REDUCING READMISSIONS: SMALL & RURAL HOSPITALS

Insights from 2015 to inform strategies for 2016

Amy E. Boutwell, MD, MPP
Small and Rural Hospital Conference
November 11, 2015

COLLABORATIVE
HEALTHCARE STRATEGIES

Agenda

- Foundation: know your data, listen to “why”
- Success factors: multi-faceted portfolio of strategies
- New practices: strategies from small & rural hospitals

FOUNDATION: DATA, LISTEN TO “WHY”

Use data and patient/caregiver interviews to guide work

Insights from Data Analysis – NC

2014 Data	Medicare	Medicaid	Other	Total
Total discharges*	96,153	17,565	43,403	157,120
% total discharges by payer	61%	11%	28%	100%
Total readmissions	3,098	15,930	4,244	23,272
% readmissions by payer	68%	13%	18%	100%
Readmission rate	16.6%	17.6%	9.8%	14.8%
Behavioral health				18.5%
High Utilizers readmit rate				43%
High Utilizers %readmits				40%
Top diagnoses and rates	HF (25%) Sepsis (17%) COPD (20%) Psychosis (18%)	Psychosis DM (30%) COPD (22%) Sepsis (22%)		HF (24%) Psychosis (14%) Sepsis (17%) COPD (19%)

*44 small & rural NC Hospital; Adult = 18+ non-OB

Courtesy North Carolina Hospital Association

Insights from Data Analysis – SC

2014 Data	Medicare	Medicaid	Other	Total
Total discharges*	47971	6455	24,072	78,498
% discharges by payer	61%	8%	30%	100%
Total readmissions	8,267	1,323	2,830	12,420
% readmissions by payer	66%	11%	23%	100%
Readmission rate	`7%	20%	12%	15.8%
Behavioral health				18.5%
High Utilizers readmit rate				43%
High Utilizers %readmits				42%
Top diagnoses and rates	Sepsis (20%) ARF (20%) PNA (16%) COPD (22%)	Sickle (44%) Sepsis (18%) COPD (29%) Pancreatitis		Sepsis (19%) ARF (19%) PNA (15%) COPD (21%)

*44 small & rural NC Hospital; Adult = 18+ non-OB

Courtesy North Carolina Hospital Association

H·CUP HEALTHCARE COST AND UTILIZATION PROJECT

AHRQ Agency for Healthcare Research and Quality

STATISTICAL BRIEF #172

April 2014

Conditions With the Largest Number of Adult Hospital Readmissions by Payer, 2011

Anika L. Hines, Ph.D., M.P.H., Marguerite L. Barrett, M.S., H. Joanna Jiang, Ph.D., and Claudia A. Steiner, M.D., M.P.H.

Methods:
- Used CCS groupers
- Included OB

Top 10 Medicaid Dx:

1. Mood disorder
2. Schizophrenia
3. Diabetes complications
4. Comp. of pregnancy
5. Alcohol-related
6. Early labor
7. CHF
8. Sepsis
9. COPD
10. Substance-use related

Top 10 Medicare Dx:

1. CHF
2. Sepsis
3. Pneumonia
4. COPD
5. Arrythmia
6. UTI
7. Acute renal failure
8. AMI
9. Complication of device
10. Stroke

