

Experiential Quality Improvement: engaging residents in clinical practice improvement through advocacy and leading change teams

Society of Teachers of Family Medicine
Annual Spring Conference
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UCSF/SFGH Family and Community Medicine Residency Program

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Session Objectives

- Participants will
 - consider an example of an experiential CQI curriculum
 - understand common CQI tools and their use in framing residents' CQI work
 - explore CQI as a framework for teaching about health disparities
 - discuss engagement of residents in the clinical practice through leading QI teams and working directly with clinic staff and patients

Background

- ACGME Program Requirements for Family Medicine (2007)

Management of Health Systems: residents must receive at least 100 hours of management and leadership instruction to include both the didactic and the practical settings.

SFGH Family Health Center

- On San Francisco General Hospital campus
- 10,500 patients served
- 47,000+ visits per year
- Teaching clinic: 39 family practice residents and many medical and nursing students
- Diverse patient population
 - 39% Latino, 27% Asian, 17% Caucasian, 13% African American
 - 48% Medi-Cal, 22% uninsured, 18% Medicare
 - 31 different languages spoken
 - 42% English, 25% Spanish, 8% Cantonese/Mandarin



QI Infrastructure

- Monthly clinic-wide QI meeting and small group meetings (“PDSAs”)
- Clinic staff all expected to participate in QI
- Developing RN role as QI coach for PDSA teams

Outline of the Course

- Fifty total hours
- Spread over 9 months (two 3 month blocks)
- Didactics during block one of 3rd year
- Best Practice Visit and report back using FOCUS-PDSA model
- Choice of project: refinement using FOCUS model and feedback from peers and faculty
- Development of project with team
- PDSA cycles
- New collaboration with Primary Care Internal Medicine Residency Program

Didactic Seminar #1: Introduction to Quality Improvement and Tools

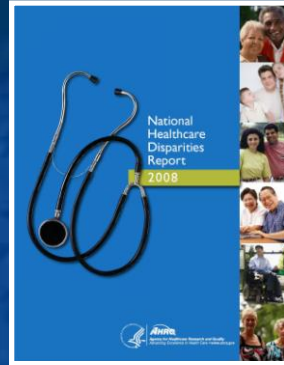
- Evolution from quality assurance to quality improvement
- Examples of use of QI in clinical practice
- Introduction to the FOCUS-PDSA cycle
- Individual patient panel reports (dashboards) as springboard to thinking about improvement
- QI tools
- Pay for performance

Didactic Seminar #2: Measuring Improvement

- Measurement for improvement vs. measurement for research
- Where in the FOCUS-PDSA cycle data collection and measurement should happen
- How much data to collect to drive improvement process (sampling)
- Types of improvement measures
- Use of surveys, qualitative, and quantitative measures

Didactic Seminar #3: Using Quality Improvement to Address Health Care Disparities

- Distinguish health care disparities from health disparities
- Frame HCD as a *quality* and *system* problem
 - AHRQ Natl HCD report and IOM reports
- Importance and limitations of data on race, ethnicity, and language
- QI to close HCD gaps
 - Broad or targeted approach?
- Examples of national and local interventions



Experiential Quality Improvement: Resident-Driven Projects

- **F**= Find a process to improve: Residents each identify a problem
- **O**=Organize a team: Meet with team to fully understand problem and causes of variation
- **C**=Clarify current knowledge of the problem and
U=Understand sources of variation: Present plan for collecting data to support assertion that there is a problem
- **S**=Select a process to improve: Select the process improvement strategy—based on feedback from peers and faculty
- Work through PDSA cycles

Lesson Learned: process of feedback and designing project

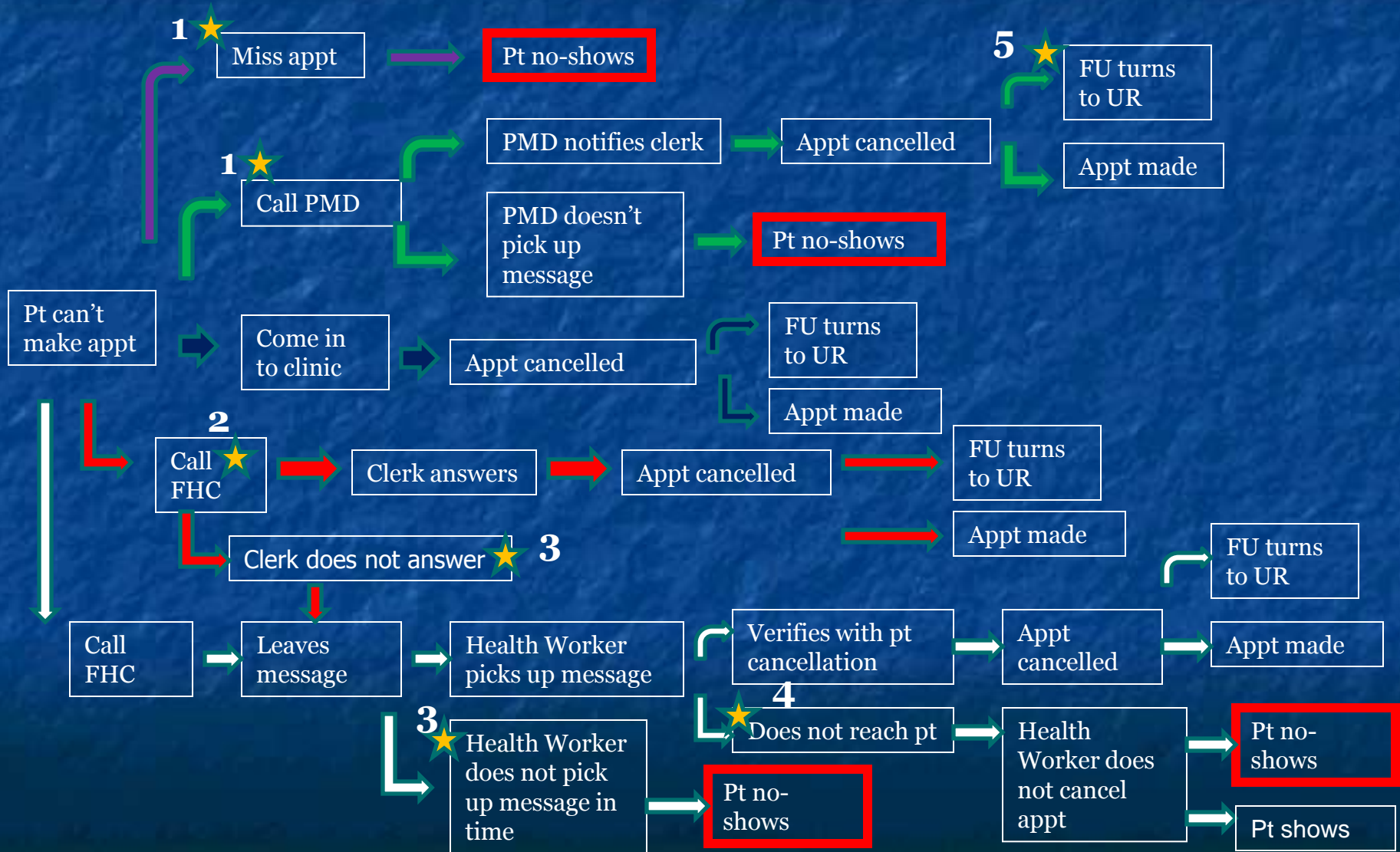
- Scope
- Avoid improvement plan which hinges only on provider education
- Data must support that there is a problem
- Use PDSA cycles to test and measure improvement

