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CENTER FOR INNOVATION IN ACCESS AND QUALITY



# Improving the Primary-Specialty Care Interface

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*No Disclosures to Report*

## Primary Care

11 non-profit  
community clinics

5 hospital-based  
clinics

11 DPH  
community clinics  
(COPC)

skilled nursing  
facility

county jails

eReferral



EMR

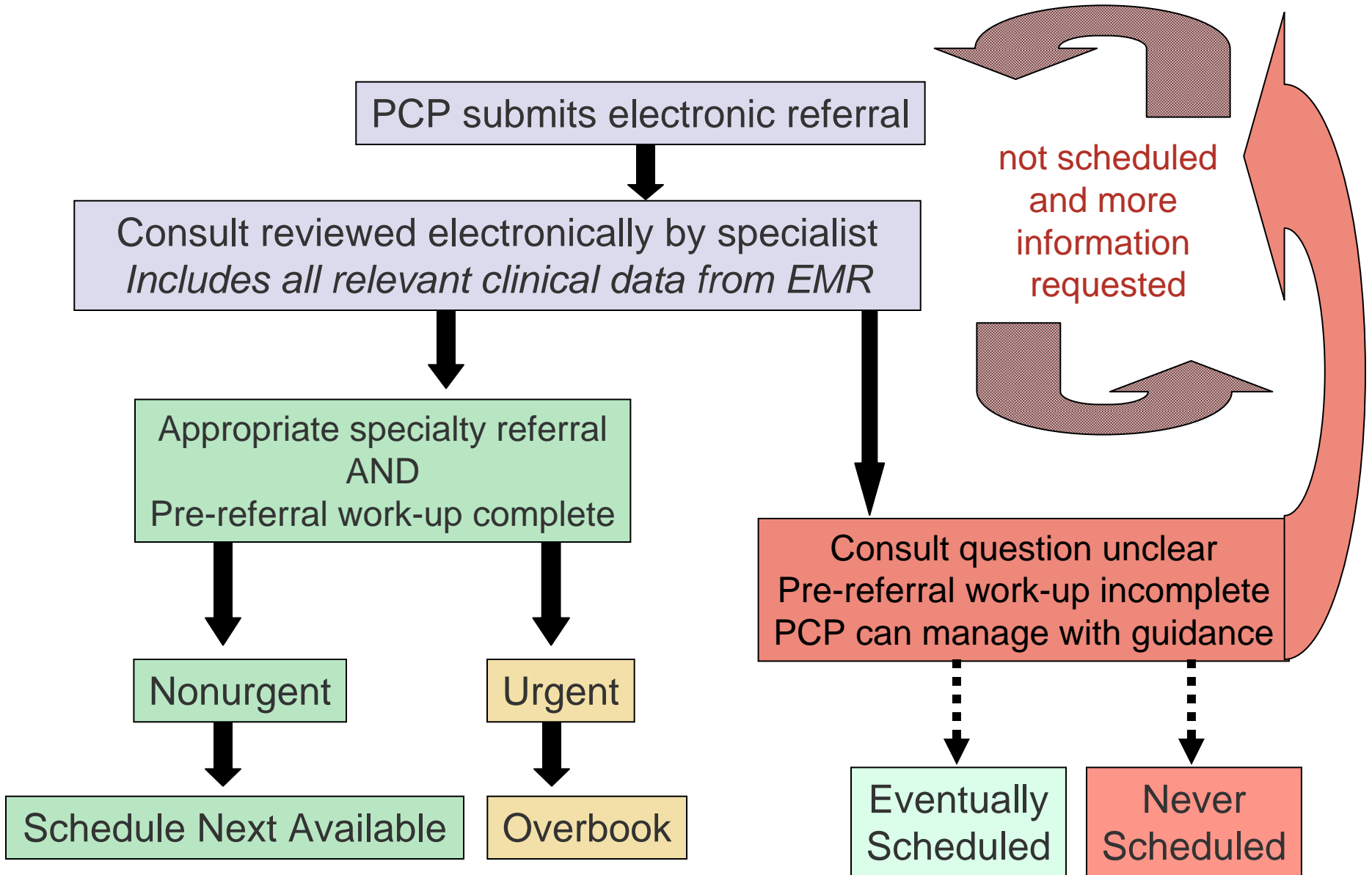
## Specialty Care

**SFGH/UCSF**

Salaried Academic Faculty  
Comprehensive Specialty Services  
>579,000 ambulatory visits annually  
35% specialty care, 20% diagnostics

37% uninsured  
35% Medicaid  
17% Medicare

# eReferral Workflow



[Switch to SFGH Pediatrics Portal](#)[Switch to Laguna Honda Portal](#)

## SFGH Adult Portal

Welcome to the eReferral site, which has been developed to handle appointment requests from Community Health Network (CHN) and CHN-affiliated providers for outpatient specialty consultations. Routine consultation requests for the below clinics will no longer be accepted by hardcopy, facsimile, or phone. Please follow the steps outlined below in submitting your referral request.

