



Minnesota Hospital Association

Potentially Preventable Readmissions

Mark Sonneborn



February 2012

Series Objectives

At the conclusion of this learning activity, participants will be able to:

- Describe the PPR methodology
- Describe how to interpret the PPR reports
- Describe how to use PPR data to monitor overall progress on reducing avoidable readmission.

Disclosure

Mark Sonneborn and Kathy Cummings have no relevant personal financial relationships to disclose and do not intend to discuss off-label or investigational uses of commercial products or devices.

- What are PPRs?
 - 3M software
 - Based on MHA administrative data
 - Measures readmissions to the same facility only
 - ~ 22% go to different facilities, per literature

- How to interpret the reports

General Guidelines for PPRs

| | | Readmission | |
|-------------------|--|--|--|
| Initial Admission | Medical | Surgical | |
| Medical | PPR except if clearly unrelated acute events | Not PPR unless initial medical diagnosis clearly should have resulted in surgery | |
| Surgical | PPR except conditions clearly unrelated | PPR if related to prior surgery | |

PPR Global Exclusions

- If any of the following conditions apply to the initial admission, a subsequent readmission is globally excluded from consideration as a PPR
 - Admissions for which follow-up care is intrinsically extensive and complex
 - Major or metastatic malignancies treated medically
 - Multiple trauma, burns
 - Discharge status indicates limited hospital & provider control
 - Left against medical advice
 - Transferred to another acute care hospital
 - Neonates
 - Other exclusions
 - Specific eye procedures and infections
 - Cystic fibrosis with pulmonary diagnoses
 - Died – not included as candidate initial admissions (denominator)

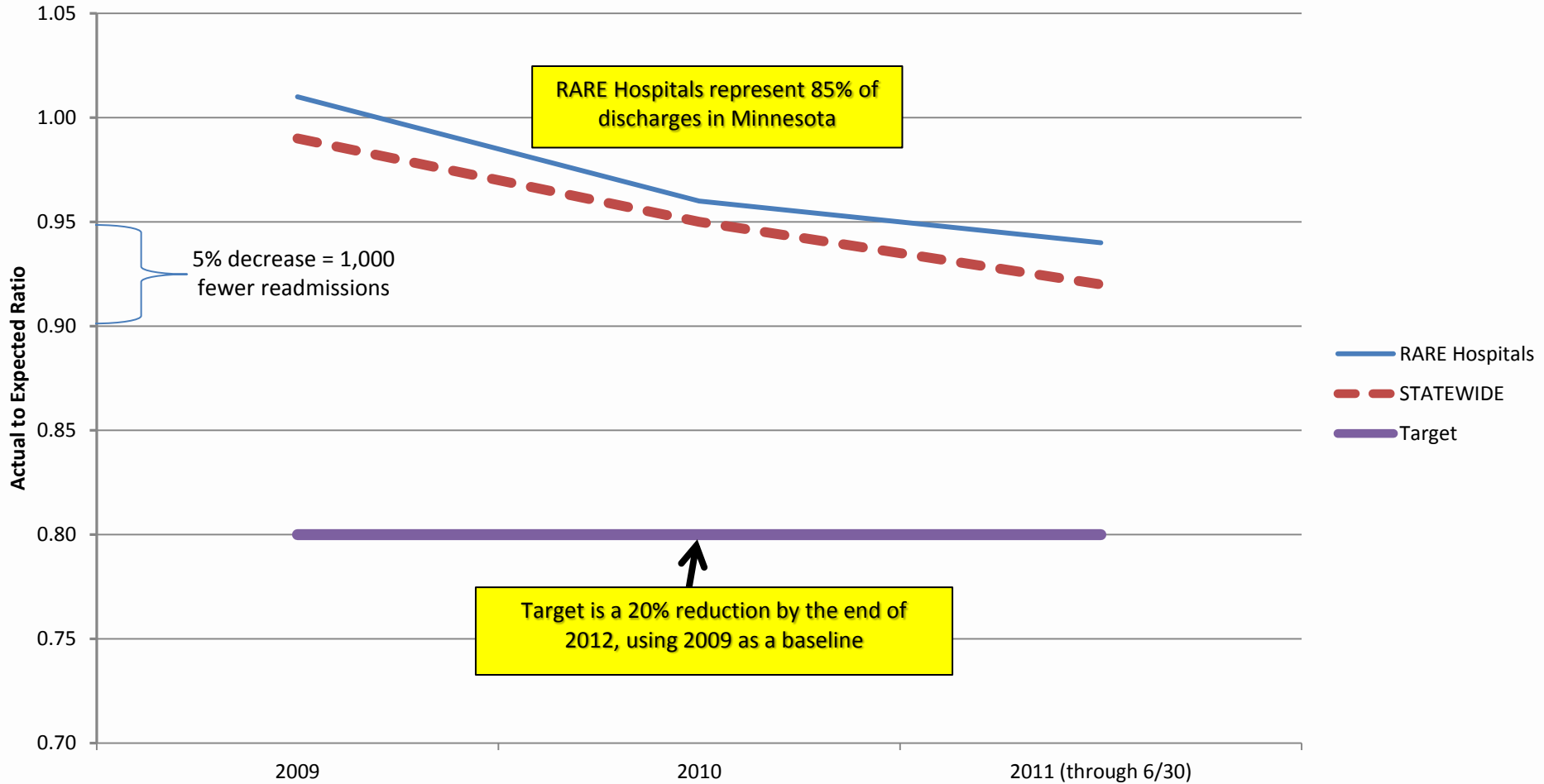
Clinical Factors make a readmission not potentially preventable

