Clinical Safety & Effectiveness Cohort # 10

Improving Response Time for Secure Health Messaging at the UHS Family Health Northwest Clinic

CENTER FOR PATIENT SAFETY & HEALTH POLICY

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Educating for Quality Improvement & Patient Safety

UNIVERSITY OF TEXAS MD ANDERSON CANCER CENTER

Making Cancer History®

AIM STATEMENT

To Reduce
Patient Communication Response Time
(Secure Health Messaging - SHM)

by 50%
by May 31, 2012

Secure Health Messaging

- Secure communication channel between patients and providers (Currently Telephone, Web Portal in future)
- Allows established patients to request and process referrals and prescriptions without physically coming to office
  - Helps reduce office visits
- Patient communication note is initiated in EMR by the telephone operator
- Note follows a “workflow” that may involve various stakeholders and touch points to satisfy patient request

Rationale

- Patient Satisfaction
  - Timely completion of
    - Medication refills
    - Patient questions and concerns
- Decreased call volume
  - Repeat calls avoided
- Staff satisfaction
- Improved workflow with pharmacy
  - No more repeat faxes

The Team

Members

- Cynthia Carranco, RN, BSN, JD
- Monika Kapur, MD
- Camerino I. Salazar, MS
- Edward Aguilar
- Lisa Wammack
- Amruta Parekh
- Hope Nora/Leti Bresnahan
- NW Family Health Center Staff
- Quality and Outcomes Staff

Sponsoring Departments

- Community Medicine Associate
- UHS Ambulatory Services

Northwest Family Health Center

- Front Desk/Phone Bank
- Nurses
- Providers

Project Milestones

• Team Created	**January 2012**
• AIM statement created	**February 2012**
• Weekly Team Meetings	**2/9/12 – 5/3/12**
• Background Data, Brainstorm Sessions, Workflow and Fishbone Analyses	**2/9/12 – 2/29/12**
• Interventions Implemented	**3/15/12 –Ongoing**
• Data Analysis	**5/31/12-Ongoing**
• CS&E Presentation	**6/15/2012**

Our Approach

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Current State

- Model the current end-2-end business process - People, Processes, Technology
- Identify stakeholders, Activities, Touch Points

Analysis

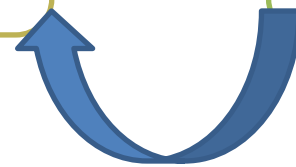
- Analyze the current business process
- Identify Non Value Add Activities, bottlenecks
- Identify KPI's (Benchmark). Best Practices, Checklists

Future State

- Identify how people, processes and technology can be better leveraged to optimize the processes.
- Model the new process

Rollout

- Coordinate with various stakeholders to rollout the new processes
- Establish protocol to monitor and tweak the process



Iterative and Incremental

Current State

Figure 1: Swim Lane Process Mapping of Secure Health Messaging (SHM)

