BECKER'S HOSPITAL REVIEW

Establishing a Successful Value-based Care Model through Standardization and Risk Stratification

Atlantic Health System

CHANGE HEALTHCARE

Meet Our Presenter

Steven A. Maser, MD
Medical Director Orthopedic Service Line
Atlantic Health System

ATLANTIC HEALTH SYSTEM

Atlantic Health System

Headquartered in Morristown, New Jersey
Not-for-profit 5 hospital system with 1,669 beds
Children's, Rehab, Home Care and Hospice
600+ community-based health care providers
1.9 Million primary population served
Part of Atlantic Accountable Care Organization

BEST HOSPITALS U.S.News RANKINGS

ALLSPIRE HEALTH PARTNERS MEMBER

HIGH PERFORMING HOSPITALS U.S.News & WORLD REPORT 2016-17 HIP REPLACEMENT

HIGH PERFORMING HOSPITALS U.S.News & WORLD REPORT 2016-17 KNEE REPLACEMENT

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Industry Challenge

Hip/knee replacements most common Medicare inpatient surgery –
Quality and costs vary greatly among providers

Average Medicare expense for hip/knee surgery, hospitalization and recovery ranges from $16,500 to $33,000

Risk shifts to providers

Manage costs when not preventative

Control costs for high-cost procedures

Maintaining good physician relationships

https://innovation.cms.gov/initiatives/cjr

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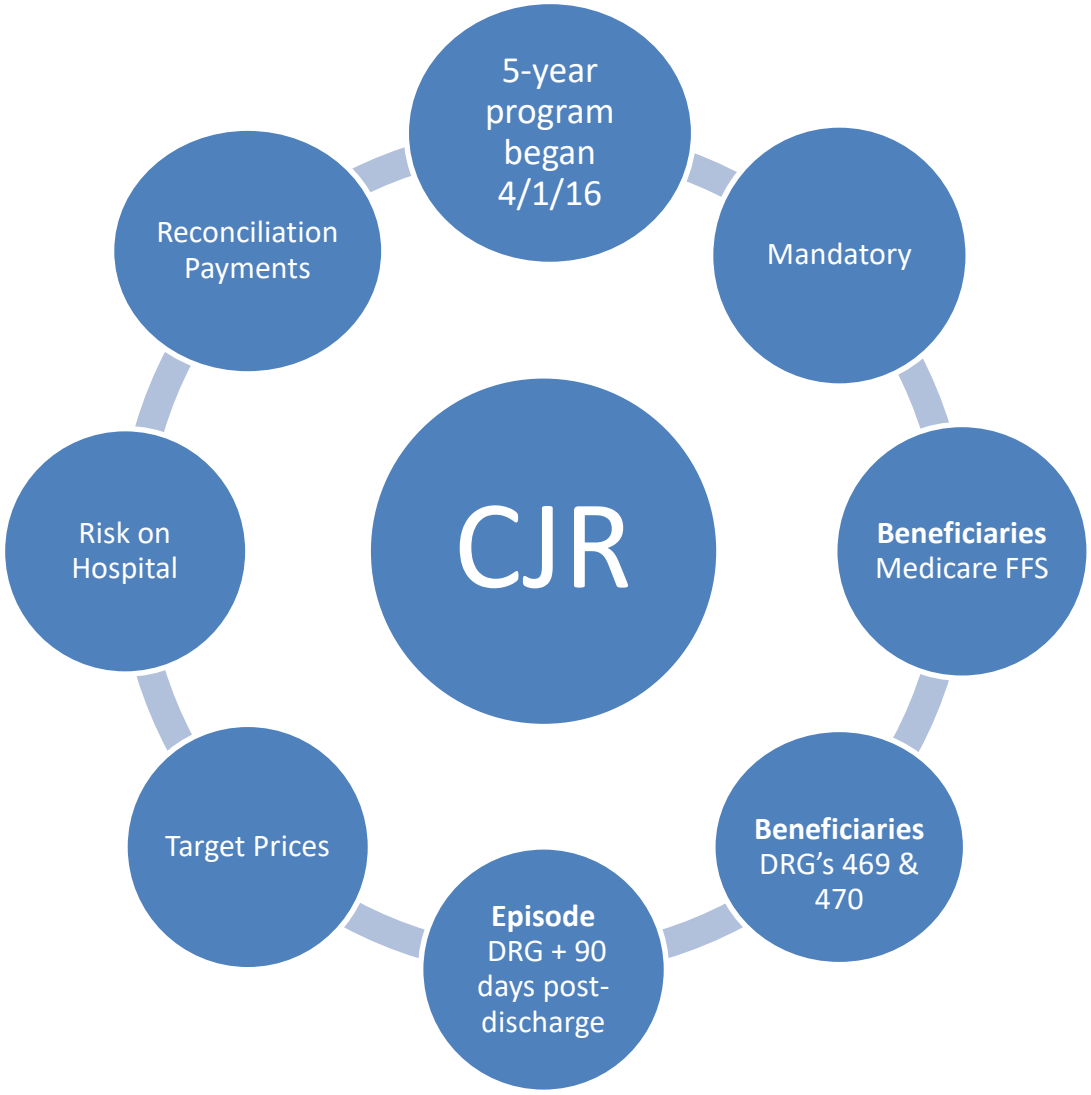
Comprehensive Care for Joint Replacement (CJR) Program



788
Expected number of participant hospitals

$343M
Estimate of episodic savings over five years

Source: CMS, The Advisory Board Company

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The Episode

Pre

Acute Care/Inpatient Physician Fees

Post- Acute Care
IRF- SNF- Home Care

Post
(Including Readmissions)

Episode Triggered by acute care discharge

90 Days

Episode Ends

Source: The Advisory Board Company

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The CJR Program - Target Price

Medicare Payment Below Target Price

Separate targets are calculated for the following bundles

- MS-DRG 469 without fracture
- MS-DRG 469 with fracture
- MS-DRG 470 without fracture
- MS-DRG 470 with fracture

CJR Reconciliation Payment					
	2016	2017	2018	2019	2020
Stop-Gain Limit	5% of target	5% of target	10% of target	20% of target	20% of target
Stop-Loss Limit	0%	5% of target	10% of target	20% of target	20% of target

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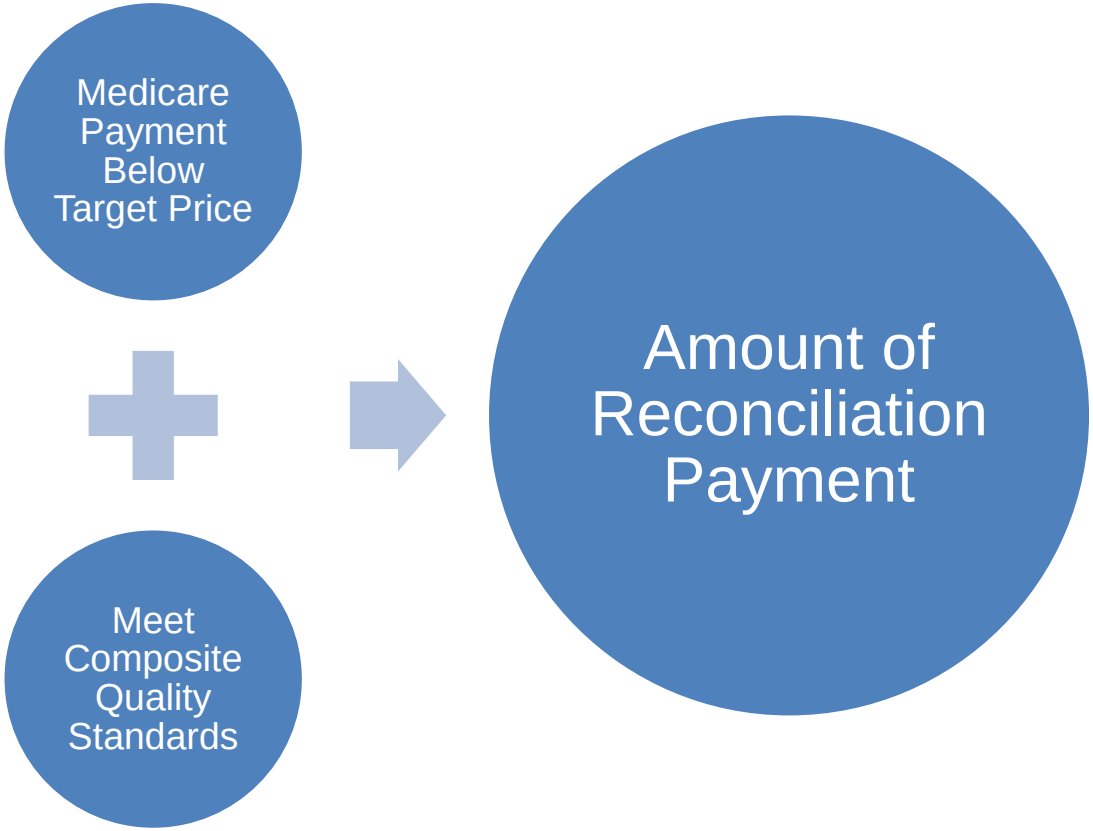
The CJR Program - Quality

Meet Composite Quality Standards

- Quality results ⇒ $$
- Composite Quality Score determines discount
- Minimum “Acceptable” score to receive any reconciliation payment
- Higher score = less $ for you to pay back to CMS or more to receive

CJR Composite Quality Scoring			
Quality Category	Maximum Points	Score Allocation	Notes
Complications (RSCR) for THA/TKA (NQF # 1550)	10	50%	Based on hospital’s decile performance nationally
HCAHPS (NQF #0166)	8	40%	Based on hospital’s decile performance nationally
PRO Submission	2	10%	Voluntary year 1-3, may be mandatory year 4-5

The CJR Program- Recap of Payment



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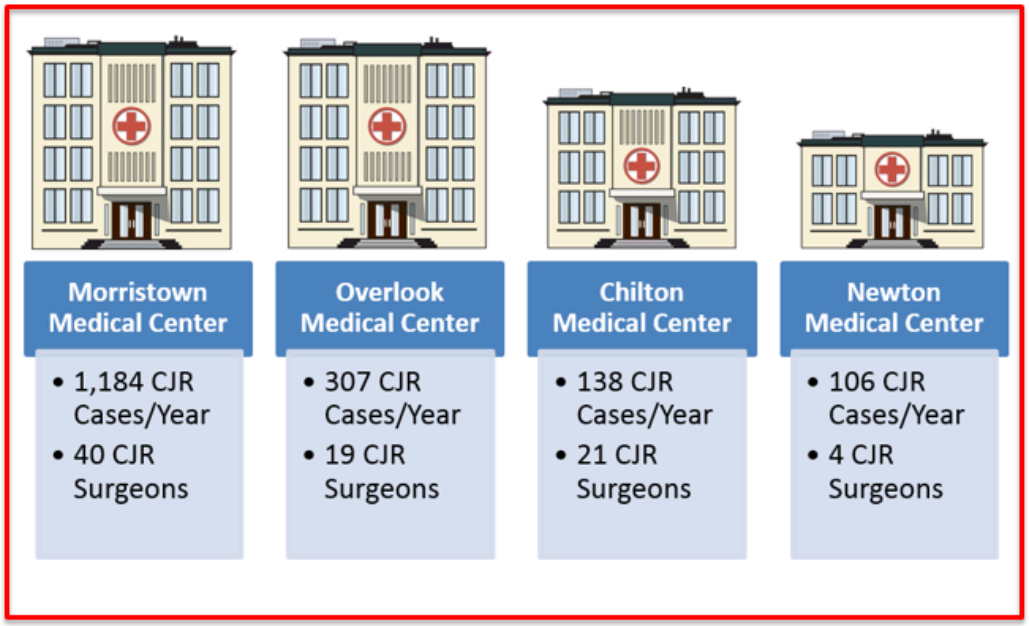
Atlantic Health System (AHS) Hospitals included in CJR



Morristown Medical Center	Overlook Medical Center	Chilton Medical Center	Newton Medical Center	Hackettstown Medical Center	Goryeb Children's Hospital
• 1,184 CJR Cases/Year • 40 CJR Surgeons	• 307 CJR Cases/Year • 19 CJR Surgeons	• 138 CJR Cases/Year • 21 CJR Surgeons	• 106 CJR Cases/Year • 4 CJR Surgeons	•Not in MSA	•Children's Hospital

Source: Atlantic Health System

Accolades for Total Joint Replacements

- Total Hip Replacement
- Total Knee Replacement
- Spine Surgery

Morristown Medical Center

- 702 beds
- 37,527 annual admissions
- 14,133 annual inpatient surgeries
- 16,616 outpatient surgeries
- 90,809 emergency room visits

