Healthcare Informatics Executive Summit 2012

Readmissions and the Medical Home: Re-Visioning Care Management

Marriott Orlando World Center May 8. 2012 9:30 – 10:45 AM E07 James L. Holly, MD
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ACO Integrator: Exercise in Accountability

The following discussion addresses how SETMA which participates in Medicare Advantage capitation, Patient-Centered Medical Home and in a federally qualified ACO, addresses one of the biggest challenges to success which is decreasing preventable readmissions to the hospital.

Preventable Hospital Readmissions Public Policy

- Care planning that begins with an assessment at admission — nurse care managers representing the insurer, the hospital, and the primary providers must collaborate.
- Clear discharge instructions with particular attention to medication management — incorporating the input of the inpatient and outpatient pharmacist has proven effective.
- Discharge to a proper setting of care Hospital case management screenings should determine rehab/skilled nursing requirements before discharge to outpatient care.

Preventable Hospital Readmissions Public Policy

- Timely physician follow-up visits with primary care provider and appropriate specialists; preferably the appointment should be scheduled prior to discharge.
- Appropriate use of palliative care and end-of-life planning should be built into the hospital discharge process. Palliative specialists and hospice expertise need to be integrated components of post-hospital planning.

SETMA's Hospital Discharges

	Total Dis	charge	es	Readmission Ra	ate (Days)
				30	60
•	2009	_	2995		
•	2010	_	3001	16.5%	21.9%
•	2011	_	4194	17.4%	24.6%
•	2012 *	_	946		
•	Total	_	1105		

^{*}Jan, Feb 2012

CMS Fee For Service Medicare Study – Medical Homes vs. Benchmarks

					Potentially	
	30 Day		Two Week (%)		Avoidable	
	Readmission (%)	Benchmark (%)	Follow-Up	Benchmark (%)	Inpatient Stays (\$)	Benchmark (\$)
SETMA 1	25.7	47.7	57.8	47.7	1766.00	3290.00
SETMA 2	17.5	30.9	56.5	40.4	962.00	2259.00
SETMA West	20.0	14.4	56.9	62.0	731.00	300.00

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Care Transition Audit

 Quarterly and annually, SETMA audits each provider's performance on these measures and publishes that audit on our website under "Public Reporting," along with over 200 other quality metrics which we track routinely.

• The following is the care transition audit results by provider name for 2011.

Care Transition Audit



Care Transition Audit (Section A)

Discharge Date(s): 01/01/2012 through 03/31/2012

Provider	Reason for Hospitalization	Discharge Diagnoses	Medications Updated Reconciled	Documentation of Allergies	Cognitive Status	Pending Test Results	Major Procedures	Follow-Up Care Plan	Progress to Goals Response to Treatment
Anwar	97.4%	99.1%	94.9%	98.3%	98.3%	97.4%	98.3%	96.6%	97.4%
Aziz	98.9%	100.0%	96.6%	100.0%	99.4%	98.9%	99.4%	98.9%	98.9%
Curry	100.0%	96.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Deiparine	97.9%	98.7%	95.7%	98.3%	99.1%	98.3%	98.7%	97.0%	97.9%
Gulfcoast	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Halbert	100.0%	100.0%	98.6%	98.6%	100.0%	100.0%	98.6%	100.0%	98.6%
Holly	97.6%	99.5%	96.7%	98.6%	99.0%	97.6%	97.1%	97.1%	98.1%
Leifeste	99.5%	100.0%	99.5%	99.5%	99.5%	100.0%	98.9%	99.5%	99.5%
Murphy	100.0%	100.0%	98.6%	98.6%	100.0%	100.0%	100.0%	100.0%	100.0%
Palang	100.0%	100.0%	100.0%	100.0%	98.6%	100.0%	98.6%	100.0%	98.6%
Qureshi	98.3%	100.0%	93.9%	98.3%	98.3%	97.4%	97.4%	97.4%	97.4%
Shepherd	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Thomas	97.7%	100.0%	93.7%	99.5%	99.5%	97.7%	98.2%	97.7%	97.7%
Vardiman	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
SETMA Totals :	98.5%	99.6%	96.5%	99.0%	99.2%	98.5%	98.5%	98.1%	98.3%