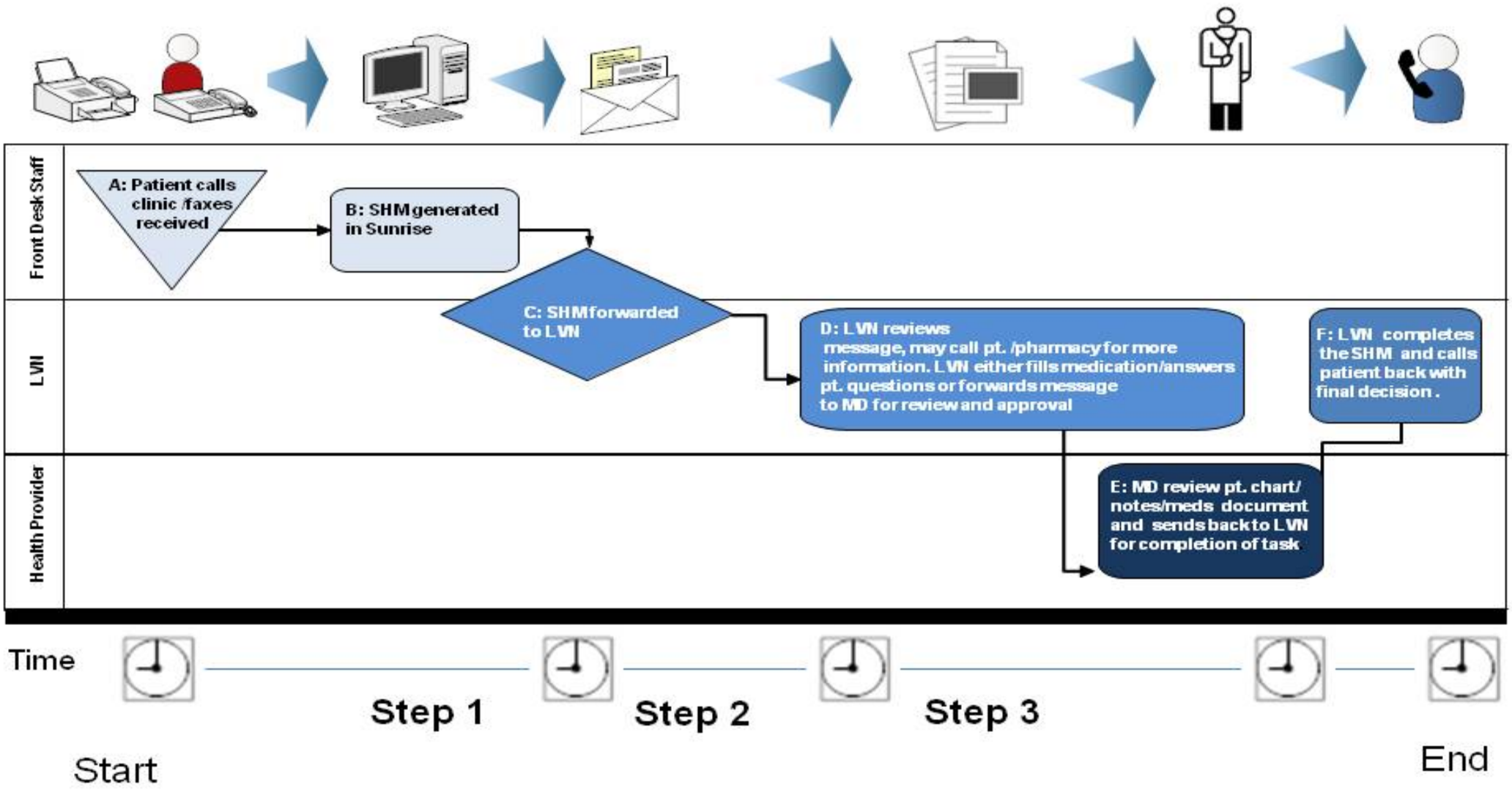
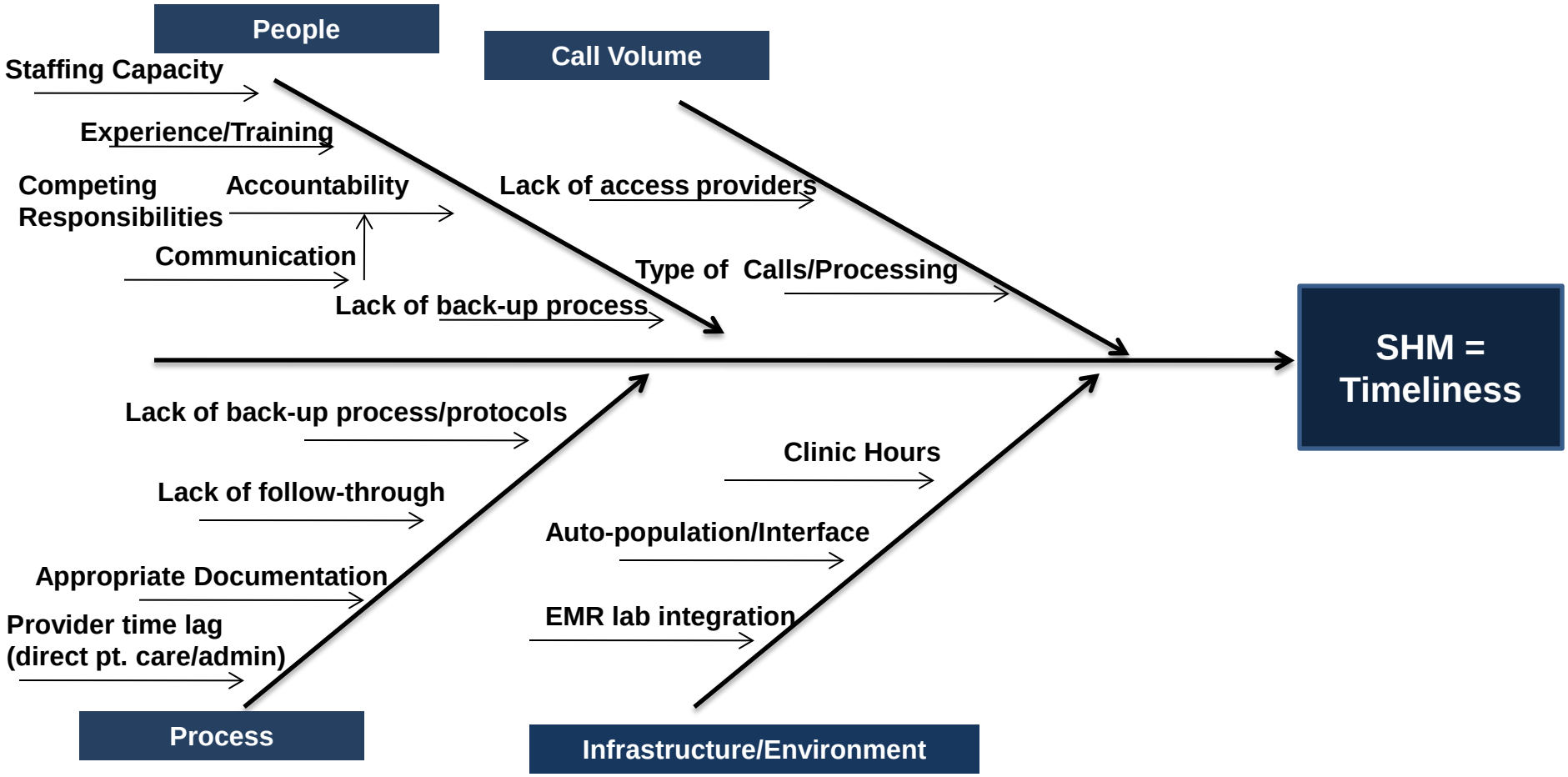
