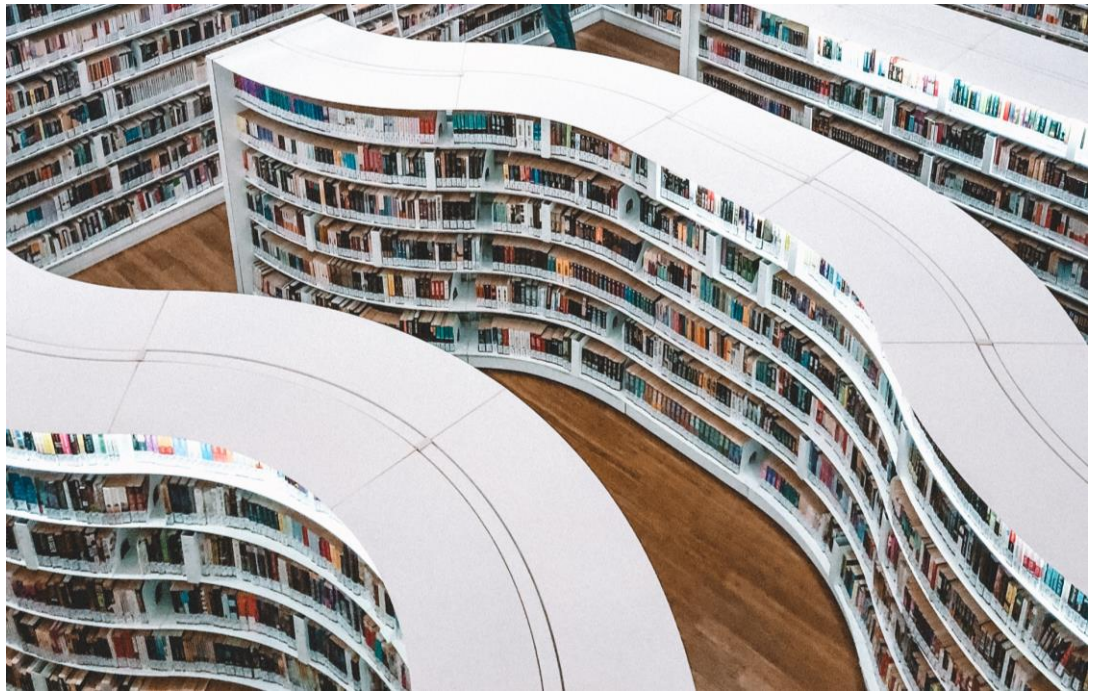

Telemedicine Black Belt Presentation

(Originally presented on April 2017 at the 2017 American Telemedicine Association Pre-Conference Course)

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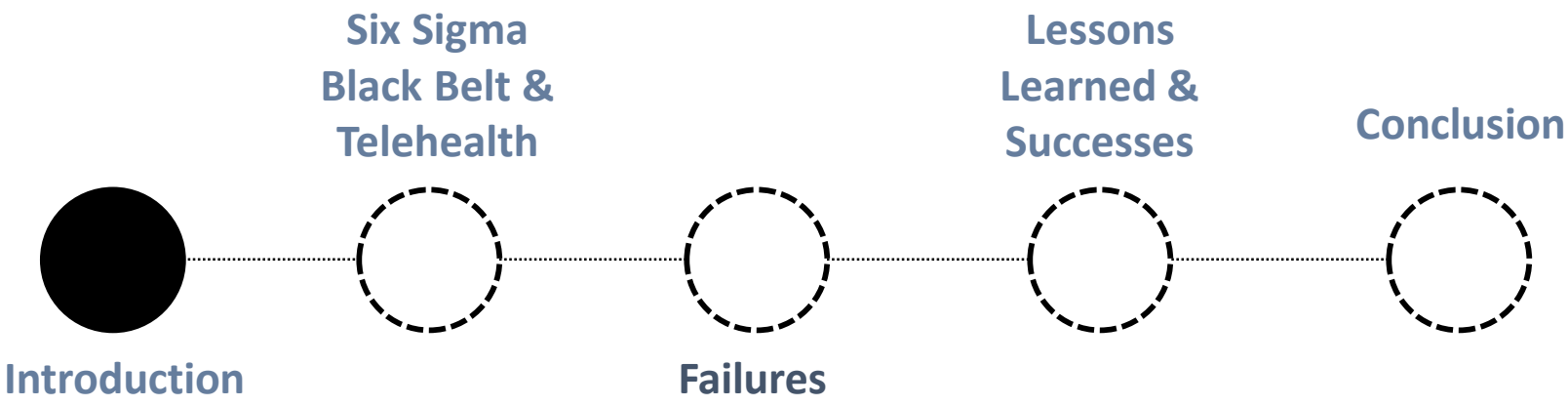
Presentation Outline

