



Virtual Care Could Be Rural Health's Lifeline

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CAH providers in the future

- Attendees will be informed on virtual care opportunities in the rural healthcare setting.
- Attendees will have increased knowledge of cost-reduction models for rural healthcare facilities.
- Attendees will have an understanding of possible strategies to implement a virtual care model.
- Attendees will be knowledgeable about various revenue opportunities in the virtual healthcare setting.

A photograph of a doctor in a white lab coat and blue surgical mask examining a patient's arm. The patient is a woman with long dark hair, also wearing a blue surgical mask. They are seated at a white table. In the background, several other people are seated in a waiting room, all wearing blue surgical masks. The scene is brightly lit with natural light from a window on the left.

Specific Challenges- Impact to Rural Healthcare

Rural Health Care Rural vs Urban Challenges

National Rural Health Snapshot	Rural	Urban
Percentage of population	19.3%	80.7%
Number of physicians per 10,000 people	13.1	31.2
Number of specialists per 100,000 people	30	263
Population aged 65 and older	18%	12%
Average per capita income	\$45,482	\$53,657
Non-Hispanic white population	69-82%	45%
Adults who describe health status as fair/poor	19.5%	15.6%
Adolescents who smoke	11%	5%
Male life expectancy in years	76.2	74.1
Female life expectancy	81.3	79.7
Percentage of dual-eligible Medicare beneficiaries	30%	70%
Medicare beneficiaries without drug coverage	43%	27%
Percentage covered by Medicaid	16%	13%
All information in this table is from the Health Resources and Services Administration and Rural Health Information Hub.		



- 19% of population lives in rural areas
- Rural residents tend to be older and sicker than in urban areas
- Higher poverty and less access to care in rural communities



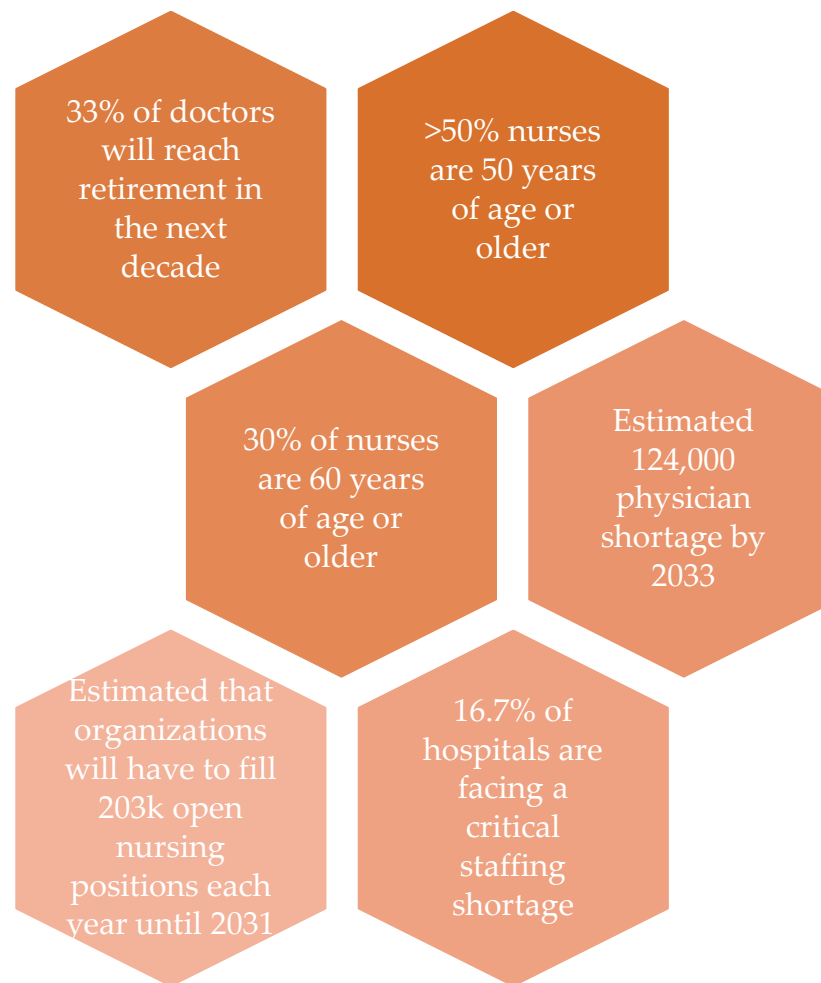
- Rural patients are more likely to die from heart disease, cancer, chronic respiratory disease and stroke
- Rural areas have higher rates of diabetes and coronary artery disease



- Longer travel times to specialty and emergency care for rural health patients
- 50% higher crash-related fatalities in rural areas
- Rural patients have higher rates of smoking, high blood pressure and obesity

Health
Inequity in
rural
settings

Healthcare Staffing Shortage Statistics



Barriers to Healthcare Workforce

Workforce Growth

- Nursing schools denied over 90k nursing school applicants due to lack of faculty and training sites
- Medical education costs are high limiting those entering those programs
- Less interest in physician programs like primary care and pediatrics due to pay and amount of work required

Reasons for Leaving the Profession

- 35% of nurses and 54% of doctors display symptoms of burnout
- 60% of healthcare workers had a decline in mental health from working during the pandemic
- 30% of healthcare workforce is considering leaving the profession

