Clinical Safety & Effectiveness Cohort # 15

Improving Referral Process from UT Medicine Primary Care to Specialty Care

The Team

– Mariana Munante, MD: Medical Director Medical Drive Clinic, Primary Care Center, UT Medicine

– Gricelda Valdez: Clinic Manager, Medicine Specialty Care, UT Medicine

– Lisa Gonzales: Clinic Supervisor, Front End Cardiology, UT Medicine

– Maricela Linan: Benefits Coordinator, Medical Drive Clinic, UT Medicine

– Pamela Glasscock: Director of Clinical Operations, UT Medicine

– Facilitator: Hope Nora, PhD

– Sponsor: Sara Pastoor, MD: Director, Primary Care Center

Aim Statement

- The aim of this project is to decrease the amount of monthly referrals that are incompletely processed from UT Medicine Primary Care Medical Drive Clinical to Specialists by January 15, 2015 from the current baseline of 198 by 15%. The process begins when the referral is made and ends when the appointment is booked and authorized as needed with a specialist.

- This is important to improve because incomplete processing of referral authorizations causes delays in care for patients and loss of revenue for the organization

Project Milestones
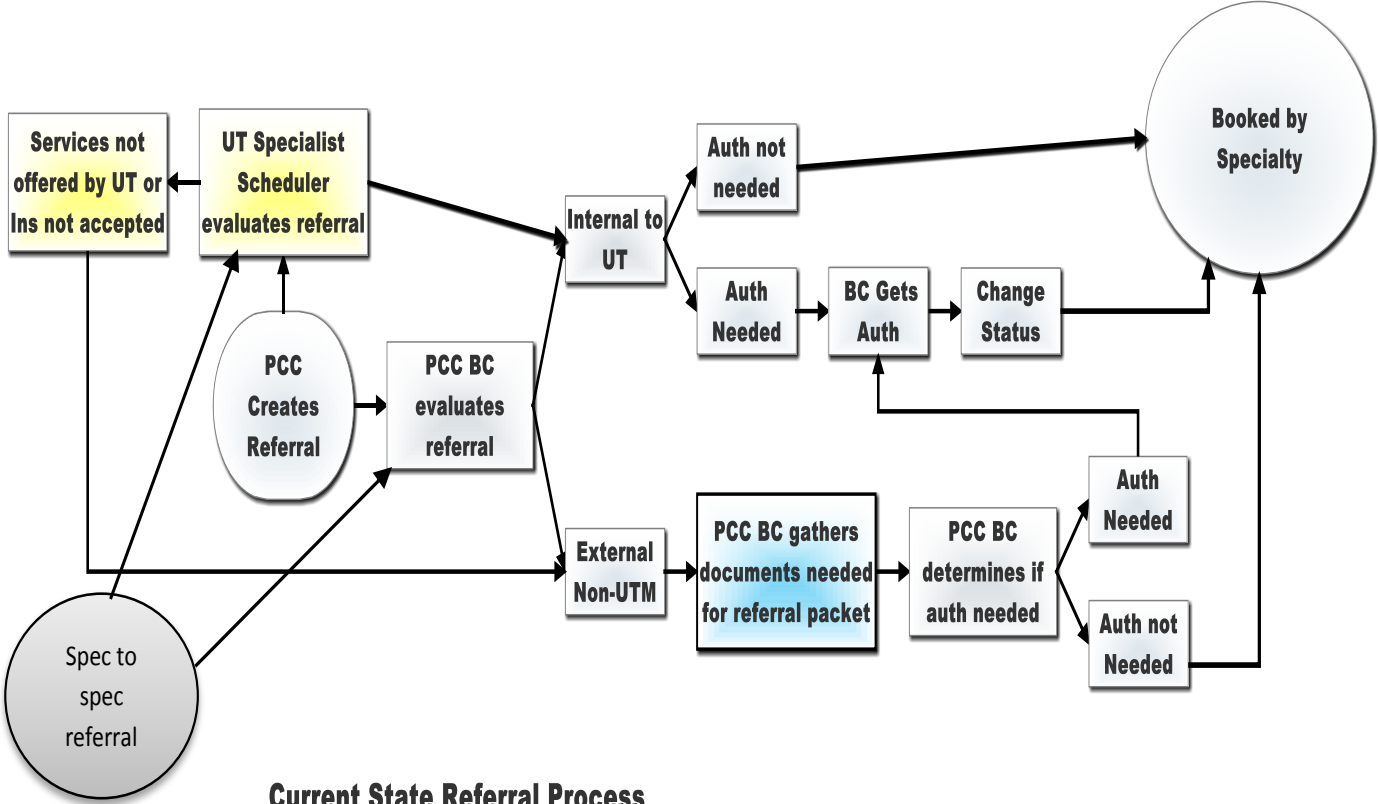
- Team Created   Sept 2014
- AIM statement created   Oct 2014
- Weekly Team Meetings   Sept- Nov 2014
- Background Data, Brainstorm Sessions,   Sept- Nov 2014
  Workflow and Fishbone Analyses
- Interventions Implemented   Dec 2014
- Data Analysis   Oct- Jan 2015
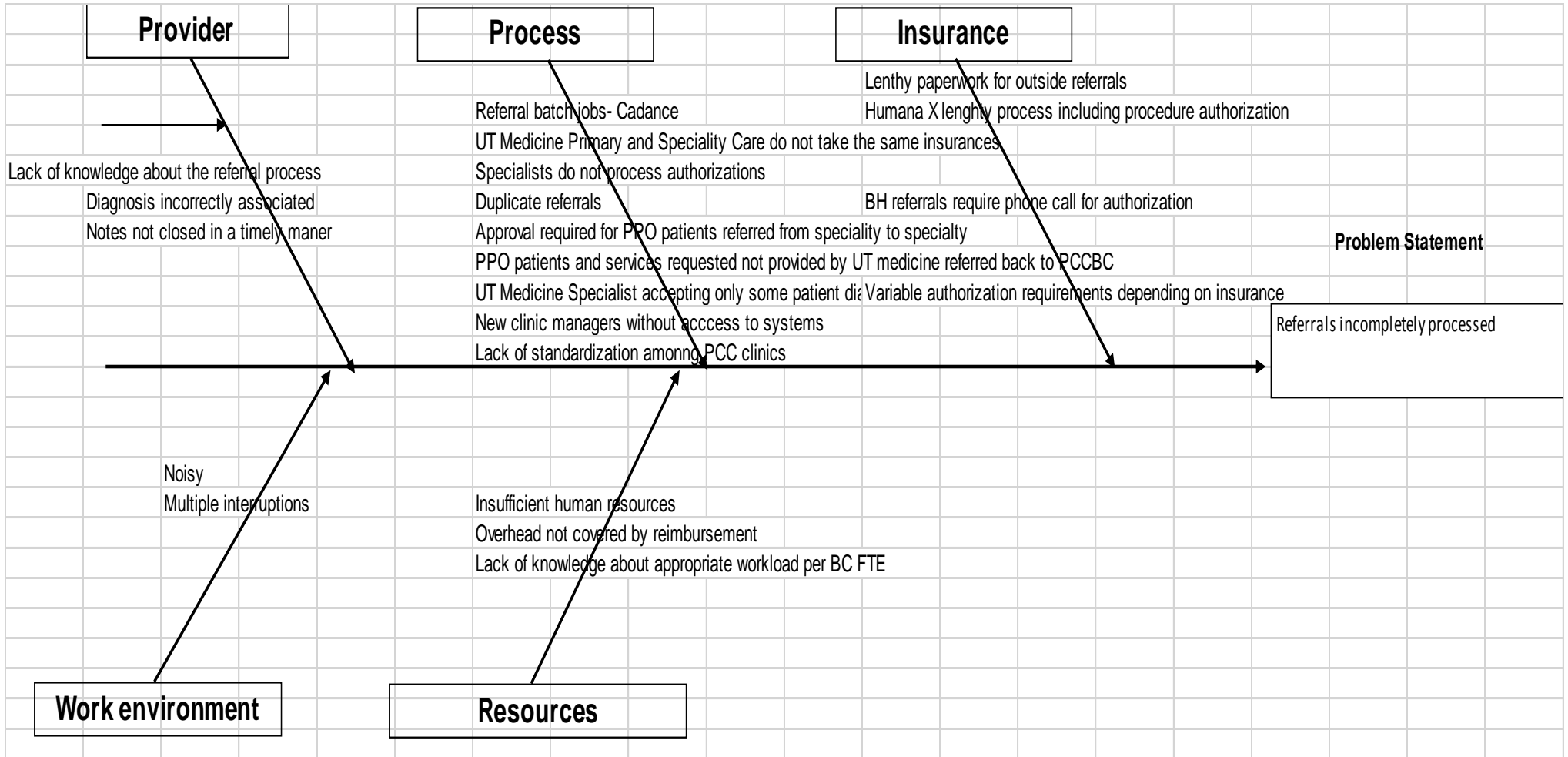- CS&E Presentation   Jan 23, 2015