KNEE REPLACEMENT
Morristown Medical Center

HIP REPLACEMENT
Morristown Medical Center

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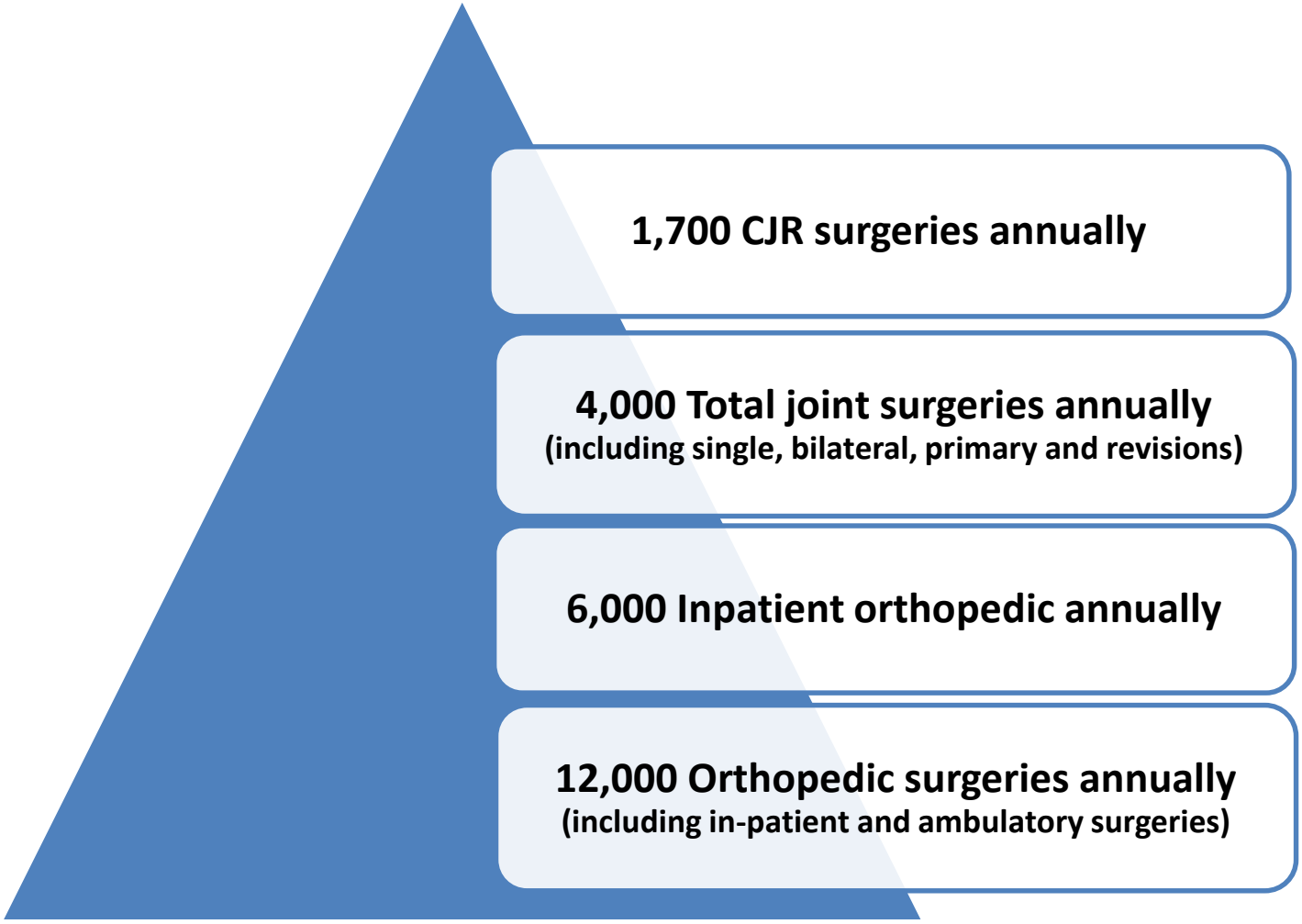
AHS Orthopedic Volume at a Glance



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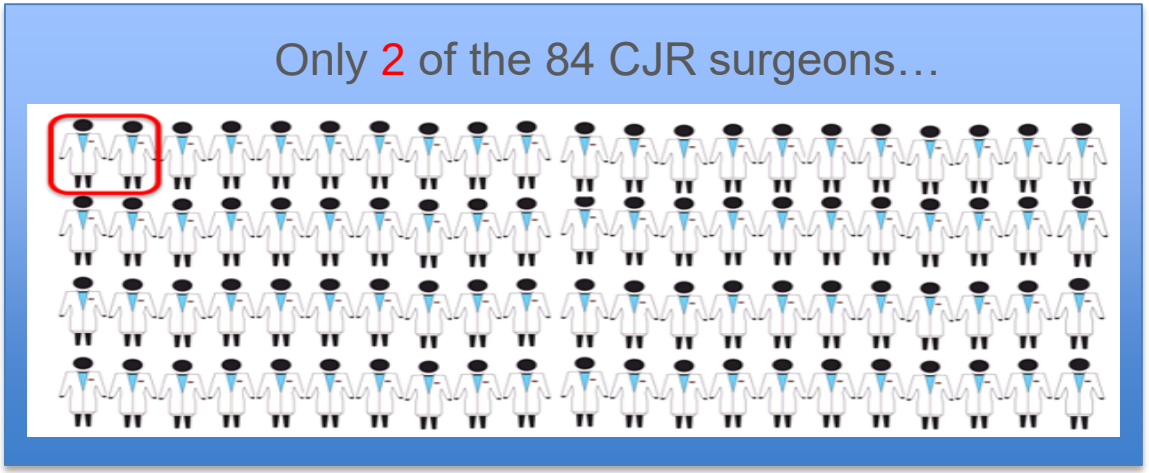
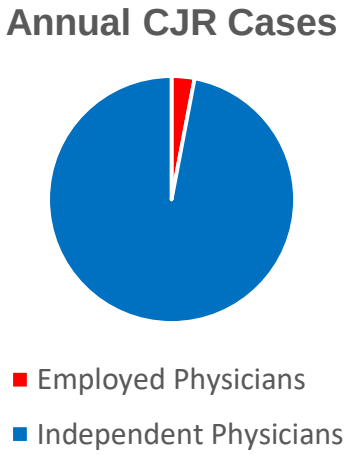
Challenges with Physician Make-Up



…completing fewer than 3% of the CJR cases are employed physicians, remainder are independent physicians



Source: The Advisory Board Company

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Model Year 1 Constructs

Steering Committee and Work Groups Established

Baseline – processes and metrics

Developed goals and initiatives – focus on patient discharge

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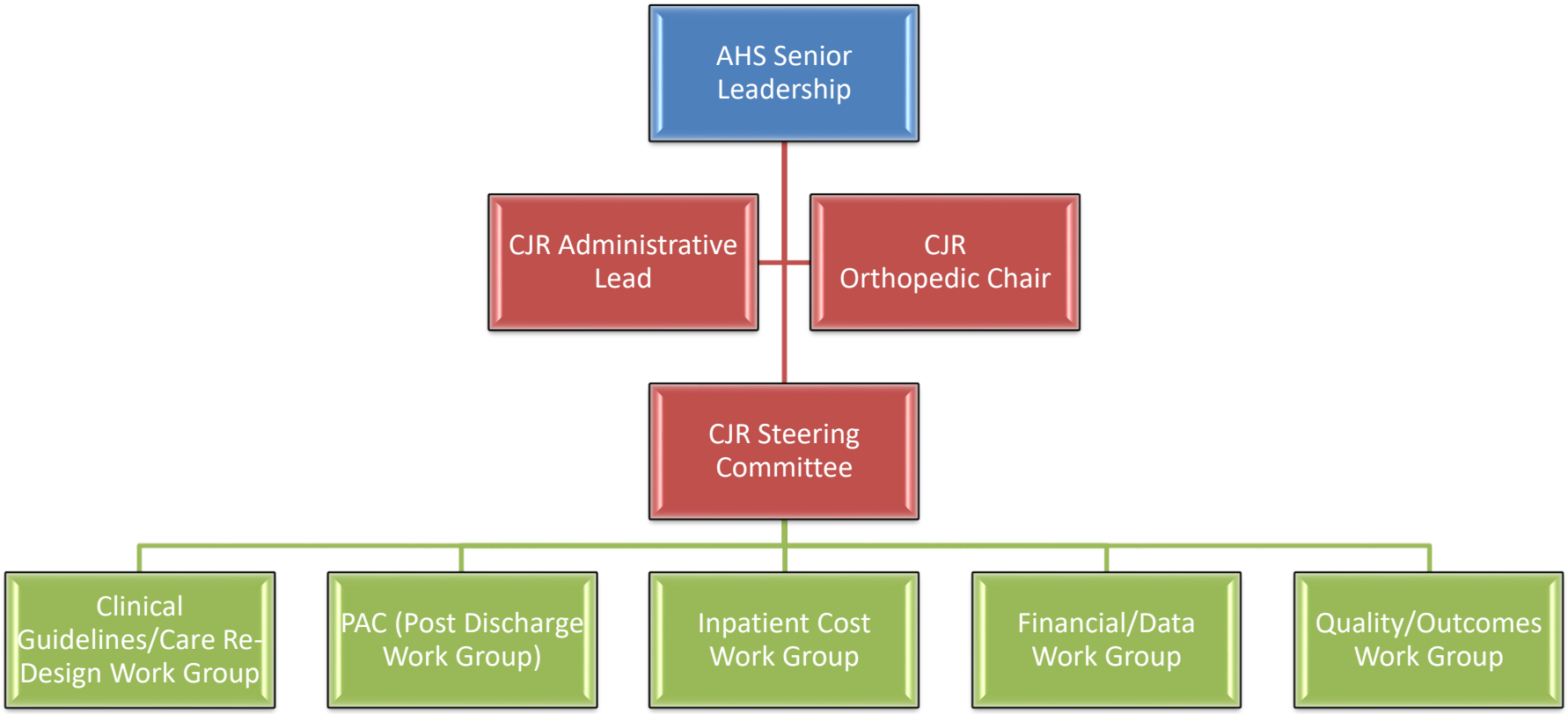
Model Year 1 Steering Committee



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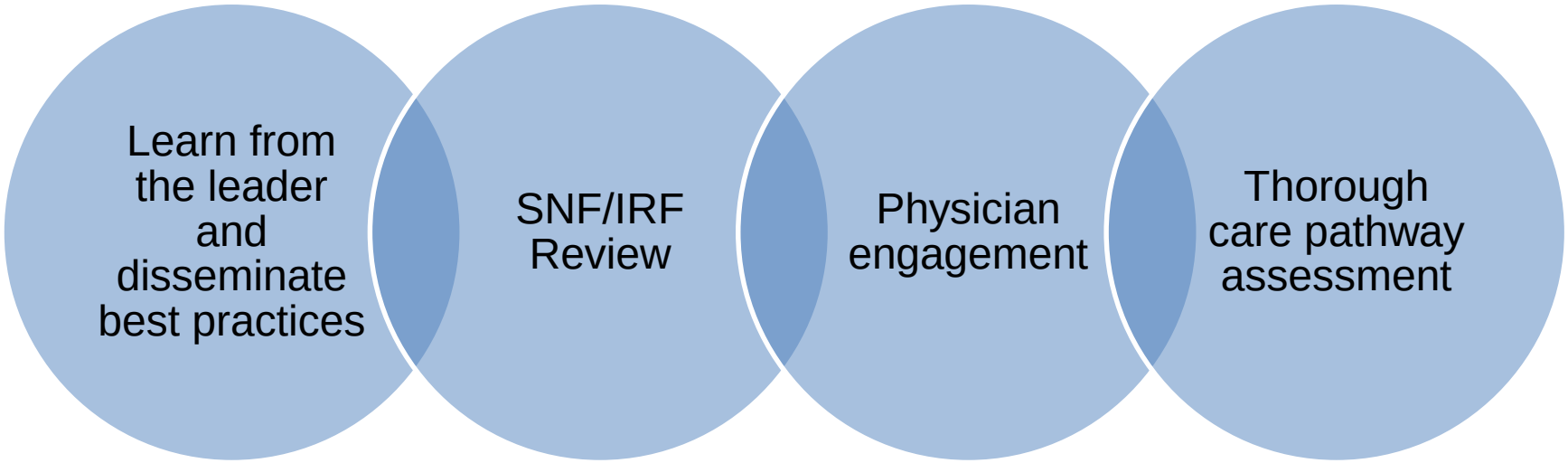
Baseline Data Provided Key Recommendations