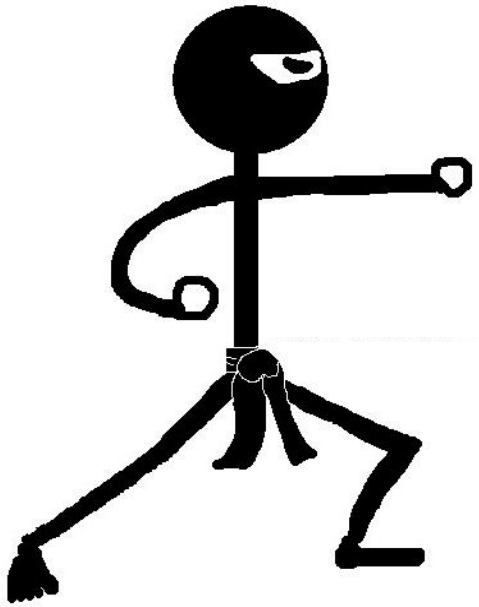


Six Sigma Black Belt & Telehealth

Six Sigma Black Belt & Telehealth…

Brief Context

- Personal Path, OhioHealth & Wake Forest Baptist Health
- Infused to your life… & your passions
- Not cookie cutter, use as an influence, tools



Six Sigma Black Belt & Telehealth…

- American Society for Quality Certification, Tested on Proficiency of 9 Bodies of Knowledge

Knowledge Areas	Summarized Key Proficiencies
1. Organization-wide Planning and Deployment	Tools and techniques to deploy strategic directions for initiatives. Group influences for project deployment, support communications about the project deployment. Apply operational change management techniques within their defined scope or domain.
2. Organizational Process Management and Measures	Define various types of benchmarking. Describe various types of performance measures, and select an appropriate financial measure for a given situation and calculate its result.
3. Team Management	Components and techniques used in managing teams, including time management, planning and decision-making tools, team formation, motivational techniques and factors that demotivate a team, performance evaluation and reward. Describe elements that can result in a team's success. Techniques to overcome various group dynamics challenges.
4. Define	Data collection methods and voice of the customer data, and customer feedback to determine customer requirements. Elements of a project charter (problem statement, scope, goals, etc.) and be able to use various tools to track the project progress.
5. Measure	Process flow metrics and analysis tools to indicate the performance of a process. Develop and implement data collection plans, and use techniques in sampling, and data capture.
6. Analyze	Apply robust and mature statistical analyses, root cause tools, and gap analysis tools. Able to identify and interpret the 7 classic wastes.
7. Improve	Apply various lean tools and techniques to eliminate waste and reduce cycle time. Implement an improved process and how to analyze and interpret risk studies.
8. Control	Apply, use, and analyze the various statistical process control techniques. Able to develop control plans and use various tools to maintain and sustain improvements.
9. Design Framework and Methodologies	Understand common DFSS and DFX methodologies, and elements of robust designs.

