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Author	Babar Munir	**Version issue date**	12/11/2020

GP Connect Consumer Supplier Test Assurance for achieving Technical Conformance

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Revision History

Version	Date	Summary of Changes
0.1	03/03/2019	First draft
1.0	20/05/2019	Final Version
1.1	22/01/2020	Removed the reference to the wording 'Pathways', Renamed the Document and Added FAQ Section to Aid consumers with common queries/questions
1.2	02/04/2020	Addend onboarding section for GP Connect Messaging Section 2.6 (INT Only)
1.3	15/04/2020	Section 2.6 (re-purposed for Open Test) and 2.27 created for INT. Also moved instructions on how to gain compliance for ITK/MESH API and PDS to the New Open Test Section (2.6) and hence 2.7 is just confirming these are in place ensuring all pre-req compliance is carried out in when in Open Test.
1.4	23/04/2020	Updated after review comments from Amit.
1.5	10/06/2020	Re-review of the onboarding process to incorporate early assurance activities, Also added section 2.3 as Business team requested clarity of how existing consumers are assure
1.6	10/07/2020	Added Stage Headings to the various phases in the test routes (Stages 1-4)
1.7	24/09/2020	Updated Links to point to the Artifacts n the new consumer repository
1.8	12//11/2020	Updated for Extended Structured Capability

Reviewers

This document must be reviewed by the following people: author to indicate reviewers

Reviewer name	Title / Responsibility	Date	Version
Paul Butterworth	Head of SA – Connecting Systems		
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Approved by

This document must be approved by the following people: author to indicate approvers

Name	Signature	Title	Date	Version
Paul Butterworth		Head of SA – Connecting Systems		

Glossary of Terms

Term / Abbreviation	What it stands for
SCAL	Supplier Conformance Assessment List
PTL	NHS DIGITAL Path to Live environments
SA	NHS DIGITAL Solution Assurance
IG	Information Governance
SSP	Spine Security Proxy

Related Documents

These documents will provide additional information.

Ref no	Doc Reference Number	Title	Version

Document Control

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2. Introduction

1.1 Objectives

This document describes the different GP Connect Consumer Supplier Test routes for achieving Technical conformance in the test environments, prior to go live. The intended audience for this document are the GP Connect Consumer suppliers who would need details of the test tools, test environments and the test routes for achieving technical conformance. The need for having separate test routes was identified taking into consideration the different types of suppliers who may or may not have had previous engagement with NHS Digital and its' test environments for other compliance services.

1.2 Scope

This scope covers the following:

- The early development and testing by the supplier in the early development test environments for exploratory testing, prior to formal engagement with NHS Digital for seeking Technical conformance in the NHS Digital INT (integration) 'Path to Live' test environment.

- The testing and assurance in the INT environment as part of the formal engagement with NHS Digital Solution Assurance team to achieve Technical Conformance

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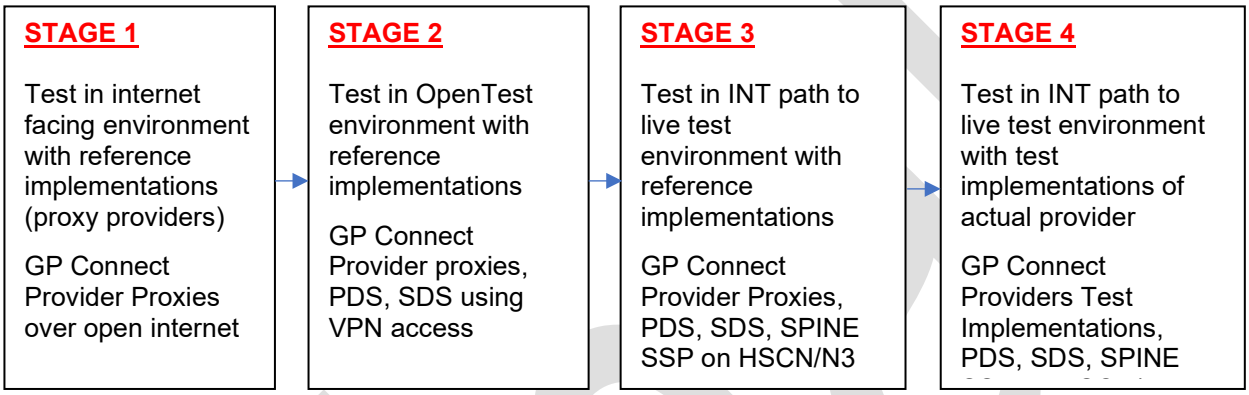
3. Test Routes

2.1 Test Routes for Access Record, Appointments and Structured Capabilities for new GPC consumers

2.1.1 Test route for a potential GP Connect Consumer Supplier who does not have HSCN (or N3) network connectivity. The Supplier is not PDS compliant but has access to PDS service through a third party Spine Mini Services Provider (SMSP) for doing PDS traces.



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Step	Description	Phase
1	Supplier explores and tests for the GP Connect capabilities in scope of the supplier solution using the internet facing GP Connect Provider reference implementations i.e. GP Connect Demonstrator version(s) as below: **Note:** The links to the GUIs (open in Google Chrome) and the FHIR server URLs for the internet facing GP Connect Provider reference implementations (i.e. Demonstrators) are as follows: **HTML Access Record:** GUI: https://orange.testlab.nhs.uk/gpconnect-demonstrator/v0 FHIR Server URL: https://orange.testlab.nhs.uk/gpconnect-demonstrator/v0/fhir **Appointments:** GUI: https://orange.testlab.nhs.uk/gpconnect-demonstrator/v1 FHIR Server URL: https://orange.testlab.nhs.uk/gpconnect-demonstrator/v1/fhir **Structured Access Record (Allergies and Medications):** GUI: https://orange.testlab.nhs.uk/gpconnect-demonstrator/v1 FHIR Server URL: https://orange.testlab.nhs.uk/gpconnect-demonstrator/v1/fhir **Extended Structured Access Record:-** FHIR Server URL: https://orange.testlab.nhs.uk/B82617/STU3/1/gpconnect/structured/fhir **Access Document:-** FHIR Server URL: https://orange.testlab.nhs.uk/B82617/STU3/1/gpconnect/documents/fhir	**STAGE 1** Exploratory testing phase in Internet Facing test environment with GP Connect APIs only.

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2	Supplier carries out testing with the internet facing GP Connect Demonstrators. Supplier references, completes and submits the SCAL (Supplier Conformance Assessment List) spreadsheet and at this stage the supplier is required to capture early assurance evidence for requirements with supporting test evidence for the GP Connect Consumer tests. which are marked as **Internet Facing** (Column E) and **confirmation stating evidence required** (Column F). Where there are requirements which are marked as **ENVNA** (Column E) the supplier is required to confirm they meet the requirement with a supporting statement The GP Connect specific worksheets within the SCAL which would need completion being: • GPC - Spine Integration_v1.0 (mandated) • GPC - Foundations_v1.2.X (if in scope for delivery) • GPC - Appointment Mgmt_v1.2.X (if in scope for delivery) • GPC - AR HTML_v0.5.X (if in scope for delivery) • GPC - AR Structured_v1.2.X (if in scope for delivery) • GPC - AR Extended Structured_v1.2.X (if in scope for delivery) • GPC - AR Documents_v1.2.X (if in scope for delivery) Links to the GP Connect Consumer tests and the supporting test data for testing with the GP Connect Provider reference implementations i.e. GP Connect Demonstrator version(s) as below: **HTML Access Record:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-HTML **Appointments:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Foundations https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Appointments **Structured Access Record (Allergies and Medications):** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Structured	As above

