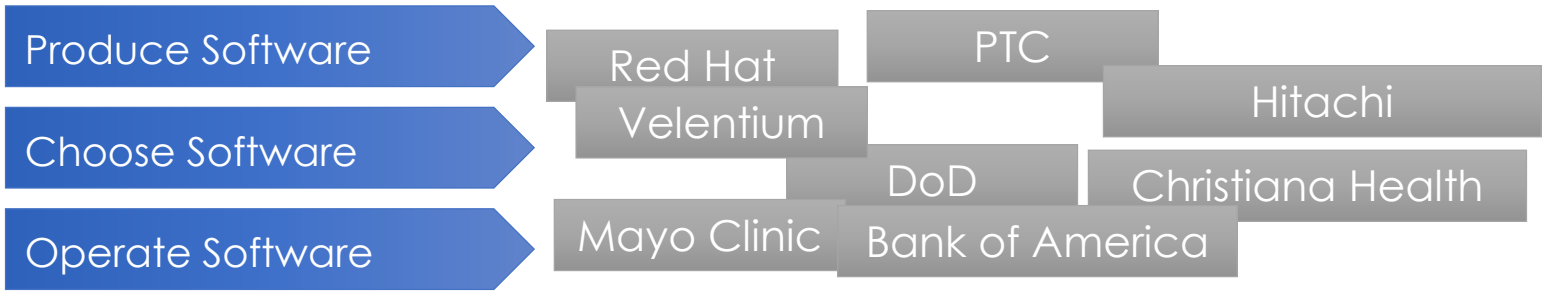
# Use Cases & State of Practice Working Group

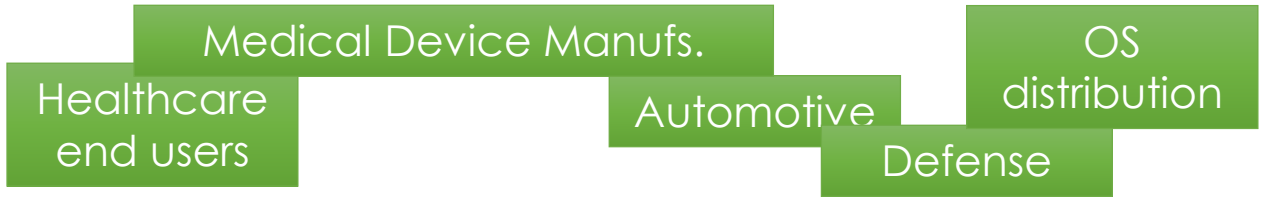
Summary of Work and Potential Next Steps

November 18 2019

# Initial approach: gather data




**Live interviews** to find out **how people use** SBOM, what **works**, & what are **stumbling blocks**




**Less mature:**
No SBOM penetration
No tooling, no readiness
SBOM not a factor in selection
"Our vendors are clueless!"
"SBOM is QA's problem!"
"Vetting is too much work!"

**More mature:**
Consistent SBOM Everywhere
Mature tooling
SBOM contract language
"We can respond to incidents."
"Let's phase out EoL assets."
"SBOM is a forcing function."

# Software Supply Chain Roles

| Benefit | Produce | Choose | Operate |
|---|---|---|---|
| Cost | Less unplanned, unscheduled work | A more accurate total cost of ownership | More efficient administration |
| Security Risk | Avoid known vulnerabilities | Easier due diligence | Faster identification and resolution.<br>Know if and where specific software is affected |
| License Risk | Quantify and manage licenses and associated risk | Easier due diligence | More efficient, accurate response to license claims |
| Compliance Risk | Easier risk evaluation. Identify compliance requirements earlier in lifecycle | More accurate due diligence, catch issues earlier in lifecycle | Streamlined process |
| High Assurance<br>(See Appendix II) | Make assertions about artifacts, sources, and processes used. | Making informed, attack-resistant choices about components. | Validate claims under changing and adversarial conditions. |

# Document SBOM Benefits by Supply Chain Role

## Produce Software

Less unplanned maintenance work
Reduce code bloat / streamline component choice

Understand component and code dependencies

Know and comply with licensing
Monitoring/reviewing for vulnerability
Awareness of component EOL, orphan, etc.
Streamlined code review

Streamline release/ production
Enable black- and whitelists

SBOM and transparency for customers

## Choose Software

Identify vulnerable components
Targeted security analysis

Verify sourcing

Compliance with policies

Awareness of component EOL, orphan, etc.

Integrate with asset, compliance, ERT systems
Audit and verify supplier claims
Show best practices by supplier

## Operate Software

Easily ID vulnerabilities
Drive independent mitigations
Better risk analysis - “Roadmap for the defender”
Awareness of component EOL, orphan, etc.

