Documentation Best Practices to Drive Appropriate Patient Care and Coverage



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Special Appreciation

Reference Pilot Study

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OUTCOMES AND QUALITY

QUALITY IMPROVEMENT PROJECTS

The Role of Coding Accuracy in Enhancing TAVR Risk Adjustment

Findings From a Pilot Study

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Contributor Recognition

Rachel M. Bond, MD

Thank you for your outstanding contribution and leadership in developing the slides and content for this study.

Special thanks also to our other esteemed colleagues and co - authors who made this pilot study possible.

TAVR: Why Accurate Risk Adjustment Matters for Patients

CLINICAL CONTEXT

Treatment Transformation

TAVR has transformed treatment of severe aortic stenosis.

Shift to Lower-Risk

Expansion to lower -risk patients has increased emphasis on quality metrics.

DOCUMENTATION IMPACT

Essential Drivers

- Appropriate Risk Adjustment
- TVT Registry Benchmarking
- Fair Comparison of Outcomes
- Appropriate Reimbursement

The Clinical & Financial Problems Affect Patient Records

REGISTRY REVIEW FINDING

Incomplete Documentation

Despite known active disease, a comprehensive registry review demonstrated that heart failure documentation was frequently incomplete in clinical records.

CONSEQUENCES

Downstream Risks

01 Incorrect MS - DRG assignment

02 Underestimation of illness severity

03 Reduced clinical reimbursement

04 Less accurate peri - procedural risk assessment

Project Objective

THE PREMISE

Standardized Workflow

Determine whether a simple standardized documentation workflow could improve clinical and operational metrics across key hospital registries and systems.

EXPECTED OUTCOMES

Areas for Improvement

01 Heart failure capture

02 MS-DRG 266 assignment

03 TVT Registry accuracy

04 Risk adjustment

05 Financial performance

Project Intervention

STRATEGY & IMPLEMENTATION

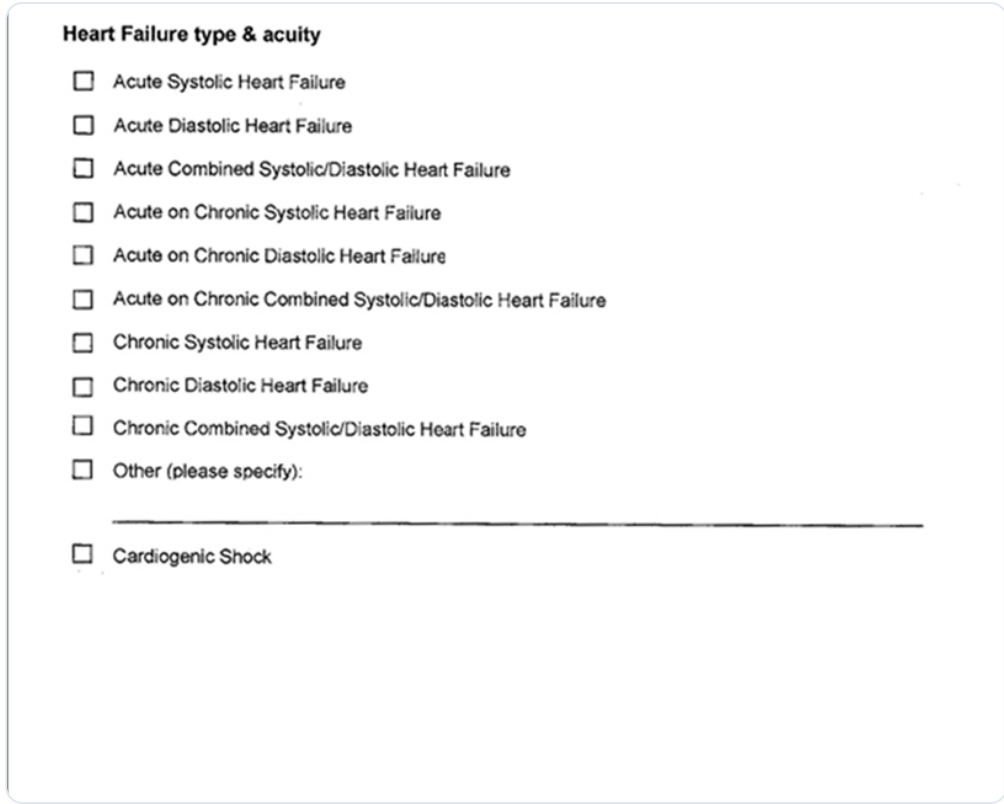
Standardized Process

01 Created standardized HF supplemental documentation form.

02 Structural Heart coordinators completed workflow during every TAVR.

03 Weekly/monthly coding reconciliation with hbRecon.

04 Expanded to all TVT procedures after early success.



Heart Failure type & acuity

- ☐ Acute Systolic Heart Failure
- ☐ Acute Diastolic Heart Failure
- ☐ Acute Combined Systolic/Diastolic Heart Failure
- ☐ Acute on Chronic Systolic Heart Failure
- ☐ Acute on Chronic Diastolic Heart Failure
- ☐ Acute on Chronic Combined Systolic/Diastolic Heart Failure
- ☐ Chronic Systolic Heart Failure
- ☐ Chronic Diastolic Heart Failure
- ☐ Chronic Combined Systolic/Diastolic Heart Failure
- ☐ Other (please specify):

