

Request for information – Digital Health Platform

Introduction

“Felles Kommunal Journal Interim AS” (FKJ) is a company set up to describe a platform-based approach to renew the primary care EHR infrastructure within a majority of the Norwegian municipalities. The project is a cooperation between Norwegian municipalities, is managed by the Norwegian Association of Local and Regional Authorities (KS) and is a spin-off of the “Akson” and “En innbygger – en Journal” projects originally run by the Norwegian Directorate of eHealth. The project scope potentially covers all primary health and care services in all Norwegian municipalities except those in the counties of “Møre og Romsdal” and “Trøndelag”, but a final decision on scope and participation has not yet been taken. This RFI intends to investigate the market availability for digital health platforms based on certain technologies and give vendors the possibility to formally respond to the proposed concept.

Objectives

The vision of FKJ is to create an ecosystem of different application vendors that use a shared platform for storage and sharing of health data. These applications should combine to provide complete EHR solutions to the Norwegian municipalities. FKJ acknowledges that there are few health ecosystem examples where such a separation between data storage and application functionality have been achieved on a national scale, but believes that this platform concept is a future-proof architecture that many other health providers are actively considering. Through this RFI we would like to receive feedback from vendors on the platform concept and on our tentative choices of technologies.

This RFI does not intend to pre-qualify vendors to a possible future purchasing process but could be used to invite certain vendors to meetings, hackathon events and demonstrations of their products. A decision on potential future purchasing models have not been taken. The responses may change the strategy, requirements, and timeline of the FKJ platform and the future purchasing process.

Concept description

The tentative FKJ platform concept describes an ecosystem of many EHR and patient administration applications from multiple vendors that use the same shared platform for storing information. This RFI mainly concerns the platform for such an ecosystem rather than the applications, but we are also interested to hear from vendors of applications. For this concept to work, it needs both a platform and a group of application vendors who are willing to work together in an ecosystem to achieve the overall requirements of the Norwegian municipalities.

These separate applications should be combinable by the user to provide a complete and seamless EHR and patient administration solution for primary health care. Since the system is intended to be used by many different municipalities that are data controllers for their own information, the platform must also have flexible features to manage access control, versioning and data controller responsibility of the data. We are open to input from vendors on how such a complex ecosystem could work at the organizational, semantic and technical levels.

The multi-vendor application ecosystem is a strict requirement for FKJ, but we are open to learning from the vendor community how this may be achieved and how responsibility can be distributed between vendors.

Storing data outside all applications, in a shared and standardized format on a single platform may be difficult to achieve, and it could be that application vendors also should be allowed to store data either locally or in a separate application-space on the platform in early stages of development. We believe that the functionality and scope of the storage platform must evolve over time, and the platform may therefore not start off as a complete EHR-storage solution.

We believe there are vendors who say they are platform vendors but have limited support for third party vendors' applications. It is therefore important to stress that you should focus on how your platform is or can be an open platform for other application vendors and explain to us how this works in real life both in terms of business models and more technical aspects.

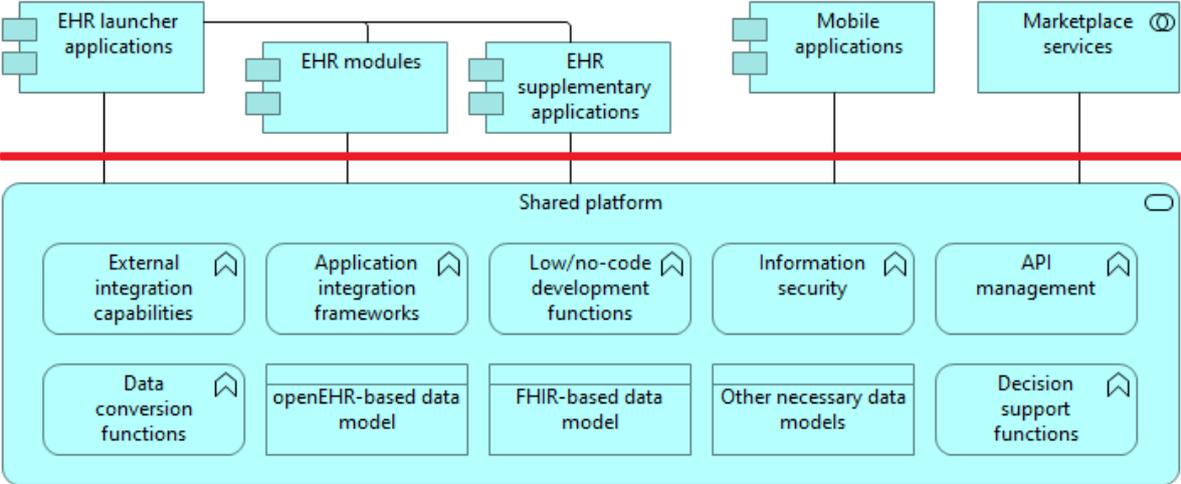


Figure 1 shows a conceptual model of a platform (below the red line) and different types of applications (above red line). The platform functions are illustrative and may not represent a complete picture, and can be built gradually over time.

