Clinical Safety & Effectiveness Session # 11

Clinical Staff Competency Training

CENTER FOR PATIENT SAFETY & HEALTH POLICY

UT HEALTH SCIENCE CENTER™

SAN ANTONIO

Educating for Quality Improvement & Patient Safety

The Team

- Division
  - CS & E Participant - Carlayne Jackson, MD
  - CS & E Participant - Nicole Buenning, MHA
  - Team Member - Alisha Chini, RN
  - Team Member - Amanda Bryant
  - Team Member - Delia Villarreal
  - Team Member - Ladonna Adams
  - Facilitator – Amruta Parekh, MD, MSPH

- Sponsor Department
  - President / CEO UT Medicine - Thomas Mayes, MD, MBA

What We Are Trying to Accomplish?

OUR AIM STATEMENT

The goal of this project is to improve Clinical Staff Competency in our outpatient UT Medicine clinics by July 15, 2009.

Project Milestones

- Team Created   March 2009
- AIM statement created   March 2009
- Weekly Team Meetings   March - August
- Background Data, Brainstorm Sessions March - April
- Workflow and Fishbone Analyses   March – April
- Interventions Implemented   April - May
- Data Analysis   June - August
- CS&E Presentation   August 28, 2009

Background

- Blue Ribbon Tours – February / March 2009

  – Provider Satisfaction

- EpicCare Implementation

  – Increased Intake Times

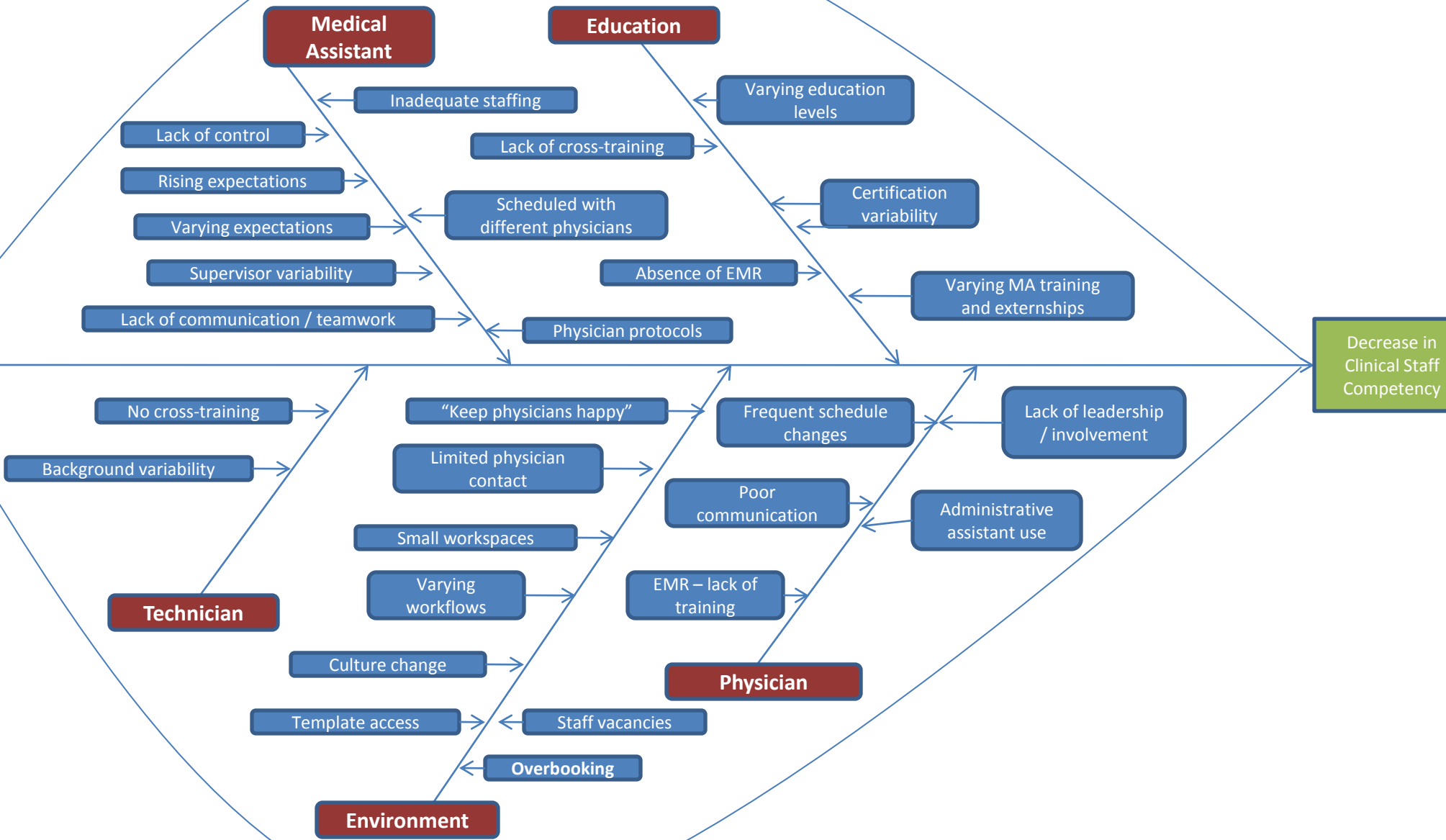- Inconsistent Medical Assistant training and experience

