The eReferral and eConsult Model for Specialty Care

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Webinar sponsored by:
The Center for Excellence in Primary Care and the Center for Care Innovations

Who Are We?

blue of california foundation

Care Integration Resource Center

eReferrals and eConsults
A New Model for Specialty Care

Delphine S. Tuot, MDCM, MAS

Asst. Professor of Medicine, University of California San Francisco
Director of eReferral, San Francisco General Hospital
Co-Director, Center for Innovation in Access and Quality

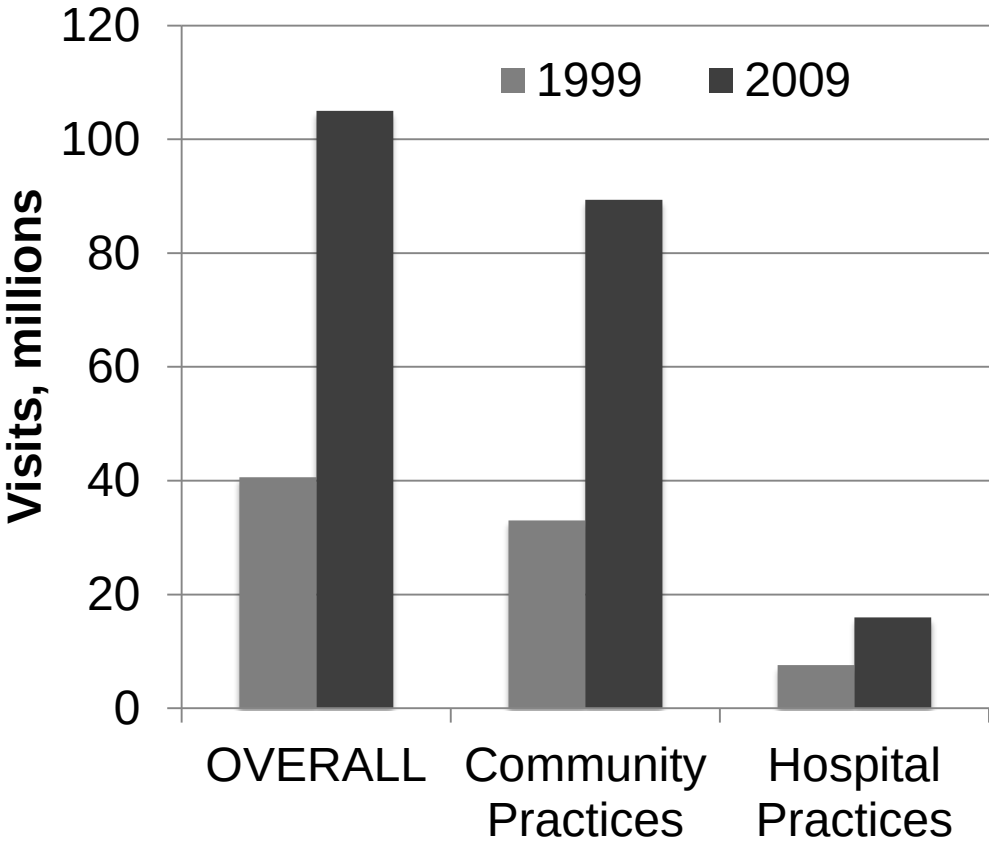
- No disclosures to report.

Overview

- Context – supply/demand mismatch of specialty care in the US
- What is the Medical Neighborhood?
- Enhancing the primary care – specialty care interface through electronic referral and consultation (eCR) systems

Specialty care trends

- Specialty visits comprise >50% of all ambulatory visits
- For patients <65, 1/3 patients referred to a specialist/year; for patients ≥ 65 avg of 2 referrals annually
- ~60% of U.S. physicians are specialists



National Ambulatory Medical Care Survey (NAMCS), National Hospital Ambulatory Medical Care Survey (NHAMCS); Barnett ML, Song Z, Landon BE. Trends in physician referrals in the United States, 1999-2009. Arch Intern Med 2012;172:163-70.

Care coordination demands

Context

Primary care physicians are responsible for coordinating care that their patients receive from other physicians. This role will probably expand with the implementation of such models of care as the patient-centered medical home.

Contribution

Investigators analyzed survey data from 2284 primary care physicians and claims for the Medicare beneficiaries they cared for in 2005. They estimate that, for every 100 Medicare patients a physician treats, the physician potentially must interact with 99 other physicians in 53 different practices.

Implication

To coordinate care of patients for whom they are the primary care physician, physicians must coordinate with a large number of other physicians.

—The Editors

Pham HH, O'Malley AS, Bach PB, Saiontz-Martinez C, Schrag D. Primary care physicians' links to other physicians through Medicare patients: the scope of care coordination. Ann Intern Med 2009; 236-242.

Specialty care in the safety net

UpDate

Special Report

Monitoring Local Safety-Net Providers: Do They Have Adequate Capacity?

In five diverse cities, safety-net capacity was strained for specialty and pharmaceutical services.

by Suzanne Felt-Lisk, Megan McHugh, and Embry Howell

ABSTRACT: The safety-net providers that serve the nation's thirty-nine million uninsured residents are vulnerable organizations even in good economic times, yet efforts to monitor their capacity have been limited at best. This study of the safety-net in five cities found that capacity was strained for specialty services and that access to pharmaceuticals was difficult, while primary care capacity was more often adequate to serve those who presented themselves for care. Also, free clinics grew during the 1990s, while many other safety-net providers focused on improving their efficiency and collecting more fees from patients.

Specialty care in the safety net

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In five diverse cities
pharmaceutical se

by Suzanne Felt-Lis

ABSTRACT: The safety-
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Access To Specialty Care And Medical Services In Community Health Centers

Lack of access to specialty services is a more important problem for CHCs than previously thought.

by Nakela L. Cook, LeRoi S. Hicks, A. James O'Malley, Thomas Keegan, Edward Guadagnoli, and Bruce E. Landon

ABSTRACT: Although community health centers (CHCs) provide primary health services to the medically underserved and poor, limited access to off-site specialty services may lead to poorer outcomes among underinsured CHC patients. This study evaluates access to specialty health services for patients receiving care in CHCs, using a survey of medical directors of all federally qualified CHCs in the United States in 2004. Respondents reported that uninsured patients had greater difficulty obtaining access to off-site specialty services, including referrals and diagnostic testing, than did patients with Medicaid, Medicare, or private insurance. [*Health Affairs* 26, no. 5 (2007): 1459–1468; 10.1377/hlthaff.26.5.1459]

Specialty care in the safety net

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The New York Times

U.S.

WORLD | U.S. | N.Y. / REGION | BUSINESS | TECHNOLOGY | SCIENCE | HEALTH | SPORTS | OPINION

Medicaid Growth Could Aggravate Doctor Shortage

Emily Berl for The New York Times

Dr. Ted Mazer, an ear, nose and throat specialist in San Diego who treats people on Medicaid, with Oresta Johnson.