More leaving
the medical
field than
entering causing
a larger gap
with providers

Reasons to Consider a Virtual Model



Financial

Decrease nursing turnover- Increase nurse retention rates



Staffing Strategy

Ability to recruit experienced nurses outside of community market



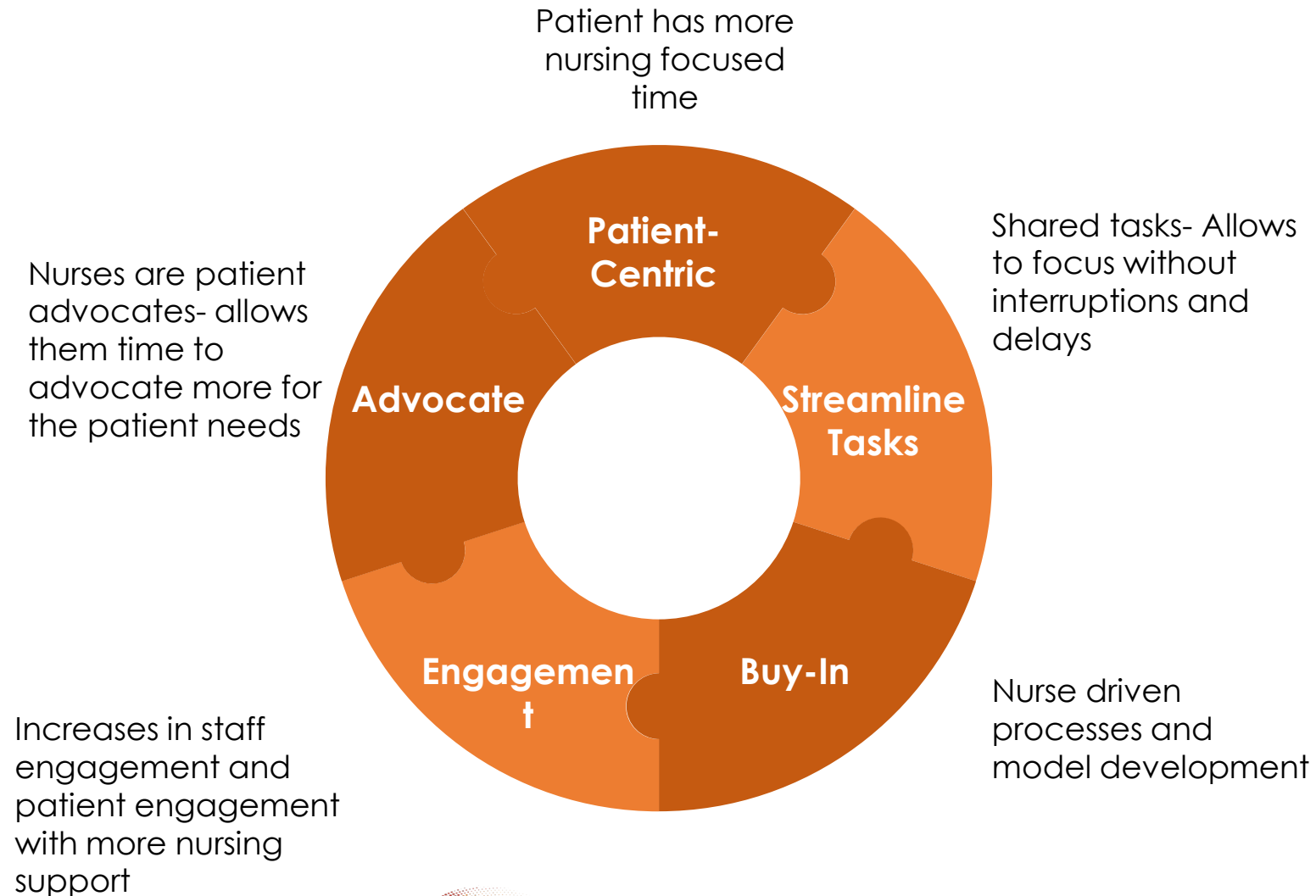
Team Approach

Mentoring of nursing staff and provide support to onsite nursing staff/team

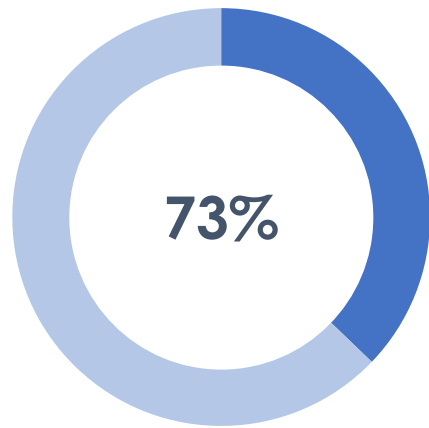
Nursing Shortage Considerations



Nursing Staff Benefits

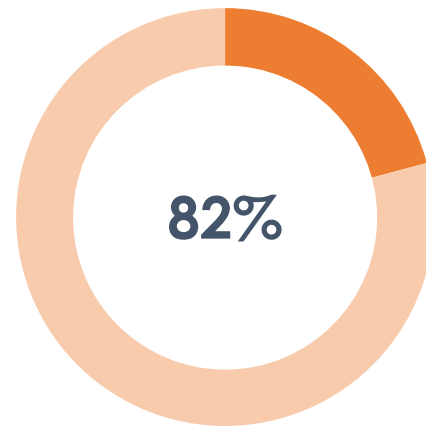


Reported Benefits of Virtual Care



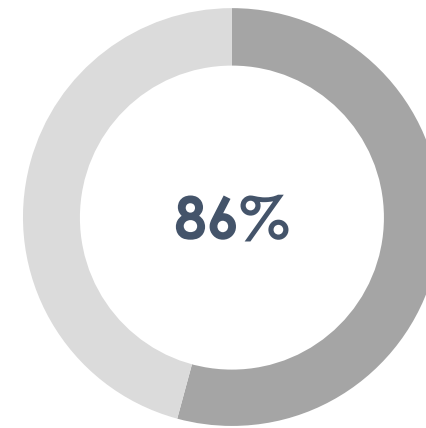
RN Turnover Reduction

Survey results from Providence Hospital 1 year after implementation



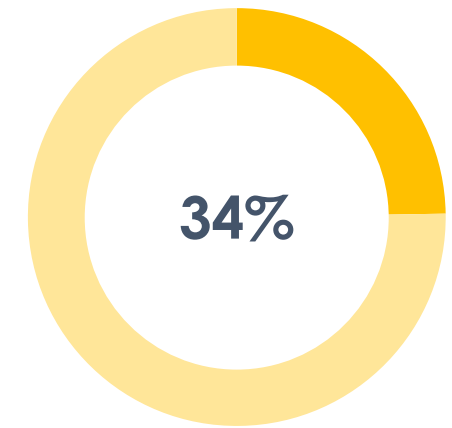
Workload Improvements

Staff reported on survey of overall improvements in workload



Nurse Satisfaction and Retention

Staff reported on survey increased job satisfaction



Hospitals Expanding to Virtual Care

More health systems expanding into virtual models

Virtual Care Advantages

Access to Care

Expansion of
services and
offerings

Convenience

Patient and provider

Cost-effectiveness

Increase in number
of patients per
team member



Financial Impact Of Nursing Turnover

RN Turnover Rates



RN Turnover has increased by 13.5% from 2021-2022

Nurse Replacement Costs



Cost to replace 1 RN- National Average is \$52,350

Recruitment Time



RN Recruitment- Average is 61-120 days with all specialties having increased recruitment time except for L&D

Specialty Turnover



RNs in Stepdown, ED, Behavioral Health and Telemetry have a cumulative turnover rate of 108.7%-115.2% (Essentially turning over an entire unit in less than 5 years)

\$380,600 →

The amount each percent change in turnover can COST/SAVE the average hospital

"Bedside nurses spend way too much time in documentation." — Emily Warr, administrator for Medical University of South Carolina's Center for Telehealth

Through virtual nursing platforms, a nurse in a separate location, such as a nurse's station or telemedicine center, can handle EMR documentation for several patient rooms, monitor activity, and answer questions from patients, visitors, or staff in the room.

For [this week's lead story](#), we look at return on investment and sustainability of virtual nursing programs.



Providence rolls out virtual nursing to 8 hospitals

Giles Bruce - Tuesday, June 6th, 2023



Renton, Wash.-based Providence is [rolling out](#) a new virtual nursing program across eight hospitals after a successful pilot at a Texas facility.

Covenant Medical Center, a 381-bed tertiary hospital, in Lubbock, Texas, implemented the Co-Caring hybrid nursing model in 2021. The program includes a virtual nurse who can communicate with the patient and bedside team via video and audio, helping with admissions, discharges, preprocedural checklists, medication reconciliation, and interdisciplinary team meetings.

"The past three years dramatically transformed our industry and workforce in ways that accelerated the modernization of care," Syl Trepanier, DNP, RN, chief nursing officer of Providence, in a June 6 news release. "Co-Caring represents an innovative solution to one of healthcare's most pressing issues — the increased need for nurses, which for the United States is currently estimated at more than 200,000 new nurses required each year to account for population growth."

Since Covenant Medical Center started the pilot, first-year turnover rates declined 73 percent for registered nurses and 55 percent for all employees on the unit. It will expand the program to a second unit, while Providence is bringing Co-Caring to these hospitals:

"With inpatient virtual care, it opens up a lot of doors," says [Colleen Mallozzi, MBA, RN](#), senior vice president and chief nursing informatics officer at [Jefferson Health](#), which recently launched its Virtual Nursing Program after a trial run earlier this year involving nearly 400 patients.

"The virtual nurse can do anything except physical touch," adds [Laura Gartner, DNP, MS, RN, RN-BC, NEA-BC](#), an associate chief nursing information officer and division director of clinical informatics at the Philadelphia health system.

HOME >> PATIENT-CENTERED CARE

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PATIENT-CENTERED CARE

The Rise of the Virtual Nurse

Virtual nursing programs help hospitals overcome staffing shortages and support onsite nurses in providing patient care.



by [Melissa Delaney](#)

Melissa Delaney is a freelance journalist who specializes in business technology. She is a frequent contributor to the CDW family of technology magazines.

▶ LISTEN 09:55

Healthcare organizations across the U.S. are under tremendous pressure as the growing need for nurses outpaces a shrinking workforce. There have been unprecedented challenges from the large, aging baby boomer population. Nurses are also getting older, with [a median age of 52](#) — 4.7 million are [projected to retire](#) by 2030.

"None of us are going to have the complement of nurses that we would like to have moving forward, so we have to get creative with the way that we provide care," says Jennifer Ball, director of virtual care at [Saint Luke's Health System](#) in Kansas City, Mo.

"We were seeing that a lot of our nurses [were dealing with] a heavy workload. We decided that we would try anything we could do to better support the staff that we have." — Kelly George, vice president of performance improvement, OSF HealthCare.

I have traveled coast to coast for the past few months, and **#virtualnursing** is making a huge impact! I have seen it in real-time, from the novice nurse needing to phone a friend to an experienced nurse needing support for paperwork. I was with a patient last week, and he hugged me and told me to thank those nurses on the other side of the camera because they took the time to answer his questions about his new diagnosis and follow-up. I have seen the emergency departments decompress because there was someone who could begin the admission process, and they no longer had to wait on the bedside nurse. I have also seen the comfort it brings to families, knowing that someone on the other side of the camera makes sure their family is not alone and safe. We have to change healthcare we are not ever going to have enough caregivers but we can modify care delivery to ensure care is the center of healthcare. **#telehealth #virtualcare**

Becker's Hospital Review posted an article this morning (linked in the comments) about the number 1 problem that is keeping hospital CEO's up at night.