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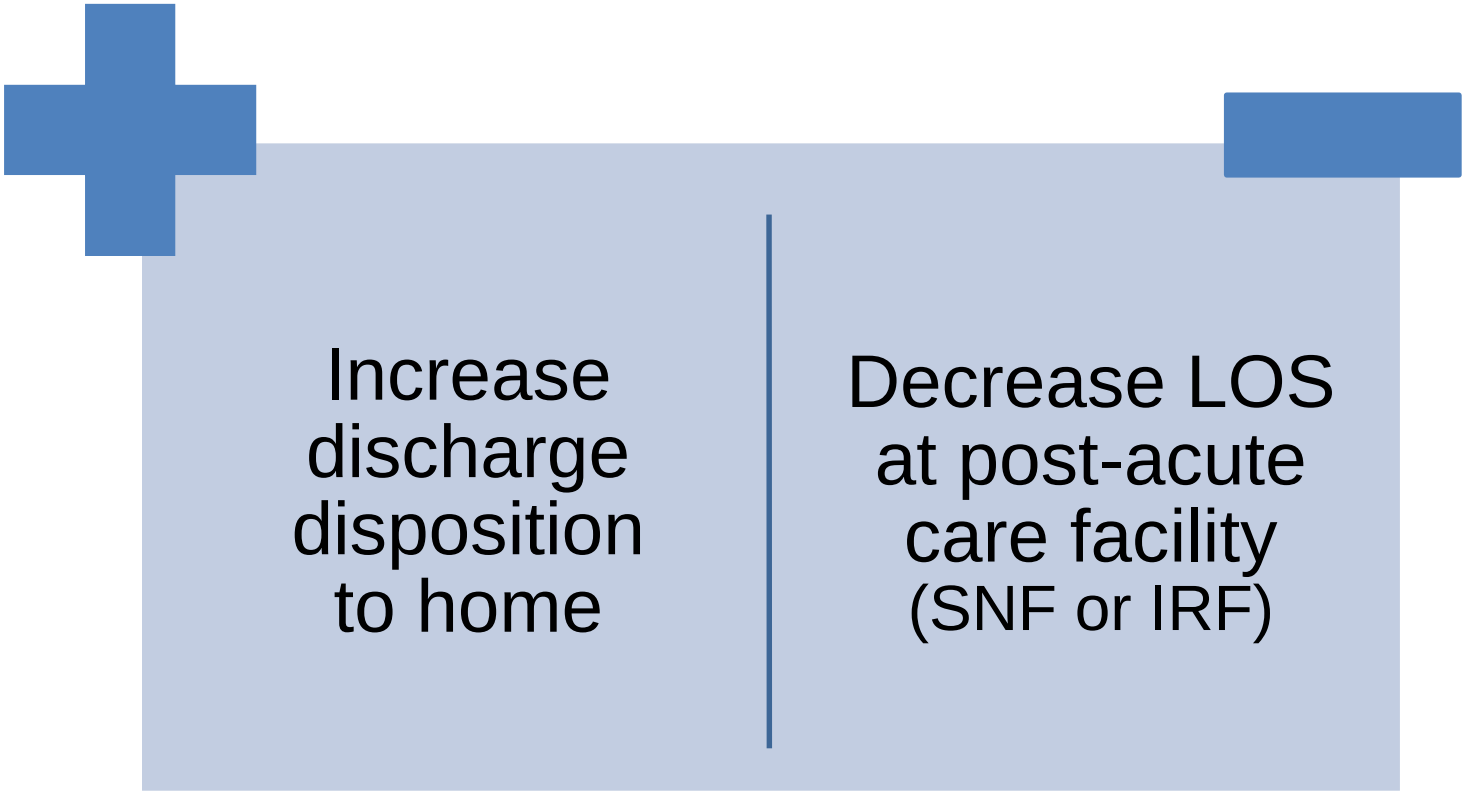
Model Year 1 Goals



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Model Year 1 Initiatives

Patient Focused and Quality Driven Standardization

- Standardization of Order Sets System-wide
- Standardization of Care Guidelines
- Standardization of Patient Education
- Development of CJR Preferred Provider List
- Implementation of Patient Risk Stratification

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Importance of Actionable Analytics

Focused on reducing variation and optimizing post-acute utilization

Comprehensive performance scorecards

Hospitals

Home care agencies

Skilled nursing partners

Surgeons

Custom development

- CJR analytics
- Quantified performance opportunity by DRG and fracture status

Balanced set of measures

- Patient satisfaction
- Complication rates
- Readmission reporting
- Cost
- Utilization
- Joint education

Atlantic Health and Change Healthcare partnership

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Surgeon Scorecard

Sample data

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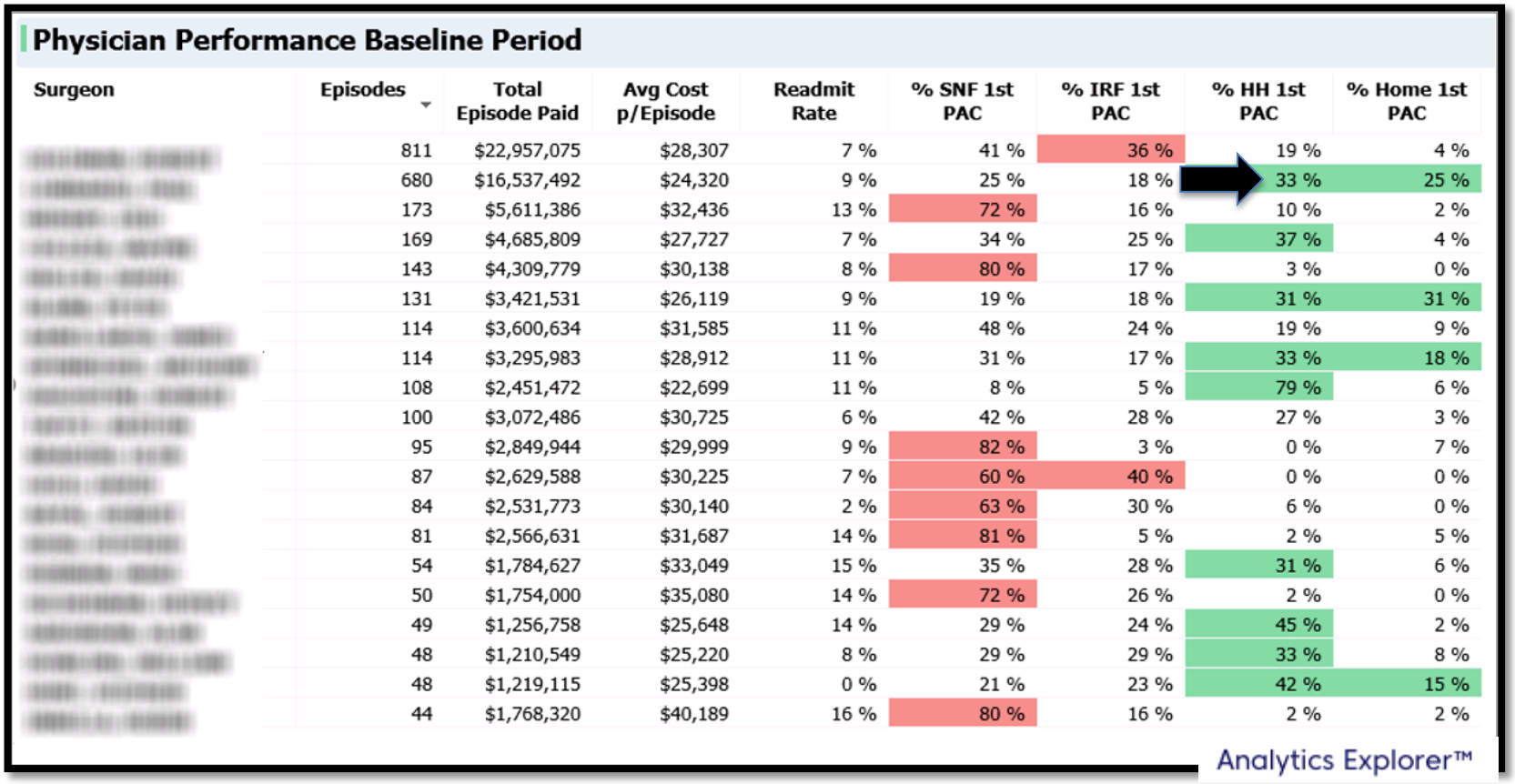
Baseline Data Review
Physician Performance Report

explorer



Physician Performance Baseline Period

Surgeon	Episodes	Total Episode Paid	Avg Cost p/Episode	Readmit Rate	% SNF 1st PAC	% IRF 1st PAC	% HH 1st PAC	% Home 1st PAC
[redacted]	811	$22,957,075	$28,307	7 %	41 %	36 %	19 %	4 %
[redacted]	680	$16,537,492	$24,320	9 %	25 %	18 %	33 %	25 %
[redacted]	173	$5,611,386	$32,436	13 %	72 %	16 %	10 %	2 %
[redacted]	169	$4,685,809	$27,727	7 %	34 %	25 %	37 %	4 %
[redacted]	143	$4,309,779	$30,138	8 %	80 %	17 %	3 %	0 %
[redacted]	131	$3,421,531	$26,119	9 %	19 %	18 %	31 %	31 %
[redacted]	114	$3,600,634	$31,585	11 %	48 %	24 %	19 %	9 %
[redacted]	114	$3,295,983	$28,912	11 %	31 %	17 %	33 %	18 %
[redacted]	108	$2,451,472	$22,699	11 %	8 %	5 %	79 %	6 %
[redacted]	100	$3,072,486	$30,725	6 %	42 %	28 %	27 %	3 %
[redacted]	95	$2,849,944	$29,999	9 %	82 %	3 %	0 %	7 %
[redacted]	87	$2,629,588	$30,225	7 %	60 %	40 %	0 %	0 %
[redacted]	84	$2,531,773	$30,140	2 %	63 %	30 %	6 %	0 %
[redacted]	81	$2,566,631	$31,687	14 %	81 %	5 %	2 %	5 %
[redacted]	54	$1,784,627	$33,049	15 %	35 %	28 %	31 %	6 %
[redacted]	50	$1,754,000	$35,080	14 %	72 %	26 %	2 %	0 %
[redacted]	49	$1,256,758	$25,648	14 %	29 %	24 %	45 %	2 %
[redacted]	48	$1,210,549	$25,220	8 %	29 %	29 %	33 %	8 %
[redacted]	48	$1,219,115	$25,398	0 %	21 %	23 %	42 %	15 %
[redacted]	44	$1,768,320	$40,189	16 %	80 %	16 %	2 %	2 %

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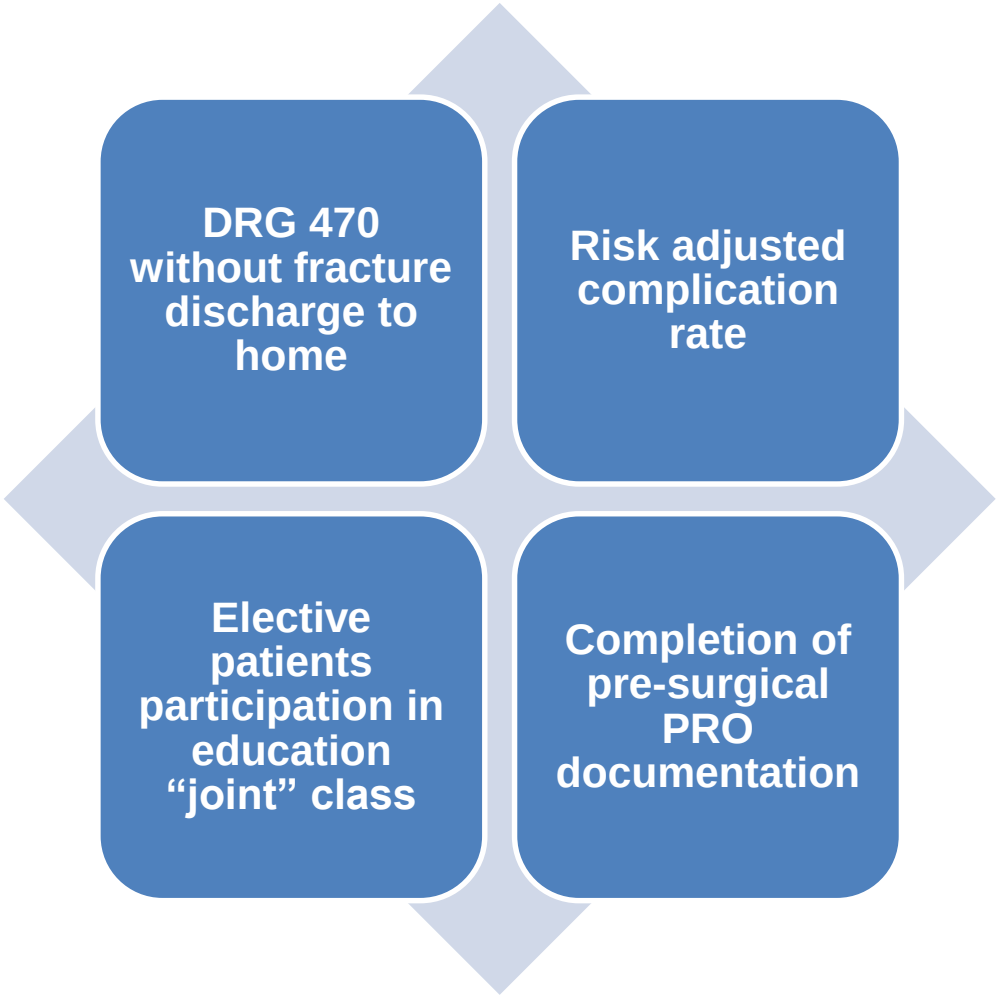
Source: CMS Data Release & Change Healthcare

