



Gareth Senior		GP2GP Project Manager		
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**Distribution:**

<Suppliers, testers, implementation teams>.

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**Related Documents:**

These documents will provide additional information.

Ref no	Doc Reference Number	Title	Version
1	NPFIT-SHR-QMS-PRP-0015	Glossary of Terms Consolidated.doc	<enter latest>

**Glossary of Terms:**

List any new terms created in this document. Mail the NPO Quality Manager to have these included in the master glossary above [1].

Term	Acronym	Definition