

**Draft Guidance: Predetermined Change Control Plans for Medical Devices  
September 3, 2024**

**Moderator: CDR Kim Piermatteo**

**CDR Kim Piermatteo:** Hello, everyone, and welcome to today's CDRH webinar. Thanks for joining us. This is Commander Kim Piermatteo of the United States Public Health Service, and I serve as the Education Program Administrator in the Division of Industry and Consumer Education within CDRH. I'll be the moderator for today's webinar.

Our topic today is the draft guidance titled Predetermined Change Control Plans for Medical Devices, which was issued on August 22, 2024. This draft guidance proposes a policy for predetermined change control plans, or PCCPs, and provides recommendations on the information to include in a PCCP in a marketing submission for a device.

I'd now like to introduce our presenters for today's webinar. Jessica Paulsen, Associate Director for Digital Health within CDRH's Office of Product Evaluation and Quality, or OPEQ; Dr. Kathryn Drzewiecki, Team Lead in the Division of Digital Health Policy and CDRH's Digital Health Center of Excellence; and Dr. Jason Ryans, Policy Analyst on the Regulatory, Policy, and Guidance Staff within OPEQ.

We'll begin with the presentation from our presenters and then field your questions about our topic. Before I turn it over to our presenters, I would like to provide a few reminders.

First, please make sure you've joined us through the Zoom app and not through a web browser to avoid technical issues. Second, the intended audience for this webinar is industry. Trade press reporters are encouraged to consult with the CDRH Trade Press team at [cdrhtrade@fda.hhs.gov](mailto:cdrhtrade@fda.hhs.gov). And members of national media may consult with FDA's Office of Media Affairs at [fdaoma@fda.hhs.gov](mailto:fdaoma@fda.hhs.gov). Third, for those of you who want to follow along with today's presentation, you may access printable slides of today's presentation from CDRH Learn under the section titled How to Study and Market Your Device and the subsection Cross-Cutting Premarket Policy. And lastly, we look forward to interacting with you during the live question and answer segment of today's webinar. So, if you have a question, please wait, and raise your hand at the end of today's presentation to get into the queue.

Thank you all again for joining us. I'll now turn it over to Jessica to start today's presentation. Jessica?

**Jessica Paulsen:** Thanks for the introduction, Kim. I'm really excited to be joining today's webinar to discuss our new draft guidance.

On August 22, we issued our draft guidance on Predetermined Change Control Plans for Medical Devices. Given the high interest in this topic, we're having this webinar today to share information and answer questions about the draft guidance, as well as encourage you to submit any comments you may have to the docket about the draft guidance.

During today's webinar, we hope that you will learn about our authority for predetermined change control plans, or PCCPs, as you'll hear us refer to them throughout the webinar. We'll also describe the proposed policy and recommendations for PCCPs included in the draft guidance. In particular, we'll spend some time focusing on our proposed thinking for how manufacturers should determine whether

a modification may or may not be appropriate for inclusion in a PCCP. And finally, early engagement is really important for PCCPs, so we'll discuss how best to approach that engagement with us.

Before we go too much further, let's begin with, what is a predetermined change control plan? As described in the draft guidance, a predetermined change control plan, or PCCP, is the documentation for a device that includes a description of the planned device modifications, the associated methodology to develop, validate, and implement those modifications, and an assessment of the impact of those modifications.

The next question you may have is, what is the value of a PCCP? So, by including a PCCP in a marketing submission for a device, manufacturers can prospectively specify and seek premarket authorization for intended modifications to a device without needing to submit additional marketing submissions before implementing each modification described in the PCCP. Implementation of modifications used in a PCCP can help facilitate safe and effective device innovation and may be least burdensome for device manufacturers. By including a PCCP in a marketing submission for a device, it may reduce the need for manufacturers to submit subsequent additional marketing submissions to modify their device, and as a result, manufacturers may be able to iterate their devices more quickly.

PCCPs may be least burdensome for FDA as well, as FDA reviews the PCCP as part of the marketing submission for the device to ensure its continued safety and effectiveness. PCCPs may also support safe and effective device innovation by providing the public with safe and effective improvements and iterations to devices faster.

PCCPs are not entirely new to FDA. While this draft guidance provides our proposed thinking on PCCPs, we have leveraged PCCP-like concepts in prior guidances. One of these examples is from our guidance titled "Deciding When to Submit a 510(k) for a Change to an Existing Device" where we described that changes in the expiration date for use of a device generally do not require submission of a new 510(k) when the same methods or protocols that are described in the previously cleared 510(k) are used to support the change.

Separately in the guidance titled "Replacement Reagent and Instrument Family Policy for In Vitro Diagnostic Devices," or IVDs, we describe that manufacturers may add certain additional instruments for use with an IVD assay that was previously cleared for use with a specific instrument without submission of a new 510(k), in part by conducting a risk-based assessment and design verification and validation activities to assess the use of the IVD assay with the new instrument.

In 2019, we introduced the concept of a PCCP in our discussion paper that focused on a proposed regulatory framework for modifications to artificial intelligence and machine learning-based software. So while, as described in this draft guidance, PCCP can support innovation for all devices, this discussion paper really emphasized how PCCPs can be particularly beneficial for AI/ML-based devices, given their ability to learn, adapt, and improve performance over time. So, building on this concept, we subsequently issued a draft guidance in April of 2023, focused on marketing submission recommendations for a predetermined change control plan for AI/ML-enabled device software functions, or as you'll hear us refer to it today, as the AI PCCP guidance.

On December 29, 2022, Section 3308 of the Food and Drug Omnibus Reform Act of 2022, or FDORA, added Section 515C titled "Predetermined Change Control Plans for Devices" to the Federal Food, Drug,

and Cosmetic, or FD&C, Act. Section 515C has provisions regarding PCCPs for devices requiring premarket approval, or PMA, or premarket notification, also referred to as 510(k).

While as you saw in the discussion paper, we had described the concept of a PCCP for AI/ML-based devices, this provision applies to all device types. As described in 515C, PCCPs describe planned changes that may be made to the device and that would otherwise require a PMA supplement or a 510(k) under section 515C if the device remains safe and effective without any change.

Section 515C also describes that FDA may require certain elements of a PCCP. For example, FDA may require that a PCCP include labeling for safe and effective use of the device as the device changes in accordance with the PCCP. FDA may also require notification requirements if the device does not function as intended in accordance with the PCCP or performance requirements for changes described in the PCCP.

515C also provides that for devices subject to 510(k) requirements that in making a determination of substantial equivalence where the predicate device was authorized with a PCCP, the subject device must be compared to the version of the predicate device that was cleared or approved prior to changes made under the PCCP.

I will also note that 515C is in effect, and it is self-executing. FDA can authorize PCCPs right now at this time; however, much of the content in the remainder of this webinar is not for implementation, as it is draft guidance. So now I want to take some time walking through the proposed recommendations from the draft guidance.

This draft guidance provides proposed recommendations on the types of modifications that generally may be appropriate for inclusion in a PCCP. This includes those device modifications that generally would otherwise require a new marketing submission. So for PMA devices, this includes those changes that affect the safety and effectiveness of the device. And for 510(k) or De Novo devices, it includes those changes that could significantly affect the safety or effectiveness of the device. It does not include those device modifications that do not otherwise require a new marketing submission.

Premarket authorization for a device with a PCCP may be established through the PMA, 510(k), or De Novo pathways, and cannot be established using pathways for which FDA does not make an affirmative decision. And finally, these proposed recommendations apply to the device constituent part of device-led combination products and do not apply to the drug or biologic constituent part of device-led combination products.

The draft guidance includes several proposed guiding principles, which, when finalized, should help both FDA and manufacturers understand the policies in this guidance. So first, for a PCCP to be authorized with a device, the totality of the information included in a PCCP should enable FDA to assess the reasonable assurance of safety and effectiveness or substantial equivalence of the device, including the PCCP.