No surprise, its #workforcechallenges

Its sited that of those surveyed, 90% ranked shortages of registered nurses as the most pressing in the category, followed there after by shortages of technicians, and burn out of non-physician staff.

How can we help affect those that are still fighting for patients on the frontlines serving patients?

One way is a #virtualnursing strategy. The aim is to bring capacity back to the bedside and create hybrid care team roles that can improve:

- Retention AND recruitment
- Training and onboarding
- Nurse job satisfaction

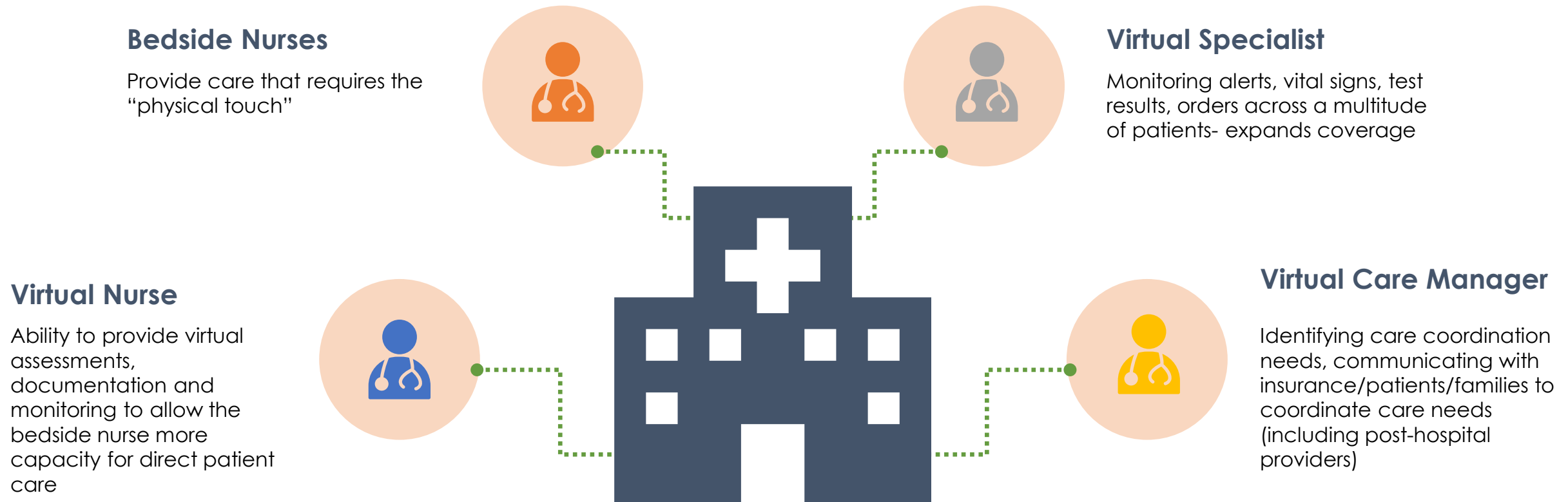
Was it what you were expecting?
#digitalstrategy #nursing #virtual



I floated to a unit this past week that did not embrace virtual nursing for admissions and discharges. I was dumbfounded by their resistance to this timesaver for bedside nurses. I calculated that it gave me back over 2.5 hours of my day towards patient care and charting. Plus, I never felt overwhelmed or stressed. Virtual nursing is a godsend. Please consider using this service if it is available in your organization 😊 #nursing #nursesonlinkedin #nurseleaders #virtualnursing

Nursing Model Changes to Support Virtual Care

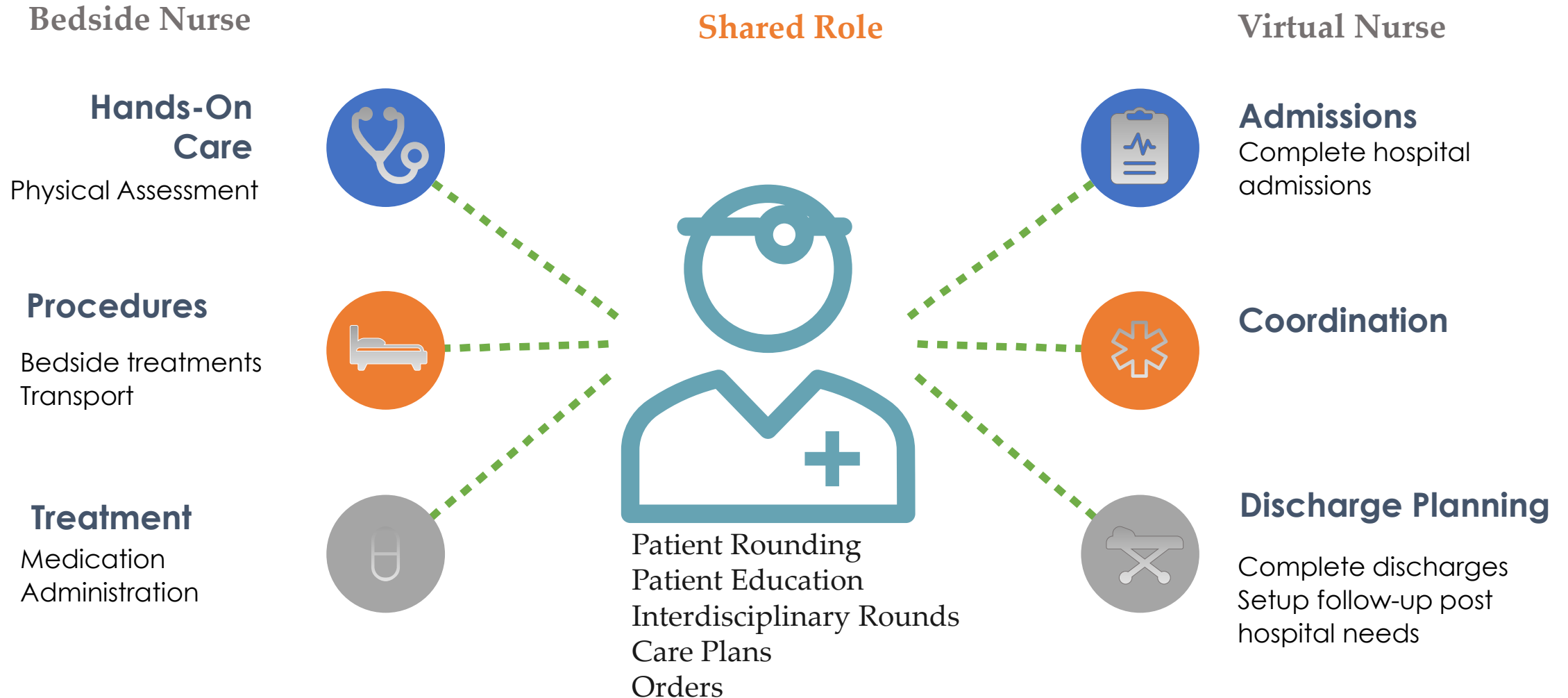
Healthcare Models to Integrate Virtual Support



“The secret to change is to focus all your energy not on fighting the old, but on building the new.” - Socrates

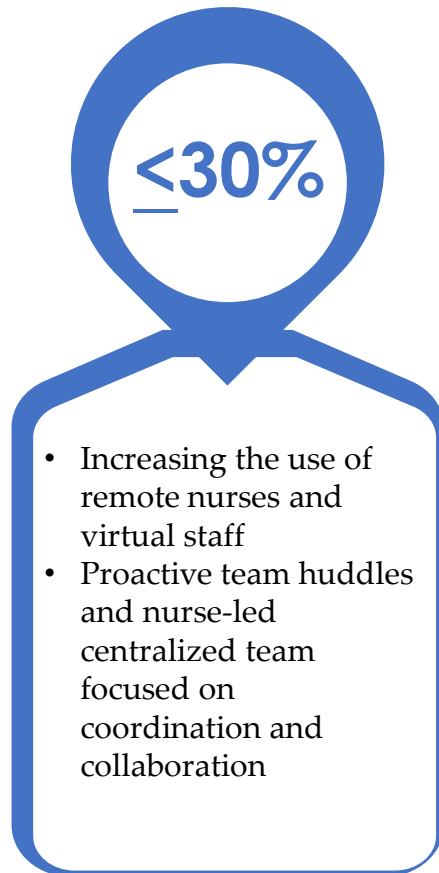
“Your role as a nurse doesn’t change whether you’re on the floor or you’re virtual. We all made a promise to provide the best care that we can give”, Theresa Mont, Chief Nursing Office at the Department of Veterans Affairs