Scope: big => small

- Residents tend to gravitate toward large, ambitious projects (i.e. CenteringPregnancy)
- Residents have approximately 18 hours to work on their projects outside of seminars, which seems like a lot of time.
- Choice of project that involves scheduling or care over time hard to "PDSA" because 18 hours only spans 2-3 months

CQI Project: turning cancelled appts into open slots

U: Understand Variation

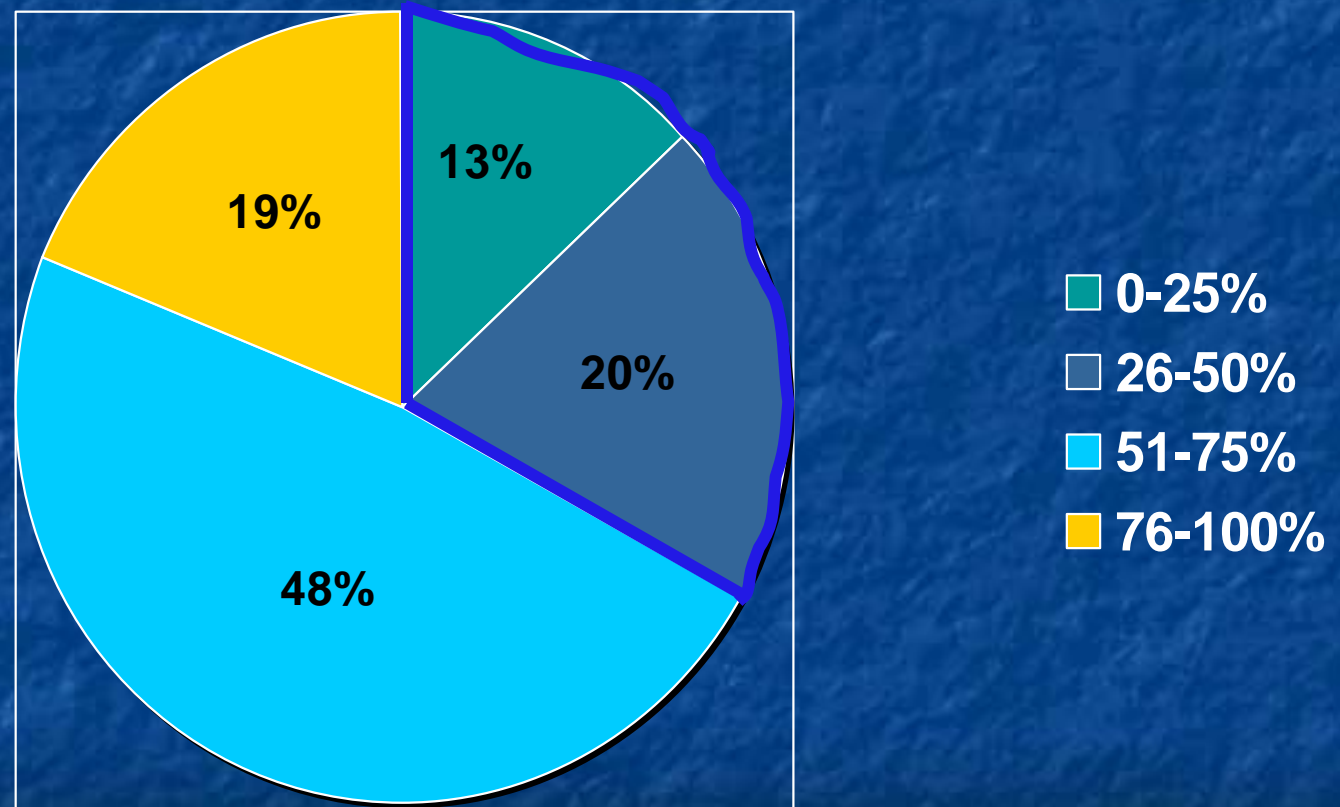


Education \neq Process Improvement

- Use of provider surveys (but not just to measure satisfaction)
- Provider education can be the process improvement *only* if it leads to measurable improvement in care

CQI: Chronic Pain Management at the FHC

How often do we feel there is a clear pain diagnosis?



