National Committee on Vital and Health Statistics
Advising the HHS Secretary on National Health Information Policy

Project Scoping: Improving Security in Healthcare

NCVHS Subcommittee on Privacy, Confidentiality and Security

March 31 – April 1, 2021 Full Committee Meeting

Today's Agenda

Background

Project Goals

Phased Plan

Proposed Timeline

Discussion

Background

NCVHS' Charge

NCVHS is charged with studying and identifying "privacy and security and access measures to protect individually identifiable health information in an environment of electronic networking and multiple uses of data."

Background

- The challenges of safeguarding individually identifiable information have become increasingly complex with the rise of hacking and IT incidents, as well as insider threats in the health care industry.
- Advancing interoperability, new technologies, the use of big data, and artificial intelligence are creating new opportunities for the industry, as does meaningful engagement of consumers, families, and communities in advancing health and health care.
- Privacy and security are linked to all the ways in which information about individuals is collected, analyzed, and used in our increasingly digital society.
- The growing number of ransomware attacks and targeted nation-state hacking illustrates the vulnerability of this information.

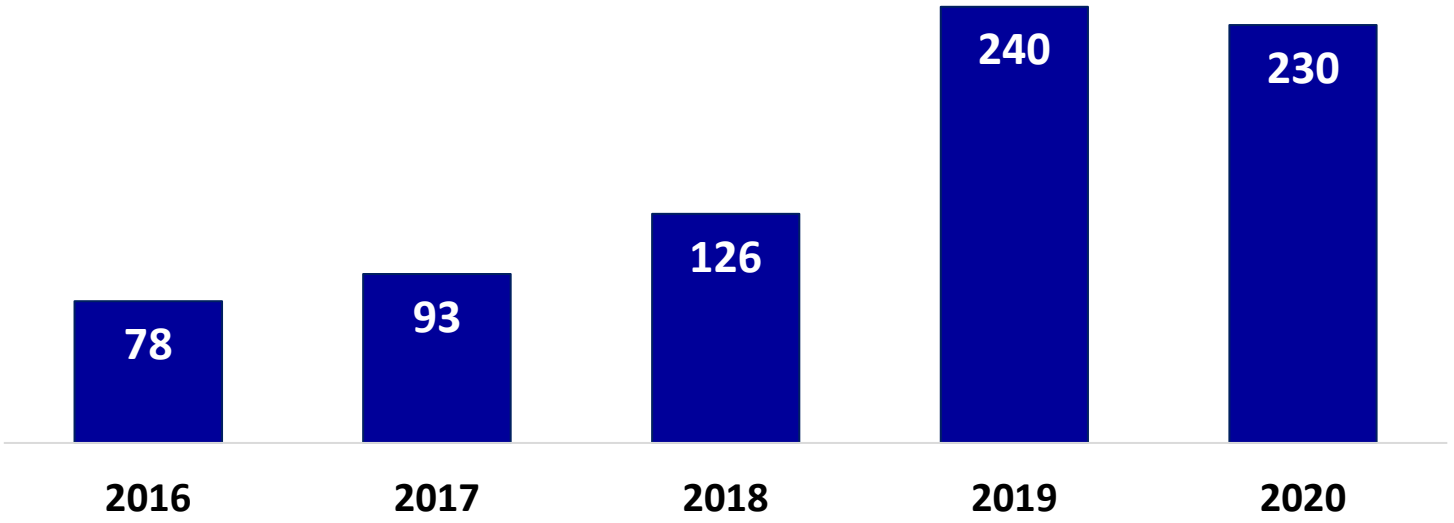
Background, cont.

- Consumer trust in the privacy and security of their information is critical, as the use of emerging technologies can help individuals make more informed decisions about their care.
- When breaches of health information occur, they can have serious consequences for organizations and patients alike, including reputational and financial harm.
- Poor security practices heighten the vulnerability of patient information in health information systems, increasing risk.

Today's Headlines

Breaches Affecting 500 or More Individuals
Reports Received Involving Hacking/IT Incidents