Year 1 Orthopedic Surgeon Gainsharing Metrics



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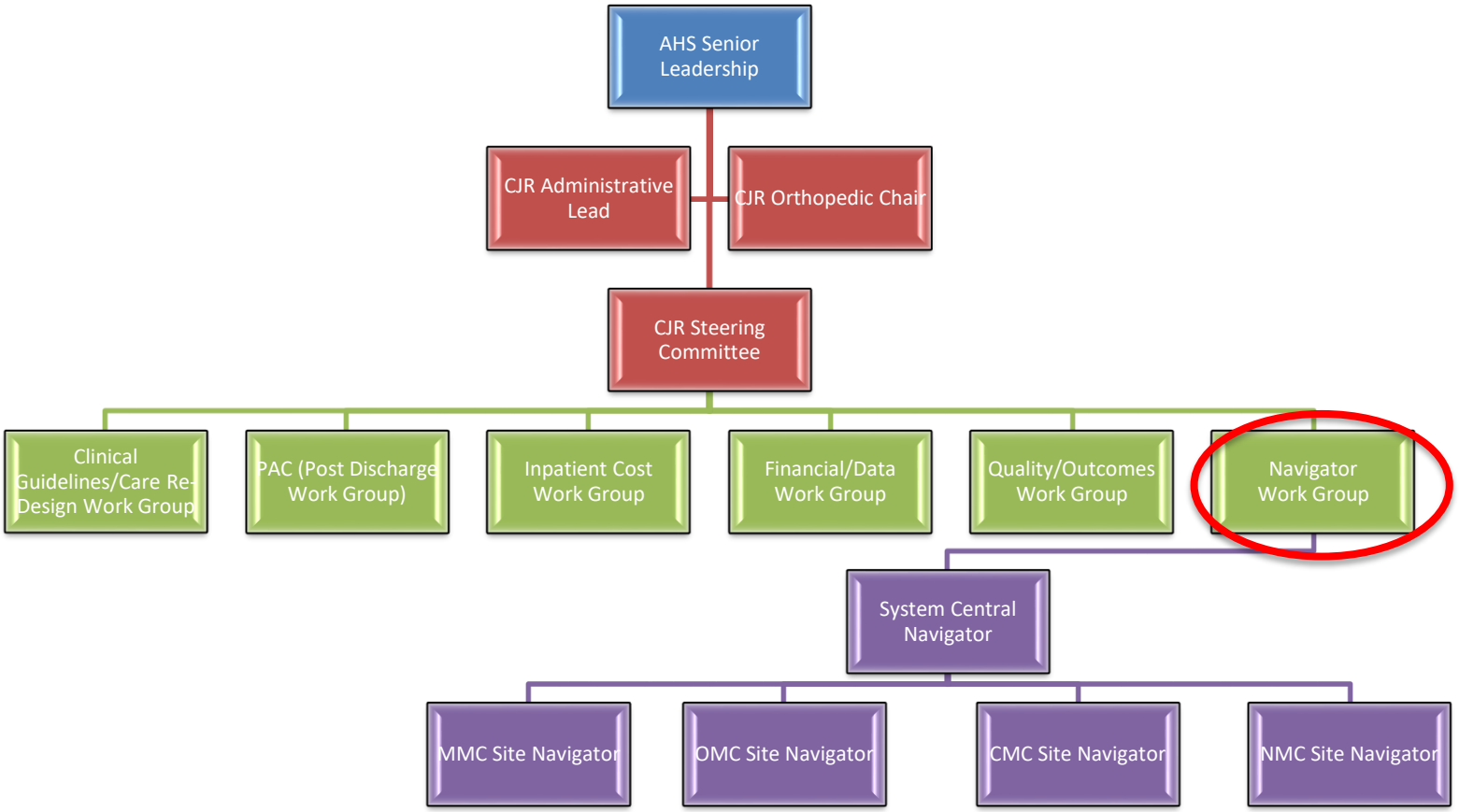
Key Objectives Developed for the Work Groups



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CJR Episode Cost

Cost = Acute Care + 90-Day Post- Discharge (*including Readmissions)*

Pre | Acute Care/Inpatient Physician Fees | Post- Acute Care IRF- SNF- Home Care | Post (Including Readmissions)

Low Variation
Minimal cost savings opportunities

44.26% Inpatient Services
16.34% Professional Services
60.6% Total

High Variation
Significant cost savings opportunities

39.4% Total

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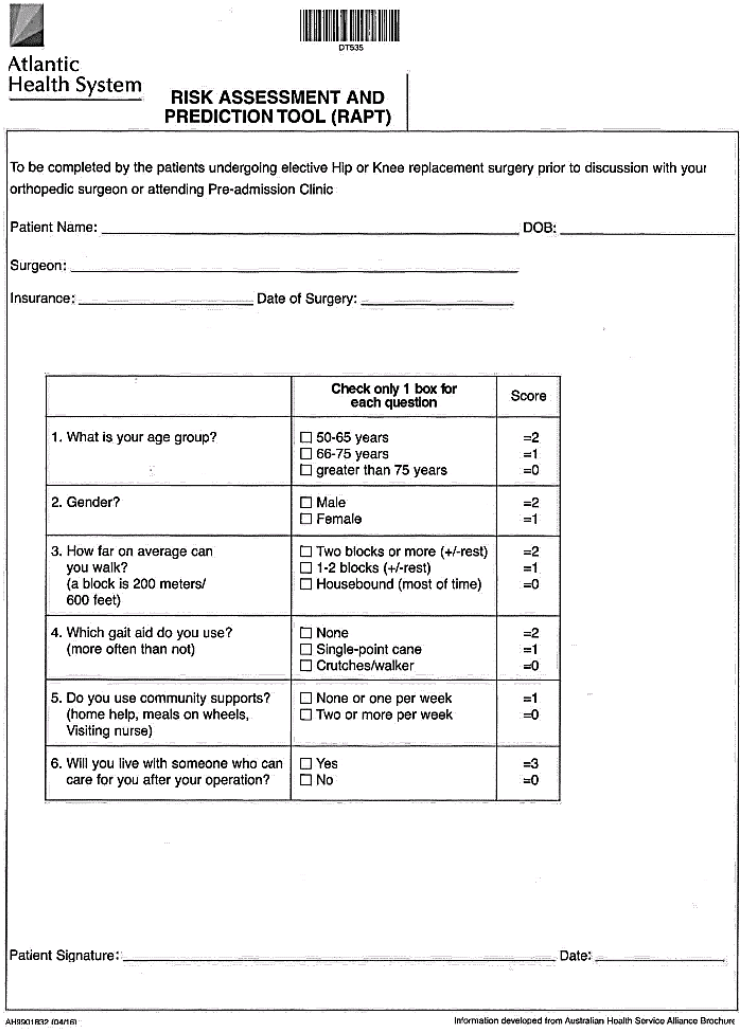
Why is Discharge Disposition to Home for Elective Patients Important?

Increase Discharge Disposition of Home → Improve Quality → Decrease Likelihood of Complications → Decrease Readmission Rate → Decrease Resource Use

CJR 90-day Readmission Rate for episode dates: 2012, 2013, 2014, 4/1/16-9/30/16

	All Ellective Episodes (4067 episodes)			Elective Episodes with 2 or fewer "chronic conditions" (3391 episodes)		
Row Labels	Total Readmission Rate	Discharge to Home Readmission Rate	Discharge to Facility Readmission Rate	Total Readmission Rate	Discharge to Home Readmission Rate	Discharge to Facility Readmission Rate
DRG 469 w/o fracture	15.7%	0.0%	16.0%	5.3%	0.0%	5.9%
DRG 470 w/o fracture	7.6%	**4.2%**	**9.8%**	5.2%	**3.6%**	**6.5%**
Grand Total	**7.7%**	**4.2%**	**12.1%**	**5.2%**	**3.6%**	**6.5%**

Risk Assessment and Prediction Tool (RAPT)



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DT535

RISK ASSESSMENT AND PREDICTION TOOL (RAPT)

To be completed by the patients undergoing elective Hip or Knee replacement surgery prior to discussion with your orthopedic surgeon or attending Pre-admission Clinic

Patient Name: _____ DOB: _____

Surgeon: _____

Insurance: _____ Date of Surgery: _____

	Check only 1 box for each question	Score
1. What is your age group?	☐ 50-65 years ☐ 66-75 years ☐ greater than 75 years	=2 =1 =0
2. Gender?	☐ Male ☐ Female	=2 =1
3. How far on average can you walk? (a block is 200 meters/ 600 feet)	☐ Two blocks or more (+/-rest) ☐ 1-2 blocks (+/-rest) ☐ Housebound (most of time)	=2 =1 =0
4. Which gait aid do you use? (more often than not)	☐ None ☐ Single-point cane ☐ Crutches/walker	=2 =1 =0
5. Do you use community supports? (home help, meals on wheels, Visiting nurse)	☐ None or one per week ☐ Two or more per week	=1 =0
6. Will you live with someone who can care for you after your operation?	☐ Yes ☐ No	=3 =0

Patient Signature: _____ Date: _____

AH8501832 (04/16)

Information developed from Australian Health Service Alliance Brochure

Measures risk factors that can interfere with discharge to home

- Age group
- Gender
- How far on average can patient ambulate
- Gait aid used
- Community supports utilization
  - Home Help
  - Meals on Wheels
- Caregiver after surgery

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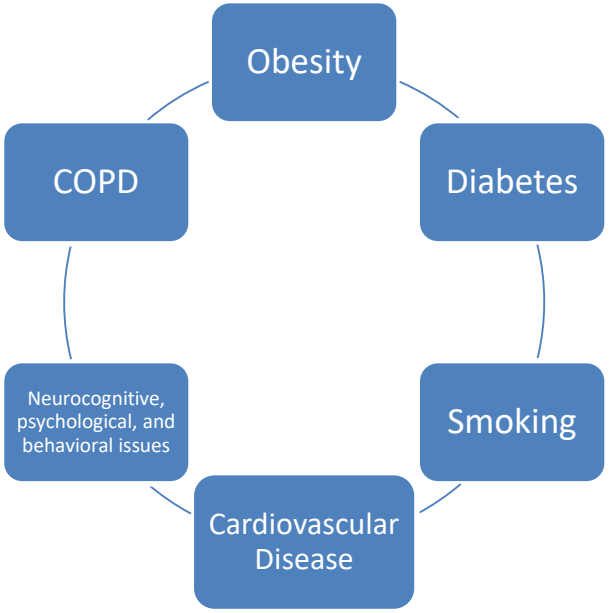
RAPT Limitations

1. **Does not account for risk factors such as***



2. **Currently a manual paper collection process****

*Currently evaluating a tool for readmissions that will look at these risk factors
** In beta development with software company to streamline Care Navigation Process

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Care Navigation Work Group

Central Navigator (1)

- Follows High Risk Patients across health system
- Develops/Maintains relationships with Post Acute Network especially with LOS
- Tracks/Evaluates patient trends

Site Navigators (4)

- Follow Low Risk Patients at specific site
- Support Central Navigator
- Develops and provides educational material to patients

RAPT Scoring

Score <=6	Score 7-9	Score >9
• Increased likelihood of discharge to PAC • High-Risk tracked by Central Navigator	• Intervention to discharge directly home • Medium-Risk tracked by Site Navigator	• Increased likelihood discharge directly home • Low-Risk tracked by Site Navigator