Nursing Model Changes



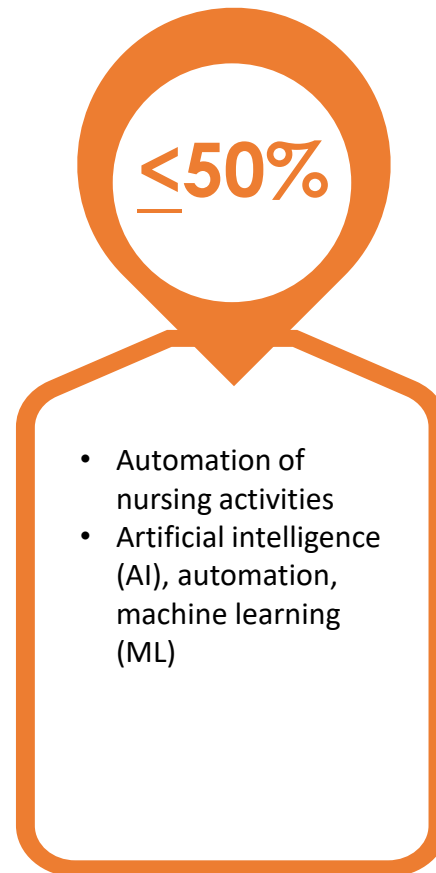
Virtual Nursing Framework

- Phases of Adoption



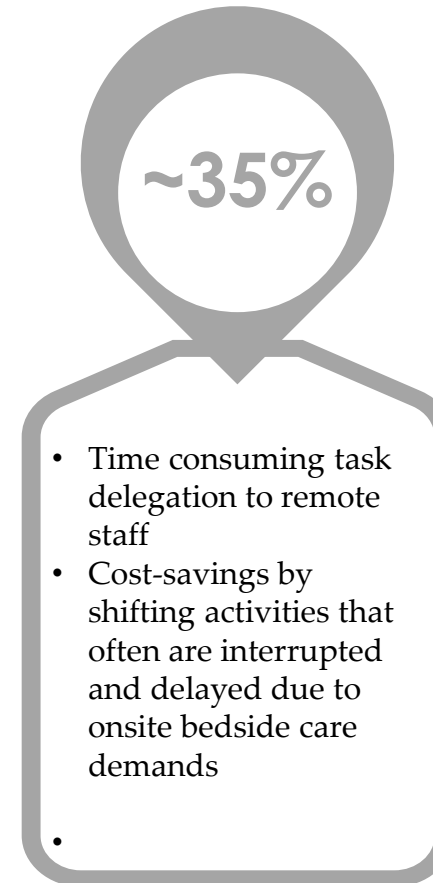
<30%

- Increasing the use of remote nurses and virtual staff
- Proactive team huddles and nurse-led centralized team focused on coordination and collaboration



<50%

- Automation of nursing activities
- Artificial intelligence (AI), automation, machine learning (ML)



~35%

- Time consuming task delegation to remote staff
- Cost-savings by shifting activities that often are interrupted and delayed due to onsite bedside care demands
-



~10%

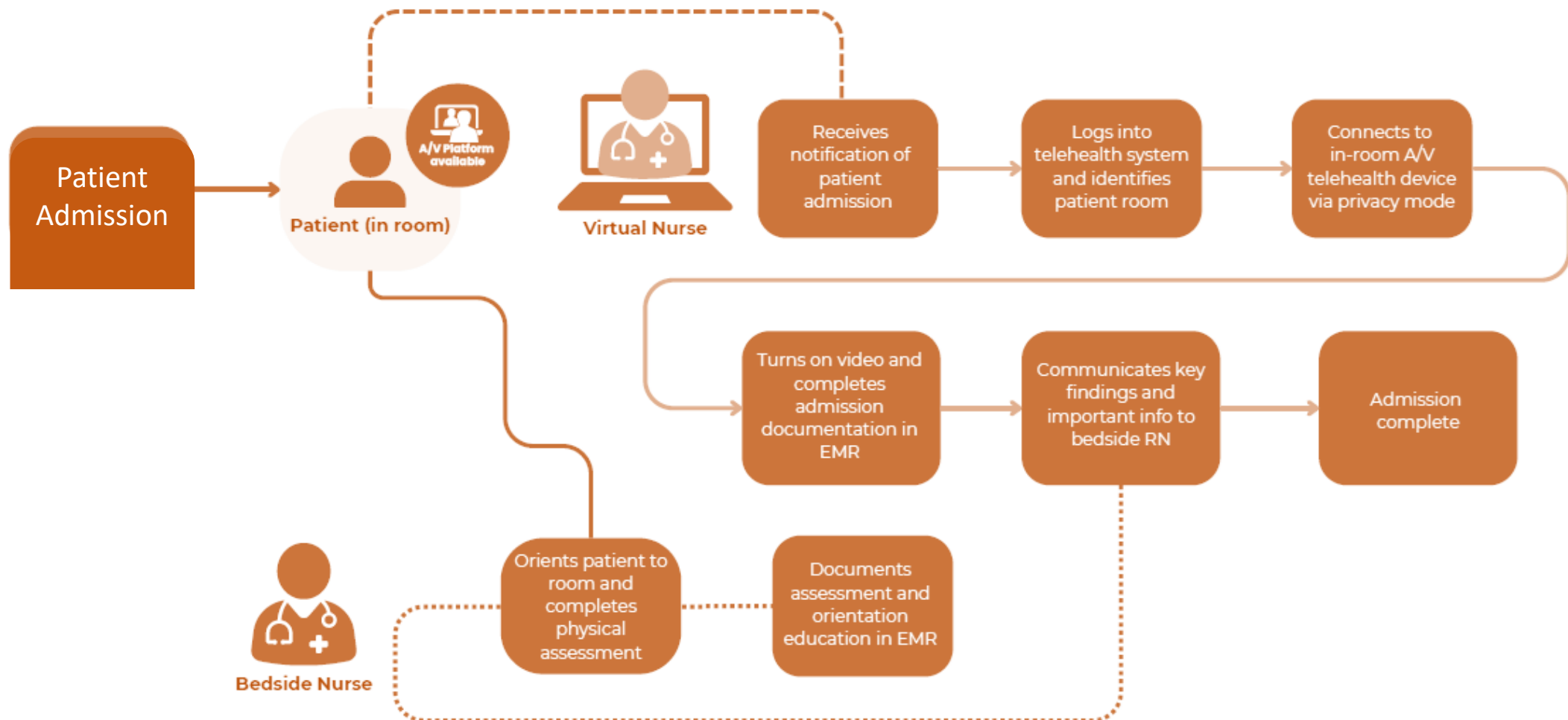
- Provider and specialists consultation
- Performed remotely or through telehealth technology
- Consultative to the local team