Background

- The administrative burden to the primary care practice of processing patient's referrals is tied to a patient's insurance type.

- This unreimbursed requirement can become overwhelming to the primary care practice

- This is important to address because delays in the processing of referrals can delay needed care for patients and decrease revenue to specialty clinics
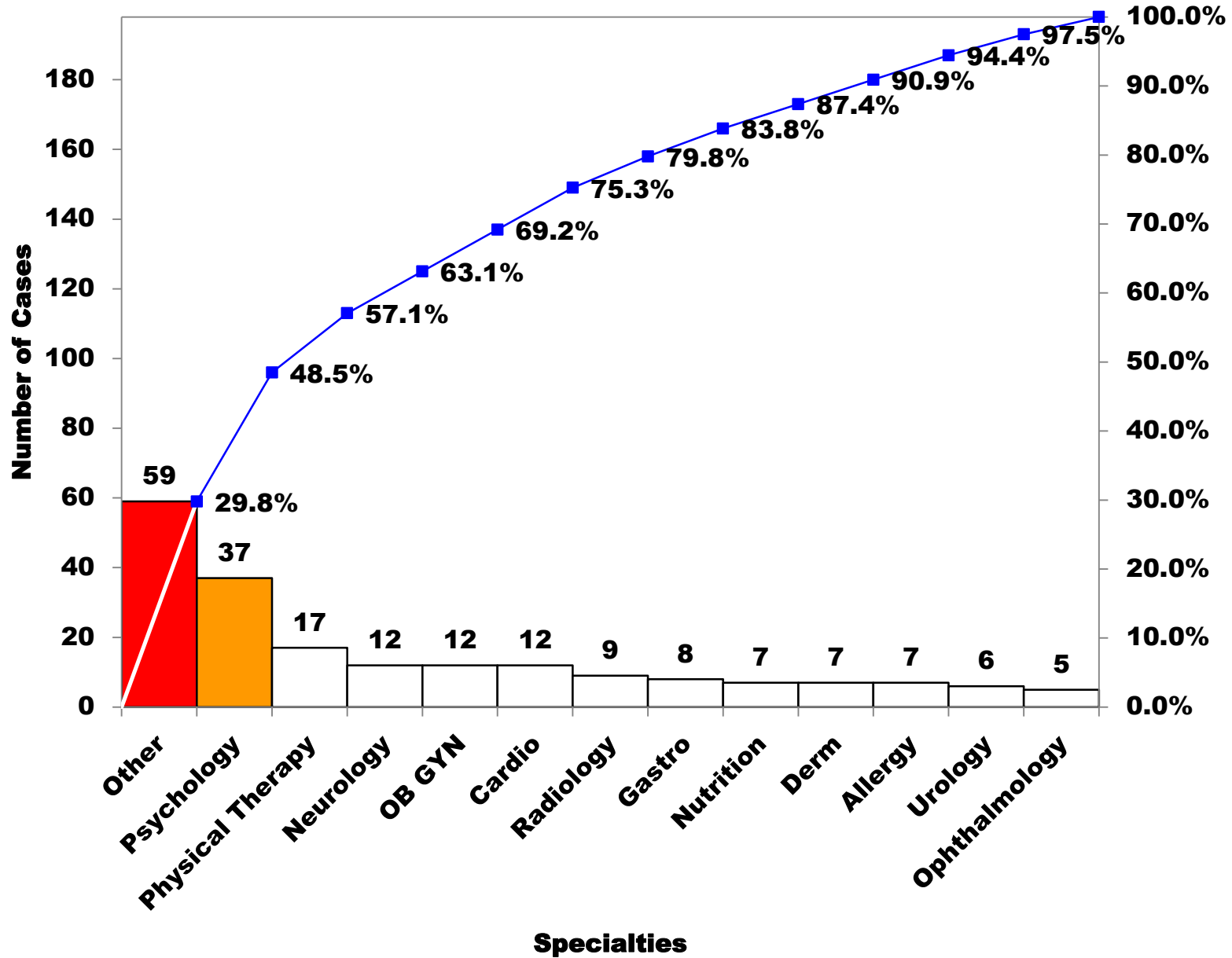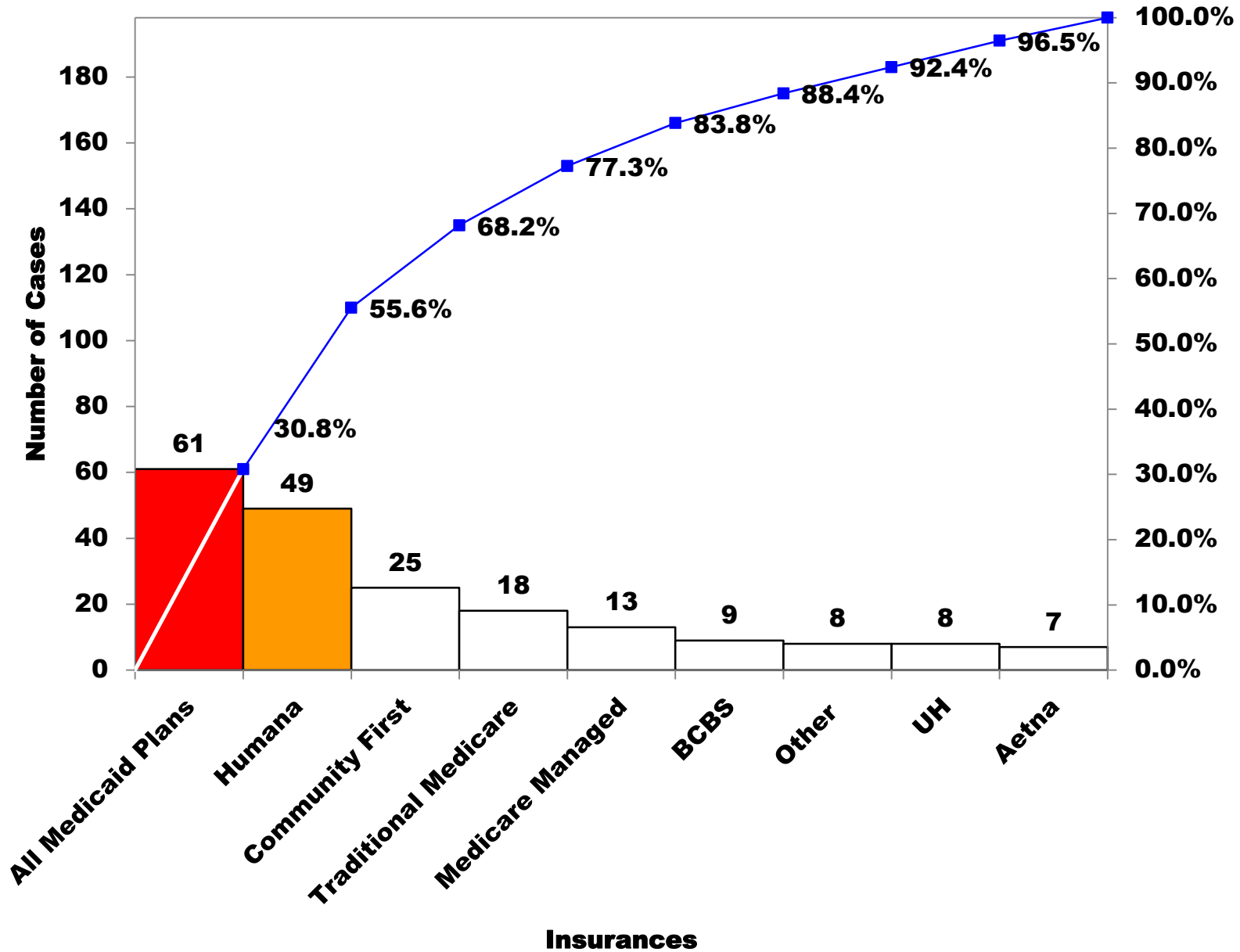
Pre-intervention Flowchart