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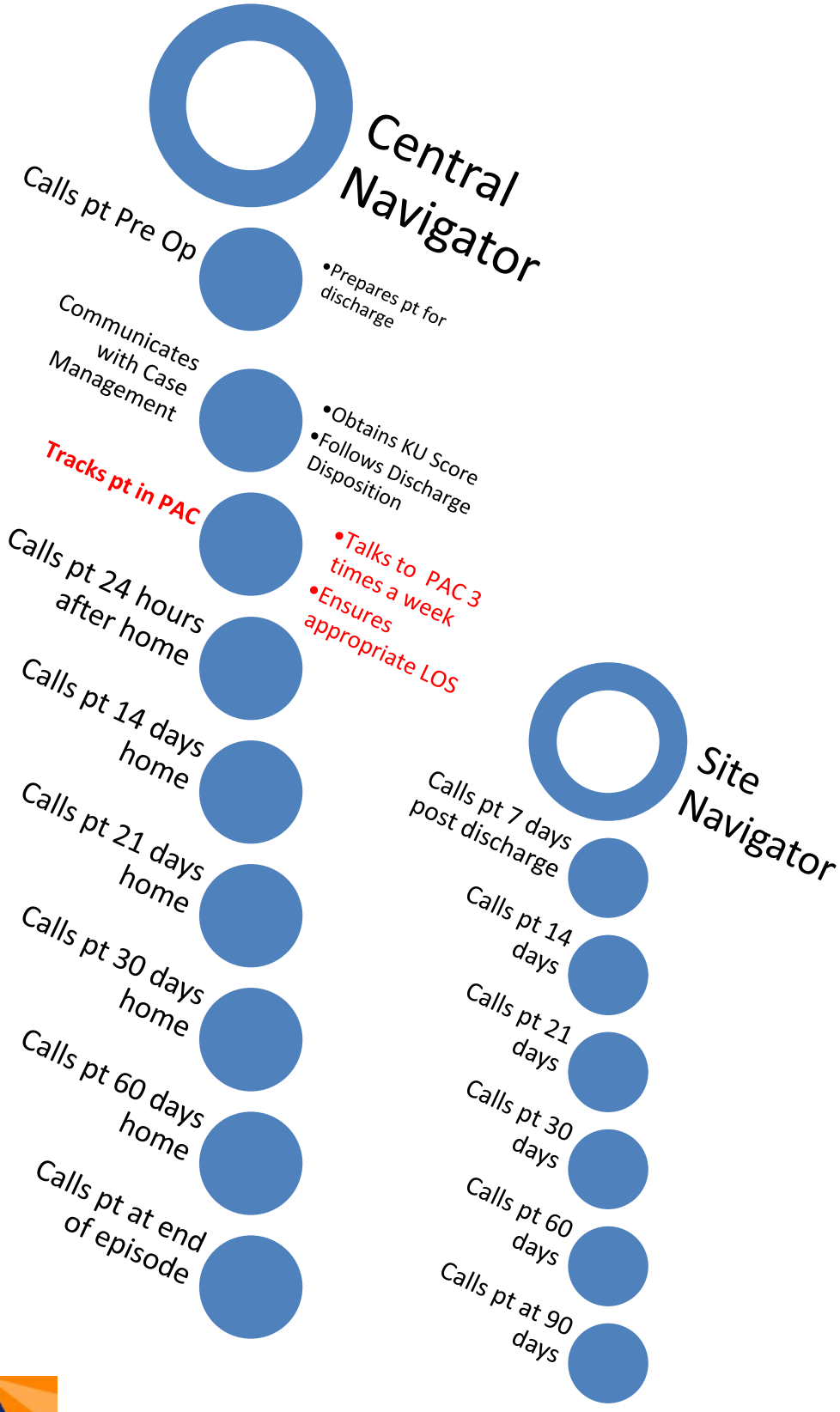
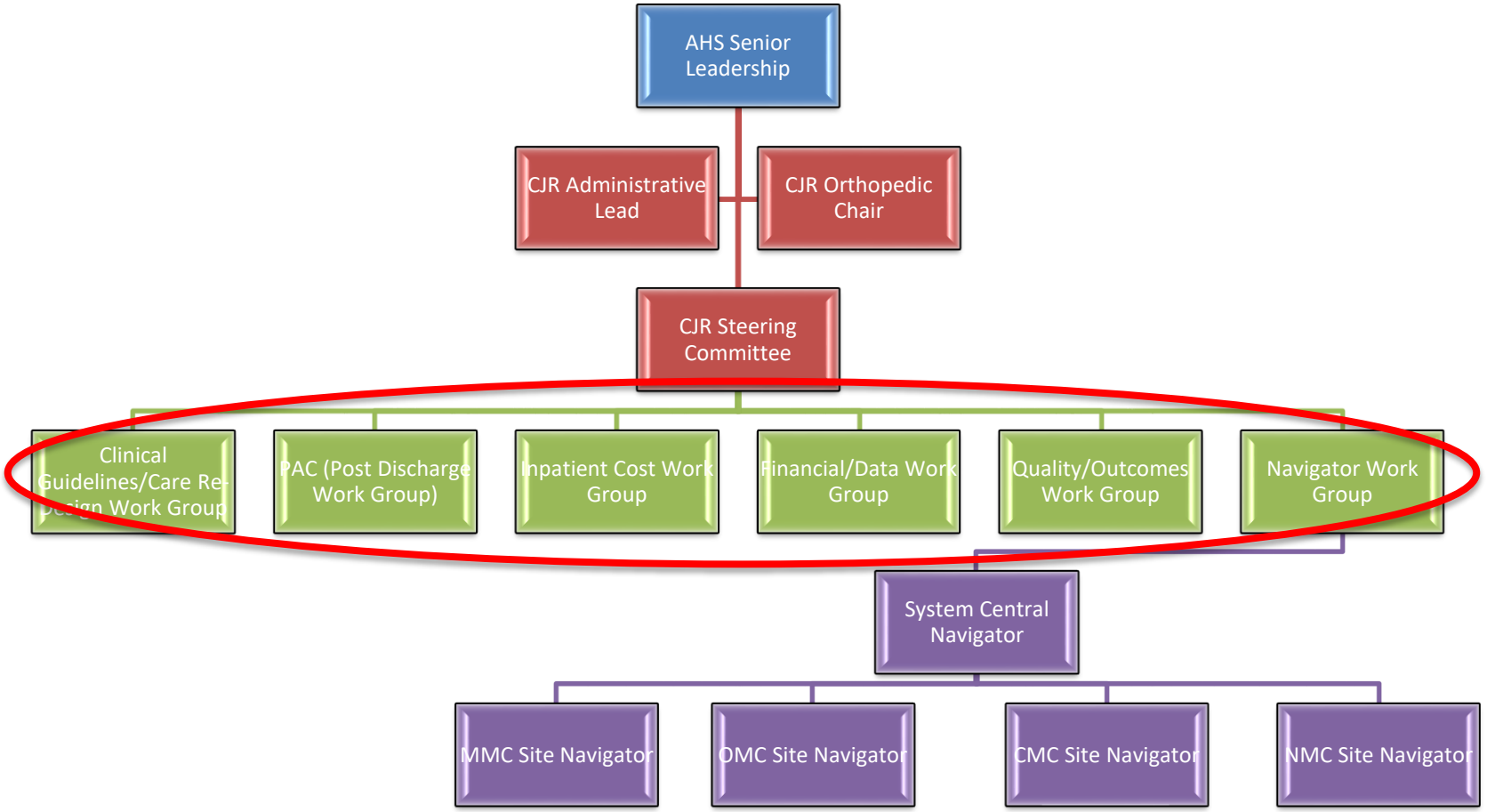
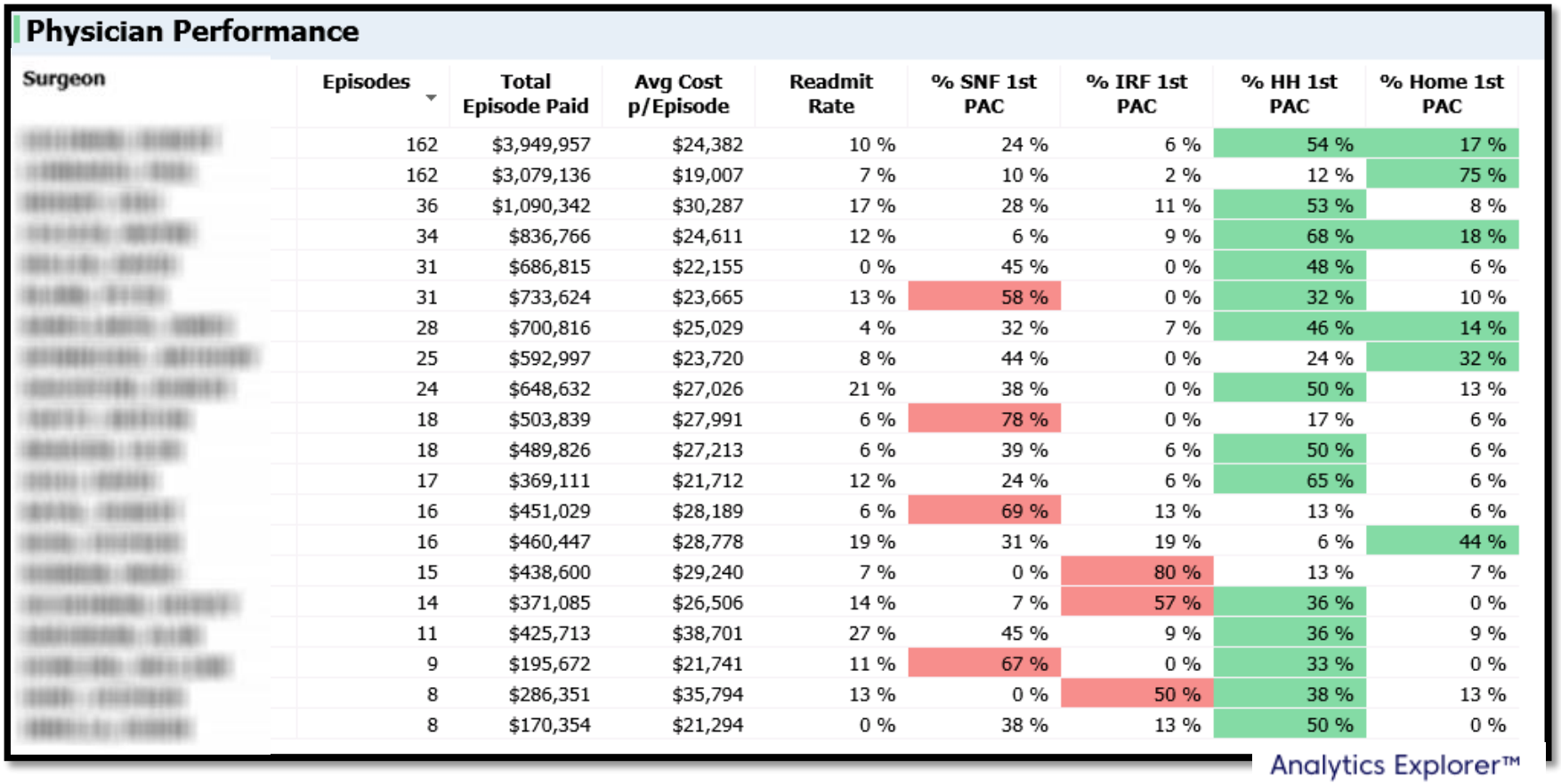
Care Navigation Work Group



What did all of this work get us?



Model Year 1 – Physician Report Card



Physician Performance

Surgeon	Episodes	Total Episode Paid	Avg Cost p/Episode	Readmit Rate	% SNF 1st PAC	% IRF 1st PAC	% HH 1st PAC	% Home 1st PAC
[redacted]	162	$3,949,957	$24,382	10 %	24 %	6 %	54 %	17 %
[redacted]	162	$3,079,136	$19,007	7 %	10 %	2 %	12 %	75 %
[redacted]	36	$1,090,342	$30,287	17 %	28 %	11 %	53 %	8 %
[redacted]	34	$836,766	$24,611	12 %	6 %	9 %	68 %	18 %
[redacted]	31	$686,815	$22,155	0 %	45 %	0 %	48 %	6 %
[redacted]	31	$733,624	$23,665	13 %	58 %	0 %	32 %	10 %
[redacted]	28	$700,816	$25,029	4 %	32 %	7 %	46 %	14 %
[redacted]	25	$592,997	$23,720	8 %	44 %	0 %	24 %	32 %
[redacted]	24	$648,632	$27,026	21 %	38 %	0 %	50 %	13 %
[redacted]	18	$503,839	$27,991	6 %	78 %	0 %	17 %	6 %
[redacted]	18	$489,826	$27,213	6 %	39 %	6 %	50 %	6 %
[redacted]	17	$369,111	$21,712	12 %	24 %	6 %	65 %	6 %
[redacted]	16	$451,029	$28,189	6 %	69 %	13 %	13 %	6 %
[redacted]	16	$460,447	$28,778	19 %	31 %	19 %	6 %	44 %
[redacted]	15	$438,600	$29,240	7 %	0 %	80 %	13 %	7 %
[redacted]	14	$371,085	$26,506	14 %	7 %	57 %	36 %	0 %
[redacted]	11	$425,713	$38,701	27 %	45 %	9 %	36 %	9 %
[redacted]	9	$195,672	$21,741	11 %	67 %	0 %	33 %	0 %
[redacted]	8	$286,351	$35,794	13 %	0 %	50 %	38 %	13 %
[redacted]	8	$170,354	$21,294	0 %	38 %	13 %	50 %	0 %

