PRISM

New API deployments and migrations for PRISM - Guidance Notes

31st March 2022

1. Guidance scope and preliminary considerations

1.1 API (Application Programming Interface) solutions enable licenced fertility centres to send data to the HFEA semi-automatically from their EPRS (electronic patient records system) directly to PRISM.

1.2 This guidance is intended to cover the following scenarios after 1st April 2022:

- Centres who wish to deploy an API solution using a new EPRS solution. The centre will be acting as a pilot sponsor for the new API deployment.
- Centres who wish to migrate from direct entry to PRISM to an API solution that has already been created and deployed to licenced fertility centres elsewhere in the UK.

1.3 The Human Fertilisation and Embryology Act 1990 (as amended) requires all licensed centres to submit data to the HFEA. It therefore follows that the HFEA's regulatory relationship rests with licensed centres not ERPS suppliers. The Persons Responsible (PR) for the centre should formally initiate any process by advising the HFEA of their request to submit data through an API solution and ensure that sufficient resource from both the centre and system supplier is committed to the work involved (see section 2).

1.4 It is the expectation of the HFEA that there will be no decline in either data timeliness or data quality (i.e., an increase in validation errors), as result of any change in the way centres submit data to the HFEA. As the individual responsible for the data submitted to the HFEA, the PR should conduct an initial risk assessment to ensure that this will be the case, and ensure they understand how their own internal systems will need to change as a result of any move to an API.

1.5 On receipt of any formal request to commence an API deployment or migration, the PRISM programme team will consult with both the centre's inspector and the HFEA Director of Information and Compliance. The HFEA reserves the right to decline to commence an API process if it deems there are other compliance issues with the centre which will adversely affect any API migration.

1.6 For each EPRS supplier, the HFEA expects that all previous and current API migrations to the UK fertility sector are fully completed before any new API migrations are initiated.

1.7 As is evident from the stages outlined in this document, before they can fully undertake this process, EPRS system suppliers will require a sponsoring licenced fertility centre to act as a pilot for their API solution.

1.8 Prospective EPRS system suppliers can however gain access to the HFEA collaboration site and the PRISM development environment so they can familiarise with the system and develop their API solutions.

2. Resources and project initiation

2.1 For a successful API migration, the following resources will be required as a minimum:

2.2 From the licenced fertility centre:

- **Project oversight:** The person who will oversee the project from a centre perspective.
- **Process re-design:** The person who will manage the changes in internal processes at the centre as a result of any API migration
- **Centre data expert:** The person expert in the fertility data that is currently submitted to the HFEA.

2.3 From the EPRS system supplier (as a minimum):

- **Project oversight and co-ordination:** The person who will oversee the project from a supplier perspective and also co-ordinate with the centre on deployment and migration.
- **API Developer:** The person who will develop the API solution between the EPRS and PRISM.
- **Tester:** The person who will test the API solution against fertility scenarios and at pilot phase.
- **Trainer:** The person who will deliver API training to the centre.

2.4 From the HFEA

- **Project manager:** The person who will co-ordinate HFEA resources in the project.
- **PRISM developer:** The HFEA developer who will answer technical queries in relation to PRISM and who will oversee the automated testing of any API solution.
- **Data developer:** The HFEA developer who will answer queries on the PRISM database, who will oversee the assessment of any testing against real data and the initiation and checking of bulk-backport procedures.
- **Authorising Person:** Either the HFEA Head of IT or Director of Compliance and Information who will authorise the project to proceed through each of the stages described below.

2.5 Once the resources have been identified, there will be a project initiation meeting of everyone involved to ensure the project approach is clearly understood by all.

2.6 The HFEA reserves the right to delay an API project if too many are progressing at one time and there are insufficient resources at the HFEA to ensure all projects can be safely managed in parallel.

2.7 Once an API deployment or migration is initiated, it will progress through the following stages:

- A new API solution will be required to progress through all stages below and the HFEA will authorise completion of one stage before progressing to the next.
- A new migration to an existing API solution will be required to undertake stage 3 only.

3. Stage 1: Assurance that a new APO solution properly deals with all fertility scenarios

3.1 The EPRS supplier must build an API solution which covers the full HFEA Data Dictionary which can be found in the link below.

