Here are my concerns across the 3 areas identified in your email:

## 1. Number of concepts that would be affected by these proposed changes is minimal.

Yes, with respect to the amount of content in the hierarchy, the number of concepts to which these attributes can be added seems trivial. Therefore, I don't' think this will offer much assistance in a hierarchy clean-up. In the meantime, the risk is that it creates a false sense for users that these attributes will support analytics or querying for "this kind of thing" in SNOMED. In my opinion, attributes of this type (very low use and difficult to apply) basically can't be relied on for anything.

## 2. Amount of effort required to determine where these new attributes would be applied

This is also a significant issue. The set of concepts that might be containers that could be used for a sample/specimen is very ill-defined and will make it difficult to apply these attributes consistently. Additionally, I find guidance on use of these attributes confusing. However, the greatest hurdle is that devices in SNOMED are generic representations of proprietary devices and finding consistent/reliable information about these containers/collection devices is very challenging.

I had some involvement in the Medical Device Project which involved the incorporation of a significant part of the GMDN database (over 10,000 new concepts, 20,000 new descriptions, and 20,000 new relationships) into SNOMED International in a tight timeframe in 2014-2015. For the January 2015 Release, I participated in a limited clean-up effort related to the added GMDN content. My recollection is that, based only on the device names, there were significant challenges in determining exactly what a device does, is, contains, etc.

Also, there were significant challenges related to merging "duplicates". Some SNOMED Fully Specified Names "corresponded" to GMDN Preferred Terms but did not fully capture the GMDN definitions for those GMDN Preferred Terms (which often exceed 255 characters). Additionally, the degree of research to get information about these devices and what they definitely or possibly may contain will be extensive and definitive resources may be difficult to identify. For these reasons, I think it is safer to assert less and allow some ambiguity around these concepts than to make potentially incorrect assertions.

Below is an example of the challenge of these devices in SNOMED that was revealed by the GMDN incorporation:

## EXAMPLE: 336953004 |Ordinary purpose syringe (physical object)|

SNOMED had 336953004 |Ordinary purpose syringe (physical object)| since 2002.

In 2015-01-31, the new description "General purpose syringe" was added as the result of trying to merge existing SNOMED content with the new GMDN content (which contained GMDN code 47017 General purpose syringe):

<ul> <li>Ordinary purpose syringe (physical object)</li> </ul>						
SCTID: 336953004						
Haivin Tive, Active. Descendants Count. 0 concepts.						
United States of America English language reference set						
Term	Description ID	Acceptability (US)				
F ☆ Ordinary purpose syringe (physical object)	723100015	Preferred				
S \star Ordinary purpose syringe	469921018	Preferred				
S ✓ General purpose syringe	3034875011	Acceptable		8		

The <u>WHO document</u> below provides the GMDN definition for "47017 General-purpose syringe". Per GMDN, this device is <u>typically</u> made of silicone and <u>may</u> have plunger anti-sticking properties (internal coating).

13	4	GMDN name	General-purpose syringe		
14	5	GMDN code	47017		
15	6	GMDN category	10 single-use devices		
16	7	UMDNS name	Syringes		
17	8	UMDNS code	13929		
18	9	UNSPS code (optional)	41105104		
19	10	Alternative name/s (optional)	Injection syringes, single-use Sterile injection syringe, gen Syringe, piston Sharp injury protection(SIP)	eral use	
20	11	Alternative code/s (optional)	S 36278, 04 19 09; S 34578	3, 100206021; MS 32171, FMF	
21	12	Keywords (optional)	Injection Devices, Infection C	Control, Drug Administration	
22	13	GMDN/UMDNS definition (optional)	A sterile device that consists of a calibrated hollow barrel (cylinder) and a moveable plunger intended to be used to inject fluids (e.g. medication) into, and/or withdraw fluids/gas from, the body or a medical device for various medical applications. At the distal end of the barrel is a male connector (typically a Lu lock type) for the attachment of the female connector (hub) of a hypodermic needle or an administration set. It is typically made of plastic and silicone materials and may have plunger anti-sticking properties (internally precoated with compatible substances) allowing smooth plunger movement, either manually or by a syringe pump. This is a single-use device.		

All kinds of devices get "mapped" to these codes. For example <u>197128 Disposable Medical Supplies Pty Ltd - Syringe</u>, <u>general-purpose</u> is mapped to "47017 General-purpose syringe".

A CALL AND							
Australian Government							
Department of Health and Aged Care Therapeutic Goods Administration							
Public Summary							
Summary for ARTG Entr	y: 197128 Dis	sposable Medical Supplies	s Pty Ltd - Syringe, ge	eneral-purpose			
ARTG entry for	Medical Device Inclue	led Class Is					
Sponsor	Disposable Medical S	upplies Pty Ltd					
Postal Address	PO Box 8617, PERTH BC, WA, 6849 Australia						
ARTG Start Date	3/05/2012						
Product Category	Medical Device Class Is						
Status	Active						
Approval Area	Medical Devices						
Conditions							
<ul> <li>The inclusion of the kind of device in the ARTG is subject to compliance with all conditions placed or imposed on the ARTG entry. Refer Part 4-5, Division 2 (Conditions) of the Therapeutic Goods (Medical Devices) Regulations 2002 for relevant information.</li> <li>Breaching conditions of the inclusion related to the device of the kind may lead to suspension or cancellation of the ARTG entry; may be a criminal offence; and civil penalties may apply.</li> </ul>							
Manufacturers							
Name		Address					
Shanghai Channelmed Import & Export Co Ltd Channelmed Group		Room 1402 No 707 Shanghai, , 200120 China	Zhangyang Road				
Products							
1 Svringe general-nurpose							
De dest Tree	a paipoor		Effective Data	0/05/0040			
Product Type	Single Device Product		Effective Date	3/05/2012			
GMDN 47017 Syringe, general-purpose							
Intended Purpose	rpose For general medical purposes used to inject fluids (e.g., medication) into, or withdraw fluids/gas from, the body, or a medical device.						

Below is a another <u>syringe</u> that is assigned GMDN code "47017: General purpose syringes". This product <u>definitely has</u> a lubricant (anti-sticking material) whereas the GDMN code 47017 (linked to 336953004 |Ordinary purpose syringe (physical object)|) <u>may have</u> an anti-sticking material. Without proprietary product names for our devices, I am not sure how we will know for certain what an item contains or is made of. The only certainty will be the few FSNs that have this information. The vast majority of the time, this information (coating, intent, container substance, container separator, etc) will not be included in an FSN.



3. The effort will be undertaken outside of the internal content team, so the folks that are interested in any potential benefits would be the ones doing the work.

Allowing an external content team to undertake a task that is challenging for experienced internal content modelers may decrease the likelihood of achieving the intended outcome.