Current State Referral Process

Fishbone Diagram

Provider

Process

Insurance

Lenthy paperwork for outside referrals

Referral batch jobs- Cadance

Humana X lenghty process including procedure authorization

UT Medicine Primary and Speciality Care do not take the same insurances

Lack of knowledge about the referral process

Specialists do not process authorizations

Diagnosis incorrectly associated

Duplicate referrals

BH referrals require phone call for authorization

Notes not closed in a timely maner

Approval required for PPO patients referred from speciality to specialty

Problem Statement

PPO patients and services requested not provided by UT medicine referred back to PCCBC

UT Medicine Specialist accepting only some patient dia

Variable authorization requirements depending on insurance

New clinic managers without acccess to systems

Referrals incompletely processed

Lack of standardization amonng PCC clinics

Noisy

Multiple interruptions

Insufficient human resources

Overhead not covered by reimbursement

Lack of knowledge about appropriate workload per BC FTE

Work environment

Resources

UT Medicine Medical Drive PCC Specialties

Specialty	Number of Cases	Cumulative %
Other	59	29.8%
Psychology	37	48.5%
Physical Therapy	17	57.1%
Neurology	12	63.1%
OB GYN	12	69.2%
Cardio	12	75.3%
Radiology	9	79.8%
Gastro	8	83.8%
Nutrition	7	87.4%
Derm	7	90.9%
Allergy	7	94.4%
Urology	6	97.5%
Ophthalmology	5	100.0%

Number of Cases

Specialties

UT Medicine Medical Drive PCC Insurances

Number of Cases (left axis)

Insurances (horizontal axis)

Insurance	Number of Cases	Cumulative %
All Medicaid Plans	61	30.8%
Humana	49	55.6%
Community First	25	68.2%
Traditional Medicare	18	77.3%
Medicare Managed	13	83.8%
BCBS	9	88.4%
Other	8	92.4%
UH	8	96.5%
Aetna	7	100.0%

PLAN: Potential Interventions
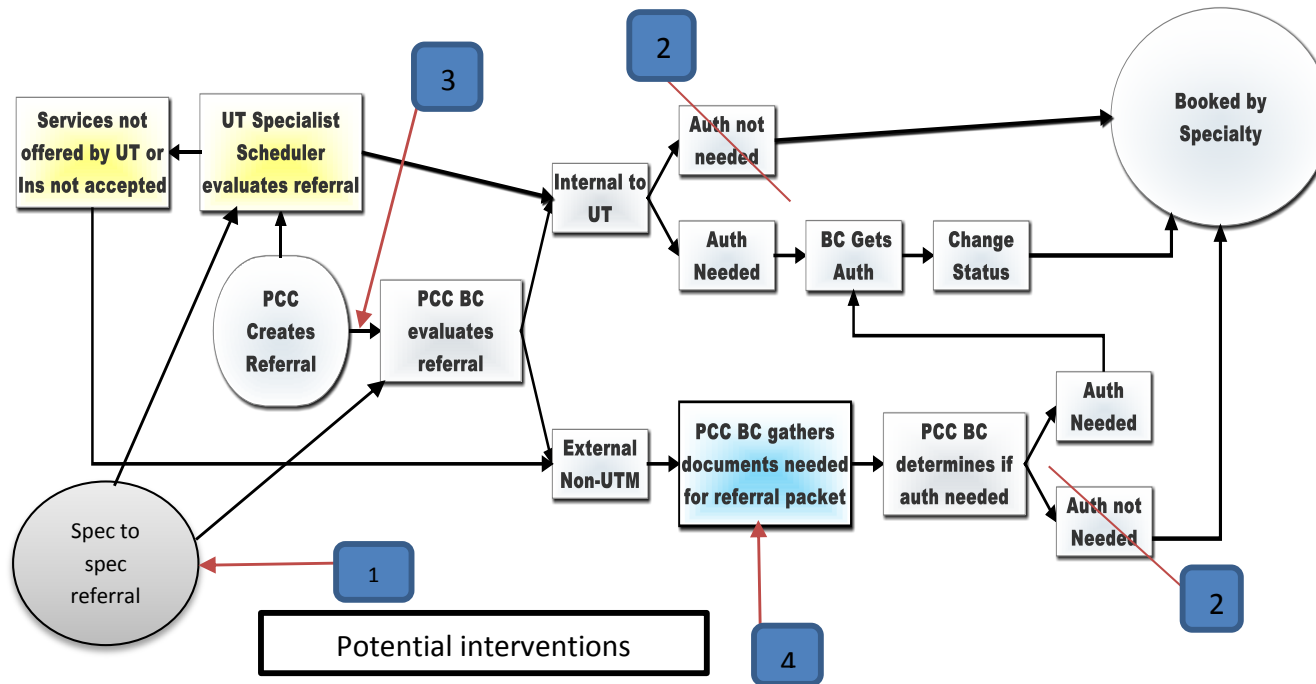
DO: Interventions Considered

