

ECHO-Care Transitions Program Toolkit

Appendix

Beth Israel Lahey Health 
Beth Israel Deaconess Medical Center

Appendix Contents

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For more information & to view a recorded ECHO conversation, please visit our website at:
<https://www.bidmc.org/research/research-by-department/medicine/gerontology/echo-care>

Program Publications:

- Mariana Gonzalez, Lauren Junge-Maughan, Lewis Lipsitz, & Amber Moore (2021). ECHO-CT: An Interdisciplinary Videoconference Model for Identifying Post-Discharge Transition of Care Events. *Journal of Hospital Medicine*. DOI: 10.12788/jhm.3523

[Link to Article Here](#)

- Moore, A. B., & Lipsitz, L. A. (2020). ECHO s ECHO: Overcoming modern healthcare operational challenges with provider-to-provider video communication. *Journal of Hospital Administration*, 9(2), 48. doi:10.5430/jha.v9n2p4

[Link to Article Here](#)

- Junge-Maughan L, Moore A, Lipsitz L. (2020) Key strategies for improving transitions of care collaboration: lessons from the ECHO-care transitions program. *J Interprof Care*. Aug 18 1-4. PMID: 32811238.

[Link to Article Here](#)

- Farris G, Sircar M, Bortinger J, Moore A, Krupp JE, Marshall J, Abrams A, Lipsitz L, Mattison M.(2017) Extension for Community Healthcare Outcomes-Care Transitions: Enhancing Geriatric Care Transitions Through a Multidisciplinary Videoconference. *J Am Geriatr Soc*. Mar 65(3):598-602. PMID: 28032896.

[Link to Article Here](#)

- Moore, A., Krupp, J., Dufour, A., Sircar, M., Trivison, T., Abrams, A., Farris, G., Mattison, M. and Lipsitz, L., (2017). Improving Transitions to Postacute Care for Elderly Patients Using a Novel Video-Conferencing Program: ECHO-Care Transitions. *The American Journal of Medicine*, 130(10), pp.1199-1204.

[Link to Article Here](#)

ECHO-Care Transitions
Beth Israel Deaconess Medical Center
330 Brookline Ave, Boston, MA 02215

Welcome! We are thrilled that you are interested in participating in the ECHO-CT program and look forward to finding ways to partner with you in improving communication and transitions of care for patients. We're excited to be able to offer this program to you free of charge through a grant from the Agency for Healthcare Research and Quality. Below, you will find an outline of program expectations. If you have any questions about the list below, please feel free to reach out. Thank you so much for your interest.

All the Best,

Dr. Lipsitz and Dr. Moore

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Vice President for Academic Medicine and
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Program Expectations for SNF Teams:

- Attend in-person ECHO-CT kick-off meeting on **(date)**
- Regularly attend weekly video conferences
- Participate in online continuing education sessions which will occur once every 6 months
- Agree to complete staff satisfaction survey every 6 months during program participation

SNF Logistics Survey Questions Sample

- 1. Choose your SNF from the list below (list SNFs)**
- 2. We will be having our ECHO-CT kick-off conference on “insert date”. We ask that each SNF sends one administrative lead and one clinical lead to the conference. Please list the names and emails for those two individuals who are planning to attend:**

(text box to list names & emails)

- 3. The weekly ECHO sessions will be (tentatively) beginning the (insert start date for sessions). In order to prepare for the first session, we want to get a sense of who will be participating on a weekly basis from your site. We recommend choosing individuals who have first hand knowledge of the patient's transition and clinical status (such as Nurse Floor manager, bedside Nurse, NP, MD). Please list the name(s) and email(s) below. Please Note: We understand that this is subject to change.**

(text box to list names & emails)

- 4. The ECHO sessions will be every (insert day of week you hold sessions). Each SNF will be assigned a 15 minute time slot in which to discuss their patients for the week. For the list of times below, please choose ALL times that work for your team. This will help the team to put together a schedule that will work well for everyone.**

(list session timeslots)

- 5. Each SNF will need to designate a point person(s) who will handle weekly pre-ECHO session logistics. This includes verifying the list of patients to be discussed and sending the patient's medication list to the Program Manager. Please list the name and email of this person(s) below.**

(text box to list name & email)

- 6. Please list the name/email of the person from your site who can be contacted to discuss IT related topics.** (text box to list name & email)

Welcome

Please sign-in at the registration area and grab some breakfast. We'll be starting shortly.

