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CANADIAN CARDIOVASCULAR SOCIETY TOOLKIT: TRANSCATHETER AORTIC VALVE IMPLANTATION

2019



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THE CANADIAN CARDIOVASCULAR SOCIETY (CCS) TAVI TOOLKIT OVERVIEW

The TAVI toolkit has been developed in an effort to:

- Complement the CCS TAVI Quality Indicators (QIs);
- Improve the data quality of the CCS TAVI Quality Report by providing guidance, resources, and practice-ready strategies;
- Strengthen collaboration and on-going commitment to the CCS TAVI Quality Report initiative;
- Share resources and capitalize on local initiatives to accelerate national quality improvement; and
- Support clinicians and programs to optimize care.

This module introduces the framework used to develop a suite of individual modules built to augment the CCS TAVI Quality Indicators.



INTRODUCTION

THE CCS TAVI QUALITY PROJECT

The CCS TAVI Working Group was established in 2014 to build a strategy for reporting and supporting quality of care in Canada. The group has multidisciplinary and pan-Canadian representation. It is guided by a vision to use evidence and clinical expertise to promote continuous quality improvement through a series of cycles involving analysis, strategy and implementation.

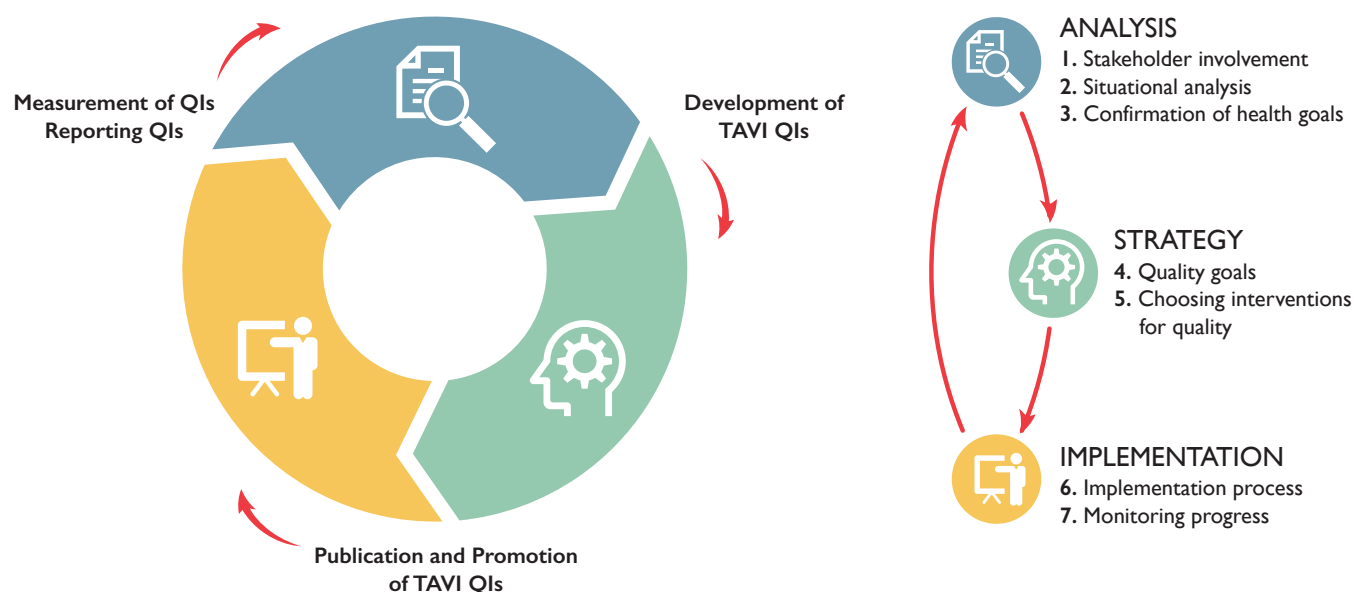


Figure 1. Quality Indicators Improvement Cycle

THE CCS TAVI QUALITY INDICATORS AND REPORT

The CCS TAVI Working Group established the first iteration of quality indicators in 2016 using the Donabedian framework of quality improvement.¹ As of 2019, the Working Group has established the following set of quality indicators:



Figure 2. Structural, process, and outcome quality indicators for TAVI in Canada¹

