



Patient-centered collaboration technology to facilitate population health management

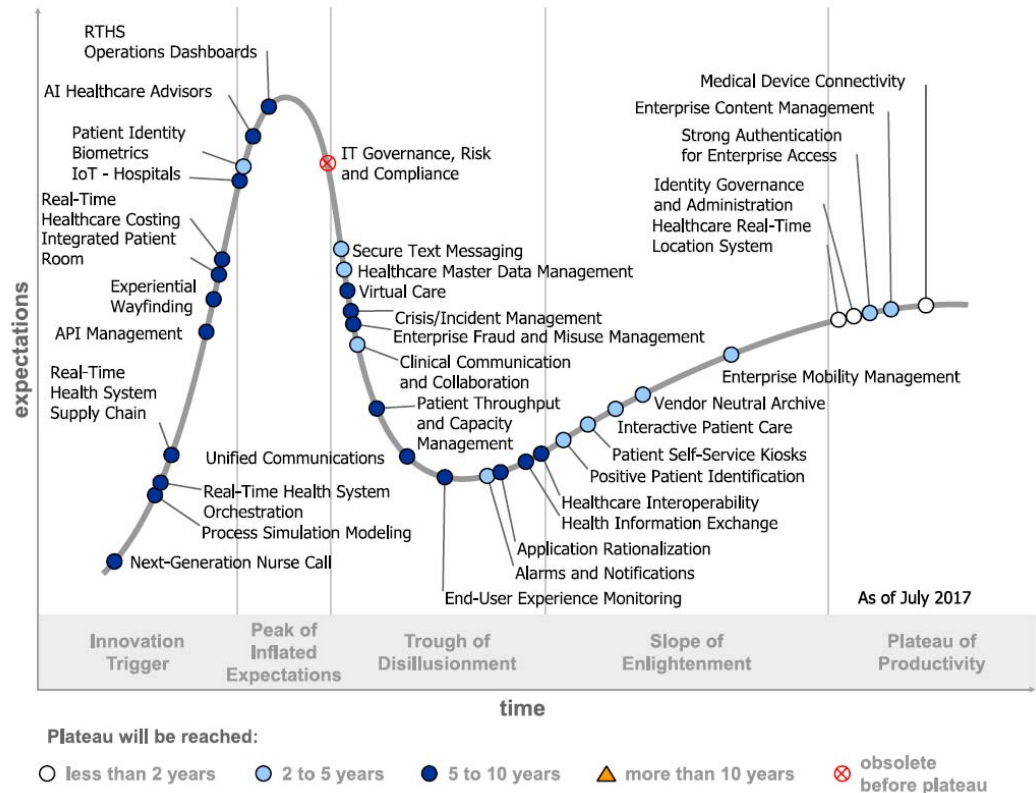
Michelle McCleerey, PhD, MA, MED, MBA, RNB
Chief Clinical Officer/VP Strategy

perfect**serve**.

Clinical Communication and Collaboration

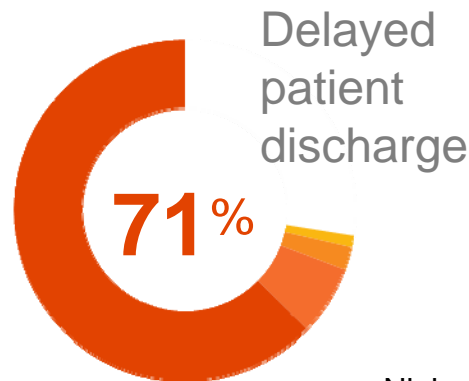
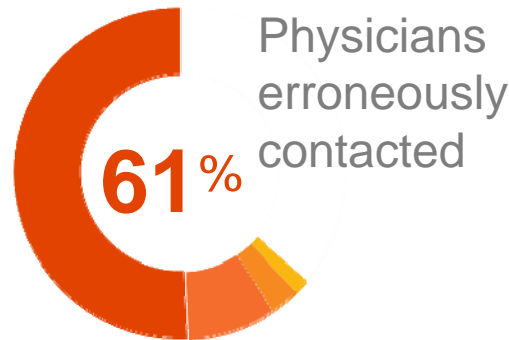
Market