So for the second guiding principle proposed, we describe that PCCPs may be a least burdensome option to supporting device modifications for manufacturers and FDA. Manufacturers may wish to use PCCPs as a way to implement modifications to their devices without needing to submit a new marketing submission for each modification, while continuing to provide a reasonable assurance of device safety

and effectiveness. However, I'll note, PCCPs are optional. FDA will review the subject device and the PCCP and determine the acceptability of a proposed PCCP in accordance with the applicable device approval or clearance standards.

For the third guiding principle, and you'll hear us say this one a lot, PCCPs are specific. A PCCP should include specific modifications that the manufacturer intends to make over time. A PCCP should not include a list of any or all modifications that a manufacturer may possibly make. FDA recommends that to ensure a timely and efficient review, a PCCP should only include a few specific modifications that can be verified and validated. And if a PCCP includes too many modifications or modifications that range across too many aspects of the device, it may prove to be difficult for FDA to make its determination for the device and its PCCP.

For the fourth guiding principle, we describe that PCCPs are a part of the device's marketing authorization; therefore, manufacturers are required to implement modifications consistent with their authorized PCCP when the manufacturer chooses to implement those modifications and uses the PCCP to do so. Premarket authorization of a PCCP is based on the details of the specific PCCP that's developed by the manufacturer for that specific device. So when the PCCP is authorized, the PCCP is part of that marketing authorization for that device, and it's included in the device's letter of authorization.

And for the fifth and final guiding principle, we note that PCCPs harmonize with existing FDA device modifications guidances. Manufacturers can use a PCCP as a way to implement modifications to their devices without needing to submit a new marketing submission for each modification. So the device modifications guidances help manufacturers determine whether a new marketing submission is required for a modification to their device. So, we believe that together, these guidances support improvement and iteration through modifications to devices while continuing to provide a reasonable assurance of device safety and effectiveness.

So now let's jump into the proposed policy for PCCPs. As you'll see, we've leveraged many concepts from the draft AI PCCP guidance that we previously issued. However, there are some differences between these guidances, and we're going to note those during this webinar. We recommend that the same high-level components for a PCCP be submitted as we did in the AI PCCP guidance, and that includes the three items listed here.

First, we have a description of the modifications, which entails the detailed description of the specific planned modifications that may be made to the device, including device specifications and performance characteristics. Next, a modification protocol, which entails the verification and validation activities, including predefined acceptance criteria that will support each modification to ensure the device remains safe and effective. And finally, we recommend an impact assessment be provided, which entails an assessment of the benefits and risks of implementing a PCCP for a device and documentation of the risk mitigations. Later in the webinar presentation, we'll walk through each of these components in more detail, and we'll note some of those differences in recommended content for the components between the two guidances.

Again, similar to the AI PCCP guidance, we proposed that a PCCP should be described in various sections of a marketing submission for a device. First and foremost, a PCCP should be included as a standalone section in a marketing submission, importantly, with both a title and a version number. We also recommend referencing the PCCP in your cover letter and table of contents for your marketing

submission, as this is a very helpful way for reviewers to be able to easily and quickly identify a submission with a PCCP. And then finally, the PCCP should be described and referenced as appropriate in other sections of your marketing submission, which may include your device description, labeling, and other relevant sections.

For labeling related to the PCCP, as I noted previously, FDA may require that a device with an authorized PCCP include labeling required for safe and effective use of the device as the device changes in accordance with its PCCP. So generally, we recommend that the labeling include a statement that the device has an authorized PCCP. It may not be necessary to include such a statement in some circumstances. For example, when an authorized PCCP is limited to manufacturing changes for a device. In most situations, we think this may help promote transparency about the device and its authorized PCCP so that users can use the device safely and effectively and continue to do so as the device changes in accordance with an authorized PCCP.

So when appropriate as modifications are implemented consistent with the authorized PCCP, we recommend that labeling related to the PCCP be updated to include a description of the implemented modifications, including a summary of current device performance, associated inputs and outputs, validation requirements and related evidence, a description of how the modifications were implemented, and a description of how users will be informed of implemented modifications such as updated instructions for use or a version history.

Similar to the content in the labeling about the device's authorized PCCP, we recommend that there should be information about your authorized PCCP in the public decision summary for the device, such as in its 510(k) summary or PMA Summary of Safety and Effectiveness Document, or SSED. Again, we recommend this information be included in sufficient detail to provide transparency to users about the device and its specifications.

Namely, we recommend that public-facing documents include information about the PCCP as appropriate, including a summary of the planned modifications, the associated test methods, the validation activities, and performance requirements to be met in order for the modifications to be implemented, and the means by which users will be informed of device modifications implemented in accordance with the authorized PCCP.

So as you can see in the last two slides, we've provided a little bit more detail on recommended information about the PCCP in the labeling and public decision summary documents when compared to the AI PCCP draft guidance. So now that I've covered the proposed recommendations for the components of the PCCP, where to include the PCCP in your marketing submission for a device, I'm going to pass it over to my colleague Kathryn to continue with the proposed policy. Kathryn?

**Kathryn Drzewiecki:** Thanks, Jessica. In the next portion of the webinar, I'll wrap up the proposed policy, including the proposed recommendations to establish, modify, and use a PCCP, and continue on to describe the types of modifications that generally may or may not be appropriate for PCCPs.

I'll start with how PCCP may be established, including through what marketing submission types. A PCCP must be reviewed and established as part of a marketing authorization for a device, which we'll refer to as an authorized PCCP. It may be appropriate to establish a PCCP through a number of marketing

submission types listed on this slide, including various PMA application or supplement types, 510(k) submission types, and De Novo requests.

We recommend that you check out the draft guidance for some additional recommendations on certain marketing submission types. Importantly, submission types for which FDA does not make an affirmative decision would not be appropriate to establish a PCCP. Additionally, we'd like to note again that in making a determination of substantial equivalence where the predicate device was authorized with a PCCP, the subject device must be compared to the version of the predicate device cleared or approved prior to changes made under the PCCP.

It is also possible to modify your previously authorized PCCP, so let's explain that process and the appropriate marketing submission types. FDA believes that modifications to an authorized PCCP will generally be changes to a device that would otherwise require a new marketing submission. Therefore, modifications to a PCCP will need to be reviewed and established as part of the marketing submission for the modified device. It may be appropriate to modify a PCCP through a number of marketing submission types listed on this slide, including various PMA supplement types or 510(k) submission types. Again, we recommend that you check out the draft guidance for some additional recommendations on certain marketing submission types.

If you're intending to modify a previously authorized PCCP, FDA intends to focus its review on aspects of the device that are modified, including the PCCP. In such cases, it can be very helpful to FDA if you provide a summary of the changes to the authorized PCCP, and if possible, a track changes or red line version compared to the authorized PCCP.

Now you have your authorized PCCP for your device. How do you implement it? The proposed process has not changed from the process that was proposed in the AI PCCP guidance. When implementing a modification to a device with an authorized PCCP, a manufacturer should first consider whether the particular modification is or is not consistent with the authorized PCCP.

As described in the flow chart, this means, first, is the modification specified in the description of modifications? And second, is the modification implemented in accordance with the modification protocol? If so, a new marketing submission is not necessary. The modification can be implemented in accordance with the modification protocol. The manufacturer should document that modification and the analysis in accordance with the manufacturer's quality system.

If the particular modification is not consistent with the authorized PCCP, including if the modification is not included in the authorized PCCP, or if the modification is included in the authorized PCCP but is not implemented in accordance with the modification protocol, the manufacturer should then proceed to evaluate the particular modification in accordance with applicable FDA requirements and after consulting the device modifications guidances to determine if a new marketing submission is required. It is possible a new marketing submission may not be required, which may lead to implementation of the modification and documentation of that modification and the analysis in accordance with the manufacturer's quality system. However, in the majority of cases, because modifications included in a PCCP are those that would generally otherwise require a new marketing submission, it is likely that a new marketing submission would be required before the manufacturer can implement the modification.



