



HALIFAX HEALTH

Live your life well.

CIO and CMIO Partnership in Healthcare Innovation and Transformation

Ginny Kwong, MD VP & CMIO

Tom Stafford, VP & CIO



HALIFAX HEALTH

Ginny Kwong, MD - Vice President & CMIO

Education:

Bachelors of Arts, Biology
Washington University

Doctor of Medicine, MD
University of Mississippi Medical Center

Degree of Fellow, American Academy of Family Physicians (AAFP)

Diplomat of American Board of Family Medicine

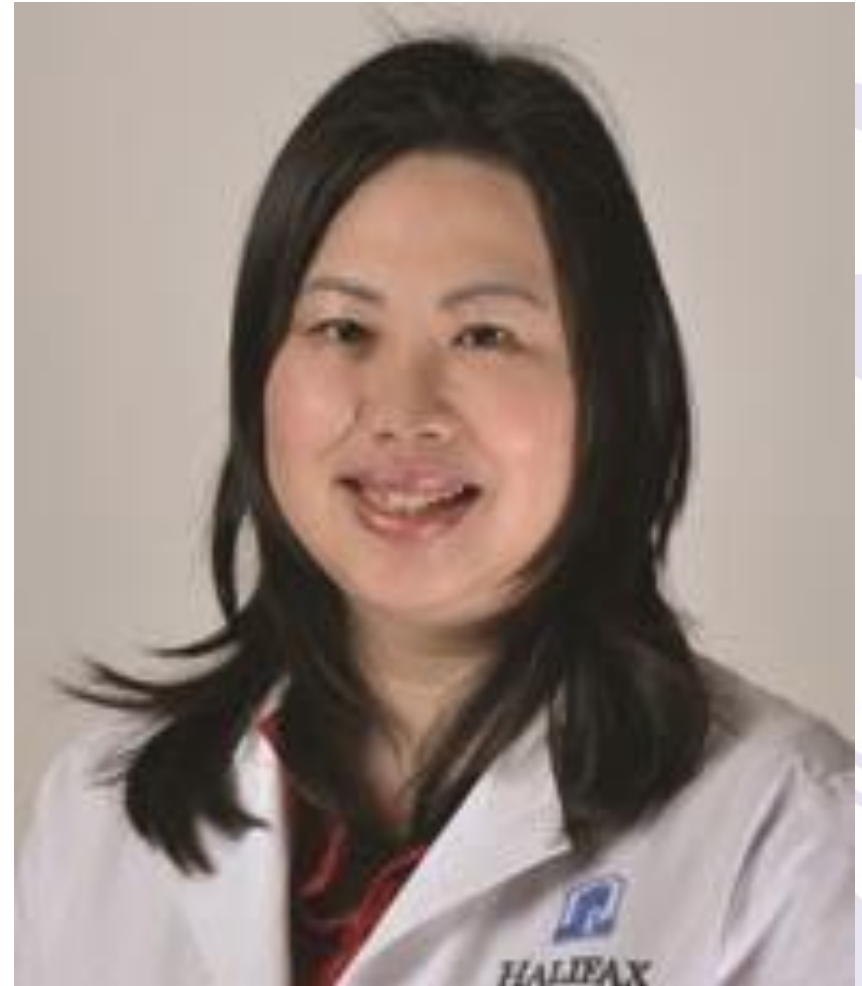
Career:

Chief of Department of Family Medicine

Chief Resident, Halifax Health Family Medicine Residency
Program

Accolades:

AAFP Excellence in Graduate Medical Education Award



Tom Stafford, Vice President & CIO

Education:

Bachelors of Science Aerospace Engineering

Masters of Science Mechanical Engineering

Career:

United States Navy

Medical Device Design and Manufacture

Healthcare IT

IT Accolades:

10th Best Place to work in IT 2015 – Computerworld

2nd Best Place to work in IT 2016 – Computerworld

5th Best Place to work in 2017 – Computerworld

5th Best Place to work in 2018 – Computerworld

Premier 100 Technology Leaders 2017 – Computerworld

Top 105 CIOs to Watch in 2018 - Beckers



Agenda

- About Halifax Health
- Beliefs and Objectives
- Leading and Working Together in the Name of Innovation
- Buzzword Soup
- Halifax Health IT
- Provide Landscape & Governance
- Evolution of Healthcare IT Innovation
- How does we Innovate?
- Innovation Examples
 - Multi-Disciplinary Rounds
 - Sepsis Monitoring and Alerting
- Where we are Heading



About Halifax Health



Halifax Health Medical Center, Daytona Beach

- Opened in 1928
- 600 beds
- More than 500 physicians, representing 54 subspecialties

Halifax Health - Medical Center of Port Orange

- Opened in 2006
- 80-bed community hospital
- 20-bed emergency department
- 8-bed intensive care unit

More About Halifax Health

Emergency Department

- *Largest in Florida: 99,000 square feet, 102 treatment rooms*
- *Area's only Level II Trauma Center*
- *Area's only Pediatric Emergency Department*

Area's only Neonatal Intensive Care and Pediatric Intensive Care Unit

Center's for Neurosciences, Cardiology, Oncology, and Orthopedics

16 Provider Offices/Clinics with more opening soon

Halifax Health Hospice

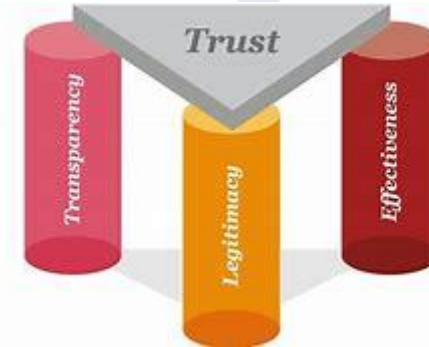
- *Area's largest Hospice Program*
- *Four Inpatient Care Centers*