https://asq.org/cert/six-sigma-black-belt

Top 3 Telehealth Failures

Top 3 Telehealth Failures

1. Technology
    - Starting Point
    - Managed Expectations
    - Human Element

Top 3 Telehealth Failures

2. Team Management
   - Buy in
   - Leadership
   - **Telehealth Governance**
     - ✓ **Telehealth Governance, An Essential Tool to Empower Today's Healthcare Leaders**

Top 3 Telehealth Failures

3. Define, Measure, Analyze, Improve
    - Data, Data, Data!
    - Return On Investment
    - Performance
    - Utilization

Lessons Learned & Successes

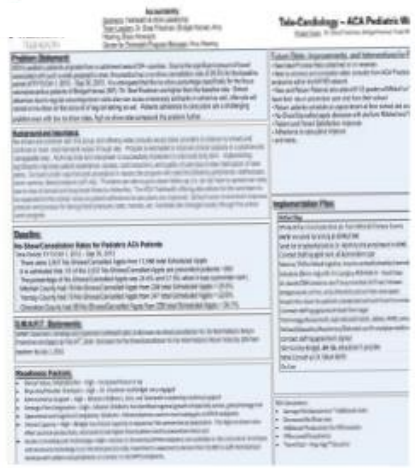
Lessons Learned & Successes

- Telehealth is here to stay
- Due Diligence
- Primary Emphasis on the Care, Quality, and Patient, not the Technology
- Telehealth Governance
  - DATA = Confidence, Re-Investment, Culture, Continuous Improvement
- Programs who are excelling today have these areas of focus in common
- Success Examples…

Rapid Telehealth Development Life Cycle

Key Stakeholders for each step include Provider Champion(s), Executive Champion(s), IT, IP or OP Medical Director for Telehealth, and the Center for Telehealth Facilitates.

1. Brainstorm and Readiness Factors
2. White Board Process Mapping
3. Exec or Steering Review Workplan

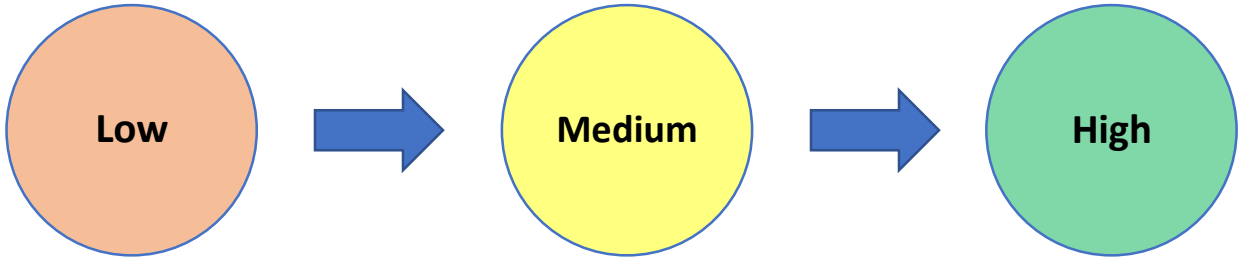


Telehealth Readiness Factors

Readiness Factors:

1. Clinical Value
2. Physician/Provider Engagement
3. Administrative Support
4. Strategic Plan Congruence
5. Clinical Capacity
6. Operational & Logistical Complexity
7. Access to Funding & Technology

