Systems Approach to Telehealth
Kentucky Telehealth Summit 2018

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Overview

• Introduction, Background, & Emerging Trends

• Considerations for a Telehealth Systems Approach
  – Care Transformation
  – Virtual Health Services
  – Clinical Operations Infrastructure

• Our inspiration
Franciscan Services Near You:
- Franciscan Hospitals
- Prompt Care Urgent Care Clinics
- Primary Care Clinics
- Specialty Care Clinics

Locations:
- Silverdale
- Bremerton
- Port Orchard
- West Seattle
- Burien, Tukwila
- Des Moines
- Federal Way
- Auburn
- Milton
- Bonney Lake
- Enumclaw
- Gig Harbor
- Vashon
- Tacoma
- University Place
- Lakewood
- Spanaway
- Dupont
- Puyallup

Images of healthcare professionals.
Emerging trends
Presence in our environments & our lives
“The most important thing to us at CHI Franciscan is quality of care and safety of our patients,” CEO Ketul Patel said. “Virtual care ... is supporting the day-to-day and minute-to-minute activities of our clinical staff. It is just a great extension of who we are as an organization.”

– Puget Sound Business Journal, September 2017
Clinical & Operational Centers
Developing reinforcing structures and systems

Mercy’s Circles of Care

- SafeWatch 24/7
- ConnectNow
- CareMatters
• We bring care services to our Franciscan patients and clinicians to improve access, quality, efficiency, and population health management, and support the regional delivery of person centered care
Patients are seeking information and care both in-person and digitally throughout the care cycle.
Care Transformation
Virtual Urgent Care as a Direct to Consumer Strategy

• Enhance patient experience
• Drive new patient acquisition & retention
• Strengthen primary care practice
• Innovate for population health
Care Transformation
Developmental timeline of Franciscan Virtual Urgent Care

- Launch of after-hours option for existing patients
- Answer PCP clinic phones after-hours for patient care, referring patients back to PCPs for follow-up
- Development and launch of web portal and regional marketing campaign
- Expansion to 24/7 virtual offering, and additional patient access components
- Expansion to growth markets
- Dedicated Provider Integration
- Insurance coverage
- Integration into Prompt Care practices

2010-2011
- Launch of direct to consumer subscription service
- Franciscan Anytime service for FHS, FMG and local CHI employees and dependents

2012
- Development and launch of web portal and regional marketing campaign
- Expansion to 24/7 virtual offering, and additional patient access components

2013
- Franciscan Anytime program sunsets due to ERISA regulations

2014
- Introduction of additional kiosk access points

2015

2016
- Adapting for Virtual Primary Care

2017

2018
Care Transformation
Rigor in establishing quality framework for suite of services

- Every chief complaint template uses cognitive forcing for QI
  - Imbedded exclusion criteria
- Establish quality indicators such as antibiotic prescribing rate
  - E.g. IDSA criteria for sinusitis
- All charts reviewed by medical director for QI
- Clinical practice guidelines

- 93 Trials; 22,047 Patients
- Usual care +/- Telemedicine.

Equivalent or Superior Care:
- Diabetes
  - Improved glucose control
- Mental Health
  - Equal quality and efficacy
- Dermatology
  - Equal quality
- CHF
  - Equivalent mortality
  - Quality of Life improved with Virtual Health
# Care Transformation

## Virtual Visit Suite of Services “Flight Checklists”

**TEAM-BASED VIDEO VISITS: PRE-VISIT CHF CHECKLIST**

The 3 elements are: (1) History (CC, HPI+ROS, PMSH), (2) Exam, (3) MDM. Need 2/3 for established pt.

<table>
<thead>
<tr>
<th>Chief Complaint</th>
<th>Congestive Heart Failure</th>
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<tbody>
<tr>
<td><strong>HPI</strong></td>
<td><strong>Current CHF Symptoms:</strong> *** (Add &gt;/&gt;= 4 of: location, quality, severity, timing, context, modifying factors, associated signs/symptoms). Diagnosis of CHF (date): *** CHF NYHA Class: *** Recent Echo/EF %: *** Dated ***</td>
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<td><strong>Hospitalization Within 30 Days: *** Discharge Date</strong> Admission Weight: *** Discharge Weight: *** Home Weight Monitoring: ***</td>
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<td><strong>Medication Reconciliation:</strong> *** Missed Doses This Week: *** Anticoagulation: *** Barriers to care: *** (E.g. insurance, English proficiency, mental illness, transportation, debility, memory)</td>
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**Extended ROS:**

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<th>YES</th>
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@PML@ @PHS@

**Exam:**

Directed patient self-exam reveals:

**VS:** *** JIR, *** RR, *** BP, *** Weight

**Constitutional:** Nontoxic appearing

**CVS:** *** pretibial edema

**MDM**

Performed by Physician; dictates LOS.

