DuVal & Associates

Passing on Tribal Knowledge of FDA Law

CLIENT ALERT

"Do You Want to Build a ~~Snowman~~ Program?"
Will the FDA STeP Program Live Happily Ever After Like Elsa?

Executive Summary

At first glance, Frozen has little relevance to the medical device industry. But Elsa and Anna's contrasting characters serve as a useful analogy when comparing the Food & Drug Administration's ("FDA") Breakthrough Devices Program with its new, sister program, the "Safer Technologies Program" or "STeP" Program. While this is a cutesy analogy for our firm, given our past Client Alerts, Frozen is popular enough to have universal understanding.

In Disney's "Frozen," Queen Elsa utilizes the powers bestowed on her from birth to break through personal boundaries and magically transform her Kingdom of Arendelle. Princess Anna, Elsa's younger sister who lacks magical powers, struggles to establish her own legacy in the shadow of her older sister. Fortunately, like most good Disney movies, Elsa and Anna (with the help of their snowman, Olaf) overcome their individual obstacles and live happily ever.

Like Princess Anna, the STeP Program is a younger sister to the Breakthrough Devices Program. The STeP Program must establish its own identity within the medical device industry. ***First,*** the STeP Program is not the result of legislative activity. It is an administrative creation and therefore lacks the same resources as the Breakthrough Devices Program. ***Second,*** the STeP Program lacks the same market cachet as the Breakthrough Devices Program because it is designed for devices that treat or diagnose "less serious diseases or conditions." ***Finally,*** unlike the Breakthrough Devices Program the STeP Program is a new initiative that did not supersede prior FDA programs.

Although these challenges appear significant, the new STeP Program can forge a fairytale ending if it receives the support necessary to fulfill the Program's promise to expedite the development, assessment and review of medical devices. Certainly, many of the resources necessary for the Program's success must come from the FDA itself. But the remaining support must come from industry. Thus, like Olaf to Princess Anna, DuVal & Associates is ready to help device manufacturers navigate the STeP Program and remains cautiously optimistic the Program will overcome its anticipated growing pains and live happily ever after.

This Client Alert summarizes the background and intent of STeP, identifies how the STeP Program fits within the scheme of the FDA's existing programs, and assesses the value of the STeP Program, including its possible limitations or complications.

Background of STeP Program

The STeP Program is a voluntary program for medical devices and device-led combination programs believed to significantly improve safety of available treatments. Devices eligible for the STeP Program include those devices that are subject to review under a premarket approval application (PMA), De Novo request, or premarket notification (510(k)), and which satisfy general and specific eligibility factors detailed below.

The FDA's intent for the STeP program is to expedite the development, assessment and review of regulatory submissions for medical devices through a collaborative approach between the FDA and a device manufacturer. (*See* "Safer Technologies Program for Medical Devices," Guidance for Industry and Food and Drug Administration Staff," Jan. 6, 2021, p.1 (hereinafter "FDA Guidance"). Through this collaboration, the FDA desires to promote patient access to innovative and safe new therapies and diagnostics while preserving the statutory standards for PMA approval, De Novo marketing authorization and 510(k) clearance. (*See* FDA Guidance p.1.)

Although the STeP Program is intended to provide patients more timely access to innovative therapies and diagnostics through an accelerated review process and provide medical device manufacturers another pathway for expedited review, the industry should be cautiously optimistic about the Program's promise. More importantly, industry should not expect the same results as observed with the Breakthrough Devices Program. There are significant differences between the Breakthrough Devices Program and the STeP Program, and limitations within the STeP Program itself, that may affect its success.

The STeP Program is not the result of legislative activity and will require buy-in from the FDA and industry. An important difference between the STeP Program and the Breakthrough Devices program is legislative support. The Breakthrough Devices Program was enacted by the 21st Century Cures Act and amended by the FDA Reauthorization Act of 2016. In this respect, the Breakthrough Devices Program benefits from its legislative support and the governmental resources committed to its success. This provides the accountability necessary to help ensure the promises of the Breakthrough Devices Program are met, allowing industry to have more confidence using this program. The STeP Program, however, did not result from legislative activity.

As a result, the resources and support for the STeP Program must be committed by the FDA and industry. It is unknown whether this will limit the STeP Program's effectiveness or whether there will adequate buy-in to ensure its success. The legacy of the programs that came before the Breakthrough Devices Program (2011 Innovation Pathway Pilot and Priority Review Program, and the 2015 Expedited Access Pathway) gives pause for the success of a program that is not backed by legislative support. However, given its relationship to its successful, powerful older sister (the Breakthrough Devices Program), and the opportunities afforded to the industry we are optimistic the STeP program will benefit from the Breakthrough Devices Program's recent success.