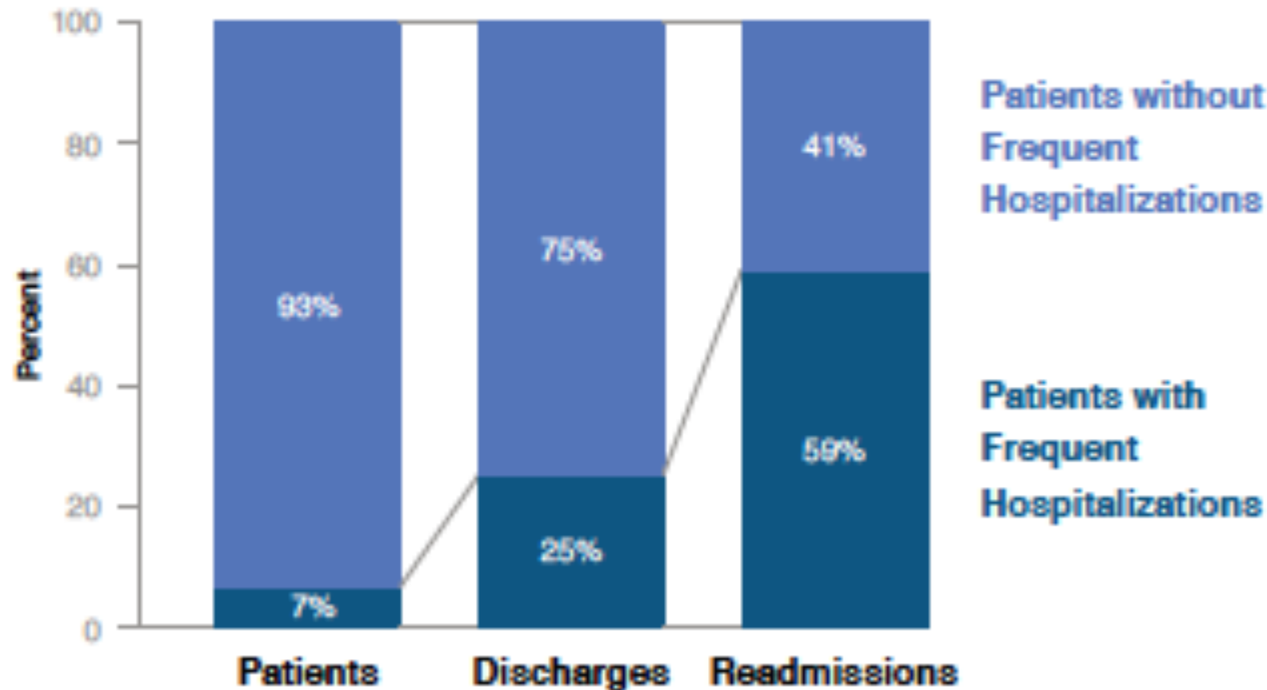
Figure 1. All-cause 30-day readmission rates for congestive heart failure by age and insurance status, U.S. hospitals, 2010

Age (in years)	Percent readmitted
1-17	--
18-44	26.1
45-64	25.7
65+	24.2

Expected primary payer	Percent readmitted
Medicare	25.0
Medicaid	30.1
Privately insured	19.5
Uninsured	17.1

Source: Weighted national estimates from a readmissions analysis file derived from the Healthcare Cost and Utilization Project (HCUP) State Inpatient Databases (SID), 2010, Agency for Healthcare Research and Quality (AHRQ).

-- Indicates too few cases to report.



7% people – 25% hospitalizations – 60% readmissions
HU Readmission Rate = 36%
Non-HU Readmission Rate = 8%
State-wide Readmission Rate = 15%

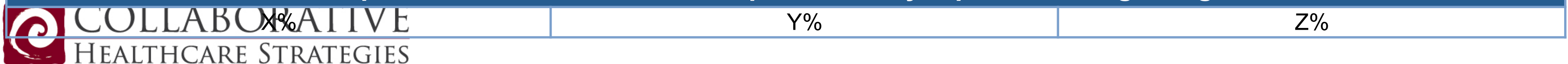
COLLABORATIVE HEALTHCARE STRATEGIES

Readmission Analysis

Use the most recent 12 months of data available. Using all hospital discharge data, exclude patients <18, all OB (DRG 630-679), discharges dead, or transfers to another acute care hospital. Define a readmission as any return to inpatient status within 30-days of discharge from inpatient status.

Measure	Total	Medicare	Medicaid	Private
A. Total Discharges				
B. Total Readmissions				
C. Readmission Rate (B/A)				
D. Total Discharges to Home				
E. Total Readmissions among Discharges to Home				
F. Readmission Rate among Discharges to Home (E/D)				
G. Total Discharges to Post-Acute Care Settings (home health, SNF)				
H. Total Readmissions among Discharges to Post Acute Care Settings				
I. Readmission Rate among Discharges to Post Acute Care Settings (H/G)				
J. Total Discharges with any coded Behavioral Health Diagnosis				
K. Total Readmissions with any coded Behavioral Health Diagnosis				
L. Readmission Rate among Discharges with any BH Diagnosis (K/J)				
M. Number of readmissions occurring within 7 days of d/c				
N. Number of patients with ≥4 hospitalizations in past year (MRNs)				
O. Total number of discharges among [N] (encounters)				
P. Total Number of 30-day readmissions among [O]				
Q. Proportion of All Readmissions Accounted for by High Users (P/E)				

R. Top 5 or 10 Discharge Diagnoses Resulting in Readmission, by Payer		
All Payer	**Medicare**	**Medicaid**
1		
2		
3		
4		
5		
N. Proportion of all readmissions represented by top 10 discharge diagnoses		
X%	Y%	Z%



