Software Bill of Materials

Practices & Use Cases Working Group

NTIA Software Transparency
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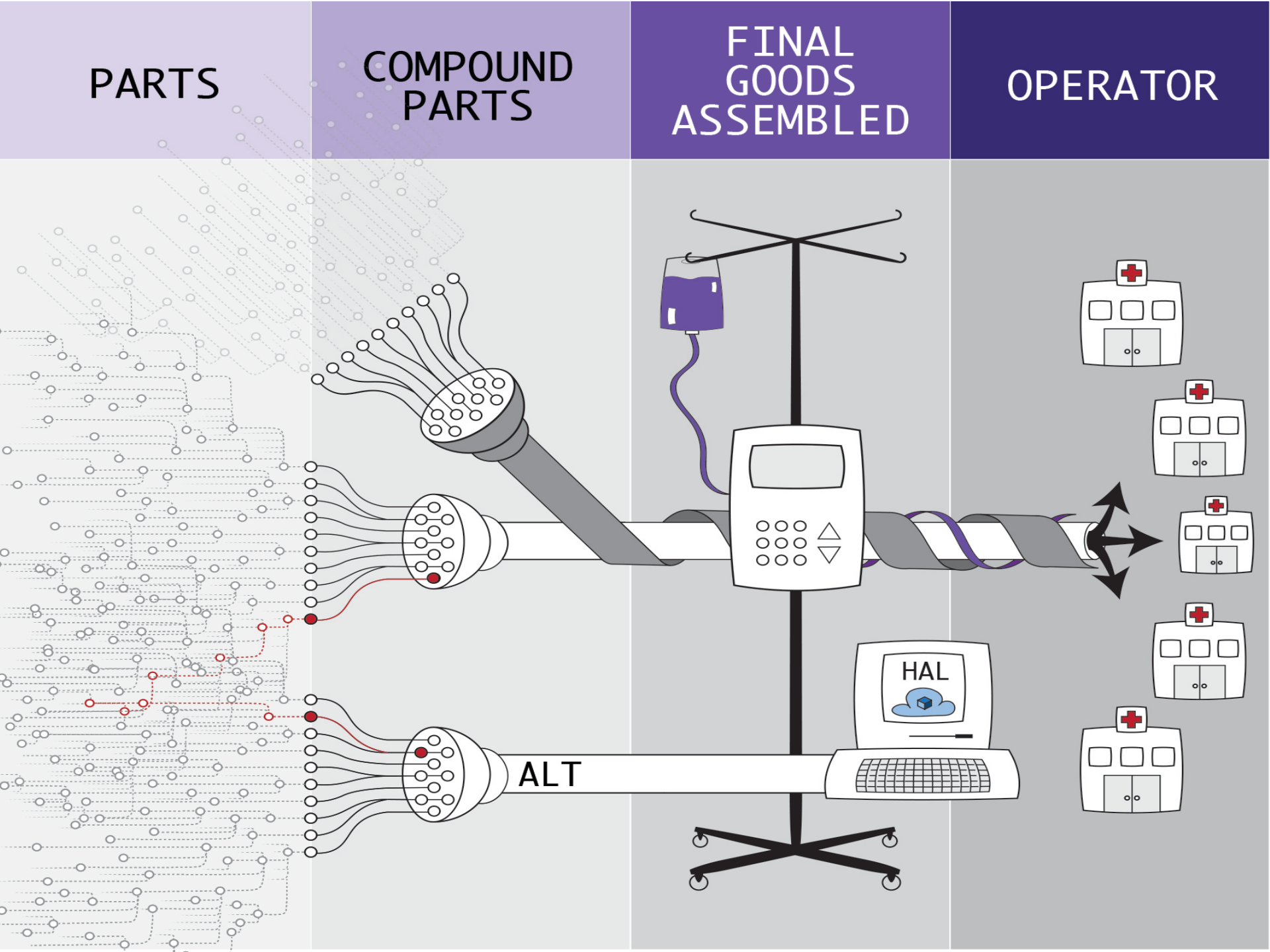
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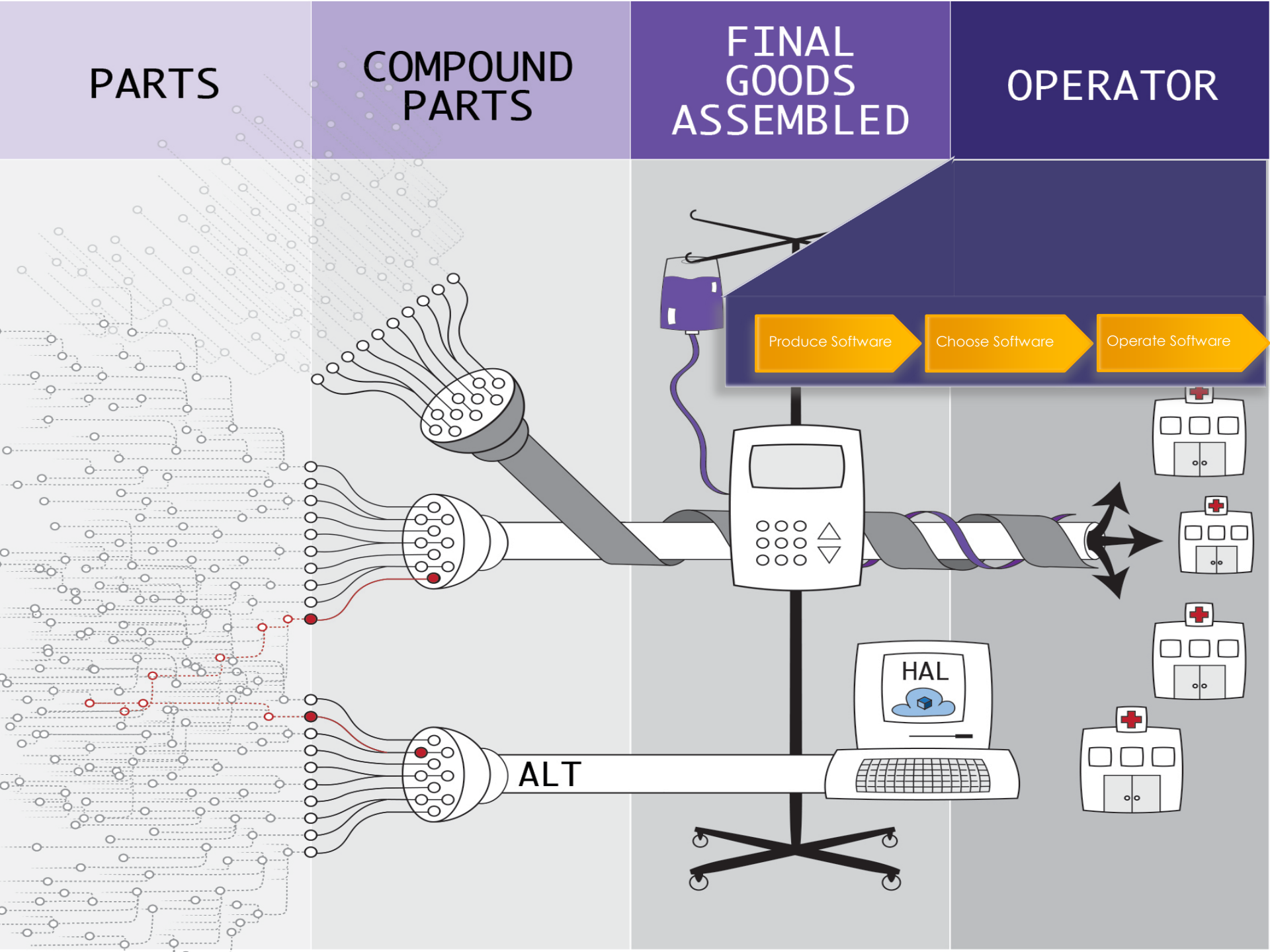
COMPOUND PARTS
FINAL GOODS ASSEMBLED
OPERATOR
HAL
ALT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OPERATOR
Produce Software
Choose Software
Operate Software
HAL
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Software Supply Chain Roles / SBOM Benefits