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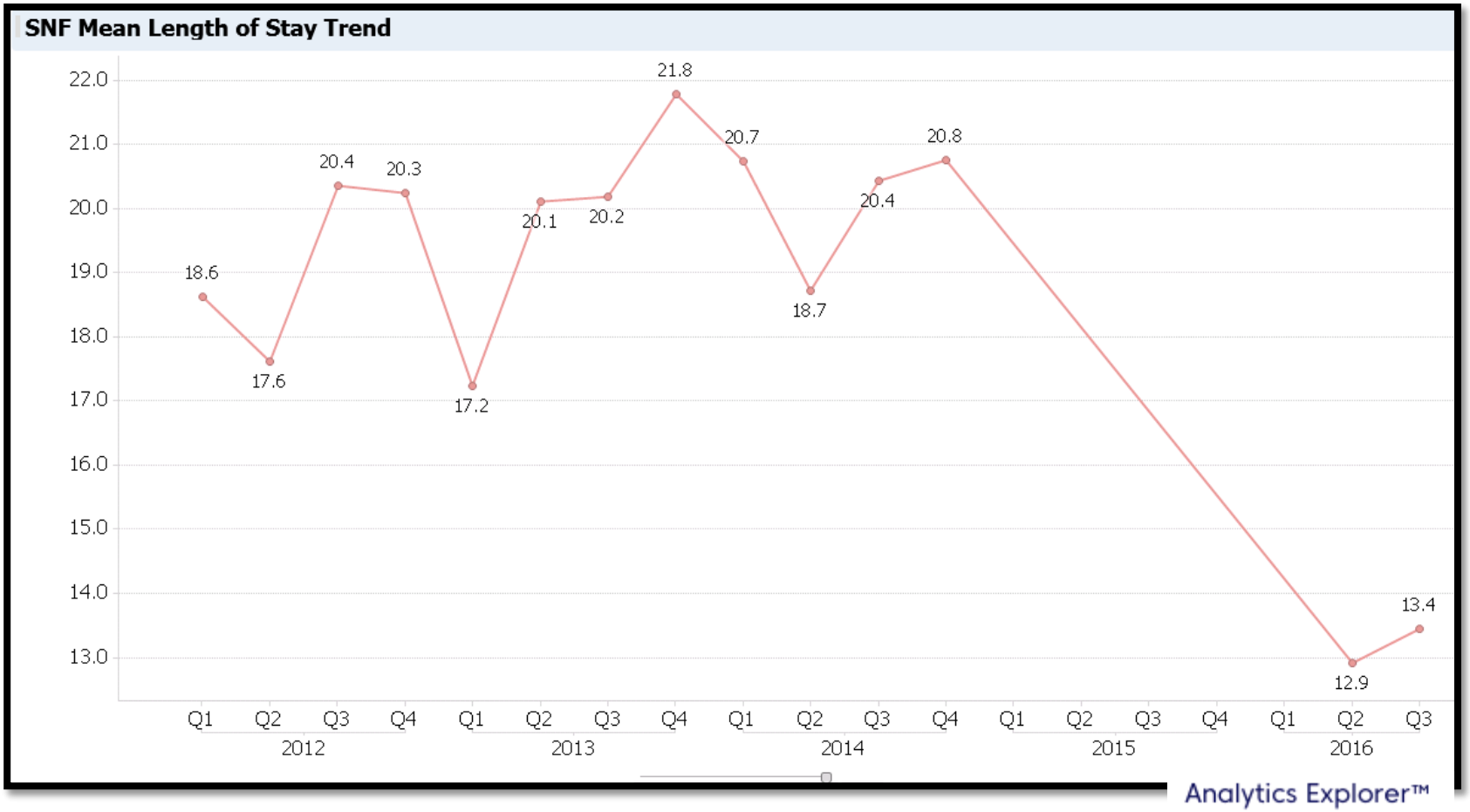
Source: CMS Data Release & Change Healthcare

Baseline–Model Year 1 - SNF Mean LOS Trend



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Source: CMS Data Release & Change Healthcare

SNF per Episode Savings

Facility	Baseline Cost p/Day	Baseline LOS	Current LOS	LOS Reduction	SNF p/Episode Savings
Chilton	$664	21.4	14.5	6.9	$4,564
Morristown	$559	18.0	12.5	5.5	$3,070
Newton	$584	21.3	14.7	6.6	$3,839
Overlook	$595	21.3	12.8	8.5	$5,060
Grand total	**$591**	**19.8**	**13.1**	**6.7**	**$3,953**

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Source: CMS Data Release & Change Healthcare

CJR Year 1 Goals and Successes

Increase discharge disposition to home

117% increase in patients going home

Decrease LOS for patients going to post-acute care facility (SNF or IRF)

52% decrease in LOS

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Year 1 Reconciliation Payment

Measure	Morristown Medical Center	Chilton Medical Center	Newton Medical Center	Overlook Medical Center
Reconciliation Payment	$831,052.60	$97,857.87	$82,418.98	n/a
Reconciliation Payment National rank	2	135	152	n/a
Reconciliation Payment National percentile	100%	83%	81%	n/a
Reconciliation Payment State rank	1	14	15	n/a
Reconciliation Payment State percentile	100%	63%	61%	n/a
Quality Score	Excellent	Good	Excellent	Below Acceptable

Model Year 2 Constructs

Work Groups further developed

Year 1 served as baseline data for more improvement opportunities

Focus shifted to reducing readmissions

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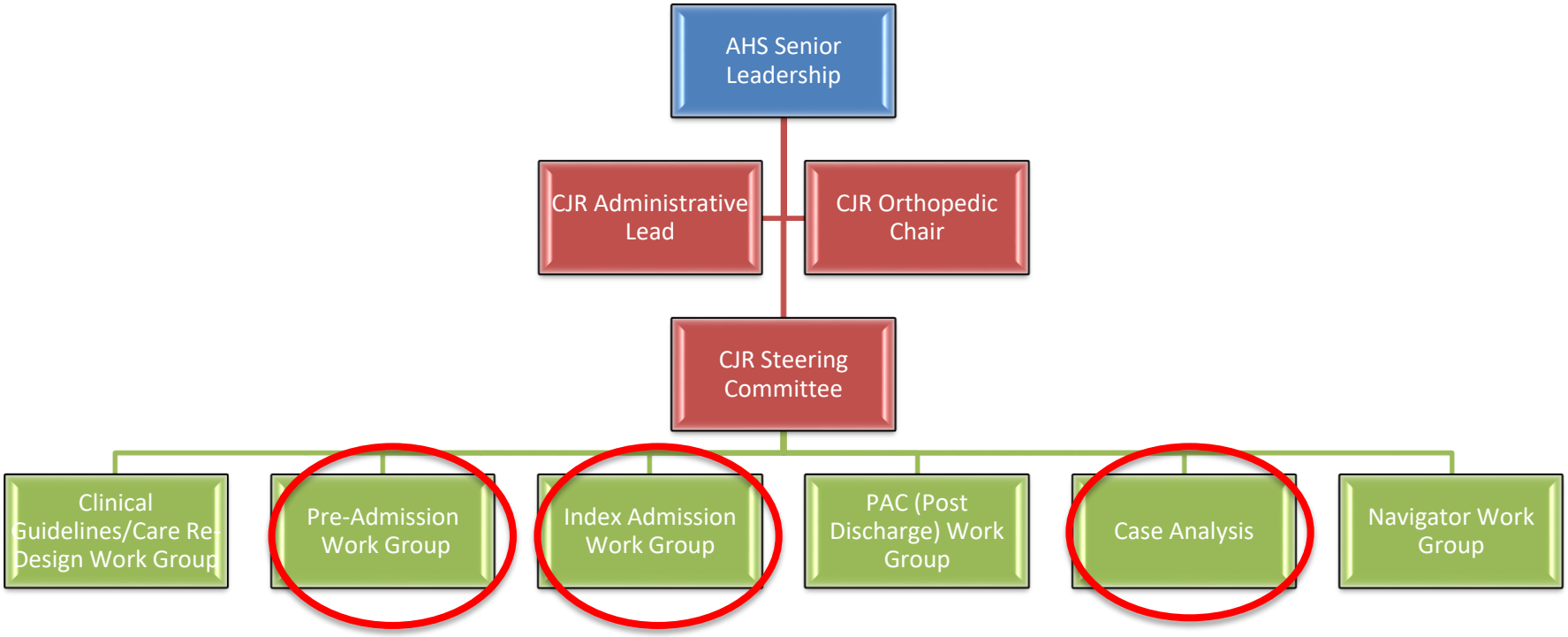
Focus for Model Year 2



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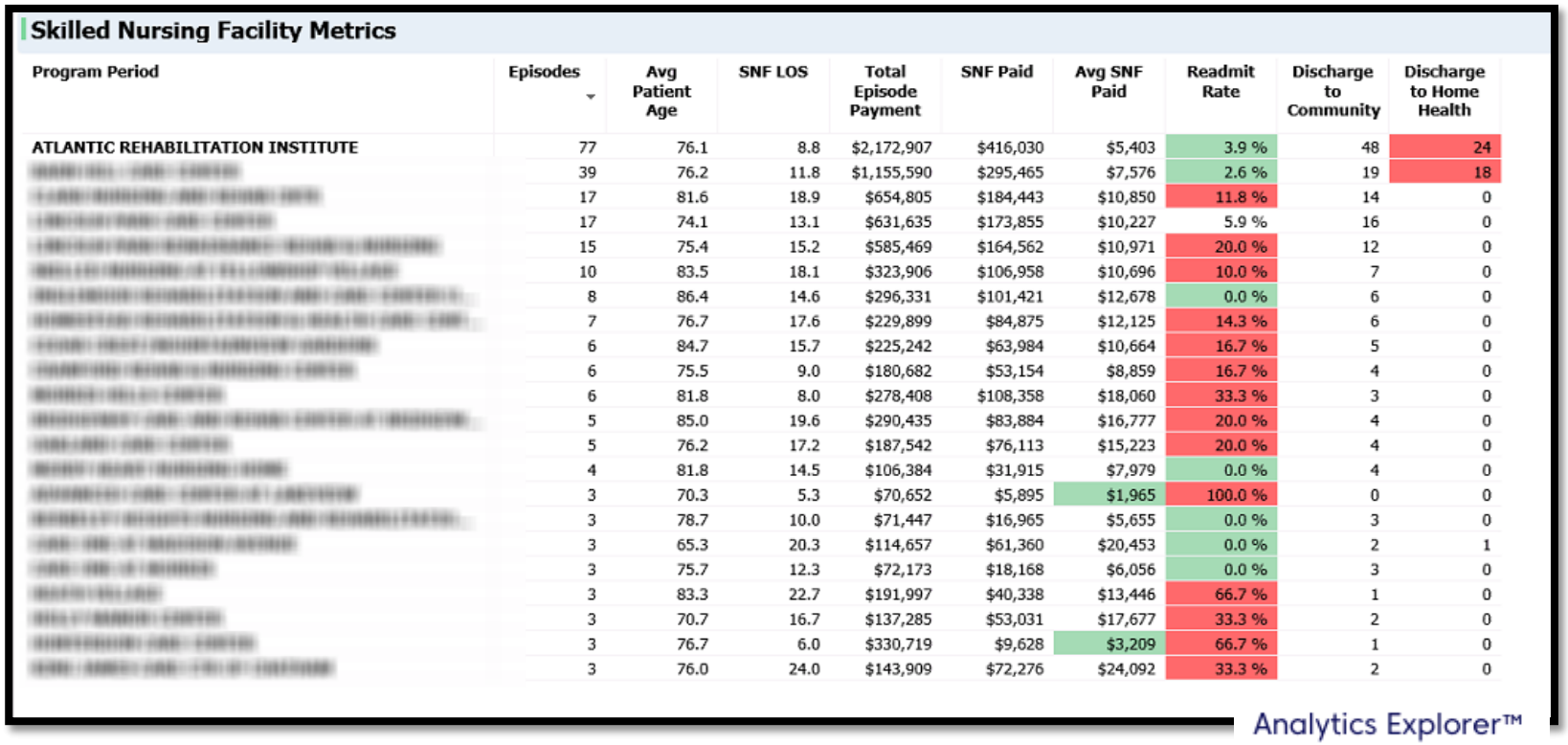
SNF Report Card



Skilled Nursing Facility Metrics

Program Period	Episodes	Avg Patient Age	SNF LOS	Total Episode Payment	SNF Paid	Avg SNF Paid	Readmit Rate	Discharge to Community	Discharge to Home Health
ATLANTIC REHABILITATION INSTITUTE	77	76.1	8.8	$2,172,907	$416,030	$5,403	3.9 %	48	24
[redacted]	39	76.2	11.8	$1,155,590	$295,465	$7,576	2.6 %	19	18
[redacted]	17	81.6	18.9	$654,805	$184,443	$10,850	11.8 %	14	0
[redacted]	17	74.1	13.1	$631,635	$173,855	$10,227	5.9 %	16	0
[redacted]	15	75.4	15.2	$585,469	$164,562	$10,971	20.0 %	12	0
[redacted]	10	83.5	18.1	$323,906	$106,958	$10,696	10.0 %	7	0
[redacted]	8	86.4	14.6	$296,331	$101,421	$12,678	0.0 %	6	0
[redacted]	7	76.7	17.6	$229,899	$84,875	$12,125	14.3 %	6	0
[redacted]	6	84.7	15.7	$225,242	$63,984	$10,664	16.7 %	5	0
[redacted]	6	75.5	9.0	$180,682	$53,154	$8,859	16.7 %	4	0
[redacted]	6	81.8	8.0	$278,408	$108,358	$18,060	33.3 %	3	0
[redacted]	5	85.0	19.6	$290,435	$83,884	$16,777	20.0 %	4	0
[redacted]	5	76.2	17.2	$187,542	$76,113	$15,223	20.0 %	4	0
[redacted]	4	81.8	14.5	$106,384	$31,915	$7,979	0.0 %	4	0
[redacted]	3	70.3	5.3	$70,652	$5,895	$1,965	100.0 %	0	0
[redacted]	3	78.7	10.0	$71,447	$16,965	$5,655	0.0 %	3	0
[redacted]	3	65.3	20.3	$114,657	$61,360	$20,453	0.0 %	2	1
[redacted]	3	75.7	12.3	$72,173	$18,168	$6,056	0.0 %	3	0
[redacted]	3	83.3	22.7	$191,997	$40,338	$13,446	66.7 %	1	0
[redacted]	3	70.7	16.7	$137,285	$53,031	$17,677	33.3 %	2	0
[redacted]	3	76.7	6.0	$330,719	$9,628	$3,209	66.7 %	1	0
[redacted]	3	76.0	24.0	$143,909	$72,276	$24,092	33.3 %	2	0

