

#AHA24



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

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Objectives

- Demonstrate the value of Remote Patient Care as a scalable solution for improving the trajectory of chronic disease in the U.S.
- Review analysis of hypertension program, which achieved a **7/5 mmHg reduction in blood pressure** and **70% increase in patients at goal** (n=23,638)
- Present analysis showing **\$1,308 annual total savings per patient** (inclusive of RPM costs) and **27% reduction in hospital admissions** (n=5,872, compared to 11,449 in propensity-score matched control group)

"It's a tragedy because we have the tools, the investments to extend life expectancy to improve people's lives. We don't have a health system that's invested or constructed to do that."

Asaf Bitton

HARVARD T.H. CHAN SCHOOL OF PUBLIC HEALTH

"We're losing ground. I think the biggest single remediable issue for us is that we don't have a primary care system in the U.S. that's functional."

Robert Califf

U.S. FOOD AND DRUG
ADMINISTRATION COMMISSIONER
AND CARDIOLOGIST

"You could do all the basic research you want, but if you can't implement it, it doesn't translate to improved outcomes."

Clyde Yancy

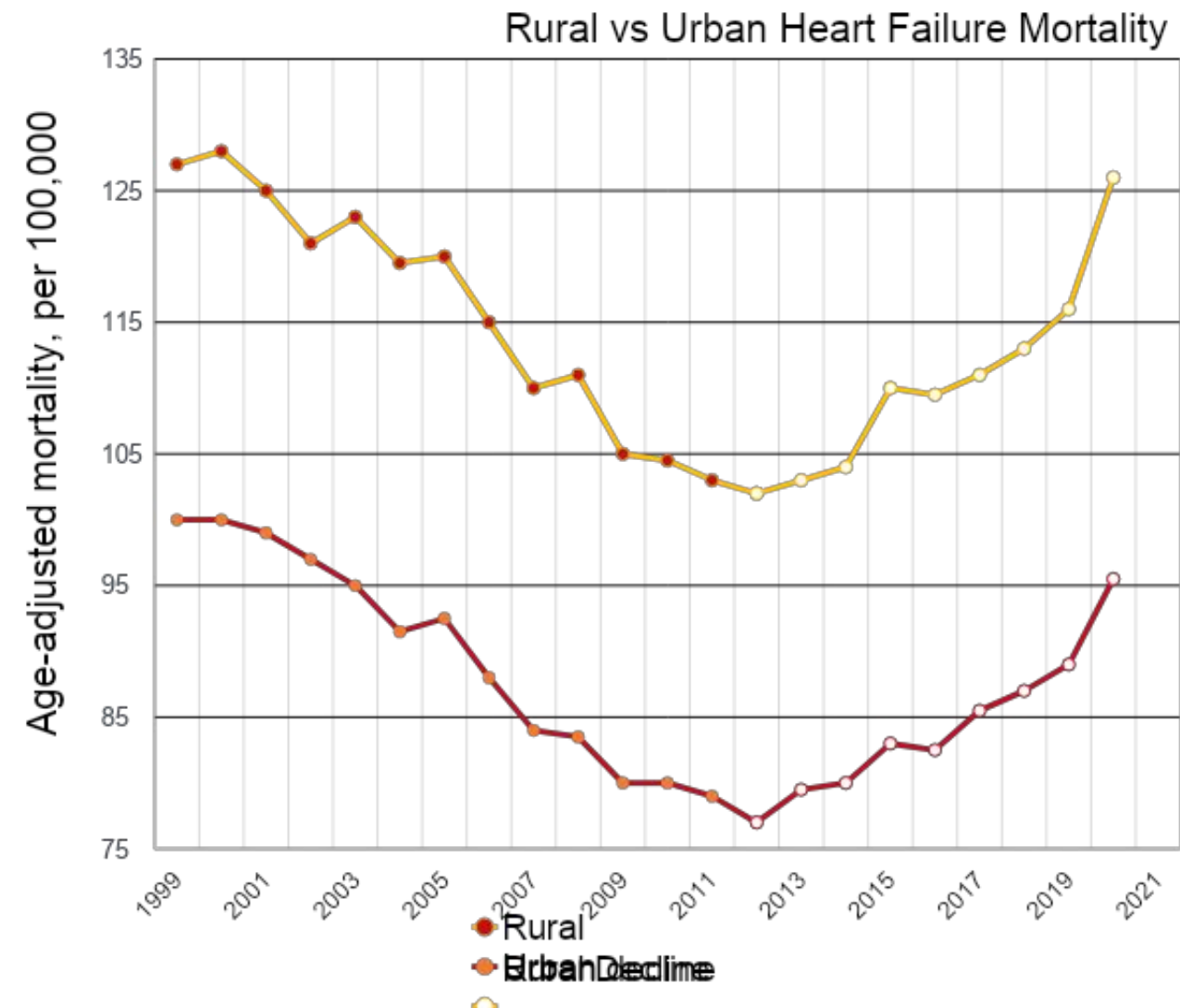
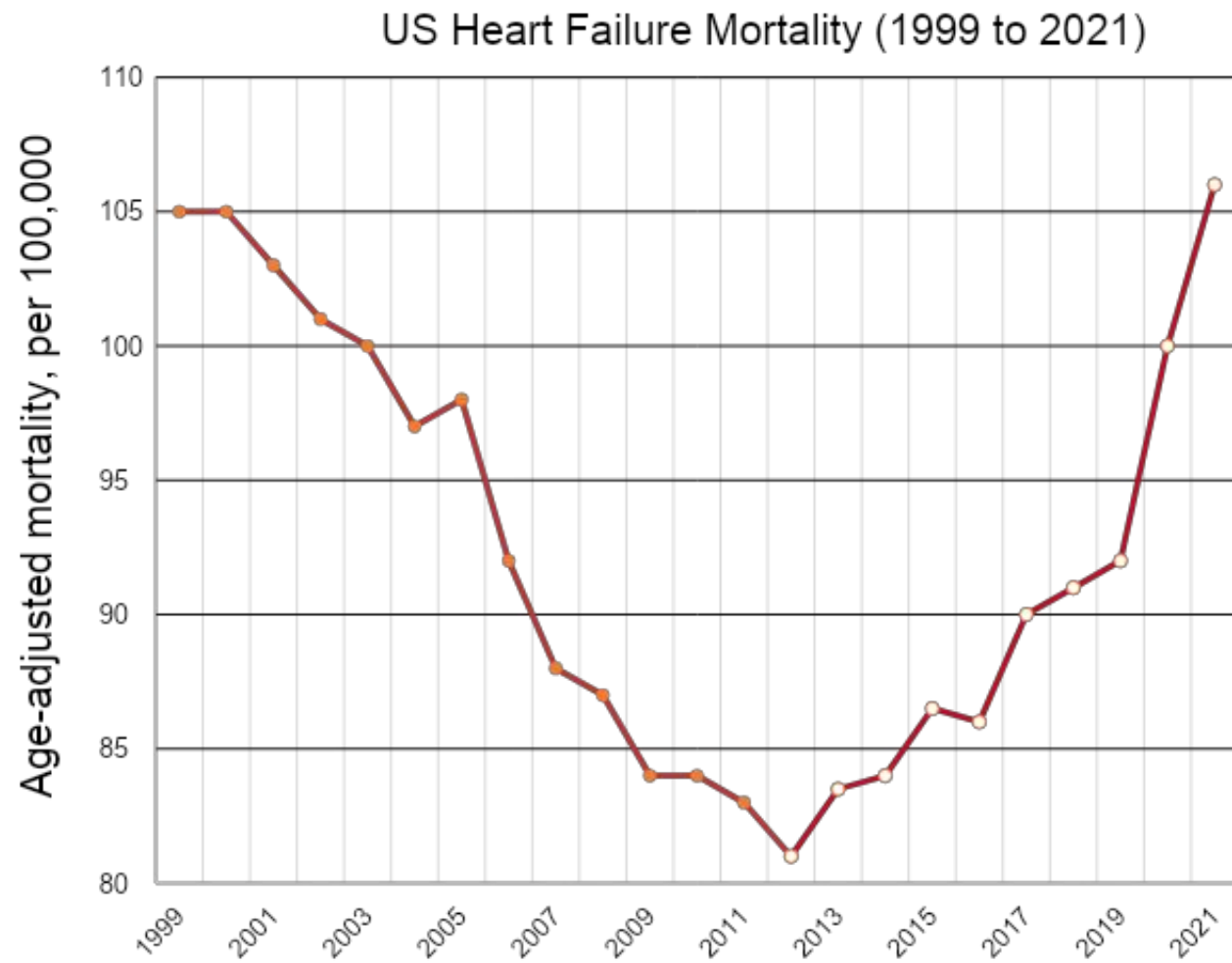
CHIEF OF CARDIOLOGY, NORTHWESTERN
UNIVERSITY FEINBERG SCHOOL OF MEDICINE

"If we found a way to equitably distribute the fruits of American research to date, I think we can make an incredible change in our health outcomes."