Hospital Virtual Nursing Support

- Some examples of virtual nursing duties and responsibilities



Example of a Virtual Nursing Workflow- Hospital Admission



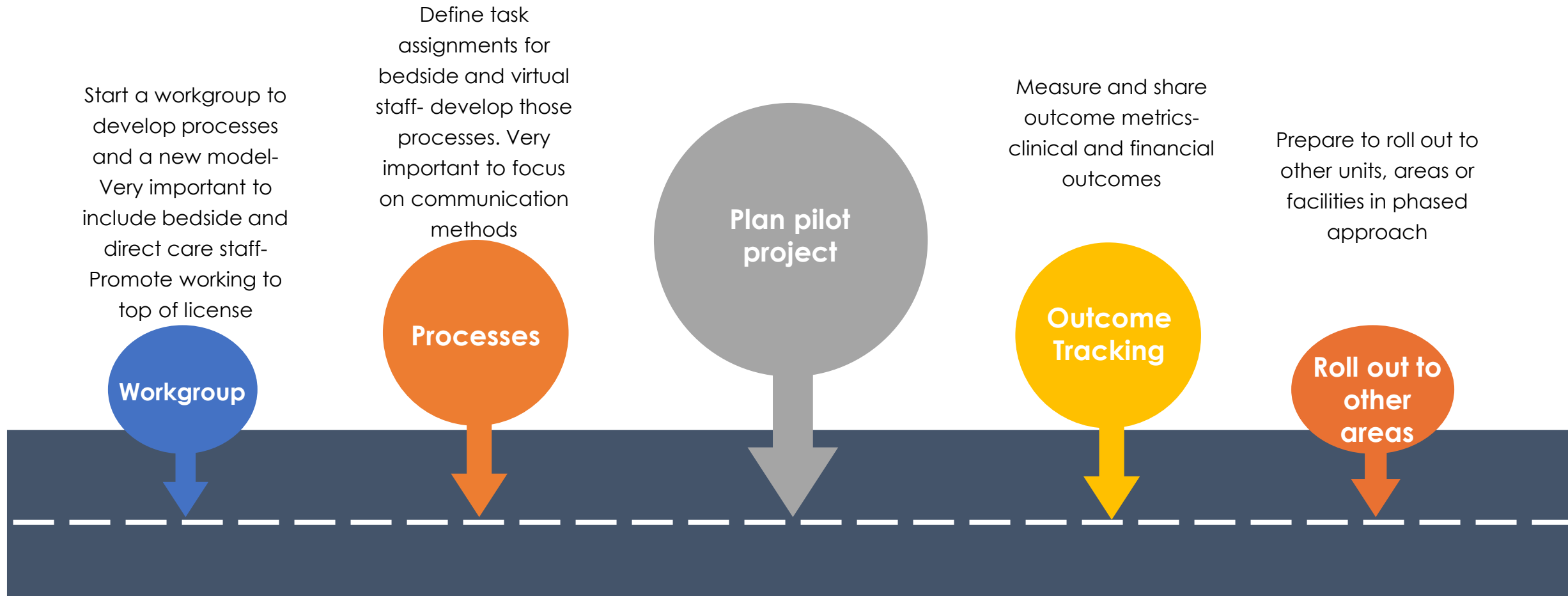
Virtual Nursing Support

	ADMISSIONS	HOSPITAL STAY	DISCHARGE PLANNING	FINANCIAL
Communication	Communicate on new admissions	Communicate with family members, ancillary departments, providers and the bedside nurse	Communicate with family, providers and post-hospital providers	Track clinical and financial outcomes
Order Management	Review orders and coordinate follow-up on orders to facilitate care	Review and follow-up on orders	Obtain and review any discharge orders	Utilization Review- Status Determinations
Throughput Coordination	Collaborate with bed assignment leadership on patient throughput	Identify patients for potential discharge to facilitate throughput planning and teaching	Coordinate discharge teaching- medications, conditions, signs/symptoms, etc	Transitional Care- Coordinate care needs
Quality Improvements	Quality checks to ensure admission checklists are completed	Perform chart checks, ensure quality documentation capture, mentor nursing staff	Make follow-up appointments and provide report to receiving facility	Clinical Documentation Improvement

Nursing Common Tasks- Moving to a Virtual Blended Approach

Common Tasks	Bedside RN	Virtual RN
Care plan review, critical lab values, monitoring telemetry	✗	✓
Charting/documentation, patient and family education, medication management	✓	✓
Coordinate huddles, nurse-to-nurse communication, nurse-to-provider communication, rounds, onboarding new nurses	✗	✓
Respond to vital signs and follow-up, tracking lab/tests orders and results for follow-up needs	✗	✓
Assessment/Reassessment, discharge communication, staff education	✓	✓
Medication administration, lifting/transferring patient, delivering equipment/supplies to patient, unit management, delivering food trays and snacks	✓	✗

Steps to Adopt Virtual Care



Virtual Nursing- How to Evaluate Next Steps



Virtual Nurse- Best Characteristics

- **Experienced** bedside nurses
- Multi-tasking skills
- Comfortable with technology
- Problem-solvers
- Ability to pick up on non-verbal cues



Common Starting Place for Virtual Programs

- Time consuming tasks
- Admissions/Discharges
- Tele-sitting
- Second signature for medication administration
- Relieving bedside nurses is important for building trust b/t the bedside nurse and virtual nurse
- Telemonitoring



Staffing Ratio Considerations

- Contingent on virtual duties offloaded from bedside nurse
- Time studies should be done to determine staffing needs based on duties
- A virtual nurse can monitor 100+ patients with telemonitoring and decision support tools
- 30-50 beds per virtual nurse reported with some programs



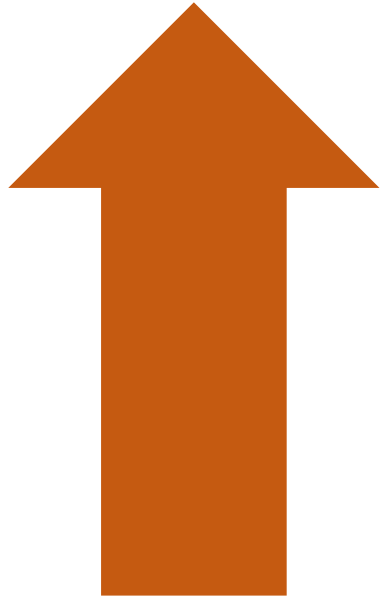
KPIs for ROI of Virtual Nursing Programs

- Labor cost per unit tracking
- Patient Experience Scores
- Clinical outcome improvements
 - Patient Falls
 - LOS
 - Infection Rates

Examples of Efficiency and Productivity Outcomes

TAT- Discharge

Track time from discharge order to disposition



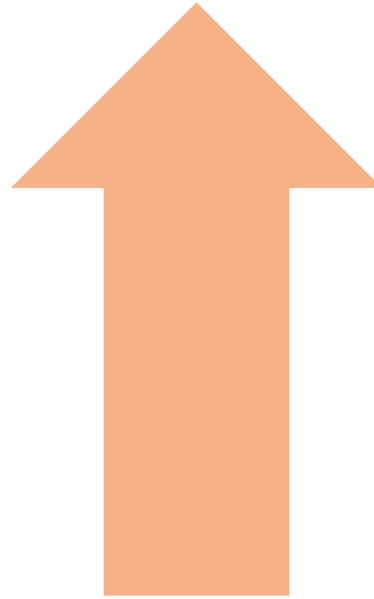
TAT- Care Orders

Track time for completion of orders, tests, supply delivery, etc



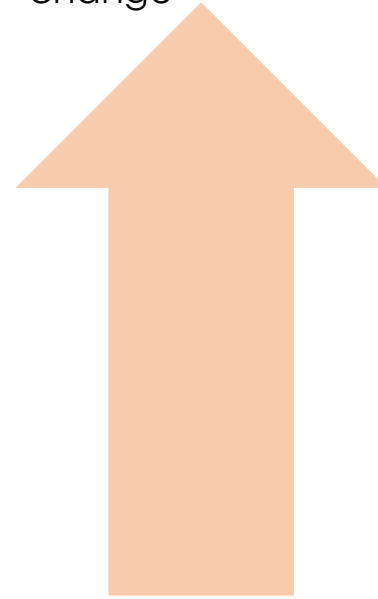
Throughput

Measure throughput times- ED decision to admit to bed placement



Nurse Tasks

Compare TAT to nursing tasks before and after model change



Clinical Outcomes

- Outcomes to track improvements in care



Readmissions

Increase in patient/family education to prepare for transition and patient follow-up coordination improvements



LOS

Reducing delays, missed care and improved coordination



Patient Safety

Infection, fall rates, complications etc.
Sitter capabilities, mental health support



Clear Communication

Track communications and response timelines



Missed Care-Catches

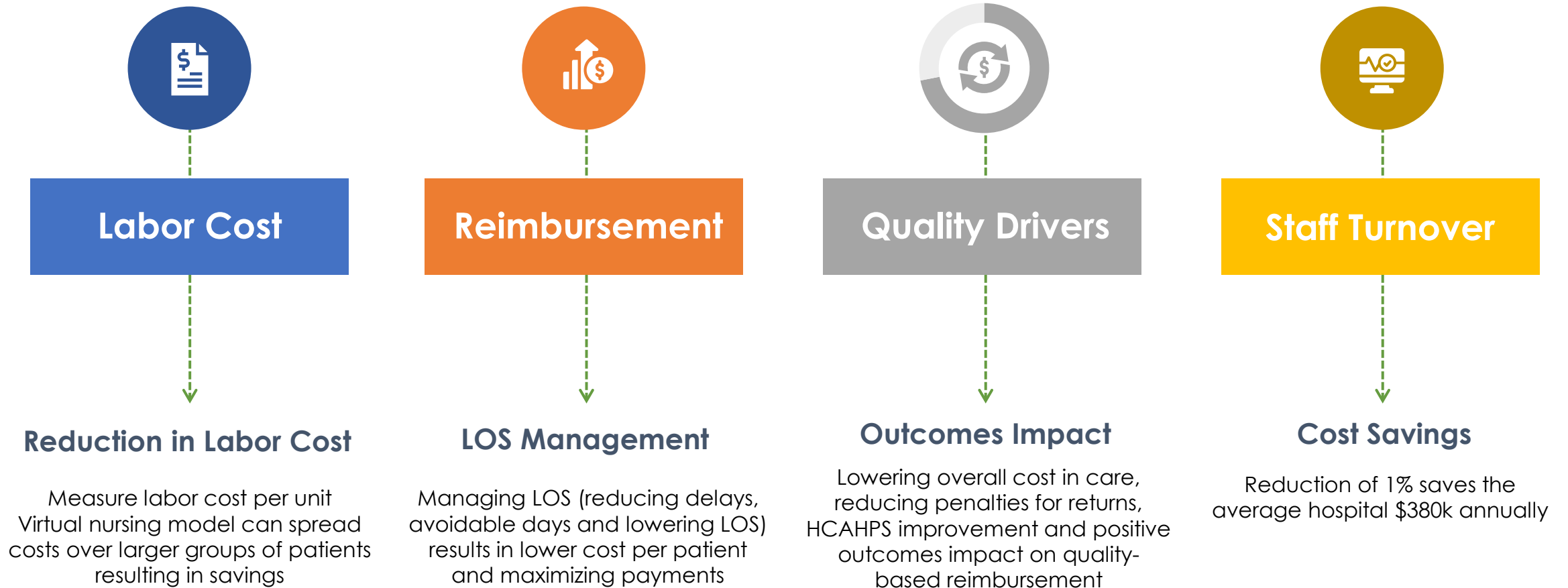
Identify and track missed tasks, orders/tests for improvements