Begin by selecting an eReferral type for: [TEST](#), [TEST](#)

### Medical Specialty Clinics

[Allergy Adult Clinic](#)  
[Cardiology Clinic](#)  
[Chest Specialty Service](#)  
[Diabetes Services](#)  
[Endocrinology Clinic](#)  
[Gastroenterology Clinic](#)  
[Geriatrics Clinic](#)  
[Hematology Clinic](#)  
[Liver Clinic](#)  
[Neurology Clinic](#)  
[Oncology Service](#)  
[Renal Clinic](#)  
[Rheumatology Clinic](#)

### Womens Health Specialty Clinics

[5M Breast Evaluation and Referral Clinic](#)  
[Gynecology Clinics](#)  
[Obstetric Clinics](#)

### Other Programs

[Anticoagulation FHC \(No Review\)](#)  
[1M Anticoagulation Clinic \(No Review\)](#)  
[Financial Fitness Clinic \(No Review\)](#)  
[Comprehensive Pharmacy Care](#)  
[Wellness Center \*\*New!!!\*\* \(No Review\)](#)  
[Health At Home](#)  
[Psychosocial Medicine](#)  
[Respite Program](#)  
[Stop Smoking Program \(No Review\)](#)

### Surgical Specialty Clinics

[Cardiothoracic Surgery Service](#)  
[3M Breast Surgery Clinic](#)  
[Otolaryngology-Head and Neck Surgery Clinic \(ENT\)](#)  
[General Surgery Clinic](#)  
[Neurosurgery Clinic](#)  
[Concussion eScheduling \(No Review\)](#)  
[Ophthalmology/Optometry eScheduling \(No Review\)](#)  
[Orthopaedic Surgery Clinic](#)  
[Plastic Surgery Clinic \(No Review\)](#)  
[Podiatry Clinic](#)  
[Urology Clinic](#)  
[Vascular Surgery](#)  
[Vasectomy Service at FHC](#)

### Diagnostic Services

[Audiology eScheduling \(No Review\)](#)  
[Echocardiography Clinic \(No Review\)](#)  
[EEG Service \(No Review\)](#)  
[Holter Monitor \(No Review\)](#)  
[Treadmill Exercise Testing \(ETT\) \(No Review\)](#)  
[Sleep Study](#)  
[Radiology CT Service](#)  
[Radiology Fluoroscopy](#)  
[Radiology Mammo Screening Service \(No Review\)](#)  
[Radiology MRI Service](#)  
[Radiology Ultrasound Service](#)

Patient and Provider information can be up to 24hrs old. Corrections to this information must be made in the LCR.

Patient Information

Referring Provider Information

Name  
Phone  
ID  
Insurance  
Demog  
Address  
City/State

Name: BURNS, ANNETTE NP  
eMail:  
Pager:  
Fax:  
Ref Loc: Family Health Center-FHC  
PagerBox **PagerBox**



Attending Provider Information

Primary Care Provider Information

The Referring Provider is an Attending.

The Referring is the PCP

All Communication will become part of the Electronic Medical Record (LCR)  
Reason for Consultation

Include pertinent history, physical laboratory findings, and medications.

