INTEGRATING HEALTH-RELATED DATA
Roche

The need / opportunity to be addressed

The opportunities to be addressed are solutions which enable the collection and utilisation (sense making) of multiple sources of health-related data alongside traditional clinical data sources such as electronic health records. Such data can include real-world data (RWD), patient-reported outcomes (PROs), genetic profiling and other types of data generated both within and outside of the healthcare system,

This will enable better disease management and treatment (in order to support engagement and decision making by both the individual and the healthcare provider) through the use of real time data at the time point of decision. It will also pave the way for new financial models for health care products and services and eventually support predictive analytics and hopefully preventive care.

The solution should be designed for interoperability with existing systems and enable a high degree of sharing. Such solutions can include, but are not limited to, data lakes etc.

Why it matters

- We as individuals are generating more health-related data than ever (IBM estimates that we each generate more than 1 million gigabytes of health-related data in our lifetime).

- RWD (e.g. data generated through wearables etc) and PROs are emerging as important sources as data alongside traditional clinical data to help patients manage their conditions in real time, and provide real-world evidence to the efficacy of medical interventions.

- Diagnostic advances, including e.g. genetic profiling, need to be considered at point of decision to maximize the chance of treatment success.

- Using real time data has the potential to improve decision making and making the value of data collection apparent to all citizens.

- However, there is a challenge in getting real time access to and making sense of data from multiple sources in healthcare that translate into decision making and actionable insights.

- A key issue is the lack of interoperability of existing systems with promising data generating solutions (which limits their implementation in practice), as well as a means of evaluating the quality and importance of the data.

The challenge owner's point of view / specific interest

Roche would like to see the following perspectives, where possible, reflected in the pitches:

- It should be clear whether the solution is an idea, prototype or already available product.

- Which collaborators are needed to develop or implement the solution.

- How the solution would enable integration of new software and technologies compared to how this is being done today, including benefits of the solution for healthcare providers as well the general society.

- If similar solutions are used elsewhere and the lessons that can be made from those examples.

- How the solution fits into highly specialized hospital care (such as within oncology, rare conditions, and/or Advanced Therapy Medicinal Products (ATMP)), and the envisioned business model for the solution.