Abstract

The increased pace of advances in science, technology, and healthcare and the need for medical breakthroughs have blurred the lines between traditional Biotechnology, Pharmaceutical Research, and Healthcare. Anyone who is familiar with these sectors knows that the data and information needs of these industries are large and complex and often daunting even within a single organization.

In this paper, we will discuss implications of the patient data flow produced by each of these organizations. We will define what each of these types of organizations does in terms of their interaction with the patient and the data footprint that each of them generates. Further, we will outline trends in the context of each industry and what that might mean for the integration of data and systems. Finally, we will talk about the implications of interoperability within and between these sectors including the electronic and personal health record (EHR/PHR), health information exchanges (HIEs), the role of patient registries and epidemiology databases, and the converging data and interoperability standards (for example, CDISC, ICH, and HL7.)