Community Hospital, Central Massachusetts

Measure	Total	Proportion of Total (%)	Medicare	Medicare as a % of Total	Medicaid	Medicaid as a % of Total	How to Calculate %
A. Total Discharges	4,333	100%	2,410	**55.62**	1,138	**26.26**	---
B. Total Discharges to Post-Acute Care	1,830	**42.23**	1,452	**60.25**	210	**18.45**	B/A
C. Discharges to SNF/IRF/LTAC*	871	47.60	769	52.96	39	18.57	C/B
D. Discharges to Home Health	959	52.40	683	47.04	171	81.43	D/B
E. Discharges to Home	2,240	**51.70**	804	**33.36**	857	**75.31**	E/A
F. Discharges with Primary or Secondary BH Diagnosis	2,731	**63.03**	1,397	**57.97**	855	**75.13**	F/A
G. Total (adult non-OB) 30-day Readmissions	633	14.60	346	14.36	183	16.08	G/A
H. Readmissions Occurring <4 days of d/c	150	23.69	69	19.94	38	20.76	H/G
I. Readmissions Occurring <10 days of d/c	264	41.75	139	40.17	84	45.90	I/G
J. Readmissions with a Primary or Secondary BH Diagnosis	407	**64.33**	201	**58.09**	150	**81.97**	J/G
K. Number of Patients with ≥4 Hospitalizations Past Year	87	---	56	---	20	---	---
L. Total Number of Discharges Among [K]	420	**9.69**	266	**11.04**	104	**9.14**	L/A
M. Total 30-day Readmissions Among [K]	169	**32.07**	108	**31.21**	41	**33.61**	M/G
N. % of Discharges that Result in Readmissions Among [K]	---	**40.23**	---	**40.60**	--	**39.42**	M/L

O. Top 10 Discharge Diagnoses Resulting in Readmission, by Payer		
All Payer	**Medicare**	**Medicaid**
1. PNEUMONIA, ORGANISM NOS	1. PNEUMONIA, ORGANISM NOS	1. PNEUMONIA, ORGANISM NOS
2. ACUTE RENAL FAILURE, UNSPECIFIED	2. ACUTE RENAL FAILURE, UNSPECIFIED	**2. DIAB W/KETOACID TYPE I (JUVENILE) UNCONTRO**
3. URINARY TRACT INFECTION,UNSPECIFIED	3. URINARY TRACT INFECTION NOS	**3. CELLULITIS OF LEG**
4. OBST CHRONIC BRONCHITIS W/ACUTE BRONCHITIS	4. OBST CHR BRONCHITIS W/ ACUTE BRONCHITIS	**4. ALCOHOL WITHDRAWAL**
5. ACUTE CHRONIC DIASTOLIC HEART FAILURE	5. OBST CHR BRONCHITIS W/ACUTE EXACERBATION	**5. DEPRESSIVE DISORDER NEC**
6. OBST CHRONIC BRONCHITIS W/ACUTE EXAC	6. ACUTE CHRONIC DIASTOLIC HEART FAILURE	6. ACUTE CHR DIASTOLIC HEART FAILURE
7. CHR OBST ASTHMA W/ACUTE EXAC	7. AC MI INFARCT, SUBENDO INFARCT, INITIAL EPS	**7. SCHIZAFF DISORDER, CHR W/ACUTE EXAC**
8. ACUTE MI, SUBENDO INFARCT, INITIAL EPS	8. CHRONIC OBST ASTHMA W/ACUTE EXACERBATION	**8. RECURRENT DEPR DISORDER – SEVERE**
9. CELLULITIS OF LEG	9. ACUTE CHRONIC SYSTOLIC HEART FAILURE	9. OBST CHR BRONCHITIS W/ACUTE EXAC
10. RECURRENT DEPR DISORDER - SEVERE	10. HYPTNSV HRT&CHR KD UNSPEC W/HRT FAIL/ CHR KD I-IV OR UNS	10. ACUTE RENAL FAILURE, UNSPECIFIED
P. Proportion of all readmissions represented by top 10 discharge diagnoses		
34.91%	43.06%	39.34%

ASK YOUR PATIENTS "WHY"

Ask each patient, caregiver for the story behind the story

Understand the “story behind the chief complaint”

- 61M with 8 hospitalizations this year for shortness of breath returns to the hospital 10 days after discharge with shortness of breath.

- 41F with 100 ED visits and 10 hospitalizations. Has PCP, psychiatrist, counselor; taking medications. Lives in group home with staff present 16 hours a day.

