Developing a Unique Patient ID: Proposed Data Submission Fields

March 24, 2011

MARYLAND HEALTH SERVICES COST REVIEW COMMISSION

Agenda

1. Background: Incentive programs and readmissions

2. Proposed additional data fields

3. Proposed data collection approach and commensurate regulation promulgation

4. Group Discussion

HSCRC Quality Initiatives

Quality Based Reimbursement (QBR)

Maryland Hospital Acquired Conditions (MHAC)

Readmission Initiatives:

- **Maryland Preventable Hospital Readmissions (MHPR)**
- **Admission-Readmission Revenue Hospital Payment Constraint Program (ARR)**

Maryland Hospital Preventable Readmissions (MHPR)

- Research shows hospital readmissions are sometimes indicators of poor care or missed opportunities to better coordinate care, or poor quality care in the hospital.
- For Medicare, 18% of all Medicare patients discharged from the hospital have a readmission within 30 days of discharge, accounting for $15 billion in spending nationally (Medpac 2007);
- HSCRC's MHPR initiative will reward efforts that reduce the number of readmissions and that also increase the quality of care and decrease cost.
- Cost implications from analysis of 2007 readmission data using the 3M Potentially Preventable Readmission (PPR) methodology:
  - For readmission in 15 days, there were $430.4 million (5.3%) estimated associated charges
  - For readmissions in 30 days there were $656.9 million (8.0%) estimated associated charges

PPR Definition:

A Potentially Preventable Readmission (PPR) is a readmission that is clinically-related to the initial hospital admission that may have resulted from a deficiency in the process of care and treatment or lack of post discharge follow-up.

Maryland Hospital Preventable Readmissions

- HSCRC is currently working on additional analyses of PPR data
- Anticipate implementing the MHPR initiative in next year if a unique patient identifier can be developed to measure across hospital admissions.
- Consistent with the MHAC methodology, the MHPR initiative provides a system of payment incentives based on the added or averted resource use resulting from a hospital's actual number of readmissions versus a statewide target rate for each by APR DRG, by severity of illness (SOI) category.
- Patient groups excluded include HIV, multiple trauma, major malignancies, newborns.
- Adjustments needed for:
  - Age categories- 0-17, 18-64, 65 +
  - Mental health substance use status- split each age category "yes" /"no" MH/SU status
  - Medicaid status- 25% more likely to be readmitted
  - Out-of-state readmissions

Maryland Rates of PPRs

		PPR Rate
15 Day Readmission Time Interval Across Hospital Readmissions	**2006**	**6.74**
	2007	**6.74**
30 Day Readmission Time Interval Across Hospital Readmissions	**2006**	**9.89**
	2007	**9.81**

PPR rates consistent between two years

Maryland PPR Impact in 2007 for a 30 Day Readmission Time Interval

- 452,863 admissions were candidates for having a subsequent potentially preventable readmission
- 44,417 admissions were followed by one or more PPRs
- PPR rate is the percent of candidate admissions that were followed by one or more PPRs
  - PPR Rate 9.81 = 44,417 / 452,863

- 59,599 admissions were indentified as PPRs
- PPRs account for $656.9 million in charges and 303,865 hospital bed days

Admission-Readmission Revenue (ARR) Hospital Payment Constraint Program

- Hospitals may volunteer for the ARR pilot to begin April 1, 2011; 15 of the 46 acute care hospitals have expressed interest to date.
- Readmissions are defined as “all-cause readmissions” to the same hospital facility or health system within 30 days of the most recent discharge until across- hospital measurement can be done.
- ARR Hospitals may petition HSCRC for two potential modifications to these provisions (i.e., limit the definition of readmissions to Potentially Preventable Readmissions and/or applying to a readmission window of 15 days).
- Hospitals under will be held to a standard Charge per Episode (“CPE”) that would provide a combined revenue constraint for both initial admissions and subsequent readmissions, up to a limit of three readmissions.
- ARR provides a strong financial incentive to put in place the care coordination mechanisms/infrastructure necessary to reduce the potential for any patient to be readmitted and keep 100% of the savings associated with that outcome.
- It also begins to remove the current disincentives providers face to treat in a holistic and comprehensive fashion.
- Patients will stand to benefit because they will likely receive better overall care and avoid additional unwanted and costly acute hospitalizations.

ARR Simple Example (Illustration on Next Slide)

Assuming the hospital treats the same profile of patients in year 2 as in year 1:

- **Scenario 1 illustrates:**
  - a 30% reduction in readmissions,.
  - Under ARR, the hospital is guaranteed the $1,000,000 associated with their historical readmission performance (the original CPC of $10,000 x 1,000 historical base readmissions) or $100,000,000 in overall inpatient revenue absent changes in the number of admissions.
  - The hospital is rewarded and allowed to keep 100% of the savings it created. The savings is realized through an increase in the approved charge per case associated with other admissions.
  - This increase to the original $10,000 CPC (an increase of $345 per case in this example) is tantamount to an extra surcharge that provides a warranty to payers against having to pay for readmissions
- **Scenario 2 illustrates:**
  - a 30% increase in its readmissions.
  - Since the hospital is 100% at risk for readmissions, any increase in the number or readmissions (all other things being equal) will result in a reduction of $323 in their approved charge per case for all other cases.
  - The hospital must lower its average charge per case for each initial admission to avoid having payers pay for the increased level of readmissions.