Quality Outcomes

Track improvements in quality scores before/after implementation

Financial Outcomes





CMS Financial Drivers for Evaluating the Model of Care

Healthcare Strategy Considerations



Clinical Population Requiring Focus

- Diagnosis specific
- Social determinants of health
- High spend
- High risk population
- Methods of identification
- Specific algorithms



Penalties Related to Outcomes

- VBP
- HRRP
- QIPP
- Payor specific penalties



Value-Based Models

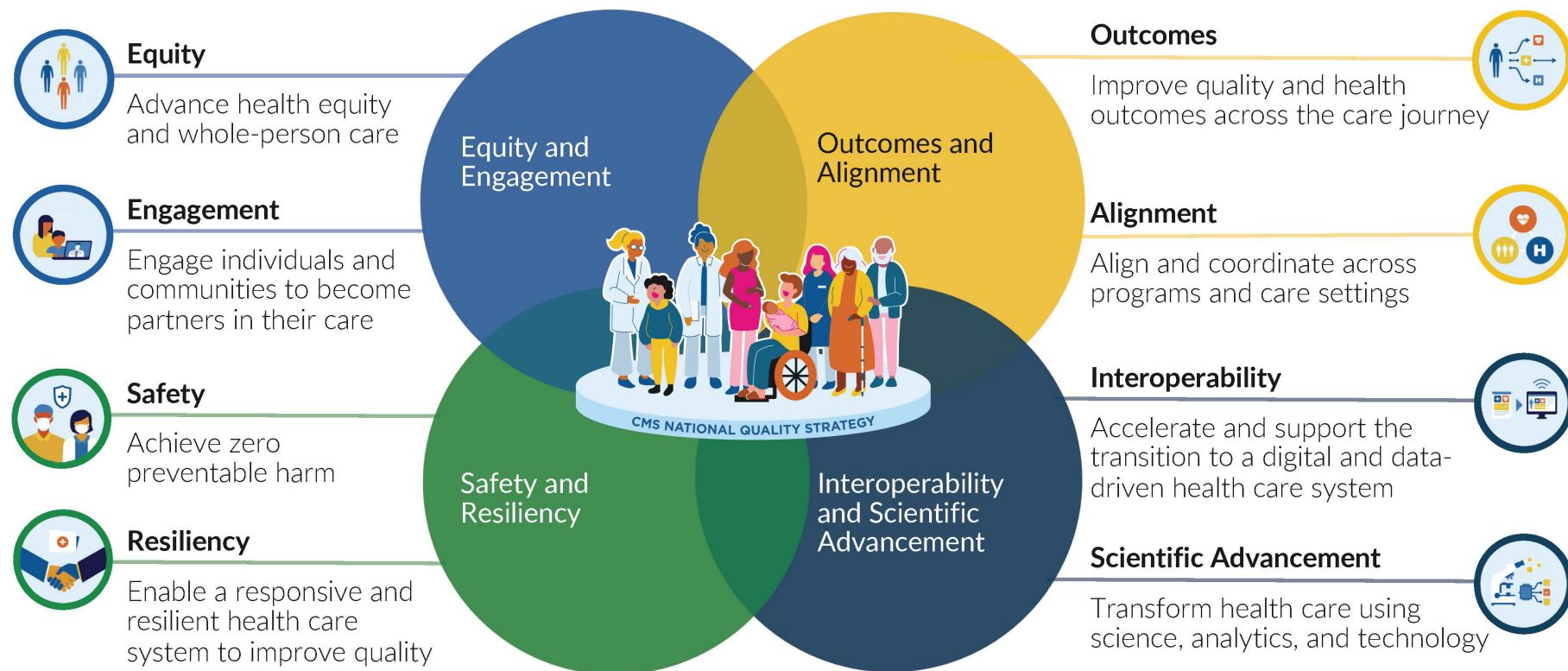
- ACO
- Bundled Payments
- Risk-Based Contracts
- Preparations for value-based arrangements



Healthcare Utilization Patterns

- ED utilization
- Care management program enrollment
- AWV capture
- Acute admissions
- Ambulatory visits
- Outside network utilization
- Preferred community partners

CMS National Quality Strategy Goals



Promote Aligned and Improved Health Outcomes
Advance Equity and Engagement for All Individuals

Ensure Safe and Resilient Health Care Systems
Accelerate Interoperability and Scientific Innovation

Quality Based Reimbursement Incentives for Hospitals

FY 2024 Hospital Value-Based Purchasing Program Quick Reference Guide



Payment adjustment effective for discharges from October 1, 2023, to September 30, 2024

Clinical Outcomes	Mortality Measures		Performance Period		25%
	Baseline Period July 1, 2019–June 30, 2017		July 1, 2019–June 30, 2022*		
	Measure ID	Measure Name	Achievement Threshold	Benchmark	
	MORT-30-AMI	Acute Myocardial Infarction 30-Day Mortality	0.869247	0.887868	
	MORT-30-CABG	Coronary Artery Bypass Graft Surgery 30-Day Mortality	0.969499	0.980319	
	MORT-30-COPD	Chronic Obstructive Pulmonary Disease 30-Day Mortality	0.916491	0.934002	
	MORT-30-HF	Heart Failure 30-Day Mortality	0.882308	0.907733	
	MORT-30-PN	Pneumonia 30-Day Mortality	0.840281	0.872976	
Person and Community Engagement	Complication Measure		Performance Period		25%
	Baseline Period April 1, 2014–March 31, 2017		April 1, 2019–March 31, 2022*		
	Measure ID	Measure Name	Achievement Threshold	Benchmark	
	COMP-HIP-KNEE	Total Hip Arthroplasty/Total Knee Arthroplasty Complication	0.025396	0.018159	
	Baseline Period Jan. 1, 2019–Dec. 31, 2019		Performance Period Jan. 1, 2022–Dec. 31, 2022		
	HCAHPS Survey Dimensions	Floor (%)	Achievement Threshold (%)	Benchmark (%)	
	Communication with Nurses	53.50	79.42	87.71	
	Communication with Doctors	62.41	79.83	87.97	
	Responsiveness of Hospital Staff	40.40	65.52	81.22	
	Communication about Medicines	39.82	63.11	74.05	
	Hospital Cleanliness and Quietness	45.94	65.63	79.64	
	Discharge Information	66.92	87.23	92.21	
	Care Transition	25.64	51.84	63.57	
	Overall Rating of Hospital	36.31	71.66	85.39	
Safety	Healthcare-Associated Infections		Performance Period		25%
	Baseline Period Jan. 1, 2019–Dec. 31, 2019		Jan. 1, 2022–Dec. 31, 2022		
	Measure ID	Measure Name	Achievement Threshold	Benchmark	
	↓ CAUTI	Catheter-Associated Urinary Tract Infection	0.650	0.000	
	↓ CDI	Clostridium difficile Infection	0.520	0.014	
	↓ CLABSI	Central Line-Associated Bloodstream Infection	0.589	0.000	
	MRSA	Methicillin-Resistant Staphylococcus aureus	0.726	0.000	
	↓ SSI	Colon Surgery	0.717	0.000	
		Abdominal Hysterectomy	0.738	0.000	
Efficiency and Cost Reduction	Baseline Period Jan. 1, 2019–Dec. 31, 2019		Performance Period Jan. 1, 2022–Dec. 31, 2022		25%
	Measure ID	Measure Name	Achievement Threshold	Benchmark	
	↓ MSPB	Medicare Spending per Beneficiary	Median MSPB ratio across all hospitals during the performance period	Mean of lowest decile of MSPB ratios across all hospitals during the performance period	

(*) These performance periods are impacted by the ECE granted by CMS on March 22, 2020, further specified by CMS on March 27, 2020, and amended in the August 25, 2020, COVID-19 Interim Final Rule. Claims from Q1 2020 and Q2 2020 will not be used in the claims-based measure calculations.