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ECHO-Care Transitions Kick-off Conference

March 28th, 2019

8:00-12:00pm

Beth Israel Deaconess Medical Center

Today's Agenda

7:30-8:00am	Breakfast and Registration
8:00-8:20am	Introductions and Icebreaker
8:20-9:05am	Transitions of Care: Scope of the Problem
9:05-9:30am	The ECHO-CT program: past, present, future
9:30-9:45am	Video of ECHO-CT Session & Discussion
9:45-10:00am	Break
10:00-10:30am	Logistics of ECHO Session & Running an Effective ECHO Session
10:30-11:00am	Identifying Common Clinical Problems encountered in care transitions
11:00-12:00pm	Mock ECHO Session and wrap up

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Meet the Team:

Program Administration	 Lewis Lipsitz, MD Principal Investigator	 Amber Moore, MD, MPH Program Director	 Lauren Junge-Maughan, Program Manager	 Anita Vanka, MD Education Director	 Dave Baker, IT Support
El Boston Team	 Marisa Juppfer, MD Hospitalist Facilitator	 Evan Gwyn, MD Hospitalist Facilitator	 Leo Newhouse, LICSW Social Worker	 Kristen Knoph, PharmD, BCPS Pharmacist	
El Needham Team	 Ghania El Akki, MD Needham Director	 Matt Adlerstein, MD Hospitalist Facilitator	 Elaine Rousseau, RN, MSN Case Manager	 Emily Gaukman, PharmD Pharmacist	<p>Shella Argard, RN Case Manager</p> <p>Patty Bray, RN Case Manager</p>

Participating Skilled Nursing Facilities



Introductions

We're going to go around the room and please let us know:

- Name
- Role
- What facility you are from

We will also have a poll question up. Please text in your responses as we do introductions.

https://www.polleverywhere.com/free_text_polls/wjE0crt1nGWP1amZw012?preview=true

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6 Weeks, 6 Transitions: Lessons Learned from One

Patient

Anita Vanka, MD, FHM, FACP

Hospitalist
Beth Israel Deaconess Medical Center

Assistant Professor of Medicine
Harvard Medical School

Boston, MA

Beth Israel Deaconess Medical Center

Beth Israel Deaconess Medical Center

Conflict of Interest Disclosure

- I have no financial relationships with a commercial entity producing healthcare-related products and/or services.



Our patient: Ms. D

- 71 y/o woman who lives at home with her husband
- Originally from Ireland, came to the US at age 15
- Has been married > 50 years
- She has 4 children, 7 grandchildren, 1 great-grandchild
- Former secretary
- Uses a walker and a right leg prosthesis at home
- Husband helps with many ADLs

Our patient: Ms. D

- Past Medical History
 - Diabetes mellitus
 - HTN
 - Orthostatic hypotension
 - Peripheral neuropathy
 - PVD s/p right BKA
 - Chronic back pain
- Takes 25 different medications daily
 - Opiates
 - Anti-HTN meds
 - Insulin pump
 - Anxiolytics
 - Antiplatelets

- Severe confusion, fall, decreased urine output over 2-3 days
- Recently started on NSAIDs for shoulder bursitis
- Brought to the ED for evaluation
- Diagnosed with acute kidney failure, hyperglycemia, severe confusion
- Admitted to the Intensive Care Unit



- Mental status slowly clears
- Kidney function improves
- Course complicated by severe high blood pressure
- Started on new anti-hypertensive agents
- Methadone started for pain control
- Insulin pump discontinued, long-acting insulin started
- Discharged to a skilled nursing facility