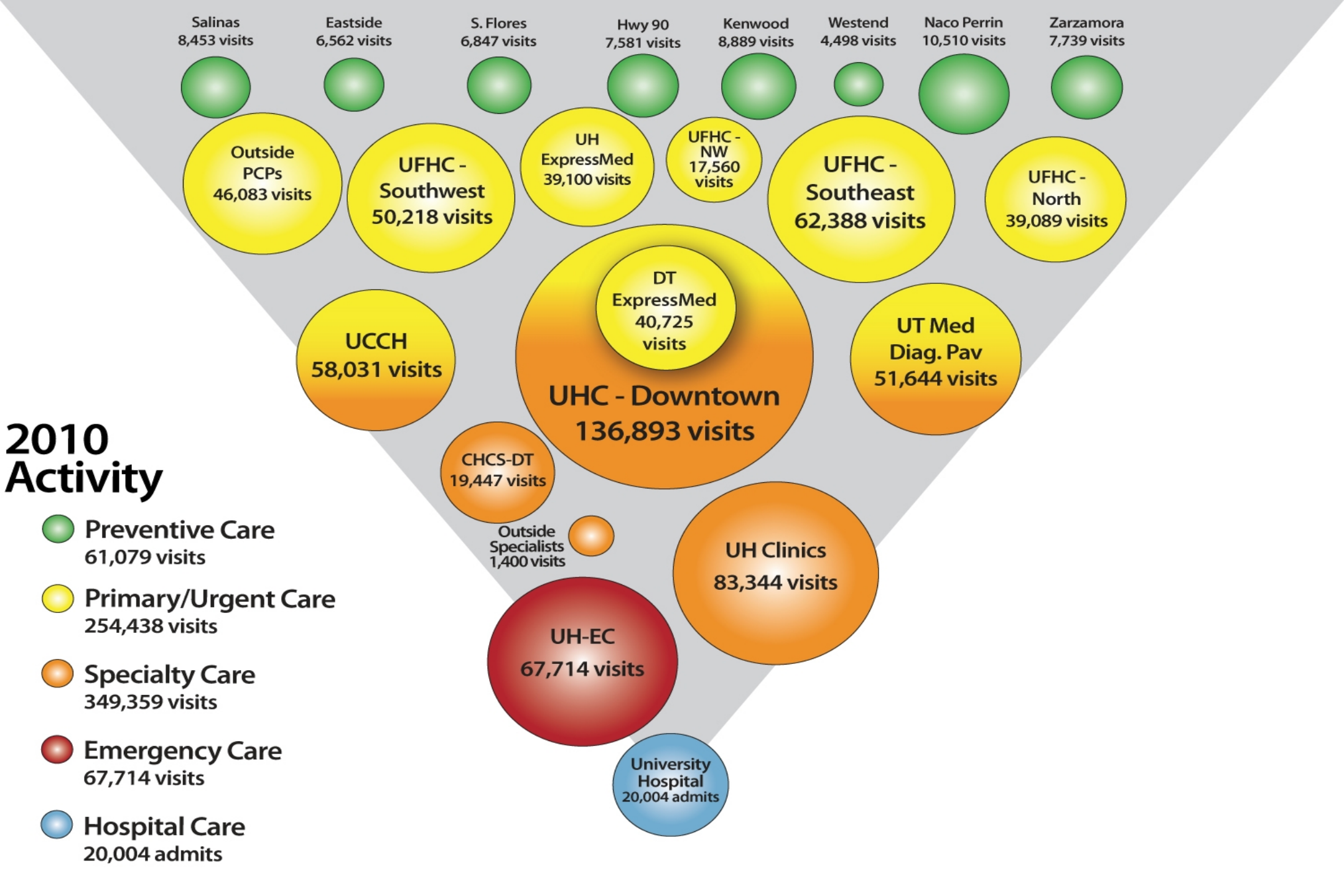
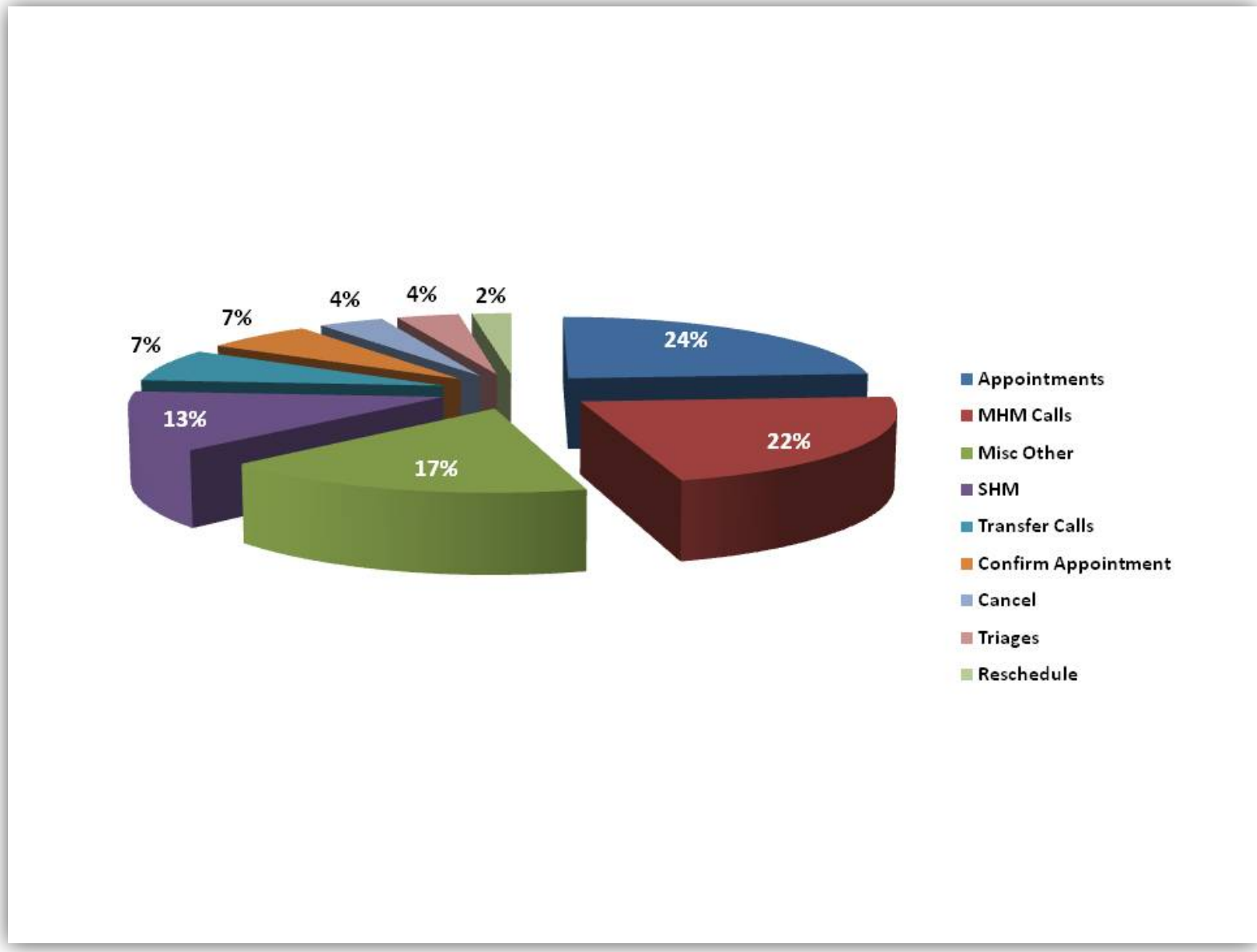


