IMPROVING INPATIENT TO OUTPATIENT TRANSITION FOR GENERAL MEDICINE CLINIC PATIENTS

JULIE GILBREATH, MD, FACP; RAMON GALLEGOS, RN; PATRICIA REYES

8/2016-1/2017

PRIMARY CARE

ER   office

hospital   home

THE TEAM

- **CSE Participants:**
- Julie Gilbreath, MD, FACP, Assistant Clinical Professor Division of General and Hospital Medicine
- Ramon Gallegos, RN, Director of Operations for Medicine and Medicine Specialties
- Patricia Reyes, Operations Manager for Access Plus

- **Team Members**
- Sean Moore, University Hospital RN
- Cathleen Hauschildt, Manager Care Coordinator University Hospital
- Krayton Blower, MD, Internal Medicine resident
- Taryn Johnson, LVN, General Medicine Clinic
- Christian Cueva, MD, Internal Medicine resident
- Norma Porter, Senior Administrative Associate Access Plus
- Alexia Pratt, Nurse Supervisor at the Robert B. Green
- Irma Rodriguez, Support Service Robert B. Green
- Camerino Salazar, Senior Director, Health Analytics
- Herminia Flores, Medical Assistant General Medicine Clinic
- Sherry Martin, Facilitator

WHAT WE ARE TRYING TO ACCOMPLISH?

OUR GOAL

To decrease the hospital readmission rate of General Medicine Clinic patients

WHAT WE ARE TRYING TO ACCOMPLISH?

OUR AIM STATEMENT

To increase the number of General Medicine Clinic patients that are seen in clinic within 7 days of hospital discharge from the inpatient medicine service by 20% for the period of November 1 – January 31 2017.
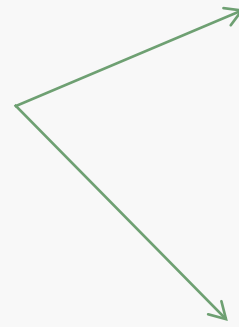
BACKGROUND

19% of patients

Adverse event
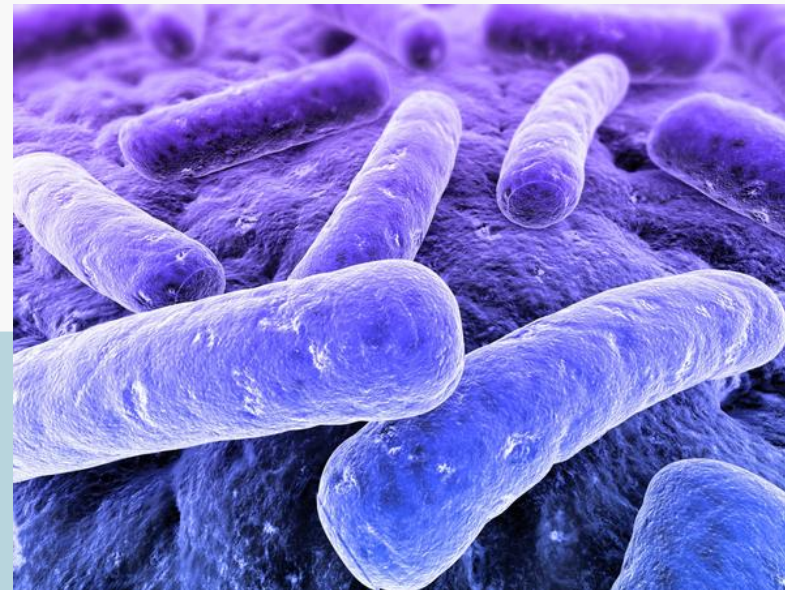
<2 weeks of hospital discharge