Beit Ivrit Lohay-Hudi
Beit Israel Deaconess Medical Center

- Develops acute kidney failure again
- Changes to blood pressure medication regimen due to side effect
- Diagnosed with urinary tract infection, started on antibiotics
- Pain regimen changed
- Discharged to home on a Saturday



Beit Ivrit Lohay-Hudi
Beit Israel Deaconess Medical Center

- Decreased urine output
- Two falls at home
- Slightly confused
- Noted by VNA to have "many many old meds around the house"
- Presents to the ED
- Found to be in acute kidney failure & hyperglycemic
- Admitted to Medicine



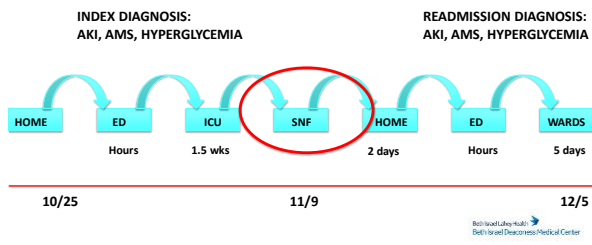
Beit Ivrit Lohay-Hudi
Beit Israel Deaconess Medical Center

- Diagnosed with urinary retention again
- She was taking old oxycodone and morphine that she had at home
- She had re-initiated her insulin pump on her own
- Urinary retention resolves with foley placement
- Patient stabilized on long-acting insulin, methadone
- Discharged home with VNA



Beit Ivrit Lohay-Hudi
Beit Israel Deaconess Medical Center

SIX MAJOR TRANSITIONS OVER SIX WEEKS



How do we define Transitions in Care?



“Set of actions designed to ensure the coordination and continuity of health care as patients transfer between different locations or different levels of care within the same location”

Coleman EA. *Falling Through the Cracks: Challenges and Opportunities for Improving Transitional Care for Persons with Continuous Complex Care Needs.* J Am Geriatr Soc. 2003;51(4):549-555.

Prevalence of Post-hospital Transitions

- Hospitalized Medicare beneficiaries
 - 73% -> HOME
 - 17% -> SNF or Acute Rehab
 - 10% -> Different hospital or within the same hospital
- Number of transfers within 30 days
 - 61% single transfer
 - 18% two transfer
 - 8.5% three transfers
 - 4.3% four or more transfers

Coleman E, Mi S, Chomick A, Kramer A. *Posthospital Care Transitions: Patterns, Complications, and Risk Identification.* Health Care Res. 2004;19(2):140-146.

Why is this important?

- Vulnerable time for patients
 - Shorter length of stay
 - Possible worsening of functional impairments
 - Changes in treatment regimen
 - Discontinuities during their transitions

Rot/Israel/Leahy-Hubi
Beit Israel Deaconess Medical Center

The Incidence and Severity of Adverse Events Affecting Patients after Discharge

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One in five experienced an adverse event post discharge

- 50% used health services > 24% readmitted

Adverse drug events were the most common type (66%)

- Antibiotics, steroids, CV drugs, analgesics, anticoagulants, AEDs

MD, MSc, review appropriate outcomes of discharge (readmission, mortality, and hospital costs). In total, 26% of patients died and 6 were rehospitalized.

Medical Errors Related to Discontinuity of Care from an Inpatient to an Outpatient Setting

Carlton Moore, MD, Juan Wisnivesky, MD, Stephen Williams, MD, Thomas McGinn, MD
J GEN INTERN MED 2003;

MAIN RESULTS: Forty-nine percent of patients experienced at least 1 medical error. Patients with a work-up error were 6.2 times (95% confidence interval [95% CI], 1.3 to 30.3) more likely to be rehospitalized within 3 months after the first

association between medication continuity errors (odds ratio [OR], 2.5; 95% CI, 0.7 to 8.8) and test follow-up errors (OR, 2.4; 95% CI, 0.3 to 17.1) with rehospitalizations.

CONCLUSION: We conclude that the prevalence of medical errors related to the discontinuity of care from the inpatient to the outpatient setting is high and may be associated with an increased risk of rehospitalization.

