Readmission Reduction Incentive Program

Overview of Methodology and Reporting

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Webinar Agenda

▸ Background and Guiding Principles

▸ Rate Year (RY) 2016 Readmission Reduction Target

▸ Measurement Methodology

▸ Readmissions Excel Workbook

▸ Program Reporting Timelines

▸ Chesapeake Regional Information System Enterprise Identifier (CRISP EID)—Unique Identifier

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Background and Guiding Principles

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Background

▸ Maryland's readmission rates are high compared to the nation.

▸ The CMMI all-payer model demonstration contract, which began on January 1, 2014, established a readmission reduction target that requires Maryland Medicare rates to be equal or below National Medicare rates by 2018.

▸ HSCRC staff and the Performance Measurement Workgroup, which was convened in January to support the new waiver, proposed and vetted the program methodology that was approved by the Commission in April 2014.

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Maryland Performs Poorly on Broad Measures of Medicare Readmissions

Unadjusted Medicare 30-day, All-Cause, Readmission Rate
Maryland vs. National 2009-2013*
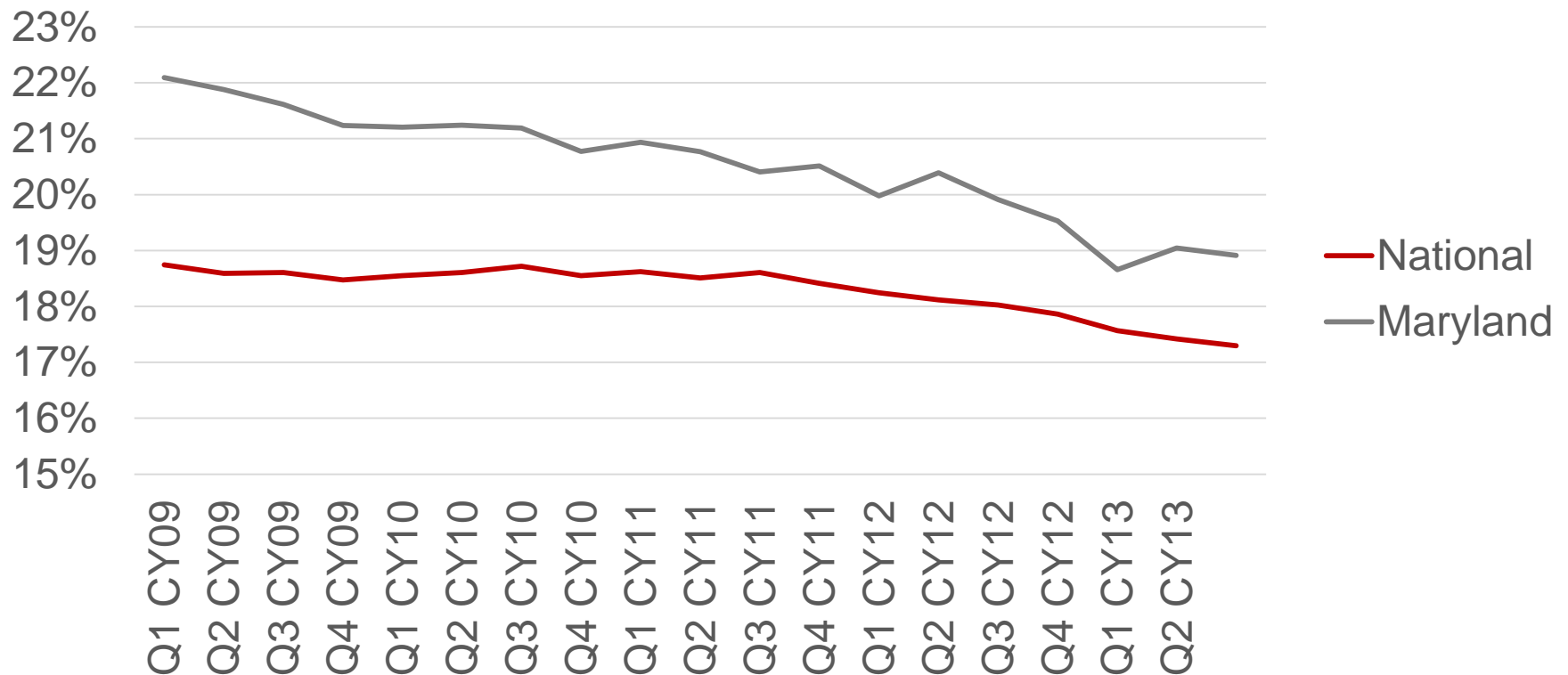
*Data for 2013 only includes the first 9 months of the calendar year

Source: Delmarva

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Maryland's Readmission Rates are High for the CMS Condition Specific Measures for AMI, CHF and Pneumonia- Maryland Performs Poorly

The majority of Maryland hospitals were ranked below the national average for Medicare's Hospital Readmission indicators, and many were in the lowest 25 percent.

- Four Maryland hospitals were ranked among the worst 100 hospitals in the nation for each of the three indicators.
- For pneumonia readmissions, one-fifth of Maryland hospitals (n=9) were ranked among the worst 200 hospitals in the nation for excess readmissions.