By ABBY GOODNOUGH
Published: November 28, 2013

Referral process characterized as…

"often incomplete and needlessly inefficient"

Kunkle 1964

"often falls short of its goals"

Lee, Pappius and Goldman 1983

"not consciously designed and leaves much to be desired"

Gandhi et al 2000

"perilous journey through the health system"

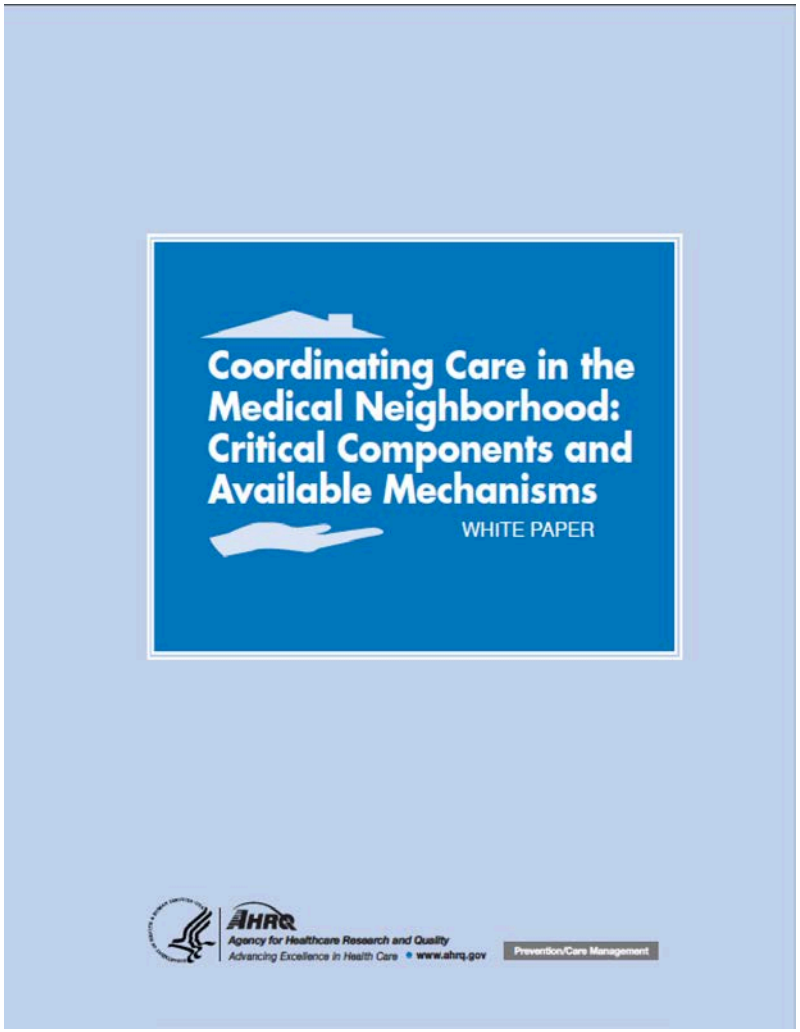
Bodenheimer 2008

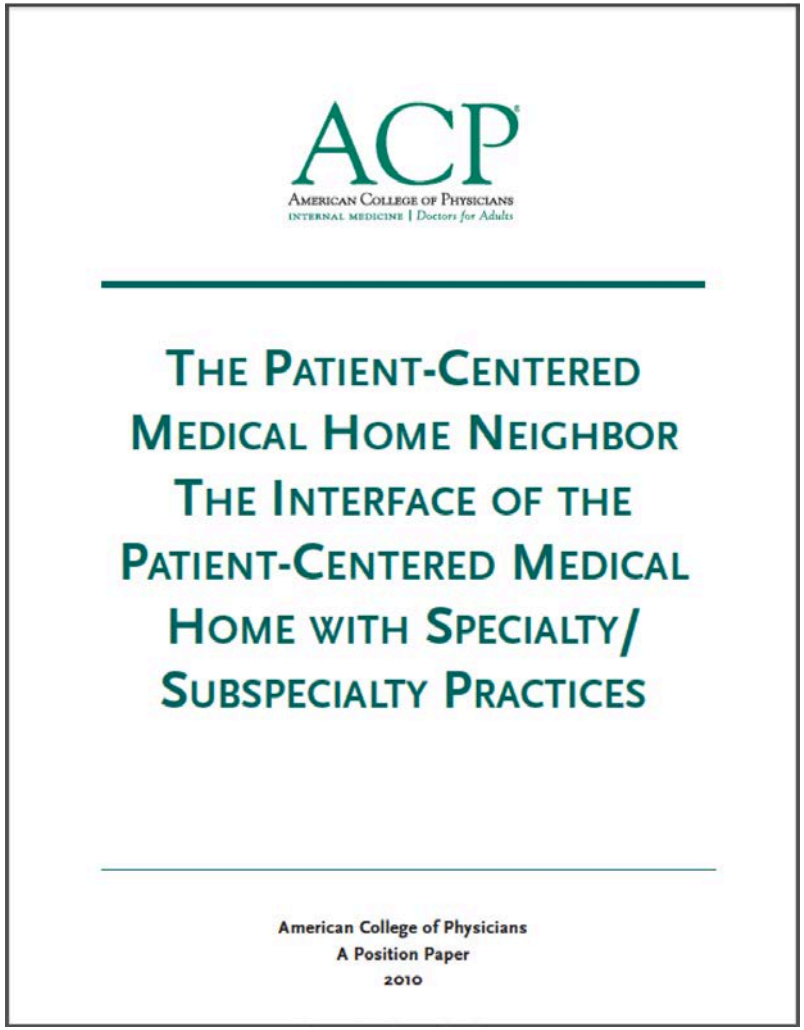
"long-standing source of frustration among physicians"

Mehrotra, Forrest and Lin 2011

Mehrotra A, Forrest CB, Lin CY. Dropping the baton: specialty referrals in the United States. Milbank Q 2011; 89(1):39-68.

Patient-Centered Medical Home-Neighborhood (PCMH-N)

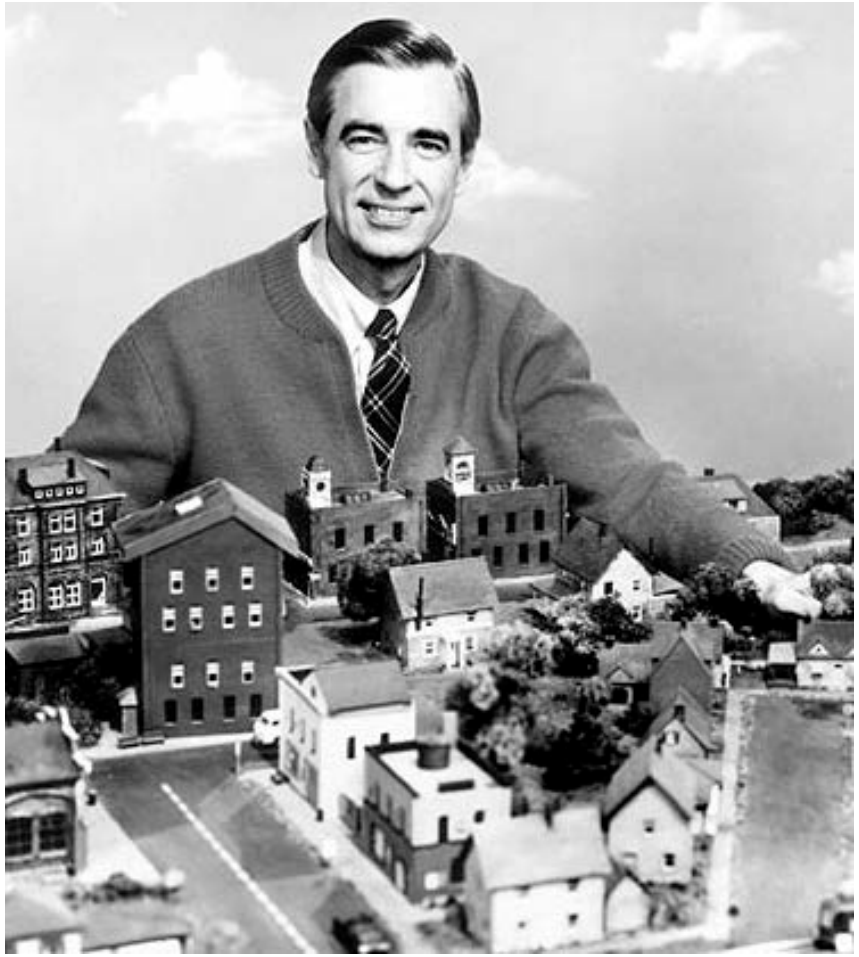




PCMH-Neighborhood

- PCMH: team of providers centered around patients' needs, with care functions and team processes coordinated through HIT
  - Greater delivery of high-quality medical care
  - Enhanced patient experience
  - Greater efficiency
- Neighbor: specialists who offer effective bi-directional care communication, coordination, integration and patient-centered care
- PCMH-N: home + specialty care + acute care

Won’t you be my neighbor?