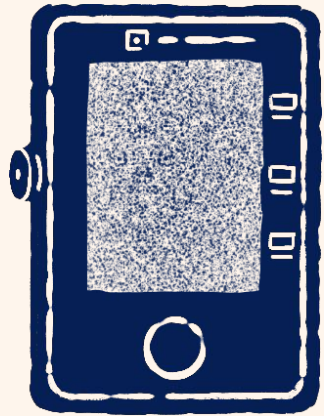
Herman Taylor

FOUNDING DIRECTOR, CARDIOVASCULAR
DISEASE RESEARCH INSTITUTE AT
MOREHOUSE COLLEGE

Heart Failure mortality rates have been on the rise since 2012

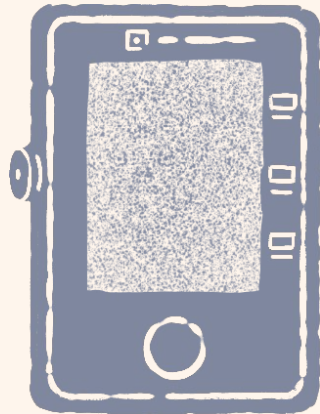


Remote Patient Monitoring

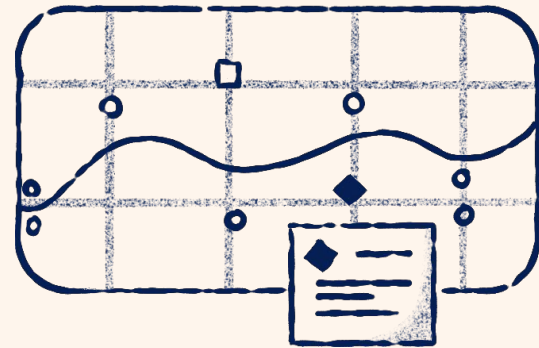


Monitoring Only

Remote Patient Monitoring

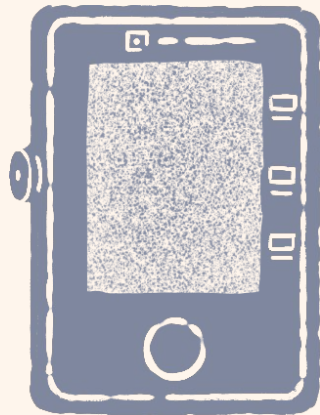


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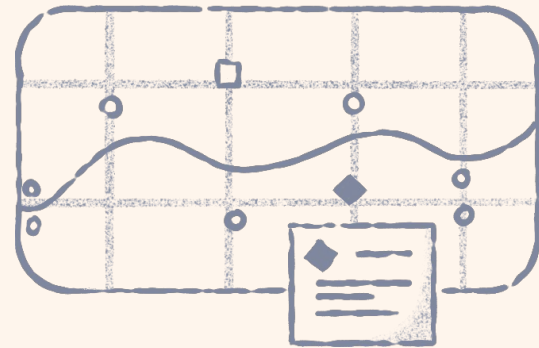


**Monitoring +
Decision Support**

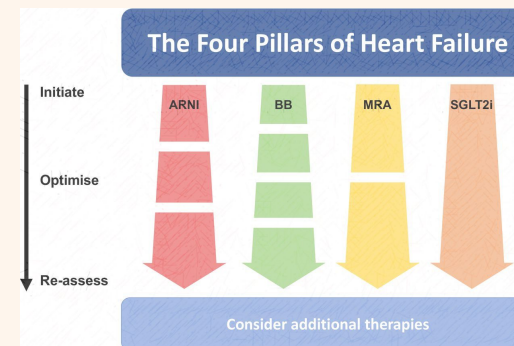
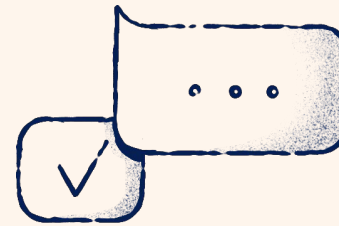
Remote Patient Monitoring



