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Prescription Exemption Checking Service – Client Non Functional Requirements

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Document Management

Revision History

Version	Date	Summary of Changes
0.1	15/06/2017	Initial version for review

Reviewers

This document must be reviewed by the following people:

Reviewer name	Title / Responsibility	Date	Version
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Glossary of Terms

Term / Abbreviation	What it stands for
Electronic prescription	The information transmitted electronically, with the inclusion of an Advanced Electronic Signature, from a prescriber to Spine to allow dispensing and claiming via EPS
Electronic Prescription Service (EPS)	Electronic Prescription Service delivered by the EPS/ETP programme
Electronic Transmission of Prescriptions (ETP)	Electronic Transmission of Prescriptions programme, now known as the Electronic Prescription Service
Prescription token	Paper copy of the electronic prescription used to capture the patient's declaration of charge paid or exemption.
FP10	The paper form that is used to create a paper–based NHS prescription.
Medication item	Any medicine, appliance or reagent that can be prescribed
Organisation Data Service (ODS)	The Organisation Data Service (ODS) provided by the Authority. It is responsible for the national policy and standards with regard to organisation and practitioner codes.
Patient Medical Record (PMR)	A term used to describe the module/component of the system that holds patient medical records. Some implementers use the term PMR to describe a single patient medication record. Within the EPS documentation the term relates to the entire collection of patient medical records for the GP practice.
Personal administration	The prescribing, dispensing and claiming of products listed in the GMS Statement of Financial Entitlements, by a GP practice, which can be directly administered to the patient.
Prescribe	The act of authorising medication items on a prescription.
Repeat prescription	A prescriber-authorised repetition of a prescription
Repeatable prescription	A prescription valid for an authorised number of issues
The System	The system seeking compliance with the Prescription Exemption Checking Service

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Further Requirements:

NPFIT-FNT-TO-TIN-1383 IG v3 Foundation Module

NPFIT-ETP-EDB-0278.03 EPS Infrastructure Specification

Related Guidance Documents:

NPFIT-ETP-EIM-0110 RBAC Implementation Guidance for the EPS R2

Contents

1 About this Document

1.1 Purpose

This document details the non functional requirements that must be fulfilled in order to for client systems to integrate with the Prescription Exemption Checking Service.

It is likely that dispensing systems are already compliant with Prescription Exemption Checking Service and so must additionally adhere to the requirements defined within the “Dispensing Systems Compliance Specification” (ref: NPFIT-ETP-EDB-0024).

1.2 Audience

This document has been written for implementers and NHS Digital Solutions Assurance Non Functional Test team.

1.3 Content

Within this document, system requirements are explicitly numbered and listed within tables. Additional documentation, guidance and illustrations are contained within each document section to support the understanding of the requirements.

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119.

Drafting notes and areas for further review and confirmation are highlighted.

2 Background

NHS Prescription Fraud is currently costing the NHS over £200 million a year. Patients are not clear what exemptions they are entitled to and how to obtain the required proof. The current paper system is open to error and checks are only carried out by the NHSBSA once medication has been dispensed.

NHS Digital has been asked to provide an effective solution to ensure that exemptions from prescription charges are applied correctly prior to medication being dispensed.

The solution will enable dispensers to check a Patients’ prescription exemption status, resulting in exemptions being applied correctly prior to medication being dispensed, thereby reducing prescription fraud in England which currently stands at £237 million a year.

There are numerous benefits associated with this change, including dispensers benefiting from efficient exemption status checking, due to the digitising of the process, which will in turn reduce the burden on pharmacy. Solutions must not increase pharmacy activity nor hinder any patient from receiving their medication.

2.1 Architecture

DN: to follow

3 Non Functional Requirements

The following non functional requirements are required to be met by implementing systems.

3.1 Accessibility

This category describes how the system is to be used by people with disabilities.

3.1.1 Consistent with rest of system

PEC-NFR-1	Systems should provide accessible access to the system consistent with other areas of the system.

3.2 Availability and Resilience

This category describes the ability of the system to be fully or partly operational as and when required and its ability to handle failures that could affect availability. NFRs are not demanding in this area as failure of the prescription exemption checking component will not prevent patients receiving medication, and lost exemption data can be re-requested from the Prescription Exemption Checking Service.

3.2.1 Data Retention

3.2.1.1 Data Retention Periods

The audit log requirements are consistent with GPSoC Schedule 1.7, 730.40.8

PEC-NFR-2	Systems must retain audit logs with the following availability: • 3 years on-line (Years 1 to 3) • A further 7 years off-line, recoverable within 1 working day (Years 4 to 10 inclusive) • A further 20 years off-line, recoverable within 1 working week (Years 11 to 30 inclusive)

3.2.2 Service support

NHS Digital requires that national services engage with NHS Digital Service Management processes.

