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New products from vendors may not work immediately in many clinical settings of various forms. One of them are reasons, however, is due to the fact that most clinicians are in a multi-vendor environment. The workflow demonstrated by the vendor may not completely work in a multi-vendor/hospital-specific environment. Similarly, new technologies are not perfect; they often require supplementary workflow solutions to accomplish the main goal. Often in time, vendor's support is limited. Simply waiting for the next product release is not always working. As the technology leader in a radiation oncology team, medical physicists should be actively involved in the technology implementation process, which can be hospital-specific. However, there are common steps in achieving the goal of technology integration. The first steps often involved in identifying why things are not working. This troubleshooting process may require assistance from vendors or friends in other hospitals. Once the main problem is identified, value-adding new ideas should be sought as alternative solutions. After an alternative solution is judged feasible, resources need to be identified to implement it in the clinic. This resource-seeking process may require you to "sell" your idea to your chief physicist, the vendor, or other members of the radiation oncology team. It is important to get buy-ins in the clinic before you invest time significantly. Successful clinical implementation often relies on the key clinical issues identified. Technologies used for such implementation do not need to be complicated, definitely not a complete overhaul of the existing workflow. While inventing a technical solution may not be easy, the biggest challenge is to make it live in your clinic. In addition, continuous support, improvement and adapting to changes are required. It is worth mentioning that many of the middleware solutions can be short-lived. The goal is not to insist "in-house" solutions. Rather, the eventual goal is the clinical efficacy for your clinic. Examples of in-house solutions will be discussed to illustrate these processes and experience will be shared among other presenters.

Learning Objectives

1. To suggest common strategies for in-house implementation of new technologies
2. To share experience on how to work effectively with your vendors
3. To identify challenges in in-house solutions