_____

- ☐ Cardiogenic Shock

Project Results

KEY OUTCOMES

Metrics & Impact

01 HF capture: 69.2% → 98.6%

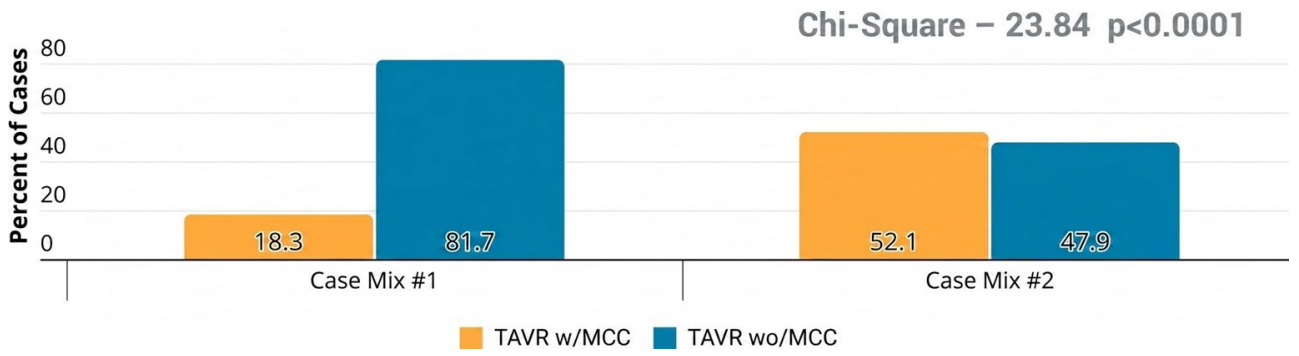
02 MS-DRG 266: 18.3% → 52.1%

03 O:E mortality ratio improved

04 Chi-square p<0.0001 (Improvement)

DATA VISUALIZATION

Case Mix Assignment Comparison



Improved Risk Adjustment Equals Improved Patient Records

KEY INSIGHTS

Documentation Impact

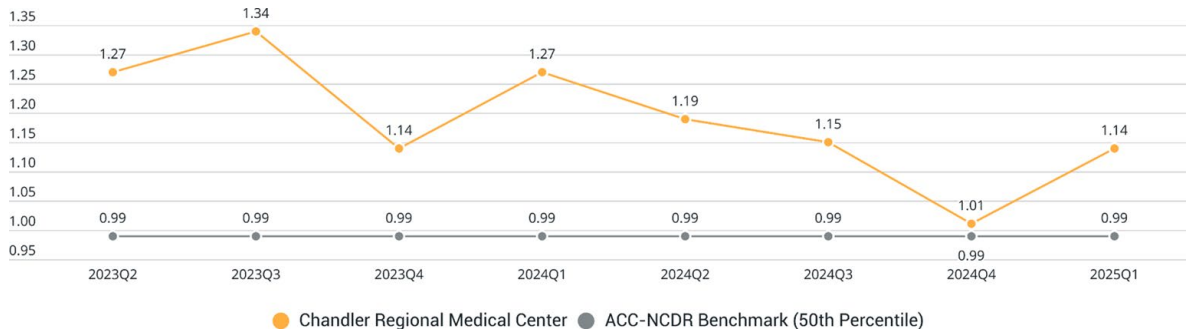
01 Better documentation changed expected mortality.

02 O:E ratio improved significantly over time.

03 Reflects more accurate risk adjustment rather than changes in clinical care alone.

DATA VISUALIZATION

O:E Ratio Trend & Benchmark



Financial Impact Supporting Patient Access

FINANCIAL METRICS

Revenue & Margin Impact

~$414,000

Estimated 6-Month Revenue Improvement

+$11,147

Net Revenue / Case

+$4,670

Contribution Margin / Case

Overall Medicare financial performance improved.

DATA REFERENCE

TAVR Financial Comparison

Comparison of DRG 266 and 267 Medicare Cases

FY24 Q2 YTD vs FY25 Q2 YTD

DRG/Payor	FY	Cases		% of FY Cases		Net Rev/Case		Var Cost/Case		CM/Case		EBIDA/Case		Profit or Loss/Case	
		FY24	FY25	FY24	FY25	FY24	FY25	FY24	FY25	FY24	FY25	FY24	FY25	FY24	FY25
266		7	22	10%	32%	$47,841	$47,565	$39,822	$44,322	$8,019	$3,242	$367	($4,558)	($1,336)	($5,887)
Medicare		7	22	10%	32%	$47,841	$47,565	$39,822	$44,322	$8,019	$3,242	$367	($4,558)	($1,336)	($5,887)
267		60	47	90%	68%	$36,358	$36,418	$38,058	$37,846	($1,700)	($1,428)	($7,077)	($7,121)	($8,303)	($8,108)
Medicare		60	47	90%	68%	$36,358	$36,418	$38,058	$37,846	($1,700)	($1,428)	($7,077)	($7,121)	($8,303)	($8,108)
Grand Total		67	69	100%	100%	$37,558	$39,972	$38,242	$39,911	($685)	$61	($6,299)	($6,304)	($7,575)	($7,400)

FY24 Jul-Dec v. FY25 Jul-Dec Comparison. The tables show the comparison rate of the DRG 266 and 267 and the financial comparison between FY24 not using the supplemental form and FY25 using the form for 4 out of the 6 months.