47 year old female with fatigue and family history of thyroid disease. THS <0.1 with T3 and T4 high. Alk phos is also high at 230. GGT sl high at 57 all other LFT normal. THyroid nonpalpable on exam. I am thinking of gettin antibody tests. Does she need a iodine uptake scan? Can alk phos be elevated in thyroid disease? Thanks Annette

Scheduling considerations for this patient

10/29/2012 5:50:24 AM entered by elizabeth murphy

Most patients with hyperthyroidism have a high alkphos due to increased bone turnover (doesn't exactly explain the slightly up GGT however). So would recheck when she's euthyroid. So if no clinical findings (eyes/bruit) suggestive of Graves, very reasonable to get a TSH Receptor antibody with next labs. No need to get a scan at this point. Typically do that prior to ablation or if for some reason we can't make dx of etiology of hyperthyroidism otherwise. So assuming her gland isn't tender on exam/no recent URI (so no evidence thyroiditis) would be reasonable to start methimazole at 5 mg daily (or if she's clinically symptomatic/tachy etc could do 10 mg daily). And then would recheck a TSH/FT4 with the antibody in 4 weeks or so. Wasn't clear if you wanted us to see her or not. Happy to do either way. If you want us to see her just please give lab slip for above for right before the visit. Otherwise, just let me know when f/u labs back.


As a reminder to review with a patient when prescribing methimazole or PTU, both drugs have a very rare but real SE of agranulocytosis. Patients should be instructed to come in immediately for any sore throat, fever, or other sign of infection to have a WBC with diff checked.

Patient and Provider information can be up to 24hrs old. Corrections to this information must be made in the LCR.

### Patient Information

Name: \_\_\_\_\_  
Phone: \_\_\_\_\_  
ID: \_\_\_\_\_  
Demog: Gender: M DOB: \_\_\_\_\_ Age: 65 Lang: ENG  
Address: \_\_\_\_\_  
City/State: SAN FRANCISCO, CA, 94112

### Reviewing Consultant Information

Name: MURPHY, ELIZABETH J. MD [MSO](#)  
[Info](#)  
eMail: [EMURPHY@MEDSFGH.UCSF.EDU](mailto:EMURPHY@MEDSFGH.UCSF.EDU)  
[Help for Text Paging link](#)  
PagerBox  \*\*\*\*\*



You are the Referring Provider  
[Change Referring Provider](#)

### Attending Provider Information

The Referring Provider is an Attending You are the Attending

### Primary Care Provider Information

You are the Primary Care Provider

All Communication will become part of the Electronic Medical Record (LCR)

### Reason for Consultation

Include pertinent history, physical, laboratory findings, and medications.

**PCP initiates referral request**

July 2011-June 2012  
27,604 new submissions

**Specialist reviews**

Appropriate and complete consults  
60%  
(16,466)

Consult inappropriate or incomplete or clinic visit not needed  
40%  
(11,138)

**Scheduled**  
need to be seen in clinic

**Not initially scheduled**  
specialist responds to request more information and/or make recommendations

50%  
(13,783)

10%  
(2,683)

Iterative communication as needed

Non-urgent **routine** appointment

Urgent **overbook** appointment

PCP provides information, initial evaluation complete, visit needed

No appointment 6 months after last exchange

20%  
(5,641)