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Step	Description	Phase
	Extended Structured Access Record: **Access Documents** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Access-Document The test data (synthetic NHS numbers) are specified in the **Demonstrator Patient ID** column within the tests. Test evidence to be submitted to the NHS Digital Functional Assurance mail box functional.assurance@nhs.net, Which demonstrate that the supplier has developed a basic prototype solution using the GP Connect technical specifications and done a level of testing against the internet facing GP Connect Provider reference implementations to satisfy the minimum SCAL requirements at this stage. The test evidence could be embedded in a word document. Any queries or issues pertaining to the internet facing GP Connect Provider reference implementations can be emailed to the above mailbox. NHS Digital Functional Assurance endeavour to provide responses and feedback on the test evidence submission within 5 working days of the receipt of the supplier's email. **The supplier evidence must satisfy the minimum SCAL requirements at this stage before progressing on to the next environment of this assurance path**	
3	Supplier commences work on getting HSCN connectivity after completing the HSCN Connection agreement. Link to the details for HSCN connectivity is as below: https://digital.nhs.uk/services/health-and-social-care-network/new-to-hscn Note that this does not have to done in the sequence as it appears here. This HSCN connectivity process can commence anytime earlier.	NA

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Step	Description	Phase
4	Supplier emails request to the NHS Digital Platforms Support Desk (platforms.supportdesk@nhs.net) for VPN access to the NHS Digital OpenTest Environment. NHS Digital Platforms Support Desk endeavour to provide access to the OpenTest environment within 5 working days of the request being registered by the supplier	**STAGE 2** Exploratory testing phase with GP Connect APIs, SDS, PDS and GP Connect APIs in the NHS Digital OpenTest environment without any data sharing rules
5	Supplier provided VPN access to the OpenTest Environment to test with SDS, PDS and the GP Connect Demonstrator(s) along with the details on accessing these services to test with. Link to the details about the OpenTest environment is as below: http://www.assurancesupport.digital.nhs.uk/opentest Link to the URLs for the PDS, SDS and GP Connect Demonstrator(s) in the OpenTest environment and the test data to use is as below: https://orange.testlab.nhs.uk/opentest.html	As above

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6	Supplier carries out testing captures evidence of testing done in the OpenTest environment:- Supplier references, updates and submits the SCAL (Supplier Conformance Assessment List) spreadsheet and at this stage the supplier is required to capture early assurance evidence for requirements with supporting test evidence for the GP Connect Consumer tests. which are marked as **OpenTest** (Column E) and **confirmation stating evidence required** (Column F). Where there are requirements which are marked as **ENVNA** (Column E) the supplier is required to confirm they meet the requirement with a supporting statement The GP Connect specific worksheets within the SCAL which would need completion being: • GPC - Spine Integration_v1.0 (mandated) • GPC - Foundations_v1.2.X (if in scope for delivery) • GPC - Appointment Mgmt_v1.2.X (if in scope for delivery) • GPC - AR HTML_v0.5.X (if in scope for delivery) • GPC - AR Structured_v1.2.X (if in scope for delivery) • GPC - AR Extended Structured_v1.2.X (if in scope for delivery) • GPC - AR Documents_v1.2.X (if in scope for delivery) Links to the GP Connect Consumer tests and the supporting test data for testing with the GP Connect Provider reference implementations i.e. GP Connect Demonstrator version(s) as below: **HTML Access Record:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-HTML **Appointments:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Foundations https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Appointments **Structured Access Record (Allergies and Medications):** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Structured	As above

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Step	Description	Phase
	Extended Structured Access Record: https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Access-Record-Structured-(extended) **Access Documents:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Access-Document The test data (synthetic NHS numbers) are specified in the **Demonstrator Patient ID** column within the tests. Test evidence in form of system screenshots, input and output messages (PDS, SDS LDAP queries and responses, GP Connect request an response messages) required to demonstrate that the supplier has gone through the GP Connect technical requirements, used the GP Connect APIs and the PDS and SDS services to build and test a working prototype or proof of concept solution prior to entry into the NHS Digital INT (integration) environment for further development iterations and formal engagement with NHS Digital for Technical Conformance. The test evidence can be embedded in a word document and emailed to the NHS Digital Functional Assurance mail box functional.assurance@nhs.net. NHS Digital Functional Assurance endeavour to provide feedback on the test evidence submission within 5 working days of the receipt of the supplier's email **The supplier evidence must satisfy the minimum SCAL requirements at this stage before progressing on to the next environment of this assurance path**	
7	Supplier gets HSCN connectivity after completing the HSCN Connection agreement.	**STAGE 3** Build and Test Phase with Technical Conformance engagement in the INT Path to Live environment

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Step	Description	Phase
8	Supplier submits request NHS Digital Platforms Support Desk (platforms.supportdesk@nhs.net) for registering their GP Connect consumer endpoint in the INT environment which will do the messaging interactions with the Spine Security Proxy (SSP). The URL for the SSP in the INT environment is https://proxy.int.spine2.ncrs.nhs.uk Link providing details about the INT 'Path to Live' test environment is as below: https://digital.nhs.uk/services/path-to-live-environments/integration-environment Link to the Authority Service Names (ASN) document which provides the list of services in the INT environment, their URLs, IP addresses and port numbers is as below: https://digital.nhs.uk/services/path-to-live-environments/integration-environment In addition to configuring any local firewalls to allow access for the required services from the ASN document, the supplier will also need to configure their local firewalls to allow access to the subnet as below: Subnet: 10.239.14.0/24 Port(s): 443 (inbound and outbound)	As above
9	NHS Digital Platforms Support Desk and NHS Digital Solution Assurance in conjunction complete the end point registrations and data sharing rules to enable the Supplier to access the INT Path to Live environment to do testing against the GP Connect Provider reference implementations i.e. GP Connect Demonstrator version(s) with the SPINE services PDS and SDS and the Spine Security Proxy (SSP). NHS Digital Platforms Support Desk and NHS Digital Functional Assurance team endeavour to provide access to the INT test environment within 5 working days of the supplier registering the request with the NHS Digital Platforms Support Desk	As above

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10	Supplier carries out testing captures evidence of testing done in the INT (Demonstrator) environment:- Supplier references, updates and submits the SCAL (Supplier Conformance Assessment List) spreadsheet and at this stage the supplier is required to capture early assurance evidence for requirements with supporting test evidence for the GP Connect Consumer tests. which are marked as **INT**(Column E) and **confirmation stating evidence required** (Column F). Where there are requirements which are marked as **ENVNA** (Column E) the supplier is required to confirm they meet the requirement with a supporting statement The GP Connect specific worksheets within the SCAL which would need completion being: • GPC - Spine Integration_v1.0 (mandated) • GPC - Foundations_v1.2.X (if in scope for delivery) • GPC - Appointment Mgmt_v1.2.X (if in scope for delivery) • GPC - AR HTML_v0.5.X (if in scope for delivery) • GPC - AR Structured_v1.2.X (if in scope for delivery) • GPC - AR Extended Structured_v1.2.X (if in scope for delivery) • GPC - AR Documents_v1.2.X (if in scope for delivery) Links to the GP Connect Consumer tests and the supporting test data for testing with the GP Connect Provider reference implementations i.e. GP Connect Demonstrator version(s) as below: **HTML Access Record:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-HTML **Appointments:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Foundations https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Appointments **Structured Access Record (Allergies and Medications):** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Structured	As above

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Step	Description	Phase
	Extended Structured Access Record: https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Access-Record-Structured-(extended) **Access Documents:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Access-Document The test data (synthetic NHS numbers) are specified in the **Demonstrator Patient ID** column within the tests. Test evidence in form of system screenshots, input and output messages (PDS, SDS LDAP queries and responses, GP Connect request an response messages) required to demonstrate that the supplier has gone through the GP Connect technical requirements, used the GP Connect APIs and the PDS and SDS services to build and test a working prototype or proof of concept solution prior to entry into the NHS Digital INT (Provider) environment The test evidence can be embedded in a word document and emailed to the NHS Digital Functional Assurance mail box functional.assurance@nhs.net. NHS Digital Functional Assurance endeavour to provide feedback on the test evidence submission within 5 working days of the receipt of the supplier's email **The supplier evidence must satisfy the minimum SCAL requirements at this stage before progressing on to the next environment of this assurance path**	
12	NHS Digital SA and other SCAL stakeholders review and approve the SCAL and the supporting test evidence. NHS Digital Functional Assurance and other SCAL stakeholders endeavour to provide responses and feedback on the SCAL submission and the supporting test evidence within 5 working days of the receipt of the supplier's submission.	As above