1/3 preventable

1/3 could have been ameliorated

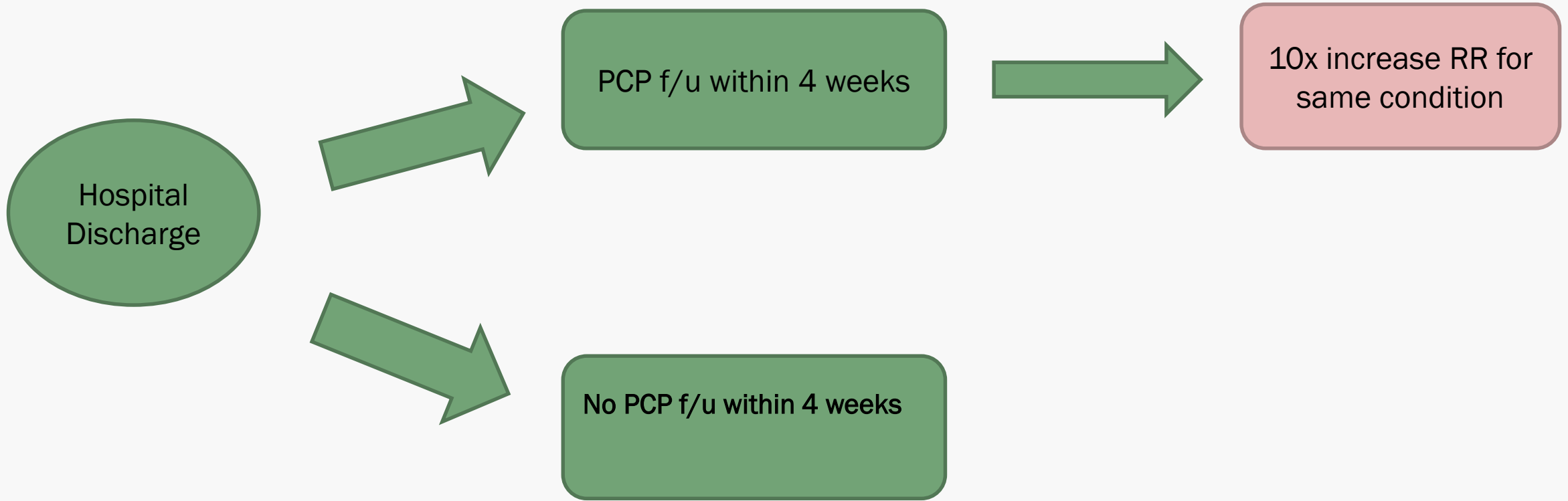# BACKGROUND

Most common adverse events

- Injuries due to medications
- Procedure-related complications
- Infections
- Falls

BACKGROUND

Hospital Discharge

PCP f/u within 4 weeks

10x increase RR for same condition

No PCP f/u within 4 weeks
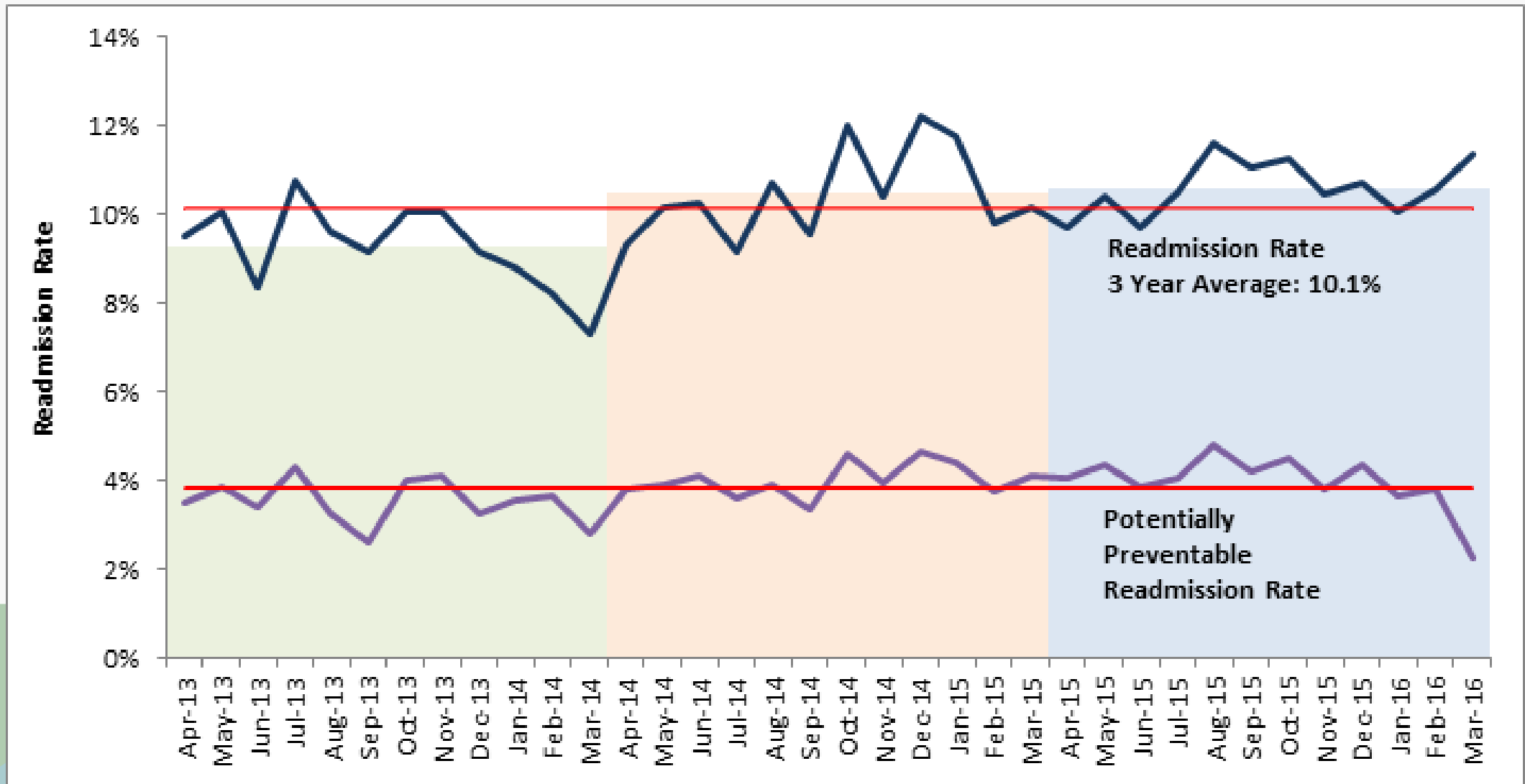
NATIONAL ALL-CAUSE READMISSION RATE