- Identified by Gartner
- Rapidly evolving
 - Adopt as critical patient care delivery initiative and technology program
 - Higher priority on RTHS roadmap



Gartner, Inc. (2017). Hype Cycle for Real-Time Health System Technologies, 2017
Gartner, Inc. (2018). 2018 Strategic Roadmap to the Real-Time Health System
Gartner, Inc. (2018). Innovation Insight for Care Team Collaboration

Healthcare communication is broken



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Reaching physician consults through their offices is a pain-staking, laborious and often unfruitful exercise which adds considerable time and frustration to our days. Which is why it gets pushed off to nursing staff who then waste their time doing it.

New Hanover Medical Center
Hospitalist

Nielsen, 2015

PHM communication/collaboration demands

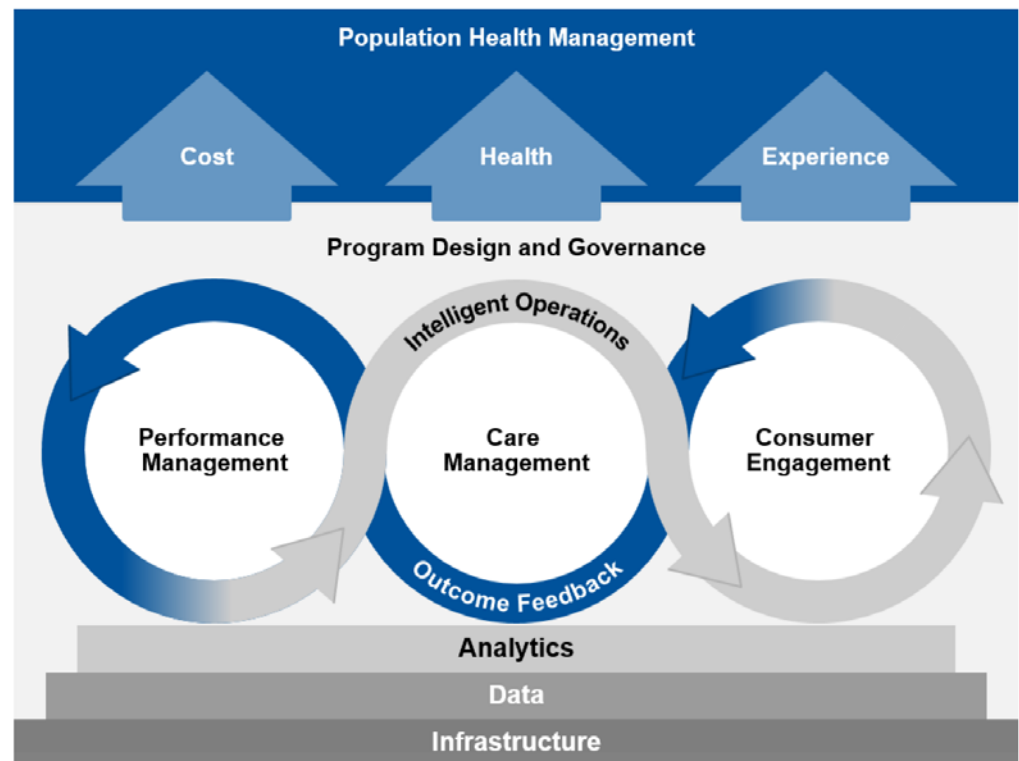
- True team based care
- Physicians/care teams act on the data when interventions can do the patient most good
- Communications delivered across a network of providers and affiliates and the continuum
- Enhanced coordination between providers and care team members across care settings
- Patients transferred more quickly to reduce lengths of stay in the hospital and decrease admissions from the PAC facilities.
- Collaboration between provider and payer
- Consumer-driven healthcare marketplace expects/demands
- Ongoing patient engagement

PHM technology solutions

IT capabilities and services that enable provider organizations to manage populations of patient and achieve specific quality, cost and experience goals

