MAKING IMPROVEMENTS THROUGHOUT THE CONTINUUM OF CARE TO PREVENT AVOIDABLE READMISSIONS: A SYSTEM APPROACH

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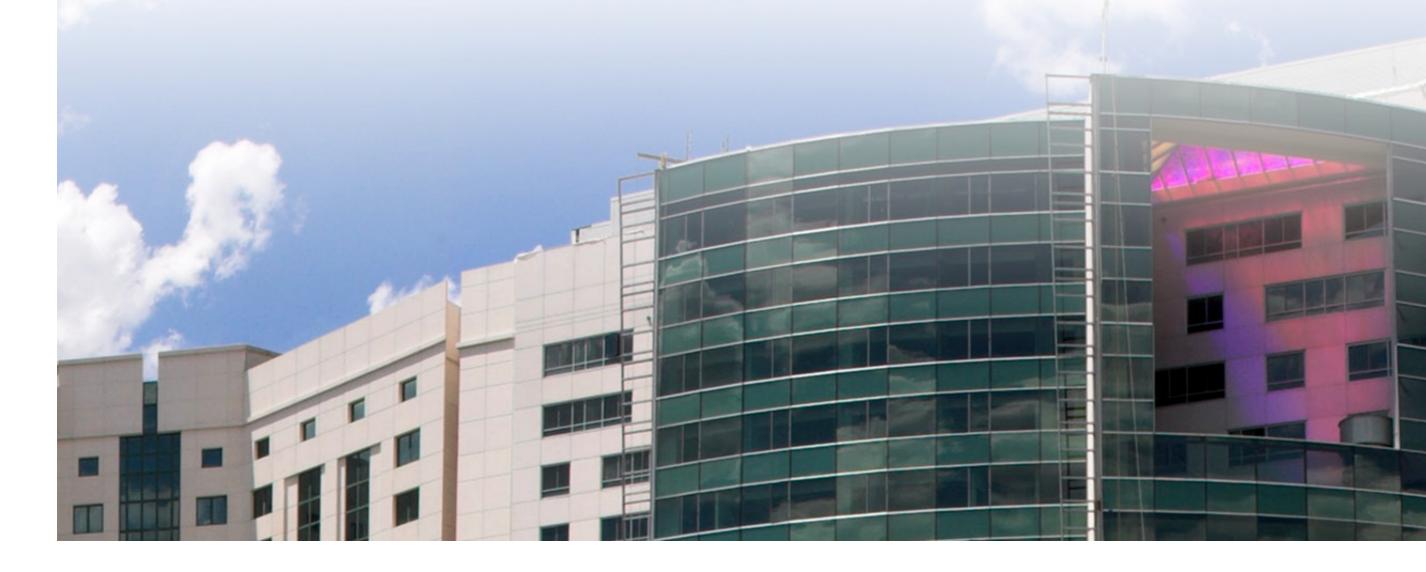
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BACKGROUND