Providers were asked what percentage of the time their patients had a clear diagnosis for the cause of their pain.

Baseline data must support the problem

- Residents are energized to fix problems they've been living with for 2+ years
- Challenge: redirect energy to a measurable problem to be able to show improvement
- Distinction between process problems and provider dissatisfaction

CQI: Improving Cycle Time for a Resident Primary Care Visit

C: Clarify Current Knowledge of the Process

Registration	Intake	Triage	Waiting for MD	MD Visit	Discharge	Total Time	Pt Arrival vs. Appt time
13	8	3	0	20	1	43	-5
5	3	2	0	40	12	72	-25
7	1	2	17	20	1	56	-38
2	1	2	14	33	18	77	-7
3	3	3	0	30	1	46	8
4	1	4	25	26	18	83	-16
8	3	8	0	41	5	58	6
Avg: 6.5 Variation: 2-13	Avg: 3.5 Variation 1-8	Avg: 3.5 Variation 2-8	Avg: 8 Variation 0-25	Avg: 30 Variation 20-41	Avg: 8 Variation 1-18	Avg: 62 Variation 43-83	Avg: -11 Variation -38 +8

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Plan PDSAs to measure improvement

- Finding time to do PDSAs
- Engaging staff so they will test change
- Working with team members so that they will continue “PDSAing” when resident goes off block or graduates
- Ok to start small and measure small

CQI: Scheduling follow-up appts at the FHC

Plan: Process Improvement

- Decrease the internal patient demand (backlog + monthly appointment requests) by encouraging f/u appt folder review by residents
- Goal is to prevent the scheduling of patients that may not need to be seen and therefore free up appointments that are more urgent
 - Patients who might not need to be seen include multiple no shows, recently seen by PMD or other provider, has multiple dispo sheets for appointments

Study: Impact of PDSA on Internal Demand for Current Month

Resident	A	B	C	<i>R3 avg</i>
Appt slots/month	48	48	48	
Current month + Backlog	83	44	66	<i>120</i>
Current month (before reviewing)	59	44	21	<i>70</i>
Current month (after reviewing)	48	27	16	
Dispo sheets removed	11	17	5	

Act/Adjust: Summary

- The principal benefit from folder review seems to be reducing the backlog >> current month by discarding dispo sheets that are duplicates and recently-seen patients, etc.
- Is the folder review process effective in reducing the total number of patients awaiting appointments?
 - Would need to continue regular folder review and reassess in a few months the state of the backlog

Advocacy and Engagement

- **Engagement with clinic staff**
- Involvement of patient in process of describing problem and in developing improvement strategy
- Advocate for improvement

CQI: PCP Continuity for Refugee Screens

O: Organize to Improve

■ Team:

- Newcomers Health Program (NHP) staff including coordinator Samira Causevic, Christy Diedrick, Newcomers Health Workers
- Residents/NPs doing refugee screens
- Grace Espinal (green team clerk)
- Adelia Carandang (clerical supervisor)
- Sarah Kureshi (R3)

- ### ■ Mission Statement: To improve PCP continuity for initial refugee screens & screening follow-up visits

Advocacy and Engagement

- Engagement with clinic staff
- **Involvement of patient in process of describing problem and in developing improvement strategy**
- Advocate for improvement

CQI: Chronic Pain Medicine Refills

C: Phone Survey of Patients

Phone survey among resident-treated chronic pain patients to determine their satisfaction with our delivery of pain management. Goal: to clarify and understand their satisfaction with chronic pain care.

7 patients surveyed

10 pt scale of satisfaction with process for
getting pain meds refilled

Average 6 (range 4-10)

Problems identified in patient interviews

- Difficulty getting refills (5)
- Doesn't want PMD to think he/she is abusing her meds (1)
- Undertreated pain (2)
- Meds have to be prescribed each month (2)
- None of the patients reported using the Pain Clinic for refills.
- One (1) patient reported problems getting pain medicine refilled at the Refill Clinic

Advocacy and Engagement

- Engagement with clinic staff
- Involvement of patient in process of describing problem and in developing improvement strategy
- **Advocate for improvement**

Cervical Cancer Screening Rate Improvement Project

Elizabeth Ferrenz

3rd year resident

Dept. Family & Community Medicine

F – Find a process to improve

- Cervical cancer screening rate defined as women age 24-64 who have had a pap smear in the last 36 months (if clinically indicated)
- Family Health Center (FHC) cervical cancer screening rate doesn't meet the following goals
 - 80% goal for Community Health Network clinics
 - 77.5% Medicaid clinic 90th percentile
- 65.6% - June 2009 up-to-date rate
- 69.5% - December 2009 up-to-date rate
- Quality improvement targets for the San Francisco Health Plan
 - Pay for performance for improving 5% and 10% from baseline