1. Decrease work-load: Stop sending referrals from specialty to specialty not requiring authorization to the primary care BC and allow specialty care to book them directly.

2. Recruit help from specialty care: Stop sending referrals from Primary care to specialty for referrals not requiring authorization to the Primary care BC and allow specialty to book them directly while simultaneously:

3. Recruit help from patients: Provide each patient receiving a referral with a phone number to call and schedule their own specialty appointment, using the MARC as primary option and giving the patient alternative numbers if the MARC did not accept their insurance or did not provide the service.

4. Recruit help from non BC staff: for simple tasks like preparing packages for certain services, calling patients with referral information.

****Hire more BCs: Determine the appropriate workload per BC to justify**

DO: Interventions Implemented

- Recruit help from front desk staff: simple tasks like preparing packages for certain services and calling patients with referral information

- Time study to justify hiring additional BCs

DO: Time Study Results

Medical Drive

Number	Time (S)	Time (M)	Insurance	Notes
1	1316	21:56	Humana X HMO	Colonoscopy
2	375	6:15	Community First	Call, pt. verify ins covers referral.
3	91	1:31	Community First	Spec to Spec (Audio/Ent)
4	100	1:40	Community First	Urgent, Pt had apt already
5	372	6:12	Humana X HMO	Ophthalmology. Contracted
6	946	15:46	Amerigroup Medicare	Sleep Study – verify CPAP
7	255	4:15	HMO-X West	Cardiology, Pt seen already. Duplicate.
8	195	3:15	Humana X HMO	Radiology- ultrasound
9	721	12:01	Medicare	Oral Surgeon
10	421	7:01	Humana X HMO	Colonoscopy. exp. Ins. No referral
Average	479.2	7:59		

MARC

Number	Time(s)	Time(m)	Insurance	Notes
1	90	1:30	Community First	Urgent. Wound care.
2	716	11:56	Community First	Sleep Study
3	850	14:10	Community First	Physical Therapy
4	468	7:48	Community First	Wound care/Urgent
5	159	2:39	Community First	Colonoscopy. Changed to internal.
6	189	3:09	Humana X	Duplicate from Batch update, verified
7	788	13:08	Humana X	Contraception Management Meds
8	674	11:14	Community First	Wound care/Urgent
9	282	4:42	Community First	Sleep Study. Mychart Message
10	296	4:56	Community First	Podiatry. Mychart Message
Average	451.2	7:31		

Westover Hills

Number	Time(s)	Time (m)	Insurance	Notes
1	181	3:01	Human X (Gold)	Breast Cancer Screen Referral Radiology
2	788	13:08	Humana X (Silver)	Physical Therapy
3	49	0:49	Humana PPO	Breast Cancer Liver Biopsy
4	237	3:57	Humana X	Hearing Test. Duplicate
5	70	1:10	Humana X	Psychiatric Referral
6	83	1:23	Humana X (Silver)	Radiology
7	25	0:25	Humana X-PPO	Radiology
8	45	0:45	Humana X-PPO	Radiology
9	334	5:34	Humana X (Silver)	OB/GYN
10	320	5:20	Humana X	Sleep Study
Average	213.2	3:33		

Senior Health

Number	Time(s)	Time(m)	Insurance	Notes
1	360	6:00	Medicare	Psychology
2	205	3:25	Medicare	Psychiatric Referral
3	277	4:37	Medicare	Ortho Surgery
4	354	5:54	Medicare	Neurology
5	135	2:15	United HC Medicare Secure Horizons HMO West	Ophthalmology
6	177	2:57	Blue Cross BS-PPO	Psychology
7	62	1:02	Blue Cross BS-PPO	Gastro
8	285	4:45	Blue Cross BS-PPO	Neurology
9	1140	19:00	Humana X	Gastro
10	600	10:00	United HC Medicare Secure Horizons HMO West	Audiology
Average	359.5	5:59		

