

CLEVELAND HEART FAILURE SCAN ECHO PROGRAM



Using administrative data to assess changes in processes of care related to SCAN ECHO participation

- Among treatment naïve patients (to ACE/ARB and B-blockers), is SCAN ECHO participation associated with being started on these medications
- Among patients already on ACE/ARB and B-blockers, is SCAN ECHO participation associated with titration to higher doses of medications
- Is SCAN ECHO participation associated with subsequent:
 - cardiology clinic visits
 - ED visits or hospitalization for HF

VISN 10 SCAN-ECHO Participation

- 43 SCAN-ECHO sessions from 8/24/2011 to 12/11/2013
- 53 distinct provider participants indicated in logs
 - ▣ Average provider participation: 9 sessions (median)
 - ▣ Average length of provider participation: 307 days

Patient and provider inclusion criteria for analysis

- All patients with heart failure diagnosis in VISN 10
 - August 1, 2010-October 31, 2014
 - At least 2 PCP visits
 - CBOC-based Primary Care
- 10,612 patients identified
 - 523 primary care providers
- SCAN ECHO participation
 - Of the 53 providers indicated in the logs, 29 providers were matched as PCP's of patients in the cohort above
 - 1,178 patients with HF matched to those 29 providers

Baseline characteristics

	All	Exposed	Not Exposed	P Value
	N = 10612	N = 1178	N = 9434	
DEMOGRAPHICS				
Age *	70.96 (10.46)	71.84 (10.56)	70.85 (10.45)	< 0.01
Male	10421 (0.98)	1159 (0.98)	9262 (0.98)	0.69
White	9607 (0.91)	1080 (0.92)	8527 (0.9)	0.17
COMORBIDITIES				
CKD	1992 (0.19)	234 (0.2)	1758 (0.19)	0.33
COPD	770 (0.07)	68 (0.06)	702 (0.07)	0.04
CVD	1423 (0.13)	162 (0.14)	1261 (0.13)	0.75
CardShock	11 (0)	1 (0)	10 (0)	0.99
DVT	478 (0.05)	54 (0.05)	424 (0.04)	0.95
Depression	1141 (0.11)	115 (0.1)	1026 (0.11)	0.27
Diabetes	5421 (0.51)	562 (0.48)	4859 (0.52)	0.02
Dialysis	100 (0.01)	11 (0.01)	89 (0.01)	0.99
Fam Hx CAD	26 (0)	2 (0)	24 (0)	0.81
HTN	8789 (0.83)	980 (0.83)	7809 (0.83)	0.75
Hyperlipidemia	7907 (0.75)	931 (0.79)	6976 (0.74)	< 0.01
New Dialysis	29 (0)	2 (0)	27 (0)	0.67
PAD	1895 (0.18)	222 (0.19)	1673 (0.18)	0.37
PTSD	873 (0.08)	78 (0.07)	795 (0.08)	0.04
Prior CABG	1365 (0.13)	157 (0.13)	1208 (0.13)	0.65
Prior Cardiac Trans	14 (0)	1 (0)	13 (0)	0.96
Prior MI	338 (0.03)	35 (0.03)	303 (0.03)	0.72
Prior PCI	852 (0.08)	113 (0.1)	739 (0.08)	0.04
Prior Renal Trans	36 (0)	2 (0)	34 (0)	0.43
Prior Valve DZ	1090 (0.1)	135 (0.11)	955 (0.1)	0.17



Among treatment naïve patients (no ACE/ARB or B-blockers fills in the prior year), is SCAN ECHO participation associated with being started on these medications?

	SCAN-ECHO Exposure	Number at Risk	% on medication	Unadjusted Hazard Ratio (95% CI)	Adjusted Hazard Ratio (95% CI)
ACE/ARB					
	pre	25	14.5	ref	ref
	none	910	24.4	1.4 (0.9-2.1)	1.3 (0.88-1.9)
	post	103	22.8	1.8 (1.2-2.8)	1.7 (1.1-2.6)
Beta Blocker					
	pre	163	18.4	ref	ref
	none	3,420	30.1	1.4 (0.98-2)	1.3 (0.9-1.9)
	post	440	30.1	1.9 (1.2-2.8)	1.8 (1.2-2.6)

* Hazard Ratios above 1.0 represent increased medication fill rates

Among patients already on medications, is SCAN ECHO participation associated with titration to higher doses of medications?