- 30 day readmission rate, all-cause 17.8% (2012)
- Potentially preventable readmissions" (PPR) was 12.3% (2011)

UNIVERSITY HEALTH SYSTEM READMISSION RATE

GENERAL Medicine clinic readmission rate
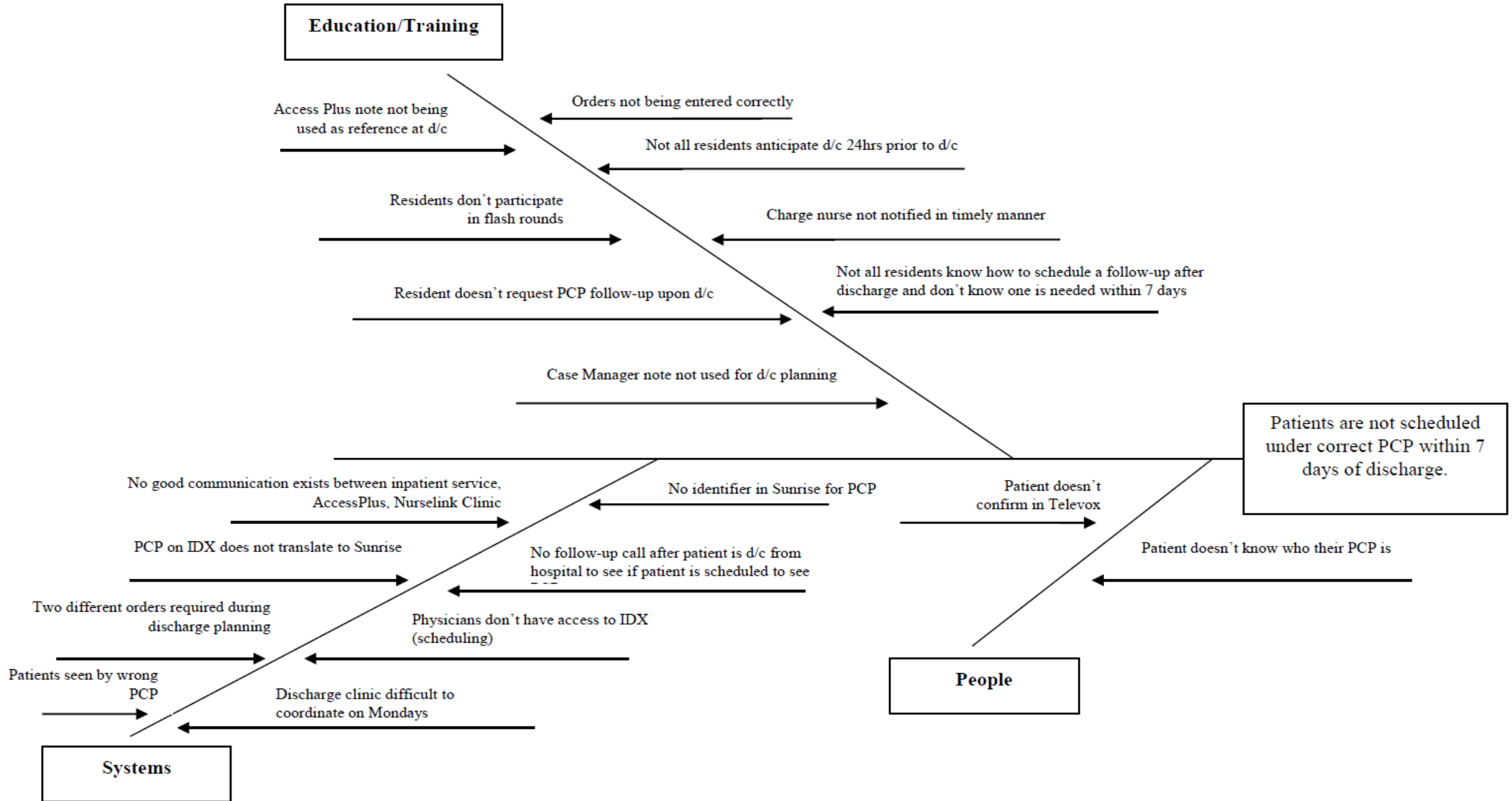
Calculating…….

DATA COLLECTION PLAN

- Data will be collected on the number of GMC patients discharged from the Medicine teams and ER at University Hospital.

