



AFFILIATE MARKET MEETING

Q2 2025— June 25, 2025

Agenda

- Heart Failure codes/common missed codes Kiersten Kinchen, Lead, Clinical Documentation and Coding Accuracy Educator
- Village MD Heart Failure protocols- Zenobia Brown, MD SVP Clinical Operations
- Heart Failure Medical Economics- Vinod Shenai Senior Director, Healthcare Analytics
- Q &A



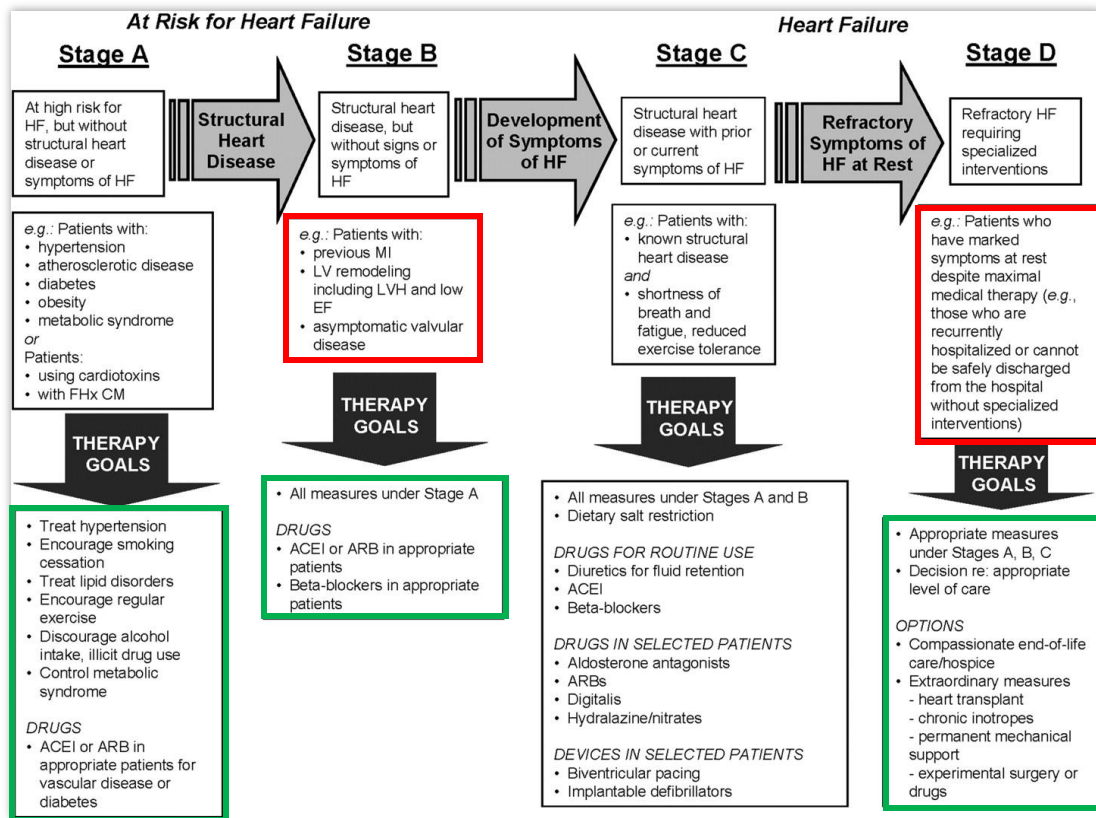
Clinical Documentation for Heart Failure

Documentation and AHA Stages of Heart Failure

Documentation

Stages	Definition & Code
Stage A: At Risk	At risk for HF but without symptoms, structural heart disease, or cardiac biomarkers of stretch or injury. ICD-10: Z91.89, Other specified personal risk factors
Stage B: Pre-HF	No symptoms or signs of HF and evidence of 1 of the following: <ul style="list-style-type: none"> Structural heart disease Evidence for increased filling pressures Patients with risk factors <i>and</i> increased BNP or persistently elevated troponin in the absence of competing diagnoses resulting in such biomarker elevations. ICD-10: I50.9, Heart failure
Stage C: Symptomatic	Structural heart disease with current or previous symptoms of HF. ICD-10: I50.*, Heart failure (by type as diastolic or systolic)
Stage D: Advanced	Marked HF symptoms that interfere with daily life and with recurrent hospitalizations despite attempts to optimize guideline-directed medical therapy. ICD-10: I50.84, End stage heart failure

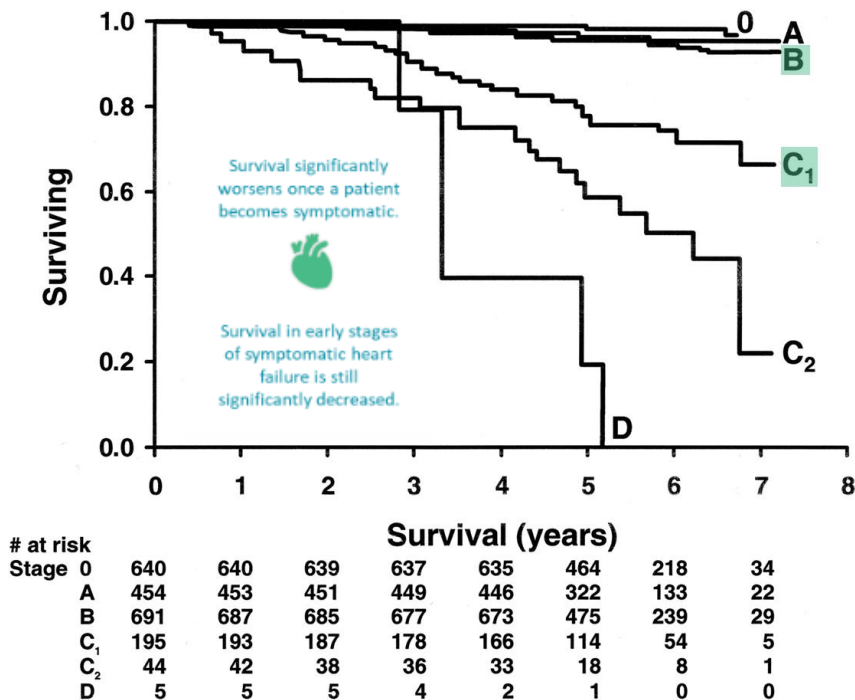
AHA Stages of Heart Failure



References:

1. <https://www.ahajournals.org/doi/full/10.1161/circulationaha.105.600437>

Why Early Detection of Heart Failure Matters



- For example, HFpEF is found in 20%-25% of people with diabetes, he pointed out, and the American Diabetes Association recommends annual screening for heart failure in these patients.
- Without screening, HFpEF can be missed. “The presentation can be very subtle in comparison with heart failure with reduced ejection fraction, where people have a high burden of illness,” he explained. “In HFpEF, symptoms often overlap with the experience of people over 50-60 years of age who don’t actively exercise — fatigue, shortness of breath with exertion, peripheral edema — particularly if they are also overweight.”
- **The number one critical thing in primary care is a high index of suspicion and a low threshold for screening, Skolnik said.**

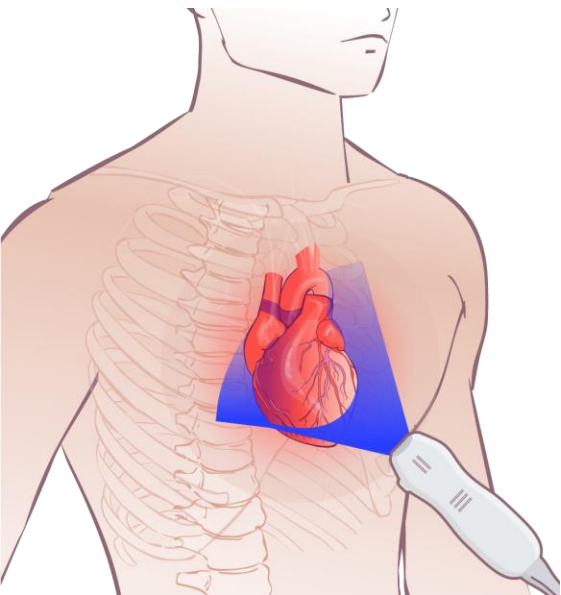
Reference:

1. <https://www.sciencedirect.com/science/article/pii/S2213177916302049>

Reference:

1. <https://www.medscape.com/viewarticle/turning-point-heart-failure-2025a10004wx?form=fpf>

Heart Failure: Screening Criteria



Transthoracic Echo screening for HF

- Patients with no previous diagnosis of HF at increased risk
- No Echocardiogram performed in the past 3 years

Any of the following:

- Cardiac murmur
- Abnormal ECG
- History of CAD or MI
- **Elevated BNP or ProBNP*³**
- Cardiac Arrhythmia

Identify At-Risk patients with any two or more of the following risk factors:

- Hypertension
- PVD
- Diabetes
- Hypertriglyceridemia
- BMI > 35

*There is evidence for obtaining a screening BNP or ProBNP in at-risk individuals

1. American College of Cardiology Foundation Appropriate Use Criteria Task Force; American Society of Echocardiography; American Heart Association; ACCF/AHA/ASNC/HFSA/HRS/SCAI/SCCM/SCCT/SCMR 2011 Appropriate Use Criteria for Echocardiography. A Report of the American College of Cardiology Foundation Appropriate Use Criteria Task Force, American Society of Echocardiography, American Heart Association, American Society of Nuclear Cardiology, Heart Failure Society of America, Heart Rhythm Society, Society for Cardiovascular Angiography and Interventions, Society of Critical Care Medicine, Society of Cardiovascular Computed Tomography, Society for Cardiovascular Magnetic Resonance American College of Chest Physicians. *J Am Soc Echocardiogr.* 2011;24(3):229-267. doi:10.1016/j.jecho.2010.12.008
2. Yancy CW, Jessup M, Bozkurt B, et al. 2013 ACCF/AHA guideline for the management of heart failure: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. *J Am Coll Cardiol.* 2013;62(16):e147-e239. doi:10.1016/j.jacc.2013.05.019
3. Gallagher J, Watson C, Campbell P, Ledwidge M, McDonald K. Natriuretic Peptide-based Screening and Prevention of Heart Failure. *Card Fail Rev.* 2017;3(2):83-85. doi:10.15420/cfr.2017.20:1

Stage B HF

PER AHA DX:

Stage B Heart Failure – “PRE-HF” - I50.9

No Symptoms (prior or current) with ANY of the below findings on ECHO:

- Grade I-IV Diastolic Dysfunction
- Ventricular Hypertrophy
- Chamber wall enlargement
- Wall motion abnormalities
- ≥ Moderate Valvular disease
- Elevated filling pressures
- Reduced Ejection Fraction

congestive heart failure stage B

I50.9 Heart failure, unspecified

Stage B PRE-HF - Asymptomatic - with
to monitor progression of disease.

learning about heart failure

- Grade I-IV Diastolic dysfunction
- Ventricular Hypertrophy
- Chamber wall enlargement
- Wall motion abnormalities
- Valvular heart disease
- Elevated filling pressure

Will continue

Follow Up + RETURN TO OFFICE



Although stage B heart failure is sometimes described as “*pre-heart failure*,” **stage B heart failure** is assigned code I50.9 (heart failure, unspecified) in the ICD-10-CM classification.

+ Failure, failed

+ heart (acute) (senile) (sudden)

+ stage B I50.9 - see also Failure, heart, by type as diastolic or systolic

9. Diseases of the circulatory system (I00-I99)

I30-I52 Other forms of heart disease (I30-I52)

I50 Heart failure



I50.9 Heart failure, unspecified



ECHOCARDIOGRAPHIC REPORT

Patient: [REDACTED]
Height: 61
Exam Date: 04/07/2025 10:06 AM
B.P.: / (mmHg)

Sex: Female
Weight: 220
MRN #: [REDACTED]

DOB: 11/20/1940
BSA: 1.97 m²
Ordering: Sturdivant, Angela MD
Referring: Sturdivant, Angela MD

ICD/Indication: I10 Hypertension

Exam Quality: This was a technically adequate study

Conclusions

- There was no regional wall motion abnormalities noted. Based on the findings above, the patient meets structural and/or hemodynamic criteria for Stage B Heart Failure. There is evidence of impaired relaxation consistent with Grade I diastolic dysfunction with normal left atrial pressure. The left ventricle is thickened in a fashion consistent with mild concentric hypertrophy. Left ventricular ejection fraction was normal, estimated in the range of 55 to 60%.
- There is evidence of mild sclerosis of the aortic valve.
- There is evidence of mild to moderate mitral regurgitation.
- There is evidence of mild tricuspid regurgitation.
- The patient was in normal sinus rhythm.

Findings

Left Ventricle: The left ventricular cavity size appears normal. The left ventricle is thickened in a fashion consistent with mild concentric hypertrophy. Left ventricular ejection fraction was normal, estimated in the range of 55 to 60%. There is evidence of impaired relaxation consistent with Grade I diastolic dysfunction with normal left atrial pressure. There was no regional wall motion abnormalities noted. Based on the findings above, the patient meets structural and/or hemodynamic criteria for Stage B Heart Failure.

Right Ventricle: The right ventricular cavity size is moderately dilated. The right ventricular systolic function appears normal.

Left Atrium: The LA Volume Index is 47.27 ml/m². The left atrium is moderately dilated. There is no visible interatrial septum shunt.

Right Atrium: The right atrium is mildly dilated.

Aortic Valve: The structure of the aortic valve is tricuspid. There is no evidence of aortic stenosis. There is no evidence of aortic regurgitation. There is evidence of mild sclerosis of the aortic valve.

Mitral Valve: There is no mitral stenosis. There is evidence of mild to moderate mitral regurgitation. There is evidence of mild sclerosis of the mitral valve.

Patient: [REDACTED] MRN: [REDACTED]

DOB: 11/20/1940

Exam Date: 04/07/2025 10:06 AM

Page 2 of 3

Pulmonic Valve: The pulmonic valve appears normal in structure and function. There is evidence of trace (trivial) pulmonic regurgitation. There is no evidence of pulmonary stenosis.

Tricuspid Valve: The SPAP is 34.2799987792969 mmHg. The tricuspid valve appears normal in structure and function. There is evidence of mild tricuspid regurgitation. There is no evidence of tricuspid stenosis. Estimated peak SPAP is in the range of 29 - 36. Estimated peak RAP is in the range of <5.

Pericardium: The pericardium appears normal. There is no evidence of pericardial effusion.

Aorta: The ascending aorta is dilated at 3.84 cm with an index of 1.95 cm/m².

Pulmonic Artery: Pulmonary artery appears normal.

Venous: There is evidence of normal respirophasic changes (> 50% collapse) of the inferior vena cava. There is a normal appearing inferior vena cava without evidence of thrombus.

ECG: The patient was in normal sinus rhythm.

