

## HEART FAILURE



## Ideal Discharge for the Heart Failure Patient: A Hospitalist Checklist

x = required0 = optional

Data Elements	Processes		
	Discharge Summary	*Patient Instructions	Communication to follow- up clinician on day of discharge
Presenting problem that precipitated hospitalization	x	x	x
Key findings and test results	х		х
Final Primary and Secondary Diagnoses	х	х	x
Brief Hospital Course — for Heart failure problem include the following:  Etiology of heart failure  Triggers of exacerbations  Ejection fraction  In-hospital interventions  In-hospital diuresis  Discharge weight  Target weight range  Discharge creatinine/GFR  Follow-up studies needed  Immunization  Pneumovax  Influenza	X X X X X X X		X X X X X X X
Condition at discharge, including functional status and cognitive status if relevant $^{20,21}$	x - functional status o - cognitive status		
Discharge destination (and rationale if not obvious)	х		х
Discharge Medications: Written schedule Include purpose and cautions (if appropriate) for each <sup>29</sup> Comparison with pre-admission medications (new, changes in dose/freq, unchanged, "meds should no longer take" <sup>30</sup> ) High risk medications that need close follow-up and monitoring (warfarin, high-dose diuretics with plan for on-going diuresis, CV meds, corticosteroids, hypoglycemic agents, narcotic analgesics	X O X	X X X	X O X
Lab monitoring within 72-hours of discharge Electrolytes, BUN, creatinine/GFR for patients with:  ❖ on-going diuresis  ❖ on ACEI/ARB with newly added spironolactone	х	х	х



	Processes		
Data Elements	Discharge Summary	*Patient Instructions	Communication to follow- up clinician on day of discharge
INR for patients: ❖ Newly started on warfarin ❖ Patients with variable in-hospital INR values			
Follow-up appointments with name of provider, date, address, phone number, visit purpose, suggested management plan. Follow-up with primary heart failure physician within 7 days of discharge	х	х	х
All pending labs or tests, responsible person to whom results will be sent <sup>31</sup>	х		х
Recommendations of any sub-specialty consultants	x		х
Documentation of patient education and understanding  Diet  Weight  Signs and symptoms of heart failure  Activity  Medications	X X X X	X X X X	
Any anticipated problems and suggested interventions and who to call	х	Х	х
24/7 call-back number	x	x	
Identify referring and receiving providers	x	x	
Resuscitation Status  And any other pertinent end-of-life issues <sup>32</sup> , including assessing appropriateness for hospice and/or palliative care.	х		

x = required

o = optional

<sup>\*</sup>Patient Instructions: Provide instructions that are culturally appropriate and in the patient's primary language that is written at 6th grade level.

## **BIBLIOGRAPHY**

- Williams SC. Schmaltz SP. Morton DJ. Koss RG. Loeb JM. Quality of care in U.S. hospitals as reflected by standardized measures, 2002-2004.[see comment]. [Journal Article] New England Journal of Medicine. 353(3):255-64, 2005 Jul 21.
- 2. Fonarow GC. Yancy CW. Heywood JT. ADHERE Scientific Advisory Committee, Study Group, and Investigators. Adherence to heart failure quality-of-care indicators in US hospitals: analysis of the ADHERE Registry.[see comment]. [Journal Article. Multicenter Study] Archives of Internal Medicine. 165(13):1469-77, 2005 Jul 11.
- 3. Straubhaar B. Krahenbuhl S. Schlienger RG. The prevalence of potential drug-drug interactions in patients with heart failure at hospital discharge. [Journal Article] Drug Safety. 29(1):79-90, 2006.
- 4. Anderson MA. Levsen J. Dusio ME. Bryant PJ. Brown SM. Burr CM. Brown-Benn C. Evidenced-based factors in readmission of patients with heart failure. [Review] [15 refs] [Journal Article. Review] Journal of Nursing Care Quality. 21(2):160-7, 2006 Apr-Jun.
- 5. Butler J. Speroff T. Arbogast PG. Newton M. Waitman LR. Stiles R. Miller RA. Ray W. Griffin MR. Improved compliance with quality measures at hospital discharge with a computerized physician order entry system. [Journal Article] American Heart Journal. 151(3):643-53, 2006 Mar.
- 6. Anderson C. Deepak BV. Amoateng-Adjepong Y. Zarich S. Benefits of comprehensive inpatient education and discharge planning combined with outpatient support in elderly patients with congestive heart failure. [Journal Article] Congestive Heart Failure. 11(6):315-21, 2005 Nov-Dec.
- 7. Lesperance ME. Bell SE. Ervin NE. Heart failure and weight gain monitoring. [Evaluation Studies. Journal Article] Lippincott's Case Management. 10(6):287-93, 2005 Nov-Dec.
- 8. Hamner JB. Ellison KJ. Predictors of hospital readmission after discharge in patients with congestive heart failure. [Journal Article] Heart & Lung. 34(4):231-9, 2005 Jul-Aug.
- 9. Koelling TM. Johnson ML. Cody RJ. Aaronson KD. Discharge education improves clinical outcomes in patients with chronic heart failure. [Clinical Trial. Journal Article. Randomized Controlled Trial] Circulation. 111(2):179-85, 2005 Jan 18.
- 10. Roe-Prior P. Variables predictive of poor postdischarge outcomes for hospitalized elders in heart failure. [Journal Article] Western Journal of Nursing Research. 26(5):533-46, 2004 Aug.
- 11. Phillips CO. Wright SM. Kern DE. Singa RM. Shepperd S. Rubin HR. Comprehensive discharge planning with postdischarge support for older patients with congestive heart failure: a meta-analysis.[see comment][erratum appears in JAMA. 2004 Sep 1;292(9):1022]. [Journal Article. Meta-Analysis] JAMA. 291(11):1358-67, 2004 Mar 17.
- 12. Walblay AM. Heart failure management across the continuum: a communication link. [Journal Article] Outcomes Management. 8(1):39-44, 2004 Jan-Mar.
- 13. McDonald K. Ledwidge M. Cahill J. Quigley P. Maurer B. Travers B. Ryder M. Kieran E. Timmons L. Ryan E. Heart failure management: multidisciplinary care has intrinsic benefit above the optimization of medical care. [Clinical Trial. Journal Article. Randomized Controlled Trial] Journal of Cardiac Failure. 8(3):142-8, 2002 Jun.
- 14. Coviello JS. Hricz-Borges L. Masulli PS. Accomplishing quality of life in end-stage heart failure: a hospice multidisciplinary approach. [Case Reports. Journal Article] Home Healthcare Nurse. 20(3):195-8, 2002 Mar.
- 15. Bull MJ, Hansen HE and Gross CR. Predictors of elder and family caregiver satisfaction with discharge planning. J Cardiovasc Nurs 2000; 14:76-87.

