

Disruptive Innovation: Nurse-Led Employee-Based Healthcare

December 11, 2019, 2pm EST

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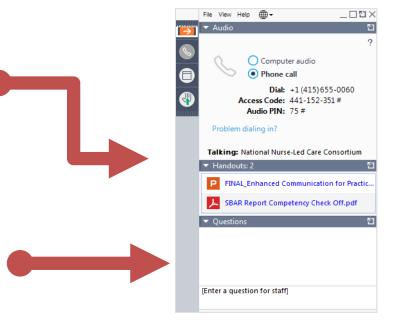
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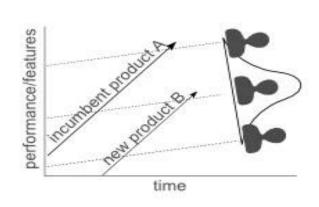






Disruptive Innovation

WHAT EVERYONE OUGHT TO KNOW ABOUT DISRUPTIVE INNOVATION



"A disruptive innovation is not a breakthrough innovation that makes good products a lot better."

- Clayton Christensen

Disruptive Innovation

- Affordable: reliable
- Simple: capable
- Accessible
- Process



Disruptive Innovation

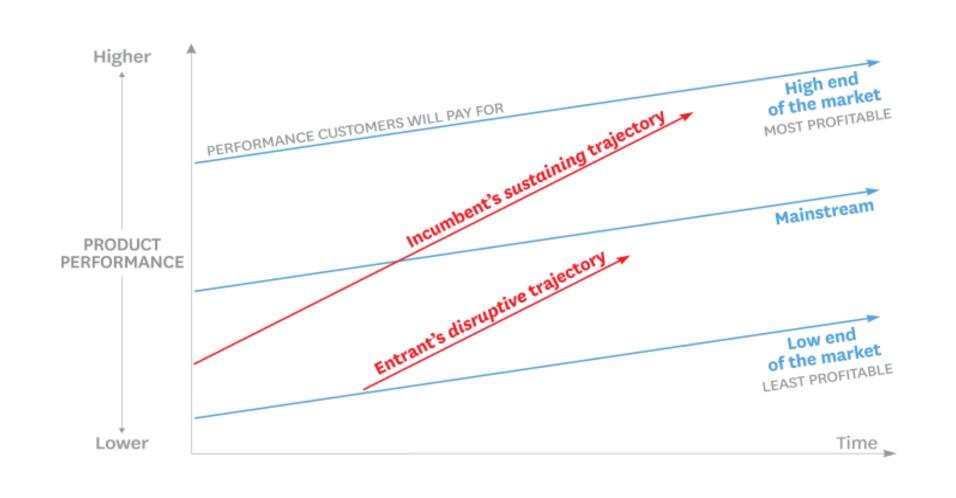
- Improvement Driven
- Existing Customer Focus
- Expensive
- Complicated



