

Data breaches can result in harm to patients and potential fines to the organization. Hospitals using telehealth platforms should implement processes to ensure that data are correct and remain confidential to prevent inappropriate delivery of care. Methods that may be used include the following:

- Multifactor authentication
- Decentralized storage of data
- Encrypted data
- Use of secured networks or virtual private networks (VPNs)
- Access control monitoring

Employee training programs must include cybersecurity awareness with specific topics that ensure security of confidential information.

Measurable Elements of HCT.01.02

1. ① The hospital implements written guidelines and processes to secure patient information when telehealth services are used.
2. The hospital establishes processes to ensure that patient information remains confidential when telehealth services are used.
3. The hospital establishes processes to ensure the integration of information when multiple touchpoints and platforms within the system are used.
4. ② All staff involved in providing telehealth services receive cybersecurity training and continuing education, and the training and ongoing education are documented. Training for staff accessing health information technology systems includes the following:
 - Device security
 - Access privileges
 - Password protection
 - Social engineering and phishing
 - Cybersecurity threats

Standard HCT.01.03

For hospitals using artificial intelligence clinical decision support tools, there are processes for selection, implementation, oversight, and improvement.

Intent of HCT.01.03

Artificial intelligence (AI) technology is rapidly progressing within the health care setting and requires guidelines to ensure that biases are avoided, ethical standards are maintained, information is stored privately and securely, and the tools are performing as intended to meet expectations of the end users.

AI advancements are providing opportunity for hospitals to improve outcomes, reduce organizational costs, and impact public health. AI-based decision support tools are being implemented across multiple settings and specialties within health care settings to transform decision-making processes. These tools are used to improve quality of care, increase efficiency in the delivery of care, and enhance decision-making by analyzing patient data and generating predictions based on those data. Machine learning and algorithms analyze data, learn from patterns or trends, and offer insight to health care providers across the continuum.

The health care industry is one of a few whose clients turn to the Internet to search for their problems before consulting with a professional. Individuals research their symptoms online and have a tendency to diagnose themselves based on those search results. Countering the need for a growing demand of services, use of AI chatbots or technology of the like are on the rise. AI use in this manner can allow for these services to be provided to a wider population range, save time for providers, and increase data analysis capabilities. When incorporating chatbots, there is a concern for data to remain private, be safeguarded, and remain encrypted during use.

A qualified individual(s), identified by relevant training and background, as well as the leadership team and key stakeholders, should be involved in the selection process and ongoing oversight of AI tools. Hospitals using AI technology should have methods in place to evaluate the decision-making support tools to ensure that they meet expectations of the hospital and patient population. Ongoing monitoring is necessary for usability, intended use, up-to-date capabilities, data safety, data quality, system risks, and any ethical concerns. There should also be consideration that a human practitioner is involved in final decision-making when it involves patient care. Practitioners should still physically examine patients, review any documentation prompts, and be held responsible for the care of the patient. The hospital should establish a process for reporting any adverse outcomes to the leadership team and key stakeholders.

Education and training of all pertinent staff members who interact with the AI decision support tools is required to ensure effective and safe integration into practice and care delivery. Having established users on-site to troubleshoot or provide training sessions can be beneficial to the organization.

AI clinical decision support tools include diagnostic decision support tools, treatment decision support tools, predictive analytics tools, and population health management tools. Examples of commonly used types of clinical decision support tools used in the hospital setting include but are not limited to the following:

- Sepsis triggers
- Wound management
- Medication reconciliation
- Medication dosing
- Diagnostic code selection
- Aide in rapid response procedures
- Creation of treatment guidelines for urgent conditions
- Interpretation of lab and testing results

Factors to consider when assessing the AI technology and algorithms are as follows:

- Is it meaningful or useful to the setting?
- Is it providing up-to-date data?
- Does it meet clinical workflow expectations?
- What is the impact on clinical decision-making?
- What is the confidence level of the output data?
- What is the likelihood of bias being introduced?

Monitoring effective use of AI technology for clinical decision-making includes the following:

- Reviewing usage logs, including common uses, areas for improvement, and user satisfaction
- Identifying discrepancies in diagnoses, treatment recommendations, or medications
- Analyzing feedback from providers
- Evaluating patient outcomes
- Performing updates to the tool or the system

Measurable Elements of HCT.01.03

1. The hospital identifies qualified individuals to select the relevant AI tools for their respective areas of expertise (for example, pharmacy, wound care, surgery).
2. © The hospital establishes written guidelines and processes for oversight of the effectiveness of AI tools used by the hospital. These include the following:
 - Approval and implementation processes
 - Human practitioner involvement in final decision-making of patient care
 - Security and privacy of patient data (*See also* PCC.01.02, ME 1)
 - Identification of system discrepancies
 - Analysis from providers and relevant third-party sources
 - Updates to software/technology as deemed appropriate
 - Ethical considerations
3. The hospital tracks usage and trends on an ongoing basis and reports outcomes to the relevant parties (for example, key stakeholders, leadership team, third-party sources).