

Standardizing the process of defining product criticality

SMI members are working together to identify impactful changes that will/would create a more resilient supply chain. The team developed a Resilience Maturity Model ([link here](#)) which is now in use across the healthcare supply chain.

The SMI Resilience Maturity Model included the need to grade the criticality of products at increasing levels along the resilience maturity journey. As an enhancement to the Resilience Maturity Model this Critical Product Attributes Framework provides a common structure and language for healthcare organizations to identify the criticality of the products they need.

This new SMI tool:

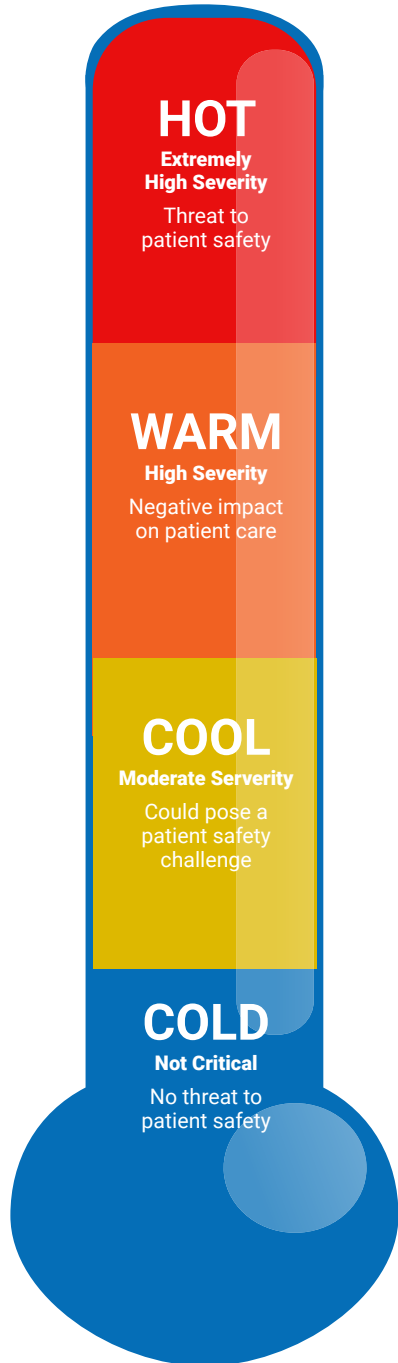
1. Provides a structure for identifying the criticality of products
2. Allows trading partners to have clear conversations about product criticality
3. Supports the broad use of the Resilience Maturity Model to drive a more resilient supply chain designed to meet future demands

Future enhancements to this tool, to be released in 2023, will address the issue of disruption as it is the next dimension of product criticality.

We welcome your feedback on this tool and look forward to its broad adoption across our industry.



Critical Product Attributes Framework



Clinical Attribute	Critical to Mission
<ul style="list-style-type: none"> Required for life sustaining procedure or care and/ or without product there is substantial risk of patient harm 	
<ul style="list-style-type: none"> Inability to provide elective care if product is unavailable; no alternatives 	
<ul style="list-style-type: none"> Change in practice required for use of alternative items. Undesirable, but alternatives are tolerable. Product substitutions require some clinical practice change. 	
<ul style="list-style-type: none"> Individual use product - product does not have any links to any other materials or equipment use; easily substituted. Product substitutions do not require clinical practice change. 	

Supply Chain Attribute	Supply Constraints
<ul style="list-style-type: none"> No manufacturing redundancy for any upstream product component Sole source to distributor with no acceptable substitutes on the market Proprietary; no other alternative to product or category 	
<ul style="list-style-type: none"> Limited upstream product component suppliers, limited manufacturing redundancy (2 plants for each product) Sole source to distributor with no acceptable substitutes maintain in distributor inventory; acceptable substitutes are available from other sources No alternative available in the market. No impact on critical patient care. 	
<ul style="list-style-type: none"> Moderate upstream product component resiliency and manufacturing redundancy (3 plants for each product) Available substitutions come from limited sources Alternative product available Requires link to ancillary products and can also link to alternative substitute products (i.e., bags and sets — interchangeable) 	
<ul style="list-style-type: none"> High degree of upstream component sourcing availability and manufacturing redundancy (4 plants or more for each product) Multiple sources and items available as substitutions Item is set up in the ERP with available alternative substitute(s) identified and acceptable to clinical staff Clinically acceptable alternative products are on market 	



Critical Product Attributes Framework

SMI RESILIENCE AND TRANSPARENCY COUNCIL



And with appreciation to members of the SMI Physician Advisory Council

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This Critical Product Attributes Framework is a component of SMI's Resilience Maturity Model

SMI	Resilience Maturity Model (RMM)			
	Scope & Service	Operational & Financial	Communication & Collaboration	Infrastructure & Knowledge
LEVEL 4: Innovate Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.
LEVEL 3: Mature Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.
LEVEL 2: Develop Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.
LEVEL 1: Prepare Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.	Advanced digital capabilities, integrated supply chain, and high-velocity innovation.



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