How Will We Know
That a Change is an Improvement?

- Visit Length

  – Time from MA Intake to Checkout

- Pre and Post Training Test Scores

- Provider, Medical Assistant and Technician
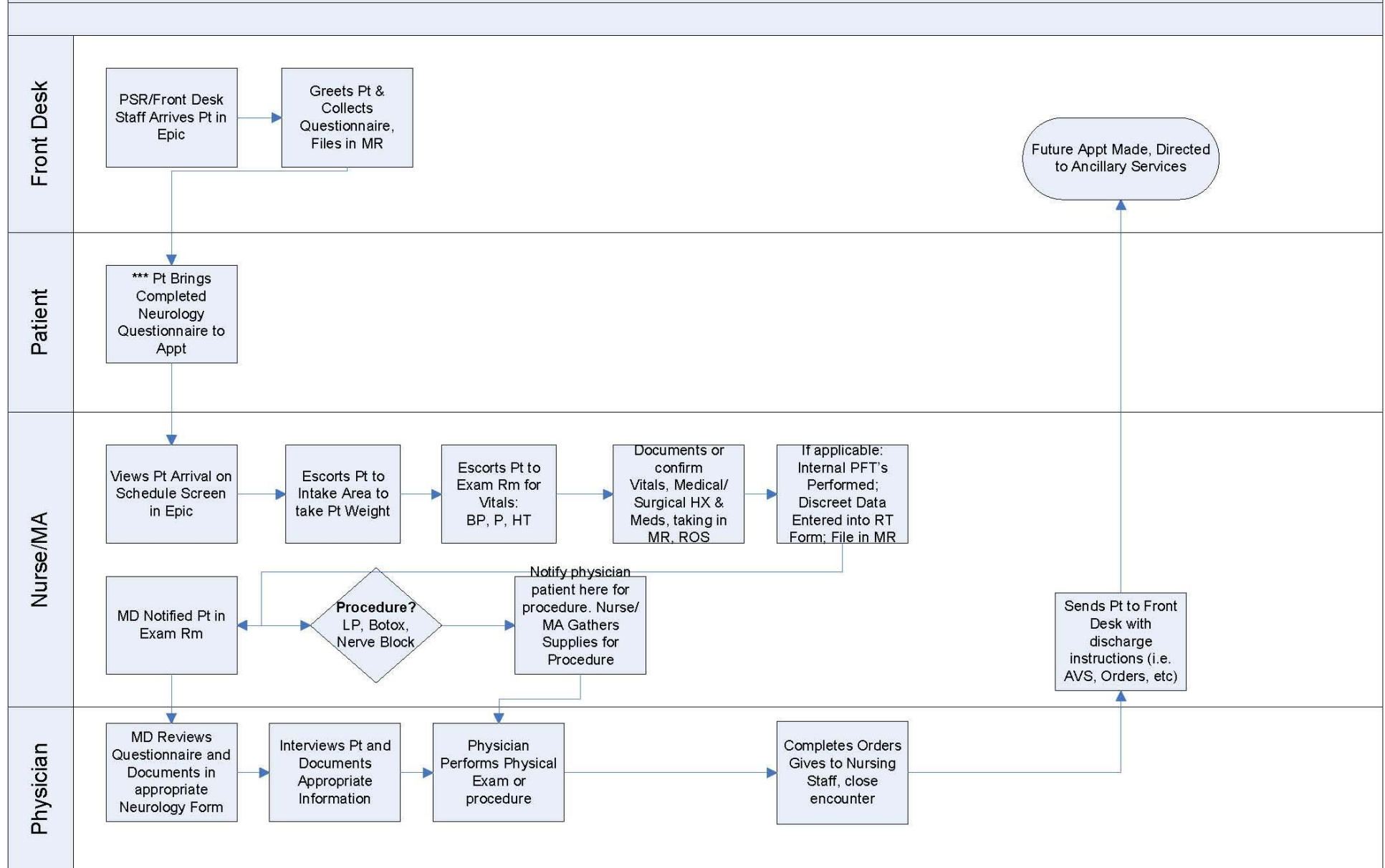
  Feedback (Survey Monkey)