DO: Time Study Results

Medical Drive		MARC		Westover Hills		Senior Health	
Referrals Per day	56	**Referrals Per day**	60	**Referrals Per day**	129	**Referrals Per day**	75
Referrals Per Hour	7.5	**Referrals Per Hour**	8.0	**Referrals Per Hour**	17.1	**Referrals Per Hour**	10
Cost Per Day	*$163.90*	*Cost Per Day*	*$163.90*	*Cost Per Day*	*$163.90*	*Cost Per Day*	*$163.90*
Cost Per Hour	*$21.85*	*Cost Per Hour*	*$21.85*	*Cost Per Hour*	$21.85	*Cost Per Hour*	$21.85
Cost Per Referral	$2.91	**Cost Per Referral**	$2.73	**Cost Per Referral**	$1.27	**Cost Per Referral**	$2.19
$ Day for Referrals	$163.90	**$ Day for Referrals**	$163.90	**$ Day for Referrals**	$163.90	**$ Day for Referrals**	$163.90

| Insurance	# Referrals	Total Seconds	Avg. Minutes
Humana X	14	6434	8
Community First	11	4101	6
Medicare	6	2863	8
HMO-X West	3	990	6
Humana X PPO	3	119	1
Blue Cross BS-PPO	3	524	3

DO: Time Study Results
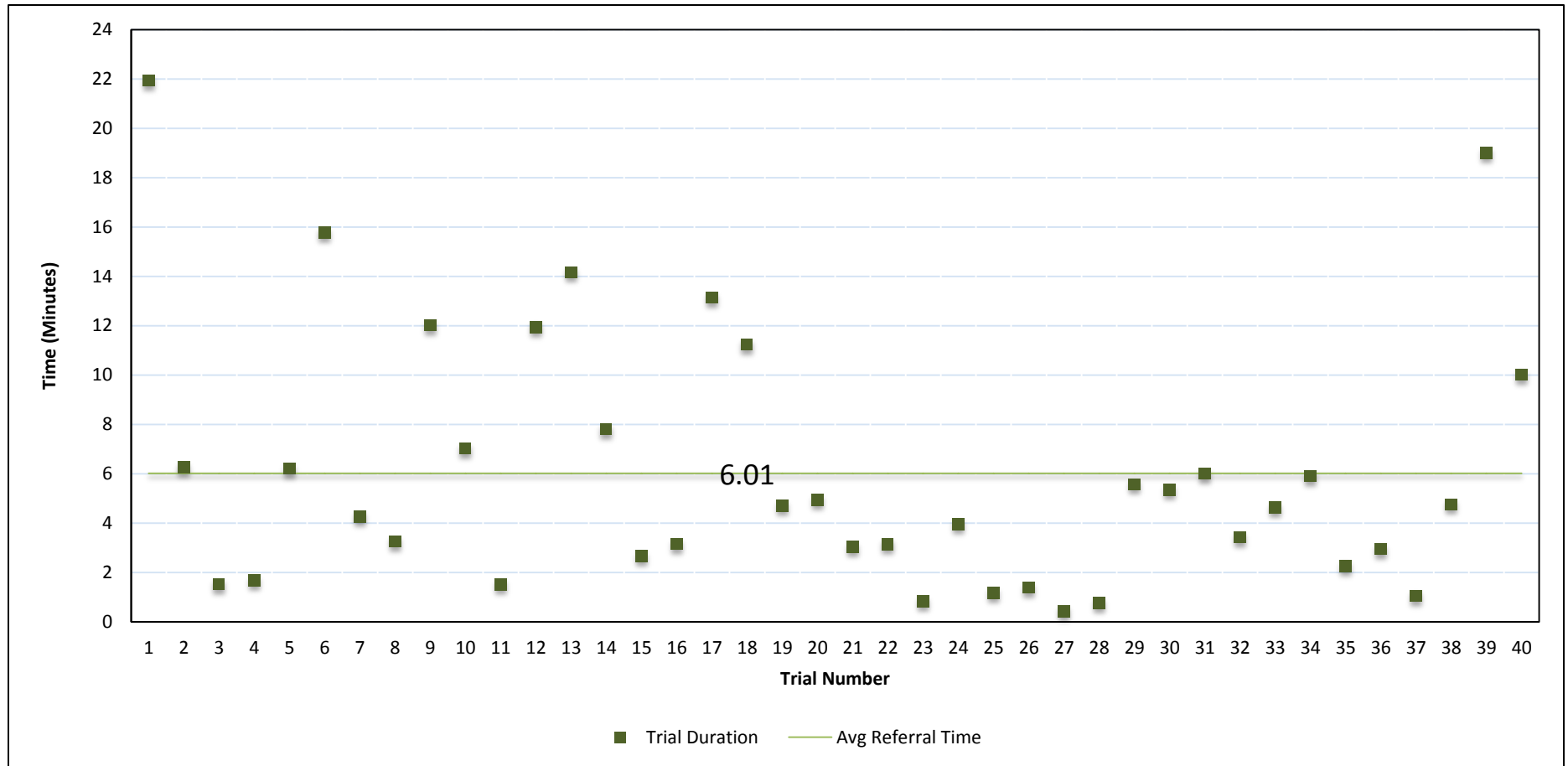
Excluded the following referral trial types due to length of completion duration (outlier trials):
- Durable Medical Equipment: (60-120 minutes in duration)
- Pulmonary Function Tests: (30-45 minutes in duration)
- Bill Inquires (30 to 45 minutes)
- Sleep Studies (15 to 30 minutes) – included those under 25 min in study