Monitoring Only

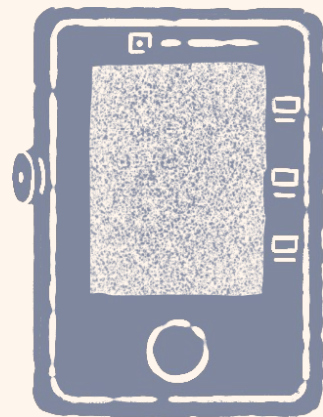


**Monitoring +
Decision Support**

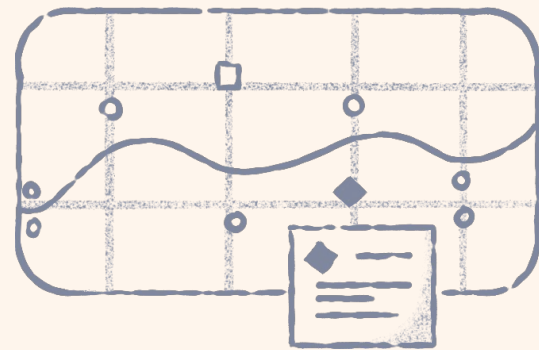


**Monitoring +
Treatment Support**

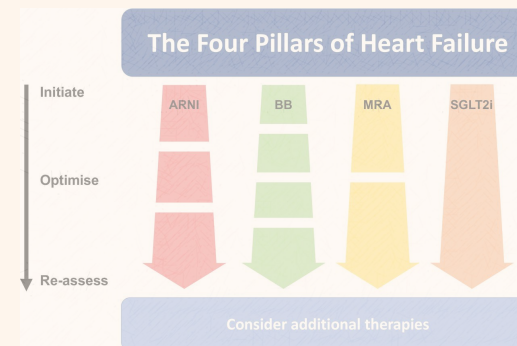
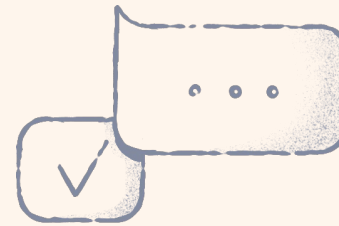
Remote Patient ~~Monitoring~~ Care