ARR Charge Per Episode Example

Admission-Readmission Revenue (ARR) Example

Ground Hog's Year 2

Year 2 - reflects exact same profile of patients as Year 1 except for changes in Readmissions

Simplified Example

Line	Year1	Scenario 1 Hospital Reduces Readmissions by 333 Year2	Scenario 2 Readmissions Increase by 333 Year2
1 Admissions	10,000	9,667	10,333
2 Approved charge per case (beginning of year)	$10,000	$10,000	$10,000
3 Total Inpatient Revenue Generated	$100,000,000	$96,666,000	$103,333,000
4 Bonus (loss) for readmission performance		$3,334,000	($3,333,000)
5Total Inpatient Revenue Allowed to Keep	$100,000,000	100,000,000	
6Readmissions	1,000	667 RA's down by 333	1,333 RA's up by 333
7Pct readmitted	10.00%	6.90%	12.90%
8 Surcharge (Reduction) per case due to ARR performance		$345	($323)
9 Total Actual Charge per case Retained at end of year		$10,345 Avg. CPC needed to "Hit" Target Revenue	$9,677 Avg. CPC needed to "Hit" Target Revenue

Wide Variation in in Risk Adjusted PPR Rates
30 Day Statewide PPR Rate for 2007 : 9.81

Risk Adjusted PPR Rate	Number of Hospitals
4.0 - 4.9	2
5.0 - 5.9	0
6.0 - 6.9	1
7.0 - 7.9	3
8.0 - 8.9	6
9.0 - 9.9	14
10.0 - 10.9	14
11.0 - 11.9	8
12.0 - 12.9	2

Risk Adjusted = A_h/E_h*9.81**

****There have been significant challenges in inter-hospital measurement absent a unique patient identifier.**

Wide Variation in 30-Day Intra-Hospital Readmission Rates

- Range is 5% to 13%
- Statewide Average is 8%
- Excludes rehab, one day stays, same day transfers as measured by discharge codes, and died or left against medical advice at the initial admission in the chain.

Wide Variation 30-Day Intra- and Inter-Hospital Readmission Rates- Medicare

About CRISP

•Chesapeake Regional Information System for our Patients (CRISP)

•Maryland's state designated Health Information Exchange (HIE) and

•a 501(c)(3) corporation with a mandate to electronically connect all healthcare providers in the state.

•CRISP's infrastructure uses a hybrid-federated model that is supported by two technology vendors. Axolotl Corporation, an Ingenix company, provides the core infrastructure and Initiate Systems, an IBM company, provides the master patient index (MPI) technology.

Proposed New Data Fields

Field Name	HSCRC Current Requirement	HSCRC New Requirement
Name, First	No	**Yes**
Name, Middle Initial	No	**Yes***
Name, Last	No	**Yes**
Date of Birth	**Yes**	**Yes**
Gender	**Yes**	**Yes**
Street Address	No	**Yes**
City	No	**Yes**
State	No	**Yes**
Zip code	**Yes**	**Yes**
Social Security Number	No	**Yes***
Medical Record Number (MRN)	**Yes**	**Yes**
Date of Admission	**Yes**	**Yes**
Date of Discharge	**Yes**	**Yes**

Yes*- Required Only if data provided by patient

Matching CRISP and HSCRC Data for Readmission Analysis

Using the patient information submitted by the hospital, CRISP will create a master patient index (MPI) for each unique patient using a probabilistic matching algorithm.
CRISP will be required to provide reports to the HSCRC at the patient level which will include at least the following fields:

- Enterprise MPI Number
- Hospital/Facility ID
- Medical Record Number
- Date of Admission
- Date of Discharge

The exact list of fields that will be required to match the report from CRISP to HSCRC's data set will be determined based on the analysis of a pilot data set. HSCRC may require CRISP to use an HSCRC algorithm to generate a supplemental HSCRC ID for the purposes of matching against other hospital reported data.

Timeline

REGULATION PROMULGATION

•4/15 - Commission Meeting: Final Staff Policy Recommendation presented

•4/15- Regulation for Proposed Action with in Maryland Register with Comment Period thru June 20th

•7/6 -Commission Meeting Regulation Ripe for Final Action

•9/1- Regulation Becomes Effective

HOSPITALS ESTABLISH CONNECTIVITY WITH CRISP

•June through August

In Conclusion

- Monitoring across-hospital readmissions is an important and needed activity for HSCRC to undertake

- HSCRC proposes leveraging the work of the Health Information Exchange to develop a unique patient ID

- DISCUSSION