Figure 2: Fishbone diagram detailing potential causes for delay in secure health messaging process




Salinas
8,453 visits
Eastside
6,562 visits
S. Flores
6,847 visits
Hwy 90
7,581 visits
Kenwood
8,889 visits
Westend
4,498 visits
Naco Perrin
10,510 visits
Zarzamora
7,739 visits
Outside PCPs
46,083 visits
UFHC - Southwest
50,218 visits
UH ExpressMed
39,100 visits
UFHC - NW
17,560 visits
UFHC - Southeast
62,388 visits
UFHC - North
39,089 visits
DT ExpressMed
40,725 visits
UCCH
58,031 visits
UHC - Downtown
136,893 visits
UT Med Diag. Pav
51,644 visits
CHCS-DT
19,447 visits
Outside Specialists
1,400 visits
UH Clinics
83,344 visits
UH-EC
67,714 visits
University Hospital
20,004 admits
2010 Activity
Preventive Care
61,079 visits
Primary/Urgent Care
254,438 visits
Specialty Care
349,359 visits
Emergency Care
67,714 visits
Hospital Care
20,004 admits

Call Volume by Type at FHC-NW



Analysis

Key Findings

People

- Incorrect & incomplete data entry
- EMR Training
- Staffing

Processes

- Conformance of Protocols
- Lack of checklists, best practices - consistency

Technology

- Missing Data
  - Date of last / next scheduled visit
- Auto population of data
- Integration with labcorp / quest

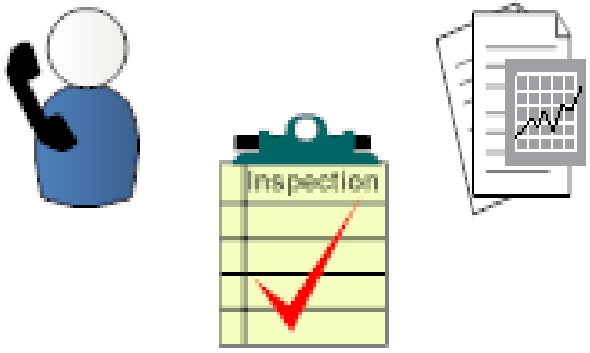
Future State

Process Improvement

- Our recommendations were centered around people and process that
  - Required minimal investment
  - Were under our control of influence
  - Information could be gathered, reviewed and reported within course timeframe

Intervention: PDSA 1

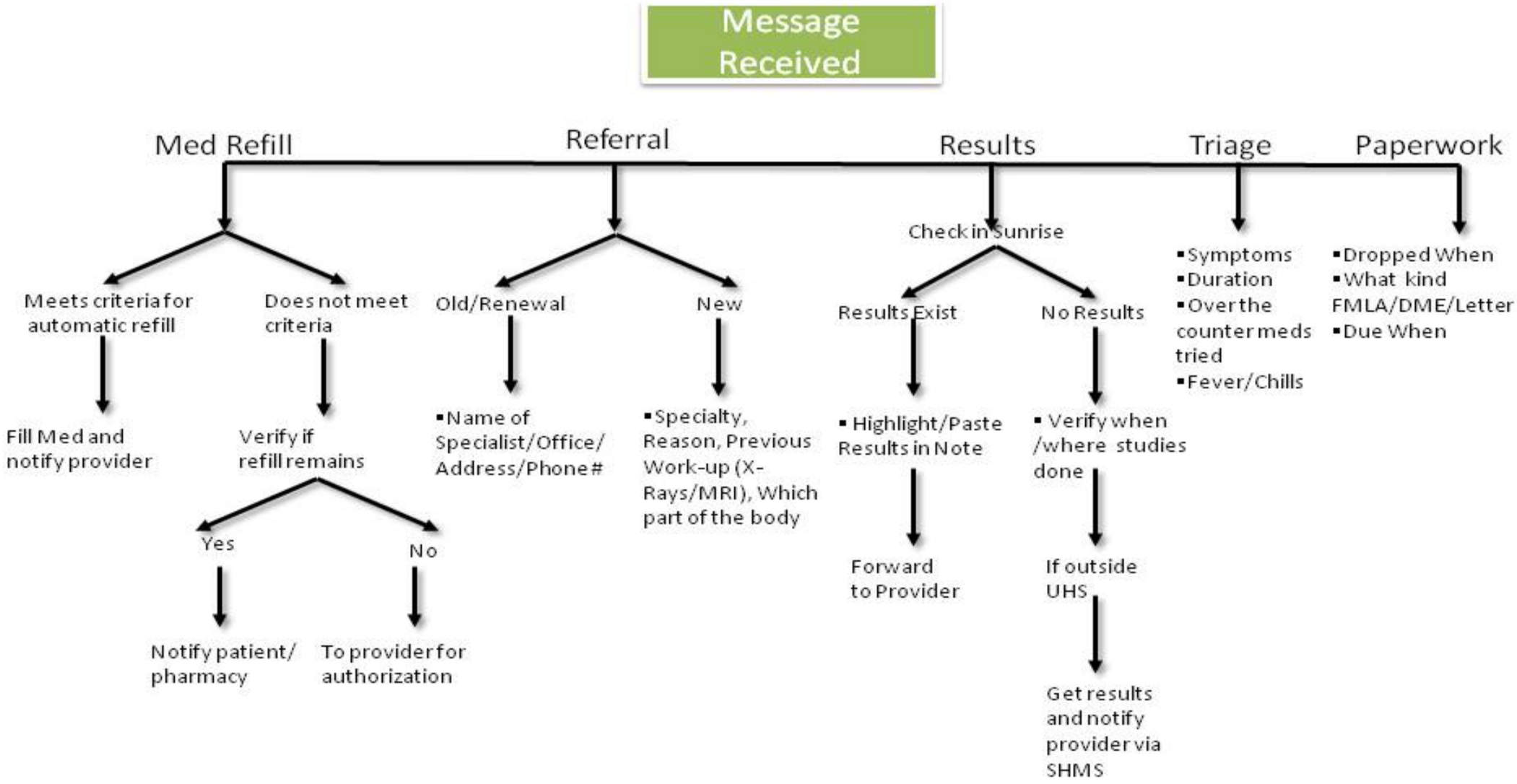
- Creation of checklist for front desk/phone bank/nurses
- Orientation of staff
- Observation and monitoring of staff