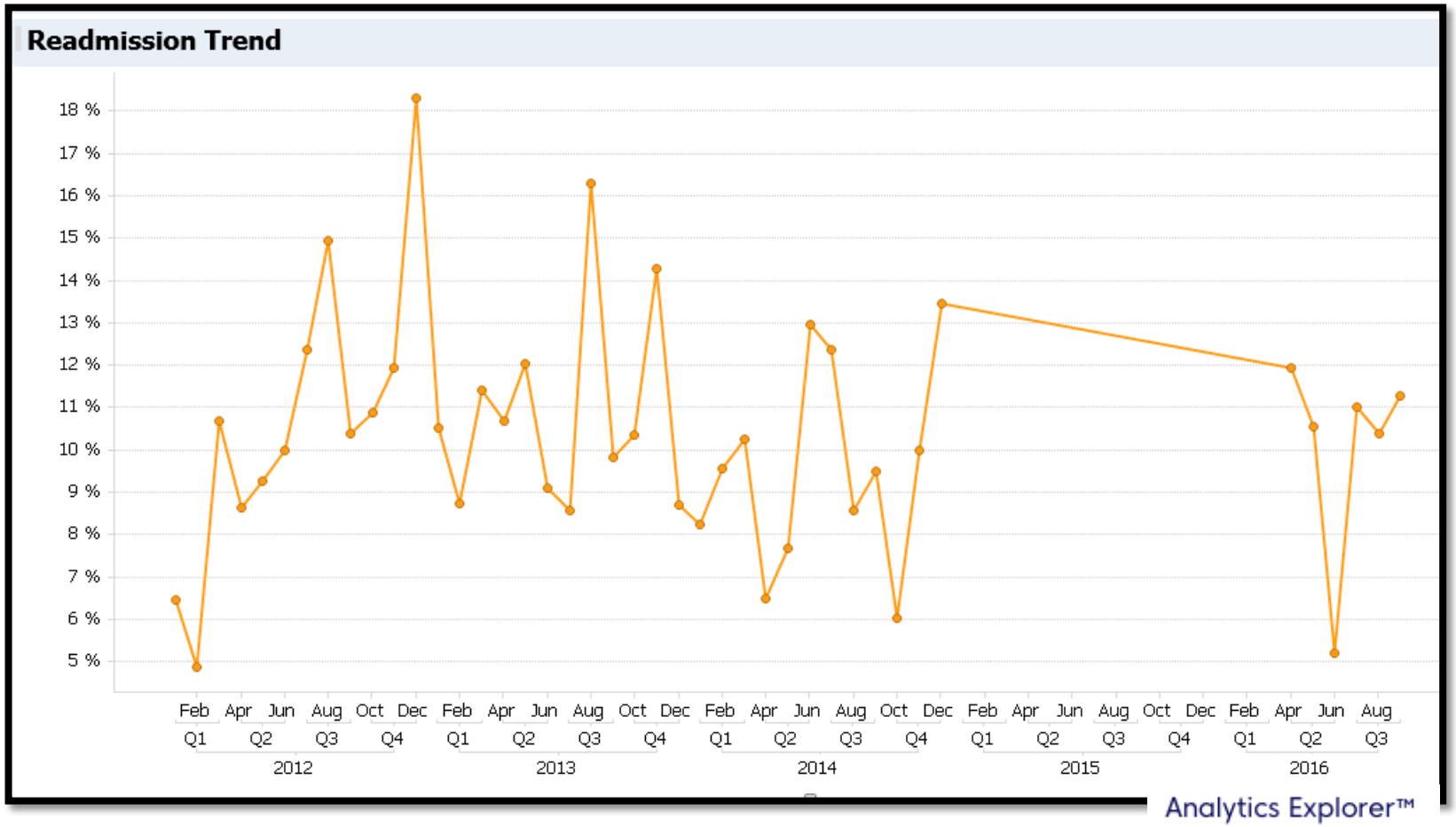
Analytics Explorer™

ATLANTIC HEALTH SYSTEM

CHANGE HEALTHCARE

Source: CMS Data Release & Change Healthcare

Model Year 1 - Readmissions by Month

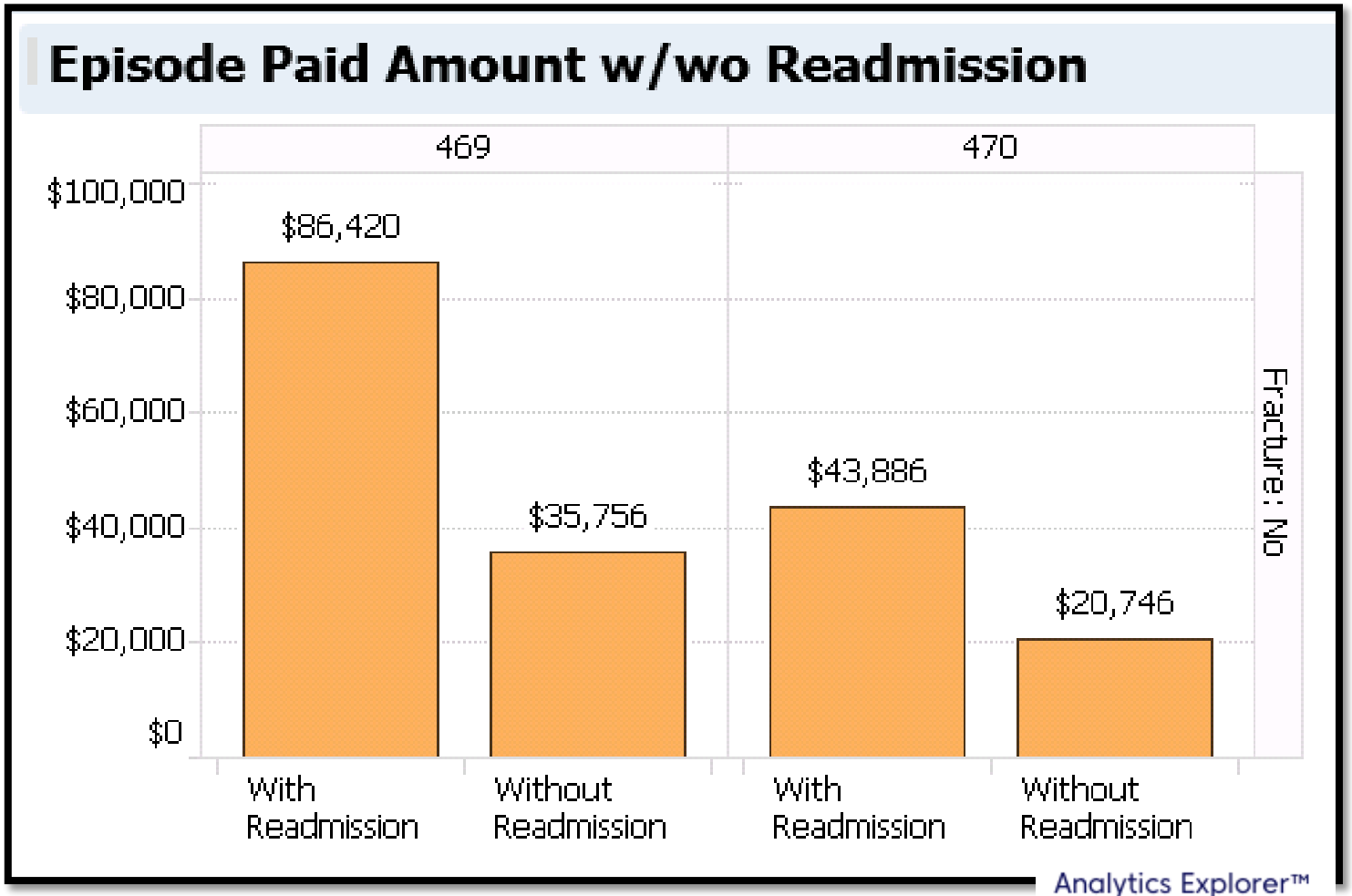


ATLANTIC HEALTH SYSTEM

CHANGE HEALTHCARE

Source: CMS Data Release & Change Healthcare

Model Year 1 - Readmission Data

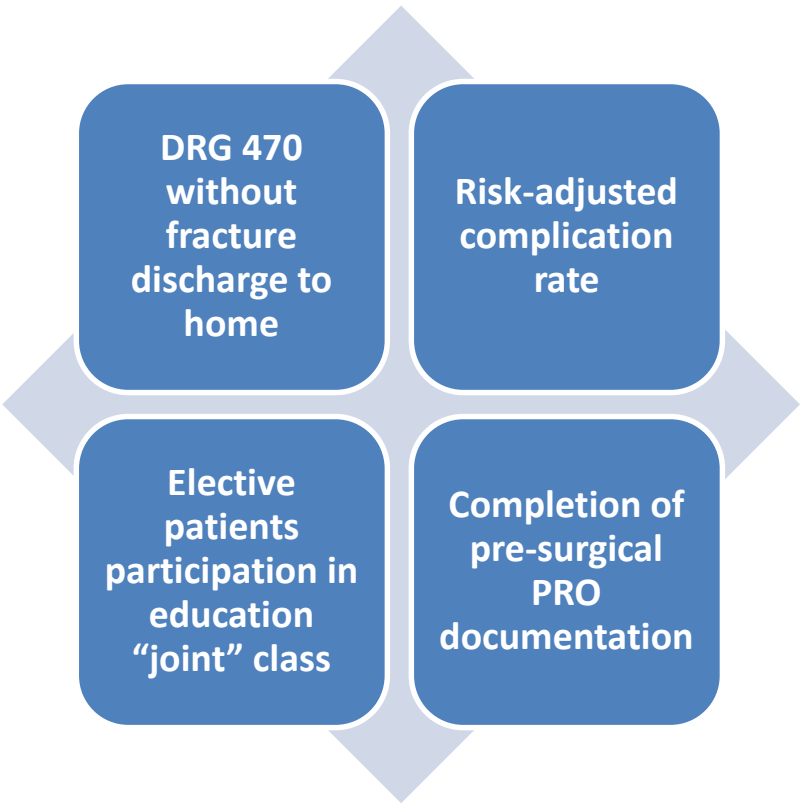


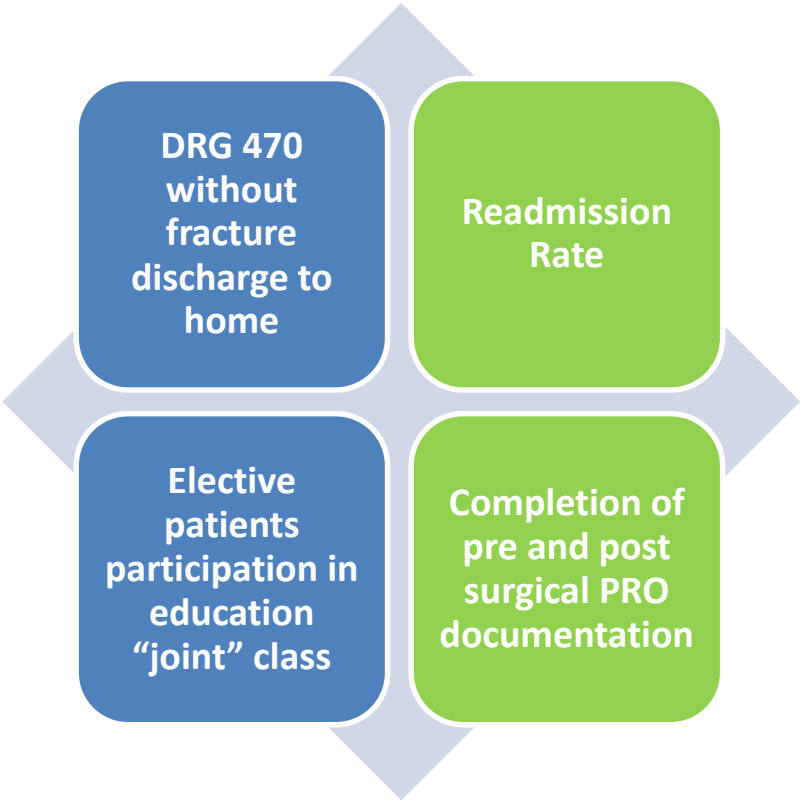
ATLANTIC HEALTH SYSTEM

CHANGE HEALTHCARE

Source: CMS Data Release & Change Healthcare

Model Year 1 vs. Year 2 Gainsharing Metrics





ATLANTIC HEALTH SYSTEM

What results did we see from the changes in Model Year 2?