Chart reviews and checklists will NOT reveal what we need to know: we must talk to patients, their families and caregivers & providers

There is Never One Reason for Readmission…..

- KP team reviewed 523 readmissions across ~14 hospitals:
  - 250 (47%) deemed potentially preventable
  - Found an average ***of 9 factors*** contributed to each readmission

- Assessed factors related to 5 domains:
  - 73% - care transitions planning & care coordination
  - 80% - clinical care
  - 49% - logistics of follow up care
  - 41% - advanced care planning & end of life
  - 28% - medications

- 250 readmissions identified 1,867 factors!

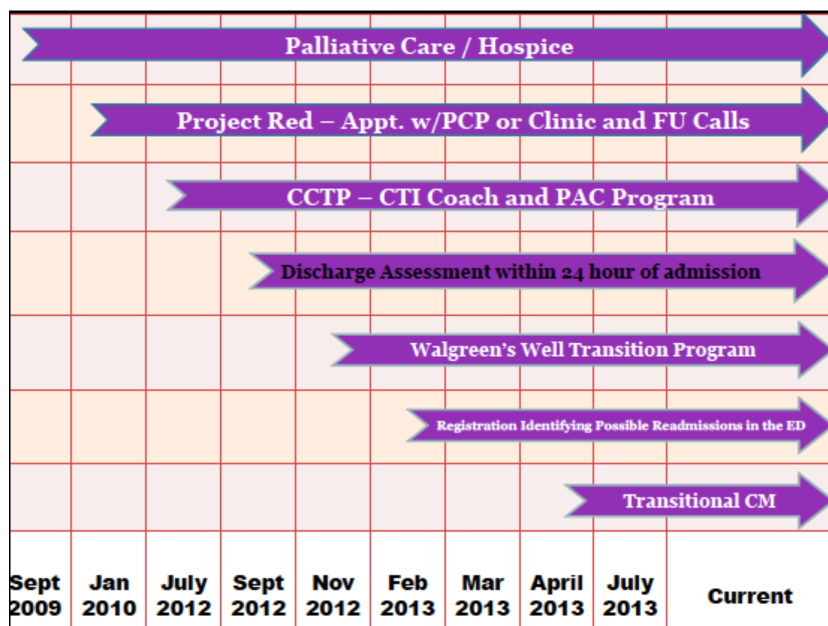
Feingenbaum et al Medical Care 50(7): July 2012

CREATE A MULTI-FACETED PORTFOLIO

This work is the work of redesigning health care in our communities

2 Hospitals' Multifaceted Portfolios

Valley Baptist (TX)



Frederick Memorial (MD)

- **Improve Standard Hospital-based Processes**
  - ED-based SW/CM – identify patients at point of entry
  - CM screen for all patients – move from 8P to "behavioral interview"
- **Collaborate with Providers**
  - 25-member cross continuum team, meets monthly
  - Track and trend H-SNF readmissions, review each, INTERACT
  - Track and trend H-HH patients, weekly "co-management" virtual rounds (move up the continuum from HH to direct SNF if needed)
  - Warm handoffs, points of contact with community BH provider
  - Use off-site urgent care center for post-d/c appointments if needed
- **Provide Enhanced Services to High Risk**
  - CM refer via order entry to Care Transitions Team
  - Multi-disciplinary team "works the case" x 30+ days
  - Cardiology NP "Heart Bridge Clinic"

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Courtesy of Angela Blackford and Heather Kirby

Hospital-wide Results

Valley Baptist (TX)

All Cause Readmission Rate:

- FY 2011: 28%
- FY 2013: 21%
- FY 2014: 14%

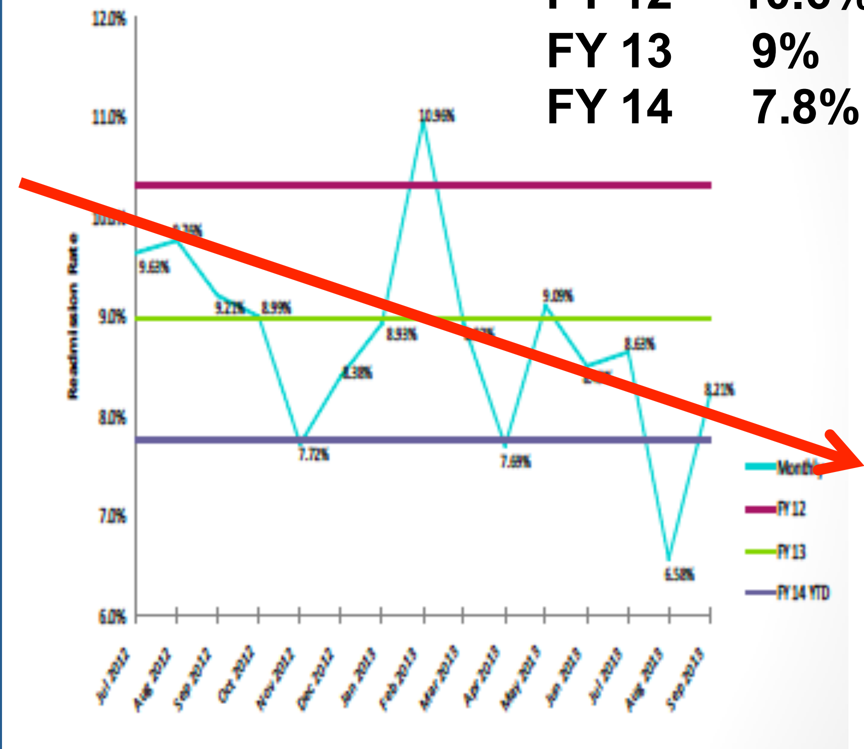
CMS Penalty:

Year 1: 0.8% (of possible 1%)

Year 2: 0.2% (of possible 2%)

Year 3   0.04% (of possible 3%)

Frederick Memorial (MD)



Courtesy of Angela Blackford and Heather Kirby

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The 2015-2016 Portfolio of Strategies

- Use analytics & technology to support care & drive outcomes*
- Develop ED-based “front-door” strategies*
- Improve hospital-based processes
- Actively collaborate across settings
- Provide enhanced services

Hospitals with hospital-wide results

- Know their data: *"data is oxygen for our program"*

  Analyze, trend, track, display, share, post

- Broad concept of "readmission risk"

  Way beyond case finding for diagnoses

- Multifaceted strategy

  Improve standard care, collaborate across settings, enhanced care

- Use technology to make this better, quicker, automated

  Automated notifications, implementation tracking, dashboards

NEW PRACTICES, NEW TOOLS

Strategies from small and rural hospitals

Strategies Used in Small & Rural Hospitals

- Hospital as a community hub
  - Convene, coordinate, align
- Cross-continuum collaboration
  - Knowing the community, relationships are a strength
- Identify & fill gaps in care
  - Access to specialists, transportation, social support
- Longitudinal knowledge of patients, families

Hospital as Community Hub, Convener

- Continually update knowledge of community resources
  - Build bridges specifically with behavioral health, elder services, social services, faith-based organizations, shelters, food pantries
  - Best work can be when a new-bie arrives!
  - Inventory what does exist….so often hear "nothing" does exist
- Hospital can convene, align, coordinate – learn!