Selected Process Analysis Tools

- Brainstorming
  - Clinic Managers
  - Medical Directors
  - Medical Assistants on Project Team

- Fishbone Diagram

Clinical Staff Competency Fish Bone Diagram

Medical Assistant
- Inadequate staffing
- Lack of control
- Rising expectations
- Varying expectations
- Supervisor variability
- Lack of communication / teamwork
- Lack of cross-training
- Scheduled with different physicians
- Physician protocols

Education
- Varying education levels
- Certification variability
- Absence of EMR
- Varying MA training and externships

Technician
- No cross-training
- Background variability

Environment
- "Keep physicians happy"
- Limited physician contact
- Small workspaces
- Varying workflows
- Culture change
- Template access
- Staff vacancies
- Overbooking

Physician
- Frequent schedule changes
- Lack of leadership / involvement
- Poor communication
- Administrative assistant use
- EMR – lack of training

Decrease in Clinical Staff Competency

Neurology Dept Standard Office Visit 7/07/2008

Front Desk

PSR/Front Desk Staff Arrives Pt in Epic → Greets Pt & Collects Questionnaire, Files in MR

Future Appt Made, Directed to Ancillary Services

Patient

*** Pt Brings Completed Neurology Questionnaire to Appt

Nurse/MA

Views Pt Arrival on Schedule Screen in Epic → Escorts Pt to Intake Area to take Pt Weight → Escorts Pt to Exam Rm for Vitals: BP, P, HT → Documents or confirm Vitals, Medical/ Surgical HX & Meds, taking in MR, ROS → If applicable: Internal PFT's Performed; Discreet Data Entered into RT Form; File in MR

MD Notified Pt in Exam Rm ← **Procedure?** LP, Botox, Nerve Block → Notify physician patient here for procedure. Nurse/ MA Gathers Supplies for Procedure

Sends Pt to Front Desk with discharge instructions (i.e. AVS, Orders, etc)

Physician

MD Reviews Questionnaire and Documents in appropriate Neurology Form → Interviews Pt and Documents Appropriate Information → Physician Performs Physical Exam or procedure → Completes Orders Gives to Nursing Staff, close encounter

*** Staff Mails Neurology and HA Questionnaire Packet to New Pts When the Initial Appt is Made

Selected Decision Making Tools

- Histogram

- Paired T-Test

- Statistical Process Control

- Survey

Background Data

SPRING 2009 BLUE RIBBON SCORECARD

Scale: 5=exceptional   4=good   3=fair   2=needs work   1=unacceptable

				2008 Overall UT Medicine	2009 Overall UT Medicine
Exceeds Target					
Within Target Range					
Below Target					
Clinic Manager					

Provider-Related Issues

Daily Operations

				2008 Overall UT Medicine	2009 Overall UT Medicine
Clinics with less than 4 responses grayed out	Responses	>5		58	95
Adequate staffing	Avg rating	4.5			3.8
Chart availability for pre-scheduled patients	Avg rating	4.5		3.9	4.0
Chart completion- labs,reports, etc.	Avg rating	4.5		3.8	3.7
Readiness of Exam Rooms	Avg rating	4.5		3.8	4.1
Ability to complete work without interruption	Avg rating	4.5		3.8	3.6

Process Ratings

				2008 Overall UT Medicine	2009 Overall UT Medicine
Messaging follow-up	Avg rating	4.0		3.6	3.7
Lab/test result follow-up	Avg rating	4.0		3.3	3.4
Notification of no-shows	Avg rating	4.5		3.8	3.7
Referral/consult note return	Avg rating	4.0		3.5	3.6
Overall Provider satisfaction score	Avg rating			3.7	3.7