National Quartiles: Hospital Ranked From Least to Most Excess Readmissions	Excess Readmissions Due To:		
	Pneumonia	Heart Failure	Heart Attack
Quartile 1 (Least Excess Readmissions)	4 (9%)	4 (9%)	2 (5%)
Quartile 2	4 (9%)	6 (14%)	7 (19%)
Quartile 3	7 (16%)	14 (32%)	10 (27%)
Quartile 4 (Most Excess Readmissions)	29 (66%)	20 (45%)	18 (49%)
Total hospitals included in analysis	3,123	3,110	2,262

Source: HSCRC analysis of CMS Readmission data, April 2013.
Note: Based on CMS data from July 1, 2008 to June 30, 2011. Some Maryland hospitals did not have enough cases for CMS to calculate excess readmission figures.

CMMI All-payer Model Contract Requires Maryland to Meet an Annual Readmission Reduction Target

▸ According to the (CMMI) all-payer model demonstration contract:

"If in a given Performance Year Regulated Maryland Hospitals, in aggregate, fail to outperform the national Readmissions Rate change by an amount equal to or greater than the cumulative difference between the Regulated Maryland Hospital and national Readmission Rates in the base period divided by five, CMS shall follow the corrective action and/or termination provisions of the Waiver of Section 1886(q) as set forth in Section 4.c and in Section 14."

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Guiding Principles

▸ Measurement used for performance linked with payment must include all patients regardless of payer.

▸ Measurement must be fair to hospitals.

▸ First year target must be established to reasonably support the overall goal of equal or less than the National Medicare readmission rate by CY 2018.

▸ Measure used should be consistent with the CMS Measure of Readmissions (also used by Partnership for Patients Program).

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Additional Readmission Measurement and Reporting Efforts Not Addressed

▸ Admission Readmission Revenue (ARR)

▸ Readmissions Shared Savings

▸ Potentially Avoidable Utilization ($)

▸ CRISP Readmission Reporting using ADT data

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RY2016 Readmission Reduction Target

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Rate Year 2016

▸ Base Period = CY2013

▸ Performance Period = CY2014

▸ Reduction target = **6.76%** (uniform goal)

▸ Incentive = **0.5%** permanent inpatient revenue (provided the RY2016 update factor is favorable)

▸ Observation and ED visits within 30 Days of an inpatient stay will be monitored.

▸ Possible adjustments if observation cases within 30 days increases faster than the overall observation cases.

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Measurement Methodology

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HSCRC Readmission Reduction Incentive Program Measure
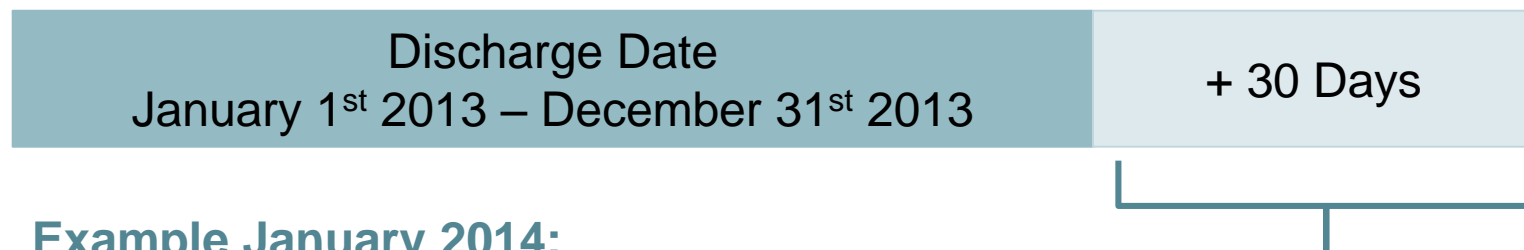
▸ Risk-Adjusted Readmission Rate

$$= \frac{\text{Observed Readmissions}}{\text{Expected Readmissions}} \times \text{Statewide Unadjusted Readmission Rate}$$

▸ 30-Day

▸ All-Payer

▸ All-Cause

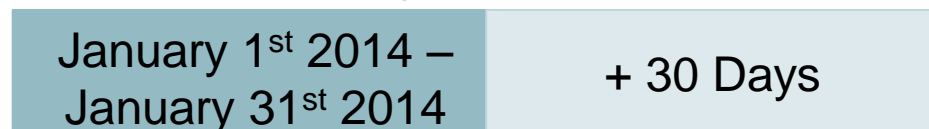▸ All-Hospital (both intra and inter hospital)

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Data Source and Timeframe

▸ Inpatient abstract/case mix data with Chesapeake Regional Information System Enterprise Identifier (CRISP EID).

▸ Risk adjustment uses discharge APR-DRG and Severity of Illness (Grouper Version 31)

▸ Measurement Timeframe:

Example CY2013 Base Period:

Discharge Date January 1st 2013 – December 31st 2013	+ 30 Days

Example January 2014:

January 1st 2014 – January 31st 2014	+ 30 Days

Readmissions Only

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Adjustments to Readmission Measurement

▸ **Planned Readmissions**
  ▸ CMS Planned Readmission Algorithm V. 2.1 + vaginal and C-section deliveries (APR-DRG 560 and 540).
  ▸ Removed from numerator but counted in the denominator since they could have unplanned readmission.