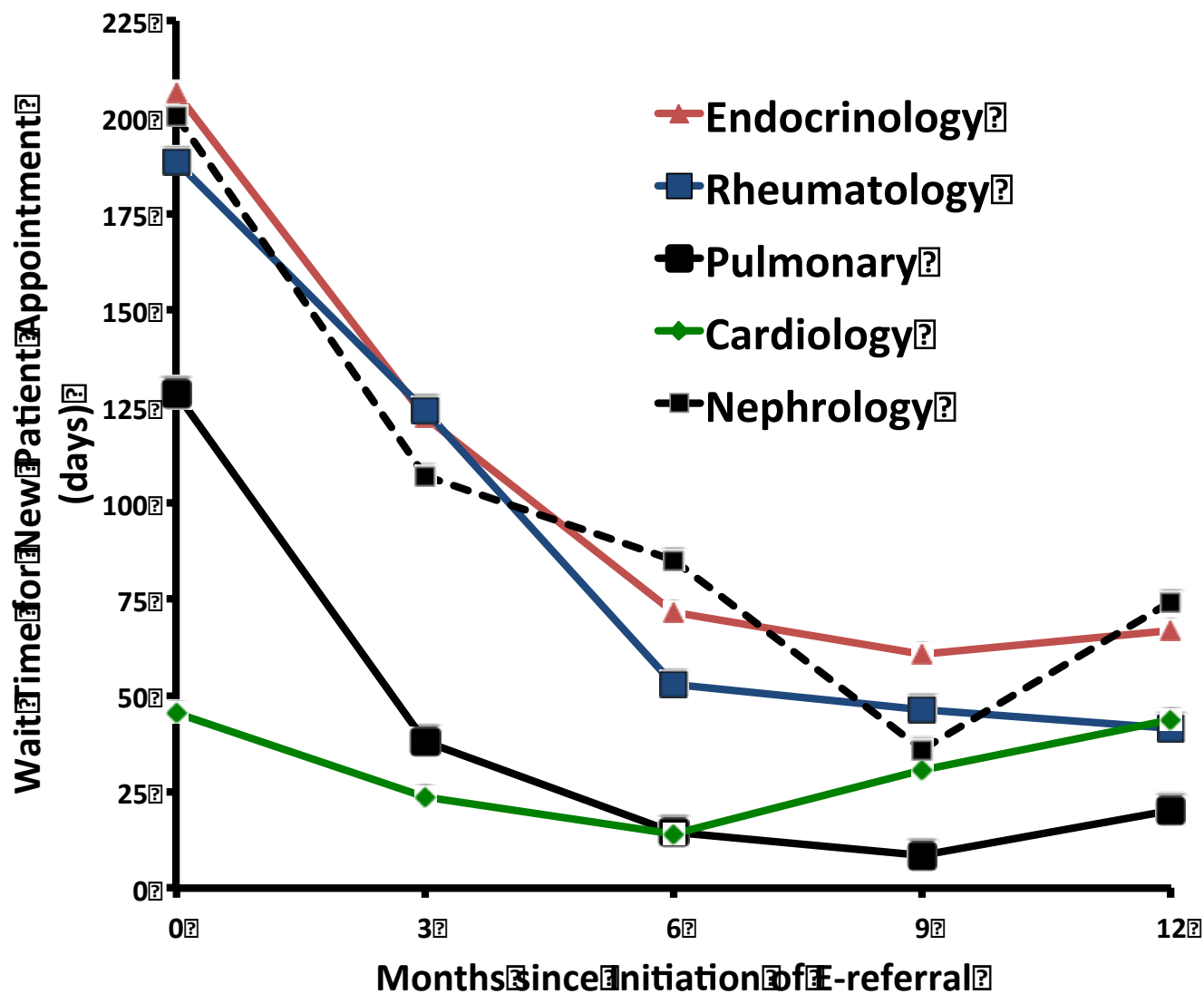
20%  
(5,397)