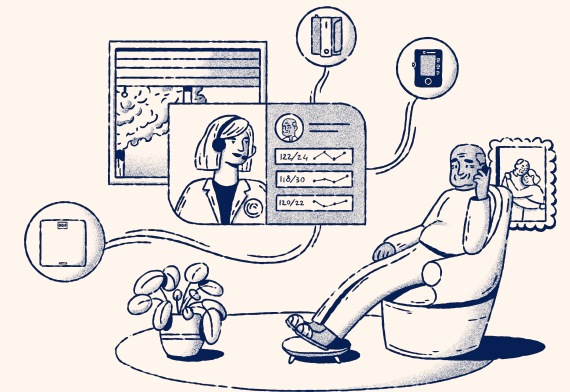
Monitoring Only



**Monitoring +
Decision Support**



**Monitoring +
Treatment Support**



**Remote Monitoring
+ Virtual Care**

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

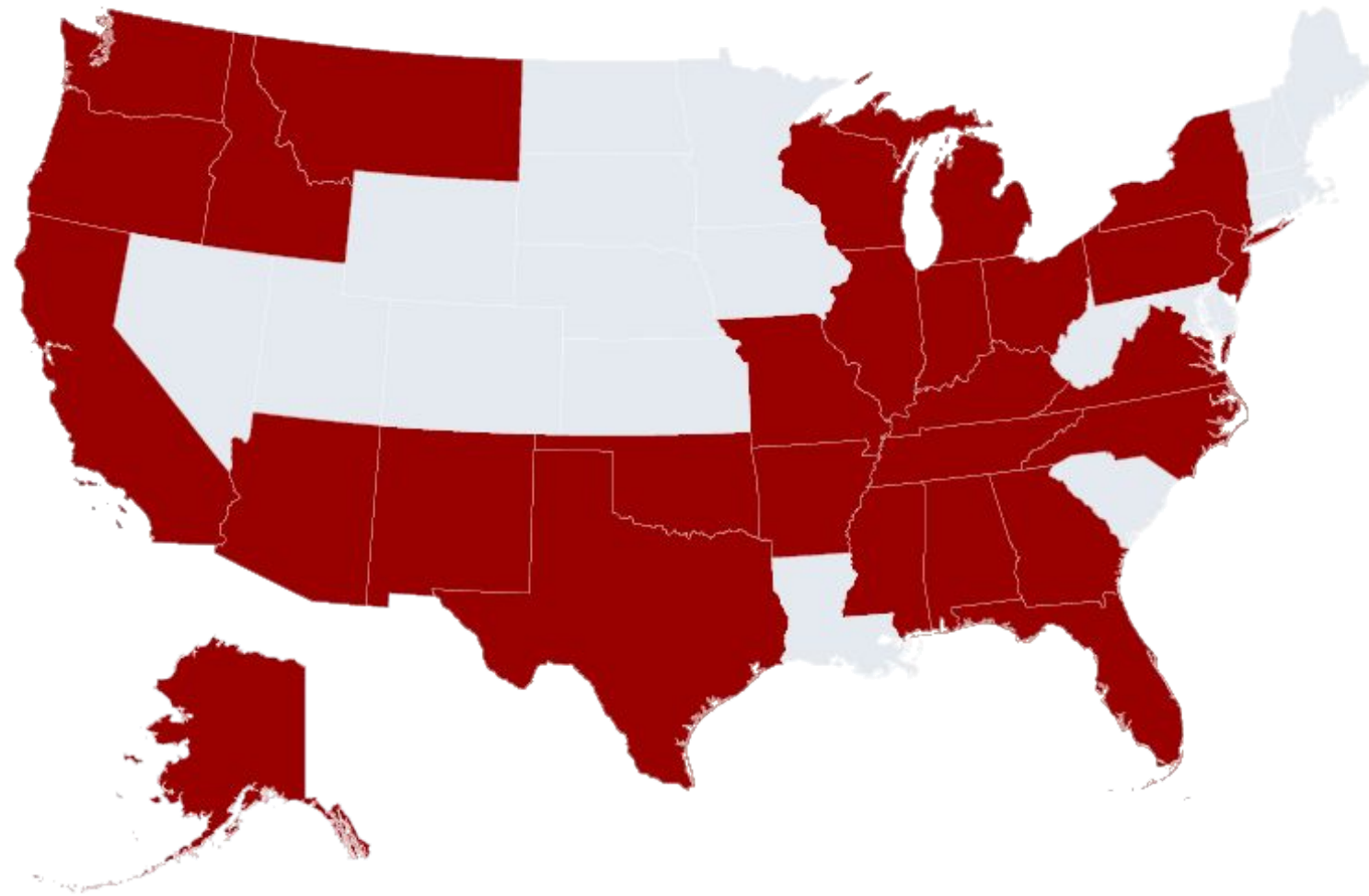
Health Systems

- 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

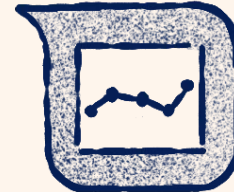
 MONTAGE Health  ArdentHealth

 Lifepoint Health  Texas Health Resources®

“It is amazing that being heart healthy is like a never-ending loop of goodness – I improve my lifestyle, my heart gets healthier, my health improves, and my quality of life improves.” — *Cadence Patient*