- Suite of capabilities

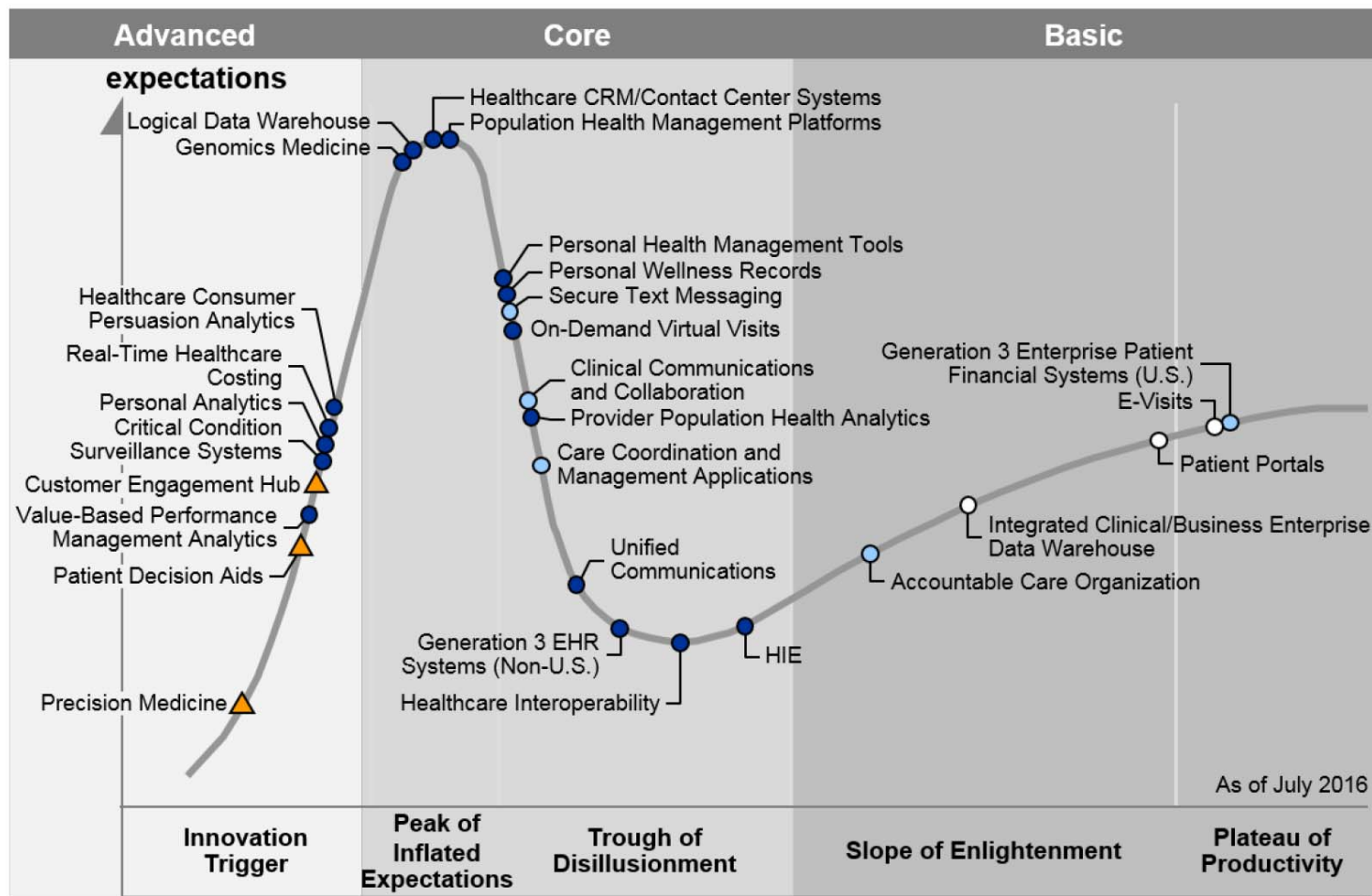
- Care management and coordination
- Network performance management
- Data analytics and proficiency
- Patient engagement tools



Source: Gartner (November 2016)

Gartner, Inc. (2016). Population Health Management Maturity Model, Version 2.0, Lays Out a Future Path for Healthcare Providers