DO: Time Study Results

Distribution of Observed Referrals
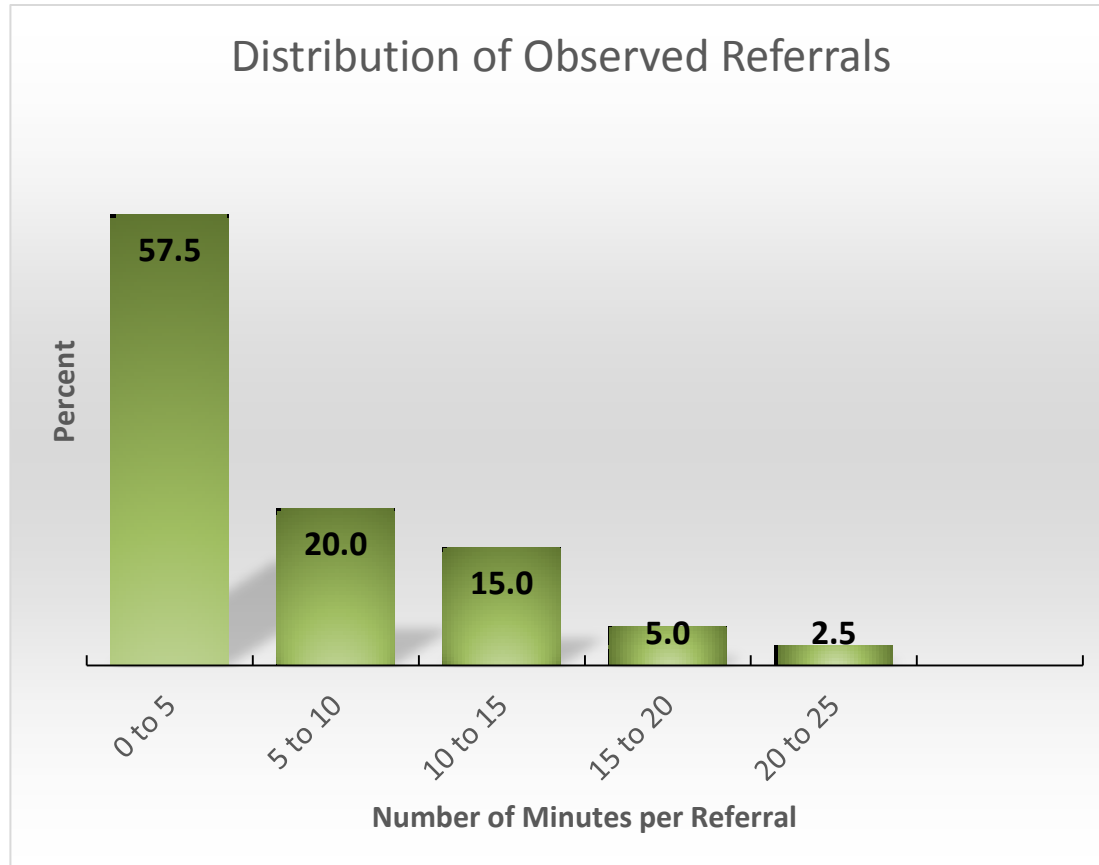
	Data			cumulative
lower		upper	percent	percent
0	<	5	57.5	57.5
5	<	10	20.0	77.5
10	<	15	15.0	92.5
15	<	20	5.0	97.5
20	<	25	2.5	100.0

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DO: Time Study Key Findings

Key Findings:
- PCC (Department) average time for BC to complete one referral: **6:00 minutes per referral**
- 450 work minutes per day/6 minutes per referral = **75 average referrals/day**
- 75 referrals per day /7.5 hours worked per day= **10 referrals/hour**
- $21.85 dollars per hour/10 referrals per hour = **$2.19 dollars per referral**
- Average number of referrals per patient encounter: **2 referrals per encounter**

Example Medical Drive Clinic:
- (13 apts. per day X 4.7 FTEs) = 61 apts. per day
- 2 referrals per encounter
- 2 x 61 = 122 referrals per day.
- **Referral workload (122 per clinic day) exceeds average benefit coordinator referral completion average per day (75 referrals/day)**
- Based on uninterrupted continuous work on referrals every day

Constants used for calculations:
- 7.5hrs per day X 60 min per hour = **450 min per work day**
- $39,500 (BC Salary)/241 work days a year = BC is paid **$164 per day.**
- $164 per day / 7.5 hrs. per day = **$21.85 per hour**
- $21.85 per hour / 10 referrals per hour = **$2.19 per referral**
- **Average referrals per encounter is determined by interview with benefit coordinator, data not available to determine average referral per encounter.**