Compared to the AI PCCP guidance, a new section that we've proposed in this draft guidance provides some recommended concepts regarding version control. The first concept relates to a PCCP title and version number. In general, we recommend that manufacturers submit a copy of the proposed PCCP with a title and version number. If the proposed PCCP is revised before the device and PCCP are authorized, that final revised version of the PCCP should be submitted as a clean copy with a title and the current version number.

As we've mentioned before, the PCCP is part of the marketing authorization of the device. And to that end, the PCCP will be referenced in the device's letter of authorization and will include that title and version number to provide transparency on what was authorized.

The second concept is that a manufacturer should only have one version of an authorized PCCP for their device. However, that PCCP can evolve over time through future marketing submissions where a new version of that PCCP can be authorized. This concept ties to version control as well, as there should only be one version of the PCCP under review with the device at any given time to help with version control of the PCCP for manufacturers and FDA.

Now let's shift gears a bit and dive into the types of modifications to include in a PCCP. In this draft guidance, we recommend that modifications that are appropriate for inclusion in a PCCP include those that are intended to maintain or improve the safety or effectiveness of the device, that are specific, and that can be verified and validated. These recommendations may sound familiar to you, as these concepts are similar to those that were proposed in the AI PCCP guidance.

Modifications included in a PCCP must maintain the device within the device's intended use. Additionally, FDA believes that most modifications to the indications for use included in a PCCP would be difficult for FDA to assess prospectively to determine whether the device would remain safe and effective. That being said, there may be certain modifications to the indications for use that may be appropriate for inclusion in a PCCP. We will discuss some of them on the next few slides.

We highly encourage manufacturers to discuss modifications to the indications for use that may be included in a proposed PCCP in a Pre-Submission. On the next few slides, we'll dive into the two subsections in the draft guidance, determining whether a modification may be appropriate for inclusion in a PCCP, in a 510(k) or De Novo, and then the same for PMA.

First, we'll start with 510(k) and De Novo devices. It is important to remember that for devices subject to 510(k) requirements, modifications included in a PCCP must allow the device to remain substantially equivalent to the predicate device. As proposed in the draft guidance, FDA recommends that modifications that could significantly modify existing risks generally may be appropriate for inclusion in a PCCP.

Modifications that could significantly modify existing risks could include those that, for example, could change the risk score, risk acceptability category, or duration of risk. As you will see in the next slide, the proposed approach for the types of modifications that may be appropriate for inclusion in a PCCP for a 510(k) or De Novo is harmonized with our policy for device modifications.

We've developed a flowchart based on the proposed recommendations in this guidance to help manufacturers determine whether a modification may be appropriate for inclusion in a PCCP, for a

510(k), or De Novo device. This flowchart helps with consideration of questions such as, could the modification be a major change or a modification to the intended use of the device? As stated earlier, modifications included in a PCCP must maintain the device within the device's intended use.

The flowchart also considers the question, could the modification significantly affect the safety or effectiveness of the device? Based on the 510(k) modifications guidances, modifications that could significantly affect the safety or effectiveness of the device can generally be categorized into two categories, either modifications that could introduce a new risk or modifications that could significantly modify an existing risk. Of those, modifications that could significantly modify an existing risk generally may be appropriate for inclusion in a PCCP, as recommended in the draft guidance. As always, please consider the recommendations in the guidance in concert with the flowchart.

We know examples can help everyone better understand the policy, so we've developed examples of high-level modifications that generally may be appropriate or are generally not appropriate for inclusion in a PCCP for a 510(k) or De Novo device. For example, modifications that generally may be appropriate for inclusion in a PCCP may include modifications such as certain changes in device design. For example, certain changes in dimensions, performance specifications, wireless communication, or the patient or user interface.

Modifications such as certain changes in software related to device compatibility or interoperability, for example, changes to support device use on additional operating systems, also generally may be appropriate for inclusion in a PCCP. Additionally, we mentioned that certain changes in the indications for use generally may be appropriate for inclusion in a PCCP, which may include certain changes to specify use of the device with an additional device component or human genetic variant.

Modifications that are generally not appropriate for inclusion in a PCCP for a 510(k) or De Novo device may include modifications such as a change from single use to reusable or a change from prescription to over-the-counter use. A change in the labeling or indications for use to include a new patient population or changes that may need new clinical data are generally not appropriate for inclusion in a PCCP. Finally, changes to address a recall or a safety issue or changes to a device constituent part that impact the biologic or drug constituent part are generally not appropriate for inclusion in a PCCP.

In general, we recommend that the list and the draft guidance be considered together to determine the appropriateness of including a modification in a PCCP. For example, a modification in device design generally may be appropriate to include in a PCCP; however, if such a modification may need new clinical data, it would generally not be appropriate to include in a PCCP. That wraps up the proposed policies for modifications that may be appropriate for inclusion in a PCCP for a 510(k) or a De Novo device. Let's move on to PMA.

As proposed in the draft guidance, FDA recommends modifications that could be minor changes or manufacturing changes generally may be appropriate for inclusion in a PCCP for a PMA device. Minor changes are those minor modifications to the design of the device, software, sterilization, or labeling. Without a PCCP, these are typically the modifications that are included in a real-time PMA supplement. Manufacturing changes are those modifications to the manufacturing procedures or methods of manufacture affecting the safety or effectiveness of the device. Without a PCCP, these are typically the modifications that are included in a 30-day notice. Again, as you will see in the next slide, the proposed



approach for the types of modifications that may be appropriate for inclusion in a PCCP for a PMA is harmonized with our policy for device modifications.

Like for 510(k) and De Novo devices, we created another flowchart, which was developed based on the proposed recommendations in this guidance to help manufacturers determine whether a modification may be appropriate for inclusion in a PCCP for a PMA device. This flowchart helps with consideration of questions such as, could the modification be a major change or modification to the intended use of the device? Again, modifications included in a PCCP must maintain the device within the device's intended use.

The flowchart also considers the question, could the modification affect the safety or effectiveness of the device? Based on the PMA modifications guidance, modifications that could affect the safety or effectiveness of the device can include, among others, minor changes, and manufacturing changes. If the modification is a minor change or a manufacturing change, then the modification generally may be appropriate for inclusion in a PCCP. As always, please consider the recommendations in this guidance in concert with the flowchart.

And again, like for 510(k) or De Novo devices, we've developed examples of high-level modifications that generally may be appropriate or are not appropriate for inclusion in a PCCP for a PMA device. For example, modifications that generally may be appropriate for inclusion in a PCCP may include modifications such as minor changes in a material or component that has similar technical specifications to those for the authorized device. Additionally, minor changes in software, related to device compatibility or interoperability, such as modifications to support device use of an upgraded operating systems generally may be appropriate for inclusion in a PCCP. Finally, for manufacturing changes, certain changes in methods of manufacture, such as a change in manufacturing materials or software, generally may be appropriate for inclusion in a PCCP.

Modifications that are generally not appropriate for inclusion in a PCCP for a PMA device may include modifications such as changes from single use to reusable or changes that may need new clinical data. Changes to address a recall or safety issue or changes to a device constituent part that impact a biologic or drug constituent part are also generally not appropriate for inclusion in a PCCP.

Finally, for manufacturing changes, changes to add, expand, or move the manufacturing of a finished device are generally not appropriate for inclusion in a PCCP. Again, in general, we recommend that the list and the draft guidance be considered together to determine the appropriateness of including a modification in a PCCP. Now I'll turn it over to Jason, who will explain the proposed recommendations for the content of a PCCP and some illustrative examples. Jason?

**Jason Ryans:** Thanks, Kathryn. I'll start with the proposed recommendations for the content of a PCCP.

As mentioned previously, the proposed components of a PCCP, including the description of modifications, modification protocol, and impact assessment are the same as it was proposed in the AI PCCP guidance. Here, we'll go through the recommended content for each component that is generally applicable to all device types, which is a bit higher level compared to some of the specific proposed recommendations for AI-enabled devices.