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Step	Description	Phase
13	NHS Digital Functional Assurance submit request to the NHS Digital Platforms Support Desk to open up data sharing access for the Supplier to access to the test instances of the FHIR endpoints of the four GP Connect Provider supplier implementations (where provisioned) for end to end interoperability testing. NHS Digital Platforms Support Desk endeavour to open data sharing access within 3 working days of receipt of request from NHS Digital Functional Assurance	**STAGE 4** Test in INT path to live test environment with test implementations of actual provider
14	NHS Digital Functional Assurance inform the GP Connect Provider supplier of the GP Connect Consumer supplier coming on board for any local config/setup activity required at the GP Connect Provider supplier end to enable the consumer supplier testing.	As above

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Step	Description	Phase
15	Supplier tests against each available GP Connect Provider test instance using a small subset of the existing NHS Digital GP Connect Consumer testsAs well as satisfy outstanding requirements in the SCAL. Supplier references, updates and submits the SCAL for outstanding requirments (Supplier Conformance Assessment List) spreadsheet and at this stage the supplier is required to capture assurance evidence for requirements with supporting test evidence for the GP Connect Consumer tests. which are marked as **INT(PROVIDER)**(Column E) and **confirmation stating evidence required** (Column F). This will include a small subset of tests as a recommend to run as a minimum, but the supplier may choose to run more or lesser number of tests at their discretion which they would benefit from re-running against actual providers for clinical content checking The purpose of these tests is not to repeat technical conformance processes against each GP Connect provider but only to aid the GP Connect Consumer supplier to perform end to end interoperability testing of their system with the test instances of the FHIR endpoints of the four GP Connect Provider supplier implementations. It will aid to identify and resolve any technical interoperability issues due to any subtle nuances in the implementation of the GP Connect capabilities by the GP Connect Providers. In event of any technical interoperability issues encountered which are attributable to either being at the SPINE end or the GP Connect Provider end, the supplier emails the NHS Digital Functional Assurance with the details of the issue along with any relevant request and response messages (including full message headers) and system screenshot which will aid the investigation and resolution.	As above
16	Supplier completes the end to end testing successfully and informs the NHS Digital Functional Assurance of successful completion. No test evidence required for review but an email confirming successful completion of testing with the GP Connect provider test implementations is sufficient. NHS Digital Functional Assurance update the SCAL to note the GP Connect Providers against which the consumer end to end interoperability testing was successfully completed.	As above

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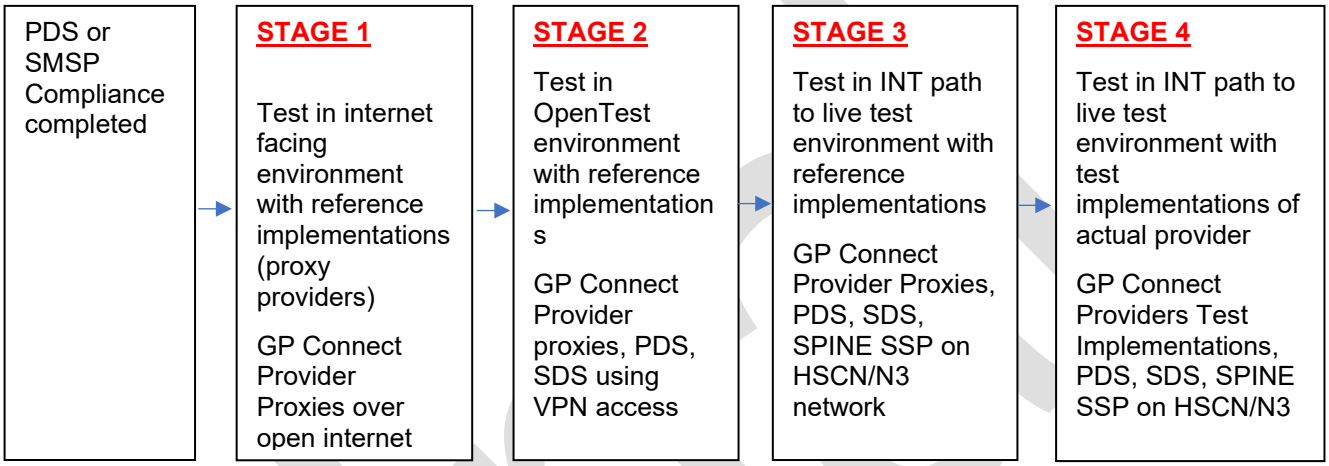
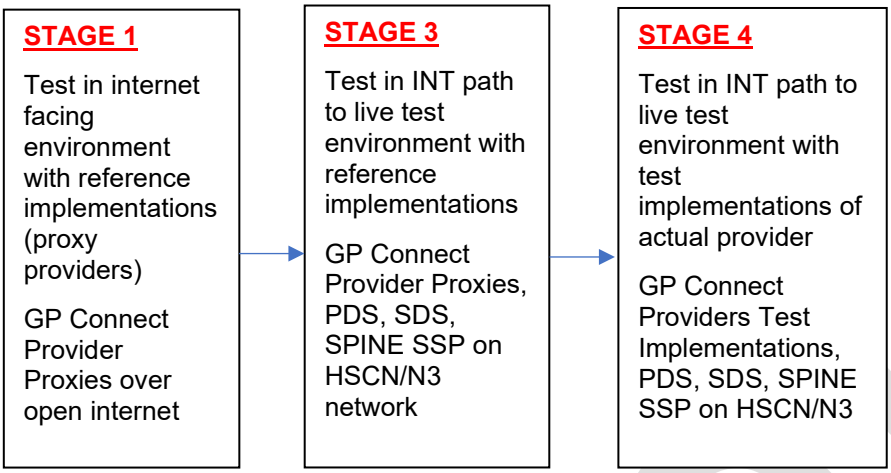
2.1.2 Test route for a potential GP Connect Consumer Supplier with or without HSCN (or N3) connectivity. The supplier is not PDS compliant but plans to have access to PDS through either their own client integration to the SMSP or undergo PDS Compliance as a connecting system supplier to the PDS service.



Step	Description	Phase
1	Supplier completes for SMSP compliance or PDS compliance before GP Connect technical conformance For SMSP Compliance, guidance on the process for Suppliers who wish to gain access to the PDS via SMSP is in the link below https://developer.nhs.uk/library/systems/nhs-digital-smsp-pds/ Supplier contacts itkaccreditation@nhs.net for completing SMSP compliance. For PDS Compliance, supplier contacts Solution Assurance team at assurance@nhs.net as first port of call for progression towards achieving PDS Compliance.	
2	Supplier then follows the same onboarding route as 2.2.1, post the SMSP Compliance or PDS Compliance	

2.1.3 Test route for a potential GP Connect Consumer Supplier with existing HSCN (or N3) connectivity. The supplier is PDS compliant or has access to PDS through a third party Spine Mini Services Provider (SMSP)



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Step	Description	Phase
1	Supplier explores and tests for the GP Connect capabilities in scope of the supplier solution using the internet facing GP Connect Provider reference implementations i.e. GP Connect Demonstrator version(s) as below: **Note:** The links to the GUIs (open in Google Chrome) and the FHIR server URLs for the internet facing GP Connect Provider reference implementations (i.e. Demonstrators) are as follows: **HTML Access Record:** GUI: https://orange.testlab.nhs.uk/gpconnect-demonstrator/v0 FHIR Server URL: https://orange.testlab.nhs.uk/gpconnect-demonstrator/v0/fhir **Appointments:** GUI: https://orange.testlab.nhs.uk/gpconnect-demonstrator/v1 FHIR Server URL: https://orange.testlab.nhs.uk/gpconnect-demonstrator/v1/fhir **Structured Access Record (Allergies and Medications):** GUI: https://orange.testlab.nhs.uk/gpconnect-demonstrator/v1 FHIR Server URL: https://orange.testlab.nhs.uk/gpconnect-demonstrator/v1/fhir **Extended Structured Access Record:-** FHIR Server URL: https://orange.testlab.nhs.uk/B82617/STU3/1/gpconnect/structured/fhir **Access Document:-** FHIR Server URL: https://orange.testlab.nhs.uk/B82617/STU3/1/gpconnect/documents/fhir	**STAGE 1** Exploratory testing phase in Internet Facing test environment with GP Connect APIs only.