	Total N	% 25MG	% 50MG	% 100MG	% 200MG
No SCAN-ECHO	4,545	14.5%	28%	31%	26%
SCAN-ECHO	236	8%	30%	25%	36%

Metoprolol

Carvedilol

	Total N	% 3.125MG	% 6.25MG	% 12.5MG	% 25MG
No SCAN-ECHO	6,771	4%	20%	20%	56%
SCAN-ECHO	354	4%	15%	16%	65%

Is SCAN ECHO participation associated with subsequent cardiology clinic visits or ED visits or hospitalization for heart failure?

	SCAN-ECHO Exposure	Number at Risk	% with outcome	Unadjusted Hazard Ratio (95% CI)	Adjusted Hazard Ratio (95% CI)
Cardiology Visit					
	pre	493	26.2	ref	ref
	none	9,428	41.4	1.4 (0.9-2.1)	1.08 (0.9-1.3)
	post	1,074	30.5	1.8 (1.2-2.8)	0.96 (0.8-1.2)
ED Visit or Hospitalization					
	pre	493	13.8	Ref	ref
	none	9,428	22.8	1.3 (1-1.8)	1.3 (0.99-1.7)
	post	1,074	21.7	1.1 (0.8-1.4)	1.2 (0.92-1.6)

SCAN ECHO heart failure

- Cleveland, Albuquerque and Salem
- National curriculum to be updated
- Moving to regions and blackboard
- Emphasis on rural sites-ORH
- Maps
- Virtual medical center

Specialty Care Neighborhoods

- Team of specialists in a multidisciplinary team
- Coordinate better with PACT (CCA)
- Improve processes with System Redesign

- FY 12,13,14
- Loma Linda and Cleveland



IMPACT HF Care: T Bootcamps



Integrating Management of PACTs and
Heart Failure Care

- Kimberley Schaub, PhD (Cardiology)
- Presenting on behalf of the Cleveland team

The Project

- WHAT: Building a support network for the PACT RN Care Manager to feel empowered to serve as the primary coordinator among the patients, primary, AND specialty care

- HOW: By providing tools to assist with
 - ▣ Assessment (care coordination template)
 - ▣ Resource management (home-based programs and specialty –based access including SMAs and med rec clinic)
 - ▣ *Education (targeted educational resources)

Education

- Development of heart failure “bootcamps”, skill-based workshops where patients and family members demonstrate knowledge/skills in:
 - Recognizing symptoms
 - Managing medications
 - Weight monitoring
 - Eating and snacking

- 4 additional bootcamp sessions (total = 8) will be developed once first 4 sessions are implemented

Bootcamp Specifics

- Who: Patients with **heart failure** post-discharge
- What: **Skill based group** educational assessment of heart failure self-management skills
- When: **Monday's 12:00-1:30pm** beginning December 2012
 - Roll out of 4 sessions over the next 4 months
- Where: **Rockefeller Garden Conference Room**
- How: **Consult** entered by PACT RN Care manager, PCP, or Cardiology

General Cardiology Consult
Cardiology PreOp Evaluation
Heart Failure Evaluation
Lipid Evaluation...
Antiarrhythmic Medication Approval
Electrophysiology Evaluation Consult
W Pacemaker/ICD Follow Up
W Cardiology HF Med Review

P Procedures

H-Fit Patient Education Bootcamps

H-Fit Patient Education Bootcamps

■ Defend Your Heart Bootcamp

During this interactive session participants will engage in activities to improve understanding of 1) the symptoms of heart failure, 2) how their symptoms present and self-management strategies to use for their symptoms, and 3) who to call when experiencing symptoms.

Documentation

- A CPRS note titled “H-FIT Patient Education Bootcamp” will be attached to the consult and entered into CPRS

- Will contain:
 - ▣ Summary of the session content
 - ▣ Individual assessment of skill demonstration
 - ▣ Recommendations