First, we'll start with the description of modifications of a PCCP. The description of modifications should identify the specific planned modifications to the device, including device specifications and performance characteristics. We recommend that a PCCP include a limited number of modifications that are specific and that can be verified and validated, which will help ensure an efficient review. In the Description of Modifications section in the PCCP, we recommend that you include a list of individual proposed device modifications and a description of the specific rationale for the device modifications. The information should be presented at a level of detail that allows FDA to understand the specific modifications that will be made to the device.

We know that some content that you include in the Description of Modifications section of your PCCP or elsewhere in your PCCP may also be included elsewhere in your marketing submission. As it pertains to your modifications included in your description of modifications, we recommend referencing the sections of your labeling that may be impacted for each modification. We also recommend linking each modification to the relevant performance evaluation activities in your modification protocol.

Next, let's turn to the Modification Protocol section of a PCCP. The modification protocol should include the verification and validation activities, including pre-defined acceptance criteria that will support each modification to ensure the device remains safe and effective. Compared to the proposed recommendations in the AI PCCP guidance, which are specific to AI-enabled devices, the recommendations in this guidance are applicable to all device types. And as such, we recommend namely two subcomponents of a modification protocol. These include performance evaluation methods and, when appropriate, update procedures. However, as noted in the draft guidance, for a particular marketing submission additional information and a modification protocol may need to be included.

Separately, a manufacturer's quality system is critical for change management processes for a device, especially for devices that include a PCCP. In using your authorized PCCP, you must document modifications verified and validated for the modification protocol in accordance with 21 CFR Part 820, including that the manufacturer must document the change in accordance with the manufacturer's quality system.

Let's take a closer look at the performance evaluation methods of the modification protocol of a PCCP. Performance evaluation of the device is important to ensure that specified acceptance criteria for all proposed modifications will continue to be met for the device's specifications. As it pertains to performance requirements, FDA may require that performance requirements for changes made under the plan be provided in the PCCP.

Performance evaluation methods included in the modification protocol of a PCCP should include plans to verify and validate that the modified device will meet the specifications identified as part of the specific modification, as well as maintain the specifications that are not part of the modification but may be impacted by the modification. Performance evaluation methods should also include plans to verify and validate the entire device.

These performance evaluation methods may be similar to methods used to support original marketing submission for a device. We recommend that you look to those methods, as well as device-specific guidances, performance testing guidances, as well as other horizontal cross-cutting guidances to help determine the information that should be included in your performance evaluation methods in your modification protocol of your PCCP.

Now, let's take a closer look at the update procedures of the modification protocol of a PCCP. Update procedures are important to ensure manufacturers update their devices consistent with their authorized PCCP and 21 CFR Part 820. Update procedures can also help provide appropriate transparency to users. As it pertains to updates, FDA may require notification requirements if the device does not function as intended pursuant to the authorized PCCP.

In general, we recommend that update procedures should include plans to describe how manufacturers will update their devices. This includes how they will implement modifications consistent with their authorized PCCP and 21 CFR Part 820. Update procedures should also include post-market surveillance plans and procedures. This may include real-world monitoring plans, and if required, notification requirements. The update procedures should also address how manufacturers will provide appropriate transparency to users, including labeling updates, as well as user training as applicable.

It can be very helpful to include a traceability table in your PCCP. A traceability table can clearly show which parts of the modification protocol are applicable to each modification within the description of modifications. It can also provide clear references to where within the PCCP this information is located in a marketing submission. We recommend including a traceability table in your PCCP, especially when your PCCP includes multiple modifications and when parts of your modification protocol may be similar for those modifications.

Finally, let's turn to the impact assessment of the PCCP, which is largely similar to the proposed recommendations in the AI PCCP guidance. The impact assessment should include an assessment of the benefits and risks of implementing a PCCP for a device, as well as documentation of the risk mitigations. We recommend that the impact assessment in a PCCP include the following. Comparison of the version of the device with each modification implemented individually to the version of the device without any modifications implemented, a discussion of the benefits and risks, a discussion of the verification and validation activities proposed within the modification protocol to continue to reasonably ensure the safety and effectiveness of the device, a discussion of how the implementation of one modification impacts the implementation of another, and a description of the cumulative impact of implementing all modifications.

The impact assessment in a PCCP should also discuss how the individual modifications included in the PCCP impact not only the particular device function, but the overall functionality of the device. This could include how the PCCP impacts other device software or hardware in the device or if the device is a combination product, this could include how the PCCP impacts the biologic and/or drug constituent part and the combination product as a whole. It is important to note that your risk assessment for the device is not the same as the impact assessment in a PCCP. We recommend including the information we've described as part of your impact assessment in a PCCP. If some of the information in your impact assessment is included elsewhere in your marketing submission, for example, in sections for the risk assessment for the device or the modification protocol in your PCCP, we recommend that you provide clear references in your impact assessment to the relevant sections in your marketing submission that support the impact assessment.

Now we'll dive into some of the illustrative examples of modifications for PCCPs. As described in the draft guidance, these illustrative examples are examples of modifications that generally may be or are not appropriate for inclusion in a PCCP for a specific device. These examples of the devices and the

modifications in this section are not intended to reflect the complete content or detail expected in a Description of Modification section in a PCCP.

Let's start with Example 2 in the draft guidance. This device is an ion selective electrode IVD, which is intended for use on a laboratory-based chemistry analyzer. This IVD quantifies the concentrations of potassium ions in serum samples to monitor electrolyte balance in the diagnosis and treatment of diseases and conditions characterized by low or high blood potassium levels. Some modifications that generally may be appropriate for inclusion in a PCCP for this device include the addition of lithium heparin plasma as a sample type, the extension of sample stability claims, for example, increasing sample stability for two hours at room temperature to four hours at room temperature, as well as the addition of a new potassium ion selective electrode. Some modifications that are generally not appropriate for inclusion in a PCCP for this device include the addition of urine or capillary whole blood as a sample type, the addition of at-home sample collection, or the addition of point-of-care use.

Next, we'll turn to Example 3 in the draft guidance. This device is a non-absorbable polyethylene surgical suture intended for soft tissue approximation or ligation. Some modifications that generally may be appropriate for inclusion in a PCCP for this device type include a change to a different non-novel sterilization method, such as a change from an established Category A method to an established Category B method, for which the categories are described in FDA's guidance Submission and Review of Sterility Information in 510(k) Submissions for Devices Labeled as Sterile.

Other modifications that may generally be appropriate include the addition of sutures to the product line with different dimensions that are within the range of dimensions of those currently authorized, as well as the addition of dye with an appropriate FDA listed color additive per 21 CFR Part 74, subpart D. Some modifications that are generally not appropriate for inclusion in a PCCP for this device include the addition of antimicrobials, a change in filament design to an atypical design, which could include designs such as unique braiding patterns, anchors, or knots, or modifications such as the addition of a stiffening agent to the ends of the suture to address a recall.

Finally, we'll turn to Example 8 in the draft guidance. This device is an implantable pulse generator pacemaker. Some modifications that generally may be appropriate for inclusion in a PCCP for this device include the addition of an alternate component supplier, such as for a memory chip, resistor, or capacitor where its component specifications and design requirements are identical to those of the currently approved component.

Another modification that may be appropriate is a minor software change to improve the battery longevity estimation algorithm. Some modifications that are generally not appropriate for inclusion in the PCCP for this device include a manufacturing change to an adhesive application process step made in response to reported device failure events, a premature battery depletion due to an identified process variation. Another modification that may not be appropriate is the addition of a new battery design or change to the battery chemistry. As you can see, these device-specific examples provide some additional context for how to apply the recommendations in this guidance in determining whether a modification may be appropriate for inclusion in a PCCP.

In summary, this draft guidance describes our proposed policy for PCCPs for all device types. It describes our proposed recommendations on the information to include in a PCCP for marketing submission for a

device. And it explains our proposed thinking for how to determine whether a modification may be appropriate for inclusion in a PCCP.