Disruptive Innovation: Business



Disruptive Innovation Model

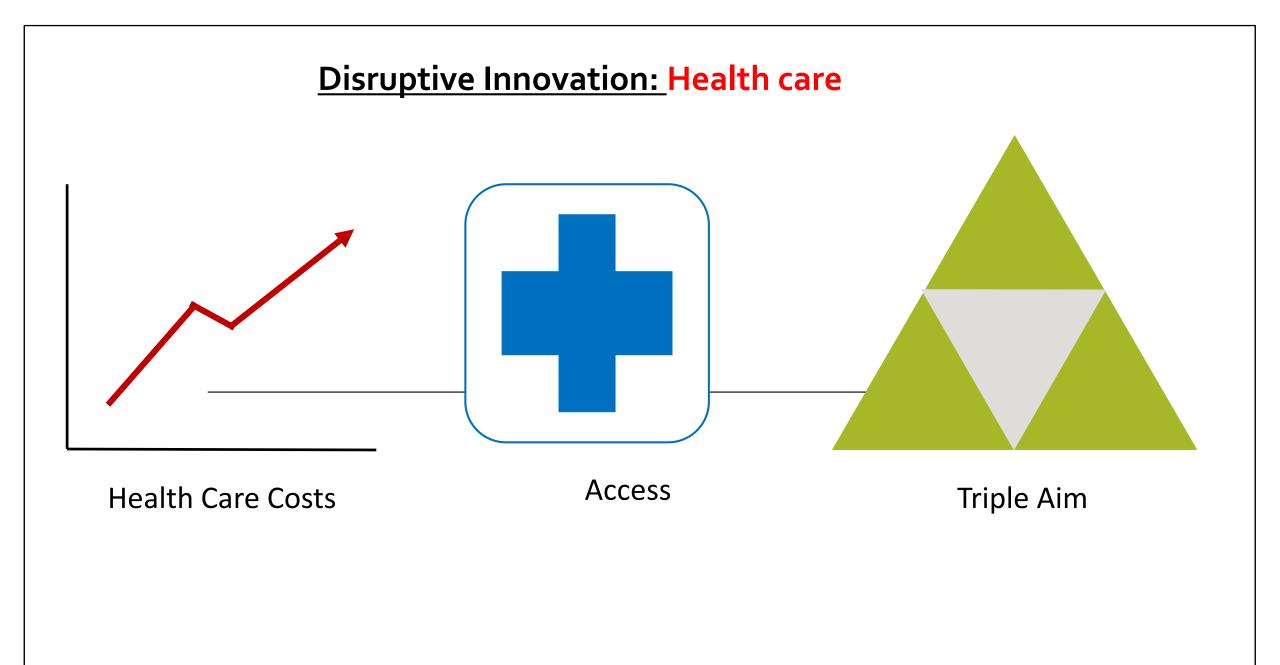


Disruptive Innovation: Health care

Why?

- Expensive
- Complicated
- ↓ Access
- ↓ Patient Satisfaction





AN EMPLOYEE-CENTERED CARE MODEL RESPONDS TO THE TRIPLE AIM: IMPROVING EMPLOYEE HEALTH

Fox K., McCorkle R. An employee-centered care model responds to the triple aim: improving employee health. Workplace Health & Safety. 2018 Vol. 66 (8), pp 373-383.

BACKGROUND TO THE PROBLEM

Health Care Costs

Direct Costs: United States

- 19.6% GDP by 2024 (2nd to Netherlands at 11.9%)
- Health Care Resource Waste (750 Billion Annually (IOM))

Indirect: Corporate Costs

- Absenteeism / Presenteeism
- Poor Health of employees cost economy \$576 Billion/year*

Employee Costs

- Premiums
- Co-pays/Deductibles

(*Integrated Benefits Institute, 2012)



BACKGROUND TO THE PROBLEM

Access to Care

Decrease in Timely Access to Care Nationally

- Primary Care Physician Shortage
- 9 million Uninsured Gained Access to Care
- Results in ↑ Use of ER/Urgent Care And ↓ Patient Satisfaction

Employees:

- Working Hours = Time Off Work
- 2006 Four-Fifths of Patients Have PCP: Only 27% Access Care After Hours
- After Hour Care =
 † ER/Urgent care
- No Care

- Comprehensive Literature Review: SCOPUS, PUBMED, CINAHL
- Content Specific: Worksite Clinics; NMHC; NP Role; NP Quality/Safety Outcomes;
 Telemedicine; Patient-Provider Relationship
- Inclusion: National And International Articles Between 2005-2016
- Exclusion: Articles Published in Languages Other Than English
- Total Articles: 20
- Articles Grouped Into 4 categories:
 - Worksite Clinics
 - Nurse-Managed Health Centers
 - Telemedicine
 - Quality Care Relationship/Nurse Integrator

Worksite Clinics

Employer Innovations

- Shahly, 2014
 - Systematic Literature Review
 - Worksite Clinic c/t Wellness Programs
 - Triple Aim
 - † Workplace Productivity (Absenteeism; Presenteeism; Disability)
 - Cost-effective
- McCaskill, 2014
 - Cost-Analysis Diagnosis/Treatment of URI
 - \$6.69 to \$1.00 ROI
 - High Employee Utilization Necessary for Sustainability
- Further Studies Needed