- We will track the days to appointment post-discharge and determine the percentage with appointments within 7 days

- We will track no-show rate for post-discharge appointments

- Will continue to monitor through June 30th, 2017

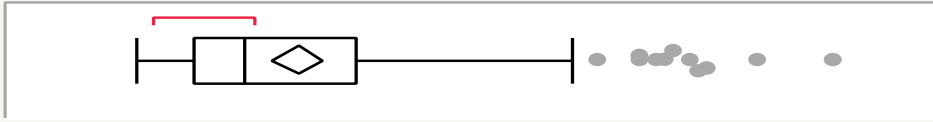# PROJECT MILESTONES

- Team Created 8/2016

- AIM statement created 8/26/2016

- Weekly Team Meetings 8/2016-1/2017

- Background Data, Brainstorm Sessions 9/6/2016, 10/6/2016, 10/21/2016

- Workflow and Fishbone Analyses 9/23/2016

- Interventions Implemented 10/5/2016, 11/1/2016, 11/10/2016

- Data Analysis 10/31/16, 1/2/2017

- CS&E Presentation- Preliminary 11/11/2016

- Graduation Date 01/13/2017

Education/Training

Access Plus note not being used as reference at d/c

Orders not being entered correctly

Not all residents anticipate d/c 24hrs prior to d/c

Residents don't participate in flash rounds

Charge nurse not notified in timely manner

Not all residents know how to schedule a follow-up after discharge and don't know one is needed within 7 days

Resident doesn't request PCP follow-up upon d/c

Case Manager note not used for d/c planning

Patients are not scheduled under correct PCP within 7 days of discharge.

No good communication exists between inpatient service, AccessPlus, Nurselink Clinic

No identifier in Sunrise for PCP

Patient doesn't confirm in Televox

PCP on IDX does not translate to Sunrise

No follow-up call after patient is d/c from hospital to see if patient is scheduled to see PCP

Patient doesn't know who their PCP is

Two different orders required during discharge planning

Physicians don't have access to IDX (scheduling)

Patients seen by wrong PCP

Discharge clinic difficult to coordinate on Mondays

People

Systems

Distributions (negative values excluded)

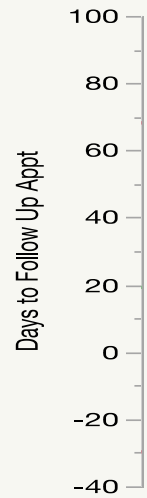## Days to Follow Up Appt (Sep-Oct 2016)

3   3

Control Chart (negative values excluded)

SPC Individuals Chart: Days to Follow Up Appt (Sep-Oct 2016)

Note: 5 samples were excluded

	Week	Admitted	Cancelled	Discharged	Pre-Admission	Total Visits	NoShow Rate
1	36	0	2	1	1	3	66.7%
2	37	0	4	6	1	10	40.0%
3	38	0	10	13	2	23	43.5%
4	39	0	7	8	3	15	46.7%
5	40	1	10	10	5	21	47.6%
6	41	0	8	7	3	15	53.3%
7	42	0	2	2	6	4	50.0%
8	43	0	1	2	5	3	33.3%
9	44	0	2	2	13	4	50.0%
10	45	0	0	0	1	0	•

Control Chart

SPC p-Chart: % No-Show Appointments ("Cancelled") (Sep-Oct206)
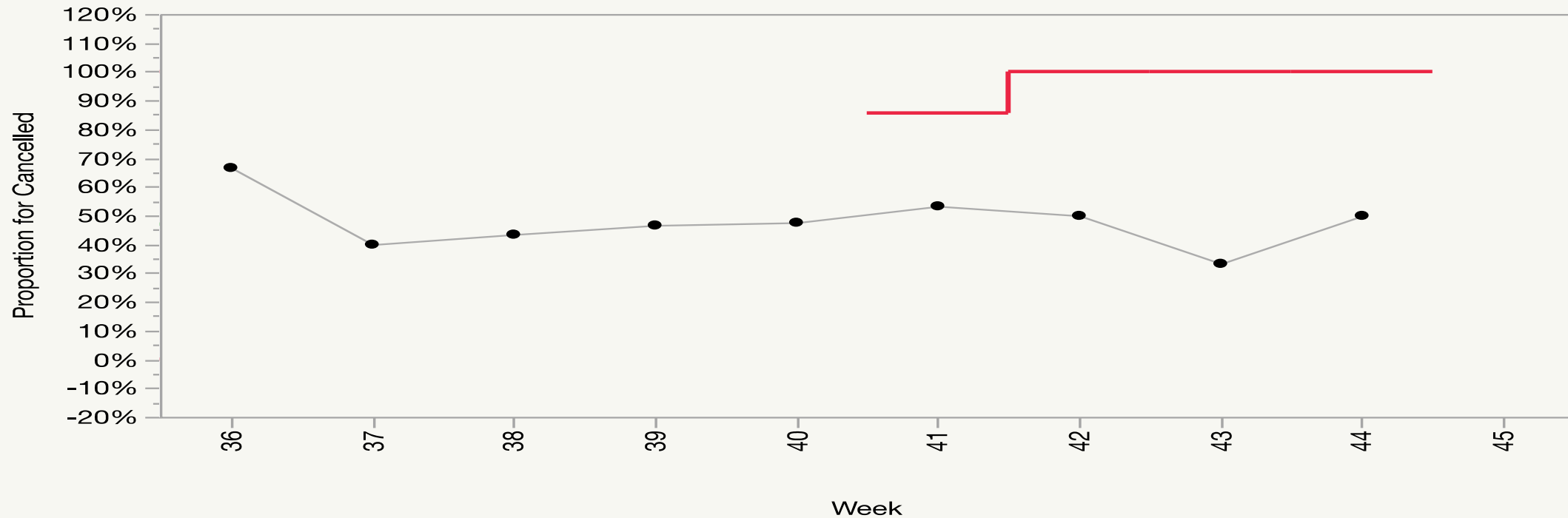
Goal