We've also discussed our authorities in Section 515C of the FD&C Act. Section 515C of the FD&C Act is in effect and is self-executing. While the recommendations and the draft guidance are not for implementation, manufacturers may submit, and FDA may approve or clear a PCCP for a device at this time.

If you are going to pursue a PCCP for your device, we strongly encourage manufacturers to engage early and often. Submitting a pre-submission to discuss your PCCP can be helpful to obtain feedback on your proposed PCCP for a device, the proposed submission type for the device and PCCP, the specific proposed modifications for a device to include in your PCCP, or proposed modifications to a previously authorized PCCP.

For your later reference, this slide includes some links to some FDA resources.

And this slide contains a listing of the acronyms used during this presentation.

As you all are likely aware, the Predetermined Change Control Plans for Medical Devices guidance is a draft guidance and is not for implementation. You may comment on any guidance at any time; however, we encourage you to submit comments on this draft guidance while the comment period is open so that FDA can consider your comments on the draft guidance before we work on the final guidance.

We're excited to hear from you, and we greatly appreciate your feedback. The comment due date for this draft guidance is November 20th. And for your later reference, this slide includes links to the docket and the draft guidance.

And with that, I'll turn it back over to Kim so that we can start the Q&A.

**CDR Kim Piermatteo:** Thanks for that presentation, Jason, Kathryn, and Jessica. Very informative. We appreciate it. We will now transition to our interactive question and answer segment. So, joining our presenters for today is Dr. Brittany Schuck, Deputy Office Director in the Office of Health Technology Number 7 for In Vitro Diagnostic Devices within CDRH's Office of Product Evaluation and Quality. So, thank you for joining us, Brittany.

Before we take our first question, I'd like to go over how we will manage this segment and a few reminders. First, to ask a question, please select the Raised Hand, or Raise Hand icon, which should appear on the bottom of your Zoom screen. I'll announce your name and give you permission to talk. When prompted, please select the blue button in Zoom to unmute your line, and then ask your question.

When asking your question, please remember to limit yourself to asking one question only and try to keep it as short as possible. And we appreciate that you may have a very specific question involving your device or scenario; however, we might not be able to answer such specific questions. Therefore, we will try to frame a broader response based on what's described in this draft guidance. After you ask your question, please lower your hand in Zoom and if you have another question, please feel free to raise your hand again in Zoom to get back into the queue, and I'll call on you as time permits.

Before we take our first live question, though, I'd like to ask two questions that we've previously received about this draft guidance. So Jason, I'd like to come to you with this first question. Jason, the question is, I want to use a device with an authorized PCCP as a predicate for my device. What version of that device do I use as the predicate device, and where do I find the predicate information?

**Jason Ryans:** Thanks, Kim. This is a great question. So, for devices subject to 510(k) requirements, when making a determination of substantial equivalence where the predicate has an authorized PCCP, the subject device must be compared to the version of the predicate device cleared or, cleared at the time that the PCCP was authorized. So, this would be a 510(k) was cleared with a PCCP that would be the version that could be used as a predicate. However, once a 510(k) for that device includes modifications that have been implemented consistent with the authorized PCCP and has been cleared in a subsequent marketing submission, that device can now serve as an eligible predicate.

And we have, you can identify eligible predicates in a 510(k) database. This online database is updated monthly by the FDA and includes the basic information the industry can use to begin identifying valid predicates. Nearly all modern legally marketed devices also have publicly available 510(k) summaries, indications for use statements, and substantial equivalence letters.

**CDR Kim Piermatteo:** Thanks, Jason. OK. So then now I would like to come to Brittany. Brittany, I have a question I'd like to ask you, and that question is, does this draft guidance provide information regarding in vitro diagnostic products or IVDs?

**Brittany Schuck:** Thanks, Kim. Yes, the concept of a PCCP is not new in the in vitro diagnostics or IVD space. In fact, in 2022, FDA described in the Replacement Region and Instrument Family Policy for In Vitro Diagnostic Devices guidance how manufacturers may add certain additional instruments for use with an IVD assay that was previously cleared for use with a specific instrument without submission of a new 510(k), in part by conducting a risk assessment and design verification and validation activities to assess the use of the IVD assay with the new instrument or instruments. This draft guidance aims to provide additional clarity on PCCPs for IVDs and other devices and includes several IVD examples in Section 8 of the draft guidance.

**CDR Kim Piermatteo:** Great. Thank you, Brittany. Alright, I'd like to, we'll now move to take our first live call. This question is coming from Allison. Allison, I have unmuted your line. Please unmute yourself and then ask your question.

**Allison Komiyama:** Alright. Can you hear me?

**CDR Kim Piermatteo:** Yes, we can.

**Allison Komiyama:** Whoo! Hey, this is Allison Komiyama. Thank you so much for this presentation and just in general for PCCPs, because I do think this will reduce burden from FDA and industry side. My question is more of a future-looking one. So, I know, I think it was slides 28 and some, 35. I wrote it down. To try and reduce burden, right? For both the lead reviewers. And I anticipate this would hopefully reduce burden on FDA inspectors as well. But how do we make sure, especially when some of the changes that may be OK in a PCCP are like expiration dating, packaging, and some of the things that



we usually will use the mod's guidance documents for, how are we, is there any anticipation that PCCPs will phase out letters to file? Or is it likely to just augment and supplement it?

**CDR Kim Piermatteo:** Thank you, Allison, for that question. Thank you for your feedback. I'm going to go ahead and turn this over to Jessica. Did you want to start with providing a response, and then any of our other panelists can chime in?

**Jessica Paulsen:** Sure. Thanks, Kim. And thank you, Allison. I appreciate the support on PCCPs and the forward-thinking question. I don't see PCCPs as a way to phase out letter-to-file changes, so to speak. But I do agree with the latter where it's really about complementing the approach with the least burdensome way to get modifications that would otherwise require submission to FDA authorized in a timely, proactive fashion. That's really the goal here. Anyone else want to add anything from the FDA side?

**Jason Ryans:** Yeah, this is Jason.

**Jessica Paulsen:** Go ahead.

**Jason Ryans:** I'll just add that I think as mentioned earlier in the presentation that we expect this to be consistent with their quality system per 820. So, I think that this is really meant to be in addition to the things that are already being documented.

**CDR Kim Piermatteo:** Great. Thank you, Jessica.

**Jessica Paulsen:** Thank you.

**CDR Kim Piermatteo:** And thank you, Allison, for that question. Thank you, Jason, as well. OK. Our next question, our next question is coming from, Bhaskar? Bhaskar, I have unmuted your line. Please unmute yourself and ask your question.

**Bhaskar:** Thank you so much. Can you hear me?

**CDR Kim Piermatteo:** Yes, we can.

**Bhaskar:** Excellent. Thank you for the PCCP talk today. It's very informative. I've got a question regarding software medical devices. So, for radiological imaging applications where we use software, software as a medical device, but the test methods and acceptance criteria remain unchanged or similar, can new indications or algorithm changes be included as part of PCCP?

**CDR Kim Piermatteo:** Thank you for that question. I'd like to turn it over to Kathryn to get us started. Kathryn?

**Kathryn Drzewiecki:** Yeah, thank you for that question. I think that those would be appropriate types of changes. I mean, I think in the webinar we talked a little bit about the changes that would be appropriate in a PCCP and a 510(k) and a PMA. Depending on if those changes could require new clinical data or something like that, maybe they would not be appropriate. But changes to the algorithm and things like that might be something that could be appropriate if you have methods that you can pre-

specify that we would be able to review in that PCCP. Does anyone else have anything to add? I think I missed part, one of your other modification types, but I think they both sounded appropriate to me.

**Bhaskar:** Thank you.

**Kathryn Drzewiecki:** Alright.

**CDR Kim Piermatteo:** Thanks, Kathryn. Yep. Thanks, Bhaskar. Alright, our next question is coming from Sandeep. Sandeep, I have unmuted your line. Please unmute yourself and ask your question.