- No clinical relationship to prior discharge
 - Cholecystectomy two weeks after hip replacement
- Discharge status of prior discharge
 - AMA and transferred to another acute care hospital
- Type of prior discharge
 - Follow-up care is intrinsically complex and extensive
 - Metastatic malignancies, Multiple trauma, Burns
- Longer interval between discharge and readmission
 - Long time intervals (>30 days) reduce confidence that readmission is causally linked to the prior discharge

Non- PPR Reasons

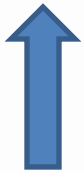
| NON PPR Reasons | |
|-----------------|-------------------------------------|
| NC | Not Clinically related |
| T | Trauma |
| C | Catastrophic |
| NP | Clinically related, not preventable |
| P | Probably planned readmission |
| E | Error |
| OB | Obstetrics |
| TR | Transplants |
| M | Malignancy |

Potentially Preventable Readmissions in Minnesota, 2009 - 2Q 2011



How to interpret PPR results

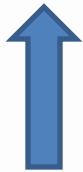
| PPRs | At Risk Cases | Actual Rate | Expected Rate | Expected PPRs | Target PPRs | Difference from Target | A/E Ratio |
|------|---------------|-------------|---------------|---------------|-------------|------------------------|-----------|
| 172 | 3,820 | 4.5 | 5.0** | 192.3 | 153.9 | 18.1 | 0.90 |



PPRs is the actual number of PPRs detected in a 12 month period

How to interpret PPR results

| PPRs | At Risk Cases | Actual Rate | Expected Rate | Expected PPRs | Target PPRs | Difference from Target | A/E Ratio |
|------|---------------|-------------|---------------|---------------|-------------|------------------------|-----------|
| 172 | 3,820 | 4.5 | 5.0** | 192.3 | 153.9 | 18.1 | 0.90 |



“At Risk Cases” is the denominator – it’s all cases minus the exclusions mentioned before

How to interpret PPR results

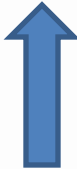
| PPRs | At Risk Cases | Actual Rate | Expected Rate | Expected PPRs | Target PPRs | Difference from Target | A/E Ratio |
|------|---------------|-------------|---------------|---------------|-------------|------------------------|-----------|
| 172 | 3,820 | 4.5 | 5.0** | 192.3 | 153.9 | 18.1 | 0.90 |



Actual Rate is PPRs divided by At Risk Cases

How to interpret PPR results

| PPRs | At Risk Cases | Actual Rate | Expected Rate | Expected PPRs | Target PPRs | Difference from Target | A/E Ratio |
|------|---------------|-------------|---------------|---------------|-------------|------------------------|-----------|
| 172 | 3,820 | 4.5 | 5.0** | 192.3 | 153.9 | 18.1 | 0.90 |



Expected Rate – this is a unique number for every hospital based on their patient population.

Generally, hospitals with more severely ill patients will have higher expected rates.