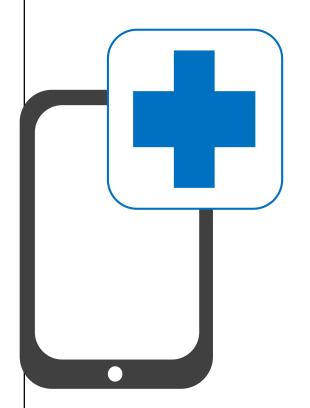


Nurse Managed Health Centers

- 250 Nationwide
- Services: Primary Care, Prevention And Wellness
 - At Risk Populations
- Model Supports Triple Aim
- Nurse Practitioners
 - Vital Role
 - Research Supports Quality/Safe Care = Primary Care Physician
 - Barkauskas: Retrospective Study on Quality Findings of 9 NMHC
 - Results: "Good" to "Very Good" for Quality (50%/90%)



Telemedicine



- IOM Defines: "Use of Electronic Information And Communication Technologies to Provide And Support Healthcare When Distance Separates Participants"
- Recent Improvements in Technology And Costs
- Platform Aligned With Triple Aim
- Literature Supports Effectiveness And Better Health Outcomes*
- Disruptive Innovation

*Bashshur (2016, 2014)

Telemedicine

Immediate, convenient, secure access to care



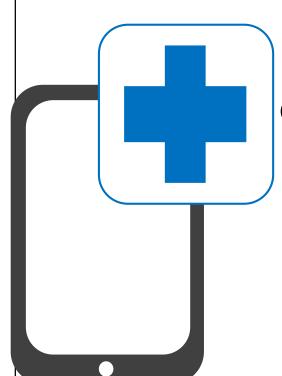
Time Burdens: satisfaction

Cost Effectiveness

\$20-\$40 Average Telemedicine Appointment

\$150 Average PCP Visit

\$750 Average ER Visit



Average Appointment Costs



• \$20-\$40 Telemedicine

• \$150 PCP

• \$750 ER

Quality-Care Relationship / Nurse Integrator

- Berwick: Integrator and Triple Aim
 - o Responsible for Triple Aim With Select Population
 - Culture: "More is Better" Ideology
 - Care:
 - Transparency
 - Education
 - Shared-Decision Making
 - Trust
 - o Role
 - Essential
 - Safe, Quality Care
 - Knowledge, Skills, Dedicated Relationship
 - Assess, Educate, Triage



Quality-Care Relationship / Nurse Integrator

"In today's uncertain world of fast changing technology, violence and terrorism, diverse cultures, rampant chronic disease, and the worst nursing shortage in history, it is clear that caring relationships may be relevant to quality health care perhaps more so than ever before."

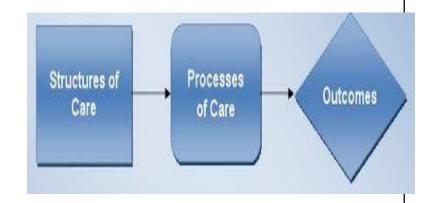
--- Duffy, 2003

Quality-Care Relationship/Nurse Integrator

Quality-Caring Model (Duffy, 2003): Increased Quality Outcomes

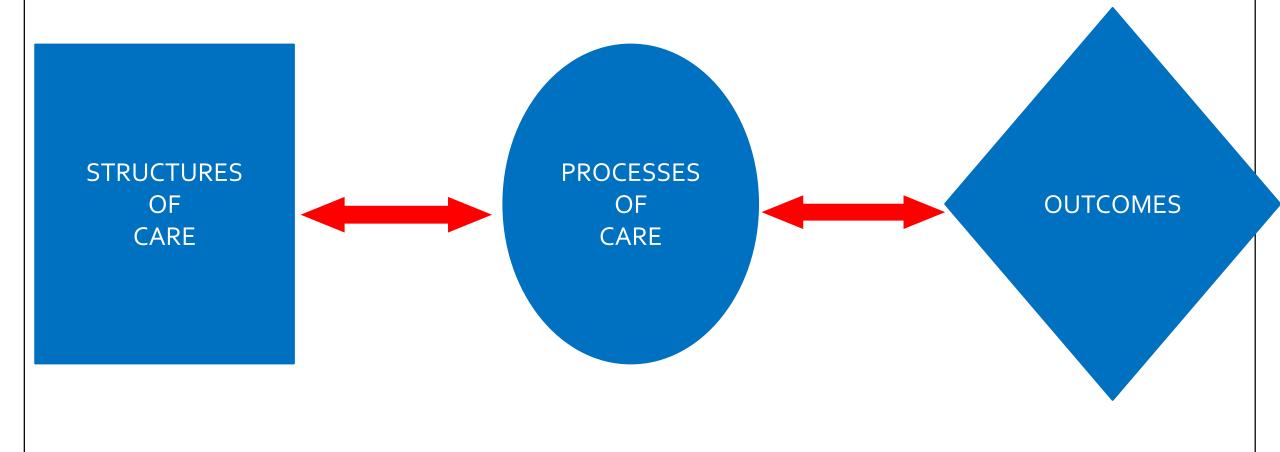
- Caring: "Human Interactions Grounded in Clinical Caring Processes"
- Caring Relationships: Essential to Delivery of Quality Care
 - Independent
 - Collaborative