**Sandeep Saboo:** Can you hear me?

**CDR Kim Piermatteo:** Yes, we can.

**Sandeep Saboo:** Great. No, my question is related to where I can find the slides. I know you guys mentioned it in the beginning, but I cannot locate it online. So, if you can provide a path or the slides themselves, that would be great.

**CDR Kim Piermatteo:** Hi, Sandeep. This is Kim. So yeah, so the slides, the printable slides are currently available on the webinar page, which, if you go to [www.fda.gov](http://www.fda.gov) and search for CDRH events, you will find this event page, and then there is a link provided there to the printable slides. But I'll mention this also later. We are going to post a recording of today's presentation and a transcript. That will be posted in the next few weeks, so you will also have that available to you as well.

**Bhaskar:** Thank you.

**CDR Kim Piermatteo:** You're welcome. Alright, our next question is coming from Adam. Adam, I have unmuted your line. Please unmute yourself and ask your question.

**Adam Zysk:** Hi, there. Thank you so much. This is Adam Zysk from Rhaeos. I have a question about changes [AUDIO OUT] higher clinical validation data. So, is FDA's thinking that clinical testing in a PCCP has to be identical to the testing performed in prior marketing approvals? And can you give a little bit of information about FDA's thinking on clinical validation requirements that may or may not be appropriate for a PCCP? I'd like to get a little bit more insight on that, please.

**CDR Kim Piermatteo:** Thank you, Adam, for that question. I'm going to turn it over to Jason. Jason, would you like to start?

**Jason Ryans:** Yeah. So, I think it's going to depend a bit. The devil's really in the details on the specifics. I think, we think generally, changes that are going to require new clinical data are likely to not be appropriate. But it depends on the modification and the study, so it's hard to address it so neatly. Maybe, Brittany, do you have anything you may want to add?

**Brittany Schuck:** Sure, Jason. I'm happy to echo what you said, which is it does depend on the type of device, including the type of IVD and the change that's being made. I can give an example where clinical validation data for a genetic variant, a human genetic variant, where that clinical validity is coming from literature, that's something that in some cases would be appropriate for a PCCP, and just generally

would be appropriate for a PCCP and we've actually done that already. We've authorized an IVD with a change to a new human genetic variant where the clinical validity data or information was reviewed through the PCCP. There are other situations, though, including in IVDs where prospectively collected clinical validation data, if that's what's needed to support the change, that would generally not be appropriate for a PCCP.

**Adam Zysk:** Maybe a quick follow-up question on this. Is that determination of the clinical data being appropriate, is it a risk-based assessment?

**CDR Kim Piermatteo:** Thanks, Adam, for that follow-up question. I guess, yeah. Jessica or Jason, I don't know if you wanted to jump back in to provide additional, yeah.

**Jessica Paulsen:** Yeah. Thanks for the follow-up question. So, regarding modifications that require clinical data to support them, I think in general the thinking is that it can be difficult to pre-specify not just the clinical trial that would be needed, but also, it's on the interpretation side. So when we're reviewing changes that require clinical data, there's often a lot of grayness when it comes to interpreting clinical trial results. So that can be really difficult when thinking about it in the context of a PCCP. Again, that's not to say that it's never appropriate in a PCCP, you just heard from Brittany that there may be cases in the IVD space as an example. So, for anyone that's thinking about it and it's a modification that requires clinical data, would definitely encourage you to reach out, engage early with FDA to see if that's something that we think reasonably could be pre-specified.

**Adam Zysk:** Thank you so much for the response. I really appreciate the insights.

**CDR Kim Piermatteo:** Great. Thank you, Adam, so much for that question. And thank you, Jessica, for the follow-up. Alright, our next question is coming from Beth. Beth, I have unmuted your line. Please unmute yourself and ask your question.

Beth, I see that you unmuted, so you may be double muted.

We still can't hear you if you're speaking, so I'll give you one more chance to check maybe your headset or your microphone if you're double muted.

OK. Beth, we can't hear you. I'm going to go ahead and skip down to our next raised hand and if you stay, if you actually will raise your hand again if you have another question, we'll get back in the queue, OK?

So, the next question is coming from Kim. Kim, I have unmuted your line. Please unmute yourself and ask your question.

**Kim Kelly:** Hello, can you hear me?

**CDR Kim Piermatteo:** Yes, we can.

**Kim Kelly:** OK. My question pertains to PCCPs for 510(k)s. Until this guidance is finalized, where do you suggest a PCCP to reside within the eSTAR structure? Like, what section of the eSTAR? Or maybe better

yet, is there going to be another version of the eSTAR that's going to come out where there's a specific section pertaining to this?

**CDR Kim Piermatteo:** Thank you, Kim, for that question. I'm going to turn it over to Jason.

**Jason Ryans:** Alright, great question. So, when we actually got the authority for 515C, we updated eSTAR to include the option to include a PCCP. So underneath the Device Description section under the device attributes, there's a checkbox now for predetermined change control plans and some accompanying help text. And if you check that box, you'll be provided with an attachment link for your documentation.

**CDR Kim Piermatteo:** Thank you, Jason. Yep. Thanks, Kim, for that question. OK. Our next question is coming from Christopher. Christopher, I have unmuted your line. Please unmute yourself and ask your question.

**Christopher DePasquale:** Hi, can you hear me?

**CDR Kim Piermatteo:** Yes, we can.

**Christopher DePasquale:** Awesome. Thank you. My name is Chris DiPasquale at Babson Diagnostics, and thanks again for this webinar. I'm looking for maybe an answer to a question that's more forward-thinking. I work for a clinical laboratory. We develop laboratory-developed tests and going forward, laboratories that make LDTs are device manufacturers. Now, I'm looking at a situation where we're modifying both an assay and a collection device. The assay is not necessarily cleared for a specific sample type and then the collection device may not have the specific assay on the list of cleared tests. So how does one approach that? I think from what I've learned here, PCCP is not the correct mechanism, so I was wondering if there's any guidance from the people on this call.

**CDR Kim Piermatteo:** Thanks, Chris, for that question. I'm going to turn it over to Brittany.

**Brittany Schuck:** Yeah. Thanks, Kim. And thanks, Chris, for that question. Appreciate the question regarding laboratory-developed tests or LDTs. To ensure we are answering generally applicable questions regarding LDTs and the LDT final rule in a manner that is transparent, we do intend to respond to submitted questions as appropriate in a public manner, such as webinars, guidances, and other resources over the course of the phase-out period described in the LDT final rule. You may submit your generally applicable questions or suggested topics for a future webinar to a mailbox that we have for those questions. So that's [ldtfinalrule@fda.hhs.gov](mailto:ldtfinalrule@fda.hhs.gov) and participate in the development and issuance of guidance documents as discussed in 21 CFR 1015(g). So, if you have a question related to LDTs, please submit that to [ldtfinalrule@fda.hhs.gov](mailto:ldtfinalrule@fda.hhs.gov) for additional information regarding laboratory-developed tests.

**CDR Kim Piermatteo:** Thanks again, Chris, for your question. And thank you, Brittany, for your response.

**Brittany Schuck:** Yeah. And Kim, sorry, if you don't mind just adding, if you do have questions about a specific test system, specific device, specific IVD, you can submit a Pre-Submission, and we have information on our Pre-Submission program on our website. I'm guessing you might be familiar with it. But if not, happy to drop the link to that in the chat as well.

**CDR Kim Piermatteo:** Great. Thanks, Brittany. Our next question is coming from Chad. Chad, I have unmuted your line. Please unmute yourself and ask your question.

**Chad Webb:** Hi. Thanks. This is Chad Webb. I was wondering if you guys can clarify if or when a De Novo pathway may be required compared to a traditional 510(k) to introduce a new device, including a PCCP if an otherwise eligible predicate does not contain one. Or said another way, are there scenarios where just including the PCCP may trigger a De Novo pathway because the proposed predicate does not contain a PCCP?