Clinical Training Pre-Test Statistics

Metric	Number / Score
Number of Pre-Tests Completed	100
Number of Employees who scored less than 80%	18
Pre-Test Completion Rate	95%
Pre-Test Average Score	88%
Pre-Test Pass Rate	80%

Intervention

Plan

- Who – All medical assistants and technicians employed in UTM outpatient clinics

- What – Provide classroom training on the following topics:
  - Universal Precautions
  - Sterile Technique
  - Vital Signs
  - Point of Care Testing
  - Medication Administration
  - Medical Documentation / Training

Intervention
Plan

- When – 2-3 hour sessions during April and May 2009

- How – Curriculum and exam developed by UTM RN Clinic Managers, Helena Crosby and presented by Alisha Chini, RN

Implementing the Change
Do

- Pre-test was distributed online and participants were asked to take the exam prior to their classroom and hands-on training.

- 12 sessions were held involving 76 Medical Assistants and 28 technicians.

- Post-test was administered immediately following the training session.

Implementing the Change
Do

- Participants not scoring 80% on the post-training exam were offered a second training session. 2/2 employees participated in remedial training and passed.

- A survey was sent to the clinic staff and providers to assess impact of the training.

- Total visit length in the Neurology clinic was assessed pre- and post-training.

Results/Impact Check

Clinical Post-Training Results

Metric	Number / Score
Number of Post-Tests Completed	103
Number of Employees who scored less than 80%	18
Post-Test Completion Rate	94%
Post-Test Average Score	88%
Post-Test Pass Rate	82%

Histogram of (post - pre) test
(with 95% t-confidence interval for the mean)
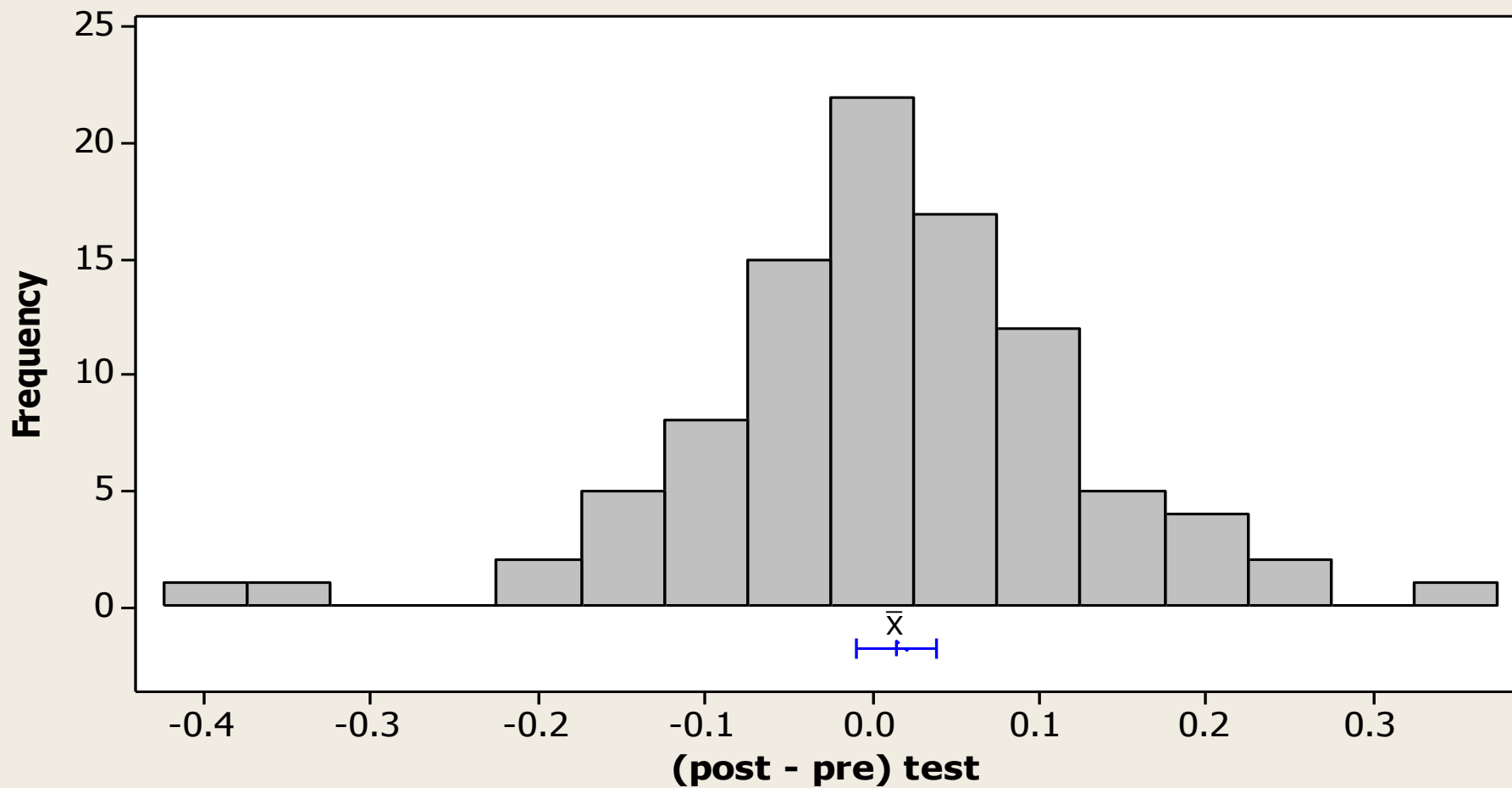
Paired t-test and CI: post-test vs. pre-test scores