Hallmark Health System Treat-and-Return to SNF

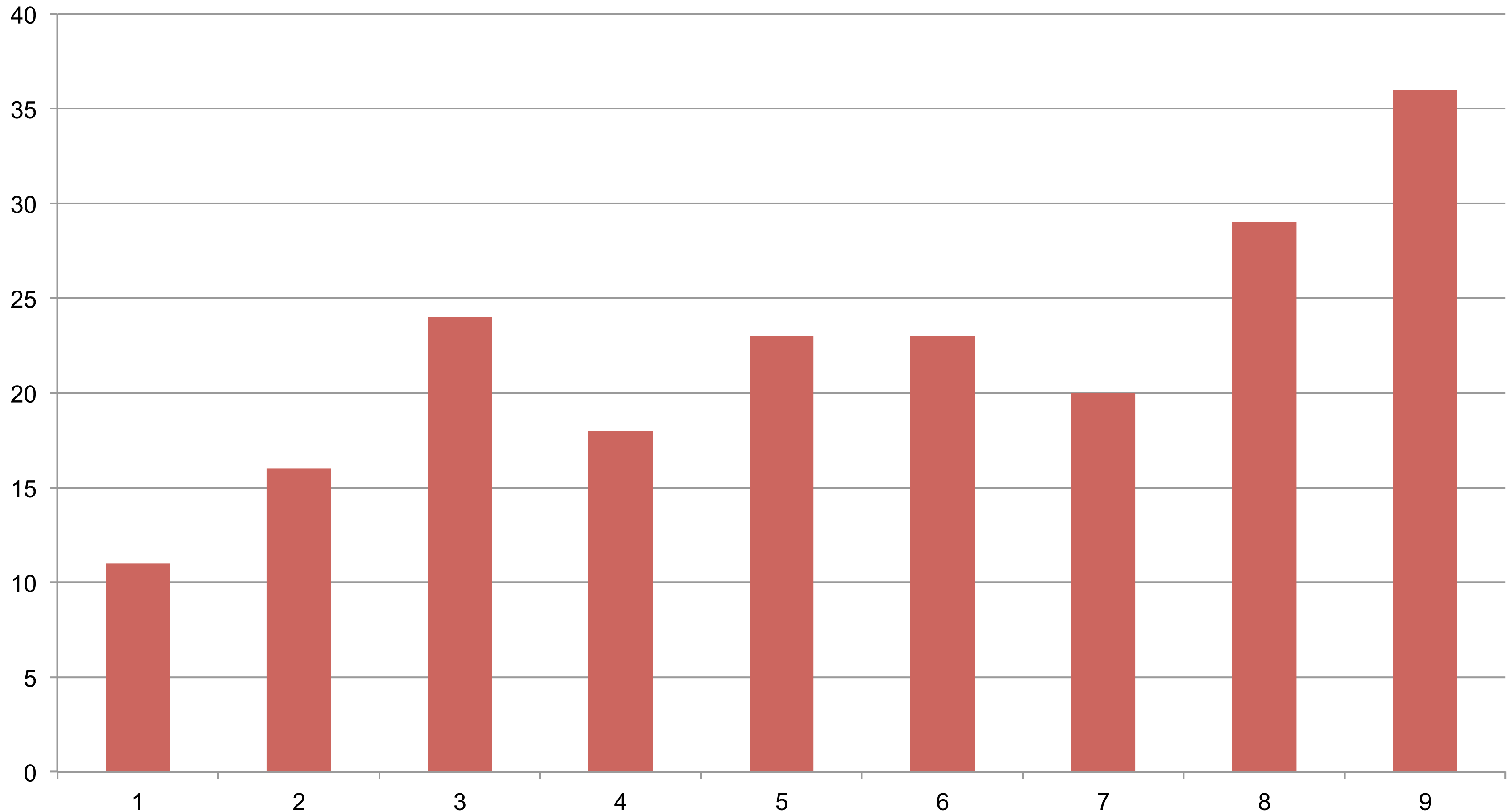
- Hallmark Health System
  - 2 hospital system, 20 ED docs, 17 PAs
  - “Why are almost all SNF patients admitted?”
  - “Patients only seen once a month”; “can’t do IVs”, etc
  - “If they send them here they can’t take care of them”

- Actions:
  - Asked ED clinicians “5 whys”
  - Education: posted INTERACT SNF capacity sheets in ED
  - Simplicity : establish contacts, standard transfer information

- Results: increase in number of patients transferred from ED to SNF

Source: Dr Steven Sbardella, CMO and Chief of ED Hallmark Health System Melrose, MA

9-month results: Treat-and-Return to SNF



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Courtesy of Dr Steven Sbardella, Hallmark Health

Cross-continuum Collaboration

- Say "yes" to partnerships
  - Social service agency co-locate navigators in ED
  - County DPH co-locate peer navigators in ED
  - Medicaid MCO pre-discharge transitional care visit in-hospital
  - Aging Services pre-discharge transitional care visit-hospital
  - Community based transitional care (CCNC)

- Invest in coordinating & optimizing what does exist
  - Start first with ensuring optimizing what does exist
  - Your own resources: light-duty RNs to do post-discharge calls
  - Look in new places: EMS, faith communities, county DPH, mental health clinics, medicaid managed care plans
  - Consider new roles/opportunities: eg SNF as transitional care clinic
  - Health Homes, PCMH, PCPs using new ToC or CM codes, ACOs, etc.

ED Collaboration with County Public Health

- Carroll County, Maryland
- County and Hospital have a **formal partnership** arrangement
- Health Department deployed **BH peer navigators** in ED
- Navigators **directly connected with** & followed patients
- **~30% reduction** in utilization for high utilizing BH patients

Carroll County Health Department

Identify & Fill Gaps

- Timely access to post hospital follow up
  - Use slow hours in ED for post-d/c appointments
  - Use urgent care center (even if unaffiliated)
  - Reconceive what "post hospital follow up" is – home visits, phone contact

- Telemedicine, Tele-consults, Tele-Co-Management
  - Behavioral health, HCV, HIV, pedi neuro, pain management
  - Project Echo
  - Partnerships with regional teaching hospitals or other affiliates
  - Direct patient-care delivery, doc-to-doc consult, specialist-doc upskilling

"There's always going to be a group of folks that's going to need somebody to help them. That's never going to change."