28,000+
Active patients¹



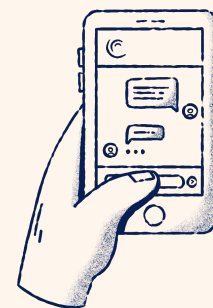
8,465,565
Vitals²



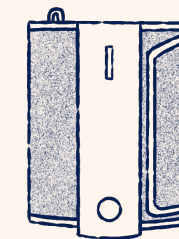
4.91
Patient satisfaction³



145,470
Alerts²



26,755
Encounters outside
of business hours²



74%
Of patients taking
vitals 16+ days per
month at 3 months²

(1) As of 11/7/2024

(2) Data from from 1/1/24 - 10/31/24

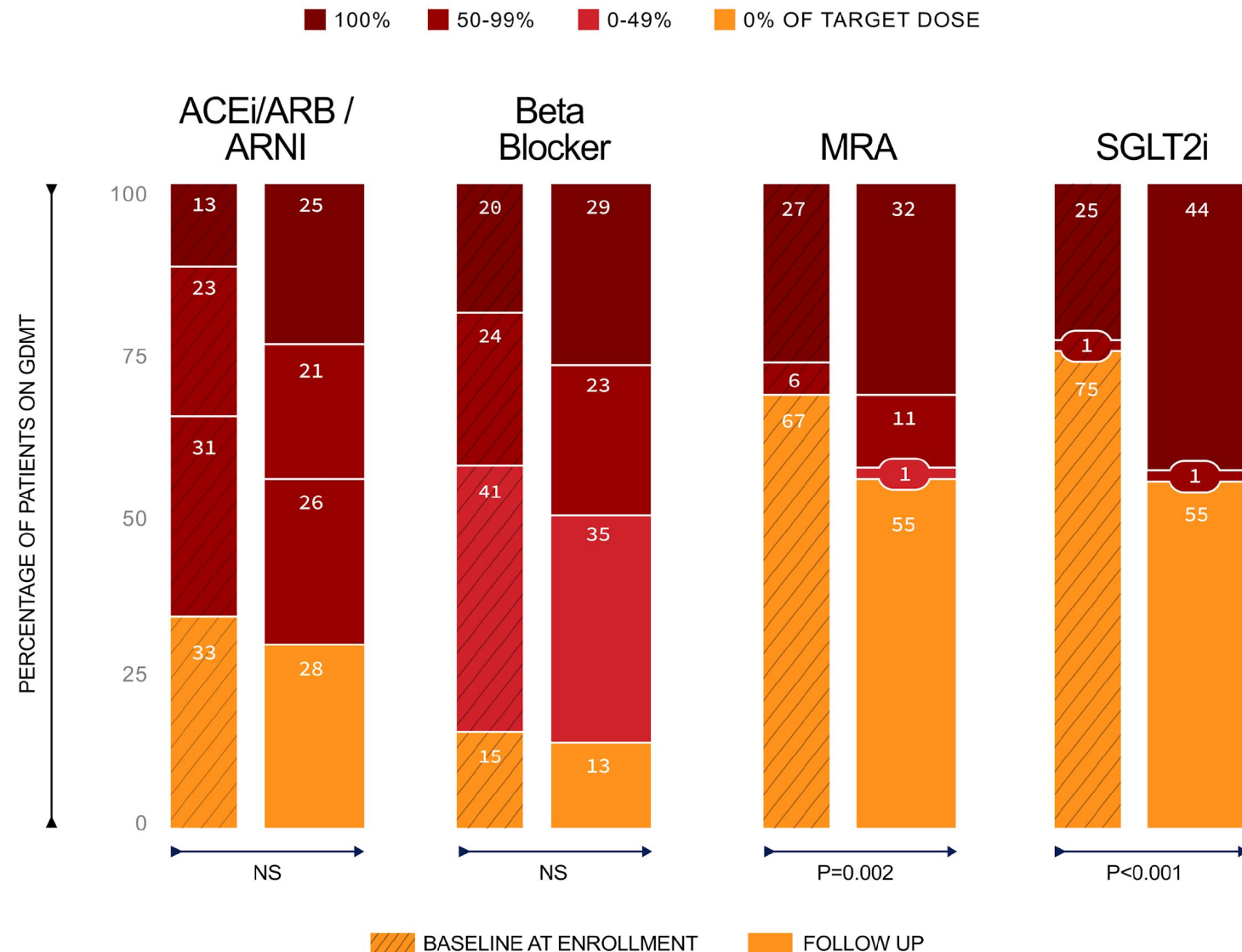
(3) n = 12,341



**RESULTS:
CLINICAL OUTCOMES +
COSTS & UTILIZATION**

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



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

n=23,638

RPC patients from 21 states

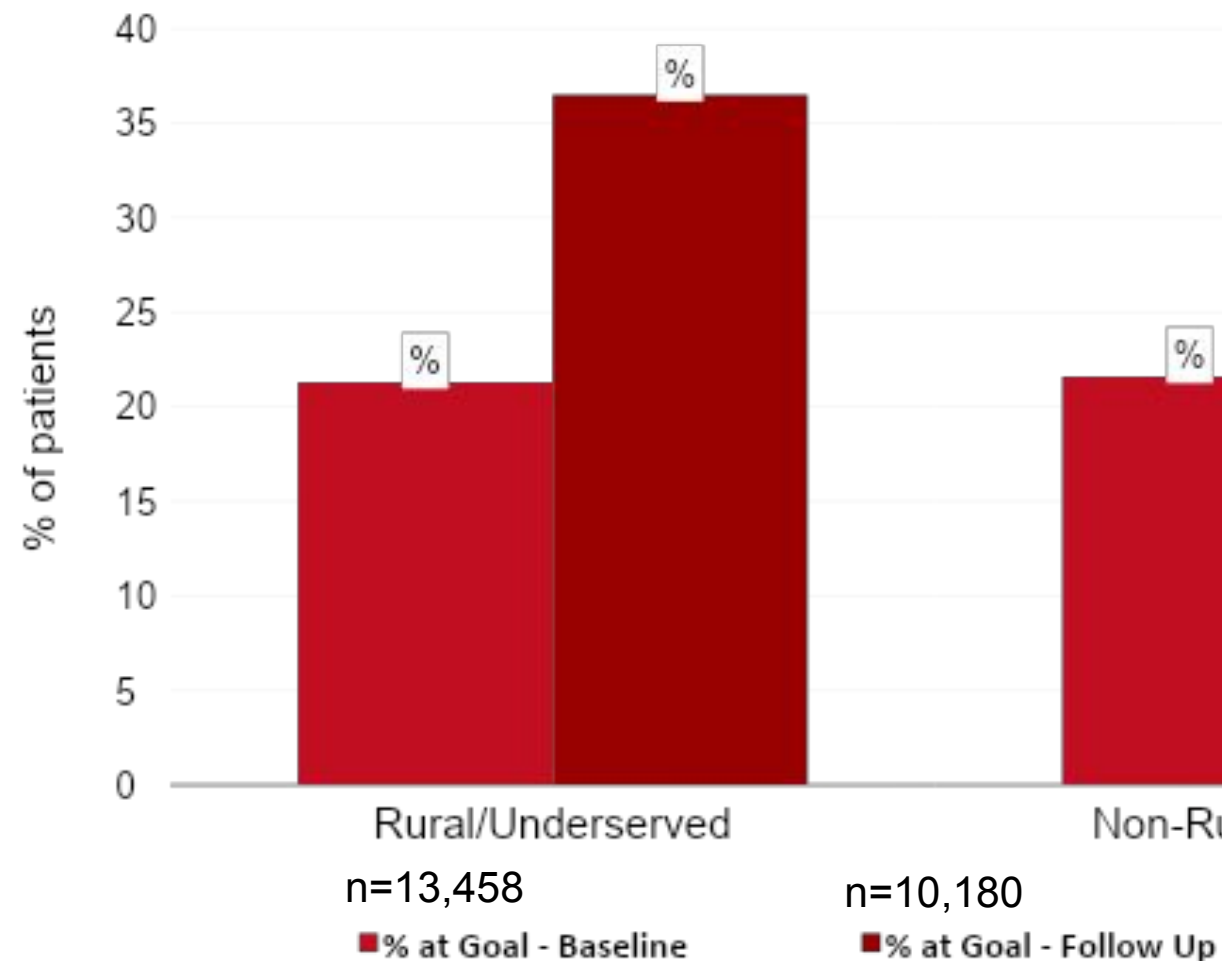
-7/5 mmHg

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

Significant cost savings and reductions in hospital admissions across all Cadence programs (pre-published)

| Program (RPC Patients) | Annual Total Savings Per Patient | Annual Inpatient Cost Savings Per Patient | Admissions Reduction at 12 Months |
|-------------------------------|---|--|--|
| Overall (n=5,872) | \$1,308 p-value = 0.0026 | \$1,428 p-value < 0.0001 | 27% p-value = 0.0002 |
| Hypertension (n=3,936) | \$696 p-value = 0.0696 | \$1,056 p-value = 0.0005 | 27% p-value = 0.0047 |
| CHF (n=897) | \$3,180 p-value = 0.0805 | \$3,264 p-value = 0.0105 | 25% p-value = 0.0737 |

Looking ahead: Cadence hopes to provide guideline-directed care to one million patients by 2030

Empowering patients with chronic conditions by providing the tools and support they need at home

Enhancing access to care by bridging the gap for patients who may struggle to regularly visit healthcare providers

Improving health outcomes and reducing costs by effectively implementing guideline-directed clinical care in a proactive, instead of reactive, manner





APPENDIX

Cost of care & utilization methodology (pre-published)

- Analyzed outcomes at month 12 for **5,872 RPC patients** enrolled in the Cadence program as compared against **11,449 patients in a propensity-score matched control group**, matched using **demographic factors, health status, risk scores, and cost and utilization at baseline**