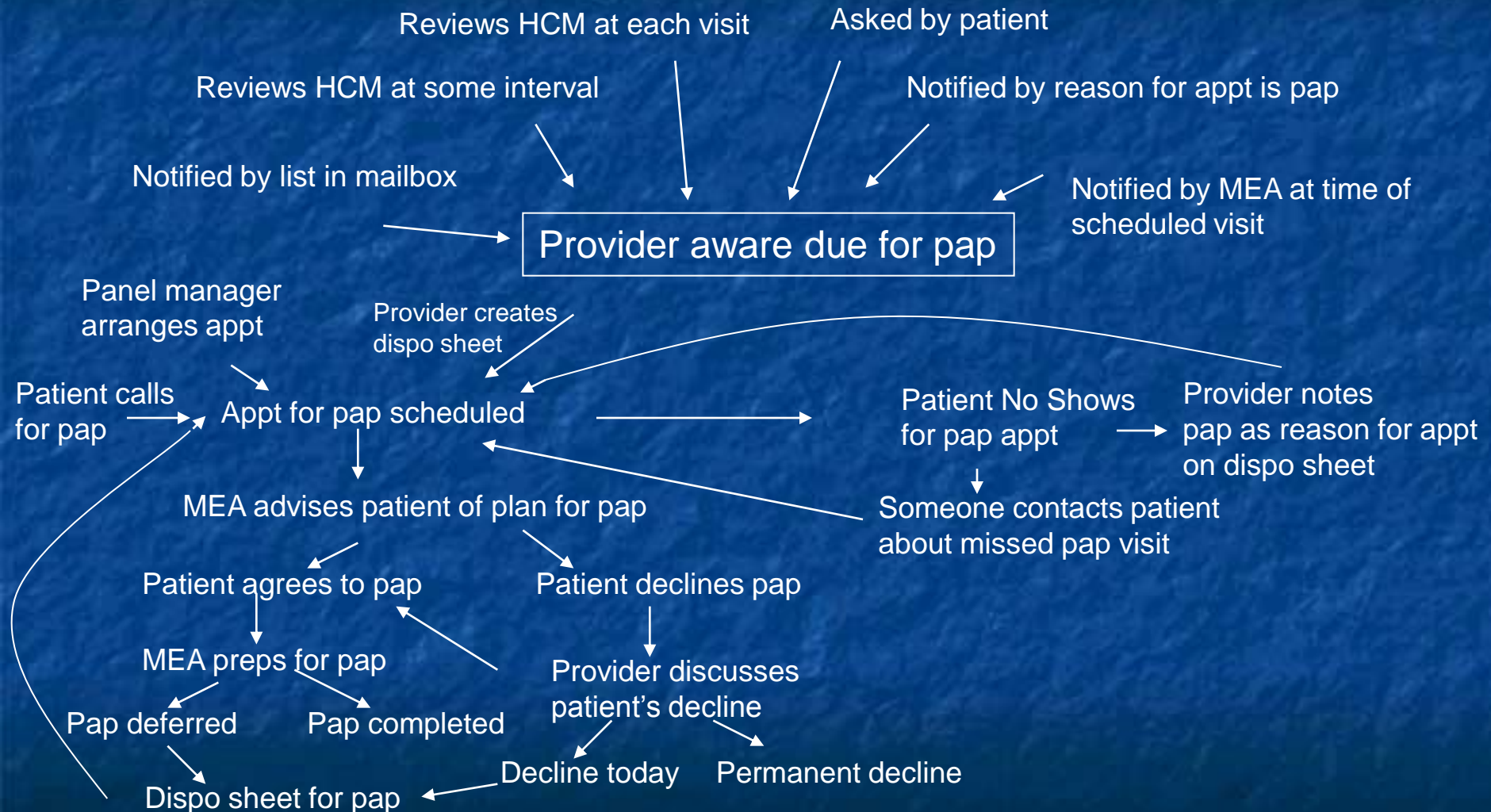
O - Organize a team

- Originally formed in summer 2009
 - La (data analyst), MEA representative from each team
 - Cristina, Alfonso, Vanessa, Vicki, me
- Pay for Performance group
 - Hali, Ceci, Jorge
- Winter 2010 group
 - Ceci – direct patient contact, scheduling
 - MEAs – see above
 - Clerical Supervisor

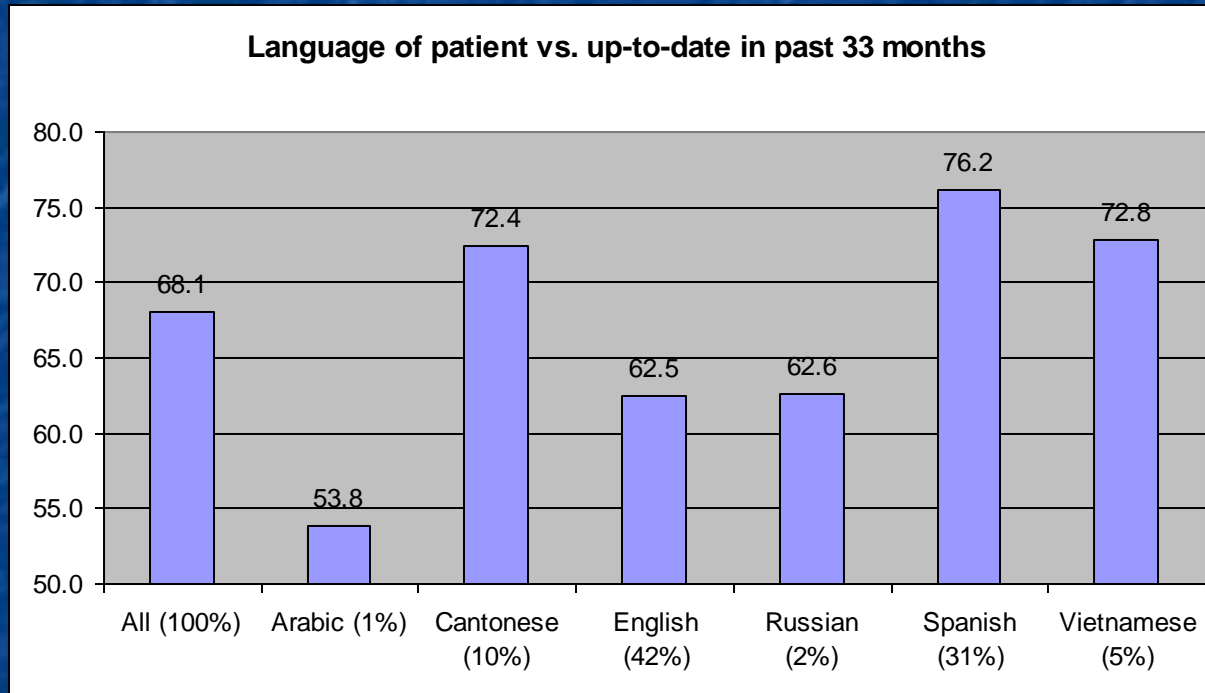
C – Clarify current knowledge FHC initiatives since June 2009