Care Transition Audit

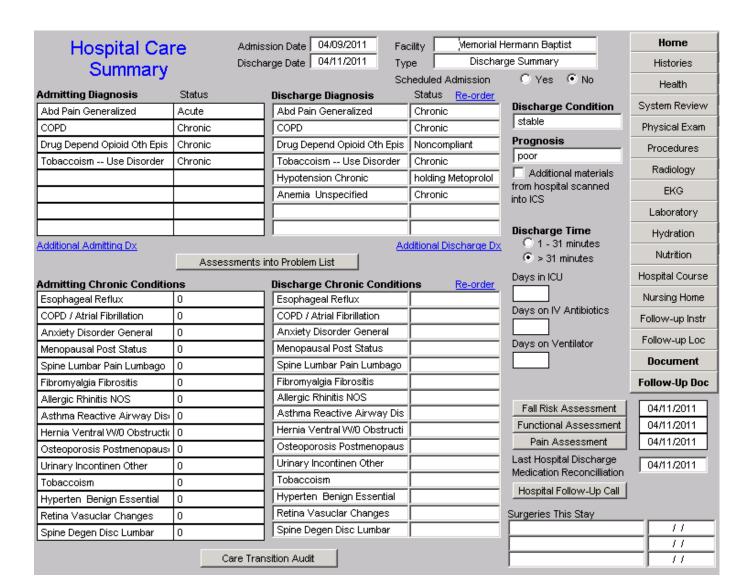


Care Transition Audit (Section B)

Discharge Date(s): 01/01/2012 through 03/31/2012

Provider	Advanced Directives	Reason for Discharge	Physical Status	Psychosocial Status	Community Resources Coordinated Referrals	Medication List	Discharge Orders	Follow-Up Instructions	Discharge Materials
Anwar	94.9%	97.4%	98.3%	97.4%	95.7%	94.0%	94.0%	94.0%	94.0%
Aziz	96.6%	98.9%	99.4%	98.9%	94.9%	96.1%	96.1%	96.1%	94.9%
Curry	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Deiparine	95.7%	97.9%	99.1%	98.7%	94.8%	94.8%	94.8%	94.8%	94.4%
Gulfcoast	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Halbert	98.6%	98.6%	100.0%	100.0%	95.8%	98.6%	97.2%	95.8%	93.0%
Holly	96.7%	98.1%	99.0%	98.6%	96.2%	94.8%	94.8%	94.8%	94.8%
Leifeste	98.9%	100.0%	99.5%	99.5%	97.3%	98.9%	98.9%	98.9%	98.4%
Murphy	98.6%	100.0%	100.0%	100.0%	97.1%	98.6%	98.6%	97.1%	97.1%
Palang	100.0%	100.0%	98.6%	100.0%	97.3%	100.0%	100.0%	98.6%	98.6%
Qureshi	93.9%	98.3%	98.3%	98.3%	94.8%	92.2%	92.2%	92.2%	92.2%
Shepherd	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Thomas	93.7%	97.3%	99.5%	98.2%	97.3%	93.2%	93.2%	92.8%	93.2%
Vardiman	100.0%	100.0%	100.0%	100.0%	92.9%	100.0%	100.0%	100.0%	100.0%
SETMA Totals :	96.4%	98.5%	99.2%	98.8%	96.1%	95.7%	95.6%	95.4%	95.0%

Hospital Care Summary and Post Hospital Plan of Care and Treatment Plan



Hospital Care Summary and Post Hospital Plan of Care and Treatment Plan

Hospital Care Summary completed at the time the patient is discharged from the hospital:

<u>Year</u>	Completion (%)
2010	98.8
2011	97.7
2012*	92.1
Cumulative	97.7

^{*} January 1, 2010 to date



Hospital Discharge Analysis

Section I - Admissions and Follow-ups

Prompt Selections		
	Selection Group 1	Selection Group 2
Beginning Discharge Date:	Jan 1, 2011	Jan 1, 2011
Ending Discharge Date:	Dec 31, 2011	Dec 31, 2011
Include Readmits:	Within 30 days	Not Within 30 days
Ethnicity:	All	All
Financial Class:	All	All
Zip Code:	All	All
Age:	All	All
Gender:	Both	Both
Living Arrangement:	None Selected	None Selected
Encounters for this Selection:	679	3226