- Analysis assessed cost and utilization for patients across **15 states**, comparing patients in **same markets and ACOs**
- Cost savings reported benefit the risk-bearing entity (ACO/CMS) and are **net of incremental costs of RPM**
- The propensity-score matching approach used in this analysis utilized the PSMATCH function in SAS

Treatment & control groups matched by demographics, risk score, health status, costs, utilization, location

| Demographic, risk scores & health | Treatment (5,872) | Control (11,449) | p-value | Cost & Utilizations | Treatment (5,872) | Control (11,449) | p-value |
|--|--------------------------|-------------------------|----------------|--------------------------------|--------------------------|-------------------------|----------------|
| Age (avg) | 73.8 | 73.7 | 0.3214 | Baseline Cost PMPM | \$838 | \$847 | 0.7606 |
| Gender (female%) | 58% | 57% | 0.4346 | Baseline IP PMPM | \$264 | \$249 | 0.4429 |
| Risk Score (avg) | 1.09 | 1.09 | 0.9702 | Baseline ED PMPM | \$23 | \$23 | 0.9634 |
| Atrial Fibrillation | 19% | 19% | 0.6458 | Baseline OP PMPM | \$205 | \$218 | 0.2918 |
| Alcohol, Drug Abuse | 3% | 3% | 0.7573 | Baseline Prof PMPM | \$339 | \$323 | 0.1698 |
| Rheumatoid Arthritis | 48% | 47% | 0.5382 | Baseline SNF PMPM | \$6 | \$33 | <.0001 |
| Behavior Health | 21% | 20% | 0.1138 | Baseline IP Admits/1000 | 235 | 238 | 0.8016 |
| Cancer | 13% | 13% | 0.599 | Baseline ED Visits/1000 | 450 | 462 | 0.6115 |
| CKD | 29% | 29% | 0.267 | Baseline OP Visits/1000 | 4,990 | 5,083 | 0.3726 |
| CKD4+ | 3% | 3% | 0.5491 | Baseline Prof Visits/1000 | 22,574 | 19,370 | <.0001 |
| Chronic Liver Disease | 2% | 2% | 0.6193 | Baseline SNF Days/1000 | 134 | 831 | <.0001 |
| Cerebrovasuclar Disease | 9% | 9% | 0.8443 | | | | |
| Electrolyte/Fluid Disorder | 20% | 20% | 0.9574 | | | | |
| Heart Disease | 37% | 37% | 0.4197 | | | | |
| Malnutrition | 1% | 1% | 0.2719 | | | | |
| Diabetes | 5% | 5% | 0.9539 | | | | |
| Pulmonary Disease | 31% | 31% | 0.4395 | | | | |
| Plegia | 3% | 3% | 0.4521 | | | | |