<u>Specialist responsibilities</u>:

1. Pre-consultative exchange
   - Reviewing/triaging referrals
   - Prioritize care
2. High-quality communication
   - Recommendations
   - Follow-up schedule
   - No-shows
   - Secondary referrals
   - Discharges to primary care
3. Co-management if patient can safely stay in PCMH

American College of Physicians, 2010

123,500 patients/clients
37% uninsured; 35% Medicaid; 17% Medicare
23% White; 18% Black; 30% Hispanic, 28% Asian

14 primary care health centers
70,000 primary care patients

comprehensive ambulatory
specialty and diagnostic services
331,000 visits in 2013-2014

behavioral health services
acute and trauma care
jail health services
long term care

10 independent PC clinics

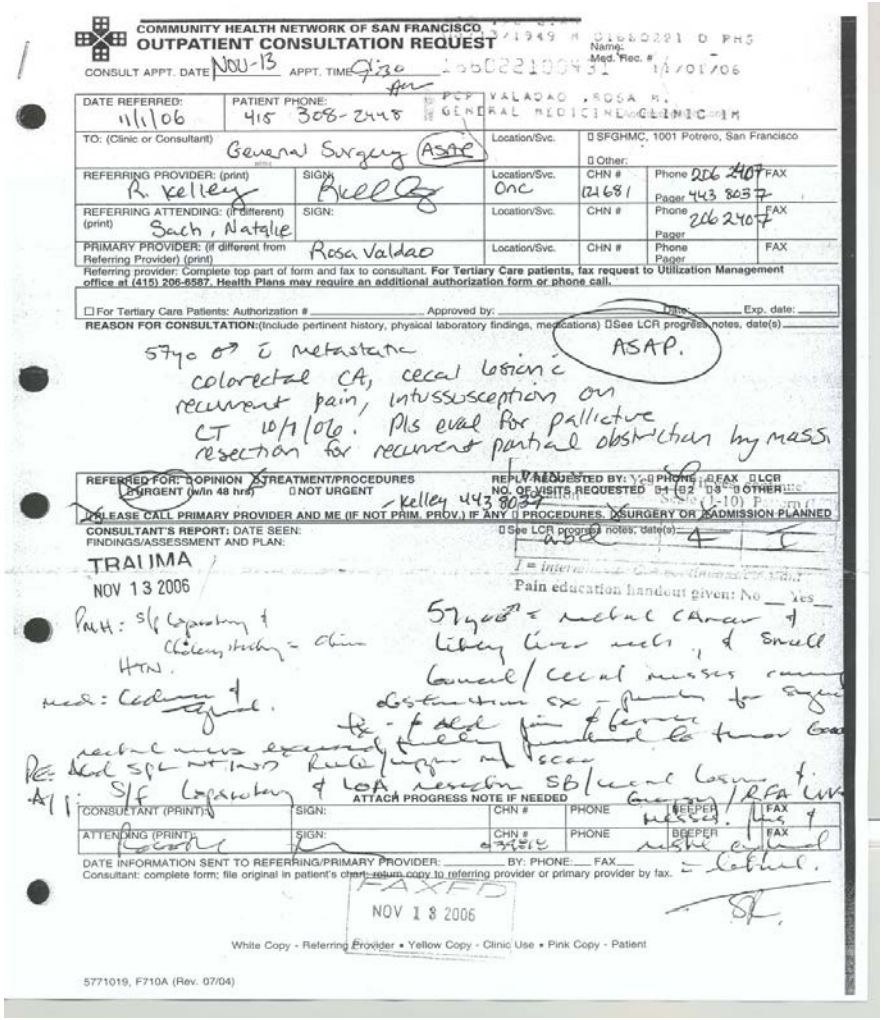
87,000 PC patients

eReferral development

- Home grown, HIPAA compliant, web-based consultation and referral system (eConsult + eReferral = eCR)
  - Tightly integrated with hospital EMR
  - Auto-population of demographic, clinical data
  - Free text consultative question
- New model of primary-specialty care collaboration
  - Individualized review and response by designated specialist reviewer (MD or NP)
  - Iterative communication between referring and reviewer clinicians until issue is addressed – with or without a specialty clinic visit

SFGH in 2005

- Paper, telephone, and fax based referral system
- Clerical process of first referred, first scheduled
- Significant inefficiencies
  - referral to wrong clinic
  - unnecessary referrals
  - premature referrals
  - inability to discern referral question
  - lack of equitable triage
- Wait times up to 11 mo



COMMUNITY HEALTH NETWORK OF SAN FRANCISCO
OUTPATIENT CONSULTATION REQUEST

CONSULT APPT. DATE Nov-13 APPT. TIME 7:30 am

Name: VALADAO, ROSA M.
Med. Rec. #
GENERAL MEDICINE CLINIC

DATE REFERRED: 11/1/06	PATIENT PHONE: 415 308-2448		
TO: (Clinic or Consultant) General Surgery ASAP	Location/Svc.	☐ SFGHMC, 1001 Potrero, San Francisco ☐ Other:	
REFERRING PROVIDER: (print) R. Kelley	SIGN:	Location/Svc. Onc	CHN # 121681 / Phone 206 2407 / Pager 443 8037 / FAX
REFERRING ATTENDING: (if different) (print) Sach, Natalie	SIGN:	Location/Svc.	CHN # / Phone 206 2407 / Pager / FAX
PRIMARY PROVIDER: (if different from Referring Provider) (print) Rosa Valdao		Location/Svc.	CHN # / Phone / Pager / FAX

Referring provider: Complete top part of form and fax to consultant. **For Tertiary Care patients, fax request to Utilization Management office at (415) 206-6587. Health Plans may require an additional authorization form or phone call.**

☐ For Tertiary Care Patients: Authorization # _____ Approved by: _____ Date: _____ Exp. date: _____

REASON FOR CONSULTATION: (Include pertinent history, physical laboratory findings, medications) ☐ See LCR progress notes, date(s) _____

ASAP.

57yo ♂ c̄ metastatic colorectal CA, cecal lesion c̄ recurrent pain, intussusception on CT 10/1/06. Pls eval for palliative resection for recurrent partial obstruction by mass.