Streamline administration

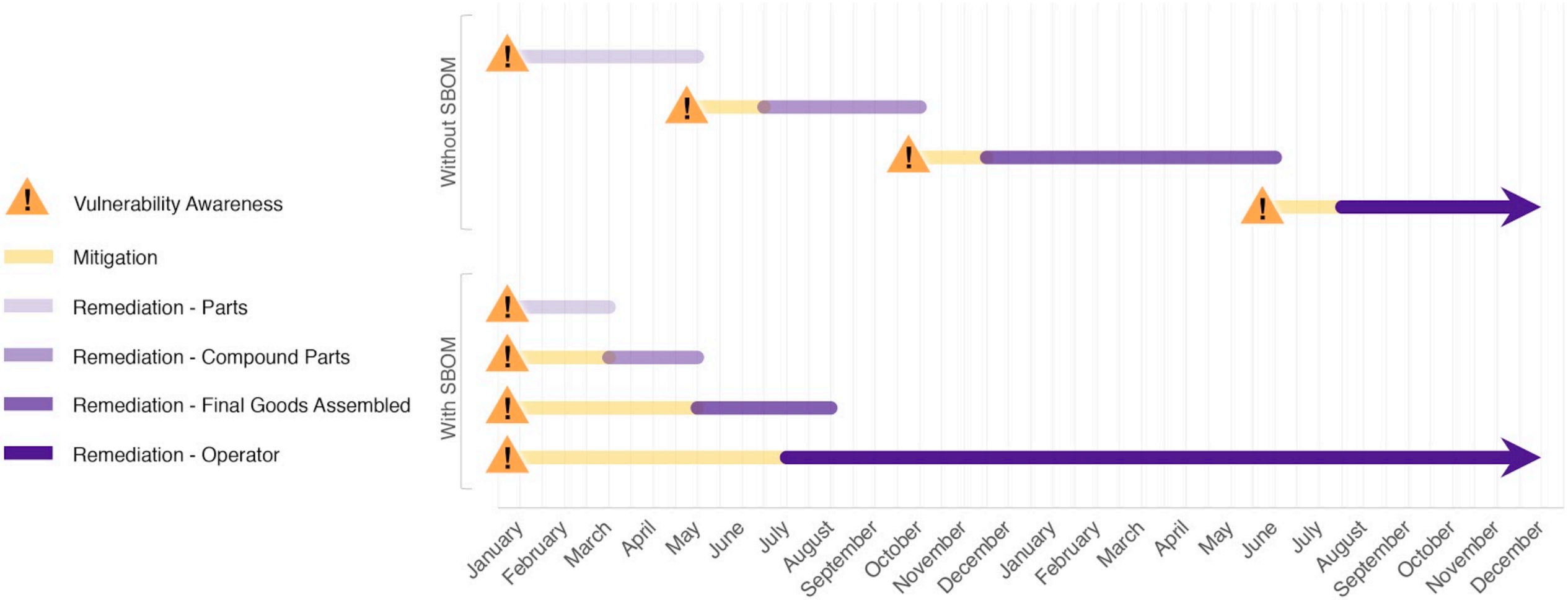
# An ecosystem perspective

*Beyond the specific benefits to stakeholders, broader adoption of SBOM generation and use can help across the ecosystem.*

- Accelerated vulnerability management
- Selecting for better suppliers
- Amplified “herd immunity”
- Weathering suppliers going away
- Combined/Cumulative Value