~ *Social Worker, North Philadelphia*

Alameda Health System, Oakland CA

- Transitional care team
  - Pharmacist, CHF RN, COPD RN, Social Worker, 2 community health outreach workers (CHOW), Program manager, data analyst
  - CHOW came from background of detox center workers
- Embrace complexity
  - "Acknowledge reality" of marginal housing, poverty, instability
  - Specifically inquire about and discuss substance use
- Actively support
  - Accompany, support, touch base, follow up
  - RN hold "group visits" as ***"drop in"*** in outpatient conference room
  - ***All members of team do home visits***

Courtesy of Maia White, Highland Hospital

Observations about “Complex Care Teams”

- Inter-disciplinary team
  - Navigator/outreach/CHW, social work w BH skills, pharmacist
- Address full complement of medical, social, logistical needs
  - Basic Needs: affordable medications, transportation, housing, legal, benefits
  - Social and Behavioral Support: psychotherapeutic support, harm reduction
  - Navigating and Advocating: problem-solving orientation
- Identify using combination of clinical and non-clinical criteria
  - History of high utilization, no PCP, numerous prescribers, numerous meds, behavioral health comorbidities, homeless….not “just” chronic disease
- Don’t over medicalize – whole person, psychosocial
  - Start with the person’s priorities
  - Understand this is about stabilization, shifting patterns of care-seeking

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Longitudinal Knowledge of Patients/Families

- Base strategies on data
  - Your data…. not data from the NEJM
  - Your patients' and their caregivers' barriers
  - Your updated knowledge of resources & partners

- Care Plans: For HU
  - Leverage that "everyone" knows this patient
  - Bring sum total of those insights to a consistent plan
  - Re-consider if "what we've always done" is best for the patient
  - Especially for recurrent pain, sickle crises, de-escalation

High Risk Patient Assessment

Clinical Background
- History of HIV and gastroparesis with frequent ED visits for abdominal pain, nausea, and vomiting. Attends Smart Pain Management.
- Allergies: Morphine, MSG, Reglan, Shellfish, Vancomycin

Clinical Challenge
- 17 inpatient admissions at Northwest Hospital in one year
- Requests IV opioids and Benadryl for pain. Declines other pain medication alternatives
- Per CRISP, seen numerous times at GBMC, St. Agnes, UMMC and Northwest Hospital from June 2014 to April 2015.
- Not compliant with NPO status despite complaints of nausea and vomiting often ordering a guest tray. Witnessed self-induced vomiting.

Date of Birth:	
Age:	
Medical Record:	
Gender	

Standards of Care:
1. Narcotics have a high potential for abuse, especially for patients with a hx of chronic pain and liver disease which affects medication metabolization.
2. Medical ethics do not require prescribing a medication when you judge the risks to be greater than the benefits, even if the patient demands the medication.
3. Consider adjunctive pain medications for ongoing chronic pain management (including antidepressants, anticonvulsants, and muscle relaxants) in appropriate patients.
4. Consider alternative therapies to address the affective pain symptoms such as Cognitive-Behavioral therapy
5. When narcotics are used, consider long-acting agents which can be provided/refilled by an identified single provider.
6. An oral or written agreement/contract for appropriate pain medication use may be useful in some cases.

Recommended Interventions - Emergency Department
1. Rule out any emergency medical conditions or life-threatening conditions. Attempt to treat pain without use of IV narcotics.
2. Due to self-induced vomiting, place in a room with sitter to monitor patient, as appropriate
3. Complete basic labs to rule out dehydration or infection. Obtain an x-ray as clinically indicated by exam to rule out obstruction.
4. Attempt to control nausea. If you feel pain medication is clinically indicated treat with IV Zofran, wait 15 minutes then give the patient 5 mg PO oxycodone. If patient vomits medication, give 0.5 mg IV Dilaudid mixed in a 100 ML solution for IVPB. Do not give IV push Dilaudid. Do not give IV push Benadryl, unless an anaphylactic reaction occurs.
5. Contact Case Management with patient to ensure appropriate discharge follow up.
6. If no need for ongoing hospital care is present, provide follow up information for **Chase Brexton Clinic.**
7. Consider referral a **Pain Management Specialist.**