REFERRED FOR: ☐ OPINION ☒ TREATMENT/PROCEDURES ☐ URGENT (w/in 48 hrs) ☐ NOT URGENT

REPLY REQUESTED BY: ☐ PHONE ☐ FAX ☐ LCR NO. OF VISITS REQUESTED ☐ OTHER

kelley 443 8037

☒ PLEASE CALL PRIMARY PROVIDER AND ME (IF NOT PRIM. PROV.) IF ANY ☐ PROCEDURES, ☐ SURGERY OR ☐ ADMISSION PLANNED

CONSULTANT'S REPORT: DATE SEEN: ☐ See LCR progress notes, date(s) _____

FINDINGS/ASSESSMENT AND PLAN:

TRAUMA
NOV 13 2006

Pain education handout given: No ___ Yes ___

PMH: S/P Laparotomy & Cholecystectomy – Chron HTN.

Med: Codeine & Tylenol.

57yo ♂ metastatic cancer of Liver, liver mets, & small bowel/cecal masses causing obstruction sx – pain for surgery

Rec: Add SPL NT INFO Rule/Urgent ... scan

S/P Laparotomy & LOA resection SB/cecal lesion & ...

ATTACH PROGRESS NOTE IF NEEDED

CONSULTANT (PRINT):	SIGN:	CHN #	PHONE	BEEPER	FAX
ATTENDING (PRINT):	SIGN:	CHN #	PHONE	BEEPER	FAX

DATE INFORMATION SENT TO REFERRING/PRIMARY PROVIDER: _____ BY: PHONE: ___ FAX ___

Consultant: complete form; file original in patient's chart; return copy to referring provider or primary provider by fax.

FAXED NOV 13 2006

White Copy - Referring Provider • Yellow Copy - Clinic Use • Pink Copy - Patient

5771019, F710A (Rev. 07/04)

