

(PDF-082) Whom on your executive team is primarily responsible for leading tactical technological innovation efforts in your organization?

(Check one)

- A. Chief Innovation Officer, Chief Technology Officer (or similar technology related type title)
- B. CIO
- C. A non-technology C-level executive (e.g., CFO; COO)
- D. A non-C-level executive team member (Vice President of Innovation; Director of Innovation)
- E. We outsource this function (external innovation leader/vendor)
- F. No one individual leads this effort
- G. We do not currently have a formalized technological innovation effort in our organization

The intent of this question is to ascertain whom within the HCO leads the organization's innovation efforts.

When thinking about technological innovation in your organization, which of the following statements best characterize your organization's strategic management

(PDF-083) LEADERSHIP approach? (Check one)

(PDF-084) PLANNING and EXECUTING?

(PDF-085) PROCESSES and TOOLS?

(PDF-086) ORGANIZATIONAL STRUCTURE and BUSINESS MODEL?

(PDF-087) PEOPLE and CULTURE?

(PDF-088) PERFORMANCE MANAGEMENT?

(PDF-089) APPROACH to the strategic management of innovation?

(Check one)

The intent of this series of questions is to assess how innovation is "digested" in an HCO.

(PDF-090) Which of the following types of digital health tools have your technological innovation assessment efforts addressed within the past three-years?

(Select all that apply)

Remote monitoring for operational efficiencies: Smart versions of common clinical devices such as thermometers, blood pressure cuffs, and scales that automatically record readings in the patient record eliminating the need for staff/clinicians to enter the data.

Remote monitoring for improved care and management: Apps and devices for use by chronic disease patients for daily measurement of vital signs such as weight, blood pressure, blood glucose, etc.; Readings are visible to patients and transmitted to the physician's office. Alerts are generated as appropriate for missing or out of range readings to assist in the management of care.

Clinical decision support: Modules used in conjunction with the EHR or apps that integrate with the EHR that highlight potentially significant changes in patient data (e.g., gain or loss of weight, change in blood chemistry).

Patient engagement: Solutions to promote patient wellness and active participation in their care for chronic diseases (e.g., adherence to treatment regimens).

Tele-visits/virtual visits: An audio/video connection used to see patients remotely (i.e., simple acute illness, adjusting therapy, etc.).

Point of care/survey workflow enhancement: Communication and sharing of electronic clinical data to consult with specialists, make referrals and/or transitions of care.

Consumer access to clinical data: Secure access allowing patients to view clinical information such as routine lab results, receive appointment reminders and treatment prompts, and to ask for prescription refills, appointments and to speak with their physician.

- A. Remote monitoring for operational efficiencies
- B. Remote monitoring for improved care and management
- C. Clinical decision support
- D. Patient engagement
- E. Tele-visits/virtual visits
- F. Point of care/survey workflow enhancement
- G. Consumer access to clinical data
- H. We do currently/have had a technological innovation effort in our organization but not in one of the above areas
- I. We do not currently/have not had a technological innovation effort in our organization.

The intent of this series of questions is to gauge the array of innovation assessed by an HCO.

(PDF-091) Of the following types of innovations, which do you currently use in your organization? (Select all that apply)

- A. Artificial Intelligence (Acute/Ambulatory)
- B. Robotics (Clinical / Non-clinical) (Acute/Ambulatory)
- C. 3-D printing (Acute/Ambulatory)
- D. Nanotechnology (Acute/Ambulatory)
- E. Biotechnology (Acute/Ambulatory)
- F. Quantum computing (Acute/Ambulatory)
- G. Point-of-care (POC) diagnostics
- H. Virtual reality (VR)
- I. Leveraging social media to improve patient experience
- J. Biosensors and trackers

The intent of this question is to gauge the array of technologies (many would consider innovative) currently used within an HCO.

“currently used”

There are no stipulations regarding the extensiveness of the technology's used.

A. Artificial Intelligence (Acute/Ambulatory)

AI in healthcare is an umbrella term to describe the application of machine learning (ML) algorithms and other cognitive technologies in medical settings. In the simplest sense, AI is when computers and other machines mimic human cognition, and are capable of learning, thinking, and making decisions or taking actions.

B. Robotics (Clinical / Non-clinical) (Acute/Ambulatory)

A medical robot is a robot used in the medical sciences. They include surgical robots. These are in most telemanipulators, which use the surgeon's activators on one side to control the "effector" on the other side.

C. 3-D printing (Acute/Ambulatory)

Medical 3D printing is increasingly deployed in both clinical and research-based healthcare activities. It involves the creation of physical replicas of anatomical structures using 3D printing (also known as additive manufacturing) processes.

D. Nanotechnology (Acute/Ambulatory)

Nanomedicine refers to the area of science that combines nanotechnology with drugs or diagnostic molecules to improve the ability to target specific cells or tissues.

E. Biotechnology (Acute/Ambulatory)

Medical biotechnology is a branch of medicine that uses living cells and cell materials to research and then produce pharmaceutical and diagnosing products. These products help treat and prevent diseases.

F. Quantum computing (Acute/Ambulatory)

Using quantum computers, fed with huge amounts of health parameters, genetic information, sensory data, and other personal health information, might be able to give a comprehensive prediction about a given person's future health. That's what we could really call predictive health.

G. Point-of-care (POC) diagnostics

Point-of-care (POC) diagnostics produce rapid, reliable results that aid in identification and monitoring of acute infections or chronic disease. POCT involves screenings and tests at or near the point of care, which produce actionable results within minutes.

H. Virtual reality (VR)

Virtual Reality solutions allow both healthcare professionals and patients interact with simulated environments tailored for medical education (including simulative surgery training), pain management or rehabilitation.

I. Leveraging social media to improve patient experience

Social media is vital to raising public awareness about new, emerging, and annual health concerns. Bringing awareness to health issues can be as simple as reminding followers about common sense health practices.

J. Biosensors and trackers

Devices that track biological processes and provide insightful analytical data for doctors and patients. Biosensors also have the benefit of making biological activity such as the levels of blood oxygen minimally invasive.

(PDF-92) Is your organization formally associated with an Innovation Center involved in healthcare technological innovations? (Check one)

- A. Yes
- B. No

The intent of this question is to gauge the array of technologies (many would consider innovative) currently used within an HCO.

Healthcare Innovation Center

There is no universally agreed upon definition of an innovation center. The intent of this question is to identify those HCOs that have a formalized effort in place designed to focus on creating new technologies, new services and exploring new business models. This is distinct from process improvement or implementation science, and often needs a different set of incentives to succeed within a large organization.