

B.1.6. The Example of the U.S. Implementation Environment

In contrast with the experience observed in Latin American and the Caribbean Countries, the implementation of Health Information Networks in the United States has been closely linked with the high level of overall development of healthcare. The health sector is undergoing a fundamental change in the alignment of economic incentives with health provision. Under the old model, based on indemnity insurance, the built-in incentive created by the fee-for-service scheme encouraged provider-induced demand, selection of high-cost interventions, and potential over-treatment. Patients with terminal conditions or irreversible organ failure frequently received costly treatment benefiting financially providers, suppliers of equipment and drugs, and inpatient care facilities. This situation resulted in escalating costs not necessarily resulting in proportional better overall improvement of the status of health of the society.

With different forms of managed care emerging as the predominant model for healthcare delivery, the incentives are in the direction of keeping people healthy and lowering costs. The new healthcare models are centered on people and focused on quality, sound financing, and accountability. In this new environment, information systems are essential and should be designed and implemented considering the diversity of perspectives of regulators, managers, payers, providers, and clients. The traditional contents of health information systems are not appropriate to the new requirements. The role of clients, for instance, was rarely considered in the past – with the desired increased participation of educated, informed, and empowered consumers, they are a key part of the new models of healthcare. Consumers require information in special formats — when they need it and where they need it, in order that they can take an active role in their own treatment.

There are many Healthcare Networks in implementation in the United States. They are expected to grow rapidly in the near future. Some examples:

- *The Arkansas Health Network* - This organization is a partnership of Arkansas Blue Cross/Blue Shield and two major providers and many physicians in the State of Arkansas. The objective of the network is to share both administrative and clinical information across organizational boundaries. When fully completed, the system will enable physicians to process referrals automatically, administrators to check patient eligibility and handle claims, all without the paperwork previously associated with these "inter-organizational" tasks.
- *BJC Health System* - This 12-hospital corporation centered in St. Louis, Missouri, is developing its own Computer-based Patient Record to support the continuum of care. BJC has begun to automate its patient data types, including laboratory, radiology, and other ancillary data, as well as radiographic images. It uses clinical repositories, vocabulary managers, and clinical decision support tools to provide comprehensive information for caregivers in its system, regardless of where the patient is or has been, or where the caregiver is.

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- *Greater Dayton Area Health Association (GDAHA)* - This is a Community Health Information Network (CHIN) located in southwestern Ohio. Although not a corporation, the 15 members of GDAHA plan to automate key functions such as eligibility/certification, referrals, and clinical documents.
- *Kaiser-Permanente* in California - It has more than 4,000 high-end servers and mainframes distributed throughout this organization. The overall information is contained both in mainframes and in thousands of personal computers.
- *United Healthcare* in Minneapolis - This organization has an extensive information-processing network outsourced to IBM, Unisys, and AT&T.