From Data to Decisions: Enhancing Data-Driven Decision Making and Persuasive Communication Skills in Clinical Trials Managers

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1. Background

Duke Cancer Institute (DCI) Clinical Trials Office (CTO) is committed to a people-driven culture. To further empower managers' decision making, we wanted to enhance their skills in analyzing and presenting quantitative data, complementing the skills they developed through a customized leadership series. We designed customized training to strengthen technical skills, focusing on effectively selecting and analyzing data to make informed decisions, and presenting it persuasively. This initiative enables managers to confidently integrate data analysis into their decision-making process.

2. Goals

The program equips managers with skills to effectively leverage data in decision-making, including identifying existing sources, recognizing when additional data collection is necessary, and using data analysis to inform robust decisions. A key focus was developing persuasive communication skills and encouraging a thoughtful, comprehensive approach to problem-solving, emphasizing considering all relevant data before acting.

3. Solutions and Methods

Building on the leadership series foundation, we developed a short, virtual microlearning course incorporating group activities and real-world examples directly relevant to participants' daily work. This scaffolded learning approach culminated in a project and presentation to cancer center leadership. The pilot focused on research practice managers (RPMs), whose feedback improves future offerings for their staff.

Prerequisite training included a recorded presentation from a Duke University Libraries data visualization specialist and a LinkedIn Learning course on data-driven decision-making, introducing them to relevant tools. DCI informatics provided an overview of available data resources within the DCI Information Technology landscape.

Group activities played a key role in their learning. Participants reflected on past decisions that could have benefited from a data-driven approach. Working in pairs, they revisited pre-existing problems, applying new knowledge to refine their decision-making approach and scope.

4. Outcomes

We modeled real-time, data-driven decision making, providing practical examples, including adjusting the course plan and presentation timeline, based on participant feedback and observed progress. Managers are increasingly making more data-informed decisions, indicating a positive impact.

5. Learned and Future Directions

Scheduling proved challenging for these busy leaders, highlighting the importance of planning future sessions earlier. Pre-course learner assessments to accurately gauge participants' baseline knowledge, rather than relying on prior working relationships, would be valuable.

We recognized more dedicated discussion and consultation time, and clearer project requirements were needed. We adjusted the original, ambitious timeline. The proposal template required revisions, and future courses will initially include a completed example.

While originally designed for paired work, we discovered significant value in bringing the entire group together to review and discuss all proposals. This broader perspective facilitated richer problem-solving, contributing to diverse solutions. Clearer proposal criteria will be shared in future offerings. The pilot highlighted more structured support was needed than anticipated. While supplemental readings could be valuable, participants benefited significantly from more direct guidance. This led to incorporating additional coaching sessions, including both individual and group discussions, to help them effectively apply concepts and complete projects.

To promote continuous learning, future cohorts will present to program graduates.

Analyzing the yet-to-be completed final proposals and presentations will provide further insights for program improvement.