Sonographer: SOLIS, ANALOU RCS, RV5

Electronically Signed by: RAJUL PATEL, MD on 4/7/2025 11:44:08 AM

Measurements:

LV Function (2D)	
SV (Telch) 2D	45.84 mL
SV (A4C)	78.89 mL
SV (Mod-Sim)	78.89 mL
EF (Telch) 2D	57.81%
EF (A4C)	66.73%
EDV (Telch) 2D	79.25 mL
EDV (A4C)	118.34 mL
EDV (Mod-Sim)	118.34 mL
ESV (Telch) 2D	33.41 mL
ESV (A4C)	39.37 mL
ESV (Mod-Sim)	39.37 mL
Left Atrium:	
LA Dimension M-Mode	4.57 cm
LA Length A4C	6.71 cm
LA ESV (A-L) A4C	93.11 mL
LA Area 4C	29.90 cm ²
LA Area 4C	24.62 cm ²
LA Volume Index	47.27
LA ESV Index (A-L)	47.37 ml/m ²

Left Ventricle:	
IVcD 2D	3.31 cm
LVPWd 2D	1.37 cm
LVIdD 2D	4.22 cm
LVIdS 2D	2.94 cm
FS (Telch) M-Mode	30.12%
LVs Length A4C	7.12 cm
LVd Length A4C	8.54 cm
LVOT:	
LVOT Diam	2.01 cm
LVOT VTI	32.67 cm
LVOT Vmax	1.23 m/s
LVOT Vmean	0.01 m/s
LVOT Max PG	6 mmHg
LVOT Mean PG	3.11 mmHg
LVOT SV	103.38 mL
LVOT SI	52.48 mL/m ²
Right Ventricle:	
RVP	81.28 mmHg
RVIdD 2D	4.38 cm
RVOT VTI	27.68 cm
RVAdD (2D)	cm
Right Atrium:	
RA Pressure	3 mmHg

Aorta:	
AO Asc Diam	3.84 cm
Dao Vmax	1.03 m/s
Dao Max PG	4.22 mmHg

Inf Vena Cava/Hep Vena:	
IVC Diam	1.69 cm
Mitral Valve:	
MV Vmean	0.40 m/s
MV Vmean PG	1.16 mmHg
MV VTI	32.42 cm
MV Max PG	4.3 mmHg
MV Peak A Vel	1.01 m/s
MV Peak E Vel	0.86 m/s
MV E/A	0.85
MVA (VTI)	3.19 cm ²
MV Dec Time	283.3 ms
MV Dec Slope	0.04 m/s ²
MVA Planimetry	cm ²
MV Vmax	1.04 m/s
MV A Tur	152.34 ms
Aortic Valve:	
AV Vmax	1.75 m/s
AV Vmean	1 m/s
AV Max PG	12.26 mmHg
AV Mean PG	4.75 mmHg
AV VTI	40.8 cm
AVA (Vmax)	2.21 cm ²
AVA (VTI)	2.53 cm ²

Tricuspid Valve	
Stenosis Severity	None
Regurg Severity	Void
TR Vmax	2.8 m/s
TR Max PG	31.28 mmHg
RVSP	34.78 mmHg
SPAP	34.78 mmHg

Pulmonic Valve	
PV Vmax	1.11 m/s
PV Vmean	0.73 m/s
PV Max PG	4.66 mmHg
PV Mean PG	2.39 mmHg
RVOT Vmean	0.41 m/s
RVOT Vmean PG	0.63 mmHg
PV (VTI)	29.89 cm

ECHOCARDIOGRAPHIC REPORT

Patient: [REDACTED]
Height: 69
Exam Date: 04/07/2025 07:13 AM
B.P.: 152 / 90 (mmHg)

Sex: Male
Weight: 252
MRN #: [REDACTED]
DOB: 04/15/1963
BSA: 2.28 m²
Ordering: UnAvailable,
Referring: UnAvailable,

ICD/Indication: I10 Hypertension
Exam Quality: This was a technically adequate study

Conclusions

- There was no regional wall motion abnormalities noted. Based on the findings above, the patient meets structural and/or hemodynamic criteria for Stage B Heart Failure. There is evidence of impaired relaxation consistent with Grade I diastolic dysfunction with normal left atrial pressure. The left ventricle is thickened in a fashion consistent with mild concentric hypertrophy. Left ventricular ejection fraction was normal, estimated in the range of 55 to 60%.
- There is evidence of physiological regurgitation in the tricuspid valve.
- The patient was in normal sinus rhythm.

Findings

Left Ventricle: The left ventricular cavity size appears normal. The left ventricle is thickened in a fashion consistent with mild concentric hypertrophy. Left ventricular ejection fraction was normal, estimated in the range of 55 to 60%. There is evidence of impaired relaxation consistent with Grade I diastolic dysfunction with normal left atrial pressure. There was no regional wall motion abnormalities noted. Based on the findings above, the patient meets structural and/or hemodynamic criteria for Stage B Heart Failure.

Right Ventricle: The right ventricular cavity size appears normal. The right ventricular systolic function appears normal.

Left Atrium: The LA Volume Index is 40.85 ml/m². The left atrium is mildly dilated. There is no visible interatrial septum shunt.

Right Atrium: The right atrial size appears normal.

Aortic Valve: The structure of the aortic valve is tricuspid. There is no evidence of aortic stenosis. There is no evidence of aortic regurgitation.

Mitral Valve: The mitral valve is normal in structure and function. There is no mitral stenosis. There is evidence of trivial (trace) mitral regurgitation.

Pulmonic Valve: The pulmonic valve appears normal in structure and function. There is evidence of physiological regurgitation in the pulmonary valve. There is no evidence of pulmonary stenosis.

Patient: [REDACTED] MRN: [REDACTED] DOB: 04/15/1963 Exam Date: 04/07/2025 07:13 AM Page 2 of 3

Tricuspid Valve: The tricuspid valve appears normal in structure and function. There is evidence of physiological regurgitation in the tricuspid valve. There is no evidence of tricuspid stenosis. Estimated peak RAP is in the range of <5.

Pericardium: The pericardium appears normal. There is no evidence of pericardial effusion.

Aorta: The ascending aorta is dilated at 3.90 cm with an index of 1.71 cm/m².

Pulmonic Artery: Pulmonary artery appears normal. Unable to obtain RVSP due to insufficient tricuspid regurgitation jet.

Venous: There is evidence of normal respirophasic changes (> 50% collapse) of the inferior vena cava. There is a normal appearing inferior vena cava without evidence of thrombus.

ECG: The patient was in normal sinus rhythm.

Sonographer: SOLIS, ANALOU RCS, RVS

Electronically Signed by: RAJUL PATEL, MD on 4/7/2025 8:00:14 AM

Measurements:

LV Function (ED)	
SV (Teich) 2D	104.54 mL
SV (A4C)	99 mL
SV (Med-Sim)	99 mL
EF (Teich) 2D	64.16 %
EF (A4C)	59.85 %
EF (Med-Sim)	60.48 %
EDV (Teich) 2D	162.54 mL
EDV (A4C)	165.47 mL
EDV (Med-Sim)	165.47 mL
FSV (Teich) 2D	38.4 mL
FSV (A4C)	65.48 mL
FSV (Med-Sim)	65.48 mL

Left Atrium	
LA Dimen M Mode	3.28 cm
LA Length A4C	5.97 cm
LA ESV (A4C)	36.35 mL
LA Area 2D	24.71 cm ²
LA Area 4C	24.52 cm ²
LA Volume Index	40.85
LA ESV Index (A4C)	40.85
LA ESV Index (A4C)	40.85

Right Ventricle	
RV Diast 2D	3.36 cm
RVOT VTI	23.59 cm
RVAVW (2D)	cm

Right Atrium	
RA Pressure	3 mmHg

Aortic	
Ao Asc Diam	3.9 cm
Deo Vmax	0.05 m/s
Deo Max PG	3.57 mmHg

Left Ventricle	
IVSD 2D	1.23 cm
IVPWD 2D	1.37 cm
LV Diast 2D	5.74 cm
LV Diast 2D	5.71 cm
IVS (Teich) M Mode	0.47 cm
LV Length A4C	7.85 cm
LV Length A4C	9.5 cm