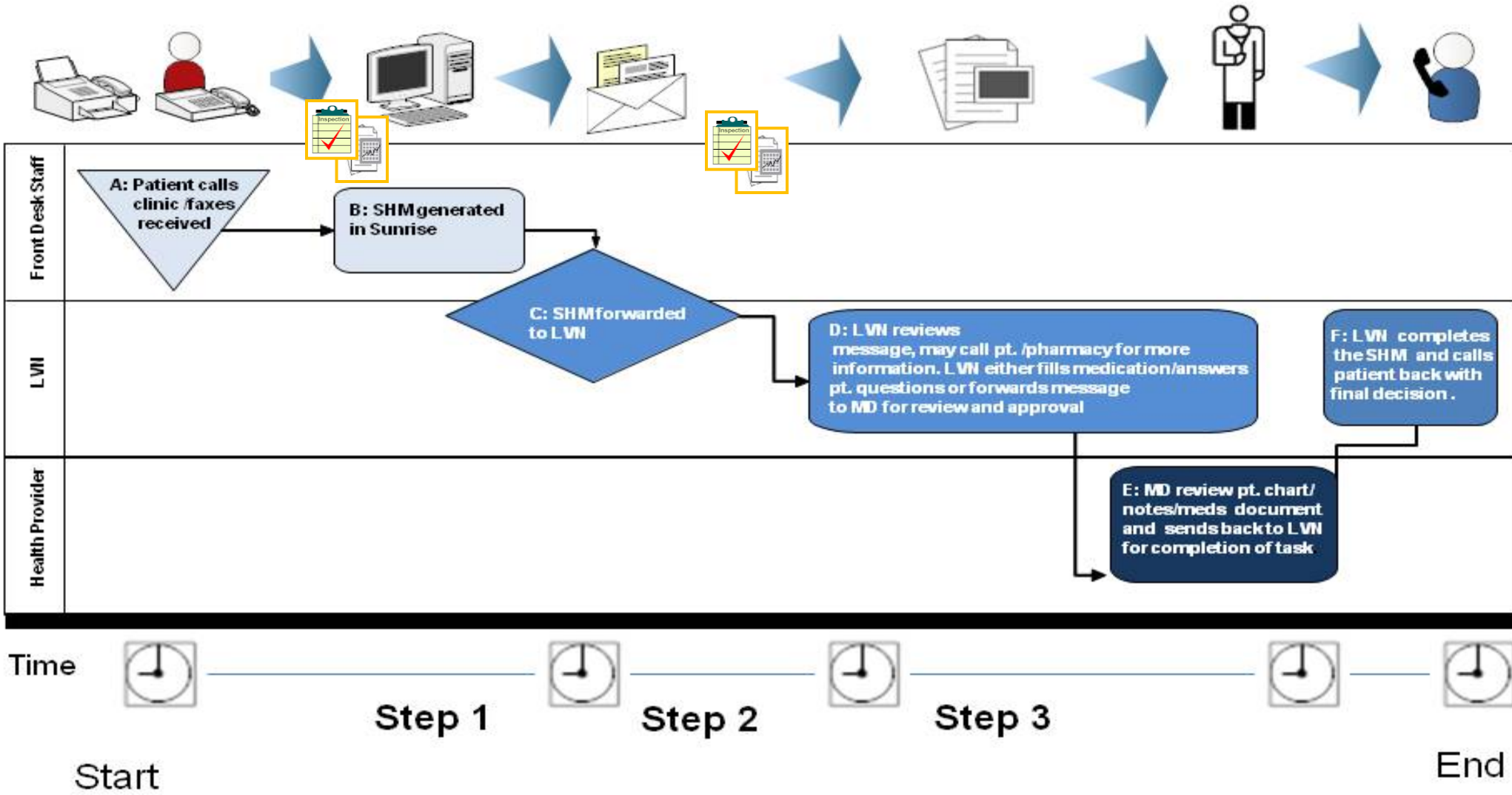
Intervention: PDSA 2 – Development of a front desk/phone bank checklist

- √ Phone Number
  - ➢ Daytime
  - ➢ Evening
- √ Date of Last Visit
  - ➢ Clinic
  - ➢ Name of Clinical Provider
- √ Comprehensive Message
  - ➢ Med Refills – List Meds
  - ➢ Referrals: Specialty/Any Specific Provider
  - ➢ Results : Done, Where and When
  - ➢ Paperwork: Dropped When
- √ Insurance
  - ➢ CareLink or Other
- √ Enter correct pharmacy in Sunrise

Intervention: PDSA 3 – Development of a nursing checklist



Swim Lane Process Mapping of Secure Health Messaging (SHM)