PEC-NFR-3	Implementers must meet the Authority's Service Management Requirements

3.3 Infrastructure

This category describes the physical and software infrastructure requirements of the system.

3.3.1 Warranted Environment

The Warranted Environment Specification (WES) defines the client environments that are supported by NHS digital. It covers:

- operating systems
- browsers
- Java Virtual Machines (JVMs)
- Smartcard printer drivers

PEC-NFR-4	Implementers must specify a supported client environment which must be a subset of the Authority's Warranted Environment Specification

3.3.2 Local Hardware

Local hardware requirements are consistent with the hardware required in dispensing systems.

PEC-NFR-5	Systems must meet the local hardware requirements as set out in the document EPS Infrastructure Requirements NPFIT-ETP-EDB-0278.03.

3.4 Evolution

This category describes the ability of the system to be flexible in the face of change post deployment, balanced against the costs of providing such flexibility.

3.4.1 Design for Extension

It is likely that further exemption categories are added in future. Systems should be architected to support extension and upversioning of the Prescription Exemption Checking Service.

PEC-NFR-6	Systems should be designed for future extension to handle an extended set of exemption types.

3.4.2 Release

Releases must undergo assurance through the NHS Digital Common Assurance Process. Post-implementation, further releases must be managed through Request For Change process.

3.4.2.1 Assurance via CAP

PEC-NFR-7	Implementers must meet the process and material requirements of the NHS Digital Common Assurance Process for initial implementation as agreed with the Authority.

3.4.2.2 Use of RFC process

PEC-NFR-8	Implementers must meet the process and material requirements of the Request For Change process for each release.

3.4.2.3 Test Environments

The CAP process and testing prior to changes requires testing within an appropriate test environment.

PEC-NFR-9	Implementers must provide at least one logically separate environment which can contain a separate release from that in the live environment, and which can be configured to connect to the Authority's test environments.

3.4.2.4 Limited Deployment of Releases

The CAP process requires First of Type testing which will require operation in the live environment with limited rollout prior to full rollout.

PEC-NFR-10	Systems must permit a limited rollout of a release to a limited number of user organisations as agreed with the Authority.

3.5 Performance and Scalability

This category describes the ability of the system to predictably execute within its mandated performance profile and to handle processing volumes now and in the future.

3.5.1 Volumetric model

PEC-NFR-11	Implementers should produce a volumetric model covering at the minimum transactional throughput, concurrent user connections, storage volumes and details of where headroom must be maintained.

3.5.2 Network impact assessment

PEC-NFR-12	Implementers must assess the impact of the service on existing services and users of the network prior to deployment of the service and ensure that there will be no undue effect.

3.5.3 Volume & Performance Testing

PEC-NFR-13	Implementers must test volume and performance of the system based on current throughput with additional headroom.

3.6 Regulations

This category describes the ability of the system to conform to all applicable laws, regulations, NHS policies, and other rules and standards.

3.6.1 Precedence of legislation & professional standards

PEC-NFR-14	Where implementers identify conflicts between this specification and legal or professional rules (e.g. due to changes in the law) they MUST notify the Authority. The authority SHALL review and agree with the implementer how to comply with legislation/rules.

3.7 Security

3.7.1 IG Toolkit

PEC-NFR-15	Implementers must ensure that all organisations connecting to the system have carried out the IG Toolkit assessment as required by the Authority.

3.7.2 Endpoint authentication

PEC-NFR-16	The System must require all connecting endpoints to be authenticated.

3.7.3 Implement 2FA

PEC-NFR-17	Implementers should require that all system access not requiring smartcard authentication is protected using two factor authentication.

3.7.4 Network Security

3.7.4.1 Firewalls

PEC-NFR-18	Networks hosting the system must be protected at the edge by appropriately configured firewalls.

3.7.5 Risk assessment

System security risk assessment needs to be carried out recognising the sensitivity of the information being handled and stored. Appropriate methodologies include HMG IS1 and ISO/IEC 27005.

PEC-NFR-18	Implementers must carry out a threat and risk assessment following a recognised risk assessment methodology

3.8 Usability

This category describes the ease with which people who interact with the system can work effectively.

3.8.1 Use NHS CUI standard

PEC-NFR-19	The System should use the NHS Common User Interface standards to present demographic information.

3.8.2 Use user centred design

PEC-NFR-20	Implementers should use user-centred design principles when designing user interface

3.8.3 Training material availability

PEC-NFR-21	Implementers must provide user training materiel specific to each release

3.8.4 Must not increase burden on user or patient

PEC-NFR-22	Systems must not place additional burden on the user or patient over existing processes.

3.8.5 Must not prevent patient from receiving medication

PEC-NFR-23	Systems must not prevent the patient from receiving their prescribed items.

3.8.6 UX consistent with rest of system

PEC-NFR-24	System user experience should be consistent with the wider system.