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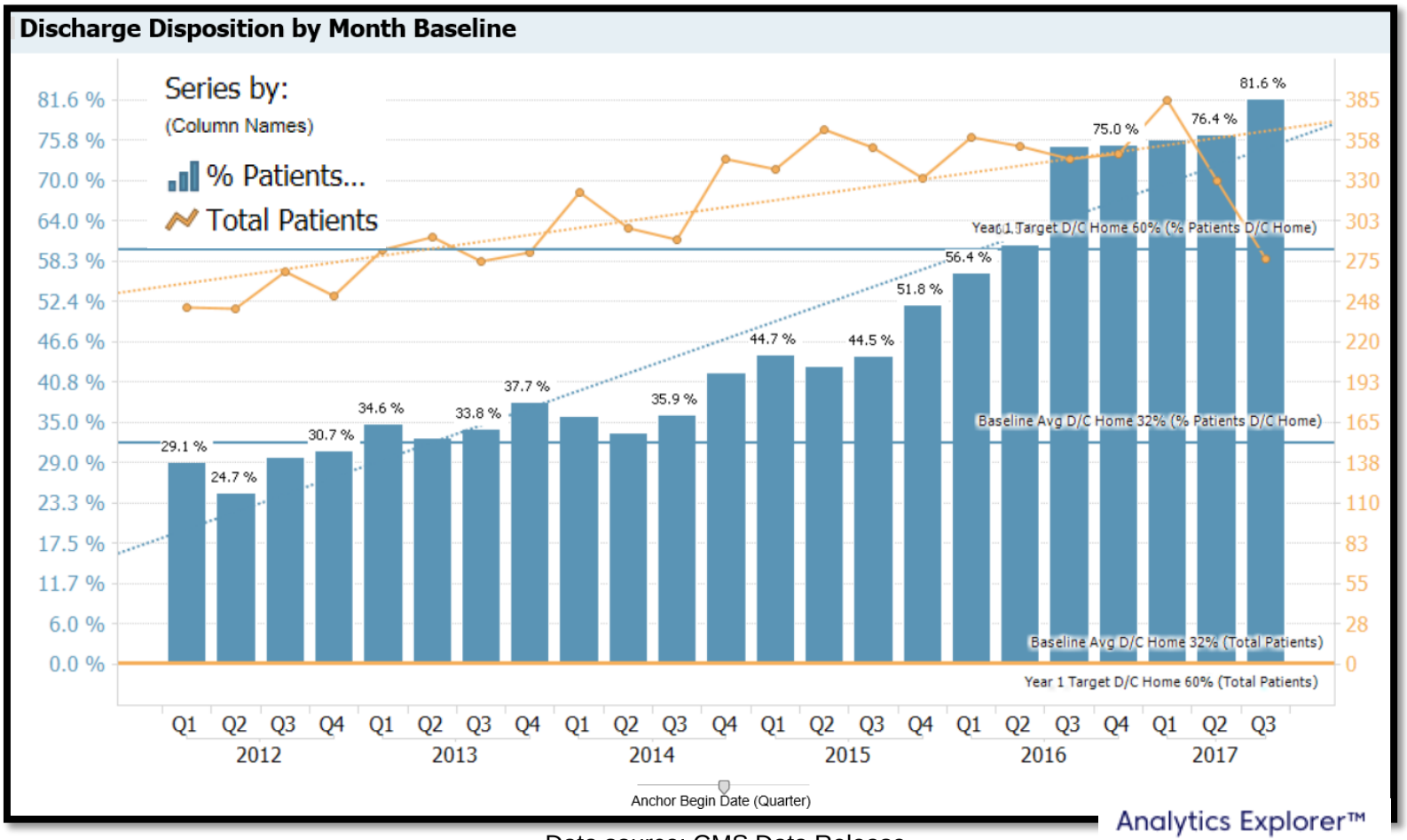
Discharge Home Trend: Baseline vs. Current



Data source: CMS Data Release

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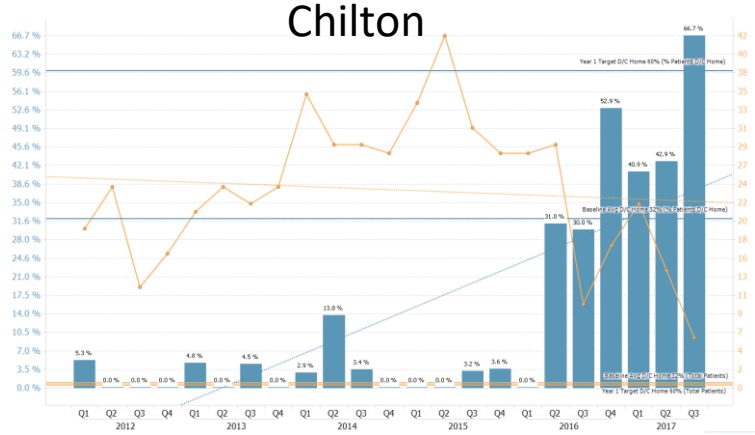
CHANGE HEALTHCARE

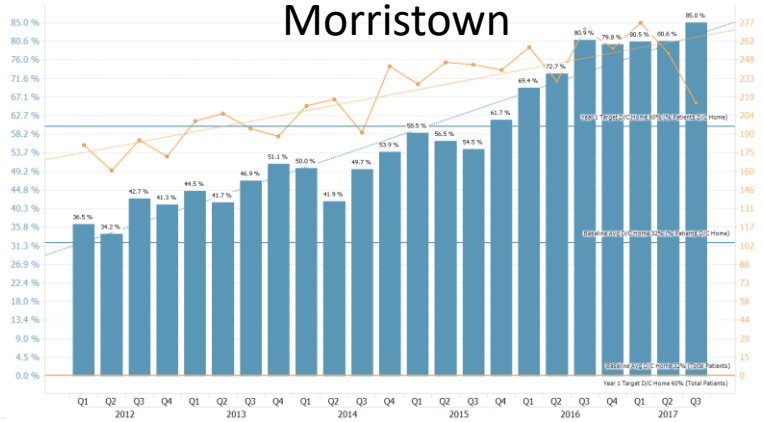
AHS CJR Discharge Disposition to Home

DRG 470 w/o Fracture

Chilton

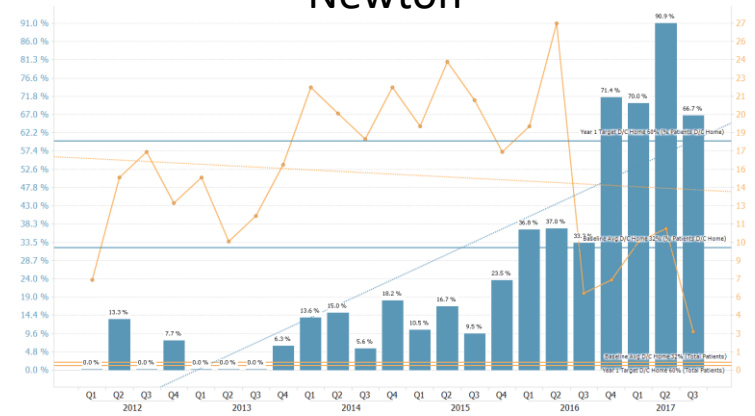


Morristown

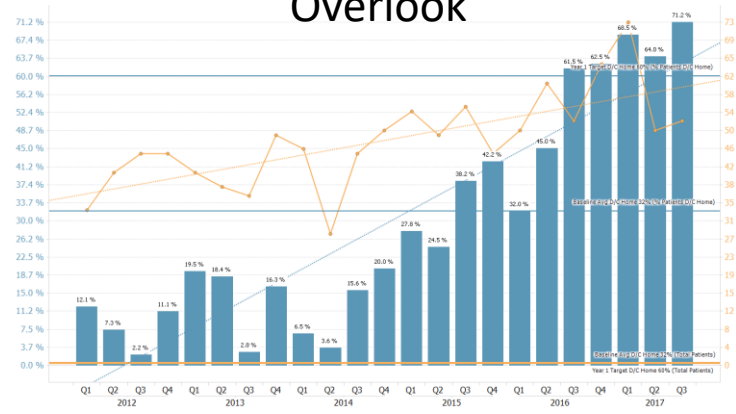


Series by:
(Column Names)
% Patients...
Total Patients

Newton



Overlook



CHANGE HEALTHCARE

Analytics Explorer™

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Model Year 2 Scorecard

Chilton Medical Center	Model Year 2 YTD							
	Episodes	Discharge to Home %	30 day Readmissions	Target Price	Average Payment	Per Episode Savings vs. Target	Estimated Reconciliation	Savings vs. Target Price
Model Year 2 YTD	**89**	**34%**	**16.9%**	**$ 40,089**	**$ 36,666**	**$ 3,423**	**$ 178,394**	**$ 304,647**
Model Year 1 Results	**52**	**25%**	**11.5%**	**$ 37,638**	**$ 35,739**	**$ 1,899**	**$ 97,858**	**$ 98,734**

Morristown Medical Center	Model Year 2 YTD							
	Episodes	Discharge to Home %	Readmissions	Target Price	Average Payment	Per Episode Savings vs. Target	Estimated Reconciliation	Savings vs. Target Price
Model Year 2 YTD	**1168**	**76%**	**7.5%**	**$ 31,302**	**$ 26,529**	**$ 4,772**	**$ 1,828,020**	**$ 5,574,158**
Model Year 1 Results	**540**	**72%**	**10.7%**	**$ 30,780**	**$ 27,825**	**$ 2,955**	**$ 831,053**	**$ 1,595,691**

Newton Medical Center	Model Year 2 YTD							
	Episodes	Discharge to Home %	Readmissions	Target Price	Average Payment	Per Episode Savings vs. Target	Estimated Reconciliation	Savings vs. Target Price
Model Year 2 YTD	**45**	**58%**	**13.3%**	**$ 37,231**	**$ 31,683**	**$ 5,548**	**$ 83,769**	**$ 249,641**
Model Year 1 Results	**52**	**25%**	**11.5%**	**$ 37,638**	**$ 35,739**	**$ 1,899**	**$ 97,858**	**$ 98,734**

Overlook Medical Center	Model Year 2 YTD							
	Episodes	Discharge to Home %	Readmissions	Target Price	Average Payment	Per Episode Savings vs. Target	Estimated Reconciliation	Savings vs. Target Price
Model Year 2 YTD	**308**	**57%**	**10.7%**	**$ 35,198**	**$ 31,144**	**$ 4,054**	**$ 542,057**	**$ 1,248,691**
Model Year 1 Results	**136**	**43%**	**8.1%**	**$ 35,471**	**$ 30,904**	**$ 4,566**	**~~$ 241,200~~**	**$ 621,003**

Atlantic Health System	Model Year 2 YTD							
	Episodes	Discharge to Home %	Readmissions	Target Price	Average Payment	Per Episode Savings vs. Target	Estimated Reconciliation	Savings vs. Target Price
Model Year 2 YTD Summary	**1610**	**70%**	**8.8%**	**$ 32,699**	**$ 28,117**	**$ 4,582**	**$ 2,632,240**	**$ 7,377,137**
Model Year 1 Results	**776**	**61%**	**10.2%**	**$ 32,282**	**$ 29,051**	**$ 3,230**	**$ 1,011,329**	**$ 2,506,720**

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Model Year 3 and Next Steps

Focus on Pre-op Optimization

Implementation of Readmission Risk Assessment Tool

Tracking metrics for case study

Financial Opportunities

Potential millions in savings with brand implants

Analytics Explorer mapping to evaluate problems associated with socioeconomic situations

Epic Implementation

Create CJR patient flags
Develop Healthy Planet

Commercial Bundles

Mobile Integrated Health

- 24/7/365 nurse assisted hotline for CJR patients
- Accompanies high-risk patients who go home with no meds
- 24/7/365 Critical care response at home

Physician choice to take risk for higher percentage of gainsharing

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Outcomes

Increased efficiency - **ED observations vs. admission process**
Improved hospital throughput

Lower cost

$10M in Medicare Savings vs. Target Price

Additional revenue via reconciliation payments of $3.2M

Improving quality

- **117%** increase of patients going home
- Significant increase in patient and care navigation
- Best practice initiatives
- **52%** decrease post-acute length of stay

Halo effect – broad changes of physician behavior

Reduced readmissions

Growing market share – physicians bring cases to AHS for gainsharing

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Questions?

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