**CDR Kim Piermatteo:** Great. Thanks for that question, Chad. I'm going to turn it over to Kathryn.

**Kathryn Drzewiecki:** Thanks for that question, Chad. There's a lot to unpack there, so let me start with just a couple of facts from the draft guidance. Introducing a PCCP alone does not mean that you need to proceed through the De Novo pathway. We consider the PCCP as part of the technological characteristics of the device. So just because a predicate does not have a PCCP does not mean you can't be part of the 510(k) pathway. I think to address the other part of your question, the circumstances in which you need De Novo, whether or not there is a PCCP is the same in either situation so that you, if you can identify a valid predicate for your device with a PCCP, then you should be OK in the 510(k) pathway. Does that answer your question, or do others have some things to add?

**Chad Webb:** It does answer it. Thank you.

**Kathryn Drzewiecki:** OK, great. Thanks. Back to you, Kim.

**CDR Kim Piermatteo:** Great. Thanks, Kathryn, and thanks, Chad. Our next question is coming from Divya. Divya, I have unmuted your line. Please unmute yourself and ask your question.

**Divya Raghavi Nandakumar:** Hi. Can you hear me?

**CDR Kim Piermatteo:** Yes, we can.

**Divya Raghavi Nandakumar:** Perfect. Thank you for the talk. So I have two questions. One is Jason mentioned that there is a section in the 510(k) application or the eSTAR application. Can we go ahead and start including PCCPs moving forward, or do we have to wait until the draft guidance is released?

**CDR Kim Piermatteo:** Thanks for that question. I'm going to turn it over to Jason.

**Jason Ryans:** Hi, great question. So, when 515C was passed, that actually was self-executing, so you are able to submit PCCPs now. We have already cleared and approved submissions with a PCCP.

**Divya Raghavi Nandakumar:** Great. Fantastic. My second question was, can PCCPs be submitted as part of a special 510(k) as well? Or is it, or can they only be submitted as part of a traditional or abbreviated 510(k)?

**Jason Ryans:** So, I would say generally, we think that establishing a PCCP may not be appropriate for a special 510(k). Given the reduced timeline as well as the need to provide information and a summary

level of risk analysis format. And so, we would recommend either using the traditional abbreviated, but if you're modifying a previously authored PCCP, then perhaps a special could be appropriate, but it would really depend on the changes that are being made.

**Divya Raghavi Nandakumar:** OK. Sounds good.

**Kathryn Drzewiecki:** If I could just add, just as recommended in the draft guidance, we think it would be possibly appropriate to have a special 510(k) when the modifications to a PCCP are changes to your own device and where well-established methods are available to evaluate the change to the PCCP. And that's consistent with our recommendations in the special 510(k) program guidance as well.

**Divya Raghavi Nandakumar:** Got it. Thank you. A follow-up question for that. So a special 510(k) is when you have established methods, right? Let's say you're making a change to a performance specification. Now, if the established method or the guidance is revised, and by the time the manufacturer implements the proposed modification, can they just test it to the revised guidance, or do they still have to test to the guidance that was approved in the PCCP application?

**CDR Kim Piermatteo:** Thank you for that follow-up.

**Kathryn Drzewiecki:** Could you clarify, Divya. I'm sorry. I'm not understanding the question. Could you, could you explain it again? Thank you.

**Divya Raghavi Nandakumar:** Yeah. So, in the application, we have to list the modifications, and let's say we would have to list the protocol. If it's a change to the performance specification, we would list the appropriate standard that we tested against to. So, let's say the standard is revised in a few years. So, when the manufacturer decides to implement the modification, would they have to test it in accordance to the revised standard, given that the testing protocol is impacted by the revision? Or should they stick to testing it to the previous revision of the standard?

**Jason Ryans:** So, I would generally say that when your PCCP was reviewed and we used whatever the current version of the recognized standard is, that version is probably still appropriate and would not generally require you to change your testing. Otherwise, I think we would have had issues when we first authorized it.

**Divya Raghavi Nandakumar:** OK. Sounds good. Thank you for the clarification.

**CDR Kim Piermatteo:** Great. Thank you all for the discussion. Our next question is coming from Kelsey. Kelsey, I have unmuted your line. Please unmute yourself and ask your question.

**Kelsey Candelmo:** Hi, there. Can you hear me?

**CDR Kim Piermatteo:** Yes, we can.

**Kelsey Candelmo:** Awesome. Thank you very much for this very informative webinar. I had a follow-up question to an earlier slide regarding one device allowed one PCCP. I was wondering if it was possible to have PCCPs categorized by the nature of their change. For example, one PCCP that will list manufacturing changes and another with minor design changes.



**CDR Kim Piermatteo:** Thanks, Kelsey, for your question. I'm going to turn it over to Jessica to start us off.

**Jessica Paulsen:** Sure. Thanks so much. Yeah. So I think what you're describing is very much a viable way to do it. I think from a reviewer perspective and least burdensome way to make sure we're understanding what's in front of us, it can be really helpful to have a single PCCP that's very clearly organized and iterates by using proper version control. But I think the scenario where maybe you have a manufacturing-related PCCP and then a design-related PCCP may be appropriate. I think what's important at the end of the day is that we get the information we need to be able to reach a final decision on the file and the device in front of us. So, I would just keep that in mind as you're thinking about how you want to structure and format your PCCP.

**Kelsey Candelmo:** Yes, absolutely. Thank you very much.

**CDR Kim Piermatteo:** Thank you, Kelsey, for the question. And thank you, Jessica, for the response. Our next question is coming from Ruth. Ruth, I've unmuted your line. Please unmute yourself and ask your question.

**Ruth James:** Thank you very much. Actually, the last question was a good, I want to just follow up from the last question that was asked. Just so I'm not being dense, the changes, the proposed changes that you put on the PCCP would have generated another 510(k) according to the current guidance. Those are the only changes you put on a PCCP, don't you? You don't just list all the other minor changes that you are going to make after clearance. Is that correct?

**CDR Kim Piermatteo:** Thanks for that question, Ruth. Kathryn, I'm going to turn it over to you.

**Kathryn Drzewiecki:** Yeah. Thanks, Ruth. That's correct. Minor changes, changes that wouldn't have otherwise required a 510(k) or a PMA supplement would generally not be appropriate to put in a PCCP. So those can be handled through your existing change management, through your quality system.

**Ruth James:** Excellent. Thank you.

**Kathryn Drzewiecki:** Yep.

**CDR Kim Piermatteo:** Thanks again, Ruth. And thank you, Kathryn. OK, our next question. That question is coming from Chitra. Chitra, I have unmuted your line. Please unmute yourself and ask your question.

**Chitra Nadig:** Yes, can you hear me?

**CDR Kim Piermatteo:** Yes, we can.

**Chitra Nadig:** OK. Thank you for the webinar. I think this is going to be a game changer for both the FDA and the industry. My question is, can we use PCCP for master file submissions, or how can we leverage PCCP in a master file submission?

**CDR Kim Piermatteo:** Thank you, Chitra, for your question. Jessica or Jason, I'm going to just open it up to the panelists if anyone wants to provide a response.

Again, Chitra, this was a question about master files, I believe. So, I think our panelists are going to provide you a response based on general response.

**Chitra Nadig:** Yeah.

**Jessica Paulsen:** Yeah. Thanks so much, Kim. Sorry about that. Yeah, so it's a good question. Unfortunately, master files aren't necessarily submissions that we authorize, and so our authority for authorizing PCCPs is specific to marketing submissions, 510(k), PMA, and we can do it in De Novo as well. I hope that helps address your question. Anyone else have anything to add?

Alright.

**CDR Kim Piermatteo:** Alright. Thanks, Jessica. OK. Our next question, our next question is coming from Dhara. Dhara, I have unmuted your line. Please unmute yourself and ask your question.

**Dhara X Bhavsar:** Hi. Can you hear me, OK?

**CDR Kim Piermatteo:** Yes, we can.

**Dhara X Bhavsar:** Alright. Thank you so much and thanking the agency for providing this guidance. Quick question on the PMAs. So how could we implement the PCCP for a modular type of PMA submission? Would it be module-specific? For example, for analytical, for clinical, or for a manufacturing module for relevant changes, or should be part of a final module solution? Thank you.