LVOT	
LVOT Diam	2.27 cm
LVOT VTI	25.4 cm
LVOT Vmax	3.29 m/s
LVOT Vmax PG	6.69 mmHg
LVOT Mean PG	3.31 mmHg
LVOT SV	103.03 mL
LVOT SI	45.19 mL/m ²

Right Ventricle	
RV Diast 2D	3.36 cm
RVOT VTI	23.59 cm
RVAVW (2D)	cm

Right Atrium	
RA Pressure	3 mmHg

Aortic	
Ao Asc Diam	3.9 cm
Deo Vmax	0.05 m/s
Deo Max PG	3.57 mmHg

Inferior Vena Cava/Supr. Vena	
IVC Diam	2.65 cm

Mitral Valve	
MV Mean PG	0.47 m/s
MV Mean PG	1.05 mmHg
MV VTI	21.25 cm
MV Max PG	3.4 mmHg
MV Peak A Vel	0.95 m/s
MV Peak E Vel	0.96 m/s
MV E/A	0.89
MVA (VTI)	3.32 cm ²
MV Dec Time	191.01 ms
MV Dec Slope	0.05 m/s ²
MVA Planimetry	cm ²
MV Vmax	0.92 m/s
MV A Dur	142.72 ms

Pulmonic Valve	
PV Vmax	1.39 m/s
PV Mean PG	0.83 m/s
PV Max PG	7.75 mmHg
PV Mean PG	3.33 mmHg
PVOT Vmax	0.6 m/s
PVOT Vmax PG	1.7 mmHg
PV VTI	29.44 cm

Tricuspid Valve	
Stenosis Severity	None
Regurg Severity	Physiological
TR Vmax	1.57 m/s
TR Max PG	5.88 mmHg

Aortic Valve	
AV Vmax	1.53 m/s
AV Vmax	1.53 m/s
AV Max PG	5.31 mmHg
AV Mean PG	4.67 mmHg
AV VTI	29.74 cm
AVA (Vmax)	3.44 cm ²
AVA (VTI)	3.46 cm ²

Stage C HF

Diagnose Chronic heart failure as ACTIVE even if they are: Stable, Improved, or Asymptomatic

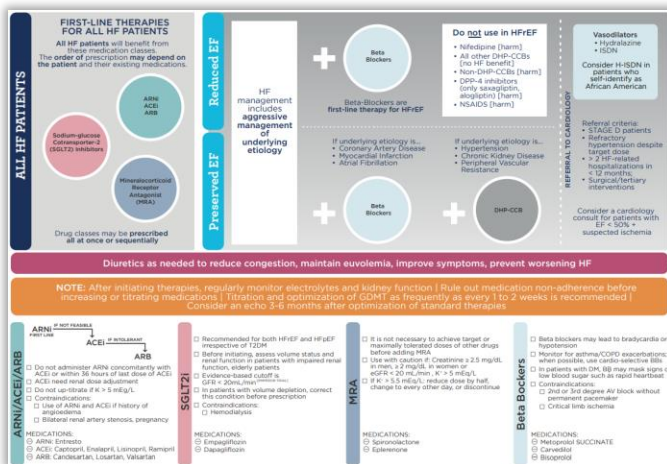
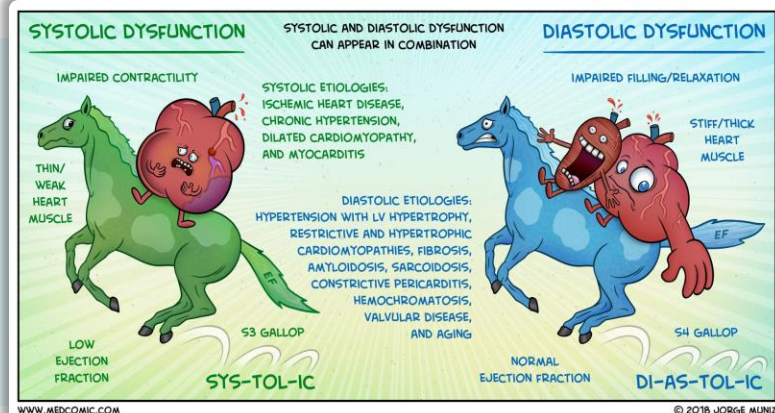
Look at Echocardiograms

CXR – Cardiomegaly will trigger further investigation

Signs: dyspnea on exertion, Edema, orthopnea, tachypnea, fatigue

Pulmonary Hypertension: start looking @ RVSP >35+ ICD10:I27.20

Cardiomyopathy ICD10: I42.9



Stage C: Symptomatic Heart Failure

Great treatment guidelines for Stage C heart failure are present on the OCMO sharepoint site.

We will provide you all with this link.

Stage D HF / Advanced Heart Failure

Stage D: Advanced Heart Failure

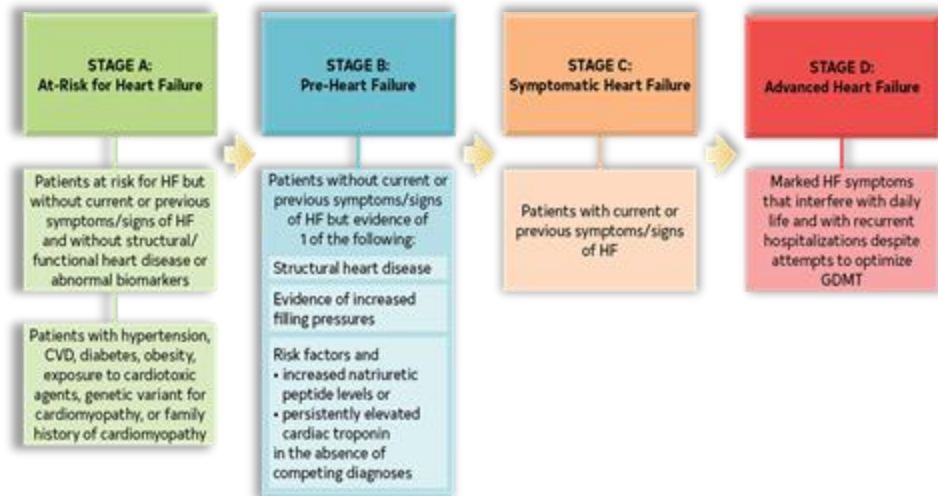
Marked HF symptoms *that interfere with daily life* and with *recurrent hospitalizations* despite attempts to optimize Guideline Directed Medical Therapy (GDMT).