Gartner hype cycle for provider-led PHM technologies



Years to mainstream adoption:

○ less than 2 years

● 2 to 5 years

● 5 to 10 years

▲ more than 10 years

○ obsolete

⊗ before plateau

Program design and governance

Activities

- Establish scope of program
- Manage employee work
- Establish policies and processes
- Maintain measurement strategy
- Drive business requirements for technology decisions
 - A connected ecosystem of partnerships for population health and wellness, patient- or consumer-centric care, and disease detection and prevention
 - Clinically integrated network that includes communities, governments and other agencies



Single, cloud-based architecture



Single, cloud-based architecture

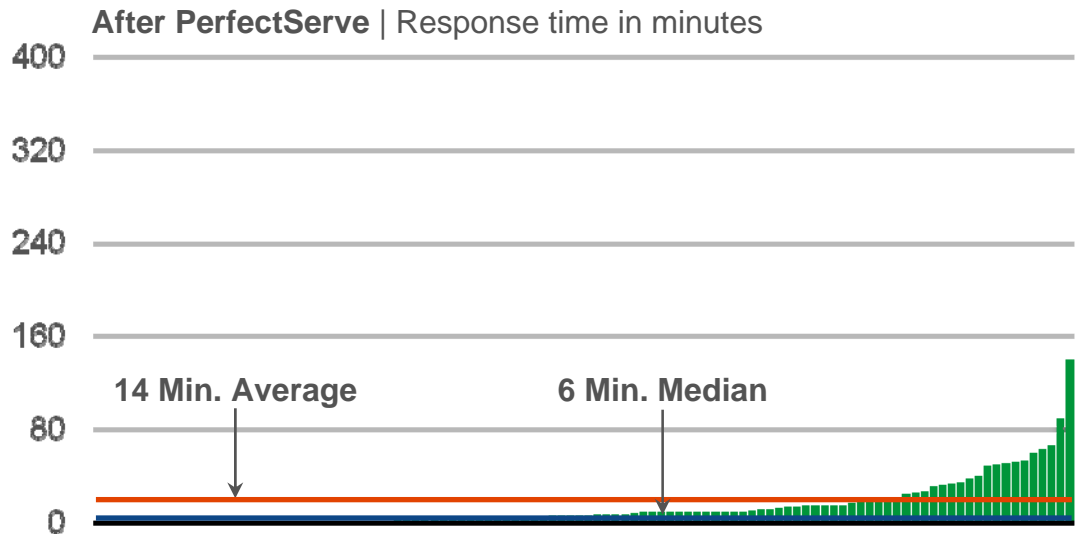
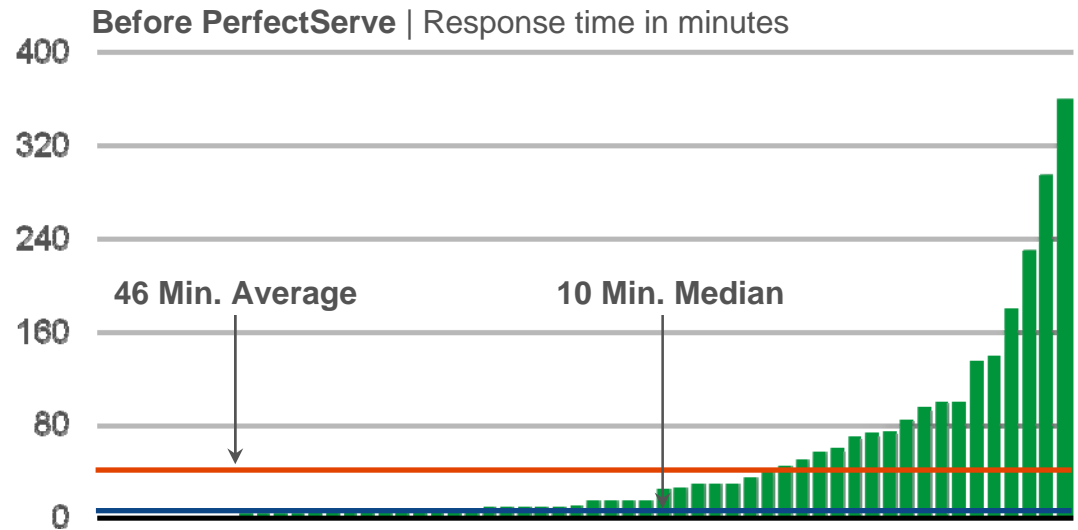
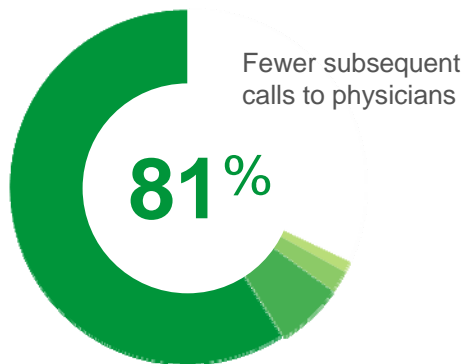
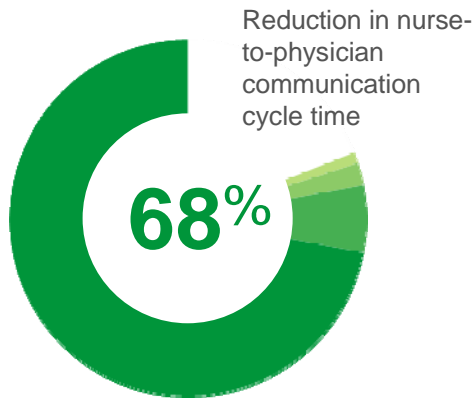