	Selection Group 1	Selection Group 2
Readmission		
Average Days:	11.81	
Mode:	1.00	
Previous Hospitilization		
Average Days:	9.39	10.24
Mode:	2.00	2.00
Follow-up (Clinic Visit)		
Average Days:	6.65	18.14
Follow-up Visit (%):	37.85%	68.04%
Follow-up (Call)		
Call Completed (%):	74.67%	77.53%
Unable to Complete (%):	6.48%	6.91%



Hospital Discharge Analysis

Section II - Patient Measures

Prompt Selections		
	Selection Group 1	Selection Group 2
Beginning Discharge Date:	Jan 1, 2011	Jan 1, 2011
Ending Discharge Date:	Dec 31, 2011	Dec 31, 2011
Include Readmits:	Within 30 days	Not Within 30 days
Ethnicity:	All	All
Financial Class:	All	All
Zip Code:	All	All
Age:	All	All
Gender:	Both	Both
Living Arrangement:	None Selected	None Selected
Encounters for this Selection:	679	3226

	Selection Group 1	Selection Group 2
Ancillary Services		
Hospice:	1.62%	1.36%
Home Health:	4.27%	2.82%
Physical Therapy:	0.15%	0.25%
Case Management:	0.00%	0.00%
Assisted Living:	0.44%	0.37%
Nursing Home:	21.35%	16.24%
Living Alone		
Patient Lives Alone:	1.62%	2.39%
Barriers to Care		
Financial Barriers:	5.60%	4.90%
Social Barriers:	5.30%	6.54%
Assistive Device:	12.96%	9.02%
Habits		
Tobacco Use:	21.35%	23.47%
Alcohol Use:	10.16%	12.24%
Illicit Drug Use:	2.50%	1.64%
Disease - Not in Compliance		
Diabetic:	40.95%	39.20%
Hyperlipidemia:	23.60%	28.43%
Hypertension:	23.77%	22.72%
CHF:	89.45%	88.51%
Care Transition Audit		
Transition Audit Completed:	94.85%	94.17%



Hospital Discharge Analysis

Section III - Patient BMI and Changes Made

Prompt Selections		
	Selection Group 1	Selection Group 2
Beginning Discharge Date: Ending Discharge Date:	Jan 1, 2011 Dec 31, 2011	Jan 1, 2011 Dec 31, 2011
Include Readmits: Ethnicity: Financial Class: Zip Code: Age: Gender: Living Arrangement: Encounters for this Selection:	Within 30 days All All All All Both None Selected	Not Within 30 days All All All All Both None Selected

	Selection Group 1	Selection Group 2
Body Mass Index		
Less than 18.5:	6.04%	6.82%
Between 18.5 and 25:	24.59%	23.93%
Between 25 and 30:	28.13%	25.26%
Between 30 and 35:	15.46%	18.07%
Between 35 and 40:	9.43%	8.18%
Greater than 40:	7.81%	8.65%



Hospital Discharge Analysis

Section IV - Readmission Diagnoses

Prompt Selections		
	Selection Group 1	Selection Group 2
Beginning Discharge Date:	Jan 1, 2011	Jan 1, 2011
Ending Discharge Date:	Dec 31, 2011	Dec 31, 2011
Include Readmits:	Within 30 days	Not Within 30 days
Ethnicity:	All	All
Financial Class:	All	All
Zip Code:	All	All
Age:	All	All
Gender:	Both	Both
Living Arrangement:	None Selected	None Selected
Encounters for this Selection:	679	3226

Selection Group 1

Top 5 Principle Diagnoses of Readmission

Rank	Readmission Diagnoses	Description
1	78650	Symp resp unsp chest pain
2	78605	Shortness Of Breath
3	486	Pneumonia organism NOS
4	78097	Altered Mental Status
5	5789	Hem gi tract