**Scheduled**

**Never Scheduled**



# Impact on Wait Times

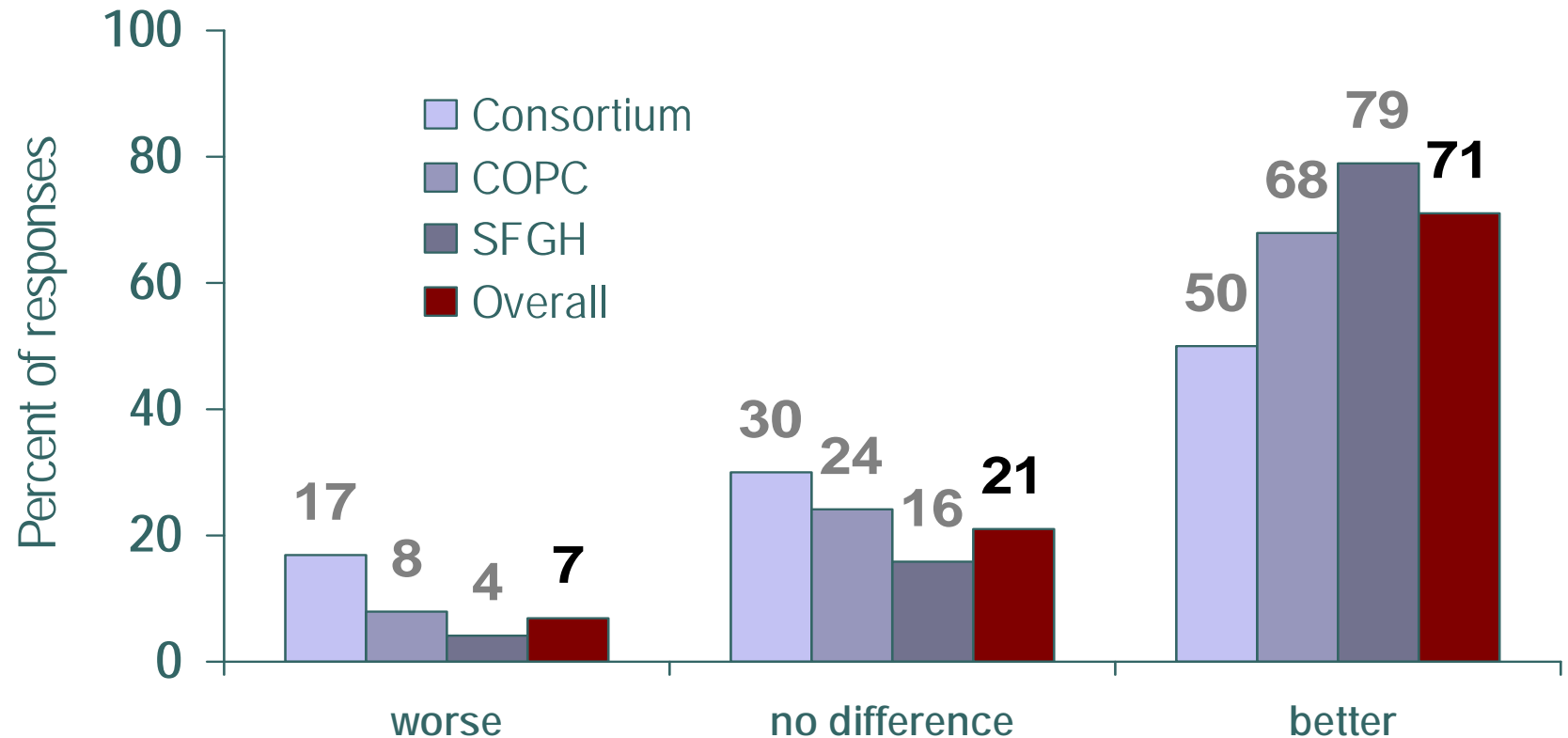




# Impact on Primary Care

Overall, how has eReferral changed clinical care for your patients?

81% response rate (298 of 368)

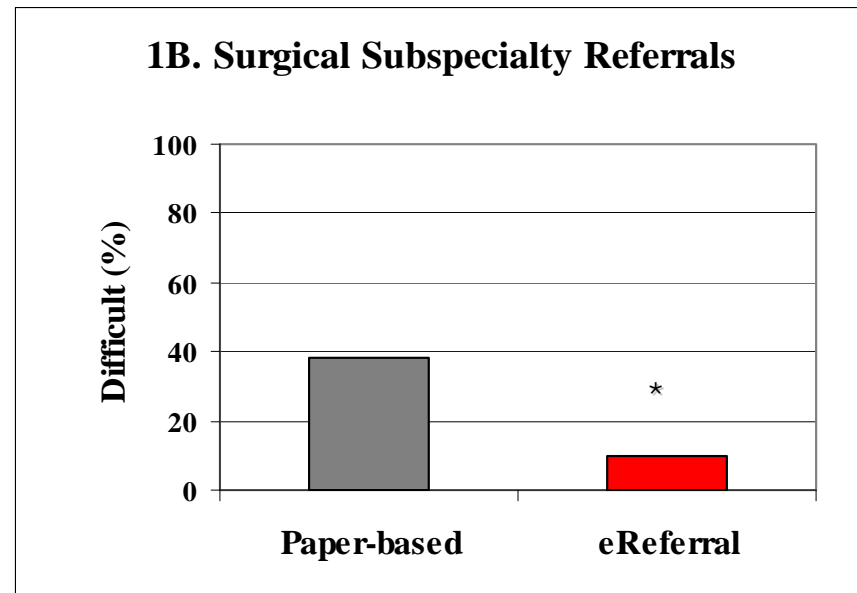
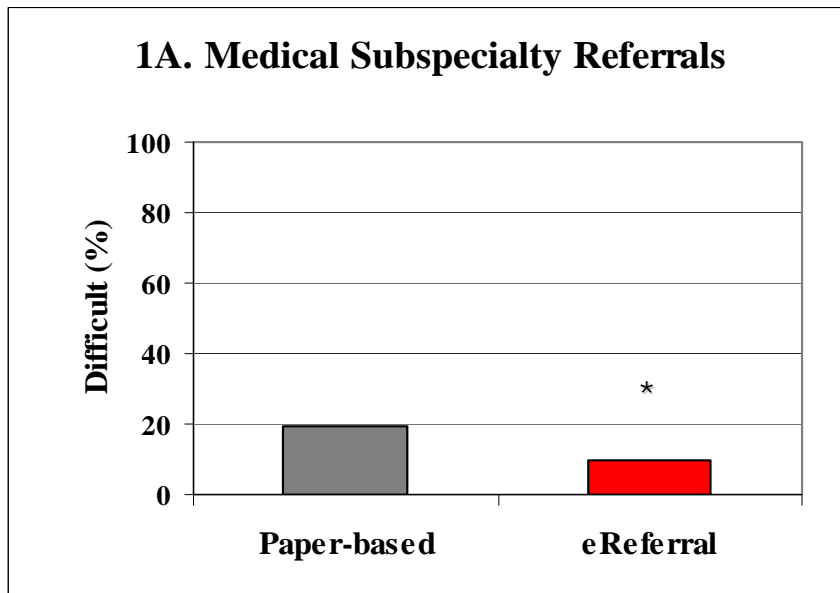