Counseling Today by the physician which constituted >/>=50% of visit time, included:

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Care Transformation
Shifting the site of care

<table>
<thead>
<tr>
<th>VDMP</th>
<th>VDM3</th>
<th>VDE</th>
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<tbody>
<tr>
<td>Most Intensive</td>
<td>Moderately Intensive</td>
<td>Least Intensive</td>
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<tr>
<td>Virtual Diabetes Management Program</td>
<td>Virtual Diabetes Management, Monitoring and Maintenance</td>
<td>Virtual Diabetes Education</td>
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Hgb A1C Comparison

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<thead>
<tr>
<th>Hgb A1C</th>
<th>VDMP</th>
<th>VDM3</th>
<th>VDE</th>
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<tbody>
<tr>
<td>Pre</td>
<td>9.7%</td>
<td>8.0%</td>
<td>8.6%</td>
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<tr>
<td>Post</td>
<td>6.9%</td>
<td>7.3%</td>
<td>7.8%</td>
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Virtual Health Services
Example of our CHI Franciscan Virtual Suite of Services Phasing

**Ambulatory/Direct to Consumer**
- Virtual Urgent Care (VUC)
  - Virtual Ortho
  - Virtual Sleep Medicine
- Transition of VUC operations to FMG
  - Virtual Bariatrics
  - Virtual GI
  - Virtual ColoRectal Surgery Follow Ups
- Walk in and Click in Urgent Care options
  - Virtual Cardiology
  - Virtual Pulmonology
  - Virtual OBGYN
  - Virtual Primary Care

**Inpatient**
- Virtual Critical Care
- Virtual Hospitalists
- Virtual Psychiatry
- Virtual Rehab Medicine
- Virtual Neurology
- Virtual Neonatology

2016
- 2017: Parity Law Part 1 (SB 5175) – insurance coverage for virtual visits at approved originating sites (not home), except Medicare
- 2018: Parity Law Part 2 (SB 6519) - Insurance coverage for all virtual visits from home, except Medicare
## Virtual Health Services
Matching technology to the need

<table>
<thead>
<tr>
<th></th>
<th>Secure messaging patient/provider</th>
<th>Video visits work within system network</th>
<th>Video visits Provider Initiated</th>
<th>Video invites sent outside of system network</th>
<th>Able to schedule video visit ahead</th>
<th>Video Patient Initiated</th>
<th>Patient Able to enter health data</th>
<th>Care Team Collaboration</th>
<th>Incremental Cost</th>
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<tr>
<td><strong>Basic Patient EMR portal</strong></td>
<td>X</td>
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<td><strong>Basic Two Way Video capability</strong></td>
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<tr>
<td><strong>Basic Two Way Video link</strong></td>
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<td>X</td>
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<tr>
<td><strong>Service Specific Video Visit capability</strong></td>
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<td>X</td>
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<td>X</td>
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<tr>
<td><strong>Service Specific Remote Patient Monitoring Platform</strong></td>
<td>X</td>
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<td>X</td>
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<tr>
<td><strong>Premiere Patient/Consumer Portal</strong></td>
<td>X</td>
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<td>X</td>
<td></td>
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<tr>
<td><strong>Ultimate Cloud Based Integrated Patient Portal</strong></td>
<td>X</td>
<td>X</td>
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**Early Phases**

**Later Phases**
Franciscan Clinical Operations Center
Located in Tacoma, WA

- Monitor 57 screens; 796 bed capacity
- Daily census of 370 patients
- Operate 6 stations at 36 pt capacity
- Support SJ, SC, SA, SF, Hi, & SE
- Transferred 500 patients/month
- Answer 165 pages to provider/night
- Avg 129 virtual admits/month
- Staffed 35 units (670 shifts/day) at SJ, SC, SA, Hi
- Launched Virtual Urgent Care 2014
- Launched CDM in 2015
- Launched nurse call in 2017
- ~1,350 nurse consults/month
- Monitor ~64 patients/day
- ~135,000 calls per month
- ~2,100 code calls per month
Regional Telemetry

Monitor 8 hospital campuses

Avg patient census of 370

Cost Savings of $1.3M Annually in Monitor Technician Labor
**Virtual Companion**

*Visual safety monitoring for acute care patients*

- Average 14 Escalations Per Shift to Bedside RN (2.3 calls per patient)
- Avg Time to Reach Bedside RN: 4 Seconds
- Cost Savings of $5.1M Annually in 1:1 Sitters
Virtual Intensive Care Unit

APACHE IV:
ICU Mortality O/E 0.73
ICU LOS O/E .93

#1 Factor in Recruiting 6 New Intensivists

Improved Leapfrog Scores
Improved bundle compliance
Virtual Hospitalist Medicine

- Improved Hospitalist Satisfaction
- 164 Calls per 12-hour night shift; Covers 4 hospitals
  Avg 4 Virtual Admits/Night
- Response Time Decreased from >30 minutes to 3 minutes
Clinical Operations Center Team