150.84 - End stage heart failure
Stage D heart failure



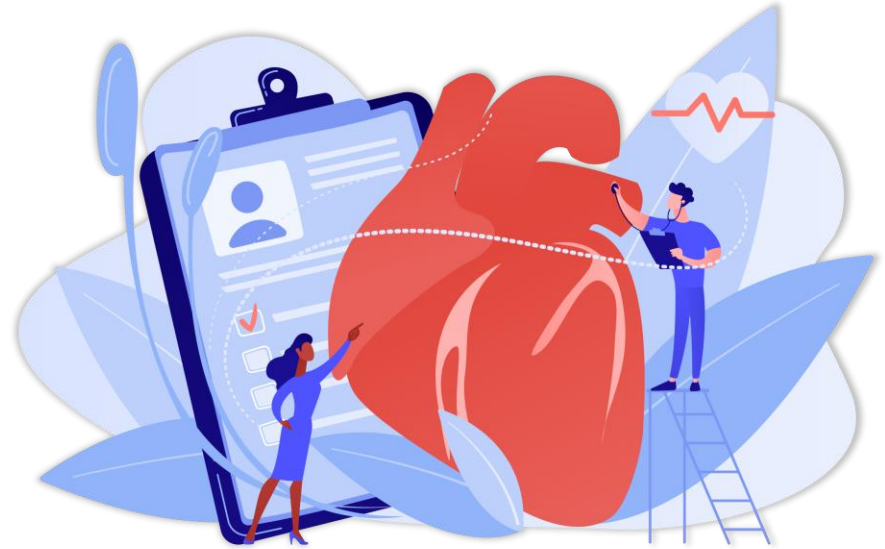
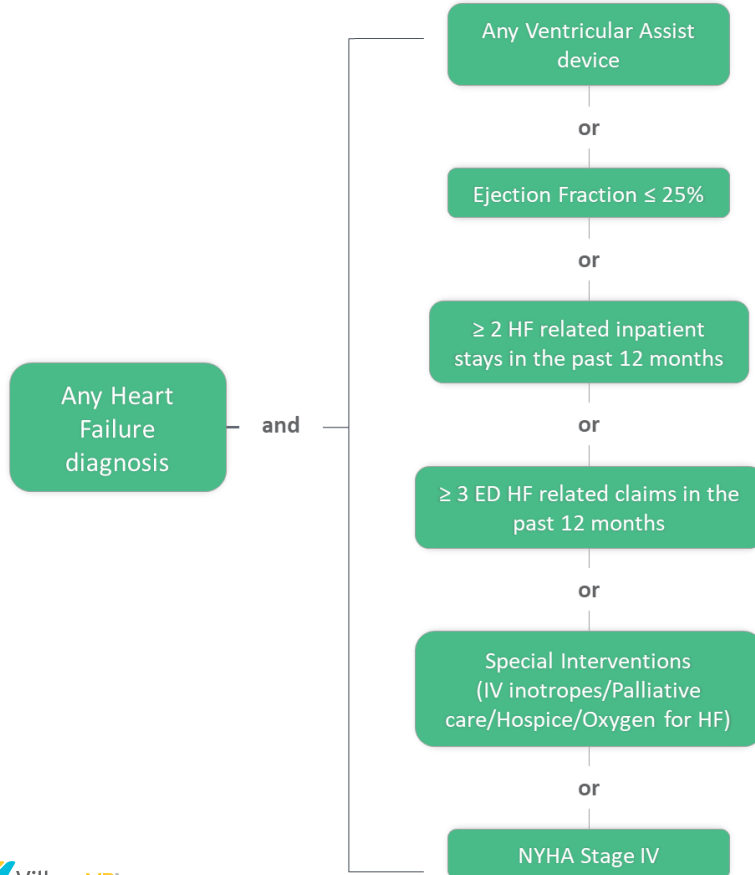
New v28 Adds:

- HCC 222 | End Stage Heart Failure



Paul A. Heidenreich. Circulation. 2022 AHA/ACC/HFSA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines, Volume: 145, Issue: 18, Pages: e895-e1032, DOI: (10.1161/CIR.0000000000001063)

Stage D / End Stage HF Criteria Considered with Clinical Correlation



REMINDER: Making it Clear to the Eyes of Reviewer



Diagnosis

Most specific active vs historical code



Status

Stable, worsening, improving, new, asymptomatic, compensated, etc.



Plan

Continue X medication, will order X

DSP = MEAT



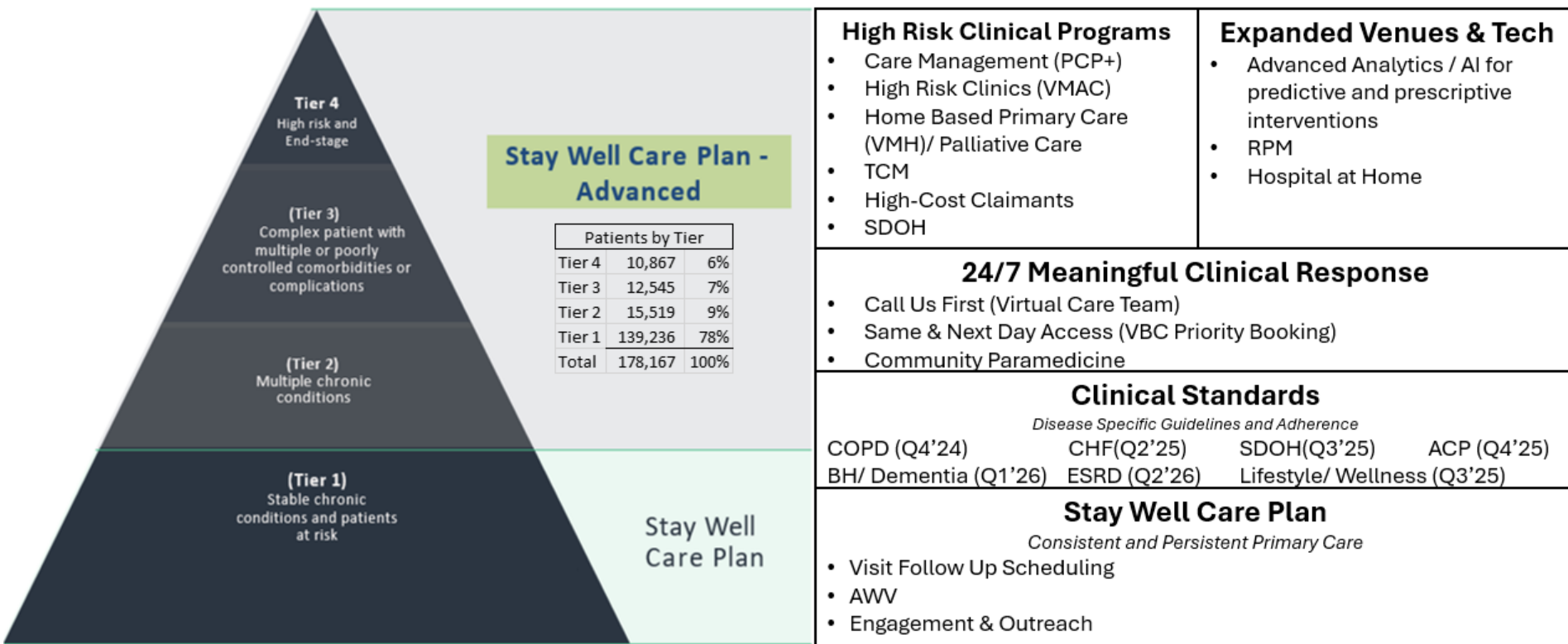
Thank you for your participation!





New Technologies in VBC to drive outcomes in
2025 and 2026

Medical Expense Clinical Strategic Approach and Programming



Cadence RPM

Remote Patient/ Physiologic Monitoring

Type of telehealth in which healthcare providers monitor patients outside the traditional care setting using FDA approved digital medical devices, such as weight scales, blood pressure monitors, pulse oximeters, and blood glucose meters. The data automatically collected from these devices are then electronically transferred to providers for care management and intervention if needed.



RPM Is The New Standard Of Healthcare

Does it work?

Impact of remote patient monitoring on clinical outcomes: an updated meta-analysis of randomized controlled trials

[Benjamin Noah](#),^{1,2} [Michelle S. Keller](#),^{1,2,3} [Sasan Mosadeghi](#),⁴ [Libby Stein](#),^{1,2} [Sunny Johl](#),^{1,2} [Sean Delshad](#),^{1,2} [Vartan C. Tashjian](#),^{1,2,5} [Daniel Lew](#),^{1,2,5} [James T. Kwan](#),^{1,2} [Alma Jusufagic](#),^{1,2,3} and [Brennan M. R. Spiegel](#)^{1,2,3,5,6}

Factors influencing the effectiveness of remote patient monitoring interventions: a realist review

Across a range of RPM interventions 31 factors emerged that impact the effectiveness of RPM innovations on acute care use. These were synthesized into six theories of intervention success:

- (1) targeting populations at high risk;
- (2) accurately detecting a decline in health;
- (3) providing responsive and timely care;
- (4) personalizing care;
- (5) enhancing self-management, and
- (6) ensuring collaborative and coordinated care.