Data Analysis

- Specific targets for change will be the first three steps in secure health messaging
- Observed staff
- Statistical Process Control Charts to chart SHM response

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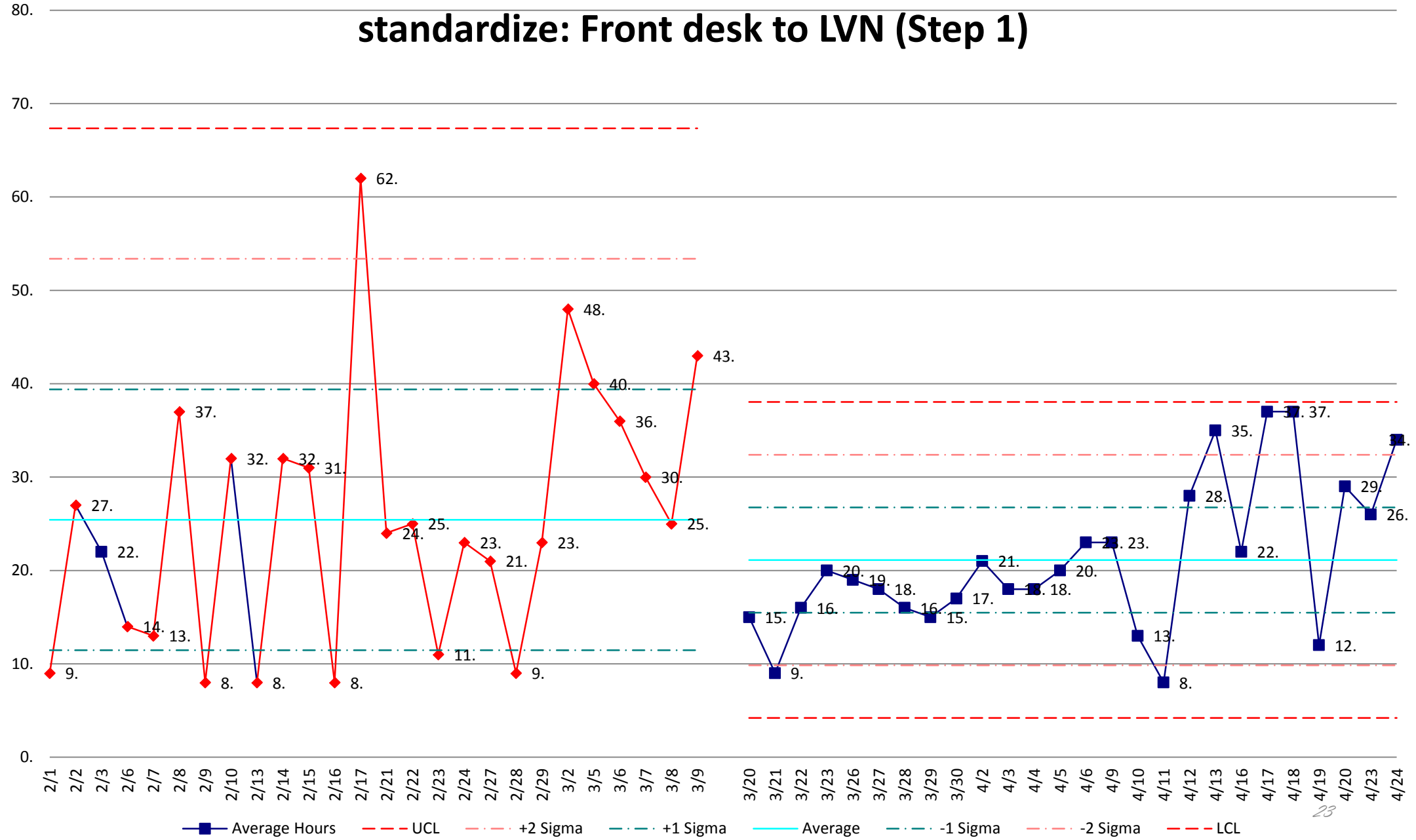
Secure health messaging time before and after the process was standardize: Front desk to LVN (Step 1)



