

HIE (Health Information Exchange)

Electronic health information exchange (HIE) allows doctors, nurses, pharmacists, other health care providers and patients to appropriately access and securely share a patient's vital medical information electronically—improving the speed, quality, safety and cost of patient care.

Despite the widespread availability of secure electronic data transfer, most Americans' medical information is stored on paper—in filing cabinets at various medical offices, or in boxes and folders in patients' homes. When that medical information is shared between providers, it happens by mail, fax or—most likely—by patients themselves, who frequently carry their records from appointment to appointment. While electronic health information exchange cannot replace provider-patient communication, it can greatly improve the completeness of patient's records, (which can have a big effect on care), as past history, current medications and other information is jointly reviewed during visits.

Relevant, timely exchange of critical patient information will help inform decision-making at the point of care and encourage providers to do so.

- Avoid readmissions
- Avoid medication errors
- Improve diagnoses
- Decrease duplicate testing

If the practice has successfully integrated patient information faxing into its business process flow, they may wonder why they should move to electronic health information exchange. There are many advantages to the exchange of information, irrespective of the means by which it is transferred. However, the importance of electronic exchange is the standardization of data. When standardized, the data transferred can be easily incorporated into the Electronic Health Record (EHR) recipients, further enhancing patient care. For example, in the case:

If laboratory results are obtained electronically and integrated into the EHR provider, a list of patients with diabetes may be produced. The provider will then assess which of these patients has excessive blood sugar and arrange the required follow-up appointments.

Three key forms of health information exchange

Directed Exchange – The ability to send and receive electronically secure information between health care providers to facilitate organized care.

Query-based Exchange - The capacity of physicians to locate and/or request information on a patient from other physicians, also used for unplanned treatment.

Consumer Mediated Exchange – The ability of patients to aggregate and monitor the use of their health information among providers

The requirements, policies and technologies necessary to initiate all three types of sharing of health information are now complete, tested and accessible. The following parts provide extensive details and examples for each of the three types.

Direct Exchange

Direct Exchange is used by providers to transmit patient details directly to another health care professional quickly and safely, such as laboratory orders and findings, patient referrals, or discharge summaries.

Consumer Mediated Exchange

Consumer Mediated Exchange allows patients access to their health records, enabling them to monitor their health care electronically in a manner similar to how they could control their finances by online banking.

Query-based Exchange

Query-based Exchange is used by providers to search and locate open clinical sources for patients. This form of exchange is also used when offering unplanned treatment.