- MEAs empowered to note if pap overdue on clinic sheet
- Ceci contacting patients by phone
- Unassigned patients who are overdue for pap test are assigned to a PCP
- Removing patients from the FHC list
- Providers given a printout of patients who are overdue for cervical cancer screening

U – Understand Variation - Indicated paps

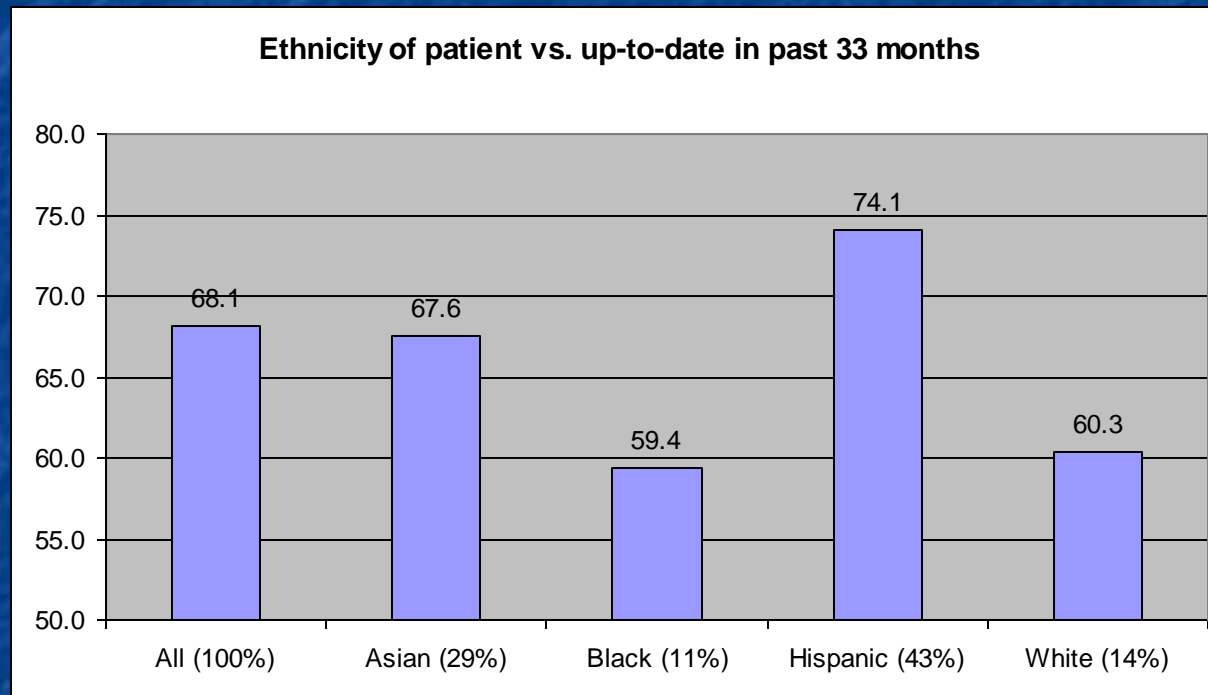


Language of patient associated with variation in pap rate



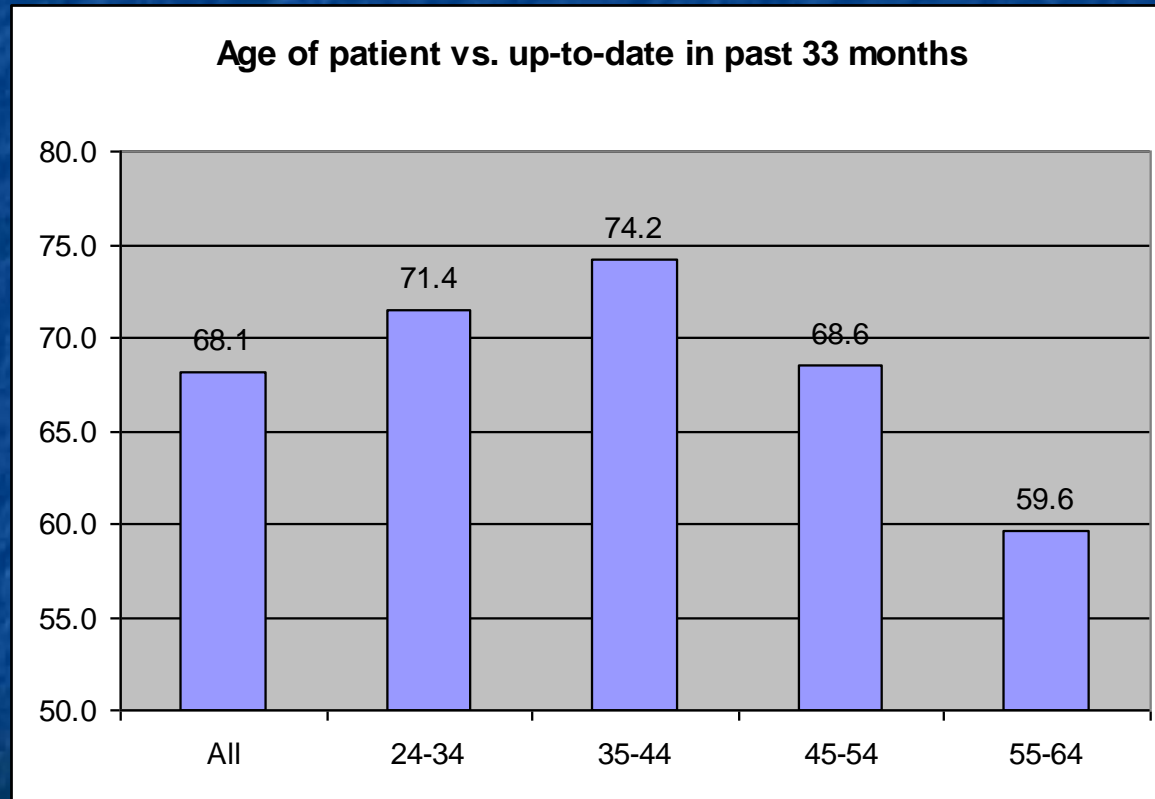
i2i data for up-to-date for past 33 months based on language
Percentages next to language indicate percent of each language group
in the overall group of women eligible for pap at the FHC