To increase the # of patients that are seen at GMC within 7 days after hospital discharge from medicine service at UHS

Primary Driver

Correctly identify pcp on Sunrise and IDX

Interventions

Work with IT to fix PCP button on Sunrise and IDX (10/5 RG)

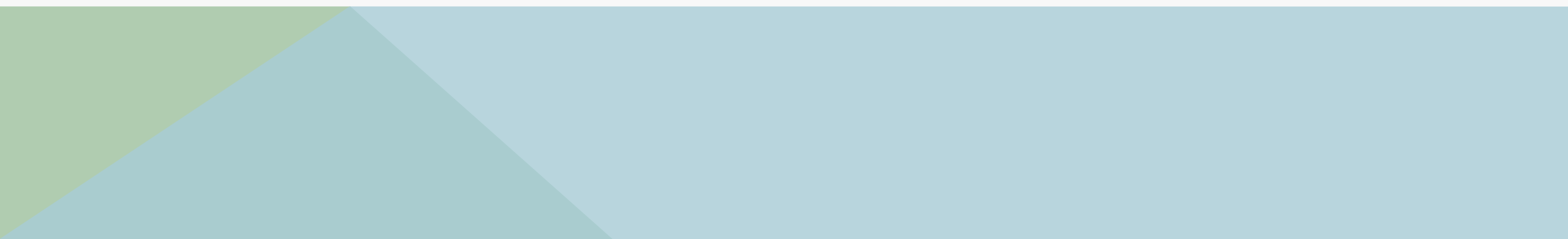Temporarily, identify PCP under allergy section (10/5 RG)

Add resident names to IDX library (10/5 PR)
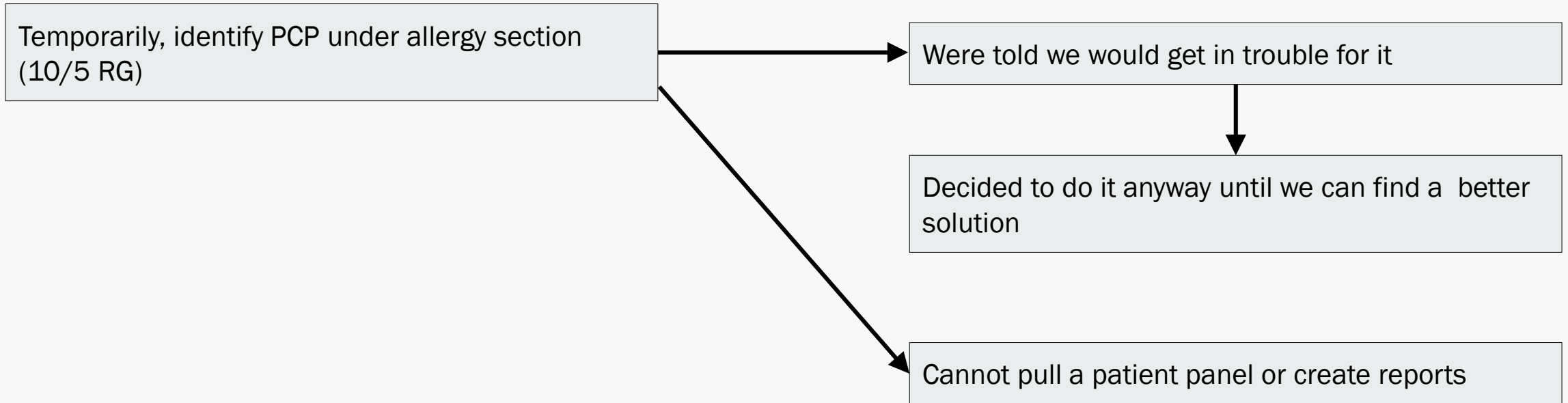
CHALLENGES

Work with IT to fix PCP button on Sunrise and IDX (10/5 RG)

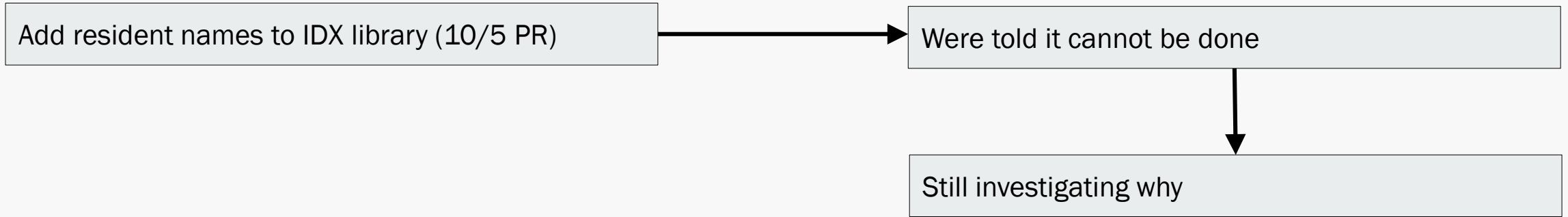IT said identifying pcp in Sunrise can't be done