Selection Group 2

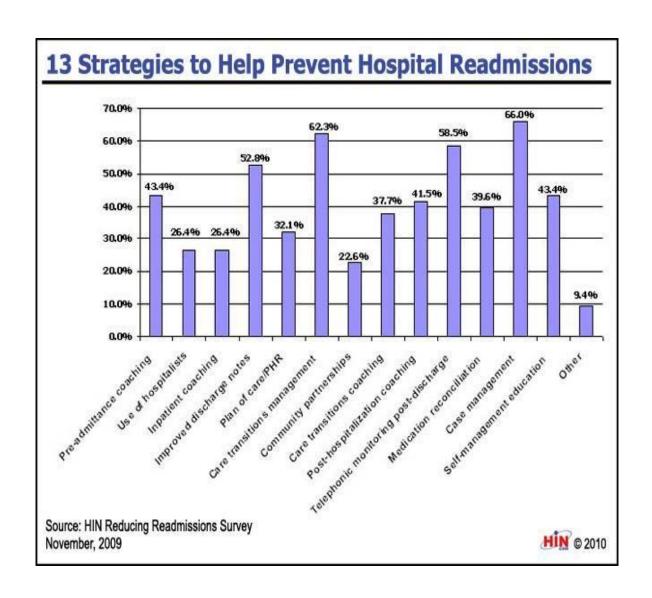
Rank	Readmission Diagnoses	Description
1	78650	Symp resp unsp chest pain
2	78605	Shortness Of Breath
3	7802	Gen symp syncope/collapse
4	2859	Anemia unsp
5	486	Pneumonia organism NOS

Top 5 Supporting Diagnoses of Readmission

Rank	Readmission Diagnoses	Description
1	4011	Essential hypertension benig
2	4019	Essential hypertension unsp
3	496	Chronic airway obstruction NEC
4	2859	Anemia unsp
5	25040	Diab mellitus ren manif typ II

Rank	Readmission Diagnoses	Description
1	4019	Essential hypertension unsp
2	4011	Essential hypertension benig
3	25040	Diab mellitus ren manif typ II
4	2859	Anemia unsp
5	41400	Coron athero unsp typ ves nati

Hospital Readmission Strategies



All Readmissions Are Not Preventable

"Critical to the analysis of readmissions is appropriateness. Some readmissions may be unavoidable. Other readmissions may be avoidable, but nevertheless occur, due to a *lack* of follow-up care coordination or some other problem. Obtaining a readmissions rate of zero is not feasible and may even indicate poor quality care, as many readmissions are medically appropriate due to an unavoidable change in condition or a new condition. For example, physicians may provide patient centered care by discussing early discharge with patients, with the mutual understanding that readmission may be necessary."

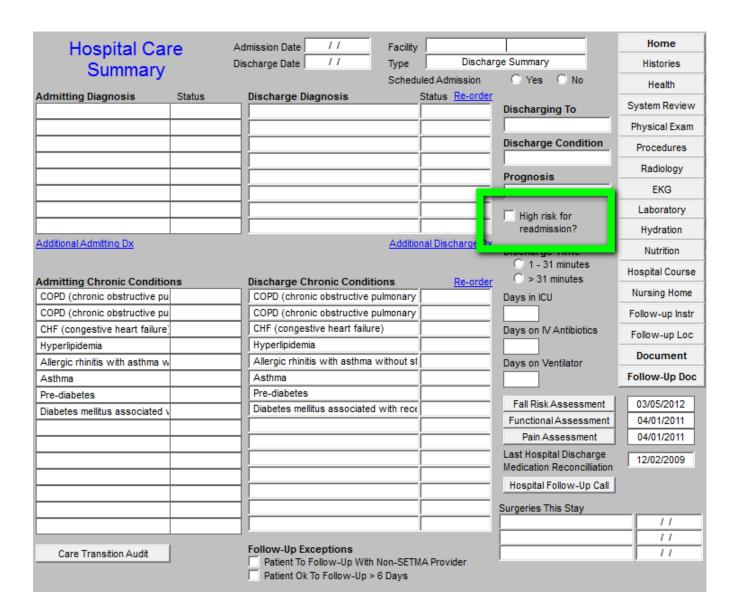
Risk of Readmissions

Recent studies continue to suggest the risk of readmission can be quantified based on a patient's risk factors and therefore are an important tool in establishing evidence-based best practices.