Dynamic Intelligent Routing®

Originator	Department	Patient	Reason	Priority	Day	Time	On-call schedule	Contact method	Receiver
Nurse	Emergency	J. Smith	Existing Patient	STAT	Monday	7:15 am – 9 am	Dr. Willis	Secure text	Nurse
Physician	L&D	D. Woods	Healthy Newborn	Urgent	Tuesday	9 am – 4 pm	Dr. Simmons	Call cell	Physician
Care Coordinator	Med/Surg	W. Jones	Critical Result	Routine	Wednesday	4 pm – 10 pm	You	Call home	Care Coordinator
Hospitalist	Lab	K. Brown	Patient Care		Thursday	10 pm – 7:15 am	Dr. Owens	Call office back line	Hospitalist
Therapist	Radiology	A. Patel	Consult		Friday		Dr. Green	Secure voicemail	Therapist
Pharmacist	Telemetry	C. Murphy	New Patient		Saturday			SMS	Pharmacist
Home Health	Pediatrics				Sunday			Page	Home Health
Hospice	ICU				Holiday				Hospice
Lab	Surgery								Lab
Radiology	Other								Radiology

Automatically identifies and provides immediate connection to the right care team member for every clinical situation

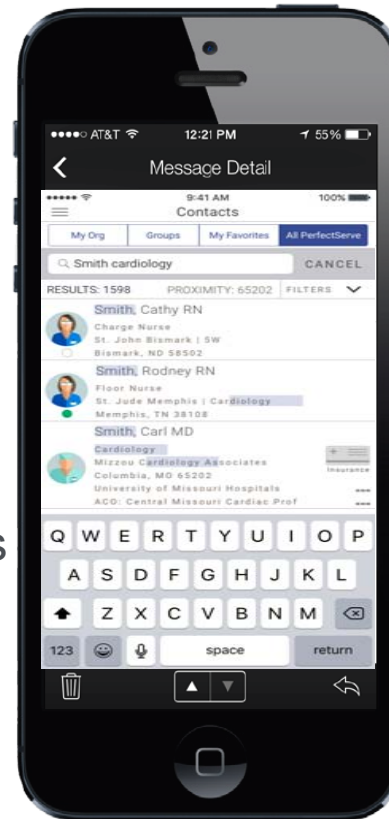
Proven reduction in communication cycle times