Will be included in the next Sunrise update (Unknown date)

CHALLENGES

Temporarily, identify PCP under allergy section (10/5 RG)

Were told we would get in trouble for it

Decided to do it anyway until we can find a better solution

Cannot pull a patient panel or create reports

CHALLENGES

Add resident names to IDX library (10/5 PR) → Were told it cannot be done

Still investigating why

Goal

Primary Driver

Interventions

To increase the # of patients that are seen at GMC within 7 days after hospital discharge from medicine service at UHS

Correctly identify pcp on Sunrise and IDX

Improve no-show rate

Have front desk review Televox report daily and call patients (10/5 RG)

Switch discharge clinic from Monday to Thursday afternoon
(10/17 JG)

Distributions (negative values excluded)

Days to Follow Up Appt (Sep-Nov 2016)

3
16.014751
201

Control Chart (negative values excluded)

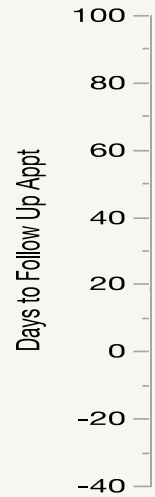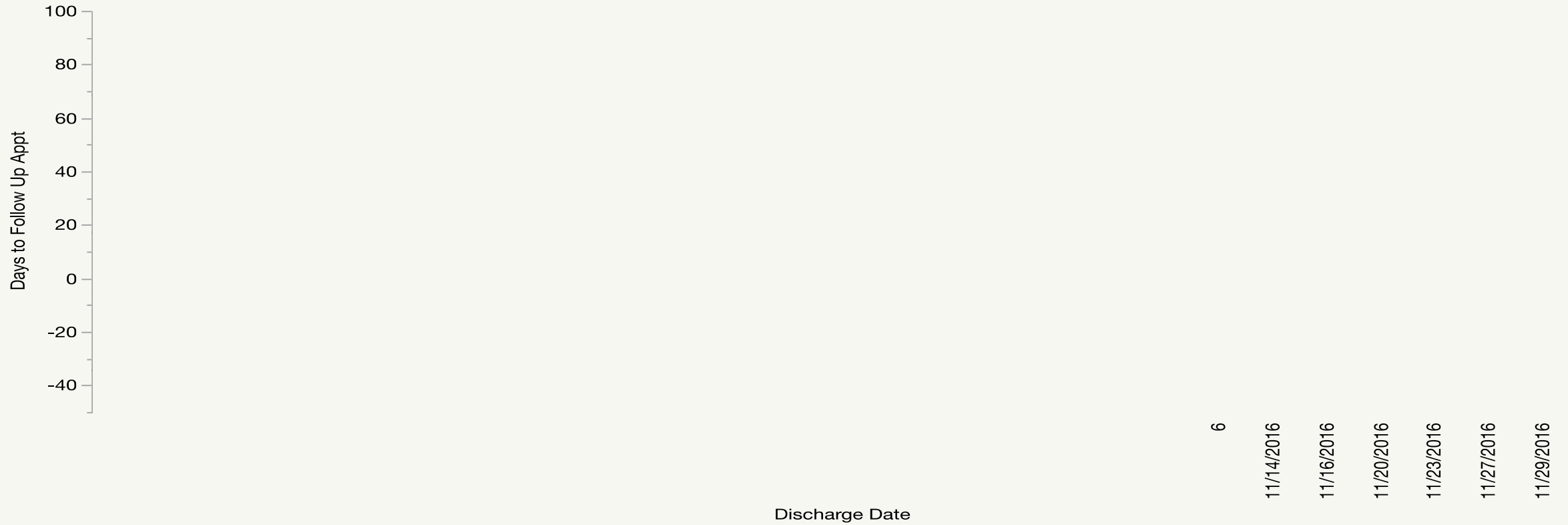## SPC Individuals Chart: Days to Follow-Up Appt (Sep-Nov 2016)

ere excluded.

SPC Individuals Chart: Days to Follow Up Appt (Sep-Nov2016)

Days to Follow Up Appt (y-axis): 100, 80, 60, 40, 20, 0, -20, -40

Discharge Date (x-axis): 6, 11/14/2016, 11/16/2016, 11/20/2016, 11/23/2016, 11/27/2016, 11/29/2016

Intervention Dates:
1. 05 Oct 2016
2. 15 Oct 2016
3. 01 Nov 2016
4. 10 Nov 2016

Conclusion: No real change in final average Days to Follow-up Appt, but real increase in average during Intervention 1; real decrease in variation during Intervention 2.