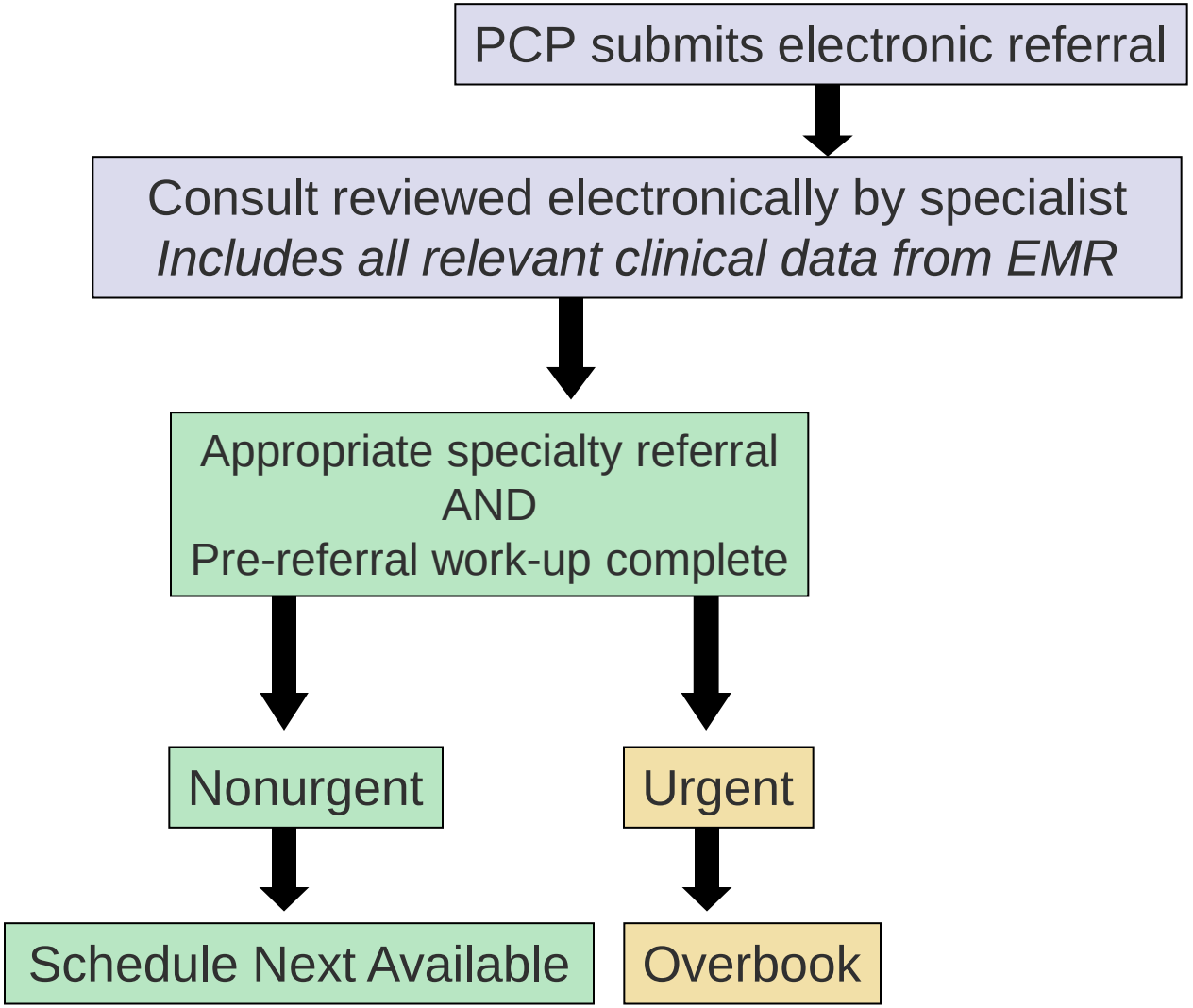
eReferral Workflow

PCP submits electronic referral

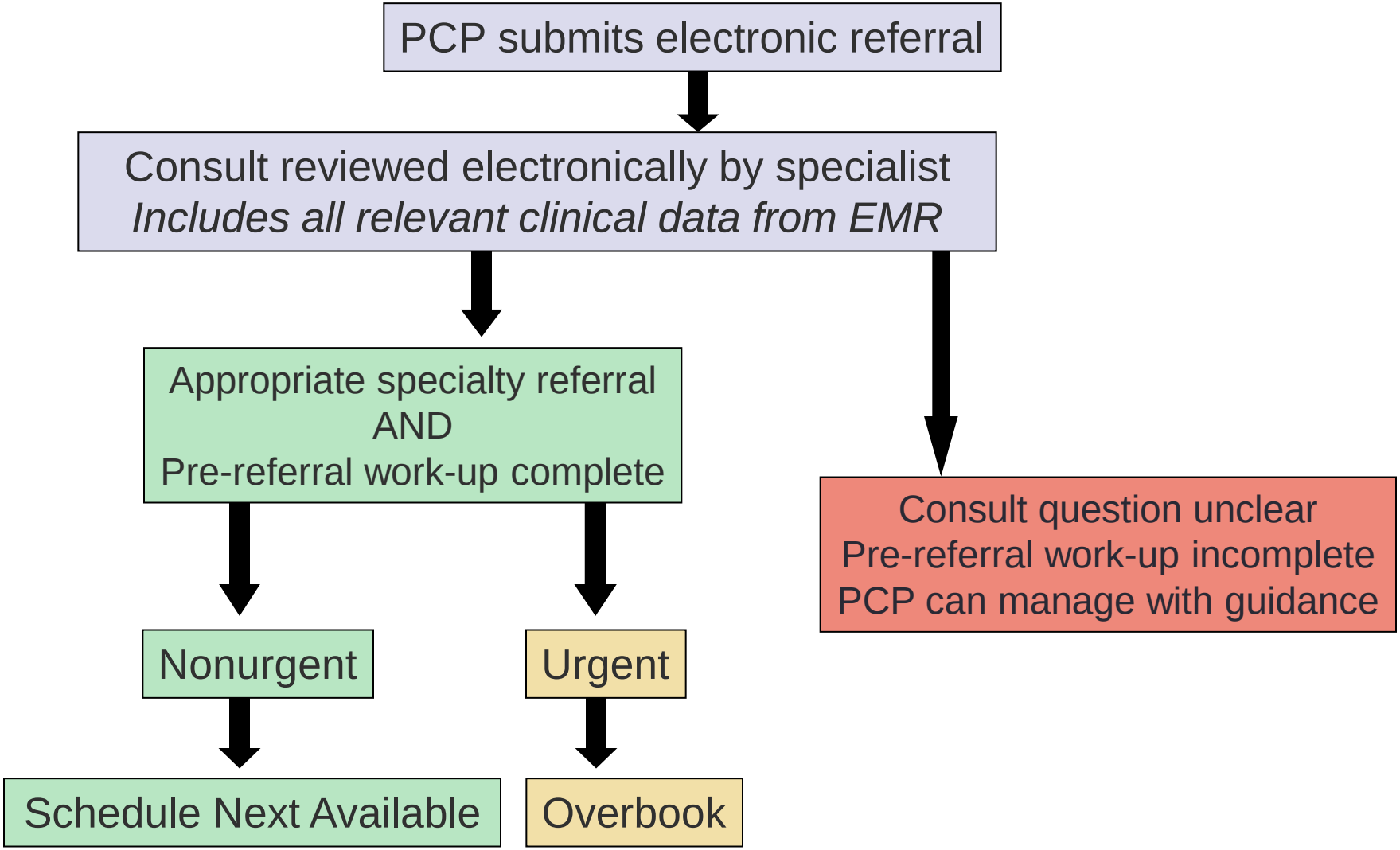
↓

Consult reviewed electronically by specialist
Includes all relevant clinical data from EMR

eReferral Workflow



eReferral Workflow



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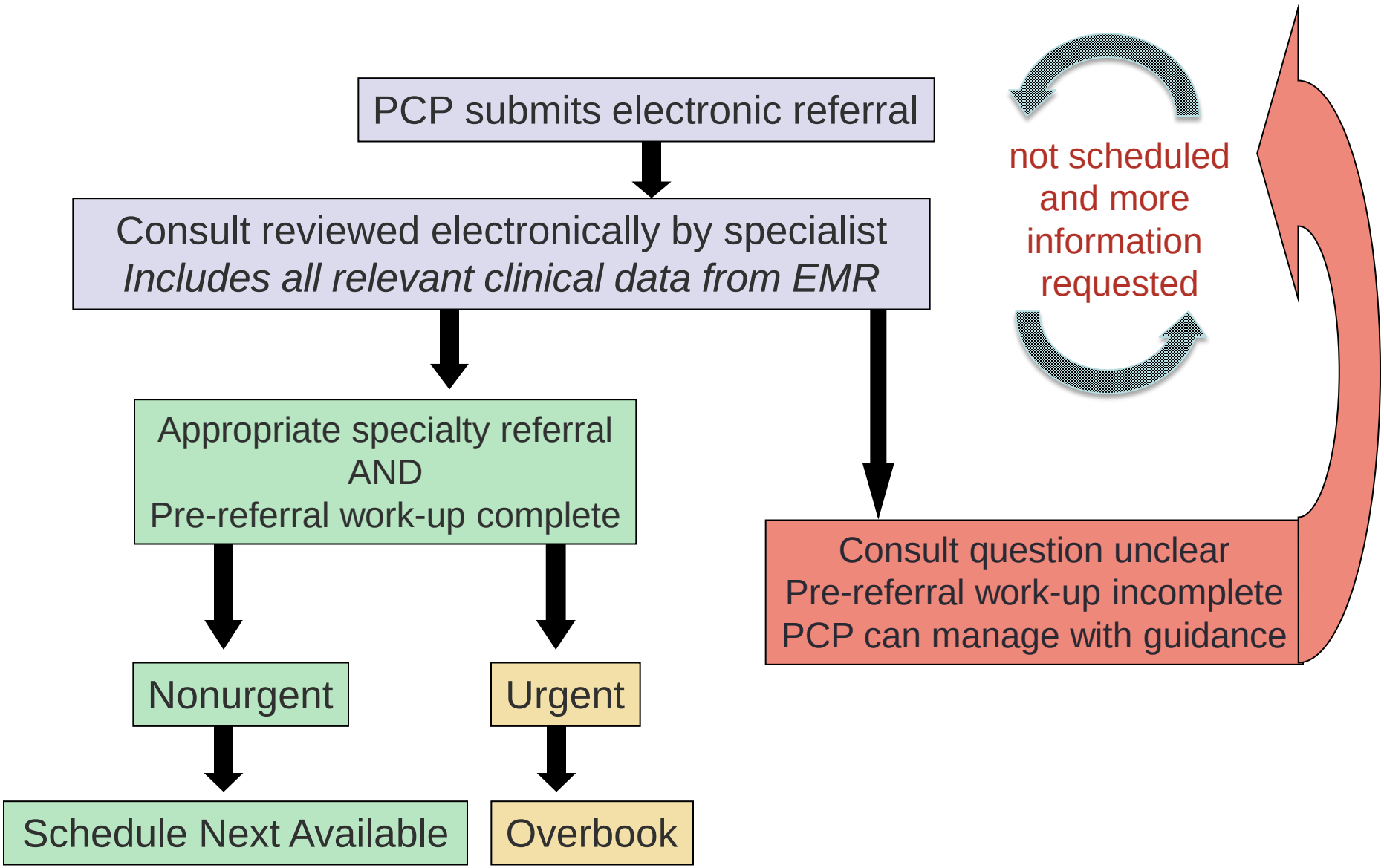

