



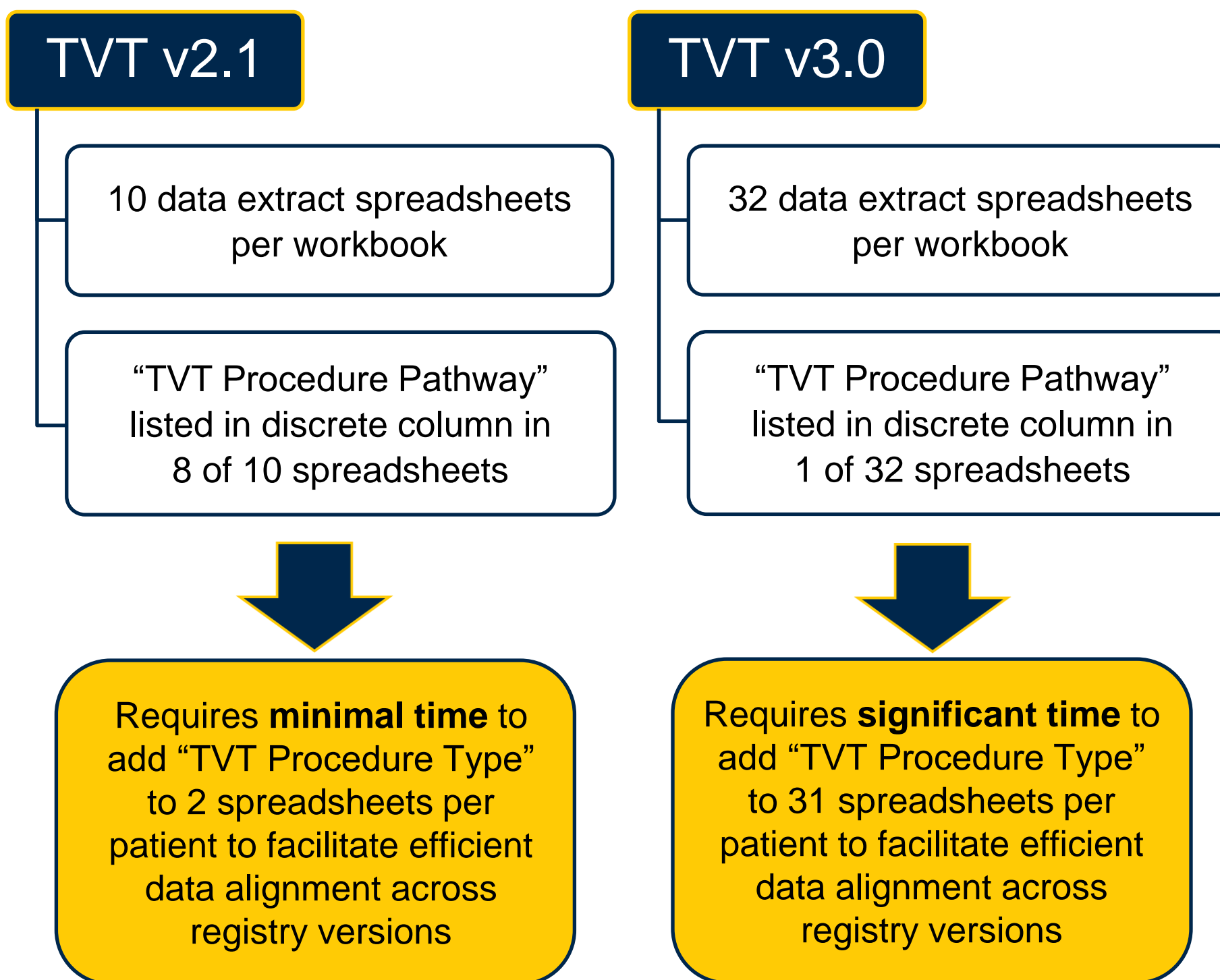
Improving Usability of the STS/ACC TVT Registry™ Data Extract Function Tool to Ensure Data Accuracy and Quality: A Collaborative Endeavor by University of Michigan Health Frankel Cardiovascular Center, Beaumont Health Spectrum Health System, Michigan Structural Heart Consortium, and STS/ACC TVT Registry

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BACKGROUND

An STS/ACC TVT Registry™ version update resulted in changes in data presentation using the data extract function tool. The layout of data extracted from the updated registry version was not compatible with prior data extracts. In order to review data over time, site registry staff had to manually sort data to align version layouts. This manual process created opportunities for large volumes of data to be misaligned. In turn, reports produced were at risk of misrepresentation, which could negatively impact quality improvement efforts and longitudinal tracking.

Several changes were made to the layout, but one change in particular impacted the ability to quickly sort data by “TVT Procedure Pathway,” commonly known as procedure type.



Independent of site procedure volume, the manual manipulation required to merge data was fraught with opportunities for human error. As a direct result, several sites in MISHC provided erroneous data to multidisciplinary care teams, hospital leadership, and other stakeholders.

