In the interest of the patient
Convergence across the pharmaceutical and healthcare industries

The pharmaceutical industry needs to develop better treatments and the healthcare industry to deliver better care. If they collaborate and share the data they separately collect, they will come closer to realizing these goals.

The pharmaceutical and healthcare industries are both going through a period of great turbulence. The pharmaceutical industry (Pharma) is seeking to replace the traditional blockbuster model of drug development with a new model that enables it to develop safer, more efficacious drugs, while the healthcare sector is struggling to cope with rapidly rising costs, inconsistent delivery and inadequate access in many countries. These pressures will bring the two industries closer together. Although some healthcare providers are quite skeptical about Pharma’s motivations, it is only by collaborating and sharing data that the two industries can “connect the dots” to realize the full value of the information they collect, provide better products and services, and ultimately improve patients’ health (see Figure).

New technologies and research techniques will play a major role in enabling this convergence. Common data standards and security-rich systems capable of preserving the confidentiality of personal data will likewise be essential, as will the active support of various stakeholders. These naturally include Pharma, its regulators, healthcare providers (i.e., doctors and other clinicians, as well as care-delivery organizations like hospitals and specialty clinics), healthcare payers (i.e., public or private health plans, employers and governments) and patients. Academic institutions, medical device and diagnostics companies, retail pharmacies, telecommunication (telecom) operators and so forth also have an important contribution to make.

A study recently conducted by the IBM Institute for Business Value shows that the scope for convergence is considerable. We interviewed 27
people from a number of different disciplines within AstraZeneca, the Karolinska Institute and the Karolinska University Hospital to ascertain a better understanding of the current situation, the benefits of greater data exchange among medical research, pharmaceutical R&D and healthcare provision, and the barriers to implementation.

The vast majority of respondents said that there is very little, if any, integration of clinical research and patient healthcare data today, but all agreed that it was essential. They identified a number of key factors driving the need for greater interoperability. Seventy five percent of respondents identified the need to do better research; 50 percent the need to save costs, time, and resources; and 46 percent the need to get data/information more rapidly.

Respondents identified a number of changes they believe will be required to support greater interoperability. Sixty percent specified the exchange and integration of data, while 50 percent thought that data standards were vital. Twenty-seven percent identified ethical and legal concerns, management commitment and greater collaboration as key issues.

All the respondents also thought that greater interoperability would bring some significant benefits to their respective organizations. Forty-one percent thought that it would improve the quality of research and/or education; and 22 percent that it would result in better collaboration. Nineteen percent thought that it would accelerate access to information, reduce the time required to complete analyses and increase the chances of success in drug development.

However, they acknowledged that there are still some important hurdles to overcome. The biggest areas of concern were legal and ethical issues, the IT changes that would be required, lack of resources, the need to maintain patient confidentiality and challenges involved in establishing an efficient business model and getting top management’s commitment.

The advances of the past decade – advances in biomedical, clinical, behavioral and computational research – have generated more opportunities for improving human health than ever before. And this is the one goal that pharmaceutical companies, medical researchers, healthcare professionals and healthcare payers indisputably share. But the only way in which they will be able to realize that goal is by working more closely together – heretical though this idea may seem to some. It is the insights generated from the synthesis and analysis of data from numerous different disciplines that will enable the biopharmaceutical industry to develop better treatments and the medical establishment to deliver better care.