↓ Indicates lower values are better for the measure.



QIPP Methodology

What is the Quality Incentive Payment Program?

In 2016, the Centers for Medicare and Medicaid Services (CMS) introduced a requirement that federal pass-through payments transition to accountability-based models within 10 years.

The Quality Incentive Payment Program (QIPP) is designed to link a portion of Mississippi Hospital Access Program (MHAP) payments to utilization, quality and outcomes.

- QIPP's goal is to use state and federal funds to improve the quality of care and health status of the Mississippi Medicaid population
- For SFY 2023, the QIPP program will disburse 51.9% of all MHAP payments
 - The Division of Medicaid (DOM) annually evaluates the percentage of MHAP to include in QIPP with the expectation that the QIPP portion will increase as more of MHAP is tied to quality metrics

SFY 2023 components of QIPP

- Potentially Preventable Hospital Returns (PPHR) – 40% of QIPP allocation
- Potentially Preventable Complications (PPC) (Inpatient) – 10% of QIPP allocation
- Health Information Network (HIN) – 50% of QIPP allocation

Hospital Readmissions Reduction Program Payment Reduction Methodology





VIRTUAL CARE PROGRAMS TO DRIVE REVENUE

VIRTUAL POPULATION HEALTH SOLUTIONS



Chronic Care Management

- Monthly billable services
- Population identification
- Monthly outreach
- Medication reconciliation
- Care coordination needs
- Patient enrollment
- Care planning
- Multi-disciplinary approach
- Patient education
- Documentation completion



Transitional Care Management

- Outreach post-discharge
- Validation of follow-up appointment
- Medication reconciliation
- Care coordination needs
- Completion of documentation to prepare for in person visit
- Weekly follow-up
- Appointment reminders
- Reduction in readmissions
- Patient education



Psychiatric Collaborative Care

- Monthly billable services
- Population identification
- Patient registry
- Care coordination needs
- Weekly case review with psychiatric consultant provider
- Patient education
- Additional support
- Outreach and enrollment
- Documentation completion
- Medication reconciliation
- Monthly outreach

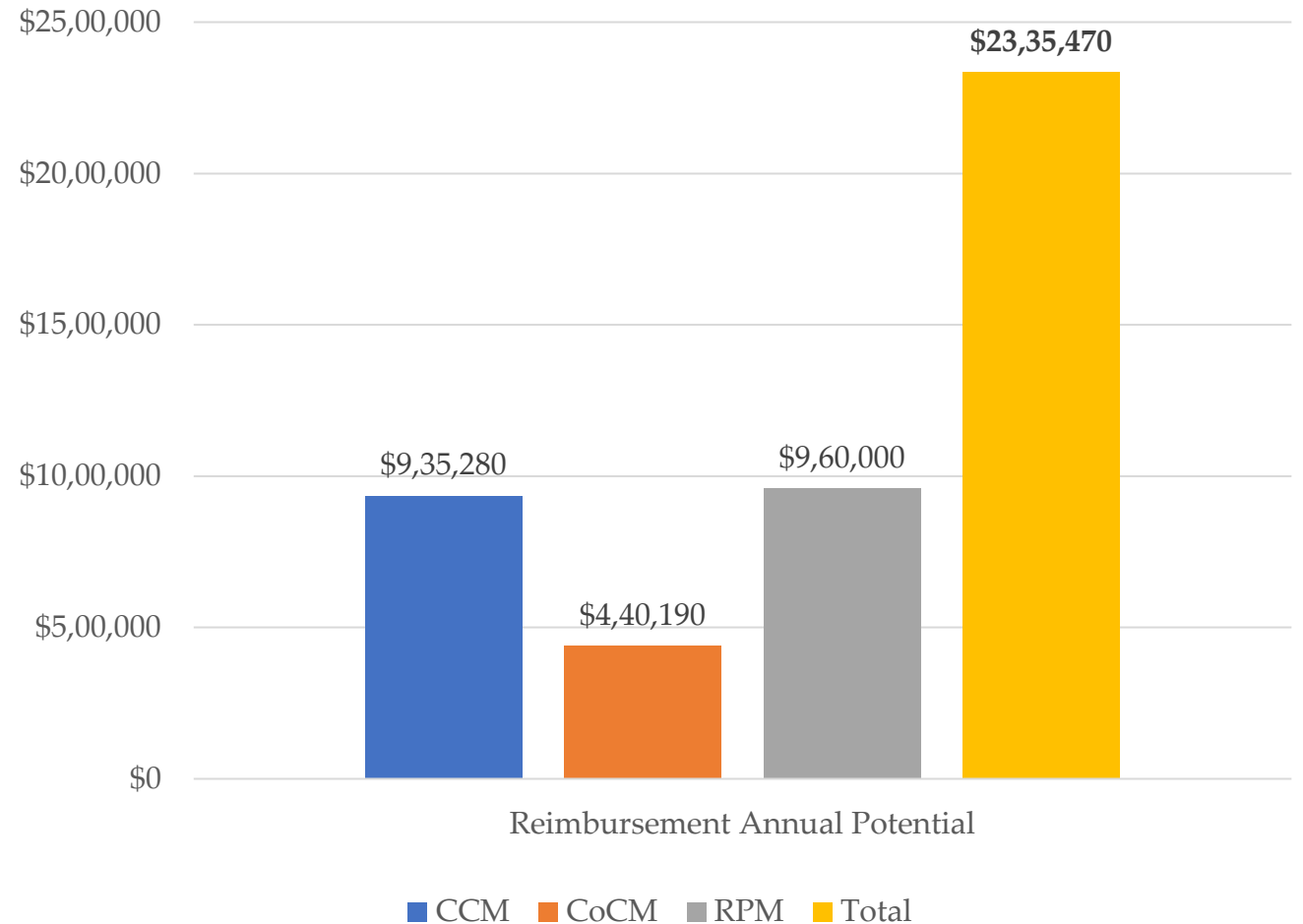


Remote Patient Monitoring

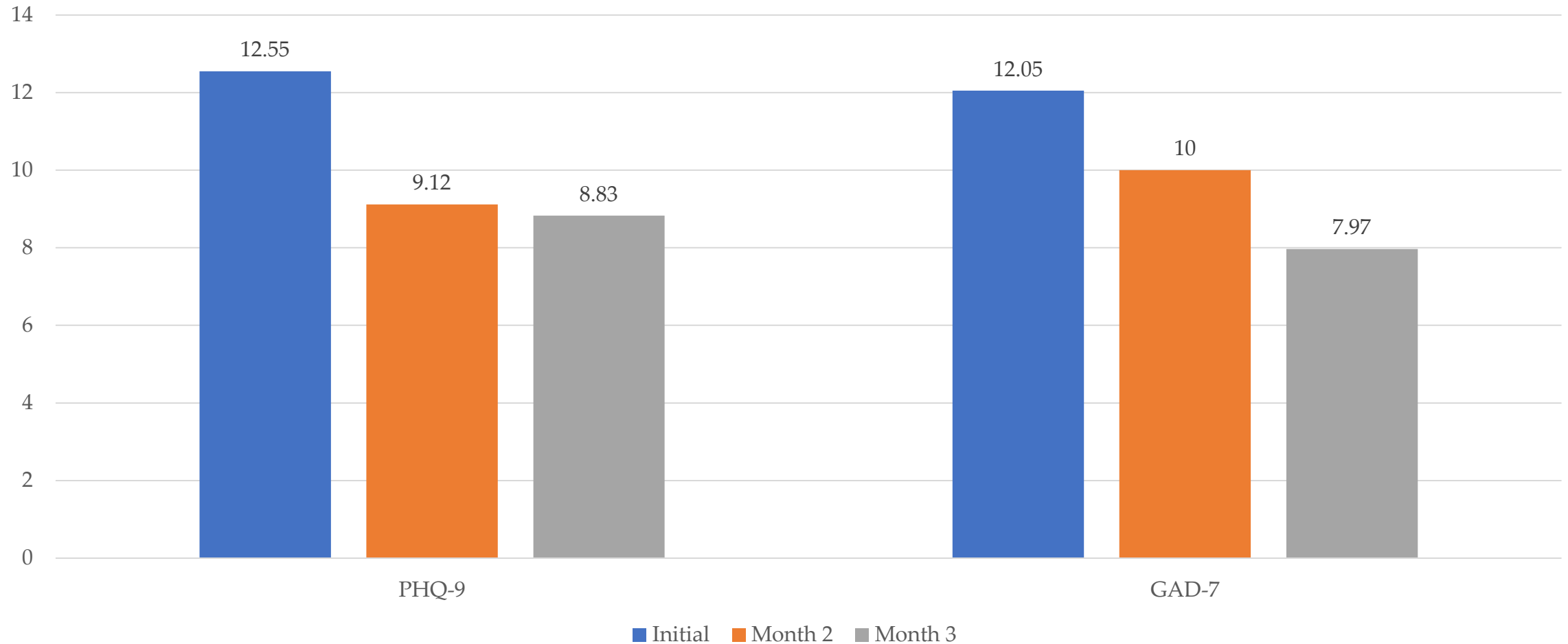
- Monthly billable service
- Population identification
- Monthly outreach
- Patient enrollment and outreach
- Care coordination needs
- Devices provided (B/P, Glucometer, Pulse Ox, Scale)
- Monitoring of biometrics
- Patient clinical monitoring coverage 365 days/year
- Clinical pathway driven care
- Patient education
- Multi-disciplinary team