# Impact on Specialty Clinic Efficiency



**HOW DIFFICULT WAS IT TO IDENTIFY** the reason for the consultation or clinical question before interviewing and examining this patient today?

Percentage of specialists responding “somewhat difficult” or “very difficult.” \* p-value <0.05



N = 618 (413 medical, 205 surgical)

# Impact on Clinic Complexity



## *Endocrinology*

Fiscal Year 2011 -

Top Ten Most Frequent Dx by Visit Count

Count	%	ICD9 Description
690	32%	Graves disease without crisis
376	17%	thyroid cancer
255	12%	nontoxic uninodular goiter
220	10%	thyrotoxicosis nos w/o crisis
140	6%	testicular hypofunction
114	5%	pituitary neoplasm
104	5%	nontoxic multinodular goiter
97	4%	anterior pituitary hyperfunction
93	4%	primary hyperparathyroidism
84	4%	hypothyroidism nos

## Primary Care

- Reduced wait times
- Quick access to specialist expertise
- Primary – specialty dialogue is recorded in real time in EMR
- Case-based “CME”
- Virtual co-management keeps patients in PCMH, reduces need for external care coordination
- More “balls” in PCP court

## Specialty Care

- Reduced wait times
- Avoidance of incorrect referrals
- Ability to clinically triage
- Improved clarity of consultative question
- Increased efficiency of in-person visits with pre-consultative guidance
- Opportunities to educate, learn
- Increased “case-mix” in clinics/greater complexity among patients

# eReferral Team



## eReferral Steering Committee

- Director: Alice Chen
- Specialty Director: Lisa Murphy
- Evaluation: Delphine Tuot, Justin Sewell
- IT Specialist: Kjeld Molvig

## eReferral Medicine Reviewers

- Cardiology: Mary Gray
- Diabetes: Mimi Kuo, Audrey Tang
- Endocrinology: Lisa Murphy
- Gastroenterology: Justin Sewell
- Hematology: Brad Lewis
- Liver: Mandana Khalili
- Oncology: Judy Luce
- Pulmonary: Adithya Cattamanchi, Antonio Gomez
- Renal: Sam James
- Rheumatology: John Imboden

## eReferral Women's Health Reviewers

- Breast Evaluation: Diane Carr, Mary Scheib w/Judy Luce
- Gynecology: Rebecca Jackson and faculty
- Obstetrics: Rebecca Jackson and faculty

## eReferral Radiology

- Radiology lead: Alex Rybkin
- MRI, CT, U/S, fluroscopy: Nancy Omahen

## eReferral Surgery Reviewers

- Breast Surgery: Kelly Ross-Manashil with Peggy Knudson
- ENT: Christina Herrera with Andrew Murr
- General Surgery: Danielle Evans with Bob Mackersie
- Orthopedics: Diane Putney, Dorothy Christian, Brenda Stengele with Ted Miclau
- Neurology: Sean Braden with Cheryl Jay
- Neurosurgery/Neurotrauma: Sean Braden with Geoff Manley
- Plastics: Erin Fry with Scott Hanson
- Urology: Ben Breyer and fellow
- Podiatry: Erika Eshoo

## SF DPH Community Clinics

- Lisa Johnson

## San Francisco Community Clinic Consortium

- David Lown

## Funders

- San Francisco Health Plan
- Kaiser Permanente Community Benefits
- Blue Shield of California Foundation
- California Health Care Foundation

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**questions/comments**  
**achen@medsfgh.ucsf.edu**