OPEN ACCESS



Post-discharge after surgery Virtual Care with Remote Automated Monitoring-1 (PVC-RAM-1) technology versus standard care: randomised controlled trial

[BMJ Open](#). 2021; 11(8): e051844.

Published online 2021 Aug 24. doi: [10.1136/bmjopen-2021-051844](https://doi.org/10.1136/bmjopen-2021-051844)



#AHA24

IMPLEMENTING GUIDELINES, IMPROVING OUTCOMES & LOWERING COST WITH REMOTE PATIENT CARE

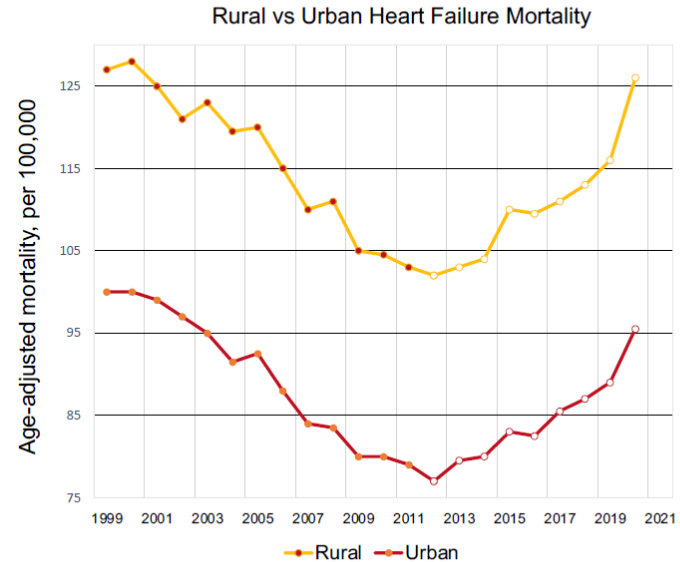
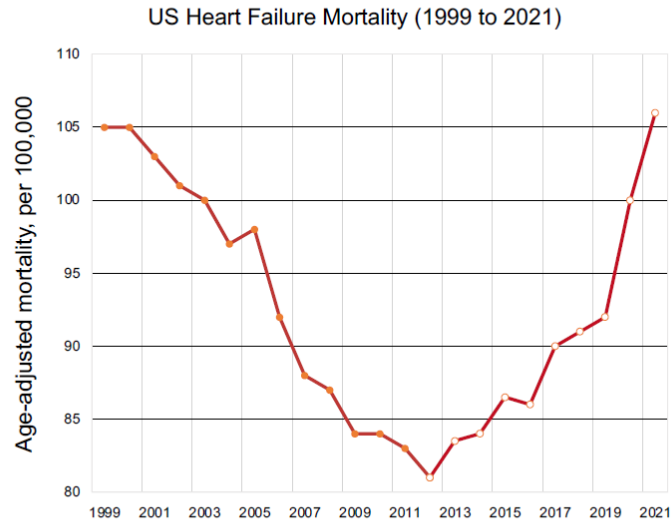
Chris Altchek, Cadence, CEO & Founder

Dr. David I. Feldman, MD MPH, Massachusetts General Hospital, Cadence Medical Advisor

Dr. Marat Fudim, MD MHS, Duke University Medical Center, Cadence Medical Advisor



Heart Failure mortality rates have been on the rise since 2012



Sayed, Fudim et al., "Reversals in the Decline of Heart Failure Mortality in the US, 1999 to 2021," JAMA Cardiology (Apr. 24, 2024).

Remote Patient Care meets the needs of providers, patients, and health systems

Physicians

- Clinical and administrative support with focus on guidelines and care plan execution
- Reduces burden and pajama time

Patients

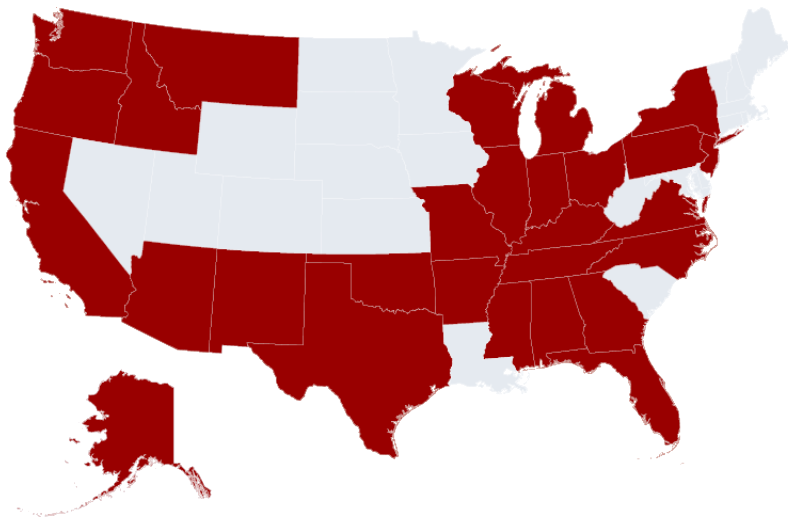
- 24/7 access & monitoring from NP-led team
- Easy-to-use devices utilizing cellular networks for maximum connectivity

Health Systems

- One EMR integration to minimize overhead
- Financially sustainable in both fee-for-service and value-based settings



Launched in 2021, Cadence is the chronic disease management partner for leading health systems



Select Health System Partners

 **RUSH**  **Providence**

 **CHS** Community Health Systems  **BayCare**

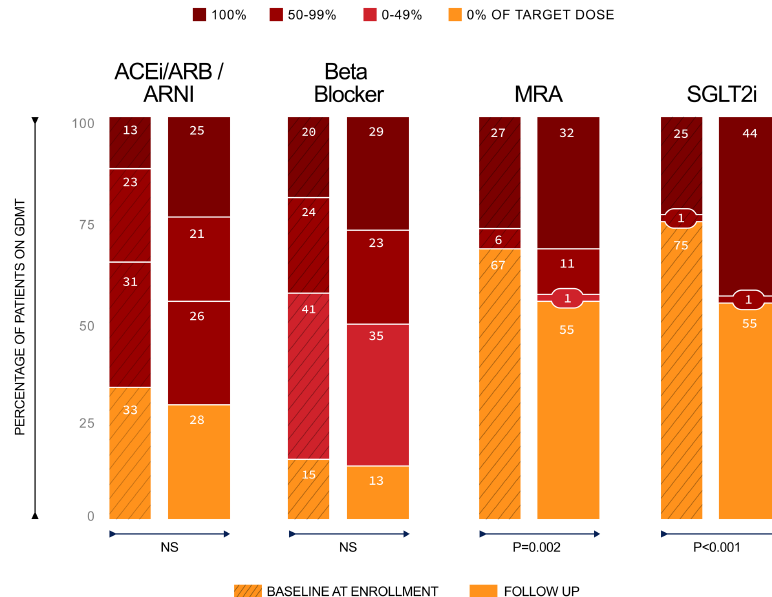
 Hackensack Meridian Health **Montefiore**

 **MONTAGE** Health  **Ardent Health**

 Lifepoint Health  **Texas Health Resources**

2024 Journal of Cardiac Failure: Leveraging RPM to put Heart Failure guidelines into practice

- **230% increase** (from 7% to 23%) in Heart Failure patients achieving all four pillars of GDMT with RPM (n=367 patients)
- **% of patients taking ≥50% of target dosage significantly increased** for all pillars of GDMT
- Average **monthly savings of over \$1,000 per patient** due to reduced hospital and post-hospital discharge spending