Annual Reimbursement Potential for CMS Billable Care Management Programs

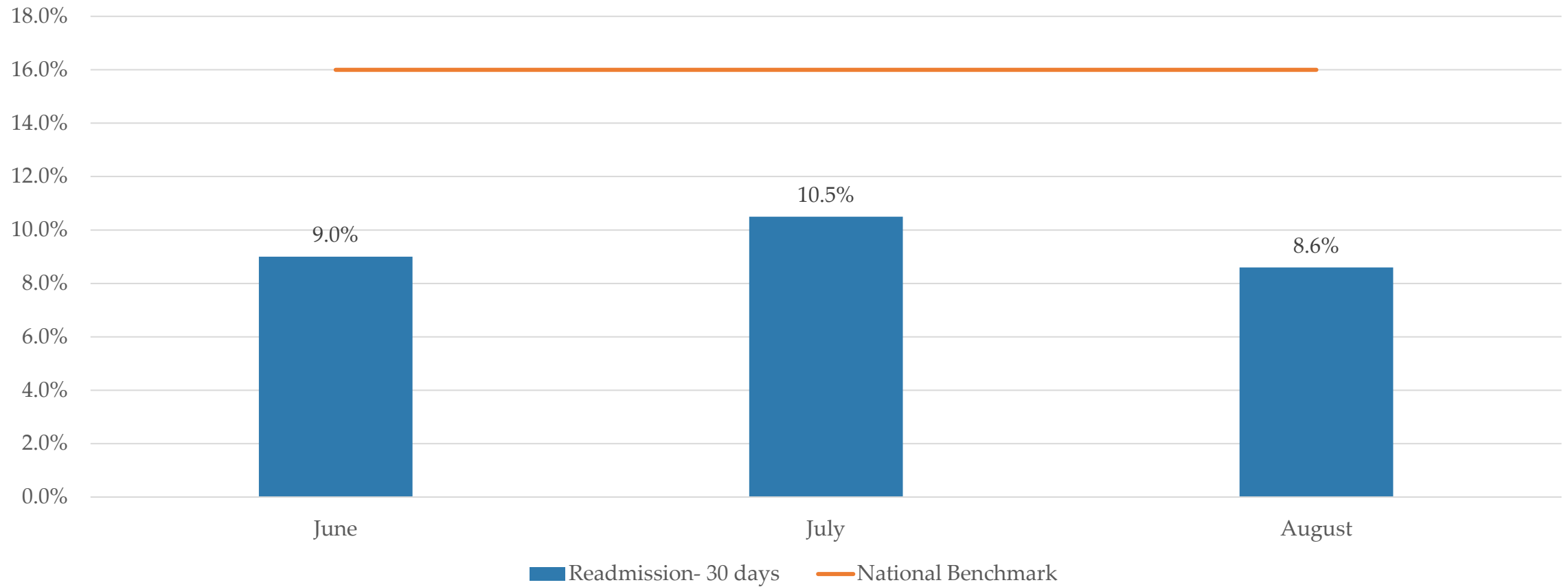
Estimated:
1,000 CCM lives
250 CoCM lives
500 RPM lives



Psychiatric Collaborative Care Outcomes

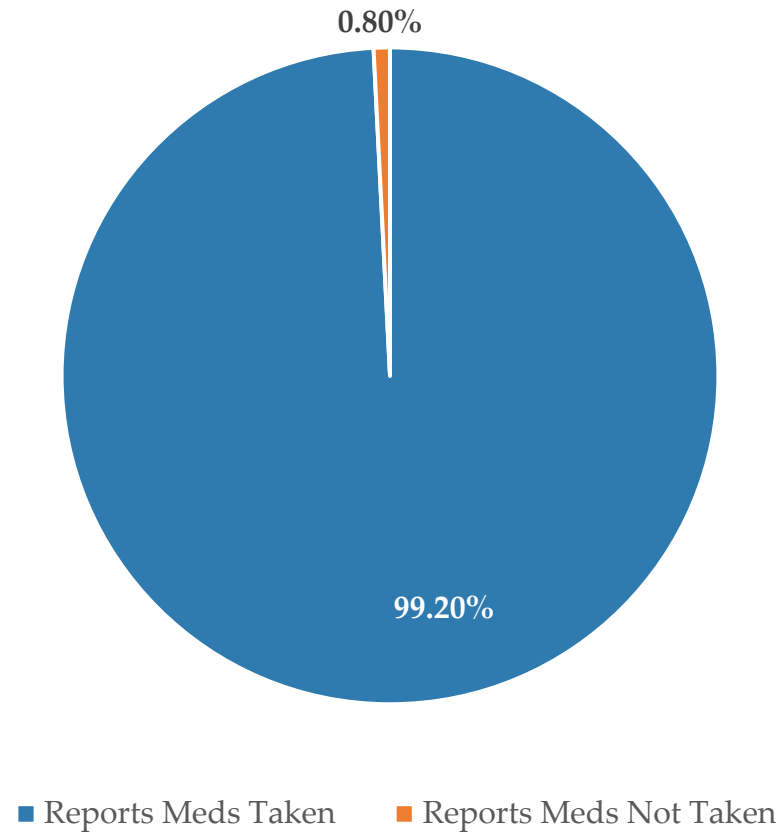


All Payor Readmission Trends



Patient Reported Medication Compliance

Medication Compliance





CONNECTED CARE PROGRAM

Provide 24/7 support from a team of dedicated healthcare professionals that can help manage your conditions and achieve better health outcomes

CONDITIONS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

Alzheimer | Arthritis | Asthma | Atrial Fibrillation | Autism | Cancer
Cardiovascular Disease | Chronic Obstructive Pulmonary Disease
Congestive Heart Failure | Depression | Diabetes | End-Stage Renal
Disease Hypertension | Infectious Disease such as HIV/AIDS

REMOTE PATIENT MONITORING

EFFECTIVE

This telehealth service uses an electronic device to monitor and send vital health information to your provider which strengthens the relationship between clinicians and patients.

COMPASSIONATE

A designated nurse will contact you to help you manage your medical condition and stay connected with your provider in between office visits.

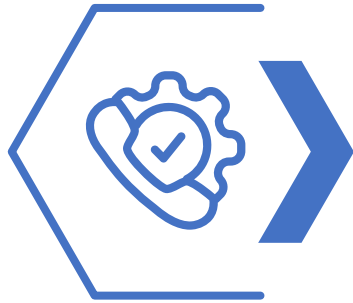
PERSONALIZED

Remote monitoring is easy to connect via text, video, or audio. You receive real-time advice tailored to your needs within the comfort of your home.

Virtual Care Overview



Summary of Virtual Care Services



Determine Goals

Evaluate opportunities for virtual care



Strategy

Determine possible strategies for virtual care models that have the biggest impact on the organization



Analysis

Evaluate cost-reduction model changes vs current model of care



Revenue Growth

Evaluate eligible population for virtual billable services

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