Phase Limits

Phase			
Baseline	-34.3	17.1	
Intervention 1	-31.3	24.8	
Intervention 2	-14.8	17.4	
Intervention 3	-27.8	17.0	
Intervention 4	-31.9	17.1	66.1

	Week #	Admitted	Cancelled	Discharged	NULL	Pre-Admission	Total Visits	NoShow Rate
1	36	0	2	1	3	1	3	66.7%
2	37	0	4	6	6	1	10	40.0%
3	38	0	10	13	13	2	23	43.5%
4	39	0	7	8	5	3	15	46.7%
5	40	1	10	10	9	5	21	47.6%
6	41	0	8	7	2	3	15	53.3%
7	42	0	2	2	4	6	4	50.0%
8	43	0	1	2	5	5	3	33.3%
9	44	0	2	2	3	13	4	50.0%
10	45	0	6	7	2	3	13	46.2%
11	46	0	7	4	2	0	11	63.6%
12	47	0	3	8	4	5	11	27.3%
13	48	0	4	4	7	4	8	50.0%
14	49	0	2	2	8	10	4	50.0%

Control Chart

SPC p-Chart: % NoShow ("Cancelled") Appointments (Sep-Nov2016)

UCL

g=0.47

LCL
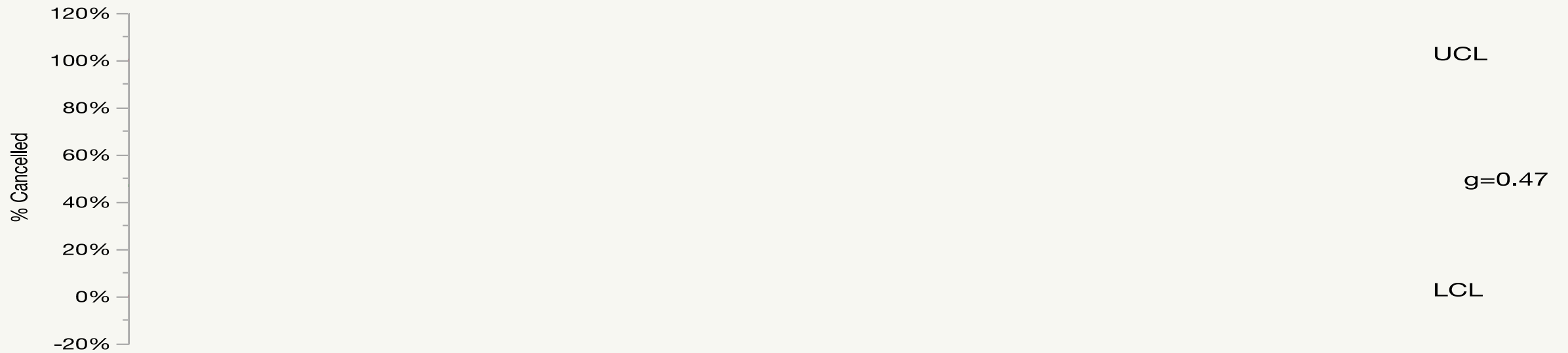
Percent (%) of Patients with a Follow-Up Appointment
and Assigned to Robert B. Green Campus,
General Medicine Clinic (N = 72)
September to November 2016

Days to a Follow-Up Appointment

Source: IDX Appointment System, Allscripts, October to November 2016
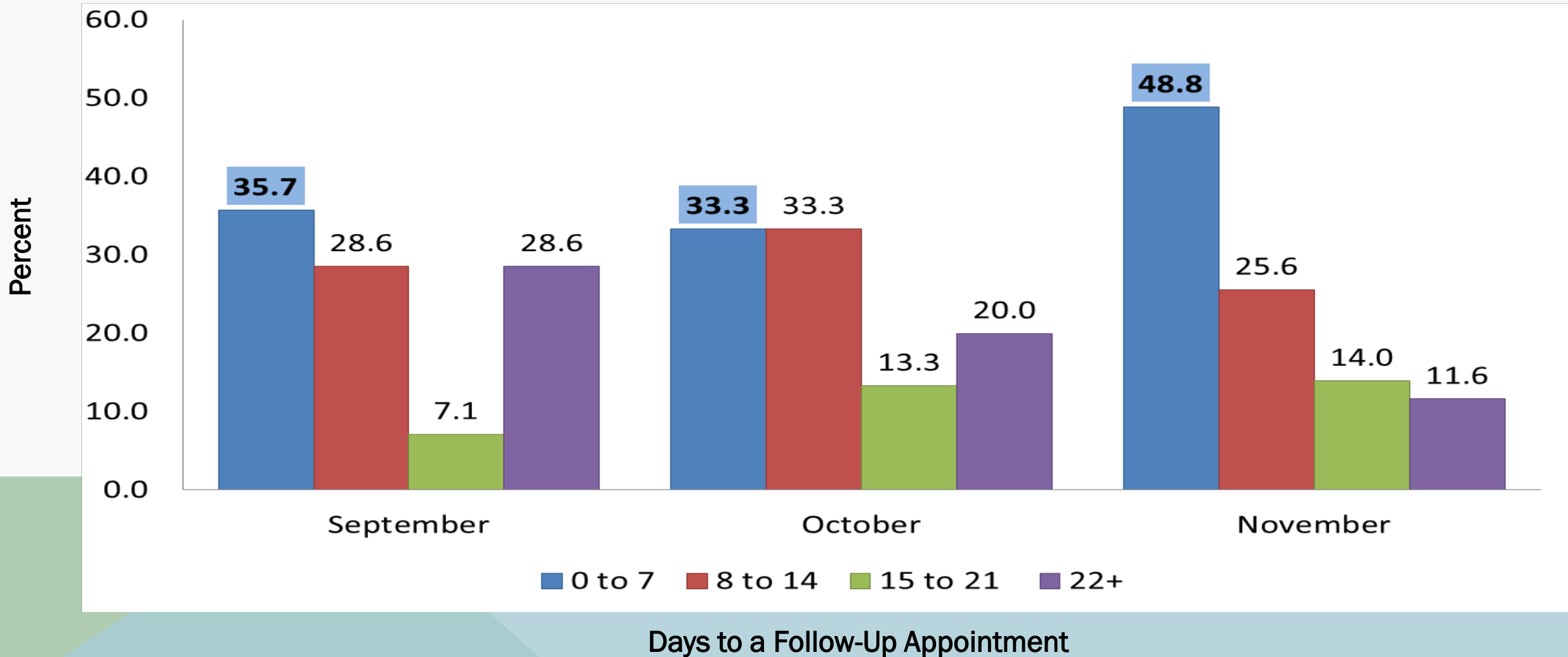
Number of Patients Discharge from University Hospital a Follow-Up Appointment and Assigned to Robert B. Green Campus, General Medicine Clinic (N = 21) September to November 2016