**CDR Kim Piermatteo:** Dhara, thanks for your question, oh, sorry. Go ahead, Jason.

**Jason Ryans:** No, that's a great question. I don't think necessarily that it'd have to be its own module. I think you kind of hit on something, I think. If there are particular modifications related to a particular module that you're going to do, it may be appropriate to include it then. But ultimately, it would be assessed in totality with all the different sections when you're assessing the device once all the different modules have been reviewed.

**Dhara X Bhavsar:** I see. So, it'll be part of final PMA submission?

**Jason Ryans:** Yes.

**Dhara X Bhavsar:** OK. Thank you.

**CDR Kim Piermatteo:** Thanks again for the question. And thanks, Jason, for the response. Our next question is coming from Rupa. Rupa, I have unmuted your line. Please unmute yourself and ask your question.

**Rupa:** Hi, can you hear me?

**CDR Kim Piermatteo:** Yes, we can.

**Rupa:** Thank you. Thank you so much for this webinar. I found it very informative. So, my question is, can design or material changes due to manufacturing transfer be submitted under a PCCP?

**CDR Kim Piermatteo:** Rupa, I'm sorry. I couldn't hear you. Can you repeat that last question that you stated?

**Rupa:** Sure. Can design and material changes for a product due to manufacturing transfer be submitted under a PCCP?

**CDR Kim Piermatteo:** Thank you. So, design and material changes due to a manufacturing change, correct?

**Rupa:** Correct.

**CDR Kim Piermatteo:** OK. Jessica, would you like to jump in here?

**Jessica Paulsen:** Sure. Yeah, happy to. Thank you so much for the question. I think the answer is that it's really going to depend on what the design and material changes are. So, if you get in that scenario, would highly encourage you to reach out with specifics and we can chat about it in a Pre-Sub so that we can get alignment on it for a PCCP.

**Rupa:** OK. Thank you.

**CDR Kim Piermatteo:** Thanks for the question. Thanks, Jessica, for the response. Our next question is coming from Chris. Chris, I have unmuted your line. Please unmute yourself and ask your question.

**Chris Gornick:** Great. Can you hear me?

**CDR Kim Piermatteo:** Yes, we can.

**Chris Gornick:** Awesome. Yeah, so my question's just, and it's specific to if we're submitting a 510(k) and that's what we're applying for the PCCP with. Could you talk a little bit about how that could impact timing of that 510(k) approval, or does it impact it? Just trying to get a sense for, is this going to extend time for that initial approval? So just want to understand that versus approval for the PCCP component.

**CDR Kim Piermatteo:** Thanks, Chris. I'm going to turn it over to Jason.

**Jason Ryans:** Yeah, so great question. So addition of a PCCP does not change the review clock. So, for a 510(k), so this could be a traditional 510(k) or abbreviated, it's still going to be the 90-day review window. There may be additional information that's needed if there are deficiencies related to the PCCP. For instance, if it needs to go on hold. But it shouldn't impact the timing.

**Chris Gornick:** Got it. And are the approvals together then? So, it'd basically be you'd get 510(k) and then the PCCP at the same time?

**Jason Ryans:** Yeah. So, the PCCP is part of the clearance of your device.

**Chris Gornick:** Yeah, yeah.

**Jason Ryans:** The substantial equivalence decision takes in totality all the information in your submission, including your PCCP.

**Chris Gornick:** Got it. Got it. OK, thank you.

**CDR Kim Piermatteo:** Thanks, Chris. And thanks, Jason. OK. Our next question is coming from Sam. Sam, I have unmuted your line. Please unmute yourself and ask your question.

**Sam Eakes:** Hi, can you hear me?

**CDR Kim Piermatteo:** Yes, we can.

**Sam Eakes:** Great. Thank you. Thanks very much for this webinar. I just had a question. If it's possible to submit a marketing authorization for the PCCP alone, so if you're going to make changes to the device in the future, but there's no new changes to approve or clear at that exact time. You're just trying to get the PCCP itself approved or cleared, if you just have any guidance on that. Thank you.

**CDR Kim Piermatteo:** Thanks, Sam. Kathryn, would you like to get us started with this question?

**Kathryn Drzewiecki:** Thanks, Sam. Yes, you can submit a marketing submission 510(k), PMA supplement to establish your PCCP, but you have to meet the marketing submission requirements for your device and the PCCP, meaning that if you need to include information about your device by referencing a prior 510(k) or things like that, you need to meet the marketing submissions for your device and the PCCP. So again, as Jason just mentioned, you can have the device and PCCP authorized together. Does that address your question, or does anyone have anything else to add?

**Sam Eakes:** Yes. Thank you. That's helpful.

**Kathryn Drzewiecki:** Great. Thanks.

**CDR Kim Piermatteo:** Thanks, Sam. And thanks, Kathryn. OK, we are coming up on time. I'm going to try to get through maybe one or two more questions. So the next question is coming from Miriam. Miriam, I have unmuted your line. Please unmute yourself and ask your question.

**Miriam Wilcox:** Hello. Thank you. I'm Miriam Wilcox. Thank you so much for this new draft guidance. I'm very excited about it. And this is a good segue from the next one. So, I deal primarily with complex software systems. So generally, when we're submitting, we try to focus it on the function under review. So, if we wanted to submit a PCCP for a different module within that system, would that be an appropriate, would that be appropriate, even though they are, they're part of the same device, they're just different modules in the system?

**CDR Kim Piermatteo:** Thanks, Miriam. Kathryn, I'm going to come back to you and then maybe open up to the group.

**Kathryn Drzewiecki:** Yep, that sounds good. Thanks, Kim. Miriam, yep. That would, sounds like it could be appropriate. Again, I think it all is about meeting the marketing submission requirements for the device and including your PCCP. And so, we have to still authorize them together, so I think the circumstance you described would generally be appropriate, but you've got to meet those marketing submission requirements.

**Miriam Wilcox:** Thank you so much.

**CDR Kim Piermatteo:** Thanks, Miriam. And thank you, Kathryn. That will be our final question for today's webinar. So, I want to thank all of you, all of our panelists, all of our presenters, and everyone for your interactions for today.

At this time, I'm going to turn it back over to Jessica to provide our final thoughts for today's webinar. Jessica?

**Jessica Paulsen:** Thanks, Kim, and thank you all for joining today. Hope that you learned a lot more about our authority for PCCPs and our proposed policy and recommendations that we've included in the draft guidance. We're excited to see PCCPs be proposed, as we see this as a way to really facilitate innovation in a least burdensome manner. So, if you're thinking about proposing a PCCP for your device, we hope that you will consider engaging early with us through a Q-Sub. And finally, I'll just remind folks that we want to hear from you. So please submit your comments on the draft guidance to the docket by November 20th so that we can consider them before we begin our work to finalize the guidance. With that, I will hand it back to Kim.

**CDR Kim Piermatteo:** Thanks, Jessica. So, before we close for today, I want to remind everyone that, as I mentioned earlier, a recording of today's webinar and a transcript will be posted in the next few weeks to the webinar page, as well as to CDRH Learn under the section titled How to Study and Market Your Device, and the subsection titled Cross-Cutting Premarket Policy. I've provided a screenshot of where you can find these materials in CDRH Learn on the slide for your reference.

And if you have any additional general questions about today's webinar, feel free to reach out to us in DICE at [dice@fda.hhs.gov](mailto:dice@fda.hhs.gov). And lastly, we hope you are able to join us for a future CDRH webinar. A listing of all of our upcoming CDRH events, including future webinars, is available via the link provided on the bottom of this slide at [www.fda.gov/cdrhevents](http://www.fda.gov/cdrhevents).

Thank you all again for joining us. We hope you found today's presentation and interactions informative. And this concludes today's webinar. Take care.

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