Leveraging Remote Patient Monitoring to Effectively Put the Heart Failure Guidelines to Practice; David I. Feldman, MD, MPH; 2024 May

Results from largest Hypertension Remote Patient Care retrospective analysis in U.S. (pre-published)

n=23,638

RPC patients from 21 states

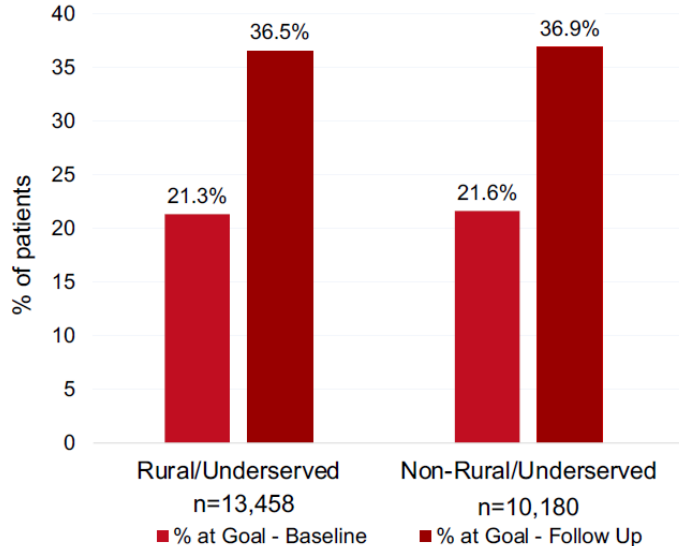
-7/5 mmHg

BP reduction ($p < 0.001$)

70%

Relative increase in % who achieve goal $< 130/80$ mmHg ($p < 0.001$)

Similar clinical outcomes among patients from rural/underserved areas of the U.S.



"Rural" as defined by the Health Resources & Services Administration and Federal Office of Rural Health Policy. "Underserved" as defined by the Federal Housing Finance Agency (low-income areas, minority census tracts, and designated disaster areas).

Results from total cost of care & utilization analysis of Remote Patient Care (pre-published)

n=5,872

RPC patients for whom Medicare claims were analyzed at 12 months following enrollment compared to **11,449 patients in a propensity-score matched* control group**

\$1,308

Annual total savings per patient
(p-value = 0.0026)

27%

Reduction in hospital admissions, driven by reduced hospitalizations for **heart failure, cardiac dysrhythmias, sepsis, and stroke**
(p-value = 0.0002)

* Patients were matched using demographic factors, health status, risk scores, geography (15 states), as well as cost and utilization at baseline

11

Cadence Project Opportunity: Provider adoption is key to improving outcomes for our CHF patients

Opportunity

The Cadence program targets the reduction of Med Ex associated with Chronic Disease. We intend to focus only on Congestive Heart Failure initially as this where the largest opportunity lies for our patient population.

Our average PMPY cost for our VBC patients diagnosed with CHF across our markets range from \$12k for Tier 1&2 patients up to \$35k for Tier 3&4 patients.

	PMPY	ADK	Readmission Rate
Non CHF	\$3,000	227	12.4 %
Tier 1&2 CHF	\$12,000	846	15.8 %
Toer 3&4 CHF	\$35,000		21.3 %

Cadence Project Considerations

Village MD has attempted RPM in the past. The implementation of the program was impacted by technical difficulties that prevented the achievement of program goals. The Cadence program has multiple differentiating elements that were not available to us in our internal attempt: **The main differentiator is the clinical model of care.**



Concierge Enrollment

Enrollment team discusses patient financial obligations, sends devices, and provides program education for patients and their caregivers.



Cell-Enabled Devices

Devices pre-assigned to the patient and automatically transmit vitals. No app, wifi or bluetooth required!

84%

of patients use devices
16+ days per month



Two-Way SMS

All patient communication & vitals sent via SMS text. No smartphone required!



24/7 support

Cadence team available 24/7 to answer any patient questions, clinical or technical.

64%

of patients are still
engaged at 12 months

Cadence handles ALL device management, logistics and troubleshooting

Cadence Project Overview

Background

VillageMD has an urgent need to improve patient outcomes while lowering overall medical expenses. Remote Patient Monitoring (RPM) is designed to manage chronic disease which is a significant medical expense driver. The Cadence RPM program includes:

White Labeled Medical Group

Extends the reach of partner providers with a multidisciplinary team led by NPs (supported by MDs, RNs, and MAs) capable of:



Titration medications



Ordering & reviewing labs



Behavioral & nutritional coaching

Disease-Specific Clinical Protocols

Cadence clinical protocols are based on national society guideline recommendations.



Seamless EMR Integration

Eligible patients easily flagged for physicians to place one-click orders for Cadence. Physicians can access all clinical documentation & patient interactions at any time in their EMR.

CADENCE



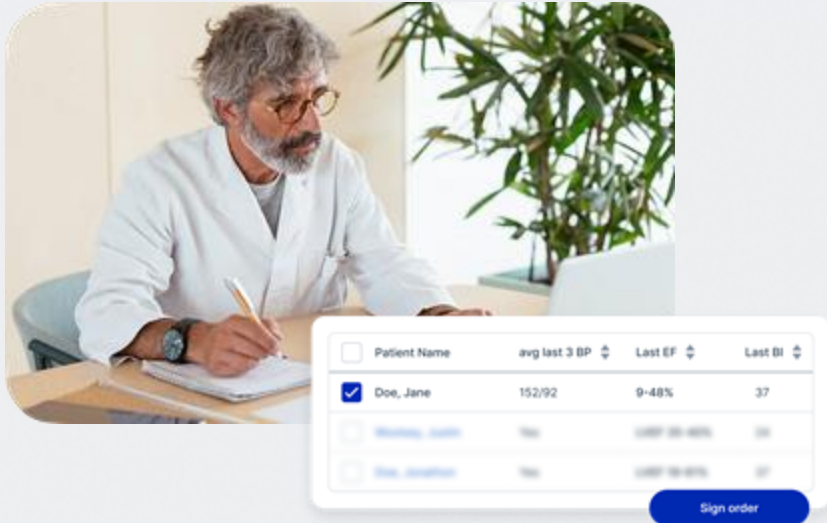
Epic

Cerner

athenahealth

Cadence Panel Athena App

V3.0



Manage your panel with clear patient status, vital averages, engagement data, and the ability to order for eligible patients.

The Panel app is organized in 3 main sections (tabs): *Order*, *Patients*, and *Outcomes*.

Order

<input type="checkbox"/>	Patient Name	avg last 3 BP	Last EF	Last BI
<input checked="" type="checkbox"/>	Doe, Jane	152/92	9-48%	37
<input type="checkbox"/>	Winters, Leah	Yes	148/78-48%	38
<input type="checkbox"/>	Lee, Jonathan	Yes	148/78-48%	37

Sign order

Order Cadence for eligible patients with full control of panel size, condition, and acuity.

Patients

Patient Status			
Patient Name	Cadence status	Condition	Last 30-days primary vital
Doe, Jane	Enrolled on 10/10/2023	HTN	126/73 missing
Winters, Leah	Enrolled on 10/10/2023	148/78-48%	126/73 missing
Lee, Jonathan	Enrolled on 10/10/2023	148/78-48%	126/73 missing

View the status of patients you've ordered, their recent readings, vital averages, and goal status. You can also click through to view their Cadence Chart.

Outcomes

Outcomes		
3 MONTH IN CADENCE	3-6 MONTHS IN CADENCE	6+ MONTHS IN CADENCE
BP below 140/90 morning 72 patients - 52%	BP below 140/90 morning 89 patients - 68%	BP below 140/90 morning 114 patients - 79%
n=132 patients	n=132 patients	n=145 patients

View panel performance data, such as % of your panel at goal, how many alerts Cadence has managed, how engaged your patients are, and more.

