

# Supplementary Document for EARS to Cyber Incidents in Health Care

## Initial search on cybersecurity in health care

WoS, Journal Articles, All Years, "Health\*" AND "Cybersecurity" OR "Cyber Security" OR "Cyber Attack\*" OR "Cyber Crisis\*" OR "Cyber Incident\*" OR "Cyber Infrastructure\*" OR "Cyber Operation\*" OR "Cyber Risk\*" OR "Cyber Threat\*" OR "Cyberspace\*" OR "Data Breach\*" OR "Data Security\*" OR "Firewall\*" OR "Information Security\*" OR "Information Systems Security\*" OR "Information Technology Security\*" OR "IT Security\*" OR "Malware\*" OR "Phishing\*" OR "Ransomware\*" OR "Security Incident\*" OR "Information Assurance"

Web of Science

PubMed, Journal Articles, All Years, Abstract Availability, "Cybersecurity" OR "Cyber Security" OR "Cyber Attack" OR "Cyber Crisis" OR "Cyber Incident" OR "Cyber Infrastructure" OR "Cyber Operation" OR "Cyber Risk" OR "Cyber Threat" OR "Cyberspace" OR "Data Breach" OR "Data Security" OR "Firewall" OR "Information Security" OR "Information Systems Security" OR "Information Technology Security" OR "IT Security" OR "Malware" OR "Phishing" OR "Ransomware" OR "Security Incident" OR "Information Assurance"

PubMed

## Narrowed search on response

WoS, Journal Articles, All Years, "Policy" OR "Response" OR "Threat" OR "Plan" OR "Detection" OR "Strategy" OR "Recovery" OR "Incident" OR "Ransomware" OR "Respond" OR "Incident Response"

Web of Science

PubMed, Journal Articles, All Years, Abstract Availability, "Policy" OR "Response" OR "Threat" OR "Plan" OR "Detection" OR "Strategy" OR "Recovery" OR "Incident" OR "Ransomware" OR "Respond" OR "Incident Response"

PubMed

**Figure S1:** Search terms (adopted from terminologies in The National Initiative for Cybersecurity Careers and Studies [10] and The British Standards Institution glossaries [11].)

**Table S1:** Quality assessment of research methods

Criteria	Papers												
	[26]	[18]	[21]	[22]	[17]	[19]	[20]	[25]	[15]	[14]	[16]	[23]	[24]
Was the research question or objective clearly stated?	1	1	1	1	1	1	1	1	1	1	1	1	1
Do the authors locate the study within the existing knowledge base and theoretical frameworks?*	2	2	2	2	1	1	2	1	0	1	0	1	0
Is the research method adequately described?	1	1	1	1	1	1	1	1	0	0	0	0	0
Is the source of data and information (e.g., personal perspective, experts' perspective, literature, survey) presented?	1	1	1	1	1	1	1	1	1	1	1	1	0
Are the researchers' own assumptions and possible biases outlined?	1	1	0	0	1	0	1	1	1	1	0	0	0
Is there sufficient depth of findings and insights?	1	1	1	1	1	1	1	1	1	0	1	0	1
Was there an evaluation of the results?	1	1	1	1	1	1	0	0	1	0	1	0	0
Was there a discussion of limitations?	1	1	1	1	0	1	0	0	0	0	0	0	0
<b>Summation</b>	<b>9</b>	<b>9</b>	<b>8</b>	<b>8</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>6</b>	<b>5</b>	<b>4</b>	<b>4</b>	<b>3</b>	<b>2</b>

\*0: no review of the literature; 1: some review of the literature; 2: extensive review of the literature