▸ **Deaths**
  ▸ Hospitalizations where the patient dies are removed from the denominator; however, if the hospitalization when the patient dies was a readmission it is counted in the numerator.

▸ **Transfers** (discharge date = admission date)

▸ **Discharges from rehabilitation hospitals** (213028, 213029, 210333)

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Additional Data Cleaning

▸ Cases with null or missing CRISP EIDs

▸ Duplicates

▸ Negative interval days

▸ Note on these data cleaning edits:

    ▸ CRISP EID matching benchmarks are closely monitored (additional information on this at the end of the presentation).

    ▸ Although rare, HSCRC staff is revising case mix data edits to prevent submission of duplicates and negative intervals.

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Risk Adjustment Calculation

▸ Calculate the Statewide Readmission Rate =

$$\frac{\text{Total number of readmissions with exclusions removed}}{\text{Total number of hospital discharges with exclusions removed}}$$

▸ For each hospital:

  ▸ calculate the number of observed readmissions

  ▸ calculate the number of expected readmissions based upon discharge APR-DRG and Severity of Illness

  ▸ Calculate ratio of observed (O) readmissions over expected (E) readmissions

  ▸ Multiply O/E ratio by the statewide rate to get risk-adjusted readmission rate by hospital

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Expected Values

▸ The number of readmissions a hospital would have experienced, given its case mix, had its rate of readmissions been identical to that experienced by a normative set of hospitals (i.e., state average).

▸ Example for an individual APR DRG category:

Severity of illness Level	Discharges at risk for readmission	Discharges with readmission	Readmissions per discharge	Normative Readmissions per discharge	Expected # of Readmissions
1	200	10	.05	.07	14.0
2	150	15	.10	.10	15.0
3	100	10	.10	.15	15.0
4	50	10	.20	.25	12.5
Total	500	45	.09		56.5

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ED Visits and Observation Stays

▸ Observation and ED visits within 30 Days of an inpatient stay will be monitored.

▸ Adjustments to the positive incentive will be made if observation cases within 30 days increase faster than the other observations in a given hospital.

▸ HSCRC will add this to monthly Readmission Excel Workbook.

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Ongoing Work

▶ Risk-adjustment (e.g., socio-demographic factors)

▶ Out-of-state readmissions

▶ With proper adjustments, consider addition of attainment to the model

▶ Subsequent statewide and hospital-specific target determination for RY2017 and beyond

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Readmission Excel Workbook

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Reporting Timeline

FY 2014 Q2 Production Schedule	End date	Days from End	Case Mix Due Date	Case Mix sent to HSCRC & CRISP	EID Data sent to HSCRC	HSCRC Quality Checks	HSCRC Read-mission Reports
April 2014 data	4/30/2014						
April prelim		15	5/15/2014	5/19/2014	5/26/2014	5/28/2014	6/5/2014
May 2014 data	5/30/2014						
April & May Prelim		17	6/16/2014	6/20/2014	6/27/2014	7/2/2014	7/7/2014
June 2014 data	6/30/2014						
April, May & June Prelim		15	7/15/2014	7/21/2014	7/28/2014	7/31/2014	8/7/2014
4th Qtr (Apr - Jun)	6/30/2014						
4th Qtr Final		60	8/29/2014	9/3/2014	9/10/2014	9/12/2014	9/20/2014

Reporting is dependent on all hospitals submitting on time and CRISP EID matching

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CRISP Unique ID Assignment

Background

▸ CRISP receives real-time encounter messages (called "ADTs") which carry facility, medical record number, visit IDs, and other important information about visits. These ADTs are currently flowing from all hospitals.

▸ The ADTs are processed through CRISP's Master Patient Index (MPI) generating a Unique Identifier (CRISP ID) linking patients across individual hospitals.

▸ Each month, the CRISP ID is linked to the IP and OP Case Mix data enabling HSCRC to run the CMS readmission logic and to perform other inter-hospital analysis.

▸ Occasionally, some hospitals may be missing a CRISP ID for a given visit or MRN. In those cases, CRISP and the HSCRC will work with the hospital to trouble shoot the issue and generate a CRISP ID for the MRN.

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CRISP Readmission Reporting

CRISP Reporting

▸ Historically, CRISP has used the ADTs to generate visits and applied "basic" inter-hospital readmission logic. These reports have been distributed directly by CRISP over the past year as a service to hospitals. CRISP will likely offer that report to those hospitals interested in receiving it.

▸ However, looking forward, CRISP will rely on case mix visit data and the CMS readmission logic to generate readmission reports for each hospital.

▸ By using the same underlying visits and same logic hospitals can have confidence that the reports CRISP produces are aligned with HSCRC methodologies.

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Questions

Please feel free to email questions to:
hscrc.quality@maryland.gov

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