DONABEDIAN FRAMEWORK



- Introduced in 1966
- Method for Evaluating Quality of Care, Initially for Medicine
- Empirical Framework Reinforcing Nursing Care and Clinical Practice
- Structure-Process-Outcomes
 - Structure: Resources Needed to Deliver Care (Human; Physical; Financial)
 - o Process: Methods Used to Provide Care
 - Outcomes: Measured Through Change (Health; Knowledge; Behavior; Satisfaction)
- Interdependence of Components Equal Success of Outcomes

- Hybrid approach
- Employees of Self-Insured Corporation
- Structure-Process-Outcomes
- Triple Aim
- Nurse-Employee Relationship: patient-centered philosophy



Structure

Provider

Nurse Practitioner

- Treatment/Diagnosis via
- Telemedicine Platform

Registered Nurse

- Integrator
- Educator
- Accountable for Triple Aim
- Outcomes and Employee Health

Annual Biometric
 Screening/Flu Clinic

Health Coach

- Mentor
- Educator

Patient Employee

Health Benefit Recipient

System

Health Care Setting

- Worksite
- Equipment
- Bluetooth and Manuel
- Computer/ Smartphone/Tablet

Space

- Private Dedicated Room
- Public Conference Room

Resources

- Telemedicine/Educational
- Primary/Emergency Care Refe

Process

Technical

- Telemedicine Platform
- Express Care Virtual-NP

Education

- Chronic Disease Management-RN
- Health & Wellness-Health Coach

Express Care Virtual **Tutorial-RN**

Relationship

- Quality Care Relationship Collaborative
- Dedicated
- Nurse Integrator Driven Relationship Building

- Employee Focused
- Cultural Needs **Assessment**

Telemedicine: Express Care Virtual

- Virtual, Private, Secure Appointments
- Staffed by Licensed Board Certified Health Professionals: Nurse Practitioners
- Diagnosis And Treatment of Minor Illness and Injury
- Computer, Smartphone, Tablet
- \$39.00 Flat Fee: With or Without Insurance
- 7 days per week 8am-midnight
- Increased Patient Satisfaction
- 2014 -- 1,591 Visits
- 98% Satisfaction Rate
- 96% = Just as Good, or Better, Than Traditional Visit



TELEMEDICINE PLATFORM: EXPRESS CARE VIRTUAL

<u>Diagnosis and Treatment of Minor Illness and Injury – Common Conditions</u>

Common Ailments

- Fever
- Cough
- Cold
- Flu
- Headaches/migraines

Respiratory

- Infections
- Bronchitis
- Seasonal allergies
- Chest congestion

Nose and Throat

- Sore throat/strep throat
- Sinus infection
- Laryngitis
- Pharyngitis

Eye

- Eye infection
- Eye irritation
- Conjunctivitis/pink eye

Skin and Nails

- Rashes, infections/hives
- Dry skin/eczema
- Poison ivy/oak
- Athlete's foot/ingrown nail
- Acne/lesions

Other Problems

- Joint or back pain
- Minor cuts/scrapes
- Strains/sprains
- Insect bites/stings
- Minor burns

NURSE INTEGRATOR*

Educator

- Chronic Disease Management
- Weight Management
- Smoking Cessation
- Stress Management
- Health and Wellness
- Common Health Questions
- Telemedicine Platform

* Minimum of a Bachelor's Degree in Nursing Required.