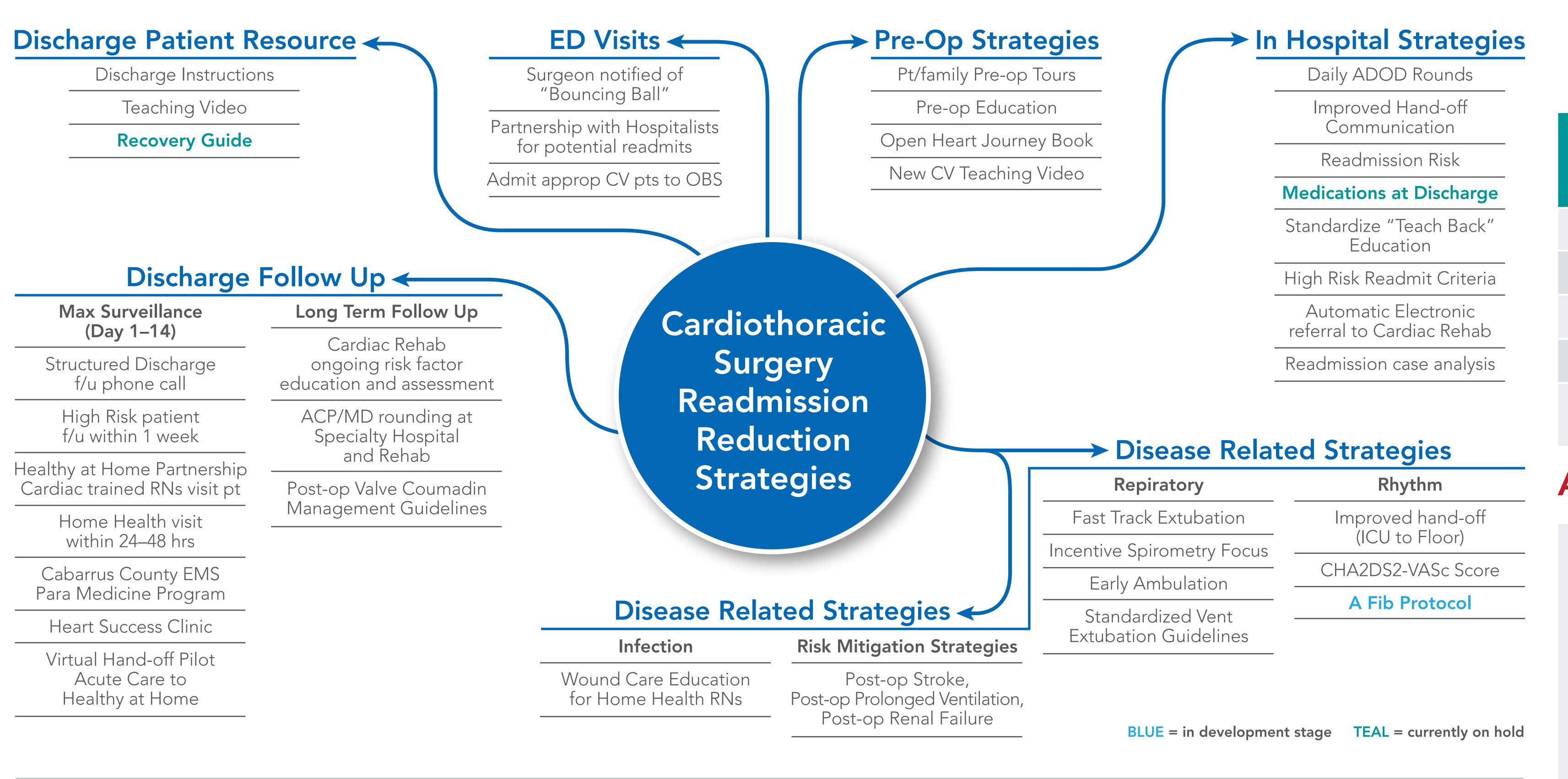
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Coronary artery bypass graft (CABG) surgery is a common and costly surgical procedure. Multiple comorbidities and post-surgical complications place CABG patients at elevated risk for unplanned readmissions (readmissions) within 30-days of hospital discharge, potentially leading to increased morbidity, mortality and cost.

Thomas Draper

METHODS

A multidisciplinary CT Surgery Continuum of Care Committee (COC) was created to develop strategies to avoid readmissions while enhancing patient care. The pre-surgical, acute and recovery phases of care were addressed to optimize the care continuum. Pre-surgical interventions included facility-specific teaching videos, standardized education, and pre-operative facility tours. Patients at-risk for prolonged ventilation, renal failure, and stroke triggered COC-developed protocols for pre-, intra- and post-op care. Risk mitigation strategies were included in hand-off communication during care transitions and infection risk was addressed through fast-track extubation, early ambulation, and incentive spirometry. Daily multidisciplinary rounds were hardwired to quickly identify complications, readmission risk, and discharge barriers. Improvements during recovery included early interventions with Home Health, structured discharge phone calls, standardized cardiac rehab referral and intake, provider rounding on inpatient rehab patients, cardiac-trained home health nurses, and improved patient resources at home.



Yearly Cost Associated with Isolated CABG 30-Day Readmission Rates

	CY 2014 Readmissions	CY 2015 Readmissions	CY 2016 Readmissions	CY 2017 Readmissions	CY 2018 Readmissions (Jan-Mar)
CMC	22	14	13	22	0
CHS-NorthEast	29	12	13	9	0
CHS-Pineville	13	9	8	7	0
Total Number	64	35	34	38	0
Total Cost (avg ~31K/readmission)	\$1,984,000	\$1,085,000	\$1,054,000	\$1,178,000	\$0

Average yearly savings from 2014 Baseline = \$878,000

\$878,000 per year

RESULTS

Combined readmissions for all facilities in 2014 was 13.3%, exceeding the Society of Thoracic Surgery (STS) Avg of < 9.2%. Through Q1 2018, readmissions remained below current STS Avg (9.9%) at all facilities [combined readmissions 5.9%; (range: 4.4%–7.7%)]. Additionally, the decreased readmissions resulted in an average yearly cost savings of \$878,000.

CONCLUSIONS

Establishing a collaborative committee consisting of engaged administrators and providers throughout the continuum of care enabled the development of data-driven strategies which reduced readmissions after CABG, resulting in significant cost savings.

CLINICAL IMPLICATION

Creation of a COC committee can have significant impact on CABG readmission rates.