Recommended Interventions - Attending Physician
1. If patient cannot be safely discharged from the ED and must be kept in the hospital, consider observation status.
2. Attempt to treat with non-narcotic agents. Again, if narcotics are required consider oral agents. Attempt to control nausea. If you feel pain medication is clinically indicated treat with IV Zofran, wait 15 minutes then give the patient 5 mg PO oxycodone. If patient vomits medication, give 0.5 mg IV Dilaudid mixed in a 100 ML solution for IVPB. Do not give IV push dilaudid. Do not give IV push Benadryl, unless an anaphylactic reaction occurs.
3. Make a referral to Case Management/Social Work and consider Pain Management as part of discharge plan.
4. Please provide follow up information for Chase Brexton Clinic.
5. Consider referral a **Pain Management Specialist.**

Recent Studies
- 14 XR-Abd/EWPA Chest at NWH from 11/2014 through 5/2015 with no significant findings
- 4 XR Abd Flat & Erect from 11/2014 through 4/2015 at NWH with no significant findings
- Diagnostic Imaging at St. Agnes x4 from 11/2014 through 4/2015
- 3 CT abdomen and pelvis on Jan 2015, March 2015, April 2015 at NWH unremarkable
- XR Chest 2V at NWH in Jan and Feb 2015 unremarkable

For help with High Risk Case Management call:
Dr. Susan Mani
Dr. Tanveer Gaibi
Maria Manna
Krystal Howard
Kimberly Knipp

Baltimore Hospitals
- Multiple hospitals collaborating
- Develop 1 page Summary
- Background
- Challenge
- Recommendations – staff, MDs
- Recent studies
- Care Management contact

Caution CT Scans

Nov 5, 2014

Dear _______________,

Our records indicate you have been to our emergency Department multiple times in the last year. In Addition, The Massachusetts Online Prescription Monitoring Program shows you have filled 25 opiate prescriptions, along with other sedating medication in the last 12 months. Research shows that filling multiple opiate prescriptions, especially from multiple providers in combination with other sedating medications drastically increases mortality and chance of death. We believe there are more effective ways to address your health care needs. For this reason, we believe it is necessary to improve the level of outpatient resources and communication. Our social workers will work closely with you to help you obtain the specialty services needed to help support your needs with chronic pain and other medical issues. As the Emergency Department is not an ideal venue in which to control chronic pain, we feel it is in your best interest to establish consistent protocols.

You have also had multiple abdominal CAT scans with no significant abnormalities. As this represents a significant amount of radiation which can lead to future health problems, we will try to avoid future CAT scans unless there is a significant abnormality in your lab work or physical exam.

If you need to visit the Emergency Department, you will be triaged according to severity, and will see a provider for an appropriate evaluation. You will be seen according to your triage level by the first appropriate and qualified provider. Any tests needed to diagnose an emergent condition will be performed, and the conditions treated according to protocol.

For subjective pain, you will not receive narcotic analgesia in the Emergency Department. Research suggests these medications are very high risk in patients who take them chronically and need very close long term monitoring. Examples of narcotic medication include Morphine, Dilaudid, Demerol, Percocet, Codeine, Fioicet, Vicodin, and Oxycodone. Prescriptions for narcotic medications will not be written.

Further, other sedative medications will also not be given or prescribed. Examples include Valium, Ativan, and Xanax.
Prescriptions will not be refilled.
We will gladly see you and take care of any acute medical problems that may arise.

If you ever feel unsafe or are at risk to hurt yourself, we will be happy to provide a crisis team evaluation and treatment.

Please make an appointment with your Primary Care Provider for an annual physical and referral for chronic pain management. If you need help locating a Primary Care Provider, our social worker can help arrange one.
Contact 748-6838 if we can assist with making these appointments.

We can assist with finding you a mental health provider for your mental health concerns.

____

Louis Durkin, MD-Chief Medical Officer, Mercy Emergency Department

Mercy ED Care Plan Letter

- Patient facing
- Signed Chief of ED

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Summary

- Know your data – use it as a powerful tool
- Constantly work to understand "why" patients return to the hospital
- Don't over-medicalize utilization: view through social / behavioral lens
- Successful efforts include a portfolio of efforts
- There are resources in the community to "do for" – navigate, advocate, support – hospitals can find, partner, re-assign roles
- Consider developing care plans for High Utilizers

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THANK YOU

Amy E. Boutwell, MD, MPP
President, Collaborative Healthcare Strategies
Co-Principal Investigator, AHRQ Reducing Medicaid Readmissions Project
Strategic Advisor, Massachusetts Health Policy Commission CHART Program
Expert Advisor, New York Medicaid DSRIP "Super Utilizer" Collaborative
Amy@CollaborativeHealthcareStrategies.com
617-710-5785

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