Click here for latest version of HFEA data dictionary

3.2 The HFEA will provide EPRS system suppliers with access to the PRISM system through the EPRS development environment and to key documents (such as the API user guide and self-certification requirements) through the EPRS collaboration site.

3.3 Once the EPRS system supplier has completed their API solution, it will be subject to the following system tests to ensure it deals properly 'in theory' with all fertility scenarios.

- HFEA testing of fertility submissions using test data. The HFEA test process will be co-ordinated by the HFEA PRISM developer with the EPRS supplier.
- Self-certification by the EPRS supplier to the HFEA and the clinic regarding those fertility processes and further complex fertility scenarios provided by the HFEA.
- An assurance interview with the EPRS supplier, clinic and HFEA technical and clinical staff.

3.4 The HFEA authorising person will determine whether the above tests have been satisfactorily completed and the project can progress to stage 2.

4. Step 2: Assurance that a new API solution properly deals with all legacy HFEA data (pilot phase)

4.1 In PRISM, an API submission does not simply send a form, it is required to post to a record that is being constantly updated. HFEA has maintained its statutory register of patient data for over thirty years, and this has now been migrated in full to PRISM.

4.2 EPRS system suppliers will be required to ensure that their API solution properly synchronises with HFEA legacy data in PRISM. To do this:

- The PR of the licenced centre which is acting as a sponsoring pilot for the API solution must confirm that it grants access to EPRS system supplier staff to the clinic's 'real fertility data' currently held in PRISM.
- Moreover, under no circumstances can 'real fertility data' leave the UK.

4.3 The EPRS system supplier should test their API solution using real data from the pilot centre in the PRISM pre-prod environment which will contain a copy of the centre's live data. This environment is whitelist protected and appropriate IP address should be provided to HFEA for whitelisting.

4.4 This phase of testing needs to demonstrate sufficient volume to provide reassurance to HFEA that the API solution effectively deals with all aspects of legacy data. It could either be through evidence of a bulk-testing exercise or through parallel running whilst the pilot clinic continues to enter data to the live version of PRISM. The details of the test will be agreed with the HFEA Head of IT and Data Developer and the time of commencement of this stage.

4.5 Once the HFEA has deemed that this stage has been completed, the project will move to deployment.

5. Stage 3: API deployment co-ordinated with the HFEA

5.1 Whether deploying a new API solution or migrating to an existing solution, all deployments and migrations involving centres that have previously submitted data to PRISM will require a 'bulk-backport'. This is to ensure that new data submitted by the centre is synchronised and aligned with data they would have submitted before the migration. It is an essential feature of an API migration which cannot work without it.

5.2 The bulk-backport is a download back to the centre of all previously submitted data to the HFEA. It is developed and operated by the HFEA who will confirm and agree the fields and length of data to be included in the backport with the EPRS system supplier.

5.3 Deployment of an API solution will therefore involve the following steps:

1. A transition date will be agreed with HFEA.
2. The centre will eliminate all historic validation errors in PRISM before transition and will be fully caught up on all data submissions.
3. HFEA will provide new whitelisting and credentials for the API solution.
4. The system supplier will take all necessary steps for installing, testing and training on the API solution at the centre.
5. At the date of transition, a bulk-backport will be provided by HFEA and uploaded by the EPRS system supplier to the centre. Checks will be undertaken by all parties to ensure the transition has progressed smoothly.
6. When all checks are passed, the HFEA authorising person will confirm that the API migration has been completed.
7. The centre will start to submit through the API solution. They can now no longer submit directly to PRISM, and they must ensure they catch up quickly on any backlog that may has arisen as a result of any delay on step 5 above.

5.4 The centre is reminded that they will need to ensure that they continue to deliver the same level of data quality, particularly concerning validation errors. Therefore, unless an alternative solution has been built into the API solution, they should ensure they have processes for continuing to review the validation errors on the PRISM Homepage, although any data corrections must be through the API solution.

5.5 Centres can find further information about data submissions standards (including error correction) on the version 5 of General Direction 0005 which came into effect on 1st April 2022 and is published on the HFEA Clinic Portal.

6. Next Steps

Centres who wish to explore an API migration can have an initial discussion with the PRISM Programme Manager or Head of IT. The first place to make contact is:

Prismsupport@hfea.gov.uk