Risks of Transitions

- Adverse drug events
- Missed results from pending tests
- Lack of appropriate follow-up

ORIGINAL ARTICLES

Adverse Drug Events Occurring Following Hospital Discharge

Alan J. Foster, MD, FRCPC, MSc,¹ Harvey J. Murff, MD,² Josh F. Peterson, MD,² Tejal K. Gandhi, MD, MPH,³ David W. Bates, MD, MSc³

From the ¹Department of General Internal Medicine and Ottawa Health Research Institute, University of Ottawa, Ottawa, Ontario, Canada; ²Division of General Internal Medicine, Vanderbilt University, Nashville, TN, USA; ³Division of General Internal Medicine, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, USA.

87% of ADEs associated with certain meds

Almost all cases associated with new med or dose change

Risk of ADE increased with number of medications prescribed

Discharge medication list

Discharge Medications:

1. Calcitrate-Vitamin D (calcium citrate-vitamin D3) 315-250 mg-unit Oral daily
2. Fish Oil (Omega 3) 1000 mg PO BID
3. carboxymethylcellulose sodium 14 Drops OU PRN dryness
4. Albuterol Inhaler 1 PUFF IH Q6H:PRN shortness of breath
5. Calcitriol 0.25 mcg PO DAILY
6. Citalopram 40 mg PO DAILY
7. Clopidogrel 75 mg PO DAILY
8. Cyanocobalamin 1000 mcg PO DAILY
9. cycloSPORINE 0.05 % OU TID
10. Docusate Sodium 100 mg PO BID
11. Folic Acid 1 mg PO DAILY
12. Glucagon 1 mg IM PRN low blood sugar
13. Levothyroxine Sodium 88 mcg PO DAILY
14. Lisinopril 20 mg PO DAILY
15. Metoclopramide 10 mg PO Q1DACHS
16. Omeprazole 20 mg PO DAILY
17. Senna 2 TAB PO DAILY:PRN constipation
18. Tiotropium Bromide 1 CAP IH DAILY
19. Amlodipine 5 mg PO DAILY
20. Labetalol 600 mg PO TID
21. Glargine 18 Units Bedtime
22. Insulin SC Sliding Scale using HUM Insulin
23. Lidocaine 5% Patch 2 PICH PO DAILY
24. Methadone 12.5 mg PO DAILY
25. Acetaminophen 650 mg PO Q6H

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What happened to our patient after discharge from the SNF?

- Discharged on a Saturday
- Given new script for Methadone
- Pharmacy did not have the medication
- Began taking opiates that she had at home (oxycodone, morphine)
- Developed urinary retention, subsequent AKI, and altered mental status

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Beaumont Deaconess Medical Center

Frequency and Predictors of Prescription-Related Issues after Hospital Discharge

Sunil Kripalani, MD, MSc,¹
Megan Price, MD,²

BACKGROUND: In the period immediately following hospital discharge, patients often experience difficulty with medication management. The problems related to

CONCLUSIONS: About 7% of patients reported prescription-related issues within a few days of hospital discharge. High-risk patients should be identified and offered additional assistance prior to discharge and receive a follow-up phone call to assess if discharge prescriptions have been filled. *Journal of Hospital Medicine* 2008;3:12-19. © 2008 Society of Hospital Medicine.

¹ Division of General Medicine, Department of Internal Medicine, University of Colorado School of Medicine, Denver, Colorado

prescription-related issues, most often not filling discharge prescriptions. In multivariable analyses, prescription-related issues were more common among adults age 35-49, women, patients with Medicare HMO coverage, Medicaid, or no insurance, adults with higher severity of illness ratings, and patients prescribed 6 or more medications or an inhaler. Predictors of fewer problems were being age 65 or older, having HMO or commercial insurance, being prescribed antibiotics, anticoagulants, or angiotensin II receptor blockers, and having a major diagnosis in the skin or musculoskeletal categories.