3 Readiness Levels:



Low = Barriers exist, meets few/no criteria

Med = Some barriers, meets most criteria

High = No barriers, meets all criteria

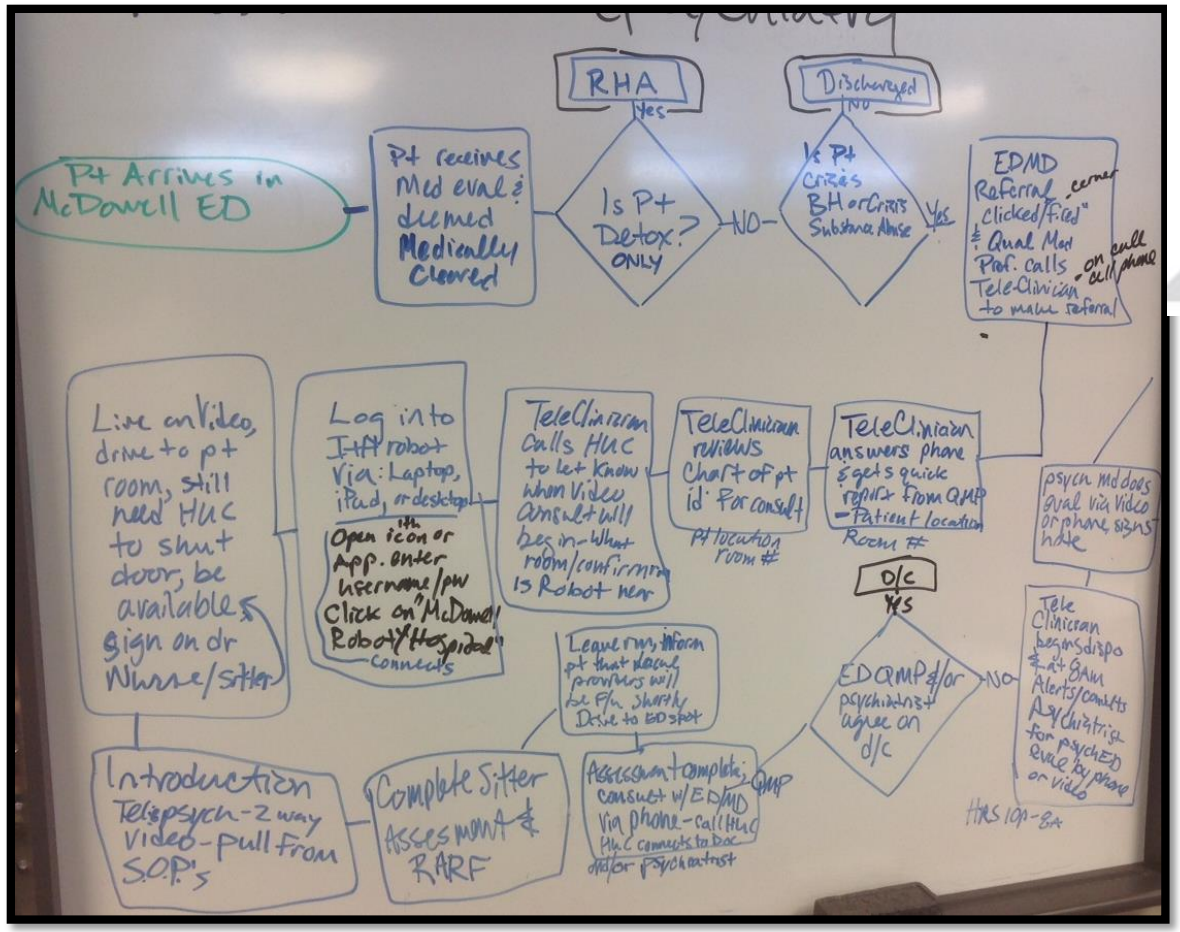
Readiness Factors: (definitions)

- **Clinical Value** – Implementing the Telemedicine application significantly improves the Patient Experience/Access, reduces Cost, & improves Quality. Is it Cognitive or Procedural in nature?
- **Physician/Provider Engagement** – Is a Physician/Provider Champion candidate present with significant buy-in from others in medical discipline (strong team & team lead & team lead backup)?
- **Administrative Support** – Does senior leadership support/validate physician champion & clinical discipline's strength to implement successfully? Has Legal Counsel been sought?
- **Strategic Plan Congruence** – Does the clinical discipline align with the Enterprise Strategic Plan (crossover, invest/grow or strengthen/defend area)?
- **Access to Funding & Technology** – Does the clinical discipline have access to research grant funding (Federal/Industry/Foundation/Association), organizational funds, capital, or other? And does clinical discipline have access to technology (is technology existing or require new investment)? Is the initiative reimbursable?
- **Clinical Capacity** – Does the clinical discipline have capacity (time & manpower) to begin implementing successfully in the short and long term (1,3, & 5 years)? Will implementing significantly impact capacity for the clinical discipline in a positive & manageable way?
- **Operational & Logistical Complexity** – Ease of implementation, are there significant barriers that exist? Has any pre-work been accomplished to date?

