

Summary Overview

Portola and NBCA have been discussing potential opportunities for collaboration. Most recently, Portola's Vice President of Marketing Scott Garrett and NBCA's Director of Communications & Health Marketing Lisa Fullam have discussed different collaborative options that might be implemented to help build knowledge among hospital nursing staff relative to thromboprophylaxis in the hospital setting.

Since its last discussion with Portola on May 16, NBCA has conducted some preliminary research into several of the specific ideas that had been discussed, and presents here an outline of some conceptual thinking for Portola's consideration and further discussion with NBCA in mid-June 2018.

These ideas are being presented as informal concepts, and will be further refined as the discussions between NBCA and Portola narrow to the specific collaborative tactics that might be of greatest interest to both organizations, or prior to NBCA's submission of a more formal proposal. Estimated budget ranges are provided here as well, and also will be refined as this exploratory process evolves.

Objective:

- Build knowledge and fill information gaps among hospital nurses/nursing staff about the spectrum of thromboprophylaxis options and corresponding selection criteria and patient profile considerations in the hospital setting.

Strategic Framework:

- Implement an enduring educational program, and mobilize corresponding educational tools, using engaging and readily accessible eLearning vehicles to a) optimize use or uptake of the program and b) produce "merchandisable" tools that can be mobilized across different digital platforms and also traditional distribution paths.
- The educational content will be unbranded, with potential access to continuing nursing education (CNE) credits, and have three primary educational tracks:
 - **VTE risks associated with hospitalization**, with select high-risk patient groups specifically addressed: medically ill and elderly, cancer, trauma/surgery; and, DVT/PE signs and symptoms also emphasized.
 - **Anticoagulation options for hospitalized patients**, including, for example, UFH, LMWH, and the one DOAC indicated for medically ill hospitalized patients; and, evidence-based patient selection considerations, including short- and longer-term clotting/bleeding risks. Also, consideration of adherence issues when hospitalized patients are assessed for anticoagulation therapy, including assessments relative to injectable and oral anticoagulation, will be addressed.
(Consideration needed re: any discussion of mechanical compression in the hospital setting?)
 - **Anticoagulation management considerations among hospitalized patients at discharge**, or in transition from hospital to home, with emphasis tied back to patient assessments when in-hospital thromboprophylaxis is chosen, the importance of patient adherence, and patient awareness about DVT/PE signs and symptoms.

Strategic Rationale: Expanded Thromboprophylaxis Choice, eLearning Among Nursing Staff

Continuing education has never been more crucial in the VTE clinical environment than it is right now: A spectrum of new DOACs, including a new DOAC option indicated for use among the medically ill in the hospital setting, has resulted in a paradigm shift in the clinical approach to VTE prophylaxis and treatment and a growing need for improved knowledge among nursing staff. While continuing education among nurses has posed challenges for all healthcare organizations for years, eLearning provides a viable response to these challenges, and a way to enhance educational opportunities in the hospital setting.

With nursing staff specifically in mind, eLearning provides a unique solution for continued education: It can deliver outside the boundaries of classroom walls and more formalized in-service training, with an online learning experience that defies geographical location, time, or distribution devices. It can be provided dynamically and at the convenience of nursing staff schedules. It provides access to thought leaders and patient perspectives alike, and allows nurses to apply this multidimensional learning to patient care practices in the workplace.

In NBCA's experience, nurses are the primary registrants for our existing online VTE curriculum, and studies have shown that nurses view online learning opportunities as ["suitable for their working conditions and needs," and that eLearning offers knowledge acquisition options for nursing staff regardless of age, employment experience, or geographic location.](#)

However, optimal success with any online educational program designed with nurses in mind rests with consistent engagement: Continuing educational development, while it [officially differs from state to state](#), is demanded by the ever-evolving nature of the nursing role and the requirements of nursing organizations that require continuing professional development among RNs and LPNs, for example. Existing staff shortages and, in some cases, geographical isolation, can make it difficult if not impossible for nurses to engage in traditional face-to-face training, and this challenge becomes more pronounced given the growing responsibilities and increasingly demanding work schedules that nurses face today.

Innovative eLearning methods allow nurses to develop their skills even when nursing supply and the demand for qualified nurses contribute to a growing shortage among nursing staff personnel. eLearning offers a spectrum of opportunities that can provide necessary flexibility during a time of massive workplace change, and will become more and more of a priority for many organizations. This continuum will no doubt persist and grow, but the demands for knowledge acquisition and retention can keep pace through the benefits of a growing number of eLearning opportunities.