CONCLUSIONS: About 7% of patients reported prescription-related issues within a few days of hospital discharge. High-risk patients should be identified and offered additional assistance prior to discharge and receive a follow-up phone call to assess if discharge prescriptions have been filled. *Journal of Hospital Medicine* 2008;3:12-19. © 2008 Society of Hospital Medicine.

Pre-Discharge Medications	Discharge Medications	Discharge Medications:
1. Calcitriol 0.25 mcg PO	1. Calcitrate-Vitamin D	1. Glargine 20 units qHS
2. Citalopram 40 mg PO DA	mg-unit Oral daily	2. Novolog [®] 2 units qAM, 32 units at lunch/dinner
3. Clopidogrel 75 mg PO B	2. Fish Oil (Omega 3)	3. Novolog sliding scale
4. Cyanocobalamin 1000 mcg	3. carboxymethylcellulose sodium 14 Drops OU PRN dryness	4. Amlodipine 5 mg BID
5. cycloSPORINE 0.05 % OU	4. Albuterol Inhaler	5. Methadone 5 mg BID
6. Docusate Sodium 100 mg	5. Calcitriol 0.25 mcg PO DAILY	6. Lidocaine 5% Patch
7. Fish Oil (Omega 3) 1000 mg PO BID	6. Citalopram 40 mg PO DAILY	7. Olanzapine 5 mg PO BID
8. Gabapentin 400 mg PO BID	7. Glucagon 1 mg IM PRN low blood sugar	8. Acetaminophen 650 mg PO Q6H
9. Glucagon 1 mg IM PRN low blood sugar	8. Levthyroxine Sodium 88 mcg PO DAILY	9. Clonidine 0.2 mg PO BID
10. Levothyroxine Sodium 88 mcg PO DAILY	9. Lisinopril 20 mg PO DAILY	10. Nystatin 400 units PO QID
11. Lorazepam 1 mg PO q6H	10. Metoclopramide 10 mg PO Q1DACHS	11. Gabapentin 400 mg PO BID
12. Metoclopramide 10 mg PO Q1DACHS	11. Folic Acid 1 mg PO DAILY	12. Polysporin 1000 units PO QID
13. Calcitriol 0.25 mcg PO DAILY	12. Glucagon 1 mg IM PRN low blood sugar	13. Doxycycline 100 mg PO BID
14. carboxymethylcellulose sodium 14 Drops OU PRN dryness	13. Levthyroxine Sodium 88 mcg PO DAILY	14. Pantoprazole 40 mg PO DAILY
15. Folic Acid 1 mg PO DAILY	14. Lisinopril 20 mg PO DAILY	15. Pantoprazole 40 mg PO DAILY
16. Morphine SR OMS Cont 10 mg PO Q4H	15. Metoclopramide 10 mg PO Q1DACHS	16. Pantoprazole 40 mg PO DAILY
17. Albuterol Inhaler 1 PUFF IH Q6H:PRN shortness of breath	16. Omeprazole 20 mg PO DAILY	17. Senna 2 TAB PO DAILY
18. Multivitamins 1 TAB PO QAM	17. Senna 2 TAB PO DAILY:PRN constipation	18. Clopidogrel 75 mg daily
19. Omeprazole 20 mg PO DAILY	18. Tiotropium Bromide 1 CAP IH DAILY	19. Cyanocobalamin 1000 mcg daily
20. Oxycodone (Immediate Release) 5 mg PO Q4H	19. Amlodipine 5 mg PO DAILY	20. Folic acid 1 mg daily
21. Senna 2 TAB PO DAILY	20. Labetalol 600 mg PO TID	21. MVI one tab daily
22. Morphine SR OMS Cont 10 mg PO Q4H	21. Glargine 18 Units Bedtime	22. Pantoprazole 40 mg daily
23. Lisinopril 20 mg PO D	22. Insulin SC Sliding Scale using HUM Insulin	23. Tiotropium M02 daily
24. Insulin Pump SC (See Appendix) (Novolog) (non-Food)	23. Lidocaine 5% Patch 2 PICH PO DAILY	24. Levthyroxine 88 mcg daily
	24. Methadone 12.5 mg PO DAILY	25. Metoclopramide 10 mg qACHS
	25. Acetaminophen 650 mg PO Q6H	26. Ciprofloxacin 250 mg BID x 1-5 days
		27. Omeprazole 20 mg daily