Ethnicity of patient associated with variation in pap rate



i2i data for up-to-date for past 33 months based on ethnicity
Percentages next to ethnicity indicate percent of each ethnic group
in the overall group of women eligible for pap at the FHC

Age of patient associated with variation in pap rate



i2i data for up-to-date for past 33 months based on age
Older women (55-64) are less likely to be up-to-date

S – Select a Process for Improvement

- Provider directed process improvement
 - Ceci not available at start of project
 - MEAs didn't feel their notation on the clinic list of pap was helpful
 - No La to act as panel manager
 - Providers can provide insight into patients and "not indicated" designations

Plan

Provider Directed Improvement

- Plan discussed in CQI meetings and presented at provider meeting
- Handout created with introduction to project and teaching about indications for cervical cancer screening
- Test run of handout & provider lists with CQI group
- Revision of provider listings, awareness that providers will need LCR access to complete

Do

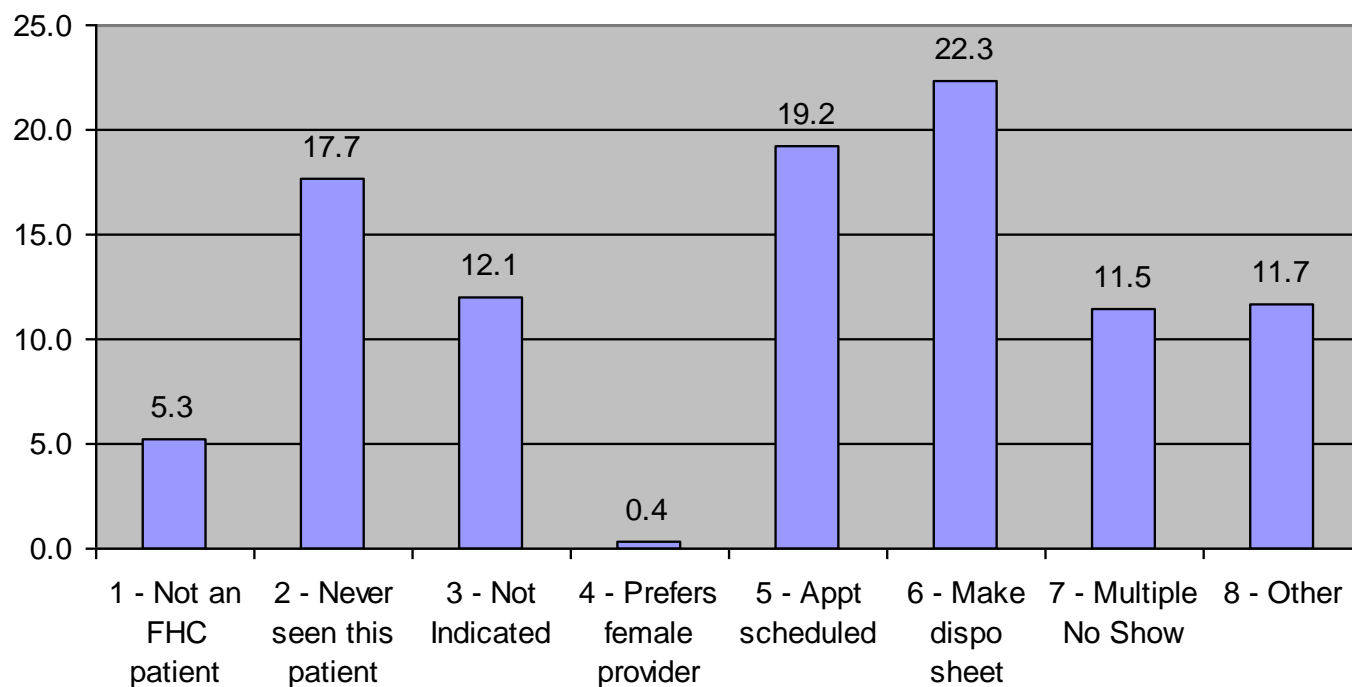
Provider Lists & Encouragement

- Provider lists handed out to providers or placed in mailboxes
- Email to all FHC primary care providers sent
- Provider encouragement by email
 - Inter-group competition between residency classes, NPs, faculty
 - Chair of the department emailed faculty to encourage participation

Patients by category

1 - 44
2 - 148
3 - 101
4 - 3
5 - 161
6 - 187
7 - 96
8 - 98

Provider coding for patients with overdue cervical cancer screening 838 patients included, 59% of providers responding