White Board Process Mapping

2

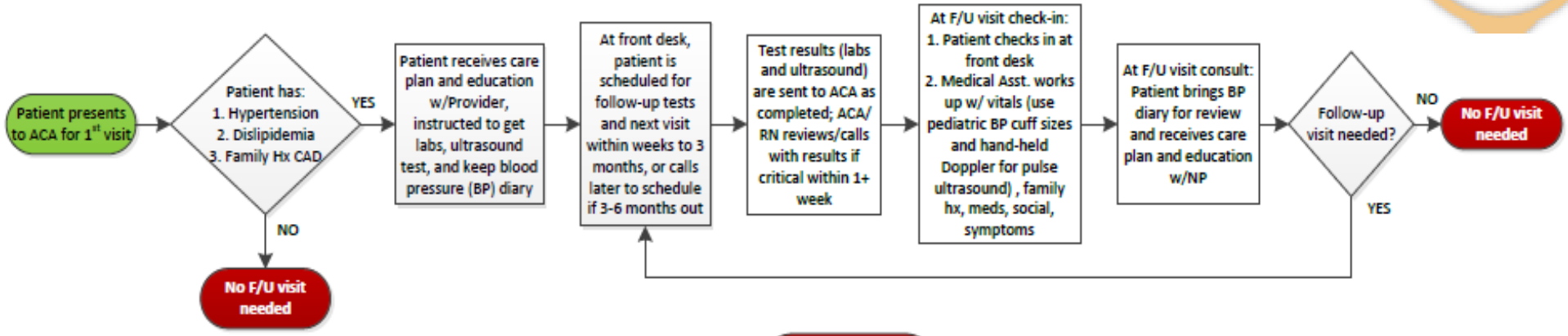
White Board Process Mapping



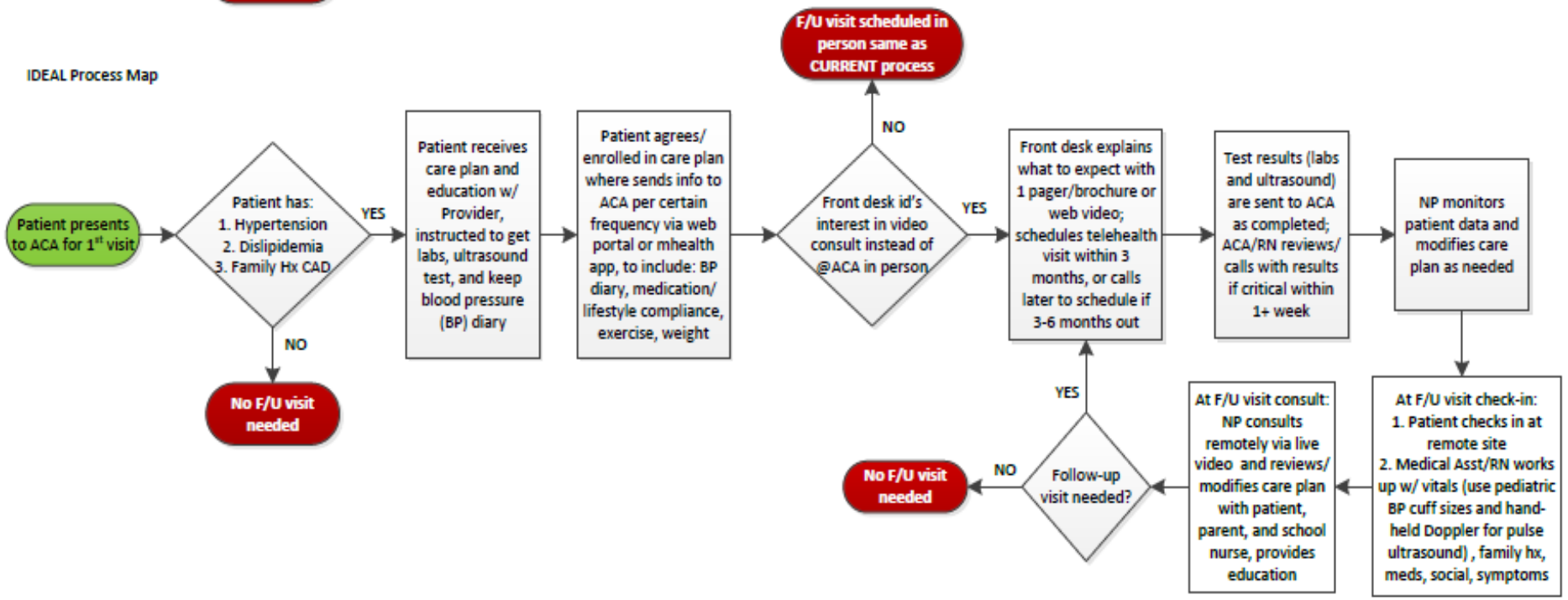
White Board Process Mapping, cont.