Risk of Readmissions

- The Journal of Hospital Medicine recently published a pair of studies in which researchers analyzed data from California and Austria to determine the risk factors of hospital readmission.
 - Medicare
 - Medicaid
 - Black Race
 - Inpatient use of narcotics
 - Inpatient use of corticosteroids
 - Cancer with and without metastasis
 - Renal Failure
 - Congestive Heart Failure
 - Weight loss

Risk of Readmissions



When a person is identified as a high risk for readmissions, SETMA's Department of Care Coordination is alerted. The following ten steps are then instituted:

- Hospital Care Summary and Post Hospital Plan of Care and Treatment Plan is given to patient, care giver or family member.
- 2. The post hospital, care coaching call, which is done the day after discharge, goes to the top of the queue for the call made the day after discharge by SETMA's Care Coordination Department. It is a 12-30 minute call.

- 3. Medication reconciliation is done at the time of discharge, is repeated in the care coordination call the day after discharge and is repeated at the follow-up visit in the clinic.
- 4. MSW makes a home visit for need evaluation, including barriers and social needs for those who are socially isolated.
- 5. A clinic follow-up visit within three days for those at high risk for readmission.

- 6. A second care coordination call in four days.
- 7. Plan of care and treatment plan discussed with patient, family and/or care giver at EVERY visit and a written copy with the patient's reconciled medication list, follow-up instructions, state of health, and how to access further care needs.
- 8. MSW documents barriers to care and care coordination department designs a solution for each.

 The patient's end of life choices and code status are discussed and when appropriate hospice is recommended.

10. Referral to disease management is done when appropriate, along with telehealth monitoring measures.

 Currently, SETMA's determination of whether patients are high risk for readmissions is intuitively determined, i.e., at discharged based on experience and judgment, a patient is designated as potentially high risk for readmission. SETMA is designing a "predictive model" for identifying patients at high risk for readmissions and instituting the above plan for interdicting a readmission. This is an attempt to quantify the most effective opportunities for decreasing preventable readmissions.

 There is a significant body of science associated with "predictive modeling." It is clear that tradition models of care delivery will not "work" in a sustainable program for decreasing readmissions. Traditional disease management will not result in changing the patterns of care. In a January/February, 2012 Professional Care Management Journal article, the following abstract addressed changes needed to affect a decrease in preventable readmissions:

"Purpose/Objectives: The move to the Accountable Care Organization model of care calls for broad-sweeping structural, operational, and cultural changes in our health care systems. The use of predictive modeling as part of the discharge process is used as a way to highlight just one of the common processes that will need to be transformed to maximize reimbursement under the Accountable Care Organization model. The purpose of this article is to summarize what has been learned about predictive modeling from the population health management industry perspective, to discuss how that knowledge might be applied to discharge planning in the Accountable Care Organization model of patient care, and then to outline how the Accountable Care Organization environment presents various challenges, opportunities, and implications for the case management role."

- "Findings/Conclusions: The development of predictive models to identify patients at risk for readmission and can positively impact the discharge planning process by lowering readmission rates. Examples of the structural, operational, cultural, and case management role changes necessary to maximize the benefits of an Accountable Care Organization are critical."
- "Implications for Case Management Practice: There is a growing need for advanced practice nurses to fill the leadership, resource management, analytical, informatics-based, and organizational development roles that are sorely needed to advance the Accountable Care Organization model of care. Case managers are well-positioned to lend their expertise to the development efforts, but they will need to be educationally prepared for the many advanced practice roles that will emerge as our nation evolves this new system of health care delivery."

National Priorities Partnership

Focus in care coordination by NPP are the links between:

- Care Transitions ...continually strive to improve care by ... considering feedback from all patients and their families... regarding coordination of their care during transitions between healthcare systems and services, and...communities.
- Preventable Readmissions ...work collaboratively with patients to reduce preventable 30-day readmission rates.