Instructions to vendors

This is a Request for Information (RFI), not an order. No cost can be charged to us for any reason.

This document shall not be construed as a request or authorization to perform work at our expense. Any work performed by a vendor will be at the vendor's own discretion and expense. This RFI does not represent a commitment to purchase or lease. The RFI does also not represent a commitment to proceed with a purchasing process, as a decision on whether or how to proceed has not been made. Submission of a response constitutes acknowledgement that the vendor has read and agrees to be bound by such terms.

The submissions will be shared within the FKJ project, including employees and consultants working for FKJ Interim AS and representatives from municipalities.

Point of contact

All communication must be directed in writing to richard.astrand@ks.no.

Submission of response

A response to this RFI must be received by 1st of March 2022. Extensions to this date will not be granted. The vendor may respond in English or Norwegian. Responses must be submitted complete and in writing for the requested information below.

1. The written responses to the highlighted questions (questions 1-7) must be a maximum total of 5 pages with 11pt font. Additional responses (question 8-21) must be a maximum total of 5 pages with 11pt font. A total maximum of 10 pages will be allowed.
2. Maximum 5 pages of additional standard product material can be submitted, but this may not be reviewed by FKJ.
3. Provide information about pricing plans, and options for delivery and deployment (maximum 5 pages).
4. Provide information about relevant Digital Health Platform reference cases (maximum 5 reference cases and maximum 1 page each).

Vendor conference

We are planning to host a vendor conference open to all interested vendors on February 10th 2022 15:00 CET. The meeting will be conducted as a video conference using Teams. Sign up for the event by February 8th 2022 12:00 CET by using the sign-up form that will be made available at our website (URL: <https://ks.no/fkj>) (not yet published). You will be asked to fill in attendee details for all attendees. Any changes to dates will be announced on our website (<https://ks.no/fkj/>).

Vendor meetings

After reviewing responses to the RFI, we may invite some of the vendors to one-to-one meetings. We expect the vendor meetings to be conducted sometime in between 14th of February and 4th of March. The purpose of the vendor meetings is to discuss the invited vendor's response and the platform concept. We do not expect to invite all vendors and getting an invitation should not be seen as a sign of pre-qualification.

Hackathon

FKJ are considering arranging one or several hackathons where application vendors can come together and develop applications on the platform in a sandbox environment. A decision has not been made how this will be arranged, and how platform vendors will be included into the hackathon events. We would welcome input and advice from you on this topic, as pointed out in one of the questions.

Questions

Please provide brief answers to the following questions, according to the above instructions. You may choose not to answer all questions. If you do not currently support the given features, please inform whether such features are planned and if possible, provide a timeframe of such support.

- 1. Give your feedback on the feasibility of the digital health platform concept as described above, including separation of content and applications between different application vendors.**
- 2. List briefly relevant existing live references you have on digital health platform deployments (you may provide more information in appendix per above instructions). State whether applications are provided by a different vendor than the platform vendor, and who is delivering platform vs apps in the reference cases.**
- 3. Describe your position on and support for the use of the HL7 FHIR standards for digital health platforms as described above. Please include a brief description of the related HL7 FHIR feature set and API support as standard product documentation in an appendix.**

4. **Describe your position on and support for the use of the openEHR standards for digital health platforms as described above. Please include a brief description of the related openEHR feature set and API support as standard product documentation in an appendix.**
5. **Describe your support for application frameworks that provide seamless flow for the user between application modules from different vendors.**
6. **Describe your support for low/no-code application development, and support for applications that are entirely made by a separate application vendor.**
7. **In your experience, which business models work best within the ecosystem involving the customers, application vendors, platform owner and platform vendor.**
8. Describe other open content standards that you believe are relevant to support in such a digital health platform
9. Describe briefly how you propose the information modelling and management should be done in the described ecosystem, where platform/data storage and application vendors are separate.
10. Describe your support for marketplace services (including for example an application store, sandbox/testing environments, business models, certification program etc).
11. Describe any API management functions you have that help third party application vendors get simple access to the right APIs, allow the platform owner to control access securely, app and API governance, lifecycle management of APIs and apps etc.
12. Describe special decision support functions that your platform has built-in, or support for third party decision support functions/applications.
13. Describe how your platform supports access control and other information security features, including support for multiple organizations storing and accessing data on the same platform.
14. Describe if you have any special functions for third party mobile applications, IoT, personal connected health or remote monitoring.
15. Describe how medical equipment at the health facilities can access the platform to store health data.
16. Describe integration functionality your platform has that enables integration with external systems, both for collaboration between health workers and citizen, and integration with back-office systems (such as ERP, foundational data, HR systems etc).
17. Describe briefly other functions than those mentioned above which you believe are important to have in a digital health platform.
18. Describe how you may contribute to testing FKJ's digital health platform concept in a hackathon or similar event, involving multiple vendors both of applications and platforms.
19. Describe briefly how you may address challenges related to information security, GDPR and Schrems II in particular, on the platform.
20. Describe how your solution addresses operation and maintenance, hosting, scalability, redundancy and scaling
21. Describe how your company addresses support for particular Norwegian regulations and requirement for municipality EHR systems and integration points.