The indicators match key components of TAVI patients' journey of care:²

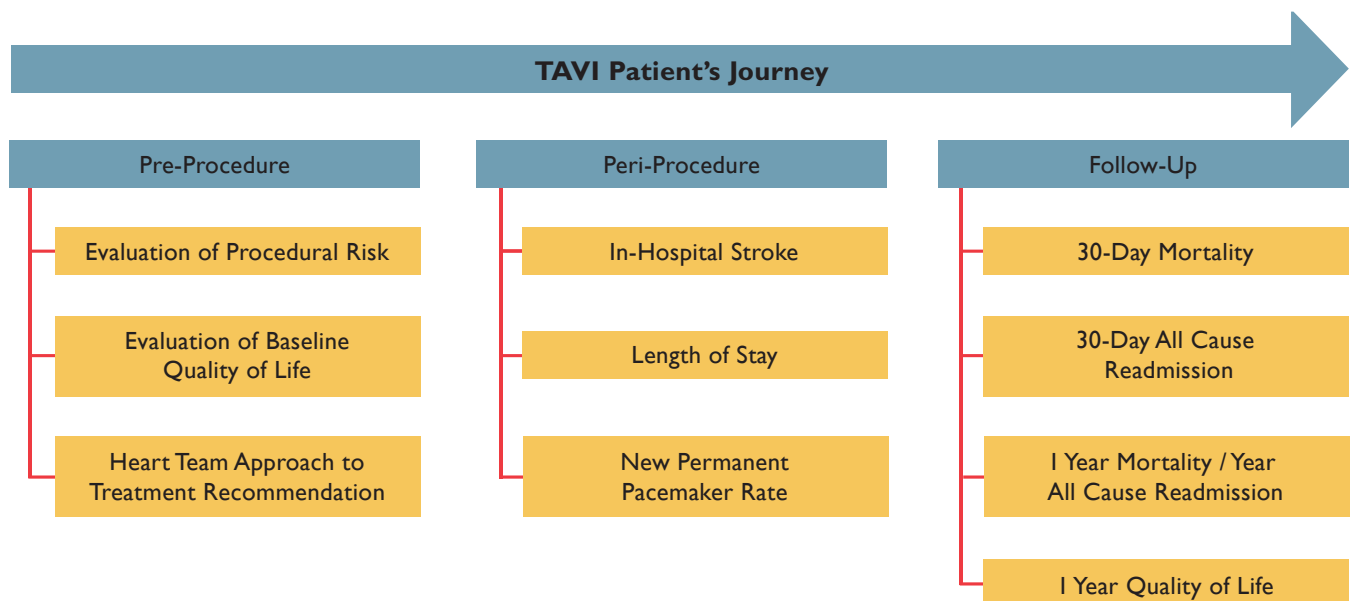


Figure 3. Quality Indicators for TAVI in Canada²

Following the development of the QIs, the CCS initiated a pilot project to pool and report on patient-level data across Canadian jurisdictions. The pilot project resulted in the 2016 CCS National Quality Report: TAVI whose objectives are to:

- Strengthen national collaboration to promote quality of care;
- Provide evidence-based findings to catalyze local, regional and national quality improvement;
- Support patients' access to appropriate, high quality care;
- Foster a national strategy to optimize patient outcomes, health service utilization, and access to treatment.

THE CCS TAVI TOOLKIT

Following the first TAVI Report, there was strong national interest in strengthening the bridge between data reporting, clinical practice, and quality improvement.³ This led to the development of the CCS TAVI Quality Toolkit.

The intent of the Toolkit is to contribute to improvements in the quality of care across Canada. The project will keep pace with the addition of new quality indicators, and provide a central repository for sharing resources and best practices to contribute to the improved outcomes of Canadian TAVI patients.



Figure 4. Geographical locations of TAVI centres in Canada¹

Each TAVI Toolkit module includes the following sections:

1. Definition of the indicator
2. Opportunities and challenges of measurement
3. Practical tips and best practices
4. Questions and answers
5. Resources

Technical terminology used throughout each module is listed in our [Common Abbreviations](#) document.

THE CCS TAVI TOOLKIT: STRENGTHS AND LIMITATIONS

The intent of the Toolkit is to provide guidance and resources; it was developed by national stakeholders who collaborated to share their expertise and build consensus. The Toolkit is strengthened by the extensive input from multiple national leaders with varying perspectives. It provides a practice-ready set of resources for program leaders, including TAVI coordinators, administrators and policy-makers in addition to physician leaders.

The goal of providing pragmatic resources that reflect contemporary practice, coupled with a rapidly evolving context of care limit the inclusion of extensive evidence. Extensive references are not provided as most of the information reflects expert opinion. Therefore, readers should use caution when considering the information provided; emerging evidence and local contexts of care should be considered.

TAVI – USEFUL LINKS

GUIDELINES

[CCS TAVI Position Statement](#)

Updated position statement in development

[American College of Cardiology \(ACC\) Clinical Expert Consensus](#)

[Clinical Practice Guideline, British Medical Journal \(BMJ\)](#)

[2014 ACC/American Heart Association \(AHA\) Practice Guidelines](#)

[2017 ACC/AHA Practice Guidelines update](#)

QUALITY STANDARDS

[2016 Canadian Cardiovascular Society National Quality Report: TAVI](#)

[Quality Standards for Québec](#)

[AHA Appropriateness Criteria](#)

PERTINENT SCIENTIFIC ARTICLES

[Systematic review of the literature \(French\)](#)

TAVI REGISTRIES

[Society for Thoracic Surgeons \(STS\)/ACC TVT Registry](#)

PATIENT EVALUATION TOOLS

[Frailty AVR study \(2016\)](#)

[Kansas City Cardiomyopathy Questionnaire \(KCCQ\)](#)

[EQ-5D](#)

[Mini-Cog](#)

[Activities of daily living \(FIM\)](#)

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SOURCES

1. Canadian Cardiovascular Society TAVI Quality Working Group. National Quality Report: Transcatheter Aortic Valve Implantation. Canada; 2016 October.
2. Asgar AW, Lauck S, Ko D, Alqoofi F, Cohen E, Forsey A, et al. Quality of care for transcatheter aortic valve implantation: development of Canadian cardiovascular society quality indicators. *Can J Cardiol.* 2016;32(8):1038-e1.
3. Asgar AW, Lauck S, Ko D, Lambert LJ, Kass M, Adams C, et al. The Transcatheter Aortic Valve Implantation (TAVI) Quality Report: A Call to Arms for Improving Quality in Canada. *Can J Cardiol.* 2018;34(3):330-2.