Hospital Care Summary

Once the Care Transition issues are completed, The Hospital Care-Summary-and-Post- Hospital-Plan-of Care-and Treatment-Plan document is generated and printed. It is given to the patient and/or to the patient's family and to the hospital.

The following picture is a portrayal of the "plan of care and treatment plan" which is like the "baton" in a relay race.



Firmly in the provider's hand,
the baton – the care and treatment plan –
must be confidently and securely grasped by the patient,
if change is to make a difference,
8,760 hours a year.

"The Baton" is the instrument through which responsibility for a patient's health care is transferred to the patient or family. Framed copies of this picture hang in the public areas of all SETMA clinics and a poster of it hangs in every examination room. The poster declares:

Firmly in the provider's hand --The baton -- the care and treatment plan Must be confidently and securely grasped by the patient, If change is to make a difference 8,760 hours a year.

The poster illustrates:

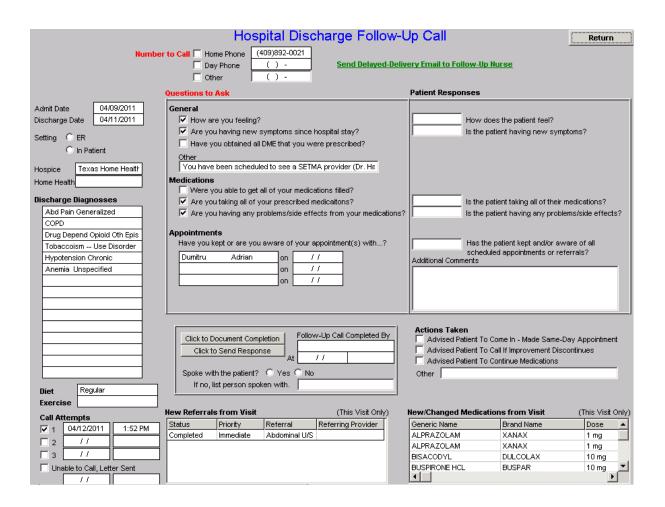
- 1. That the healthcare-team relationship, which exists between the patient and the healthcare provider, is key to the success of the outcome of quality healthcare.
- 2. That the plan of care and treatment plan, the "baton," is the engine through which the knowledge and power of the healthcare team is transmitted and sustained.
- 3. That the means of transfer of the "baton," which has been developed by the healthcare team, is a coordinated effort between the provider and the patient.

- 4. That typically the healthcare provider knows and understands the patient's healthcare plan of care and the treatment plan, but without its transfer to the patient, the provider's knowledge is useless to the patient.
- 5. That the imperative for the plan the "baton" is that it must be transferred from the provider to the patient, if change in the life of the patient is going to make a difference in the patient's health.

6. That this transfer requires that the patient "grasps" the "baton," i.e., that the patient accepts, receives, understands and comprehends the plan, and that the patient is equipped and empowered to carry out the plan successfully.

7. That the patient knows that of the 8,760 hours in the year, he/she will be responsible for "carrying the baton," longer and better than any other member of the healthcare team.

After the care transition audit is completed and the document is generated, the provider completes the Hospital-Follow-up-Call document:



- During that preparation of the "baton," the provider checks off the questions which are to be asked the patient in the follow-up call.
- The call order is sent to the Care Coordination Department electronically. The day following discharge, the patient is called.
- The call is the beginning of the "coaching" of the patient to help make them successful in the transition from the inpatient setting.

Preventing Hospital Readmission

- 1. The problem of readmissions will not be solved by more care: more medicines, more tests, more visits, etc.
- 2. The problem will be solved by redirecting the patient's attention for a safety net away from the emergency department.
- 3. The problem will be solved by our having more proactive contact with the patient.

Preventing Hospital Readmission

4. The problem will be solved by more contact with the patient and/or care giver in the home: home health, social worker, provider house calls.

5. The problem will be solved by the patient and/or care giver having more contact electronically (telephone, e-mail, web portal, cell phone) with the patient giving immediate if not instantaneous access.