How to interpret PPR results

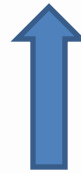
| PPRs | At Risk Cases | Actual Rate | Expected Rate | Expected PPRs | Target PPRs | Difference from Target | A/E Ratio |
|------|---------------|-------------|---------------|---------------|-------------|------------------------|-----------|
| 172 | 3,820 | 4.5 | 5.0** | 192.3 | 153.9 | 18.1 | 0.90 |



One star is statistically “worse than expected” (or higher); Two stars is “no different than expected”; Three stars is “better than expected” (or lower)

How to interpret PPR results

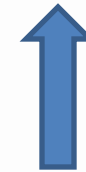
| PPRs | At Risk Cases | Actual Rate | Expected Rate | Expected PPRs | Target PPRs | Difference from Target | A/E Ratio |
|------|---------------|-------------|---------------|---------------|-------------|------------------------|-----------|
| 172 | 3,820 | 4.5 | 5.0** | 192.3 | 153.9 | 18.1 | 0.90 |



Expected PPRs is the Expected Rate times the At Risk Cases

How to interpret PPR results

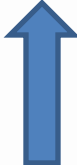
| PPRs | At Risk Cases | Actual Rate | Expected Rate | Expected PPRs | Target PPRs | Difference from Target | A/E Ratio |
|------|---------------|-------------|---------------|---------------|-------------|------------------------|-----------|
| 172 | 3,820 | 4.5 | 5.0 ** | 192.3 | 153.9 | 18.1 | 0.90 |



Target PPRs is 20% less than Expected PPRs

How to interpret PPR results

| PPRs | At Risk Cases | Actual Rate | Expected Rate | Expected PPRs | Target PPRs | Difference from Target | A/E Ratio |
|------|---------------|-------------|---------------|---------------|-------------|------------------------|-----------|
| 172 | 3,820 | 4.5 | 5.0** | 192.3 | 153.9 | 18.1 | 0.90 |



Difference from Target is your actual PPRs (first column) minus the Target PPRs.

The goal for this hospital is to reduce by 18 PPRs per year.

Actual to Expected Ratio

| Actual Rate | Expected Rate | A/E Ratio |
|-------------|---------------|-----------|
| 4.5 | 5.0 | 0.90 |



An A/E Ratio above 1.0 is more than expected; below is less than expected.

The goal for the RARE campaign is to get the A/E ratio down to 0.80 (statewide)

Detail Reports

- Acct #, Med Rec #
- Admit, Discharge Date
- APR-DRG, APR-DRG Severity of Illness
 - ❑ This is the level of statewide norms
- PPR days
 - ❑ Days between discharge and admission
- Record Type
 - ❑ 2-letter codes – **THIS IS THE KEY FIELD**
- Principal Diagnosis
- Discharge Status

Using Detail Reports

Find Your A/E Ratio by Type of Case

- Use the “norms file” on MHA portal to calculate expected PPR rates
 - Statewide expected PPR rates at APR-DRG severity level
 - Add these norms to your detail file by severity level
- Sort by APR-DRG
- Calculate actual and expected PPR rates by APR-DRG (next slides show how)

Calculating PPR Rates Using Detail Reports

- Using the “record type” field, calculate the actual PPR rate by using this formula:
 - $IA + IR / IA + IR + TR + OA$
 - Initial Admission (IA), Initial Admission-trauma (IR), Other Trauma Admission (TR), Only Admission-alive (OA)
 - Where’s readmissions (RA)? The definition of IA is that there is a corresponding RA
 - All other record types are excluded
 - Issues – the first month of data may have IAs in the previous data file; last month misses RAs in the next month
 - E.g. January RAs had December IAs

Calculating PPR Rates Using Detail Reports

- To get the expected PPR rate:
 - Look at these records: IA, IR, TR, and OA
 - The average of the norms attached to those records is the expected PPR rate
- A/E Ratio is Actual divided by Expected
- Look for APR-DRGs with high A/E Ratios as opportunities for improvement
 - Principal diagnosis is another potential analysis

Quarterly Progress Report

- What have you accomplished this past quarter to reduce readmissions at your facility?
- What challenges has your facility encountered with reducing readmissions this past quarter?



Quarterly Progress Report Questions to Consider

- What percent reduction in readmissions did your facility have this past quarter? Based on the most recent PPR data, where is your facility with regard to your goal?
- What are your team's next steps for the project?
- What do you need help/assistance with from the RARE team?

- Due Date: Two weeks after receiving it
-Please send your Rare Data to your Rare Consultant

Questions

- Mark Sonneborn,
msonneborn@mnhospitals.org
- Kathy Cummings,
kcummings@icsi.org

Next Webinar

Topic:

Involving Patients and Families
In Reducing Avoidable Readmissions

Date: February 28, 2012

Future Topics:

To suggest future topics for this series,
Reducing Avoidable Readmissions Effectively “RARE”
Networking Webinars, Contact: kcummings@icsi.org