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2	Supplier carries out testing with the internet facing GP Connect Demonstrators. Supplier references, completes and submits the SCAL (Supplier Conformance Assessment List) spreadsheet and at this stage the supplier is required to capture early assurance evidence for requirements with supporting test evidence for the GP Connect Consumer tests. which are marked as **Internet Facing** (Column E) and **confirmation stating evidence required** (Column F). Where there are requirements which are marked as **ENVNA** (Column E) the supplier is required to confirm they meet the requirement with a supporting statement The GP Connect specific worksheets within the SCAL which would need completion being: • GPC - Spine Integration_v1.0 (mandated) • GPC - Foundations_v1.2.X (if in scope for delivery) • GPC - Appointment Mgmt_v1.2.X (if in scope for delivery) • GPC - AR HTML_v0.5.X (if in scope for delivery) • GPC - AR Structured_v1.2.X (if in scope for delivery) • GPC - AR Extended Structured_v1.2.X (if in scope for delivery) • GPC - AR Documents_v1.2.X (if in scope for delivery) Links to the GP Connect Consumer tests and the supporting test data for testing with the GP Connect Provider reference implementations i.e. GP Connect Demonstrator version(s) as below: **HTML Access Record:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-HTML **Appointments:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Foundations https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Appointments **Structured Access Record (Allergies and Medications):** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Structured	As above

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Step	Description	Phase
	Extended Structured Access Record: https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Access-Record-Structured-(extended) **Access Documents:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Access-Document The test data (synthetic NHS numbers) are specified in the **Demonstrator Patient ID** column within the tests. Test evidence to be submitted to the NHS Digital Functional Assurance mail box functional.assurance@nhs.net, Which demonstrate that the supplier has developed a basic prototype solution using the GP Connect technical specifications and done a level of testing against the internet facing GP Connect Provider reference implementations to satisfy the minimum SCAL requirements at this stage. The test evidence could be embedded in a word document. Any queries or issues pertaining to the internet facing GP Connect Provider reference implementations can be emailed to the above mailbox. NHS Digital Functional Assurance endeavour to provide responses and feedback on the test evidence submission within 5 working days of the receipt of the supplier's email. **The supplier evidence must satisfy the minimum SCAL requirements at this stage before progressing on to the next environment of this assurance path**	

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Step	Description	Phase
3	Supplier submits request NHS Digital Platforms Support Desk (platforms.supportdesk@nhs.net) for registering their GP Connect consumer endpoint in the INT environment which will do the messaging interactions with the Spine Security Proxy (SSP). The URL for the SSP in the INT environment is https://proxy.int.spine2.ncrs.nhs.uk Link providing details about the INT 'Path to Live' test environment is as below: https://digital.nhs.uk/services/path-to-live-environments/integration-environment Link to the Authority Service Names (ASN) document which provides the list of services in the INT environment, their URLs, IP addresses and port numbers is as below: https://digital.nhs.uk/services/path-to-live-environments/integration-environment In addition to configuring any local firewalls to allow access for the required services from the ASN document, the supplier will also need to configure their local firewalls to allow access to the subnet as below: Subnet: 10.239.14.0/24 Port(s): 443 (inbound and outbound)	**STAGE 3** Build and Test Phase with Technical Conformance engagement in the INT Path to Live environment
4	NHS Digital Platforms Support Desk and NHS Digital Solution Assurance in conjunction complete the end point registrations and data sharing rules to enable the Supplier to access the INT Path to Live environment to do testing against the GP Connect Provider reference implementations i.e. GP Connect Demonstrator version(s) with the SPINE services PDS and SDS and the Spine Security Proxy (SSP). NHS Digital Platforms Support Desk and NHS Digital Functional Assurance team endeavour to provide access to the INT test environment within 5 working days of the supplier registering the request with the NHS Digital Platforms Support Desk	As above

Final

5	Supplier carries out testing captures evidence of testing done in the INT (Demonstrator) environment:- Supplier references, updates and submits the SCAL (Supplier Conformance Assessment List) spreadsheet and at this stage the supplier is required to capture early assurance evidence for requirements with supporting test evidence for the GP Connect Consumer tests. which are marked as **INT**(Column E) and **confirmation stating evidence required** (Column F). Where there are requirements which are marked as **ENVNA** (Column E) the supplier is required to confirm they meet the requirement with a supporting statement The GP Connect specific worksheets within the SCAL which would need completion being: • GPC - Spine Integration_v1.0 (mandated) • GPC - Foundations_v1.2.X (if in scope for delivery) • GPC - Appointment Mgmt_v1.2.X (if in scope for delivery) • GPC - AR HTML_v0.5.X (if in scope for delivery) • GPC - AR Structured_v1.2.X (if in scope for delivery) • GPC - AR Extended Structured_v1.2.X (if in scope for delivery) • GPC - AR Documents_v1.2.X (if in scope for delivery) Links to the GP Connect Consumer tests and the supporting test data for testing with the GP Connect Provider reference implementations i.e. GP Connect Demonstrator version(s) as below: **HTML Access Record:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-HTML **Appointments:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Foundations https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Appointments **Structured Access Record (Allergies and Medications):** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Structured	As above

Final

Step	Description	Phase
	Extended Structured Access Record: https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Access-Record-Structured-(extended) **Access Documents:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Access-Document The test data (synthetic NHS numbers) are specified in the **Demonstrator Patient ID** column within the tests. Test evidence in form of system screenshots, input and output messages (PDS, SDS LDAP queries and responses, GP Connect request an response messages) required to demonstrate that the supplier has gone through the GP Connect technical requirements, used the GP Connect APIs and the PDS and SDS services to build and test a working prototype or proof of concept solution prior to entry into the NHS Digital INT (Provider) environment The test evidence can be embedded in a word document and emailed to the NHS Digital Functional Assurance mail box functional.assurance@nhs.net. NHS Digital Functional Assurance endeavour to provide feedback on the test evidence submission within 5 working days of the receipt of the supplier's email **The supplier evidence must satisfy the minimum SCAL requirements at this stage before progressing on to the next environment of this assurance path**	
7	NHS Digital SA and other SCAL stakeholders review and approve the SCAL and the supporting test evidence. NHS Digital Functional Assurance and other SCAL stakeholders endeavour to provide responses and feedback on the SCAL submission and the supporting test evidence within 5 working days of the receipt of the supplier's submission.	As above

Final

Step	Description	Phase
8	NHS Digital Functional Assurance submit request to the NHS Digital Platforms Support Desk to open up data sharing access for the Supplier to access to the test instances of the FHIR endpoints of the four GP Connect Provider supplier implementations (where provisioned) for end to end interoperability testing. NHS Digital Platforms Support Desk endeavour to open data sharing access within 3 working days of receipt of request from NHS Digital Functional Assurance	**STAGE 4** Test in INT path to live test environment with test implementations of actual provider
9	NHS Digital Functional Assurance inform the GP Connect Provider supplier of the GP Connect Consumer supplier coming on board for any local config/setup activity required at the GP Connect Provider supplier end to enable the consumer supplier testing.	As above