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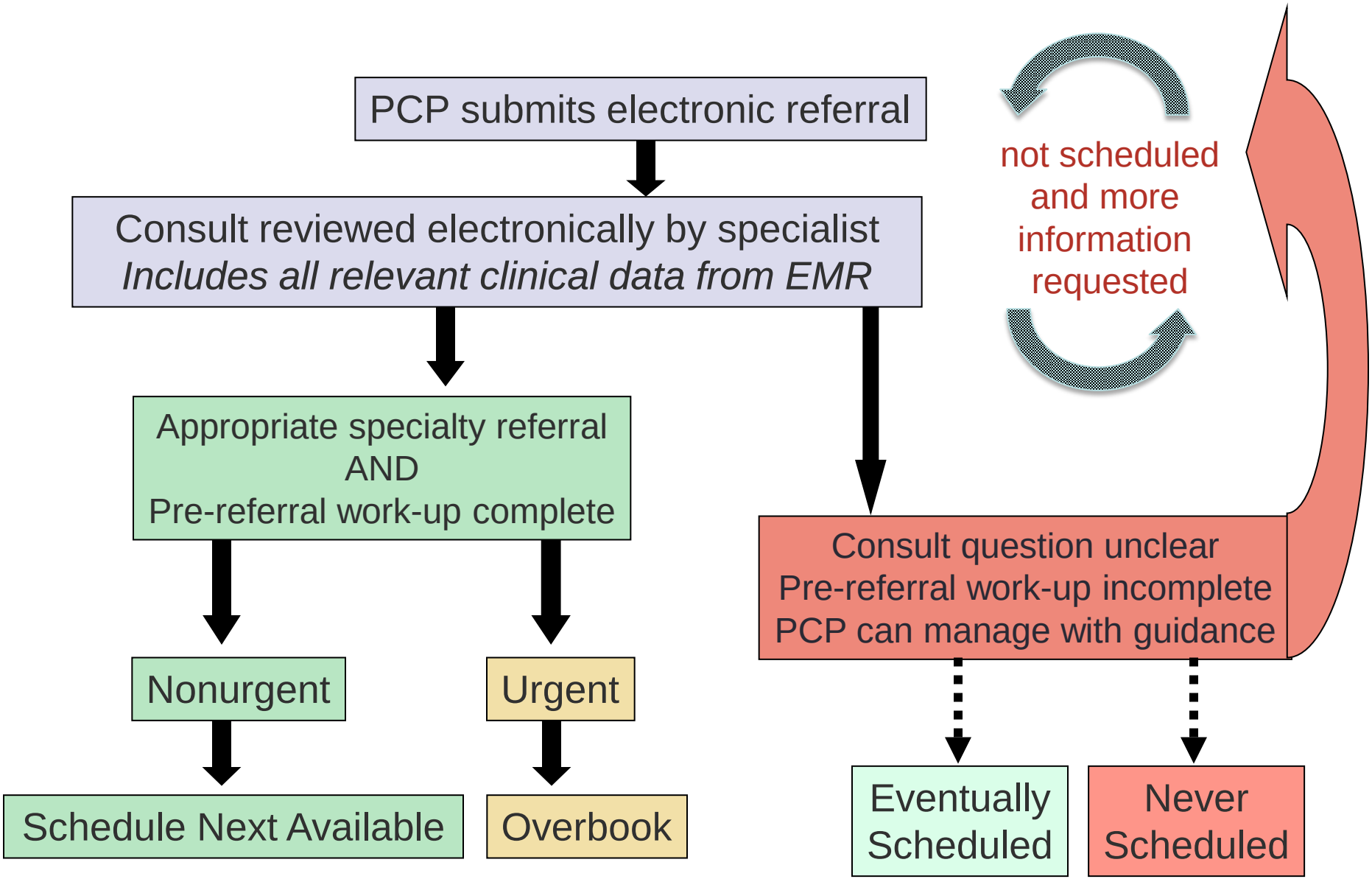


Medical Specialty Clinics

Allergy Adult Clinic
Cardiology Clinic
Chest Clinic (Pulmonary)
Diabetes Services
Endocrinology Clinic
Gastroenterology Clinic
Geriatrics Clinic
Hematology Clinic
Infectious Disease at LHH
Liver Clinic
Neurology Clinic
Oncology Clinic
Renal Clinic
Rheumatology Clinic
TB Clinic

Womens Health Specialty Clinics

5M Breast Evaluation Clinic (Non Surgical)
Gynecology Clinic
Obstetric Clinic

Other Programs

1M Anticoagulation Clinic (No Review)
Anticoagulation FHC (No Review)
Comprehensive Pharmacy Care
Asthma and COPD Group Education Classes (No Review)
Cancer Risk Program (Genetic Counseling)
Financial Fitness Program (No Review)
Health At Home (Home Health Services)
Neuropsychology Service New!!
Respite Program
Stop Smoking Program (No Review)
Transgender Health Services
Wellness Center (No Review)
CRANIUM (PCP for Citywide Focus ONLY)
Primary Care Psychiatry Service (Maxine Hall Health Center ONLY)
SFHN Primary Care (5M, 6M, 6C, 6G, UCC, & Respite ONLY) New!!

Surgical Specialty Clinics

3M Breast Surgery Clinic
Anesthesia PreOp Clinic (No Review)
Cardiothoracic Surgery Clinic
Concussion Clinic (No Review)
Diabetes Teleretinopathy Screening Service New!! (No Review)
General Surgery Clinic
Neurosurgery Clinic
Ophthalmology/Optometry Clinic (No Review)
Orthopaedic Surgery Clinic
Otolarynology (Head and Neck Surgery) Clinic
Plastic Surgery Clinic
Podiatry Clinic
Radiology- Interventional Radiology (No Review)
Urology Clinic
Vascular Surgery

Diagnostic Services

Audiology Clinic (No Review)
Echocardiography (No Review)
EEG (No Review)
Ambulatory ECG Monitoring (Zio Patch) (No Review)
Exercise Treadmill Testing (ETT) (No Review)
Sleep Study
Radiology- CT
Radiology- Fluoroscopy
Radiology- Mammography Screening (No Review)
Radiology- Breast Mammography Diagnostic
Radiology- MRI
Radiology- Ultrasound

Rehabilitation Services

Aquatic Therapy New!! (No Review)
Occupational Therapy
Physiatry (Physical Medicine & Rehabilitation) Clinic New!! (No Review)
Physical Therapy
Speech Therapy

Paste Boilerplate

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
Insurance
Demog
Address
City/State

Referring Provider Information

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

Attending Provider Information

The Referring Provider is an Attending.

Primary Care Provider Information

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 thryoid disease? Thanks Annette

Scheduling considerations for this patient

inc_ConsultHeader

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
Help for Text Paging link
PagerBox 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

Appointment Scheduled for 2/4/2013 @09:05

eReferral Submitted by: BURNS, ANNETTE Phone:41520664972 eMail:ANNETTE.BURNS@SFDPH.ORG

Request Status Select Status

The current status is **Close**

Consultants can now change Referrals regardless of Status.