Tactical Overview: The design of the tactical plan should be multifaceted and, as possible, integrative, allowing eLearning tactics to build or evolve over time for optimal access/use, transfer to other platforms, and flexible distribution options. Further, we can add value via target audience access to CNEs, as well as periodic updates to reflect evolving science/literature in this clinical space.

Portola and NBCA have spent some time discussing the development of eLearning tools, including the potential creation of something similar to an online curriculum that might be published to offer CNEs to nurses who successfully complete the online course. This type of work, particularly if we were to seek CNE accreditation, reflects a major undertaking that would require roughly 6 to 12 months to complete. We address the development of such a curriculum project below, but lead up to it with the conceptual description of other potential tactics that a) could be created and implemented in a more timely way and b) integrated with the larger curriculum development effort in the end.

Tactical Concepts for Consideration

The remainder of this concept document outlines some eLearning projects for further discussion and consideration by Portola and NBCA.

1. E-brochure (Budget Range: \$15,000 - \$20,000)

An e-brochure offers a cost-effective digital means to share information and deliver an interactive and visually appealing eLearning tool. With an e-brochure, the target audience experiences a fluid and dynamic reading experience. Brochures created in this format can work on all modern web browsers, and users also can manage e-brochures on mobile devices. As we envision it, this eLearning tool will engage our readers with an immersive digital experience and a stunning visual display through the integration of video, audio, images, photos, text, and button links.

Some additional creative and functional attributes associated with the e-brochure format and the specific software NBCA would use to create this eLearning tool include:

- 3-D page-turning effects, key fields search, responsive design, and potential incorporation of video clips
- A reduction in distribution costs, paper used, and carbon footprint

The e-brochure design platform we might use would allow us to create a brochure that conveys important learning content creatively, while also optimizing access to the e-brochure in assorted ways, including:

- The e-brochure can be created with a custom domain specific to this project, and hosted independent of NBCA's website, or it can be created for hosting on NBCA's website, as part of our organization's resources for healthcare professionals, with a domain name that includes stoptheclot.org.
- It can be downloaded for offline reading and/or printing purposes.
- It can be shared and promoted via email and a wide spectrum of social media platforms.
- It can be transferred to a CD/DVD or flash drive for distribution at meetings/events or for other distribution purposes.

Lastly, the e-brochure would be built to reflect best practices in SEO, including, for example:

- Indexed for search engines
- Measureable metrics, including e-brochure statistics such as visits, reads, views and shares

2. Video production for e-brochure integration & free-standing use (\$8,000 - \$10,000)

As part of this educational program, NBCA also sees value in the use of video, and NBCA Marcom staff can produce a video in-house, and therefore at significant cost savings, to serve two functions: a) provide compelling visual content for the e-brochure outlined above and b) create a free-standing video learning tool to enhance and support our overall eLearning efforts.

Depending on its full creative treatment, this video could be integrated into the e-brochure either in full or in part, adding important visual appeal to the brochure, but as a free-standing education tool it can be shared or distributed along several other lines, including:

- Hosted on NBCA's website, as a resource for use by healthcare professionals
- Shared via email and social media
- Looped for display at nursing meetings
- Added to in-hospital video libraries for in-service training

3. Nursing job aids (patient education pieces) (\$5,000 - \$7,000)

NBCA frequently receives inquiries from nurse practitioners and nurse educators seeking educational materials they can use to help educate their patients. We see the potential to add value to this nursing education program with the creation of two basic pieces of content that can be used as nursing job aids and patient education tools, namely: 1) A one-page document about blood clot risk factors, with hospitalization risks as the centerpiece of this fact sheet or checklist and 2) a one-page visual aid that explains the spectrum of thromboprophylaxis options for hospitalized patients. These two patient education pieces would help transfer the knowledge nurses gain from the e-brochure and/or video described above to their hospitalized patients, and enable shared decision-making among patients and caregivers. The design of the documents could be constructed to integrate effectively with either the hospital admissions process and/or discharge orders, or simply for bedside instruction. These patient education documents could be web-based and downloadable, and offered up through a direct link in the e-brochure or a URL shared with the video described above.

4. Podium content (slide presentation) \$2,500

In an effort to extend the reach of this educational effort, and provide thought leaders and those who serve educational roles in the VTE community, we can create a focused slide presentation for use with a nursing audience. The slide presentation could pull content from both the e-brochure and video outlined above, streamlining the creative effort that would be required to design this tool. This slide presentation would reflect core messaging of the e-brochure, and could be used by instructors or in connection with larger VTE educational programs or podium presentations. The slide presentation can be housed on NBCA's website, shared via DVD or flash drive, and further promoted via a link in the e-brochure.

