Understanding Readmissions: One patient at a time

Cross-Continuum Workgroup

- Participants
  - MDs, RNs, Case Managers, administrative leadership from:
    - Hospital (Beth Israel Deaconess Medical Center)
    - Primary care practice groups
    - Visiting Nurse Agencies
    - Extended Care Facilities
  - Patient/patient advocate
- Monthly meetings
- January meeting devoted to a case presentation, with special guest faculty Dr. Eric Coleman

Our patient

- 62 year-old female with multiple medical problems
- Lives with her daughter and granddaughter in Roxbury
- Home health aide visits her twice weekly
- Brother passed away mid-2010 from complications of diabetes

Medical conditions

- Chronic diastolic heart failure
- Paroxysmal atrial fibrillation, on coumadin
- Type II diabetes mellitus
- Stage 4 chronic kidney disease (creatinine 3.5-4.0) – anticipating dialysis
- Obstructive sleep apnea
- Obesity-hypoventilation syndrome
- Gout (polyarticular)
- Depression
- Asthma
- Hypertension
- Hyperlipidemia
- Hearing loss (sudden sensorineural, right ear) Nov 2010
- Remote history of stroke (1994)
- Remote history of bleeding gastric ulcer (2007)
- Multiple providers note history of “non-compliance” with medical plan

2010 Admissions

Date	Days since discharge	Diagnosis	LOS	DC destination	Outpt f/u prior to next admit
January	***	Heart Failure	8	HWS	PCP
February	8	Heart Failure	2	HWS	HF clinic
April	45	Gout	3	HWS	Primary NP
May	38	Gout	2	HWS	DNK: HF clinic
May	13	Gout	4	HWS	Post-DC clinic
June	17	Heart Failure	1	HWS	No

2010 Admissions

Date	Days since discharge	Diagnosis	LOS	DC destination	Outpt f/u prior to next admit
July	26	Renal Failure	7	AMA	No
July	1	Heart Failure	10	HWS	Renal clinic
August	5	UTI	2	HWS	PCP
August	13	Heart Failure	1	HWS	No
September	12	Heart Failure	1	HWS	DNK: HF clinic
September	14	Heart Failure	7	HWS	Primary NP

2010-11 Admissions

Date	Days since discharge	Diagnosis	LOS	DC destination	Outpt f/u prior to next admit
December	37	Heart Failure	1	HWS	No
December	3	Abdominal Pain	1	HWS	DNK: HF clinic
December	5	Heart Failure	4	HWS	Renal clinic
December	11	Heart Failure	2	HWS	HF clinic
January	5	Heart Failure	1	HWS	Renal clinic

Medications

- Allopurinol once daily
- Gabapentin once every other day
- Metoclopramide four times a day
- Pantoprazole once daily
- Docusate twice daily
- Albuterol inhaler as needed for wheezing
- Iron supplement once daily
- Calcitriol once every other day
- Polyethylene glycol as needed for constipation
- Amlodipine once daily
- Warfarin once daily (three tablets)
- Simvastatin once daily
- Carvedilol twice daily (two tablets each dose)
- Torsemide once daily
- Glargine insulin once daily
- Lispro insulin, dose by sliding scale before meals and at bedtime

Medications: Summary

- 20 pills per day, with additional pills as needed for constipation
- Inhaler or nebulizer for wheezing
- 5 insulin injections per day
- 4 fingerstick blood sugar assessments per day
- Home oxygen (3 liters/minute) 24 hours per day
- BiPAP machine to be worn at night
- Periodic INR checks on coumadin

Medical Providers

- 15 different attendings signed discharge summaries for 2010 hospitalizations (four cardiologists, 11 hospitalists)
- Primary care doctor, nurse practitioner, and community case worker in primary care group regularly involved in care
- Primary cardiologist and nurse practitioner in Heart Failure clinic
- Primary nephrologist in Renal clinic
- Anticoagulation management through HCA Anticoagulation Clinic
- Eye doctor at Diabetes Clinic
- Ear doctor at BIDMC
- Podiatrist at BIDMC
- Visiting nurse from VNA has known patient for many years

- 25 different medical professionals involved in her care in 2010 (not counting inpatient consultants, nurses, case managers, social workers, therapists)

Supports

- Lives with daughter and grand-daughter in rented apartment in Roxbury
- Immigrated from Trinidad
- Denies smoking or alcohol use
- Enjoys watching TV and spending time with family
- Uses a walker for mobility
- Home health aide twice weekly through VNA
- Family prepares her meals
- Brother died 4-5 months ago from “complications of diabetes”
- Relies on MART for rides to hospital (need to book at least 3 business days in advance)
- Insurance: Medicare, MassHealth secondary
- Obtains medications from mail service provider, local pharmacy

2010 Studies

- Three cardiac echocardiograms
- One pharmacologic stress test with nuclear imaging study
- 29 logged EKGs
- One pulmonary function test
- One vein mapping study for dialysis access
- 27 chest x-rays
- One chest CT scan
- Three head CT scans
- One abdominal ultrasound
- One kidney ultrasound
- One MRI of the cervical spine

Health Progress

- %Hemoglobin A1c = 6.4 in Sept 2010
- LDL 101 in August 2010
- Weight 241 (from 270 one year prior)
- Last eye exam: August 2010
- Last podiatry evaluation: December 2010
- Last colonoscopy: Sept 2008
- Received flu vaccine November 2010

Questions/Issues:

- What factors are contributing to this patient's frequent readmissions?
- What should we do differently the next time this patient is admitted?
- Will we do anything differently the next time this patient is admitted?
- What does it mean to be "non-compliant"?

Shared Learning

- Solutions are not easy, but they are needed
- Can’t do it alone – need partners working together with a common goal
- Be ready to reflect critically on poor outcomes – does “non-compliance” refer to patients’ behavior or systems’ performance?
- Resolve to do better, together.