B **Based on Medicare Payor Only:**

FY24 Q2 YTD vs FY25 Q2 YTD

Disch Qtr/DRG	Cases	% of Cases	Charges/Case	Net Rev/Case	Var Cost/Case	CM/Case	FC/Case	EBIDA/Case	Net Inc/Case
FY24	**70**	**48%**	**$349,873**	**$37,548**	**$38,218**	**($670)**	**$6,870**	**($6,267)**	**($7,540)**
266	7	10%	$366,184	$47,841	$39,822	$8,019	$9,355	$367	($1,336)
267	63	90%	$348,060	$36,404	$38,039	($1,635)	$6,594	($7,005)	($8,230)
FY25	**76**	**52%**	**$380,313**	**$41,191**	**$39,978**	**$1,213**	**$7,432**	**($5,129)**	**($6,220)**
266	24	32%	$416,114	$47,324	$44,097	$3,227	$8,992	($4,455)	($5,765)
267	52	68%	$363,790	$38,361	$38,077	$283	$6,712	($5,439)	($6,429)

FY24 to FY25 IMPROVEMENTS:

1. NET REVENUE - This is what we expect to be paid. It will vary by Payor.

In FY25, the average Net Revenue/Case for DRG 266 is $47,324 (Cell E13).

In FY25, the average Net Revenue/Case for DRG 267 in FY25 is $38,361 (Cell E14).

This means that we will collect approximately $9,000 more when a case is appropriately coded as DRG 266 vs DRG 267.

2. CONTRIBUTION MARGIN (CM)

The CM = Net Revenue less Variable Costs

In FY25, the average CM/Case for DRG 266 is $3,227 (Cell L13). Net Revenue $47,324 - Var Costs $44,097 = CM $3,227.

In FY25, the average CM/Case for DRG 267 is $283 (Cell L20). Net Revenue $38,361 - Var Costs $38,077 = CM $283.

The additional Net Revenue received on a DRG 266 cases is reduced due to additional Variable Costs.

FY24 Jul-Dec v. FY25 Jul-Dec Comparison. The tables show the comparison rate of the DRG 266 and 267 and the financial comparison between FY24 not using the supplemental form and FY25 using the form for 4 out of the 6 months.

C **TAVR FINANCIAL COMPARISON by DRG**

DRGs 266-267 Only (excludes 3 cases with other DRGs)

FY24 vs FY25 COMPARISON by QTR

Disch Qtr/DRG	FY	Cases		% of FY Cases		Net Rev/Case		Var Cost/Case		CM/Case		EBIDA/Case	
		FY24	FY25	FY24	FY25	FY24	FY25	FY24	FY25	FY24	FY25	FY24	FY25
Q1		**31**	**44**	**100%**	**100%**	**$39,773**	**$40,761**	**$37,933**	**$38,965**	**$1,840**	**$1,797**	**($4,026)**	**($4,095)**
266		4	10	13%	23%	$48,344	$45,996	$36,510	$39,640	$11,834	$6,356	$4,336	$321
267		27	34	87%	77%	$38,504	$39,222	$38,144	$38,766	$359	$456	($5,265)	($5,904)
Q2		**39**	**32**	**100%**	**100%**	**$35,778**	**$41,782**	**$38,443**	**$41,372**	**($2,665)**	**$410**	**($8,089)**	**($6,549)**
266		3	14	8%	44%	$47,170	$48,272	$44,238	$47,281	$2,932	$991	($4,926)	($7,866)
267		36	18	92%	56%	$34,829	$36,734	$37,960	$36,777	($3,132)	($43)	($8,309)	($5,525)

Discussion: Better Documentation, Better Patient Representation

01

Documentation

Simple documentation changes produced measurable improvements.

02

Collaboration

Multidisciplinary collaboration was essential.

03

True Complexity

Improved coding better reflected true patient complexity—not upcoding.

Limitations & Future Directions: What's next for Patient Care

STUDY LIMITATIONS

Current Constraints

01

Single-Center Pilot Study

The initial evaluation is restricted to a single-center cohort, requiring cautious generalization.

02

Causality Not Demonstrated

The pilot nature of this study design is not statistically powered to establish direct causal relationships.

FUTURE HORIZONS

Planned Expansion

03

Cardiovascular Surgery

Active planning is underway to transition and scale these coding methodologies into surgical specialties.

04

Multicenter Validation

Broad scale implementation across diverse regional centers to confirm validation and consistency.

Take-Home Messages

01

Risk Adjustment

Documentation quality directly affects risk adjustment.

02

Reimbursement

Accurate coding improves registry data and reimbursement.

03

Workflow Quality

Small workflow changes can substantially improve quality.

Thank You