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

Interviews: What's the State of Practice?

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

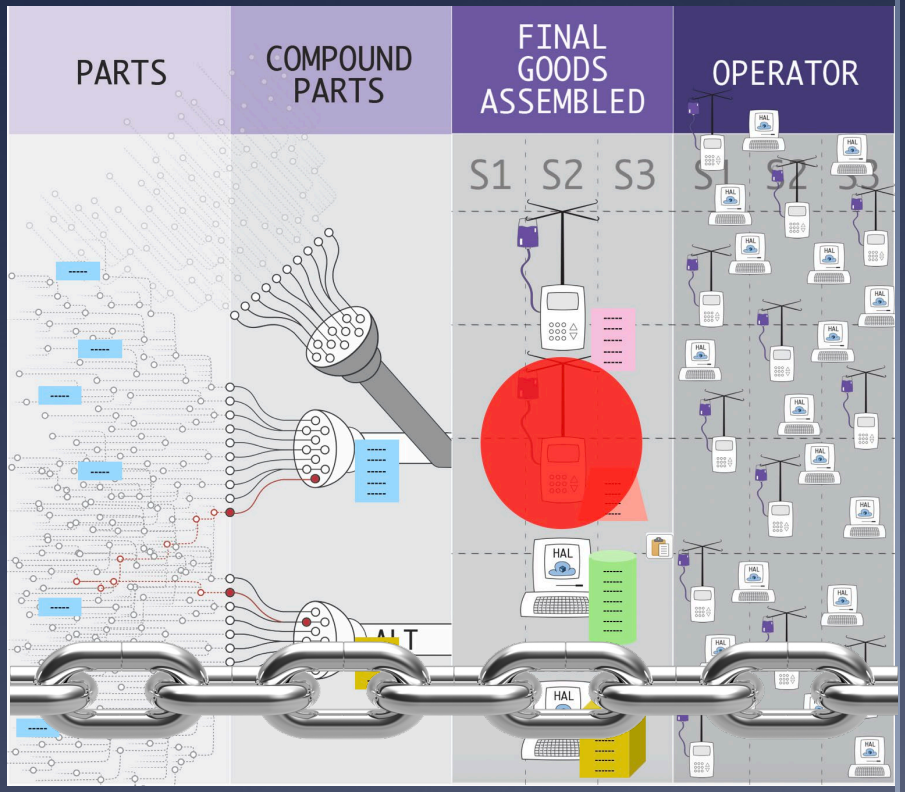
Less mature:
No SBOM penetration
No tooling, no readiness
SBOM not a factor in selection
"Our vendors are clueless!"
"SBOM is QA's problem!"
"Vetting is too much work!"