Original Study

Medication Reconciliation in Continuum of Care Transitions: A Moving Target

Liron Danay Sinvani MD^{a,b}, Judith Beizer PharmD^{a,b}, Meredith Akerman MS^c,
 Renee Pekmezaris PhD^{a,c,d,e}, Christian Nouryan MA^a, Larry Larsky PhD^f, Charles Cai RN, MS, MBA^f,
 Yosef Dlugacz PhD^{a,f}, Kevin Masick PhD^f, Gisele Wolf-Klein MD^{a,d,g}

JAMDA 2013;14:668-672

Number of meds per patient increased with each transition:
 (6.5 -> 10.7 -> 12.6)

Average of 7.5 medication changes per patient per transition

Beit Sourasky-Mab
 Beth Israel Deaconess Medical Center

Beit Sourasky-Mab
 Beth Israel Deaconess Medical Center

Medication discrepancies across multiple care transitions: A retrospective longitudinal cohort study in Italy

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Results

Of 366 included patients, 25.68% had at least one discrepancy. The most frequent type of discrepancy was from medication omission (N = 74; 71.15%). Only discharge from a long-stay care setting (T4) was significantly associated with the onset of discrepancies (p = 0.045). When considering a lack of adequate documentation, not as missing data but as a discrepancy, 43.72% of patients had at least one discrepancy.

Risks of Transitions

- Adverse drug events
- Missed results from pending tests
- Lack of appropriate follow-up

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IMPROVING PATIENT CARE

Patient Safety Concerns Arising from Test Results That Return after Hospital Discharge

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Background: Failure to relay information about pending when patients are discharged from the hospital is an important patient-safety problem. Few data are available on the epidemiology of test results pending at discharge and physician awareness of these results.

Objective: To determine the prevalence, characteristics, and physician awareness of potentially actionable laboratory and radiologic test results returning after hospital discharge.

Design: Cross-sectional study.

Setting: Two tertiary care academic hospitals.

Patients: 2644 consecutive patients discharged from hospitalist services from February to June 2004.

Measurements: The main outcomes were the prevalence and characteristics of potentially actionable test results returning after hospital discharge, awareness of these results by inpatient and primary care physicians, and satisfaction of inpatient physicians with current systems for follow-up on test results. The authors prospectively collected data on test results pending at the time of discharge and, as results returned after discharge, surveyed hospitalists, junior residents, and primary care physicians about those results that were potentially actionable according to a physician-reviewer.

Results: A total of 1095 patients (41%) had 2033 test results return after discharge. Of these results, 191 (9.4% [95% CI, 8.0% to 11.0%]) were potentially actionable. Surveys were sent regarding

results in the surveys with responses, physicians had been unaware of 66 (61.6% [CI, 51.3% to 70.9%]) of these 66, they agreed with physician-reviewers that 24 (32.1% [CI, 23.2% to 50.2%]) were actionable and 8 (12.6% [CI, 6.4% to 23.3%]) required urgent action. Inpatient physicians were dissatisfied with their systems for following up on test results returning after discharge.

Limitations: The authors were unable to determine whether physicians' lack of awareness of test results returning after discharge was associated with adverse outcomes.

Conclusions: Many patients are discharged from hospitals with test results still pending, and physicians are often unaware of potentially actionable test results returning after discharge. Further work is needed to design better follow-up systems for test results returning after hospital discharge.

Ann Intern Med. 2006;143:121-128.
 For author affiliations, see end of text.