NURSE INTEGRATOR*

Facilitator

- Flu Clinic
- Biometric Screenings
- Blood Pressure Clinic
- Virtual Telemedicine Appointments
- Resources

* Minimum of a Bachelor's Degree in Nursing Required.

NURSE INTEGRATOR*

Relationship Builder

- Develops Trusting Relationship with Employees
- Fosters Working Relationship with NP Providers
- Collaborates with Employees' Primary Care Provider
- Assesses Employees Needs and Culture
- Assumes Responsibility for Achieving Triple Aim with Employee Population

* Minimum of a Bachelor's Degree in Nursing Required.

Outcomes

Triple Aim

Cost Access Satisfaction

Decreased Health Convenient High Quality

Resources Timely Safety

Increased Workplace

Productivity

Health

Improved Employee Health

Subjective

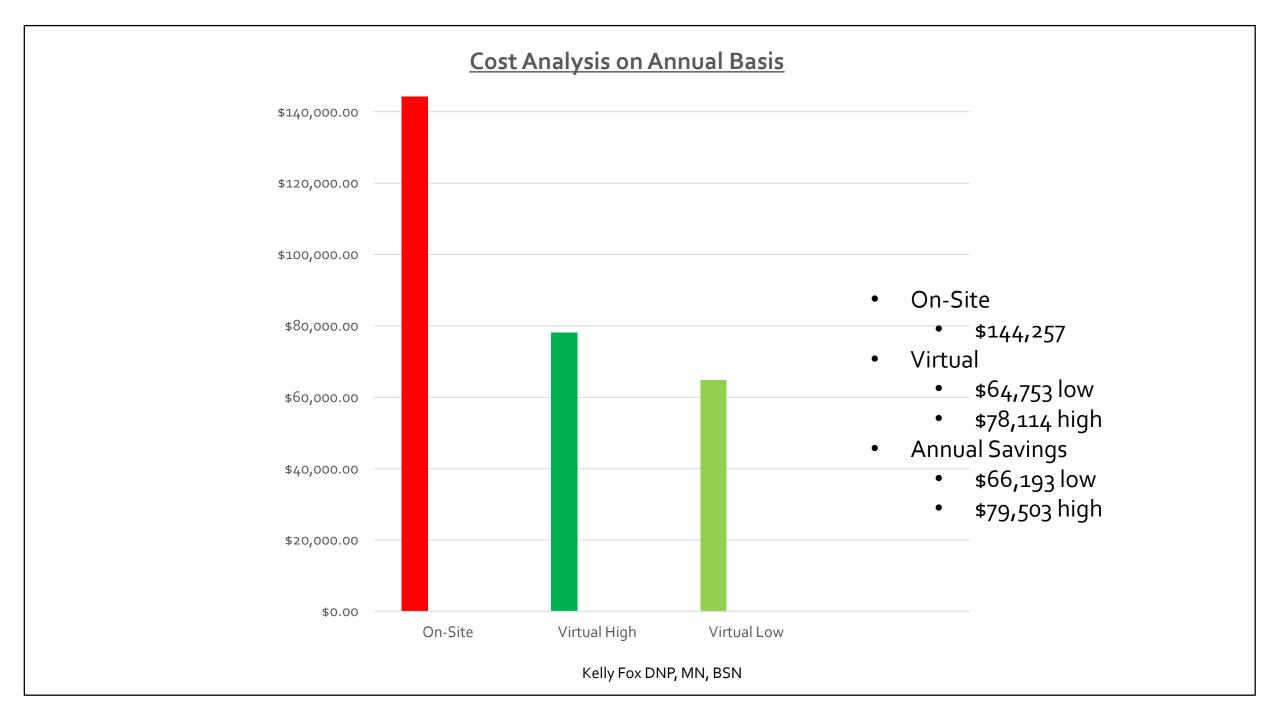
Objective

COST ANALYSIS

- On-Site Clinic (McCaskill):
 - \$574.73 Per Day (Human Resources)
 - \$144,257.23 PerYear (Operating M-F Excluding Holidays)
 - o 976 Total Visits (1-Year Study Period; 267 Employee Population)