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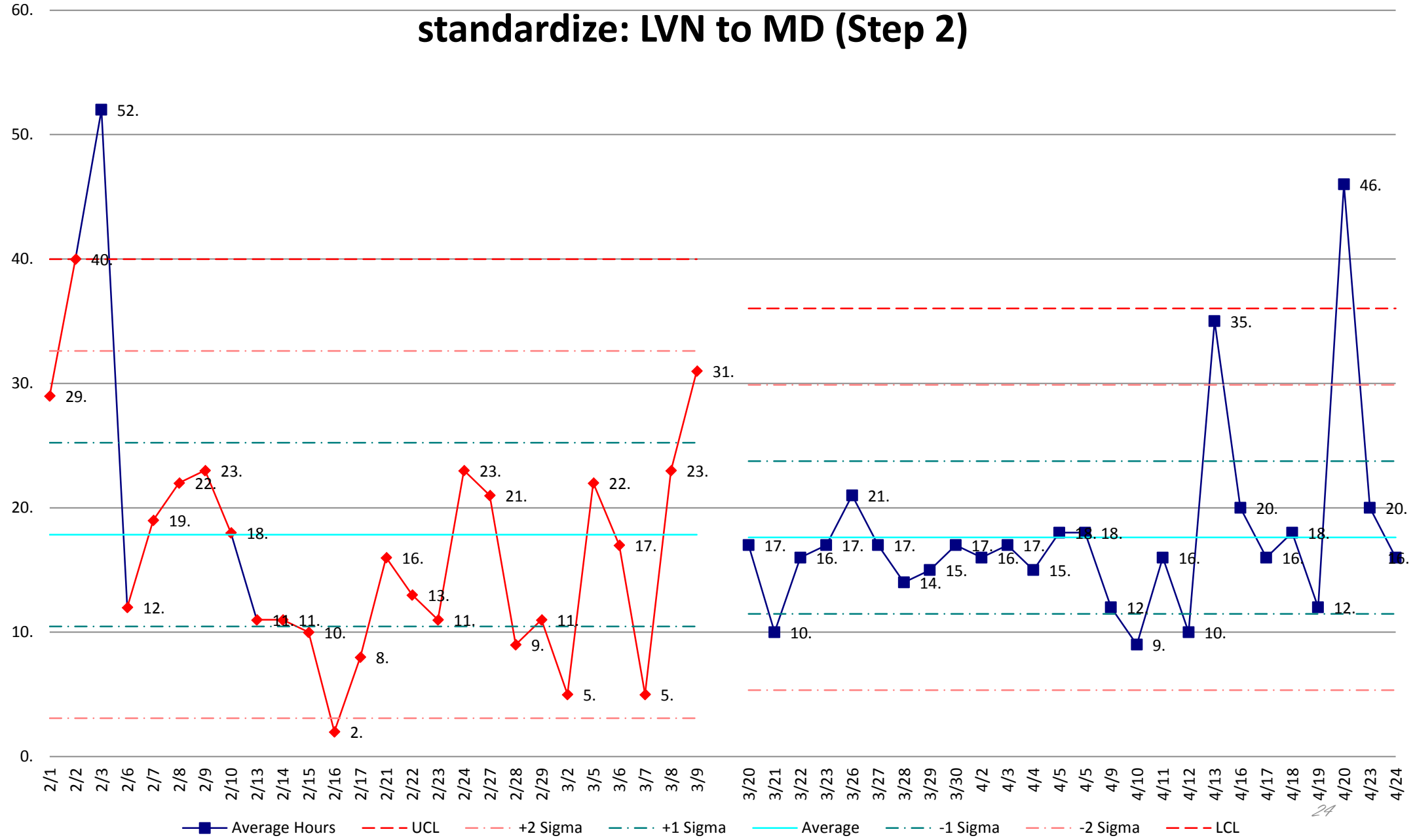
Secure health messaging time before and after the process was standardize: LVN to MD (Step 2)



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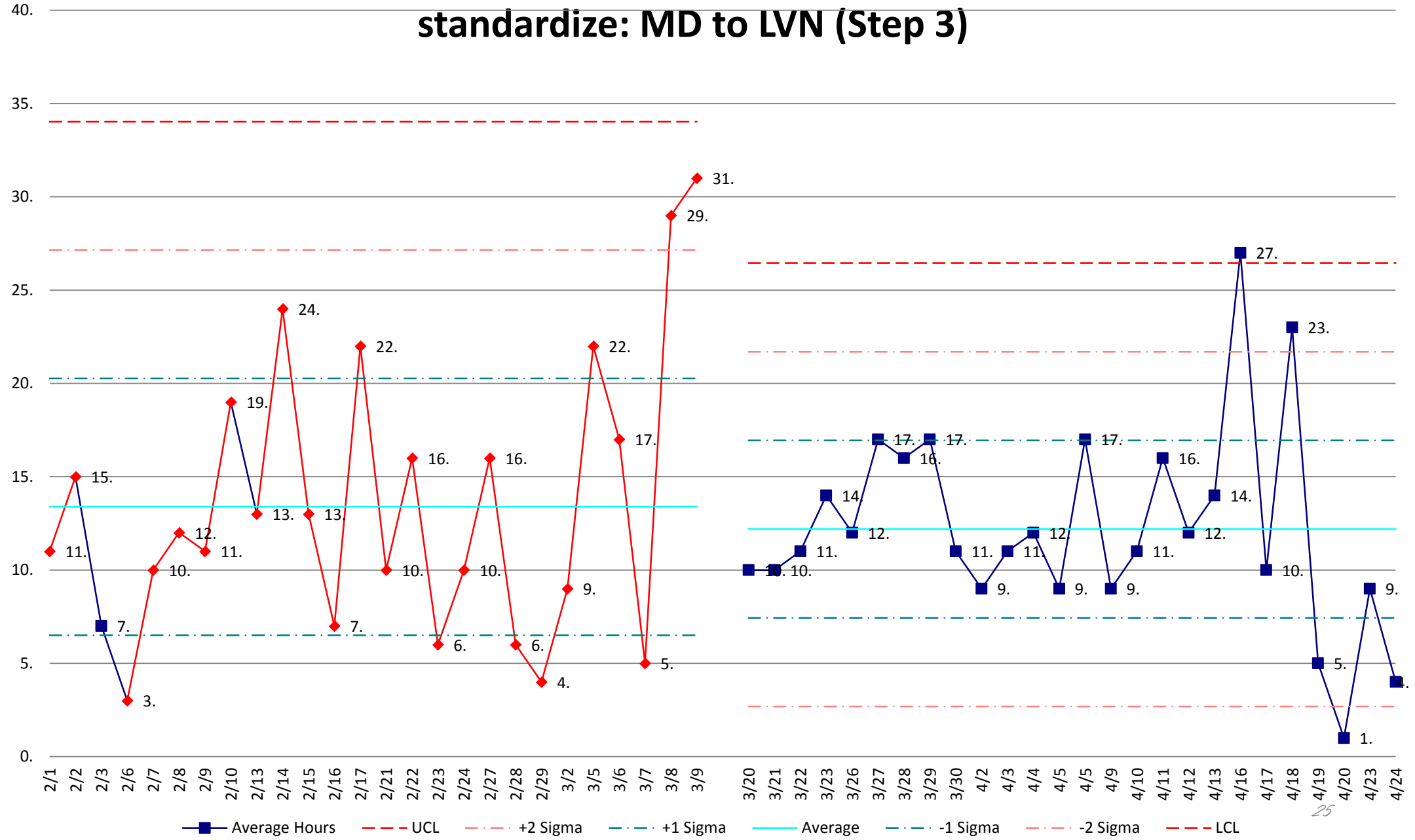
Secure health messaging time before and after the process was standardize: MD to LVN (Step 3)



