Technology Selection:

A Guide from the Medication Optimization Technology Toolkit

Description

This guide presents four key steps in the technology selection process for technology-enhanced medication optimization programs, e.g., programs that utilize technologies to improve medication reconciliation, adherence, and monitoring.

Audience

For organizations that want to design and implement a program that optimizes a key component of the medication management process and are ready to begin the technology selection process.

Helpful Tips

A collaborative approach to technology selection will better ensure program buy in.

1 Engage Medication Optimization Stakeholders

> *Who should be involved in the technology selection process for medication reconciliation, adherence, and monitoring technologies?*

2 Determine User Requirements

> *What user needs and use benefits do we need to incorporate in the selection process?*

3 Evaluate Vendors

> *What information do I need from vendors and how will I evaluate this information?*

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4   Select Technology and Vendor

Which vendor is best suited to help us meet our goals and needs?

1   Engage Medication Optimization Stakeholders

For technologies to optimize medication use and improve care outcomes, the technology and how it will be used to meet performance improvement goals must be well vetted by a multidisciplinary group of stakeholders.

Who to involve -- Stakeholders are people or organizations that are invested in the medication optimization program, are interested in the results of the vendor evaluation, and/or will be impacted by the technology selection decision. Representing their needs and interests throughout the process is a fundamental requirement in the technology selection process.

The technology selection process will be enhanced if the following stakeholders are involved:

- Stakeholders who can lend credibility to or reinforce the importance of the technology selection process.

- Stakeholders who will be responsible for day-to-day implementation of technologies for optimizing medication use.

- Stakeholders who will advocate for the technology selection process or authorize the final selection.

- Stakeholders who are sponsoring the program or have budget authorization for the technology investment.

For specific ideas about who to involve in the technology selection process, visit the ADOPT Toolkit website for tools and examples related to medication optimization program staff roles and responsibilities.

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2 Determine User Requirements

Medication optimization technologies can help ensure that the right patient is taking the right medication at the right dose and at the right time. Reducing medication misuse or underuse can lead to a reduction in emergency room visits, hospitalizations, re-hospitalizations and overall costs of care. Identifying user needs throughout the medication management process and clarifying the exact problem that is to be solved with technologies are fundamental steps toward determining user requirements.

Gather requirements – User requirements are guided by the overarching goals and context for the organization and program. Approaches to requirements gathering include interviews, questionnaires, user observation, brainstorming, use cases, focus groups, and demonstrations.

Gain consensus – Getting consensus on the high-priority requirements from involved stakeholders ensures that critical factors will be vetted from multiple perspectives and that priorities will be shared. This will set the stage for judging vendors in a consistent and structured way.

Tips – Consider the following when gathering requirements:

- Concentrate on what stakeholders want to achieve with technologies during medication reconciliation, adherence, and monitoring.

- Understand the constraints that users may face in using technologies during medication reconciliation, adherence, and monitoring.

- Separate the "nice to have" user requirements from the "must have" user requirements to prioritize what is critical to meet targeted outcomes.

3 Evaluate Vendors

Vendors are available to provide information on the technologies they offer, and often conduct on-site demonstrations. To make an apples-to-apples comparison of technology vendors, the following is recommended.

- **Request for Information (RFI)** – Develop an RFI and send to vendors that are good candidates for meeting requirements.

- **Vendor Evaluation Matrix** – This matrix will enable stakeholders to view and compare vendor information in a structured and consistent way. The matrix should include the key requirements, or criteria, and enable stakeholders to score each vendor on each criterion. The highest scoring vendor will be the best in class.

4 Select Technology and Vendor

With the right stakeholders involved, requirements identified and prioritized, and thorough information on available vendors collected, identifying a technology should be relatively straightforward. After identifying appropriate technologies that best meet the requirements of the program, selecting the vendor follows accordingly. Some caveats and tips follow.

- Consider a lease and/or services agreement with your vendor if your organization is not well set up to handle the technology logistics.

- Be sure to follow your organization's procurement process, including internal mechanisms to secure the best price, maintenance agreements, and bulk purchasing arrangements.

- Speak with or visit organizations that have successfully implemented a medication reconciliation, adherence and monitoring program that is supported by this technology vendor.