2

CURRENT Process Map



IDEAL Process Map



Workplan

Accountability:

Program Name:

Project Team:

Problem Statement:

Mission Health is focused on being a great place to work and practice. Employees of Mission Health have varying access to care based on their primary place of appointment, for example employees of Blue Ridge Hospital do not have a nearby Mission urgent care center or employee health/staff health clinic. Access to quality, Mission Health providers is limited to the ED in some locations depending on the date and time of day. Telehealth is a viable way to offer employees urgent care and staff health related care.

Background and Importance:

One of the most significant ways in which Telehealth results in cost savings for both employers and employees is the redirection of non-emergent medical care from the emergency department or an urgent care facility to a less expensive setting. There is opportunity to provide a quick proof of concept for employer telehealth by providing a Telehealth Endpoint at Blue Ridge Hospital for either Staff Health in Mission-Asheville and/or McDowell Urgent Care.

- Provide through Staff Health, McDowell Urgent Care, or hybrid to provide extended coverage 7a-11p
- After successful proof of concept, expand to Mission members and employers (i.e. Baxter)
- Great Place to Work & Practice, Employee Satisfier for convenience
- Health Plan Utilization, transferring ED visits more appropriately to urgent care or office visits saves $$$'s
- Revenue generating through reimbursement, possible increase in referrals to specialists.
- Population Health
- Grow, Grow, Grow

Baseline:

Mission DATA from entire Health System, a REAL EXAMPLE (FY13 Data):

- The Diagnosis Code **784.0 Headache, unspecified** had the following Statistics in FY 13:
  -230 Office Visits for total amount paid of $17,243 or $75 per visit Average Cost to Mission
  -14 Urgent Care Visits for total amount paid of $1,771 or $126 per visit Average Cost to Mission
  -74 ED Visits for total amount paid of $123,017 or $1,662 per visit Average Cost to Mission

- The Diagnosis Code **789.00 Abdominal Pain, colic, unspecified** had the following Statistics in FY 13:
  -220 Office Visits for total amount paid of $16,495 or $75 per visit Average Cost to Mission
  -2 Urgent Care Visits for total amount paid of $240 or $120 per visit Average Cost to Mission
  -30 ED Visits for total amount paid of $50,418 or $1,939 per visit Average Cost to Mission