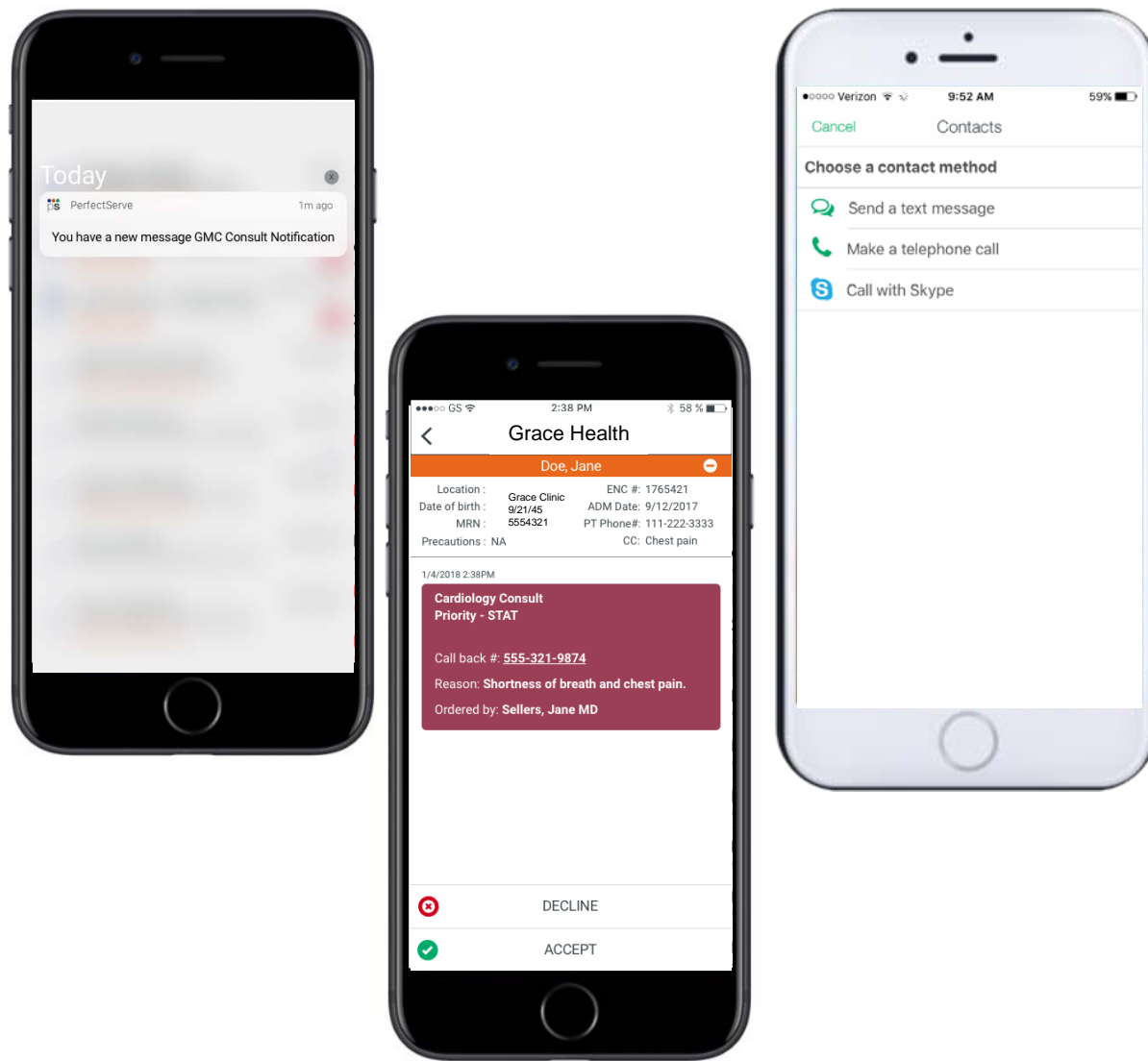
Performance management

Activities

- Contract design, performance and management
- Provider performance monitoring
- Network coordination and management
 - Establish/manage relationships affiliates
 - Coordinating dependencies and workflows
 - Create referral network of providers, resources, relationships
 - Manage leakage



Consult notifications



“

Our referring physician base and consultants are pleased with the new process for communication. We've seen an increase in referrals from community physicians. They are more satisfied with their ability to contact us.”