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."

Vuln mgmt!

Next (1 of 2) : System-Wide / Full Chain

Patient Health vs Public Health



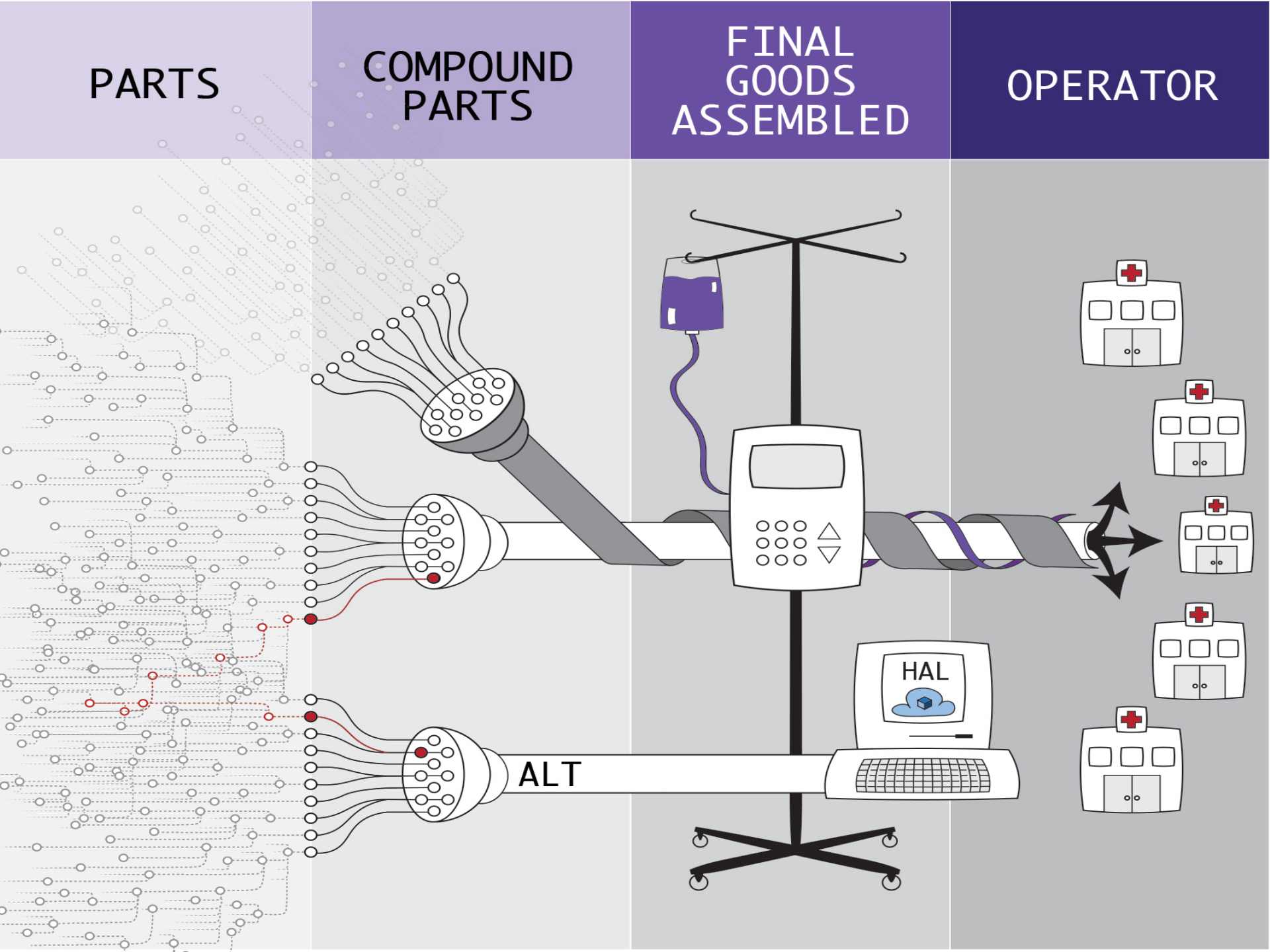
- Network Effects
- Population Impact Analysis
- Faster Vulnerability Visibility
- Market Incentives
- Supplier Darwinism
- "Out-of-Business Proof"

Next (2 of 2) : Advanced / High Assurance

Advanced

High Assurance DoD

* Provenance
* Pedigree
* Integrity
* “Deliver Uncompromised”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