# Time to Remediation Case Studies

## Without and With SBOM



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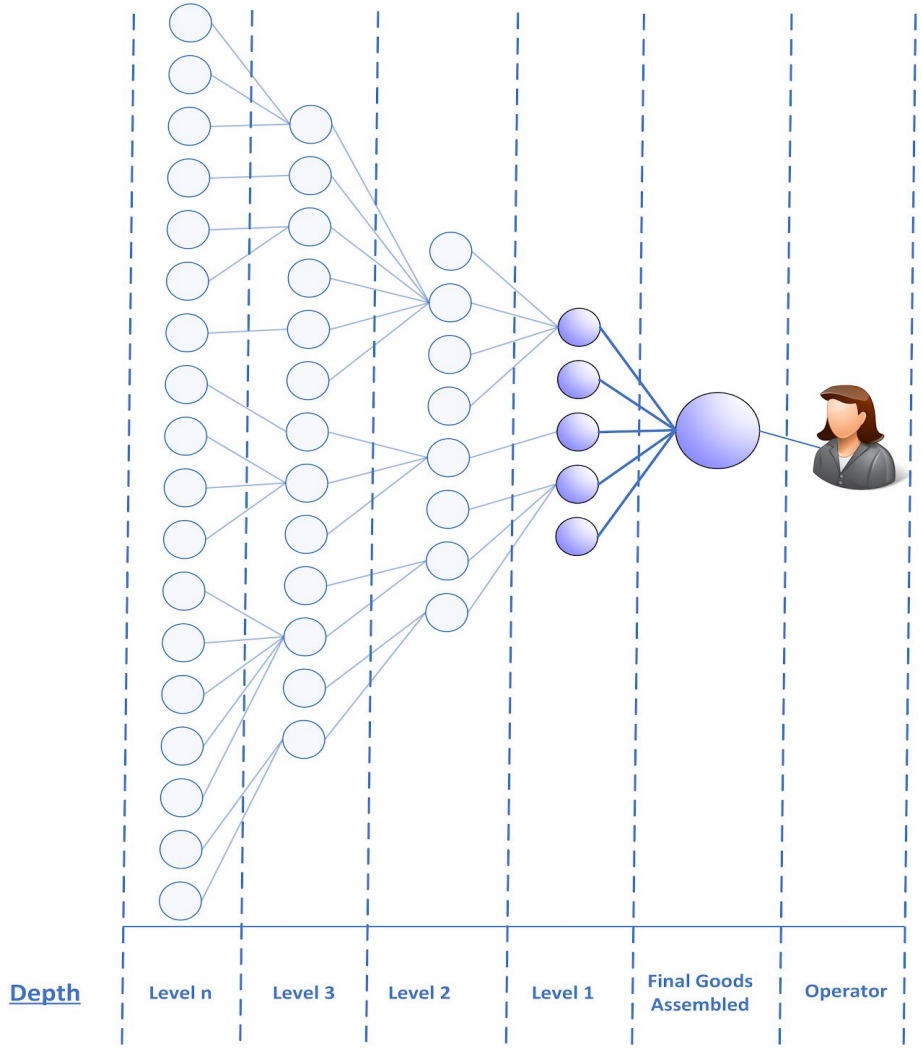
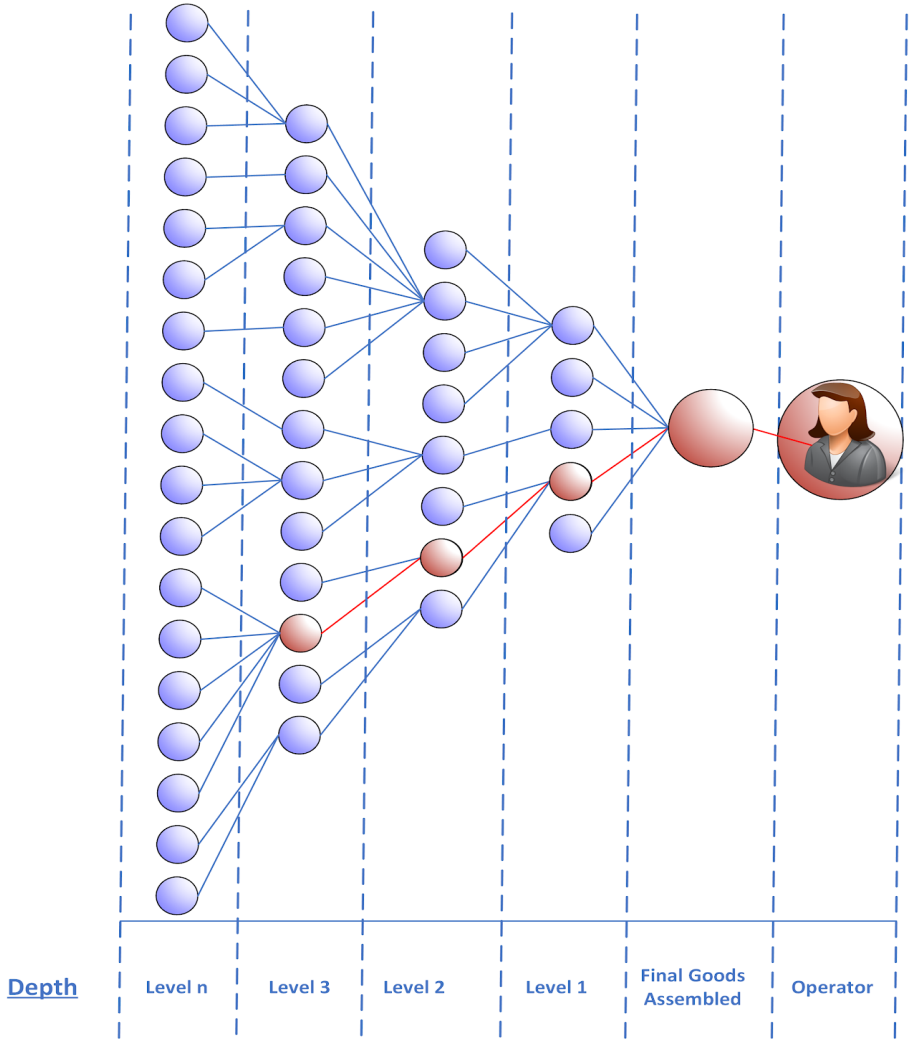
# SBOM Depth and Effectiveness



# Next steps: Potentially transition focus to *Awareness and Adoption*

Some ideas already discussed by the working group:

- A framework to track broader SBOM landscape, engagement needs, etc
- Coordinate with groups engaged in related work
- International context
- FAQs
- Branding to help outreach
- Targeted resources for specific roles: C-suite, project mgmt., product manager, risk manager, staff engineer