THOMAS W. FREDERICKSON, MD
MEDICAL DIRECTOR OF HOSPITAL
MEDICINE

**CHI HEALTH ALEGENT CREIGHTON
CLINIC**

Care management and coordination

Activities

- Executing care plan
- Coordinating efforts among multiple providers and nonmedical resources, affiliates and other partners
- Chronic condition management
 - Education
 - Nutrition
 - Transportation
 - Social/behavioral supports
- Proactive alerting for gaps in care/preventable readmissions/clinical deterioration
- Workflows to enable effective coordination and transition across clinicians, facilities and resources
 - Sharing patient information
- Payers are uniquely positioned to play orchestration role
 - Helping consumers navigate their way to better health

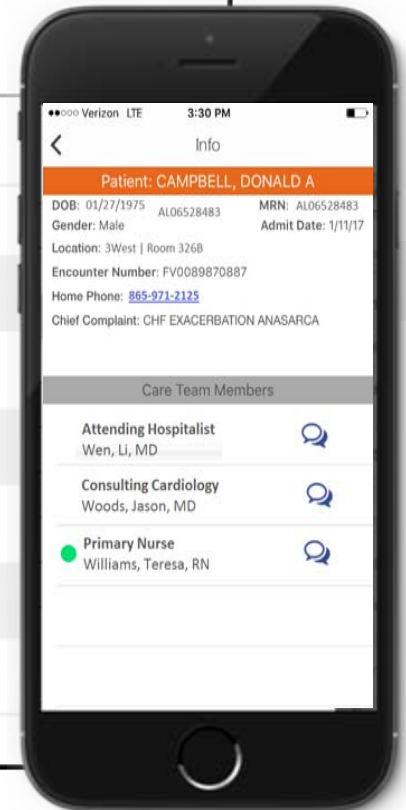
Patient-centered care team access

Patient name: Anderson, Cecil	Admission date: 8/18/2015
Location: Room 208, 2 West	Patient phone: 745.376.1234
Date of birth: 8/20/1926	Chief complaint: Abdominal pain
MRN: 42538345	

Patient's Care Team Message all

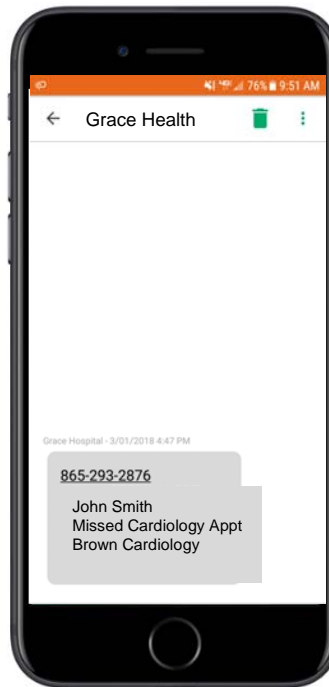
Role	Name	Specialty
PCP	Wen, Li MD	Hospitalist
Specialist	Woods, Jason MD	Cardiology
● Primary Nurse	Williams, Teresa RN	
● Transportation	Jesusa Diaz	
● BCBS Care Manager	Rashon Thomas PT	
○ Care Coordinator	Kaori Yoshida RN	

Show extended Care Team Members



Patient alerts

- Instantly and simultaneously notify team members
- Mobilize specialized teams/roles
- Alerts initiated via phone, web, mobile app, home device
- Automatically escalate messages to secondary responders
- Customize alerts to specific events and needs of response teams