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Pending Laboratory Tests and the Hospital Discharge Summary in Patients Discharged To Sub-Acute Care

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Only 11% of these tests were documented in the discharge paperwork

Risks of Transitions

- Adverse drug events
- Missed results from pending tests
- Lack of appropriate follow-up

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ORIGINAL INVESTIGATION

Tying Up Loose Ends

Discharging Patients With Unresolved Medical Issues

Carlton Moore, MD, Thomas McGinn, MD, MPH, Ethan Halm, MD, MPH

Greater than 1 in 4 of discharged patients had recommendations for an outpatient work-ups

Background: Discharge from the hospital requires that the physician recommend outpatient workups to resolve medical issues at the time of discharge.

Methods: We reviewed the medical records of patients discharged from a large tertiary care hospital between January 1 and December 31, 2007, to determine if the hospital physician recommended an outpatient workup. Subjects' outpatient medical records were then reviewed to determine if the workups were completed.

Results: Of 693 hospital discharges, 191 discharged patients (27.6%) had 240 outpatient workups recommended by their hospital physicians. The types of workups were diagnostic procedures (47.9%), subspecialty referrals (35.4%), and laboratory tests (16.7%). The most

- 36% of these work-ups were not completed
- DC summaries with documentation of recommended work-up increased likelihood of work-up being completed
- Increased time to initial post dc visit with PCP decreased likelihood of work-up being completed

commonly recommended workups were laboratory tests. Increased time to initial post-discharge visit with PCP decreased likelihood of work-up being completed.

Conclusion: Noncompletion of recommended outpatient workups after hospital discharge is common. Primary care physicians' access to discharge summaries documenting the recommended workup is associated with better completion of recommendations. Future research should focus on interventions to improve the quality and dissemination of discharge information to primary care physicians.

Arch Intern Med. 2007;167:1305-1311

Back to our patient: what is her understanding & perspective?

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Discharge instructions from the ICU:

You were admitted on 10/30 for altered mental status, high blood sugars, and high blood pressures. Your confusion and high blood pressures required a stay in the ICU. You were put on several medications to manage your blood pressure and at discharge it is moderately well controlled. You should follow up with your primary care provider for further monitoring and treatment.

You came to the hospital with high blood sugars. You were taken off your insulin pump and were put on long acting and short acting insulin. Please continue this insulin regimen until you see your endocrinologist.

In addition, you were on many pain medications at home, which likely contributed to your confusion. You have been taken off your home medications and put on a long-acting opioid medication, methadone, with plans to slowly titrate it down. At discharge please see your primary care physician for further management of your pain.

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"I felt the doctors and the nurses did a good job taking care of me. I didn't know I had problems with my blood pressure. I remember I had a problem with my kidneys, but I don't know what caused it. At the rehab, I had some physical therapy. I don't think I had any problems while I was there. I didn't know I had a urine infection or problems with my kidneys again."

"I couldn't get methadone when I went home. I had so much pain so I took oxycodone and morphine that I had at home. I didn't know what else to do. I didn't know the morphine was causing the problems with my kidneys. But I know now not to take this anymore."

"I feel I have a good system with my medications. I divide my morning medications, evening medications, and once-a-day medications in different plastic bags. I put away old medications in the back of the bathroom shelf."

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MAYO CLINIC PROCEEDINGS

Original Article

Patients' Understanding of Their Treatment Plans and Diagnosis at Discharge

Amgad N. Makaryus, MD*, Eli A. Friedman, MD*   [Mayo Clin Proc. 2005 Aug;80\(8\):991-4.](#)

RESULTS

Of the 47 patients surveyed, 4 were excluded. Of the remaining 43 patients, 12 (27.9%) were able to list all their medications, 16 (37.2%) were able to recount the purpose of all their medications, 6 (14.0%) were able to state the common side effect(s) of all their medications, and 18 (41.9%) were able to state their diagnosis or diagnoses. The mean number of medications prescribed at discharge was 3.66.

CONCLUSIONS

Less than half of our study patients were able to list their diagnoses, the name(s) of their medication(s), their purpose, or the major side effect(s). Lacking awareness of these factors affects a patient's ability to comply fully with discharge treatment plans. Whether lack of communication between physician and patient is actually the cause of patient unawareness of discharge instructions or if this even affects patient outcome requires further study.

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