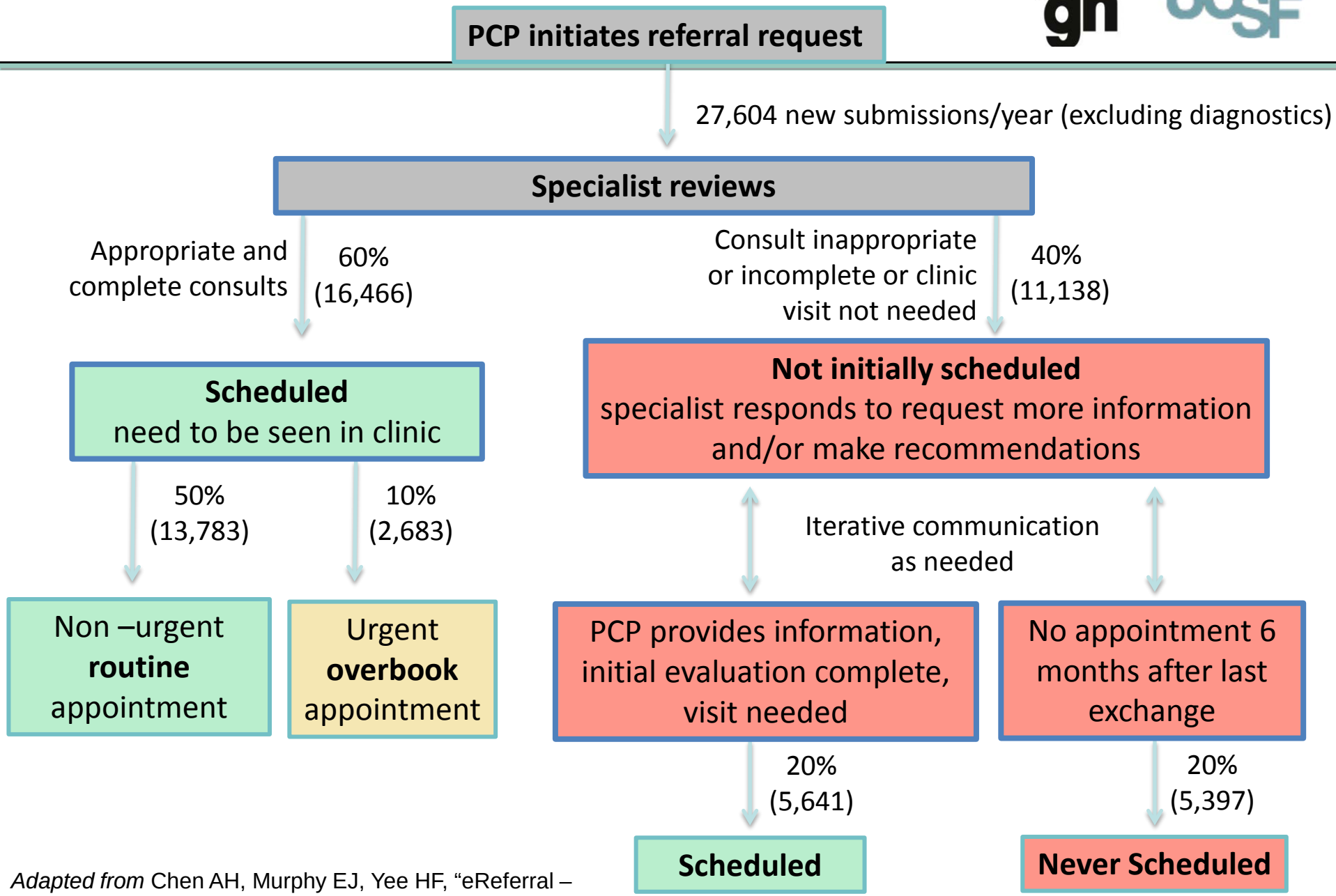
Running eReferral Note

Consultant Note To Scheduler: ENDO 1 Feb 4

1/22/2013 4:14:11 PM entered by elizabeth murphy
Actually those labs were from November. Now (today) they are very different and her TSH is very normal. There is a big lag between euthyroid and TSH recovery so with labs like these we would typically consider decreasing methimazole so the patient doesn't get hypothryoid. Fatigue no doubt is due in part to no normal tyroid function (or maybe even low). So can't explain the tachycardia. It was regular/and persisted after patient had been in clinic a bit? So agree with beta-blocker but wouldn't increase methimazole and we can see patient in 3-4 weeks. Please have patient get another TSH and Free T4 before the visit with us and we'll like go down on methimazole then.

1/22/2013 11:04:26 AM entered by annette burns
TSH <0.01 T4 1.76 T3 4.84 after 6 weeks on Methimozole 10mg.
P - 105 and feels fatigue. no sore throat or fever. Thyroid nontender, sl. enlarged sym.
I would like to refer her to you to see.
I increased her methimozole to 15mg daily and started her on Propranolol 10mg 2 times a day

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



Adapted from Chen AH, Murphy EJ, Yee HF, "eReferral – A New Model for Integrated Care." *NEJM* 2013;368(26):2450-3.

Impact overview

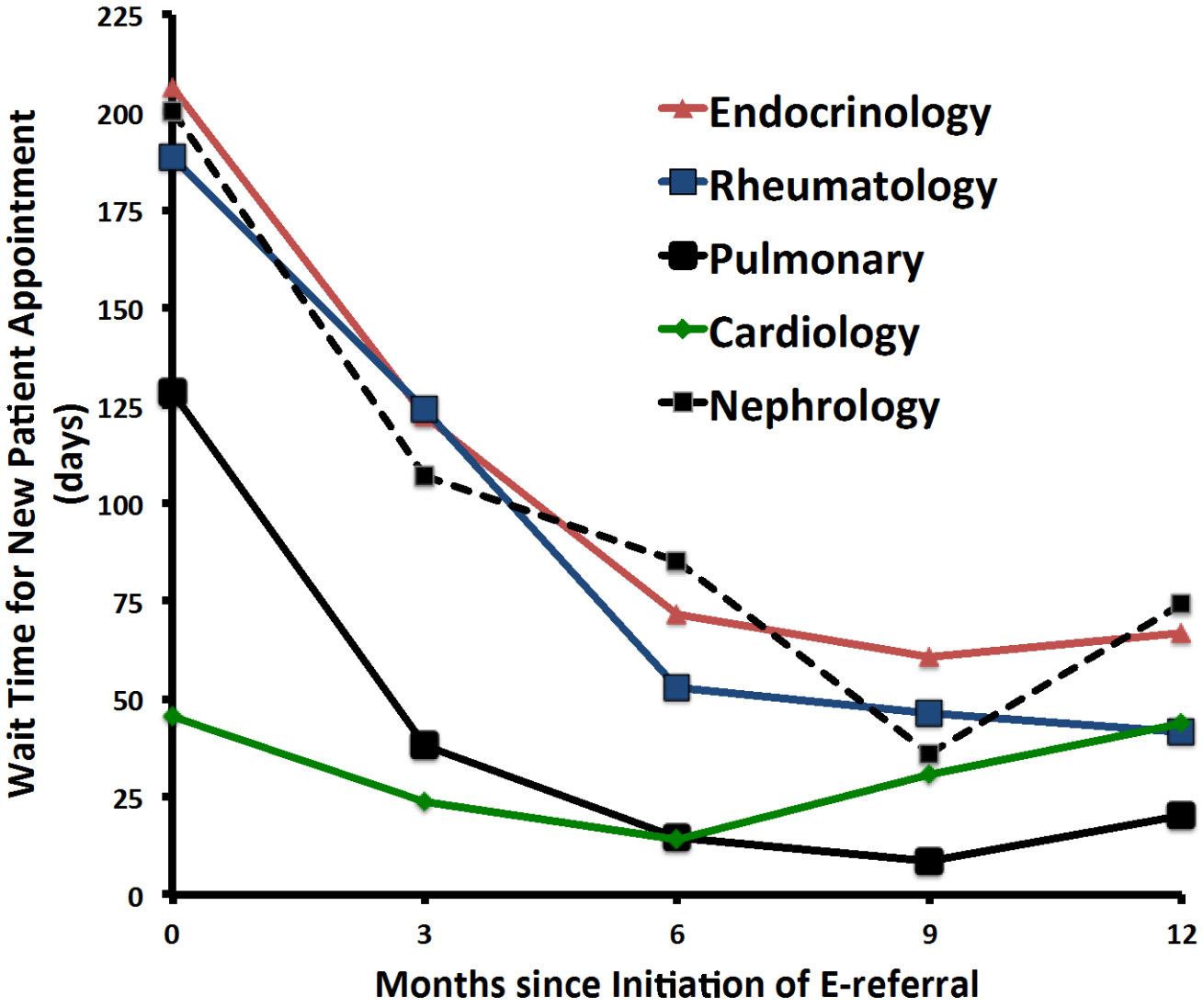
Primary Care

- Reduced wait times
- High PCP satisfaction
- 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
- Formalization of curbsides
- Opportunities to educate, learn
- Increased “case-mix” in clinics