AIM Statement Goal-Final (14 Days)

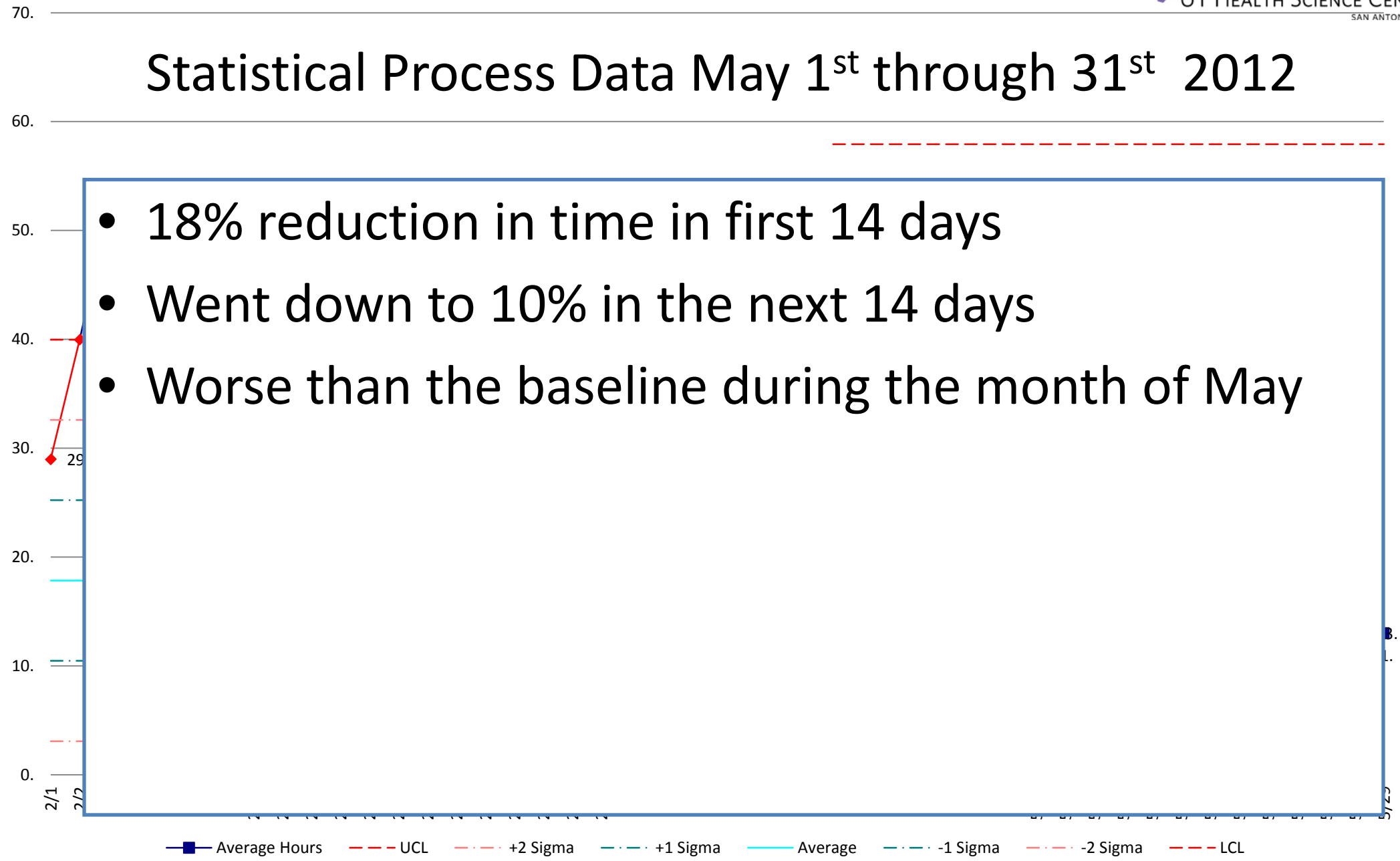
- Q: Did the group meet our goal/ AIM statement?
- A: Well…somewhat!

SHMS Steps	Pre-Intervention (Hours)	Post - Intervention (Hours)	Difference	% Difference
Step 1	25.42	17.50	-7.92	31%
Step 2	17.84	16.28	-1.56	8%
Step 3	13.38	12.57	-0.81	6%
Total	56.66	46.35	-10.31	18%

AIM Statement Goal-Final (Post- 26 Days)

SHMS Steps	Pre-Intervention (Hours)	Post - Intervention (Hours)	Difference	% Difference
Step 1	25.42	21.11	-4.31	17%
Step 2	17.84	17.61	-0.23	1%
Step 3	13.38	12.19	-1.19	9%
Total	56.66	50.91	-5.75	10%

Statistical Process Data May 1st through 31st 2012



- 18% reduction in time in first 14 days
- Went down to 10% in the next 14 days
- Worse than the baseline during the month of May

Can you monetize reduction in response time?

Yes you can…

- Amount spent by clinic staff to address pt. complaints…

Assign $ value to Customer Satisfaction

Lessons Learned

- Staffing Capacity
  - Lack of a floating pool
- Sustainability & Accountability
  - Process redefinition is step 1.
  - Mindset and behavior change over time
- **Process improvement is an ongoing perpetual activity and not a one time event.** Requires continuous feedback and monitoring

Next Steps

- Work in progress
- Processes are now in place (adjust as necessary and appropriate)
- Expand to other health centers
- Share lessons learned and the importance of measurement and tracking performance

Final Conclusions

Did we achieve all the goals we had set for ourselves?

Partially

We have completed the 1st iteration.

Business Process Reengineering (BPR) is an iterative and incremental approach.

It requires mindset change and an open collaborative approach to problem solving.

Better has no limit…

-old Yiddish proverb

Thank you!

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