Study

Up-to-date Improvement

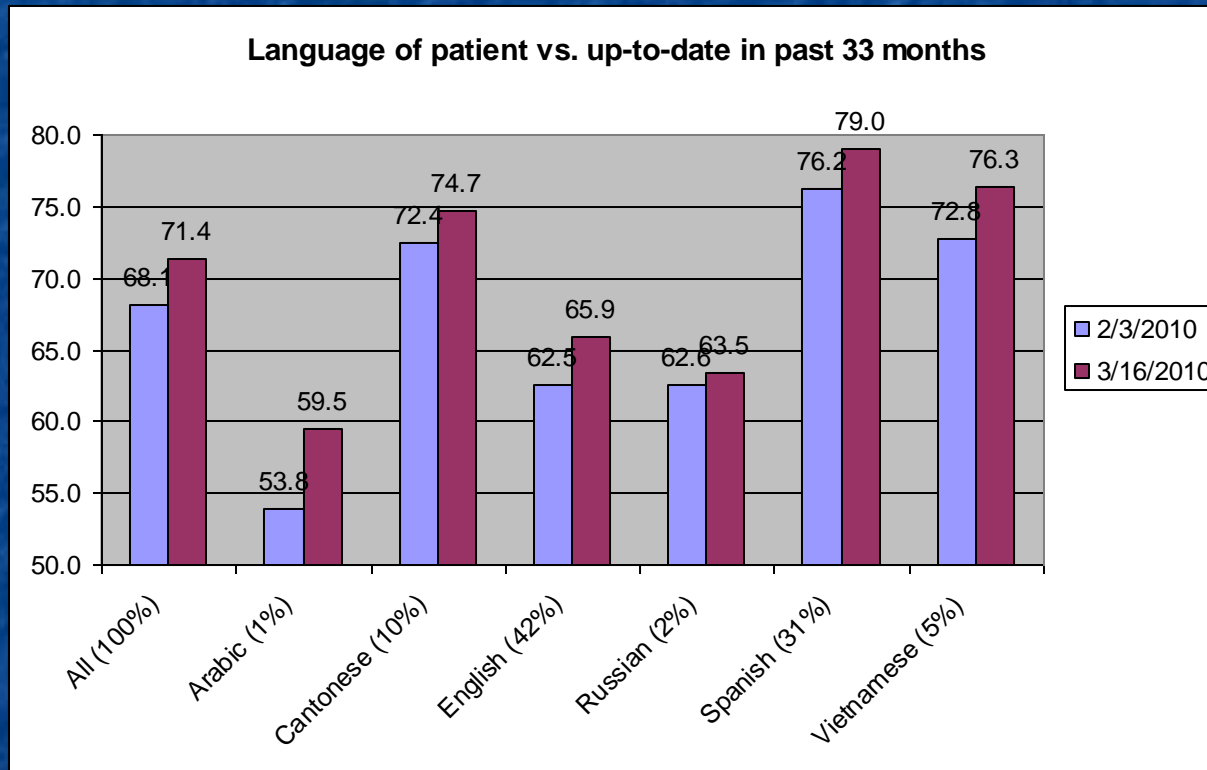
Defined as pap test in past 36 months or “not indicated”

- 65.6% - June 2009
- 69.5% - December 2009
- 73.5% - March 16, 2010 (yay!)

Multifactorial simultaneous interventions with provider lists, Ceci calling, MEAs asking patients. All the data from the providers has not yet been updated into the LCR.

Study

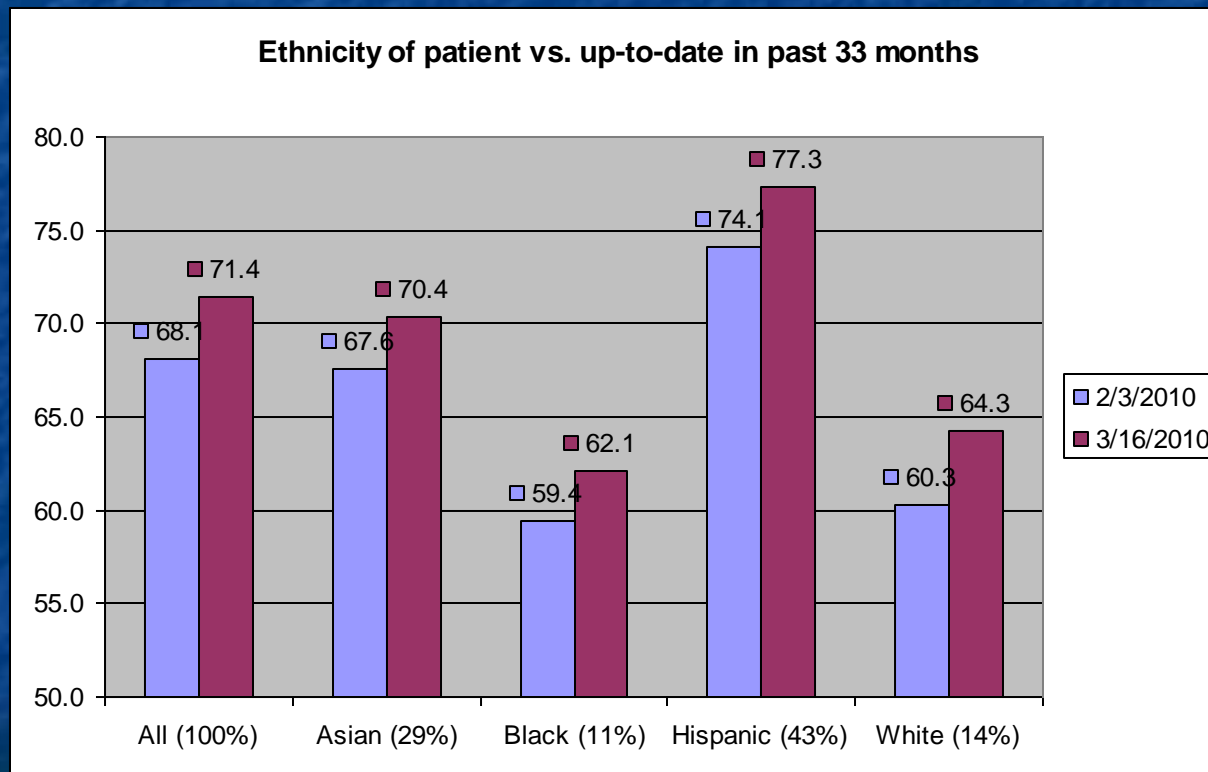
Up-to-date rate - Language



Overall 3.3% improvement
Arabic speakers 5.7% improvement
Russian speakers 1.4% improvement