COST ANALYSIS

- Employee-Centered Care Model:
 - \$39.00 per visit via Express Care Virtual
 - o 976 visits x \$39.00= \$38,064.00 Per Year
 - o Additional Costs for Monthly Retainer for RN and Health Coach
 - PEPM fee \$8.33-\$12.50 (Recommended Wellness Plan Service Range)
 - \$8.33-\$12.50 x 267 (Employee Population)= \$2,224.11-\$3,337.50 per month
 - \$26,689.32-\$40,050.00 PerYear
 - \circ 1-Year Cost = \$64,753.32-\$78,114.00
 - o Savings = \$66,193.23-\$79,503.91 Compared to On-Site Clinic



PILOT TRENDS

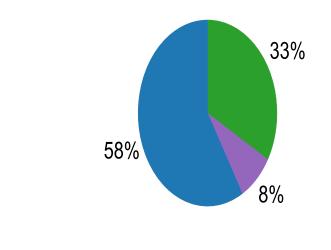
- Satisfaction
- Employee
 - > Express Care Virtual Data Analytics
 - > 90% or greater satisfaction
- Access
- Employee
 - > 89% would have sought care elsewhere
 - > 10% utilization
- Cost
- Employee
 - no cost (telemedicine appointment covered by employer)
- Employer
 - ➤ Émergency Room Charges ↓ 16.6%
 - ➤ Urgent Care Charges ↓ 41.2%
 - > Total Cost Avoidance: 91%

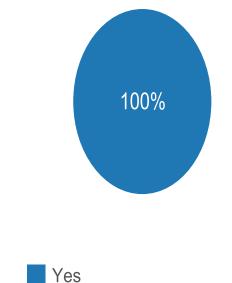
Express Care Virtual Data Analytics

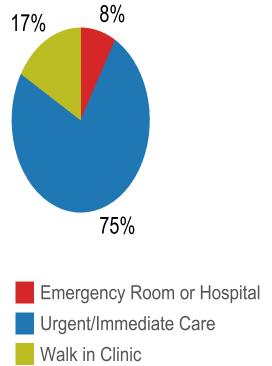
Are you likely to use this service again? September, 2016

Would you recommend this service? September, 2016

Where would you have gone instead September, 2016

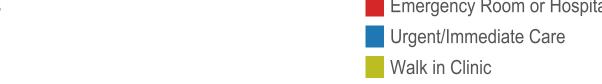






Unsure
Very likely

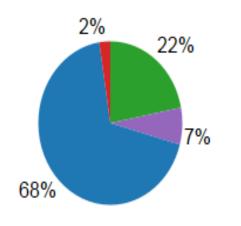
Likely

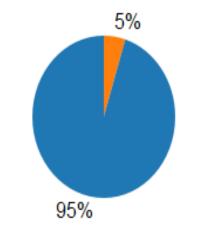


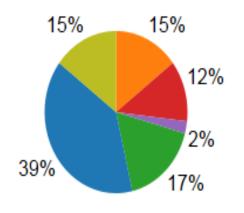
Express Care Virtual Data Analytics

Are you likely to use this service again? October, 2016

Would you recommend this service? October, 2016 Where would you have gone instead October, 2016

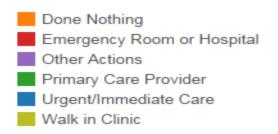












Express Care Virtual Service Report - 2017





(All Visits)

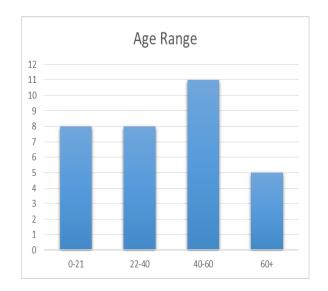
Diseases of the respiratory system

Injury, poisoning and certain other consequences of external causes

Diseases of the genitourinary system

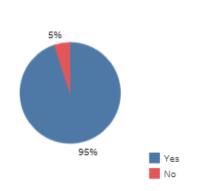
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified