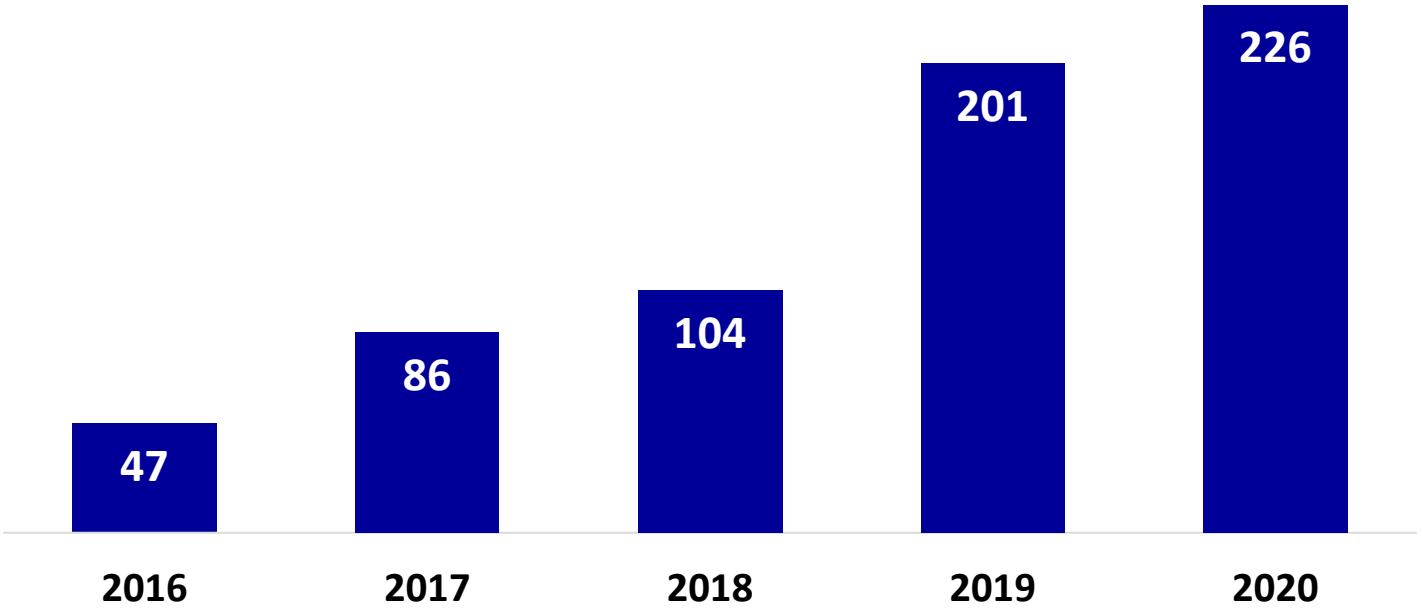
Calendar Years 2016 - 2020



Source: HHS Office for Civil Rights

Breaches Affecting 500 or More Individuals
Reports Received of Breaches Involving Email Accounts

Calendar Years 2016 - 2020



Source: HHS Office for Civil Rights

Project Goals

The Opportunity

- NCVHS has been recommending privacy and security stewardship frameworks and guidance on HIPAA for over two decades. For example, the 2008 report for policy makers, *Enhancing Protections for Uses of Health Data: A Stewardship*. In 2012, NCVHS recommended *A Stewardship Framework for the Use of Community Health Data.* Recently, NCVHS addressed current issues that fall beyond the scope of HIPAA for a growing range of uses.
- In response to the growing number of cyber threats impacting the health care industry and risk to the privacy and security of individuals' information, NCVHS will undertake a project to examine solutions for improving the security posture of the healthcare industry, including federal, state, local, and tribal organizations.

Project Goals

- Identify and describe the changing security landscape and risks to the privacy and security of individually identifiable information held by the health care industry, and highlight promising policies, practices, and technologies;
- Lay out integrative models for how best to secure individually identifiable information while enabling useful uses, services, and technologies;
- Formulate recommendations for the Secretary on actions that HHS might take; and
- Prepare a report for the Secretary.

Project Plan: A Phased Approach

Plan: Phase 1 Environmental Scan

- **Phase I** –Conduct an environmental scan to explore key security challenges and opportunities for securing individually identifiable information in healthcare:
  - Current security landscape
  - Evolving technologies for safeguarding individually identifiable information
  - Existing Frameworks (e.g. HIPAA Security Rule, NIST Cybersecurity Framework)
  - AI, Big Data, and other expanding uses and users
  - Internet of things, medical devices, applications, and other emerging technologies
  - Novel approaches to enhancing enterprise wide security

Phase 1 Environmental Scan, cont.

- Approach: The environmental scan will be accomplished through a virtual hearing and background research to learn from a range of federal agencies, academics, technologists, and thought leaders.

- One hearing will be conducted, along with background research. Participants may include representatives from federal sources (NIST, ONC, OCR, FDA, FTC, ASPR, CISA) and private sector stakeholders including academics, CIOs, technologists, and thought leaders.

- Deliverable: A report of environmental scan findings.

Phase 2: Framework Development

- **Phase II** – Based on what is learned in the environmental scan, develop models and illustrative future scenarios, laying out assumptions, and identifying areas of uncertainty.

- Approach: Develop models and identify potential policy, practice, and technology solutions.

- Deliverable: A draft security framework including benefits, levers, and relationships of policy alternatives.

Phase 3: Recommendations

- **Phase III** - Prepare recommendations for the Secretary of HHS that may include:
  - A framework of guiding principles to improve the security posture of the healthcare industry;
  - Best practices in security policies and standards across federal agencies and states;
  - Levers that HHS can apply such as release of best practices, education, and guidance; and
  - Legislative mechanisms, such as enforcement.
- Approach: Preparation of a letter for the Secretary.
- Deliverable: Letter to the Secretary to be drafted and approved by the NCVHS.

Phase 4: Report

- **Phase IV** – Prepare a report for the health care industry and data stewards and users of health data reflecting a security framework and policy and practice recommendations. This would be modeled on earlier NCVHS stewardship primers and frameworks.

- Approach: Report, primer or toolkit

Proposed Timeline

Proposed Timeline

	2021 – Q2	2021 – Q 3 & 4	2022 – Q 1 & Q 2	2022 – Q 3
Phase I: An environmental scan will be conducted, accomplished by holding a hearing including one or more panels addressing the topic areas.				
Phase II: Development of Draft Framework				
Phase III: Prepare and approve a letter to the HHS Secretary.				
Phase IV: This phase will turn the learning and recommendations into a report to the industry.				

Discussion and Next Steps