	N	Mean	StDev	SE Mean
post-test	95	0.874629	0.093502	0.009593
pre-test	95	0.860040	0.089717	0.009205
Difference	95	0.014589	0.116839	0.011987

95% lower bound for mean difference: -0.005324

t-test of mean difference = 0 (vs > 0): t-value = 1.22

p-value = 0.113

actual Visit Length - 30 min Appts (mins)

actual Visit Length - 60 min Appts (mins)
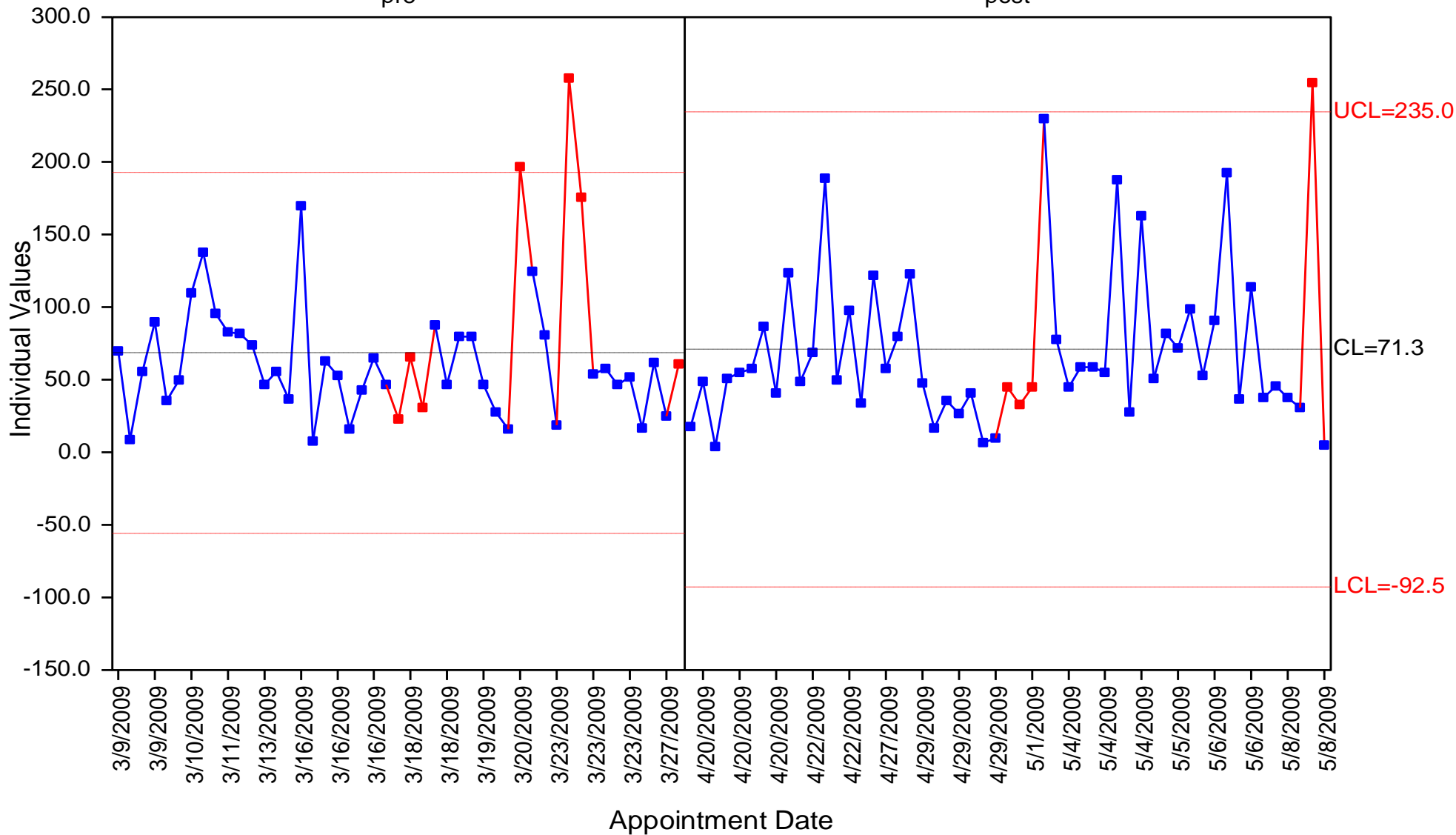
Medical Assistant and Technician Survey Results