Blue Ridge Only, Top 50 TelaDoc Diagnosis Codes in Total

- 302 Office Visits for total amount paid of $25,044 or $83 per visit Average Cost to Mission
- 3 Urgent Care Visits for total amount paid of $334 or $111 per visit Average Cost to Mission
- 21 ED Visits for total amount paid of $24,546 or $1,169 per visit Average Cost to Mission

S.M.A.R.T. Statement:

SMART Statement: Implement a telehealth video consult proof of concept pilot & endpoint at Blue Ridge Hospital for Mission Employees to get urgent care and/or staff healthcare 7a-11p by or before June 10, 2014. Go live and complete at least 2 telehealth video consults per week from pool of 302 Health Scope Claims in last FY. Track all results for 6 months & reassess.

Future State and Improvements:

1. Offered at all system hospitals
2. Dovetails into Direct to consumer medium for care delivery, could use same providers
3. Eventually begin to offer to area employers

Readiness Factors:

- **Clinical Value** – HIGH – significantly improves the Patient & Employee Experience/Access. Visits are cognitive and procedural in nature
- **Physician/Provider Engagement** – HIGH – Strong team (Dr. Westle and Dr. Lowery) Staff Health is ramping up increased service offerings across the board and adding staff and capacity as well.
- **Administrative Support** – HIGH – Dr. Westle, Kathy Bumgarner, Jonathan Bailey
- **Strategic Plan Congruence** – HIGH – Does the clinical discipline align with the Enterprise Strategic Plan? – Yes, primary care efficiency a system goal. Managing Population Health and risk by 2016 and Grow, Grow, Grow directly align.
- **Access to Funding & Technology** – HIGH – Equipment available for use at Blue Ridge. Cisco MX200 is ready for use, jabber is working with free and enterprise versions, providers each have a laptop with video consult capabilities and/or an ipad with video consult capabilities.
- **Clinical Capacity** – HIGH – Does the clinical discipline have capacity (time & manpower) to begin implementing successfully in the short and long term (1,3, & 5 years)? Will implementing significantly impact capacity for the clinical discipline in a positive & manageable way? Yes, will increase productivity, decrease no-shows, and should be able to capture billing/revenue not currently being captured. Will also shift healthcare utilization from the ED.
- **Operational & Logistical Complexity** – MED - No significant barriers, need to figure out staffing physician coverage.

Implementation Plan:

Team Reviews this draft, edits/changes	7	4/23/2014	Team
Triage and Consult Process Mtg	7	4/21/2014	Dr. L & Team
Scope out & Select BR site by ED	7	4/22/2014	Dr. N, Lynn, GH
OK'd to Move MX200 from 1 HD	7	4/30/2014	BA/AH
Forward Draft to Docs &/or schedule mtg to review	7	4/30/2014	AW &/or BA
Staff identified & Train Docs & ED personnell	14	5/30/2014	Project Team
Go-Live, 1st patient seen!	1	5/30/2014	Project Team
Peripherals bought/installed	7	5/15/2014	BA/AH/SKC
Pricing Meeting w/ Susan & Kathy	7	4/26/2014	BA/CH
Credentialing Meeting w/ MS office	7	4/30/2014	BA/AH

Outcomes:

Measures of success include:

- Time it takes to see patient
- Patient Satisfaction
- Provider Satisfaction
- Practice Efficiency,
- No-Show/Cancellations
- Health Plan Utilization
- Other……

Cost and ROI Calculation:

Cost of MX200 = $0 (provided from 1HD,after pilot, $10K)

Cost of Jabber for each provider = Minimal, System sunk expense, cost of jabber to patient = $0

Cost of Provider Time = Same calculation, but anticipate shorter time with patient, need to define

New billable time? = define and calculate based on:

-Medicaid CPT OP & Level II Consults 99201-99205, 99211-99215, 99241-99245, 99251-99255, 90801, 90804-90809, 90862

-BCBSNC CPT OP & Office Consults 99201-99215, 99241-99245, 90801, 98966-98969, 99441-99444, Diabetes OP Self-Management = G0108, G0109

Questions / Discussion

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