NTIA Software Component Transparency
Healthcare Proof of Concept

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Medical Device Manufacturer* (MDM) experience (SBOM generation)

Formats: Both SWID and SPDX generated, slight preference for SWID (perceived as less error-prone)
Preparation challenges: list completeness, patch level determination, dependency relationships
Source data: some MDMs have central repository of components for all products, some don’t
Generation method: various: manual, semi-automated (no automated tooling – to be developed)
Data issues: Product identification provided by readme – meta info that should be in the SBOM
Future looking: Anticipated complexity maintaining multiple version/configuration, but not covered in POC, anticipating trouble with HDOs connecting to different MDM/supplier portals

Healthcare Delivery Organization* (HDO) experience (SBOM ingestion and use)

CMDB: Service Now or N/A
Format appetite: SPDX more human readable, SWID preferred programmatically (easier ingest)
Data challenges: correlation to CVEs (SBOMs should use valid CPE names), data needed to be cleaned

Use Case Procurement (selected individual feedback):
- System not in place to leverage SBOM in procurement
- SBOMs allowed for identification of vulnerabilities
- End-of-Life components were identified and managed via added localized programmable firewall
- Information about customized software wasn’t able to be processed
- Lack of trust in the completeness of the information provided
- Missing granular patch information (e.g., for OS)

Use Case Asset Management (selected individual feedback):
- Digestion into CMDB not possible, tooling being developed
- Some risk management insights revealed, others are pending more sophisticated tooling
- In some cases, SBOM provided information that could be used to protect the asset
- SBOMs were useable in EoL planning, but in many cases this is still to be proven out

Use Case Risk Management (selected individual feedback):
- Some risk management solutions not compatible with SBOM without future 3rd-party tools
- ISO 9001 – SBOM was leveraged by providing insight into risks
- Monitoring of devices against new vulnerabilities successful, and for others possible in theory
  [note: PoC did not include updating SBOMs over time]

Use Case Vulnerability Management (selected individual feedback):
- Naming convention problem interfered
- Risk evaluation possible via associated CVSS score
- Some proactive mitigations were possible because of SBOM info

Wishes: CPE names, version information, patch level (at the instance), retroactive SBOMs for EoL devices

*Feedback from one MDM and one HDO pending.