Study

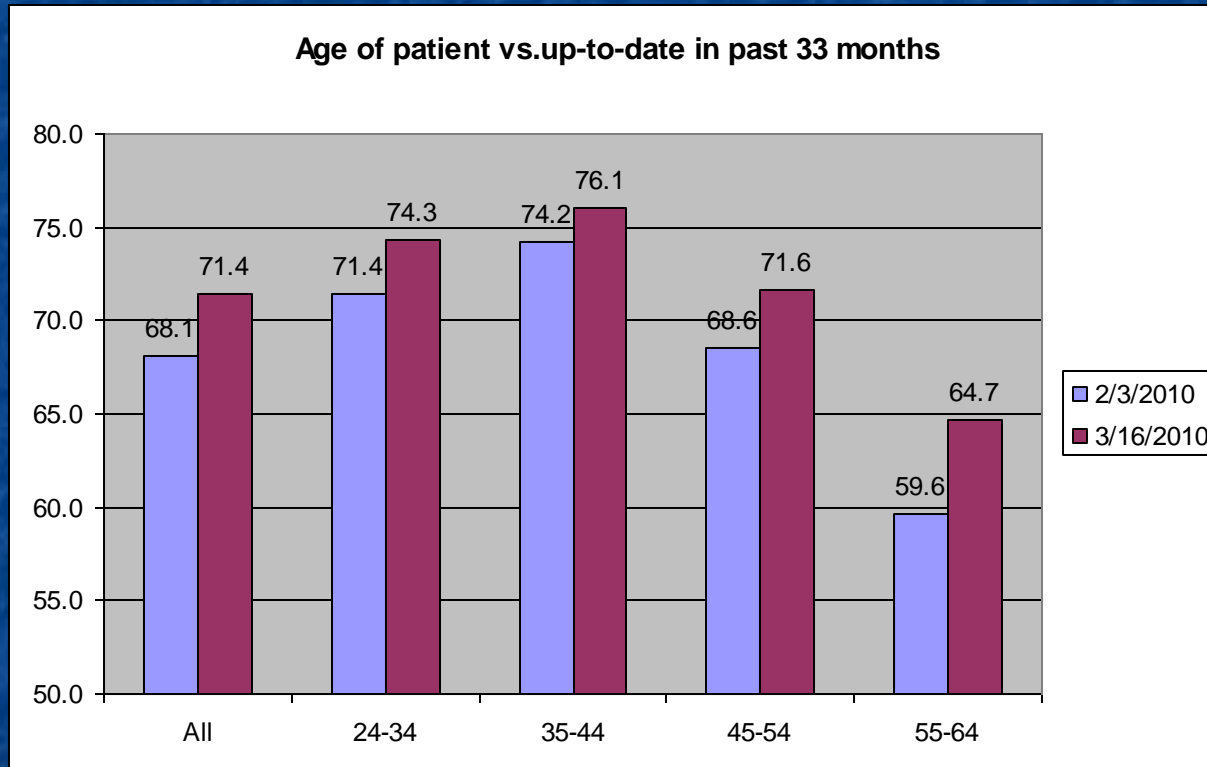
Up-to-date rate - Ethnicity



Overall 3.3% improvement - similar amongst all ethnic groups

Study

Up-to-date rate - Age



Overall 3.3% improvement

Oldest group 55-64 had 4.9% improvement

This may be related to improved documentation of "not indicated"

Act - Provider Driven

- Provider lists given out biannually in September and March
- Provider meeting announcement of project & encouragement
- Panel manager/Hali Hammer remain responsible for acting on provider designations
- NP clinic bi-annually to do pap tests after provider list review

Presenting a CQI Project

- Complete project presentation
 - CQI group – residents & faculty
 - Departmental colloquium
 - Northern California resident CQI conference
- Targeted project presentation
 - Provider meetings
 - Staff meetings
 - Residents in primary care internal medicine

Evaluation and Outcomes

- Resident projects
- Resident pre- / post-test
- Peer / faculty evaluation tool
- Resident perspective

Pre- / Post-Test Used to Evaluate Course

- 15 questions – 5 point likert scale
- 3 open-ended questions
- Knowledge, self-efficacy, evaluation of course components
- Strongest areas:
 - I'm confident that if I identify a quality problem in my practice or in my own system of care in the future, I will know how to initiate an improvement project. **91% of respondents either agree or strongly agree**
 - I would like to participate in a quality improvement project in my future practice. **100% agree or strongly agree**

Resident feedback: comments

- “Please keep this curriculum: definitely one of the most important skills I’ve learned in residency.”
- “FOCUS-PDSA was a good conceptual way of understanding a CQI project and it is good practice to do it here so I can feel confident trying this out in the future.”
- “This is important, especially since many of us will continue to work at FQHCs. Would be nice to start earlier in residency.”

Resident feedback: areas for improvement

- “Start earlier: plant 1st info (sessions) at end of R2 year so we’re thinking of projects already during our 1st block of R3 year.”
- “Need more time to plan and do PDSA cycles.”
- “We need more explicit instructions on each step like plan for best practice visits.”

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Thank you!

- Lisa Ward, faculty colleague
- Teresa Villela, Residency Director
- George Saba, Associate Residency Director
- Family Health Center staff