- 16. Charles C, Gauld M, Chambers L, O'Brien B, Haynes RB, and Labelle R. How was your hospital stay? Patients' report about their care in Canadian hospitals. Can Med Assoc J 1994; 150:1813-22.
- 17. Cleary PD. A hospitalization from hell: a patient's perspective on quality. Ann Intern Med 2003: 138:33-9.
- 18. JACHO Manual: Information Management (IM) 6.10 and Patient Care (PC) 15.30
- 19. Lewis T. Using the NO TEARS tool for medication review. BMJ 2004. 329: 434.
- 20. Manning DM, Keller AS and Frank DL. Independent Mobility Validation Exam (I-MOVE): a tool for periodic reassessment of fall-risk and discharge planning. Abstract and Poster presentation at SHM (formerly NAIP) 5th Annual Meeting, Philadelphia PA April 9, 2002.
- 21. Mathias S, Nayak US and Isaacs B. Balance in elderly patients: the "Get-up-and-go" test. Arch Phys Med Rehabil. 1986; 67:387-9.
- 22. Naylor MD, Brooten D, Campbell R et al. Comprehensive discharge planning and home follow-up of hospitalized elders: a randomized clinical trial. JAMA. 1999; 281:613-20.
- 23. van Walraven C , Mamdani M, Fang J and Austin PC. Continuity of care and patient outcomes after hospital discharge. J Gen Intern Med 2004; 19:624-31.
- 24. van Walraven C and Weinberg AL. Quality assessment of a discharge summary system. CMAJ. 1995;152: 1437-42.
- 25. van Walraven C and Rokosh E. What is necessary for high-quality discharge summaries? Am J Med Qual 1999. 14:160-9.
- 26. Kucukarslan S, Peters M, Mlynarek, M, Nafzinger, D. Pharmacists on rounding teams reduce preventable adverse events in hospital general medicine units. Archives of Internal Medicine 2003; 163:2014-2018.
- 27. Dudas V, Bookwalter T, Kerr K, Pantilat S. The impact of follow-up telephone calls to patients after hospitalization. Annals of Internal Medicine 2001; 111(9B):26S-30S
- 28. Institute of Medicine (Kindig DA editor) Health literacy: a prescription to end confusion. 2004. National Academies Press. Washington DC.
- 29. Institute for Healthcare Improvement R. Resar, MD (personal communication)
- 30. Roy C, Poon EG, Karson AS et al. Patient safety concerns arising from test results that return after hospital discharge. Ann Intern Med. 2005 Jul 19; 143(2):121-8.
- 31. AMA, Council on ethical and judicial affairs. Guidelines for appropriate use of "Do-Not-Resuscitate" orders. JAMA 1991; 265: 1868-71.
- 32. Hunt SA, Abraham WT, Chin MH, et al. ACC/AHA Guideline Update for the Diagnosis and Management of Chronic Heart Failure in the Adult. Circulation 2005; 112:e154.
- 33. Adams, KF, Lindenfeld J, Arnold JM, et al. HFSA 2006 Comprehensive Heart Failure Practice Guideline J Card Fail 2006;12:e1-e119.