Although the STeP Program can benefit from the success of Breakthrough Device Program, it will need to prove its own value. One storyline in Frozen concerns the conflict between Anna and Elsa due to Anna's effort to break out of Elsa's shadow and open the gates to Arendelle. A similar dynamic exists with respect to the relationship between the Breakthrough Devices Program and the STeP Program. The Breakthrough Devices Program is a darling of industry as breakthrough designation is increasingly sought to expedite the development, assessment and review of new devices. Additionally, a substantial part of the value of the Breakthrough Device Program is the marketing advantage obtained through a breakthrough designation. But the value of the STeP Program is unknown and, on its face, appears less exciting. **Unlike the Breakthrough Devices Program, which is directed toward devices that provide for more effective treatment or diagnosis of life-threatening or irreversibly debilitating diseases or conditions, the STeP Program is designed for devices that offer "a significant safety advantage in treating and /or diagnosis of less serious diseases or conditions."** (See FDA Guidance Document p.8.)

This does not mean devices enrolled in the STeP Program do not provide substantial innovation or benefit, only that they may lack the cachet afforded by a breakthrough designation. As a result, the STeP Program will need to eventually escape the shadow of the Breakthrough Devices Program and establish its own value proposition.

To achieve a fairytale ending, the STeP Program must overcome some obstacles. In addition to the above, it remains to be seen how the STeP Program will transform the clearance/approval process for medical devices. As the industry and FDA are aware, the FDA remains entrenched in the collective fight against the COVID-19 pandemic, a villainous antagonist. Due to COVID-19, the FDA has a substantial backlog of Emergency Use Authorizations and a related backlog of standard submissions for review. The problem with all of these expedited access programs is that so many devices will arguably qualify for an expedited pathway that it creates a review problem of another order for FDA. By creating another defined expedited pathway, FDA creates another layer of administrative review (that it does not currently have time for) to determine

program eligibility before it gets to the actual substantive review on a submission. These multiple layers are taxing on the Agency and obfuscate the actual time frame it takes to gain clearance or approval. Industry gets so enamored of the "expedited" programs, it loses sight they can take longer than a conventional clearance or approval.

Frankly, the Agency's track record with expedited programs has not been good. The Agency does not have the capacity to deal with its current workload. How will it do this with yet another promise to expedite things? The Agency has been sending out notifications to industry about the fact that EUA and general submission and pre-submission timelines are slipping. CDRH management has been speaking publicly about capacity and workload as well. So, how does one reconcile FDA's managerial complaints about workload while adding more workload that will only require more resources? Maybe the answer to the question is in the question itself. The Agency is really looking for more resources. A cynical look at this scenario is that creating new programs (and addressing existing ones) whose aspirations cannot be achieved under the current budgetary limitations, may be a strategy by CDRH to get more Congressional appropriations and significantly higher user fees from industry. Nothing like a backlog to justify your need for more funding.

As a result, it is unknown whether devices enrolled in the STeP Program will be expedited for review and assessment, or simply fall into the existing queue. Similarly, the benefits of enrollment in the STeP Program have not been quantified. For example, to what extent can the FDA provide expedited review and assessment of enrolled devices, and does that expedited review provide tangible benefit beyond the normal clearance/approval process? These are just a few of the questions that should compel industry to approach the STeP Program with caution despite its promise.

General and Specific Eligibility Factors for STeP Enrollment

To enroll in the STeP Program, a device must satisfy general and specific eligibility factors. A device is generally eligible for the STeP Program if it is subject to marketing authorization via the PMA, De Novo Request, or 510(k) pathways. (*See* FDA Guidance p.7).

A device is specifically eligible for the STeP Program if it satisfies the following factors: (1) the device is not eligible for the Breakthrough Devices Program due to the less serious nature of the disease or condition treated, diagnoses, or prevented by the device; and (2) the device is reasonably expected to significantly improve the benefit-risk profile of a treatment or diagnostic through substantial safety innovations that provide for one or more of the following: (a) a reduction in the occurrence of a known serious adverse event; (b) a reduction in the occurrence of a known device failure mode; (c) a reduction in the occurrence of a known use-related hazard or use error, or (d) an improvement in the safety of another device or intervention. (Id. p.8.)