CHECK: Results/Impact

- Approval obtained for hiring new BC

CHECK: Results/Impact

Medical Drive Primary Care Clinic
Open Referrals to Specialists
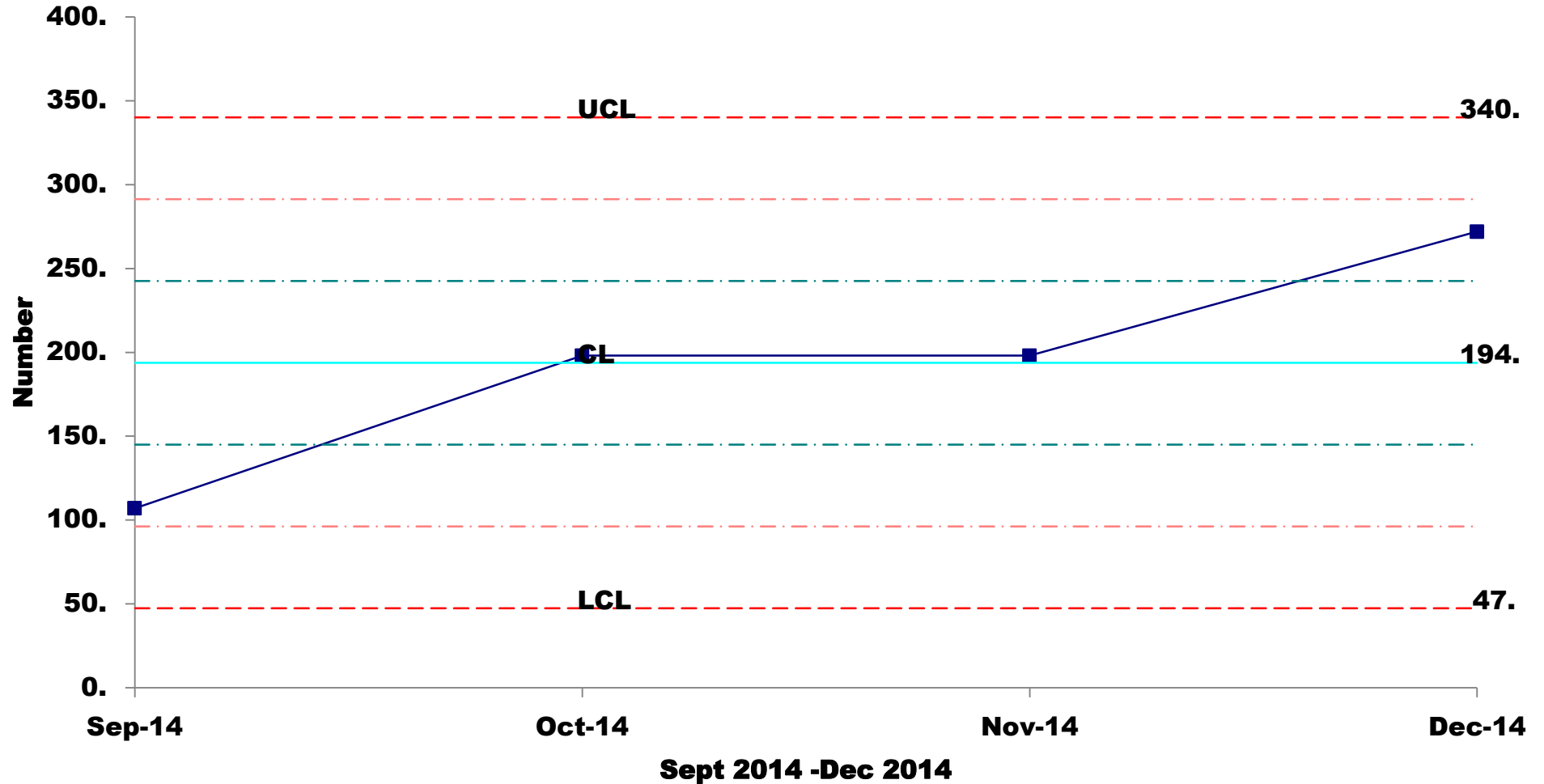
What Happened?

- Medical Drive Clinic opened in Sept, 2014 and workload is still evolving.

- EPIC is still evolving.

  -New referral process has not been fully trained due to the Holidays. Front desk staff retraining was required mid way through the month of December and was not done.

  -Unable to pull the same report again from which the data was extracted

  -New upgrade is expected February 2015 (more changes are coming)

ACT: Going Forward

- Propose housing all Primary Care benefit coordinators in the same location to allow for cross training, developing expertise in specific areas and better distribution of work-load

- Determine the BC workload and provide an appropriate support staff ratio for each clinic

- After EPIC upgrade (February 2015?) automatic electronic notification to PCPs will be sent when patients are seen by UT Medicine specialist. Discontinue BC notification with specialty to specialty referrals for patients not requiring authorization

Return on Investment

- Revenue from referrals is generated by specialist resulting from UT Medicine primary care referrals.

- Optimizing the referral process can benefit down-stream revenue generation. Reports requested about number of referrals generated and incomplete referrals (referrals that are not authorized and are not reimbursable)

- Consideration to manage benefit coordination at an institutional level to support increase of downstream revenue for specialty care

- At this time, not possible to calculate the ROI

Conclusion

- Referral coordination is an extremely complex process, insurance driven and unfunded at the primary care level.

- Accountable Care Organization involvement at all levels may be necessary to optimize patient care and downstream revenue generation.

Lessons Learned

- We have learned a lot about the referral process
- We understand how many hands it touches and how many patients it impacts
- We have been able to clarify definitions of referral status terms in EPIC
- We have identified gaps in training among people in the same position and even among trainers.
- We understand the impact of lack of communication among specialties
- CHANGE IS HARD!!!!

The Team!

Thank you!

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