Final

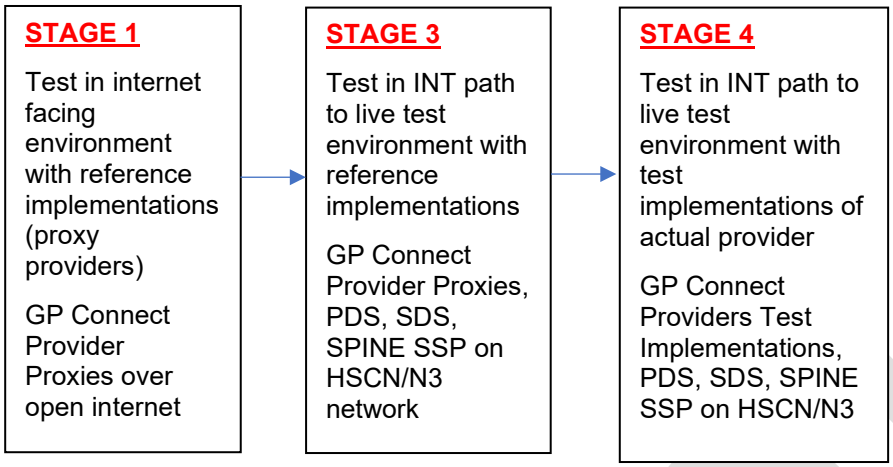
Step	Description	Phase
10	Supplier tests against each available GP Connect Provider test instance using a small subset of the existing NHS Digital GP Connect Consumer testsAs well as satisfy outstanding requirements in the SCAL. Supplier references, updates and submits the SCAL for outstanding requirments (Supplier Conformance Assessment List) spreadsheet and at this stage the supplier is required to capture assurance evidence for requirements with supporting test evidence for the GP Connect Consumer tests. which are marked as **INT(PROVIDER)**(Column E) and **confirmation stating evidence required** (Column F). This will include a small subset of tests as a recommend to run as a minimum, but the supplier may choose to run more or lesser number of tests at their discretion which they would benefit from re-running against actual providers for clinical content checking The purpose of these tests is not to repeat technical conformance processes against each GP Connect provider but only to aid the GP Connect Consumer supplier to perform end to end interoperability testing of their system with the test instances of the FHIR endpoints of the four GP Connect Provider supplier implementations. It will aid to identify and resolve any technical interoperability issues due to any subtle nuances in the implementation of the GP Connect capabilities by the GP Connect Providers. In event of any technical interoperability issues encountered which are attributable to either being at the SPINE end or the GP Connect Provider end, the supplier emails the NHS Digital Functional Assurance with the details of the issue along with any relevant request and response messages (including full message headers) and system screenshot which will aid the investigation and resolution.	As above

Final

Step	Description	Phase
11	Supplier completes the end to end testing successfully and informs the NHS Digital Functional Assurance of successful completion. No test evidence required for review but an email confirming successful completion of testing with the GP Connect provider test implementations is sufficient. NHS Digital Functional Assurance update the SCAL to note the GP Connect Providers against which the consumer end to end interoperability testing was successfully completed.	As above

Final

2.1.4 Test route for an existing GP Connect Consumer Supplier already compliant with one GP Connect capability but onboarding to seek technical conformance with other GP Connect capability(s)



Final

Step	Description	Phase

Final

1	Supplier carries out testing with the internet facing GP Connect Demonstrators. Supplier references, completes and submits the SCAL (Supplier Conformance Assessment List) spreadsheet and at this stage the supplier is required to capture early assurance evidence for requirements with supporting test evidence for the GP Connect Consumer tests. which are marked as **Internet Facing** (Column E) and **confirmation stating evidence required** (Column F). Where there are requirements which are marked as **ENVNA** (Column E) the supplier is required to confirm they meet the requirement with a supporting statement The GP Connect specific worksheets within the SCAL which would need completion being: • GPC - Spine Integration_v1.0 (mandated) • GPC - Foundations_v1.2.X (if in scope for delivery) • GPC - Appointment Mgmt_v1.2.X (if in scope for delivery) • GPC - AR HTML_v0.5.X (if in scope for delivery) • GPC - AR Structured_v1.2.X (if in scope for delivery) • GPC - AR Extended Structured_v1.2.X (if in scope for delivery) • GPC - AR Documents_v1.2.X (if in scope for delivery) Links to the GP Connect Consumer tests and the supporting test data for testing with the GP Connect Provider reference implementations i.e. GP Connect Demonstrator version(s) as below: **HTML Access Record:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-HTML **Appointments:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Foundations https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Appointments **Structured Access Record (Allergies and Medications):** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Structured **Extended Structured Access Record:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Access-Record-Structured-(extended) **Access Documents:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Access-Document The test data (synthetic NHS numbers) are specified in the **Demonstrator Patient ID** column within the tests. Test evidence to be submitted to the NHS Digital Functional Assurance mail box functional.assurance@nhs.net, Which demonstrate that the supplier has developed a basic prototype solution using the GP Connect technical specifications and done a level of testing against the internet facing GP Connect Provider reference implementations to satisfy the minimum SCAL requirements at this stage. The test evidence could be embedded in a word document. Any queries or issues pertaining to the	**STAGE 1** Exploratory testing phase in Internet Facing test environment with GP Connect APIs only.

Final

Step	Description	Phase
	internet facing GP Connect Provider reference implementations can be emailed to the above mailbox. NHS Digital Functional Assurance endeavour to provide responses and feedback on the test evidence submission within 5 working days of the receipt of the supplier's email. **The supplier evidence must satisfy the minimum SCAL requirements at this stage before progressing on to the next environment of this assurance path**	
2	Supplier submits request NHS Digital Platforms Support Desk (platforms.supportdesk@nhs.net) for registering their GP Connect consumer endpoint in the INT environment which will do the messaging interactions with the Spine Security Proxy (SSP). The URL for the SSP in the INT environment is https://proxy.int.spine2.ncrs.nhs.uk Link providing details about the INT 'Path to Live' test environment is as below: https://digital.nhs.uk/services/path-to-live-environments/integration-environment Link to the Authority Service Names (ASN) document which provides the list of services in the INT environment, their URLs, IP addresses and port numbers is as below: https://digital.nhs.uk/services/path-to-live-environments/integration-environment In addition to configuring any local firewalls to allow access for the required services from the ASN document, the supplier will also need to configure their local firewalls to allow access to the subnet as below: Subnet: 10.239.14.0/24 Port(s): 443 (inbound and outbound)	**STAGE 3** Build and Test Phase with Technical Conformance engagement in the INT Path to Live environment
3	NHS Digital Platforms Support Desk and NHS Digital Solution Assurance in conjunction complete the end point registrations and data sharing rules to enable the Supplier to access the INT Path to Live environment to do testing against the GP Connect Provider reference implementations i.e. GP Connect Demonstrator version(s) with the SPINE services PDS and SDS and the Spine Security Proxy (SSP). NHS Digital Platforms Support Desk and NHS Digital Functional Assurance team endeavour to provide access to the INT test environment within 5 working days of the supplier registering the request with the NHS Digital Platforms Support Desk	As above

Final

4	Supplier carries out testing captures evidence of testing done in the INT (Demonstrator) environment:- Supplier references, updates and submits the SCAL (Supplier Conformance Assessment List) spreadsheet and at this stage the supplier is required to capture early assurance evidence for requirements with supporting test evidence for the GP Connect Consumer tests. which are marked as **INT**(Column E) and **confirmation stating evidence required** (Column F). Where there are requirements which are marked as **ENVNA** (Column E) the supplier is required to confirm they meet the requirement with a supporting statement The GP Connect specific worksheets within the SCAL which would need completion being: • GPC - Spine Integration_v1.0 (mandated) • GPC - Foundations_v1.2.X (if in scope for delivery) • GPC - Appointment Mgmt_v1.2.X (if in scope for delivery) • GPC - AR HTML_v0.5.X (if in scope for delivery) • GPC - AR Structured_v1.2.X (if in scope for delivery) • GPC - AR Extended Structured_v1.2.X (if in scope for delivery) • GPC - AR Documents_v1.2.X (if in scope for delivery) Links to the GP Connect Consumer tests and the supporting test data for testing with the GP Connect Provider reference implementations i.e. GP Connect Demonstrator version(s) as below: **HTML Access Record:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-HTML **Appointments:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Foundations https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Appointments **Structured Access Record (Allergies and Medications):** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Structured	As above

Final

Step	Description	Phase
	Extended Structured Access Record: https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Access-Record-Structured-(extended) **Access Documents:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Access-Document The test data (synthetic NHS numbers) are specified in the **Demonstrator Patient ID** column within the tests. Test evidence in form of system screenshots, input and output messages (PDS, SDS LDAP queries and responses, GP Connect request an response messages) required to demonstrate that the supplier has gone through the GP Connect technical requirements, used the GP Connect APIs and the PDS and SDS services to build and test a working prototype or proof of concept solution prior to entry into the NHS Digital INT (Provider) environment The test evidence can be embedded in a word document and emailed to the NHS Digital Functional Assurance mail box functional.assurance@nhs.net. NHS Digital Functional Assurance endeavour to provide feedback on the test evidence submission within 5 working days of the receipt of the supplier's email **The supplier evidence must satisfy the minimum SCAL requirements at this stage before progressing on to the next environment of this assurance path**	
6	NHS Digital SA and other SCAL stakeholders review and approve the SCAL and the supporting test evidence. NHS Digital Functional Assurance and other SCAL stakeholders endeavour to provide responses and feedback on the SCAL submission and the supporting test evidence within 5 working days of the receipt of the supplier's submission.	**STAGE 4** Test in INT path to live test environment with test implementations of actual provider