5. Online Curriculum (with or without CEs) (\$40,000 to 50,000, likely includes accreditation fees)

The larger program that NBCA and Portola have been discussing involves a potential online curriculum that would provide important education about anticoagulation management in the hospitalized patient. In line with the strategic framework outlined previously, the content of this curriculum would reflect three core lessons, for example:

- **Lesson 1: *Risk Assessment, Assessing VTE Risk Groups in the Hospital Setting***
VTE risks associated with hospitalization, with select at-risk patient groups specifically addressed, including: medically ill and elderly, cancer, trauma/surgery; and, DVT/PE signs and symptoms.
- **Lesson 2: *Thromboprophylaxis Choice, Selection Criteria and Shared Decision Making***
Anticoagulation options for at-risk hospitalized patient groups, including, for example, UFH, LMWH and newest DOAC indicated for use in medically ill hospitalized patients; and, evidence-based patient selection considerations, including short- and longer-term clotting/bleeding risk, and potential patient adherence considerations when hospitalized patients are assessed for anticoagulation therapy, including assessments relative to injectable and oral anticoagulation. Appropriate patient/caregiver education measures. (Consideration needed re: any discussion of mechanical compression devices?)
- **Lesson 3: *Discharge Considerations, The Anticoagulated Patient Heads Home***
Anticoagulation management considerations at discharge, or tied back to selection criteria associated with patient profiles and hospital-to-home transitions. Emphasis on discharge instructions and adherence, as well as patient awareness of DVT/PE signs and symptoms.

The curriculum will be developed by NBCA, in consultation with select members of our [Medical & Scientific Advisory Board](#), including, for example, Mike Streiff, MD, Greg Maynard, MD, and Diane Wirth, ANP-BC CACP. We would work with these medical advisors to fine tune the key learning objectives associated with this course, and make decisions about potential strategies to achieve CNE accreditation, including research and appropriate outreach to the leading nursing organizations in this field, including the American Nurses Credentialing Center, the National Council of State Boards of Nursing, the American Nurses Association, the American Association of Nurse Practitioners, the Nurse Practitioner Associates for Continuing Education, and the American Association of Colleges of Nursing.

NBCA welcomes the opportunity to expand its inventory of resources for healthcare professionals with this non-branded educational content for nurses, and realizes that the potential addition of CNEs will optimize the value and uptake of this effort. While it may require several months for a program like this to be completed and accredited, it could be an enduring learning tool that would hold value for years to come. While we would like to pursue CNE accreditation of this online course, we do have the option to develop and launch the course without CNE credits and will give this more consideration moving forward.

From a technical standpoint, the draft content would be created in PowerPoint, allowing our medical advisors to provide input as the content evolved. When finalized, we would convert the content to Adobe Captivate or Articulate's Storyline for programming. We have many Learning Management Systems to choose from, but most of our experience is working with Moodle. We have the ability to work in both static design and fluid boxes. With the popularity of tablets, mobile fluid boxes are growing in popularity. However, there are tradeoffs between static and fluid box design or desktop versus mobile design, so further consideration of these options would be needed before a final decision might be made.

NBCA presently hosts a highly regarded and widely accessed online VTE curriculum for healthcare professionals. This online course was created under our cooperative agreement with the Centers for Disease Control and Prevention (CDC). CDC has accredited NBCA's online course for continuing education credits for MDs, PharmDs, RNs and LNPs, and allied health professionals. The course has been hosted successfully on NBCA's website for eight years, and we are presently updating all of this online content for reaccreditation later this year. Recently, NBCA learned that CDC may assign our VTE curriculum its new Quality Training Standards badge, as the Agency's training experts view our curriculum as an example of high quality online learning standards that other course developers can use as a reference or guide. In addition, The Joint Commission has recognized a number of NBCA's awareness and education programs, including our online VTE curriculum and our signature [Stop the Clot. Spread the Word™](#) educational campaign that includes an arm dedicated to VTE risks among hospitalized patients, in its [Compendium of VTE Resources; Discharge Instructions/Education Materials for Venous Thromboembolism: A Comprehensive Approach](#). Therefore, NBCA is well positioned to create a high quality online curriculum, and other corresponding eLearning tools, as part of the educational program for nurses it is presently exploring and discussing with Portola

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