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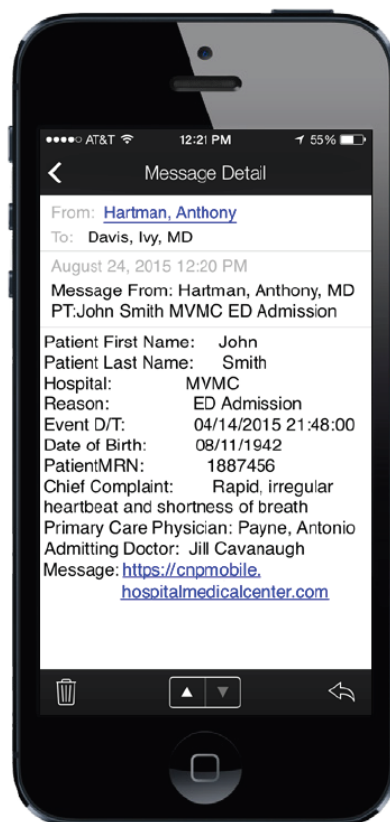
PerfectServe has provided our team with an efficient notification process that has allowed us to reduce patient care delays and attend to the patients' needs in a more effective and timely manner.”

RESOURCE CLINICIAN

ST. RITA'S MEDICAL CENTER

Patient transition notifications

- Notify care team members inside and outside the hospital about patient transitions, in real time
- Customize notifications for
 - ED arrival
 - ED discharge
 - Inpatient admission
 - Inpatient admission via ED
 - Inpatient discharge
 - Observation admission
 - Observation discharge



“

Having a communication platform that allows hospitalists to communicate with primary care physicians has led to a decrease in readmissions and an improvement in care transitions.”

DR. JACK COX
CHIEF QUALITY OFFICER

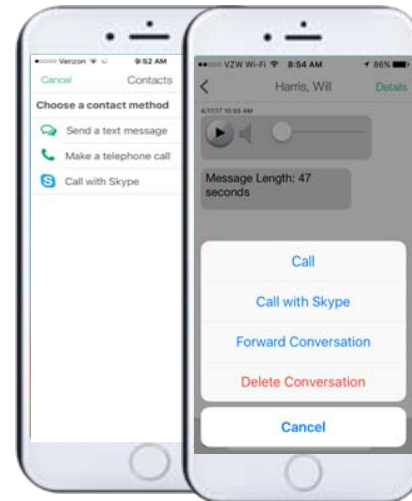
HOAG MEMORIAL HOSPITAL
PRESBYTERIAN

Consumer and patient engagement

Activities

Ongoing engagement with the patient/consumer beyond the medical encounter/episode

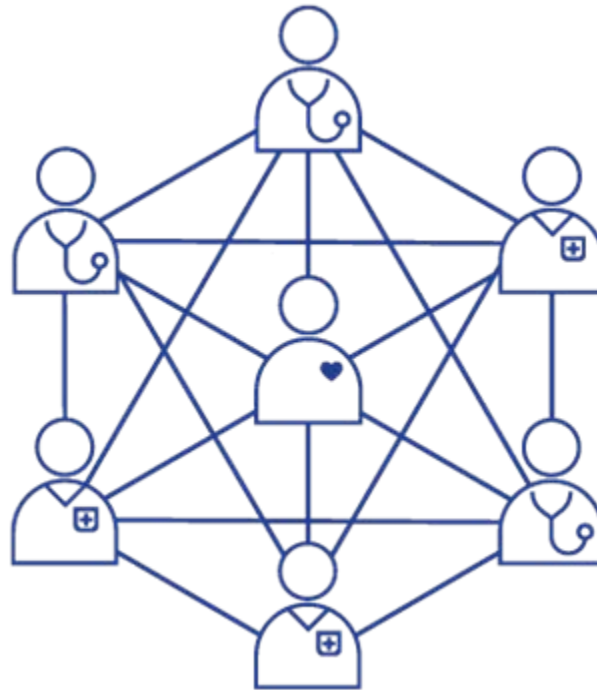
- Automated patient care alerts/reminders
- Patient wellness home devices/tools/wearables
- Patient education
- Appropriate communication channel for continuous communication



CC&C capabilities to enable holistic PHM

- Cloud-based architecture
- Dynamic Intelligent Routing
- Flexible advanced directory with expanded search capabilities
- Consult notifications
- Virtual consult option
- Patient-centered care team access and communication
- Care gap, patient deterioration, patient results, and other
- Patient transition notifications
- Multi-modal access
- Patient reminders
- Patient access to education
- Patient care team contact

Secure care team collaboration solution



Facilitates timely patient-centered collaboration
across all care team members and all care settings