FDA Guidance states STeP eligibility will be reviewed from three perspectives. The FDA will consider:

- whether the device is reasonably expected to provide a significant improvement in the benefit-risk profile relative to other available treatment or diagnostic alternatives;
- whether the expected improvement in the benefit-risk profile is through substantial safety innovation; and
- how the device is reasonably expected to achieve the significant improvement to the benefit-risk profile by considering the reductions in occurrences or the safety improvements referenced above. (Id. pp.9-11.)[1]

The FDA has identified six benefits for enrollment in the STeP Program: (1) interactive and timely communication between sponsor and the FDA through increased interaction, use of response timeframes, and interactive and transparent communications; (2) increased review team support, which the FDA describes as "a high level of review team

[1] In addition to these eligibility factors, FDA's Guidance also states the FDA intends to consider the following factors when considering the eligibility for a device for the STeP Program: (1) the regulatory path for the device; (2) the timeframe for STeP request; and (3) whether there are multiple regulatory submissions for similar devices.

support and increased senior management (e.g., Office director or designee presenting Officer director) engagement, as resources permit"; (3) expedited submission review through the use of additional review resources similar to prioritized review in the Breakthrough Devices Program; (4) benefit-risk assessments and a balancing of pre/post market data collection; (5) efficient and flexible design principles for clinical studies; and (6) manufacturing considerations for PMA submission. (FDA Guidance pp. 4-7.) It remains to see whether these benefits will be realized through the STeP Program or whether the limitations of the Program will impede its success.

The STeP criteria have created a clearance/approval gap that should be bridged by the FDA for safer, but not necessarily "more effective," devices that treat life-threatening conditions.

There is a concern the STeP Program may have unintentionally created programmatic gaps within the program eligibility criteria. The first specific eligibility factor of the STeP Program provides that a device is only eligible if it "should not be eligible for the Breakthrough Devices Program due to the less serious nature of the disease or condition treated, diagnosed, or prevented by the device." (FDA Guidance p.8.) But the compound nature of this factor has unintentionally created a gap of eligibility for the Program. This is because the eligibility factor is based upon two criteria: (1) a device not being eligible for the Breakthrough Devices Program and (2) that ineligibility resulting from the fact the device is for a "less serious" disease or condition. Thus, the STeP Program may unintentionally prohibit enrollment for a safer device intended for a life threatening or irreversibly debilitating condition merely because it was not eligible for the Breakthrough Devices Program because it provides a safer but not demonstrated more effective treatment or diagnosis. (See FDA Guidance, Breakthrough Devices Program, dated December 18, 2018, p.8) ("A device that provides "for more effective treatment or diagnosis of life-threatening or irreversibly debilitating human disease or conditions".)

A hypothetical best illustrates this gap. Assume a medical device manufacturer has developed a device to treat a "life-threatening or irreversibly debilitating human disease or condition," such as congestive heart failure, and that the manufacturer can demonstrate its device is safer than other known devices to treat that "life-threatening" disease. Also assume that based on other devices already on the market, the manufacturer cannot enroll in the Breakthrough Device Program because it will be unable to establish its device is "more effective" than the competitor's device. But the manufacturer is also ineligible for the STeP Program even though it provides a safer treatment option. That is because the device does not satisfy the first specific eligibility factor of STeP—because the device is not directed toward a less serious disease or

condition. This unintended gap between the Breakthrough Device Program and the STeP Program is imprudent and should be bridged by the FDA.

The FDA should further articulate the standards used to determine eligibility under STeP's specific eligibility factors. Despite the FDA Guidance provided to date, which includes a lengthy discussion regarding the considerations used by the FDA to evaluate specific STeP eligibility, there remains concern that the qualifying language in the STeP eligibility factors may limit the Program's effectiveness. For example, the second eligibility factor of the Program requires the FDA's assessment whether a device is "reasonably expected to significantly improve the benefit-risk profile of a treatment or diagnostic . . . ." (FDA Guidance p.8) (emphasis added). Although the FDA has provided nearly four pages of discussion regarding its evaluation of the STeP specific eligibility factor, the subjective nature of this factor provides the FDA substantial discretion to decide which devices satisfy the STeP criteria and which devices do not. It will be incumbent upon the FDA to continue to articulate standards that can be fairly and uniformly analyzed when making discretionary determinations for enrollment in STeP. After all, if such decisions are made by the FDA without adequate disclosure, the integrity of the STeP Program will be doubted and any optimism about the STeP Program will devolve into skepticism about the Program's value. This lack of clarity heightens the importance of ensuring that a STeP program application provides strong advocacy support to indicate why a device should be accepted for this new program.

TAKEAWAYS

Regarding the STeP Program

The STeP Program has substantial promise, but it must overcome initial growing pains. If the Program can be properly supported, then it will establish itself as an effective and expedited pathway for FDA review of eligible devices. In that role, the STeP Program will serve an important function distinct from the Breakthrough Device Program.

But the timing of the introduction of the STeP Program is questionable. As previously stated, there exists a backlog at the FDA resulting from the COVID-19 pandemic. Even before the pandemic, FDA's workload was heavy. It remains to be seen whether the FDA can commit the resources to simultaneously tackle those backlogs while also fulfilling its promise to expedite the development, assessment and review of medical devices through the STeP Program.

If the FDA can overcome the existing challenges, it's likely the STeP Program will live happily ever after. DuVal & Associates, like Olaf, is ready to serve as your trusted advisor and help navigate the path toward that ending.

DuVal & Associates
Drug, Device and Food Law

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