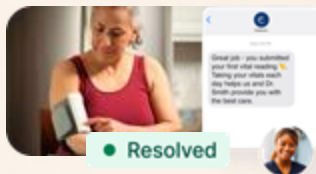
CADENCE SOLUTIONS

Escalation Pathways



Cadence manages all escalations according to our *shared protocols*: *Each practice has a dedicated clinical team and escalation protocols will cater to provider*

TIER 1



1. Patient takes an abnormal reading
2. Receives SMS message asking them to retake that reading
3. Patient retakes the reading, and it is within normal parameters

= No further action is required

TIER 2



1. Patient takes second reading and it remains abnormal
2. Patient receives a call from their Cadence Care team
3. If intervention is within scope of Clinical Protocols, Cadence clinician takes action, resolves the alert, and updates a clinical note in the EMR

= No further action is required

TIER 3 (<1% INCIDENCE)



1. Cadence Care Provider determines immediate action is required after discussing symptoms
2. Cadence Care Team contacts Partner physician and/or helps patient to present to appropriate site of care
3. Cadence follows up every 24–48 hours until the patient's condition stabilized

Cadence's 24/7 Clinical Team is *saving lives* and *reducing provider burden*

* Sample of 10,000 active patients

11,648

Monthly encounters

5,107 alert calls

6,541 appointments



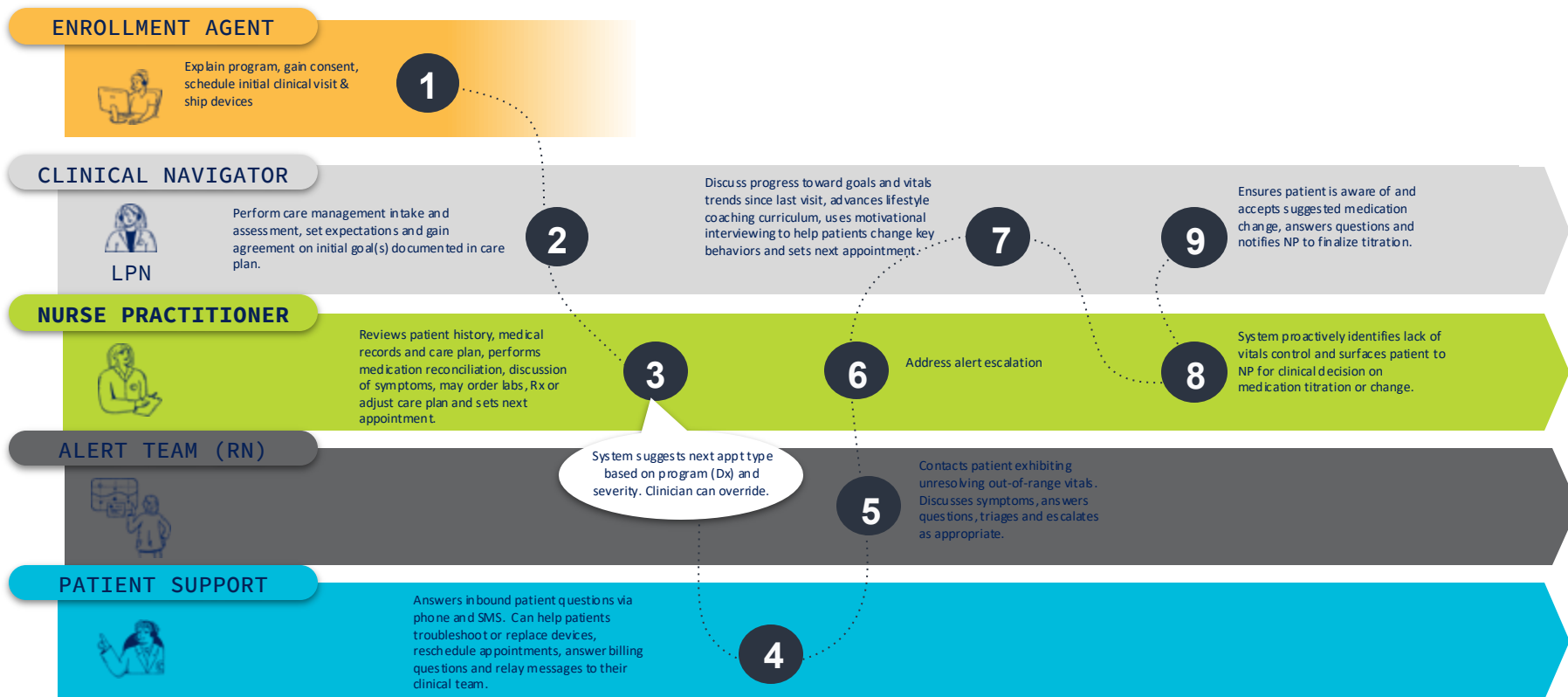
11,413

Managed by Cadence

197 escalated to partner physician

38 escalated to ED

Roles & Responsibilities of the Cadence Care Team





Heart Failure Medical Economics

2024 REACH Affiliate Heart Failure Data

Market	Practice	All Patients				CHF						
		Member Months	Total PMPM	Total Spend	ADK	Member Months	Prevalence	Total PMPM	Total Spend	% Total Spend	ADK	% Total Admits
Atlanta	Lawrenceville Family Practice, PC	6994	\$1,125	\$7,866,381	198	792	11.3%	\$2,672	\$2,116,496	26.9%	653	37.3%
	Cumberland Women's Health Center, PC	350	\$925	\$323,840	206	27	7.7%	\$182	\$4,915	1.5%	0	0.0%
Detroit	Hayner Internal Medicine Associates	2769	\$875	\$2,423,419	186	446	16.1%	\$1,478	\$658,970	27.2%	350	30.3%
	Emmaus Health Partners	2142	\$801	\$1,715,704	157	182	8.5%	\$1,261	\$229,481	13.4%	330	17.9%
LasVegas	Village Medical Priority Health Group	16466	\$1,232	\$20,279,621	224	4122	25.0%	\$2,093	\$8,628,237	42.5%	439	49.1%
NewHampshire	Derry Medical Center, PA	55738	\$993	\$55,360,841	217	10768	19.3%	\$1,938	\$20,866,055	37.7%	537	47.8%
	Southern NH Internal Medicine Associates, PC	23998	\$1,083	\$25,984,350	220	4341	18.1%	\$2,157	\$9,362,185	36.0%	558	45.9%
Orlando	Meadowcrest	44969	\$1,088	\$48,938,095	244	5789	12.9%	\$2,163	\$12,521,836	25.6%	606	32.0%



Q & A

Topic ideas for the September meeting?

ACO Operations Team

Jodi Mueller-Cabaluna

Manager, ACO Operations

- Ownership/oversight/signature authority
- Business strategy
- Claims
- Network Contracting
- Primary point of contact
- Team vision, direction, & improvement
- Compliance
- Communication / Education
- Quality monitoring, Improvement and Reporting
- **MSSP, EOM Lead**

Sapphire Davis
Program Coordinator

- Attribution & provider rosters
- Data reporting
- Affiliate Provider Meetings

Courtney Clouser

Program Coordinator

- Waivers, Beneficiary Enhancements and Incentives
- CAHPS Surveys
- Voluntary Alignment
- Beneficiary Notifications
- Marketing/Websites
- ACO Mailboxes
- Written Notices

Rashida Morgan

Project Manager

Health Equity Lead

- Health Equity Data Reporting
- Health Equity Progress
- Community Resources
- Meetings/tasks/timelines
- VBC Board Meetings
- Incentive Bonus Payments
- EOM Lead (Future state)