	Number of Completed Surveys	62

Learning Environment	Environment promoted learning	4.0
	Environment encouraged instructor/student interaction	4.1
	Environment supported question and answer time	4.1
Instructor	Instructor was well prepared and knowledgeable	4.1
	Instructor thoroughly explained training material	3.8
	Instructor made the learning environment fun and educational	4.0
	Answered questions clearly and concisely	4.1
Course Material	Relevant to my daily work	3.6
	Ease of applying material to daily work	3.8
	Beneficial to my job growth	4.0
	Increased my level of understanding	3.9
	Questions were relevant to my job position	3.5
	Material was clear and concise	3.9
	Material was applicable to every day work environment	3.6
Examination	Adequate time to complete examination	4.0
	Level of difficulty	3.6

Metric rated 4.0 or higher
Metric rated 3.9 or less

Provider Survey Results

Number of Surveys	70
Chart Completion	3.5
Exam Room Readiness	3.8
Messaging follow-up	3.6
Lab/test result follow-up	3.5
Medical Documentation	2.5
Medical Terminology	3.5
Safety Precautions	3.9
Medication Administration	3.8
Point of Care Testing	3.8
Vital Signs	3.9
Sterile Technique	4.0

Implementing the Change
Do

- Lessons Learned

  - Administer all examinations in person to avoid "open book" or "group" testing.

  - Increase duration of training and provide in no longer than 1-2 hour modules.

  - Provide more time for "hands on" training and assessments.

Expansion of Our Implementation Act

- Emphasize "hands-on training" – especially for injection administration and casting
- Develop more "clinic-specific" training in conjunction with Clinic Managers and Medical Directors
  - Medications
  - Disease-specific "emergencies"
  - Procedures

Expansion of Our Implementation Act

- Expand training to call center staff in order to further improve messaging and documentation and to develop emergency procedure workflow Visio diagram.

- Explore requirements for Medical Assistant certification and ensure that all employees retain active certification.

- Continue annual training on "the basics" with all pre and post-training examinations monitored.

Conclusions

- Competency training is critical to improve messaging, documentation, patient safety, clinic efficiency and patient / provider satisfaction.

- Improvements in competency following training could not be objectively documented. Reasons may include:
  - "Cheating" on pre-test
  - Poor curriculum / teaching techniques
  - Insufficient training period
  - Additional variables affecting visit times

What's Next?

- Clinic-specific competency training with monitored pre- and post-training examinations

- Blue ribbon inspection December 2009 to evaluate issues / concerns of providers / staff which might be addressed with additional training.

- Customer service training

Potential Barriers

- Funding/protected time for Clinical Operations staff and Clinic Managers to develop and conduct training sessions.

- High staff turnover.

- Limited EPIC staff to provide EMR optimization and follow-up training.

- Limited feedback from faculty.

- Absence of teamwork/scheduled "reflection" times

QUESTIONS?

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