Final

Step	Description	Phase
7	NHS Digital Functional Assurance submit request to the NHS Digital Platforms Support Desk to open up data sharing access for the Supplier to access to the test instances of the FHIR endpoints of the four GP Connect Provider supplier implementations (where provisioned) for end to end interoperability testing. NHS Digital Platforms Support Desk endeavour to open data sharing access within 3 working days of receipt of request from NHS Digital Functional Assurance	As above
8	NHS Digital Functional Assurance inform the GP Connect Provider supplier of the GP Connect Consumer supplier coming on board for any local config/setup activity required at the GP Connect Provider supplier end to enable the consumer supplier testing.	As above

Final

Step	Description	Phase
9	Supplier tests against each available GP Connect Provider test instance using a small subset of the existing NHS Digital GP Connect Consumer testsAs well as satisfy outstanding requirements in the SCAL. Supplier references, updates and submits the SCAL for outstanding requirments (Supplier Conformance Assessment List) spreadsheet and at this stage the supplier is required to capture assurance evidence for requirements with supporting test evidence for the GP Connect Consumer tests. which are marked as **INT(PROVIDER)**(Column E) and **confirmation stating evidence required** (Column F). This will include a small subset of tests as a recommend to run as a minimum, but the supplier may choose to run more or lesser number of tests at their discretion which they would benefit from re-running against actual providers for clinical content checking The purpose of these tests is not to repeat technical conformance processes against each GP Connect provider but only to aid the GP Connect Consumer supplier to perform end to end interoperability testing of their system with the test instances of the FHIR endpoints of the four GP Connect Provider supplier implementations. It will aid to identify and resolve any technical interoperability issues due to any subtle nuances in the implementation of the GP Connect capabilities by the GP Connect Providers. In event of any technical interoperability issues encountered which are attributable to either being at the SPINE end or the GP Connect Provider end, the supplier emails the NHS Digital Functional Assurance with the details of the issue along with any relevant request and response messages (including full message headers) and system screenshot which will aid the investigation and resolution.	As above

Final

Step	Description	Phase
10	Supplier completes the end to end testing successfully and informs the NHS Digital Functional Assurance of successful completion. No test evidence required for review but an email confirming successful completion of testing with the GP Connect provider test implementations is sufficient. NHS Digital Functional Assurance update the SCAL to note the GP Connect Providers against which the consumer end to end interoperability testing was successfully completed.	As above

Final

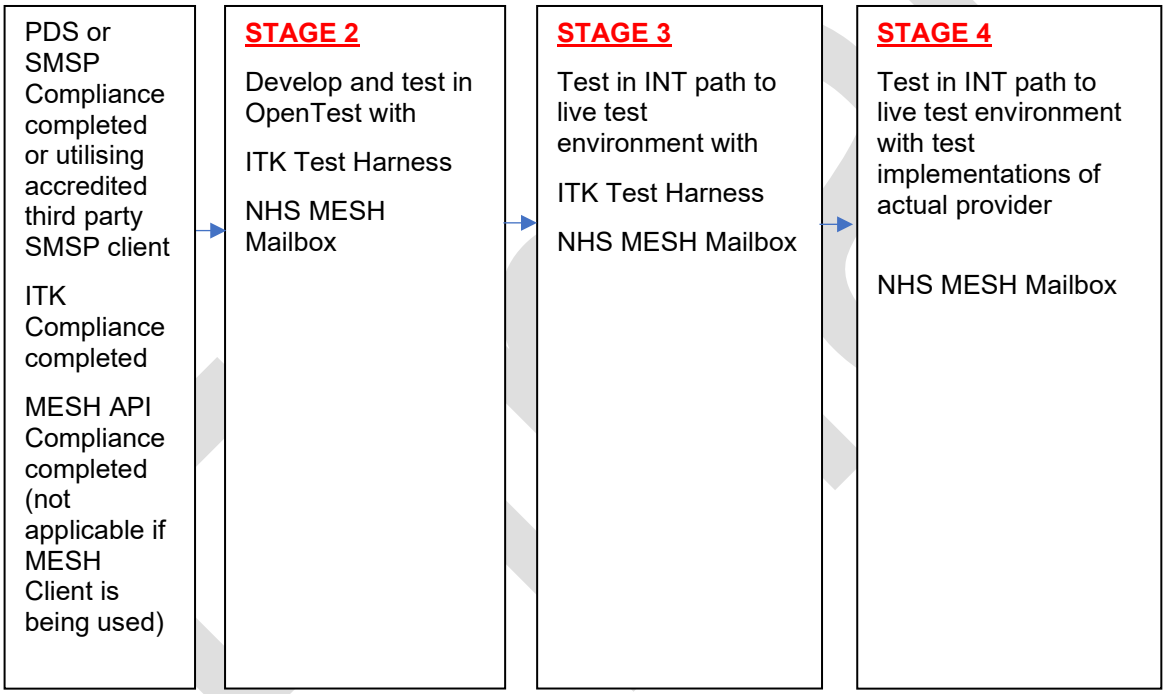
2.1.5 Test route for existing GP Connect Consumer Supplier already compliant with one or more GP Connect capability(s) making non-GP Connect changes to their consumer solution

Step	Description	Phase
1	The GP Connect supplier completes regression testing of the compliant GP Connect capabilities as per their internal testing and assurance processes. No SCAL submission or regression testing evidence required to be submitted.	NA

Final

2.2 Test Routes for Send Document Capabilities for new GPC consumers

2.2.1 Test route for SEND Document Capability where an GP Connect Consumer has not met the pre-requisites (i.e. Full PDS / SMSP Client Integration/ Utilising an accredited third party SMSP clients, ITK Compliance, MESH API Compliance (*not applicable if MESH Client is being used),* is looking to implement GP Connect Messaging or does not have HSCN (or N3) connectivity.



Step	Description	Phase
1	If supplier is not PDS/SMSP Compliant then:- Supplier completes for PDS SMSP compliance or full PDS compliance before GP Connect technical conformance For SMSP Compliance, guidance on the process for Suppliers who wish to gain access to the PDS via SMSP is in the link below https://developer.nhs.uk/library/systems/nhs-digital-smsp-pds/ Supplier contacts itkaccreditation@nhs.net for completing SMSP compliance. If full PDS Compliance required, supplier contacts Solution Assurance Business Support team at assurance@nhs.net as first port of call for progression.	
2	If supplier does not have N3/HSCN connectivity, then: - Supplier commences work on getting HSCN connectivity after completing the HSCN Connection agreement. Link to the details for HSCN connectivity is as below: https://digital.nhs.uk/services/health-and-social-care-network/new-to-hscn Note that this does not have to done in the sequence as it appears here. This HSCN connectivity process can commence anytime earlier.	NA
3	Supplier confirms which solution the consumer will be implementing: - a) MESH API b) MESH Client Following Link has the appropriate guidance: - https://digital.nhs.uk/services/message-exchange-for-social-care-and-health-mesh	NA

Final

Step	Description	Phase
4	If Supplier is implementing MESH API Solution, then: - • Supplier to confirm that they are MESH API Compliant • If not the Supplier is NOT MESH API Compliant they must email request to the NHS Functional Assurance Team: - functional.assurance@nhs.net As part of the request stating this is for GP Connect Send Messaging capability. If Supplier is implementing MESH client this step is not applicable	NA
5	Supplier to confirm that they are ITK Compliant, if not Supplier emails request to the NHS Digital ITK Team to initiate the process and gain compliance itkconformance@nhs.net As part of the request stating this is for Send Message capability.	NA

Final

<table>
<tr><th>Step</th><th>Description</th><th>Phase</th></tr>
<tr><td>6</td><td>To gain access to the ITK Test Harness and the Open Test Env