METHODS

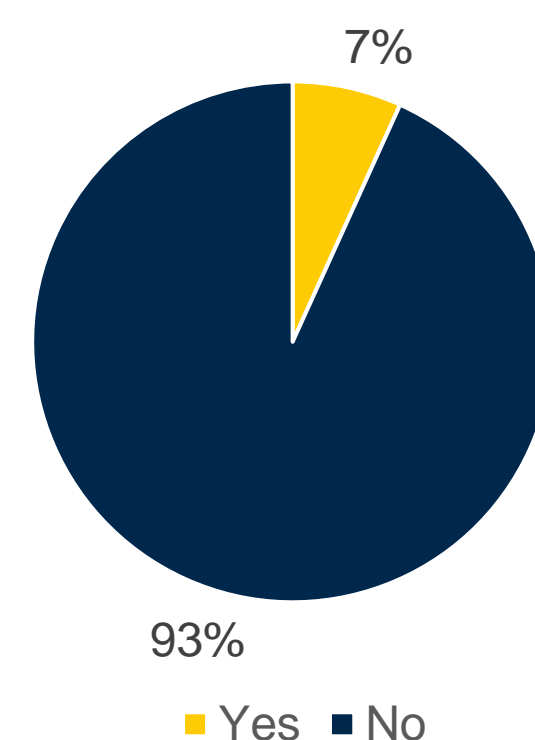
A project was launched to determine how to add the “TVT Procedure Pathway” to every spreadsheet within the workbook to allow data to be sorted accurately and efficiently. This feature is essential in providing the Registry Site Manager confidence that the data pulled and merged is reliable and accurate when used for presentations and quality improvement projects.

Registry Site Managers from University of Michigan Health Frankel Cardiovascular Center and Beaumont Health Spectrum Health System met to discuss the data misalignment to determine best practice to merge the current version data extract with prior version extracts. Unfortunately, no reliable process was available in the current structure. Subsequently, the team partnered with MISHC to coordinate a meeting with the Program Manager of the STS/ACC TVT Registry and the STS/ACC TVT Registry IT team.

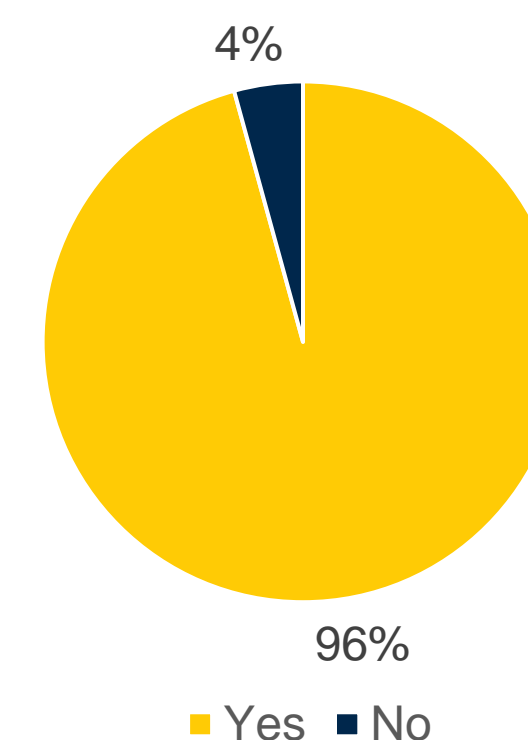
RESULTS

The team discussed barriers and opportunities to improve the ease of use and accuracy of the data extract function by including the “TVT Procedure Pathway” on all spreadsheets. As a direct result of this multi-disciplinary meeting, the STS/ACC TVT Registry added the “TVT Procedure Pathway” identifier to the data extract tool within a 4-week time frame. This change reduced the rate of error from up to 743 (93%) misaligned data elements to 34 (4%) per registered patient.

Pre-Intervention:
of Metrics Per Patient with "TVT Procedure Pathway" Included



Post-Intervention:
of Metrics Per Patient with "TVT Procedure Pathway" Included



VALUE PROPOSITION

Improving the ability to accurately track and present outcomes ensures TVT sites can confidently present data and identify opportunities for process improvement. In turn, operational and clinical quality improvement activities lead to better technique, improved outcomes, and development of best practices to better serve the patients in our communities.

CONCLUSIONS

Through thoughtful conversation, this multi-disciplinary team worked collaboratively to address the data extract formatting change in the STS/ACC TVT Registry version 3.0. By including the “TVT Procedure Pathway” identifier on every spreadsheet in the extract, we reduced the potential misalignment of 743 data elements to 34. This ultimately adds value to all transcatheter valve programs participating in the STS/ACC TVT Registry by improving efficiency and accuracy of data analysis. In turn, this allows teams more time to focus on improvement projects and best practice implementation. Moving forward, our goal is to determine feasibility of aligning all data across the consecutive version data extracts.

CONTACT INFORMATION

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DISCLOSURES

Brittany Powell, BS – None
Michelle Mullin, BSN, RN – None
Sheryl Fielding, BSN, RN - None