Remote Patient Care patients overall are saving \$109 per month or \$1,308 annually in total cost of care (n=5,872)

Difference in Difference Cost Summary

| | Baseline | Post 12 mon | Difference | DID | p-value | % change |
|----------------------------|----------|-------------|------------|------------|---------|----------|
| Total Paid PMPM | | | | | | |
| Control Group | \$ 846.6 | \$ 920.6 | \$ 74.0 | | | |
| Treatment Group | \$ 838.0 | \$ 803.5 | \$ (34.6) | \$ (108.5) | 0.0026 | -12.9% |
| Inpatient Paid PMPM | | | | | | |
| Control Group | \$ 249.1 | \$ 337.8 | \$ 88.7 | | | |
| Treatment Group | \$ 264.1 | \$ 233.8 | \$ (30.3) | \$ (119.0) | <.0001 | -45.1% |

- Total cost savings largely driven by **reductions in hospitalizations** for primary diagnoses including complicated infection, heart failure, stroke
- Top three reasons for reduction in inpatient spend, as compared to control group:
 - 60% decline in hospitalizations for **sepsis**; 27% decline in hospitalizations for **cardiac dysrhythmias**; 64% decline in hospitalizations for **heart failure**
- Reductions in inpatient spend accompanied by moderate increases in utilization of less costly outpatient visits (+18%, p<.0001) and professional services (+31%, p<.0001)

Remote Patient Care CHF patients are saving \$265 per month or \$3,180 annually in total cost of care (n=897)

Difference in Difference Cost Summary

| | Baseline | Post 12 mon | Difference | DID | p-value | % change |
|----------------------------|------------|-------------|------------|------------|---------|----------|
| Total Paid PMPM | | | | | | |
| Control Group | \$ 1,425.1 | \$ 1,384.8 | \$ (40.3) | | | |
| Treatment Group | \$ 1,375.4 | \$ 1,069.8 | \$ (305.7) | \$ (265.4) | 0.0805 | -19.3% |
| Inpatient Paid PMPM | | | | | | |
| Control Group | \$ 559.1 | \$ 602.9 | \$ 43.7 | | | |
| Treatment Group | \$ 599.8 | \$ 372.1 | \$ (227.7) | \$ (271.5) | 0.0105 | -45.3% |

- Total cost savings largely driven by **reductions in hospitalizations** for primary diagnoses including heart failure, heart rhythm disorders, heart artery and valve disorders, stroke, complicated infection
- Top three reasons for reduction in inpatient spend, as compared to control group:
 - 71% decline in hospitalizations for **heart failure**; 35% decline in hospitalizations for **cardiac dysrhythmias**; 54% decline in hospitalizations for **coronary atherosclerosis and other heart disease**
- Reductions in inpatient spend accompanied by moderate increases in utilization of less costly outpatient visits (+20%, p=.013) and professional services (+22%, p<.0001)

Remote Patient Care Hypertension patients are saving \$58 per month or \$696 annually in total cost of care (n=3,936)

Difference in Difference Cost Summary

| | Baseline | Post 12 mon | Difference | DID | p-value | % change |
|----------------------------|----------|-------------|------------|-----------|---------|----------|
| Total Paid PMPM | | | | | | |
| Control Group | \$ 739.0 | \$ 810.5 | \$ 71.5 | | | |
| Treatment Group | \$ 737.2 | \$ 750.9 | \$ 13.7 | \$ (57.8) | 0.0696 | -7.8% |
| Inpatient Paid PMPM | | | | | | |
| Control Group | \$ 189.9 | \$ 280.6 | \$ 90.7 | | | |
| Treatment Group | \$ 193.8 | \$ 197.0 | \$ 3.2 | \$ (87.5) | 0.0005 | -45.1% |

- Total cost savings largely driven by **reductions in hospitalizations** for primary diagnoses including complicated infection, stroke, heart rhythm disorders, heart attacks, lung-related disorders
- Top three reasons for reduction in inpatient spend, as compared to control group:
 - 37% decline in hospitalizations for **sepsis**; 67% decline in hospitalizations for **cerebral infarction**; 74% decline in hospitalizations for **complication of internal orthopedic device implant**
- Reductions in inpatient spend accompanied by moderate increases in utilization of less costly outpatient visits (+19%, p<.0001) and professional services (+34%, p<.0001)

THANK YOU



#AHA24