Supplier emails request to the NHS Digital Platforms Support Desk

platforms.supportdesk@nhs.net

for VPN access to the NHS Digital OpenTest Environment and the ITK Test Harness

Responsibilities of Platform Support Team:-

• Supplier provided VPN access to the OpenTest Environment to test with SDS, PDS and the ITK Test Harness along with the details on accessing these services to test with.
• Creation of a MESH mailbox within that environment for the supplier
• Configuration of the new mailbox for the required workflow_id (i.e. GPFED_CONSULT_REPORT)

<u>Test Harness Details</u>
<table><tr><td>Environment</td><td>Test Harness Mailbox</td><td>Portal URL</td></tr><tr><td>Opentest</td><td>NOWOT004</td><td>http://192.168.128.16/Login.aspx</td></tr></table>
Link to the URLs for the PDS, SDS in the OpenTest environment and the test data to use is as below:

https://orange.testlab.nhs.uk/opentest.html

ITK Test Harness Triggers

https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-ITK-Test-Harness-Send-Document</td><td><u>STAGE 2</u>

Develop and test in OpenTest with</td></tr>
</table>

Final

Step	Description	Phase
7	To gain access to the ITK Portal in the Open Test Env contact:- itkconformance@nhs.net Once a supplier has environment access and a MESH mailbox access to the ITK Portal can be configured. This allows users to • receive test harness validation reports via email • gain access to the INT portal to view validation reports and logs • ITK Conformance provides support in use of Test Harness test execution	As above
8	Supplier need to install MESH Client locally or Configure MESH API https://digital.nhs.uk/services/message-exchange-for-social-care-and-health-mesh/compare-mesh-services	As above

Final

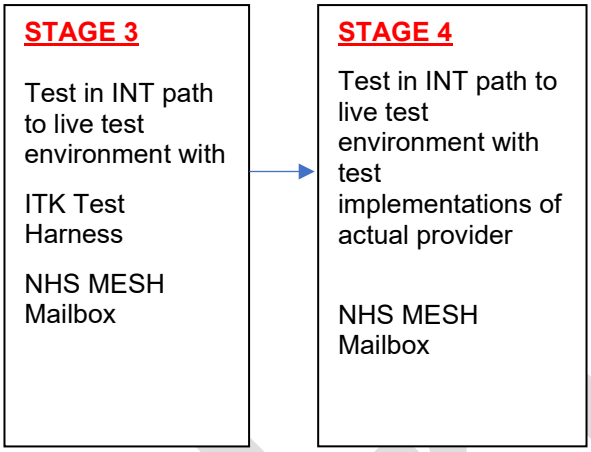
Step	Description	Phase
9	Supplier tests and builds a working prototype or proof of concept solution and captures evidence of testing done in the OpenTest environment. Supplier carries out testing captures evidence of testing done in the OpenTest environment:- Supplier captures test evidence in form of system screenshots, input and output messages (PDS queries and responses, GP Connect SEND Document request and response messages) required to demonstrate that the supplier has gone through the GP Connect technical requirements, used the GP Connect APIs and where applicable the PDS, Send Document services to build and test a working prototype or proof of concept solution prior to entry into the NHS Digital INT (integration) environment for further development iterations and formal engagement with NHS Digital for Technical Conformance. The GP Connect specific worksheets within the SCAL which would need completion being: • GPC – Send Document Links to the GP Connect Consumer tests and the supporting test data for testing with the GP Connect Provider reference implementations i.e. GP Connect Demonstrator version(s) as below: **Send Document:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Send-Document The test evidence can be embedded in a word document and emailed to the NHS Digital Functional Assurance mail box functional.assurance@nhs.net. NHS Digital Functional Assurance endeavour to provide feedback on the test evidence submission within 5 working days of the receipt of the supplier's email **The supplier evidence must satisfy the minimum SCAL requirements at this stage before progressing on to the next environment of this assurance path**	As above

Final

Step	Description	Phase
10	If it was determined that PDS/SMSP Compliance was required (as per step 1), to move forward they now need to confirm this has been achieved and is in place.	
11	If supplier did not have N3/HSCN connectivity as determined earlier (as per step 2), to move forward they now need to confirm this has been achieved and is in place.	
12	If it was determined that MESH API Compliance was required as determined earlier (as per step 3), to move forward they now need to confirm this has been achieved and is in place.	
13	If it was determined that ITK Compliance was required as determined earlier (as per step 4) to move forward they now need to confirm this has been achieved and is in place.	
14	Supplier then follows the same onboarding route as 2.2.2 post step 4	

Final

2.2.2 Test route for SEND Document Capability where an GP Connect Consumer who has met the pre-requisites (i.e. Full PDS / SMSP Client Integration/ Utilising an accredited third party SMSP client, ITK Compliance, MESH API Compliance (*not applicable if MESH Client is being used*), is looking to implement GP Connect Messaging already with existing HSCN (or N3) connectivity.



Step	Description	Phase
1	Supplier to confirm they have HSCN or N3 connectivity and PDS/SMSP Compliance or utilising an accredited third party SMSP client	STAGE 3 Build and Test Phase with Technical Conformance engagement in the INT Path to Live environment
2	Supplier confirms which solution the consumer will be implementing: - a) MESH API b) MESH Client Following Link has the appropriate guidance: - https://digital.nhs.uk/services/message-exchange-for-social-care-and-health-mesh	As above

Final

<table>
<tr><th>Step</th><th>Description</th><th>Phase</th></tr>
<tr><td>3</td><td>If Supplier is implementing MESH API Solution, then: -

• Supplier to confirm that they are MESH API Compliant

If Supplier is implementing MESH client this step is not applicable</td><td>As above</td></tr>
<tr><td>4</td><td>Supplier to confirm that they are ITK Compliant</td><td>As above</td></tr>
<tr><td>5</td><td>To gain access to the ITK Test Harness

Supplier emails request to the NHS Digital Platforms Support Desk platforms.supportdesk@nhs.net

Responsibilities of Platform Support Team:-

Granting of supplier access to the test environment

• Creation of a MESH mailbox within that environment for the supplier
• Configuration of the new mailbox for the required workflow_id (i.e. GPFED_CONSULT_REPORT)

<u>Test Harness Details</u>

<table><tr><th>Environment</th><th>Test Harness Mailbox</th><th>Portal URL</th></tr><tr><td>INT</td><td>X26OT112 or A20047OT002</td><td>http://10.210.164.11/Login.aspx</td></tr></table>
ITK Test Harness Triggers

https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-ITK-Test-Harness-Send-Document</td><td>As above</td></tr>
</table>

Final

Step	Description	Phase
6	To gain access to the ITK Portal contact:- itkconformance@nhs.net Once a supplier has environment access and a MESH mailbox access to the ITK Portal can be configured. This allows users to • receive test harness validation reports via email • gain access to the INT portal to view validation reports and logs • ITK Conformance provides support in use of Test Harness test execution	
7	Supplier need to install MESH Client locally or Configure MESH API https://digital.nhs.uk/services/message-exchange-for-social-care-and-health-mesh/compare-mesh-services	As above

Final

Step	Description	Phase
8	Supplier completes the test execution of the NHS Digital GP Connect Send Document tests against the ITK Test Harness. Supplier carries out testing captures evidence of testing done in the INT environment:- Supplier references, updates and submits the SCAL (Supplier Conformance Assessment List) spreadsheet and at this stage the supplier is required to capture early assurance evidence for requirements with supporting test evidence for the GP Connect Consumer tests. which are marked as **INT**(Column E) and **confirmation stating evidence required** (Column F). The GP Connect specific worksheets within the SCAL which would need completion being: • GPC – Send Document Links to the GP Connect Send Document tests and the supporting test data for testing as below: **Send Document:** https://github.com/nhsconnect/gpc-consumer-support/wiki/Consumer-Test-Scripts-Send-Document The test data (synthetic NHS numbers and Keywords for the Harness) are specified in the **Harness Patient ID** column within the tests.	As above
9	NHS Digital SA and other SCAL stakeholders review and approve the SCAL and the supporting test evidence. NHS Digital Functional Assurance and other SCAL stakeholders endeavour to provide responses and feedback on the SCAL submission and the supporting test evidence within 5 working days of the receipt of the supplier's submission.	As above