Beliefs and Objectives



LEADERSHIP

T together
E everyone
A achieves
M more



Leading and Working Together in the name of Innovation

- A day in the life of us, the marriage of process and technology



Buzzword Soup

Lean Healthcare

Digital Transformation

Patient Engagement

Healthca

Process

**But first,
Stability!**

n Support

Digital Disruption

Artificial Intelligence



Halifax Health IT

Turnover rate < 6%

10th Best Place to Work in IT 2015

2nd Best Place to Work in IT 2016

5th Best Place to Work in IT 2017

5th Best Place to Work in IT 2018

Allied Caregiver of the Year 2014 and 2016

Team Member of the Month 2014 and 2016

High Leadership Assessment Scores

Highly Functioning Team

Provide Landscape & Governance

Medical Informatics Governance Board

OUR MISSION is to transform healthcare at Halifax Health through analyzing, evaluating, implementing, and communicating novel information technology and processes.

OUR VISION is to enhance patient health outcomes, improve quality patient care and strengthen clinician patient relationships.

OUR SERVICE PHILOSOPHY is to serve as physician champions and clinical leaders of healthcare informatics at Halifax Health.



The Value of Stability & Governance

Very Low Attrition

- Savings retraining & replacement
- Prevents existing employee frustration

Less Leader Intervention

- Focus more on the future
- Hallway Solutions

Organizational Trust

- Operationally Stability - uptime, issue resolution
- Cyber security requirements
- MU and CQM requirements

Time to Innovate!

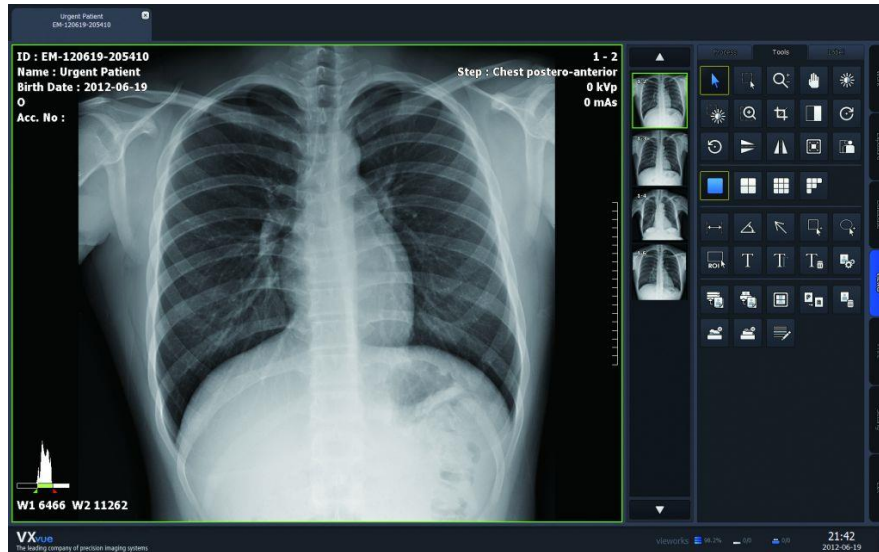
Evolution of Healthcare IT Innovation

In the beginning...



Evolution of Healthcare IT Innovation

20 to 15 Years Ago...



Collection Date & Time	05/24/2011
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ALBUMIN	4.9
ALKALINE PHOSPHATASE	71
ALT/SGPT	32
ANION GAP	10
APPEARANCE, URINE	CLEAR
AST/SGOT	34
BASO #	0.0
BASO %	0.3
BILIRUBIN, URINE	NEGATIVE
BILIRUBIN, TOTAL	0.4
BLOOD UREA NITROGEN-VT	15
BLOOD, URINE	NEGATIVE
BUN/CREATININE RATIO	15.78
CALC OSMO	274
CALCIUM	9.3
CARBON DIOXIDE-VT	26
CHLORIDE-VT	105
CHOLESTEROL	226
CHOLESTEROL/HDLRATIO	5
COLOR, URINE	YELLOW
CORRECTED CALCIUM	8.6

Evolution of Healthcare IT Innovation

Present...

- Siloed Systems
- Big Data
- Clunky HL7 Integration



Evolution of Healthcare IT Innovation

Next Gen Innovation:



Evolution of Healthcare IT Innovation

Next Gen Innovation:

Intra-operability

Wearable Communication Devices

Predictive and Prescriptive **ALERTS**

Evolution of Healthcare IT Innovation

Next Gen Innovation Benefit:

Inform the Caregiver without chaining
them to a Computer

How do we Innovate?

Internally:

- Application & Clinical Architects working with Clinicians

Externally:

- Vendor/Partner Development and Product Roadmaps
- Peer Discussion
- Conferences

Barriers and ways to overcome:

- Partner with Clinicians
- Persistence and Incremental Steps
- Beta Test



Innovation Examples:

- Multi-Disciplinary Rounds
- Sepsis Monitoring and Predictive & Prescriptive Alerting



Patient Centered Multi-Disciplinary Rounds



Predictive Alerting



Acknowledgement



Prescriptive Alerting



In summary our goal...

Creating a stable workforce and stable
infrastructure/systems
Allows for Intra-operability Innovations
Which leads to Clinical Efficiency
and...

**Our caregivers can spend more time
with their patients!**

Where we are Heading with the Marriage

- Bedboard & Clinical Communication
- More CDS and Predictive Alerts
- Enhancement to the HCIS
- Reduction of Readmissions, Excess Days, & HACs
- Improve Physician Satisfaction in the EHR

Questions?