Days to a Follow-Up Appointment

	0 to 7	8 to 14	15 to 21	22+
September		2	2	1
October		4	4	4
November	2	2	1	

❑ Of the 72 General Medicine patients, 21 (30%) were discharged from an inpatient setting.
  ❑ About half received a follow-up appointment within two weeks of discharge.

❑ In general, patients with a shorter follow-up interval were also more likely to make their primary care appointment.

WHAT'S NEXT?

- Work with IT to fix PCP button

- Work with IT to add "pcp upon discharge" order embedded in the medicine progress note

- Bypass the order completely and schedule appointment on admission (Access Plus)

- Add resident names to IDX library

- Recruit RBG SW or patient navigator to assist

- Participate in Readmission Prevention Committee efforts

- Expand Discharge clinic

- Add midlevel for these tasks only?

ROI

Investment	Amount
Correctly identify pcp on Sunrise and IDX	No additional cost
front desk review Televox report daily	No additional cost
Switch discharge clinic from Monday to Thursday afternoon	No additional cost
Orient Access Plus on scheduling B755 within 7 days	No additional cost
Create a daily report of hospital discharges	No additional cost
Call patients within 2 days of discharge and chart a TOC note	No additional cost
Hire a patient navigator	15$/hour
Hire a midlevel to run TOC	50$/hour

Benefits	Amount
Clinic vs ED visit	800 per visit
Reduce adverse events	$$$ potentially 12-44 billion annually US health care system
Avoiding Medicare penalty fees for readmission	$$$ potentially
Patient satisfaction	Soft

ROI

Current	Timely follow-up clinic visit	Not Seen	Total
Inpatient Medicine Discharges	1,200	1,200	
Percent Seen	11.75%	88.25%	100.00%
Patients Seen / not Seen	141	1,059	1,200
Readmission Rate	0.50%	5.50%	4.91%
Preventable Readmissions	0.7	58.2	59.0

Optimal of 20% to Clinic	Timely follow-up clinic visit	Not Seen	Total
Inpatient Medicine Discharges	1,200	1,200	
Percent Seen	31.75%	68.25%	100.00%
Patients Seen / not Seen	381	819	1,200
Readmission Rate	0.50%	5.50%	3.91%
Preventable Readmissions	1.9	45.0	47.0

Difference in Readmissions			12.0
Direct Cost of UHS Medical Inpatient			6,628
Annual Impact			$ 79,536

REFERENCES

1. Hansen LO, Young RS,Hinami K, Leung A,Williams MV. Interventions to reduce 30-day rehospitalization: a systematic review. Ann Intern Med. 2011;155:520-8.

2. Forster AJ, Clark HD,Menard A, Dupuis N,Chernish R, ChandokN, et al. Adverse events among medical patients after discharge from hospital. CMAJ. 2004;170:345-9.

3. Forster AJ, Murff HJ, Peterson JF, Gandhi TK, Bates DW. The incidence and severity of adverse events affecting patients after discharge from the hospital. Ann Intern Med. 2003;138:161-7.

4. Misky GJ, Wald HL, Coleman EA. Posthospitalization transitions: Examining the effects of timing of primary care provider follow-up. J Hosp Med. 2010;5:392-7.

5. Payment Policy for Inpatient Readmissions. In: Report to the Congress: Promoting Greater Efficiency in Medicare. Medicare Payment Advisory Commission. Washington DC; June, 2007:103-20.

THANK YOU