Final

Step	Description	Phase
10	GPConnect Programme Team inform the GP Connect Provider supplier/s of the GP Connect Consumer supplier coming on board for any local config/setup activity required at the GP Connect Provider end to enable the consumer supplier testing. As well as supplying relevant test data.	**STAGE 4** Test in INT path to live test environment with test implementations of actual provider
11	Supplier completes the end to end testing successfully and informs the NHS Digital Functional Assurance of successful completion. No test evidence required for review but an email confirming successful completion of testing with the GP Connect provider test implementations is sufficient. NHS Digital Functional Assurance update the SCAL to note the GP Connect Providers against which the consumer end to end interoperability testing was successfully completed.	As above

Final

2.3 Test Routes for Consumers who are making changes/uplifts to existing GPC capabilities

2.3.1 Test route for existing GP Connect Consumer Supplier already compliant with one or more GP Connect capability(s) making GP Connect changes to their consumer solution

Step	Description	Phase
1	The GP Connect supplier completes regression testing of the compliant GP Connect capabilities as per their internal testing and assurance processes. SCAL uplift submission and additional testing evidence required to be submitted. We would invite them into our INT environment to exercise the changes and carry out regression.	STAGE 3/4

2.3.2 Test route for existing GP Connect Consumer Supplier already compliant with one or more GP Connect capability(s) and not making changes to the consumer solution when there is a provider uplift

Step	Description	Phase
1	NHSD to get clarification from TA/BA regarding the change and gain a recommendation if they feel additional testing from consumers would be required.	
2	The GP Connect supplier reviews the new changes and confirms if the changes will impact their system. If there is impact or any uncertainty then we would invite them into our INT environment to exercise the changes and carry out regression.	NA

Final

4. FAQ

What do I need to fill in on the EPR form for INT When submitting to Platform Support?

Basically, this is the complete URL for each interaction ID below I have given example for each capability/interaction/fhir Resource

GPConnect-Foundations-1
urn:nhs:names:services:gpconnect

Interaction	URL bindings
fhir:operation:gpc.registerpatient-1	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:read:location-1	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:read:organization-1	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:read:patient-1	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:read:practitioner-1	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:search:organization-1	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:search:patient-1	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:search:practitioner-1	https://REPLACE WITH CONSUMER FQDN/
fhir:operation:gpc.registerpatient-1	This is an AS interaction.
fhir:rest:read:location-1	This is an AS interaction.
fhir:rest:read:organization-1	This is an AS interaction.
fhir:rest:read:patient-1	This is an AS interaction.
fhir:rest:read:practitioner-1	This is an AS interaction.
fhir:rest:search:organization-1	This is an AS interaction.
fhir:rest:search:patient-1	This is an AS interaction.
fhir:rest:search:practitioner-1	This is an AS interaction.

GPC Access Record - urn:nhs:names:services:gpconnect

Interaction	URL bindings
fhir:operation:gpc.getcarerecord	https://REPLACE WITH CONSUMER FQDN/
fhir:operation:gpc.getcarerecord	This is an AS interaction.

GPC Foundations - urn:nhs:names:services:gpconnect

Interaction	URL bindings
fhir:rest:read:location	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:read:metadata	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:read:metadata-1	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:read:organization	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:read:patient	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:read:practitioner	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:search:location	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:search:organization	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:search:patient	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:search:practitioner	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:read:location	This is an AS interaction.
fhir:rest:read:metadata	This is an AS interaction.

Final

fhir:rest:read:metadata-1	This is an AS interaction.
fhir:rest:read:organization	This is an AS interaction.
fhir:rest:read:patient	This is an AS interaction.
fhir:rest:read:practitioner	This is an AS interaction.
fhir:rest:search:location	This is an AS interaction.
fhir:rest:search:organization	This is an AS interaction.
fhir:rest:search:patient	This is an AS interaction.
fhir:rest:search:practitioner	This is an AS interaction.

GPConnect-Appointments-1 - urn:nhs:names:services:gpconnect

Interaction	URL bindings
fhir:rest:cancel:appointment-1	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:create:appointment-1	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:read:appointment-1	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:search:patient_appointments-1	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:search:slot-1	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:update:appointment-1	https://REPLACE WITH CONSUMER FQDN/
fhir:rest:cancel:appointment-1	This is an AS interaction.
fhir:rest:create:appointment-1	This is an AS interaction.
fhir:rest:read:appointment-1	This is an AS interaction.
fhir:rest:search:patient_appointments-1	This is an AS interaction.
fhir:rest:search:slot-1	This is an AS interaction.
fhir:rest:update:appointment-1	This is an AS interaction.

GPConnect-StructuredRecord-1 - urn:nhs:names:services:gpconnect

Interaction	URL bindings
fhir:operation:gpc.getstructuredrecord-1	https://REPLACE WITH CONSUMER FQDN/
fhir:operation:gpc.getstructuredrecord-1	This is an AS interaction.

GPConnect-Documents-1- urn:nhs:names:services:gpconnect

Interaction	URL bindings
documents:fhir:rest:read:metadata-1	https://REPLACE WITH CONSUMER FQDN/
documents:fhir:rest:search:patient-1	https://REPLACE WITH CONSUMER FQDN/
documents:fhir:rest:search:documentreference-1	https://REPLACE WITH CONSUMER FQDN/
documents:fhir:rest:read:binary-1	https://REPLACE WITH CONSUMER FQDN/

Final

How do I create a CSR File to submit with my EPR form's?

Ensure the Consumer has the Latest Sub CA and Root CA Cert installed on their machine before creating the CSR file from :- https://digital.nhs.uk/services/path-to-live-environments/integration-environment

Presuming consumer has have OpenSSL installed, here's the process for generating a CSR and Private Key: just open a command prompt (CMD), navigate to whatever folder they want the CSR to go into (e.g. C:\Users\johnsmith\Desktop), and enter the details highlighted (just hitting 'return' at all the other prompts)

- *C:\Users\johnsmith\Desktop>openssl req -out **<FQDN>**.csr -new -newkey rsa:2048 -nodes -keyout **<FQDN>**.key*
- *Generating a 2048 bit RSA private key*
- *.....+++*
- *.....+++*
- *writing new private key to 'client.ncrs.nhs.uk.key'*
- *-----*
- *You are about to be asked to enter information that will be incorporated*
- *into your certificate request.*
- *What you are about to enter is what is called a Distinguished Name or a DN.*
- *There are quite a few fields but you can leave some blank*
- *For some fields there will be a default value,*
- *If you enter '.', the field will be left blank.*
- *-----*
- *Country Name (2 letter code) [AU]:*
- *State or Province Name (full name) [Some-State]:*
- *Locality Name (eg, city) []:*
- *Organization Name (eg, company) [Internet Widgits Pty Ltd]:*
- *Organizational Unit Name (eg, section) []:*
- *Common Name (e.g. server FQDN or YOUR name) []:**<FQDN>***
- *Email Address []:*

- *Please enter the following 'extra' attributes*
- *to be sent with your certificate request*
- *A challenge password []:*
- *An optional company name []:*

Final

Which SCAL Tabs are required for each Capability?

Each Capability needs to provide specific evidence for each of the SCAL TAB's in their own right.

	Spine Int Tab	Foundation Tab	HTML Tab	Appointments Tab	Structured Tab	Extended Structured Tab	Access Documents Tab	Send Document Tab
HTML - CAPABILITY	✓		✓					
APPOINTMENTS CAPABILITY	✓	✓		✓				
STRUCTURED CAPBILITY	✓				✓			
EXTENDED STRUCTURED CAPABILITY	✓					✓		
ACCESS DOCUMENTS CAPABILITY	✓						✓	
SEND DOCUMENT								✓

What if some requirements are not applicable as we are not implementing that particular Interaction?

Consumers can implement the interactions based on their own use cases, as long as they indicate what they are compliant with and provide justifications for non compliance. Programme Team should have been made aware of this when use case was submitted.

What if there is a requirement which we cannot meet?

Need to supply a justification which will then be triaged with Tech Architect/BA whether to accept non compliance

Final