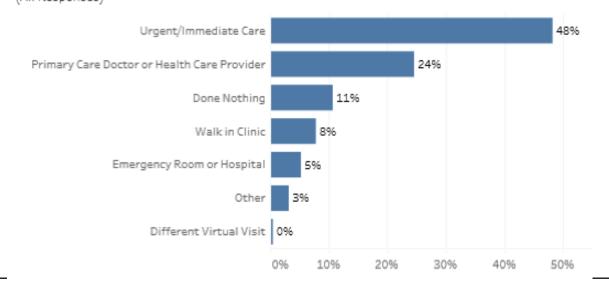
Factors influencing health status and contact with health services

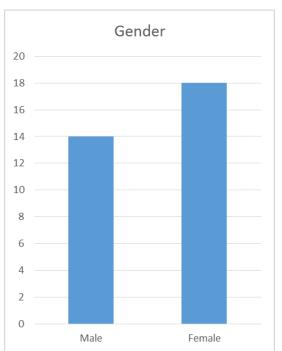


Where would you have gone instead? (All Responses)

Would you recommend this service? (All Responses)





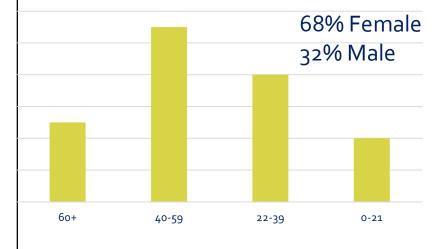


Express Care Virtual 2018 Report

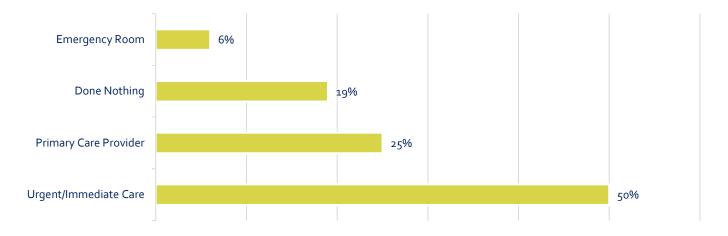
Top 5 Conditions

- Respiratory condition
- Sinusitis
- Rash
- Eye condition
- Rash or skin condition

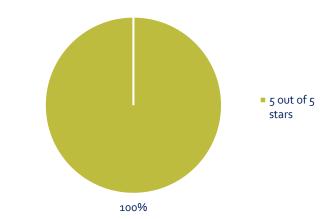
Age Range of Patients



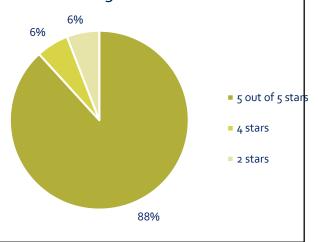
Where would you have gone instead?



Patient Rating of Provider



Patient Rating of Care Platform



Employee-Centered Care Model Results

- Satisfaction
- Employee
 - Express Care Virtual Data Analytics
 - > 90% or greater satisfaction with on-site and Express Care Virtual services
- Access
- Employee
 - > 81-89% would have sought care elsewhere
 - > 5-10% utilization of Express Care Virtual
 - > 65% utilization of on-site services (blood pressure clinic, biometric screening, flu clinic, education)
- Cost
- Employee
 - > no cost (telemedicine appointment covered by employer)
- Employer
 - > Total Cost Avoidance with Express Care Virtual: 91%
 - > Decrease in corporations 12-month rolling medical claims average
- 2019 Success
 - Weight Watchers (on-site)
 - > 25-30 employees participated
 - > 1 year=700 pounds lost!

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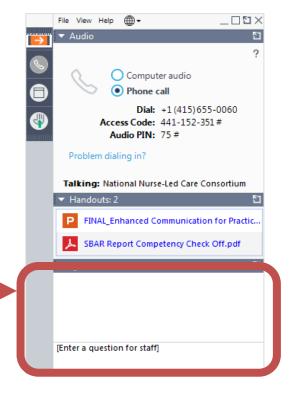
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Care Coordination: A Business Case for Nurse-Led Care at All Professional Licensure Levels

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