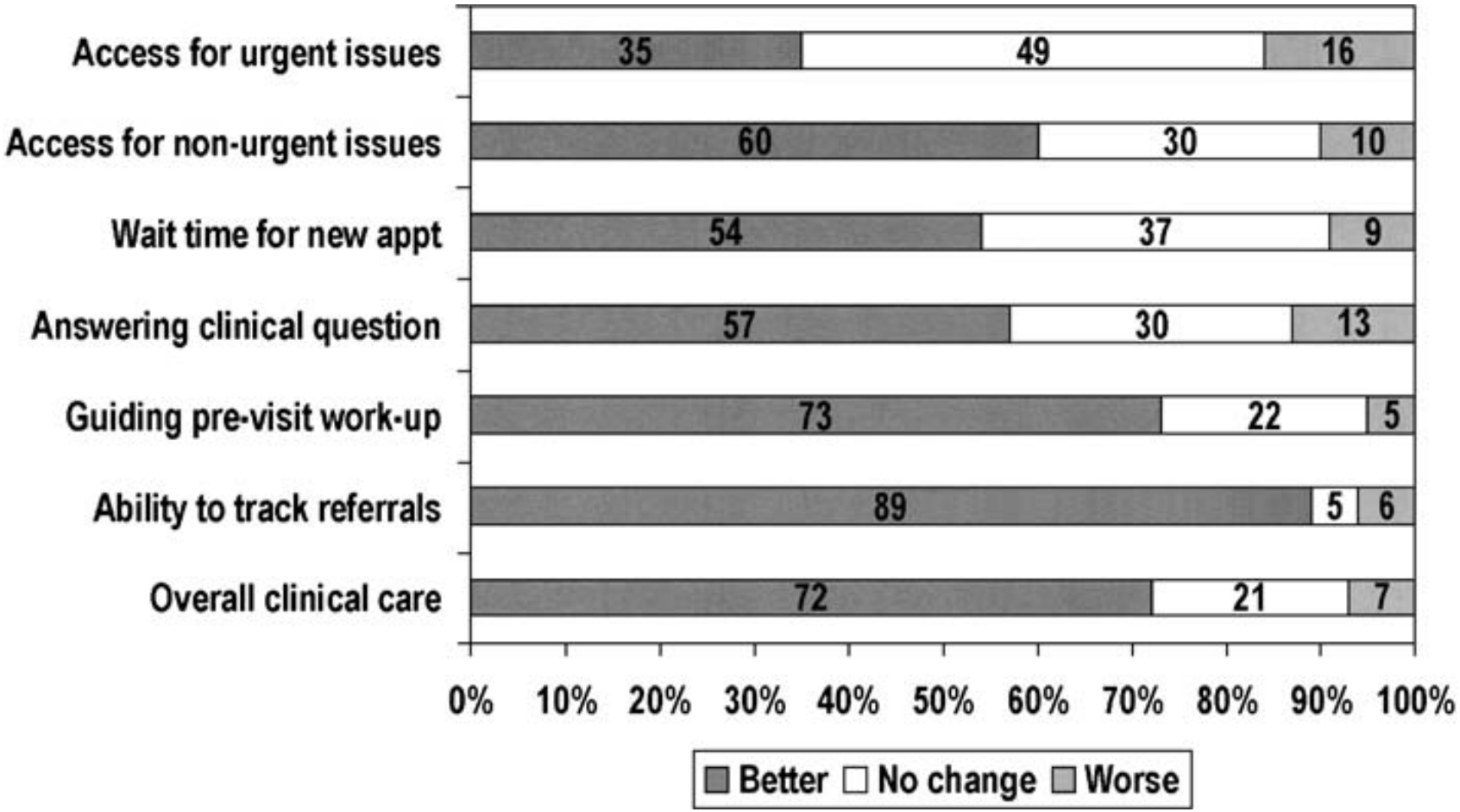
Impact on wait times



Impact on primary care

PCP ratings of electronic referrals compared to prior referral methods.

81% response rate (298 of 368)

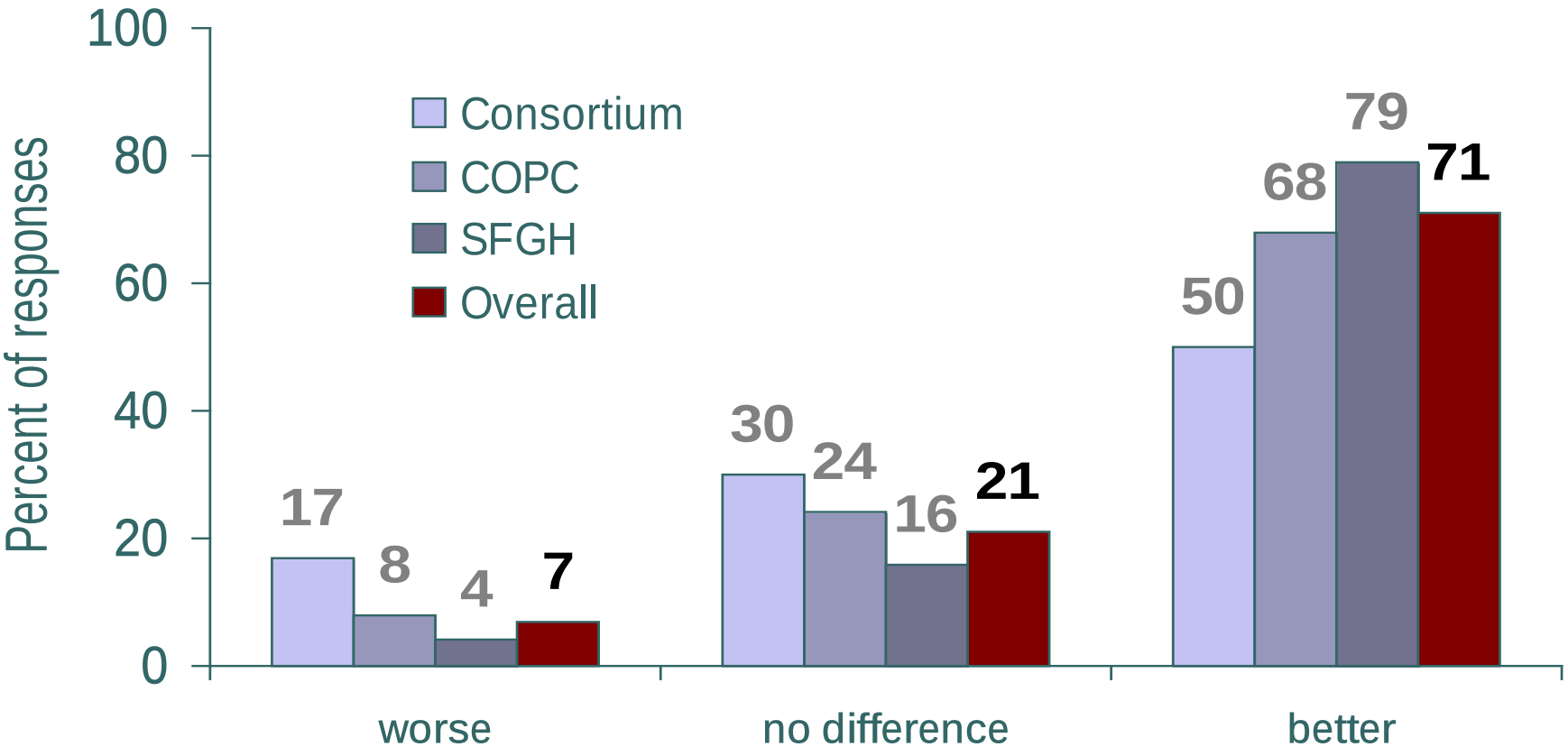


Kim Y, Chen AH, Keith E, Yee HF, Kushel MB. "Not perfect, but better: primary care providers' experiences with electronic referrals in a safety net health system." *Journal of General Internal Medicine* 2009; 24(5):614-619.

Impact on primary care

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

81% response rate (298 of 368)



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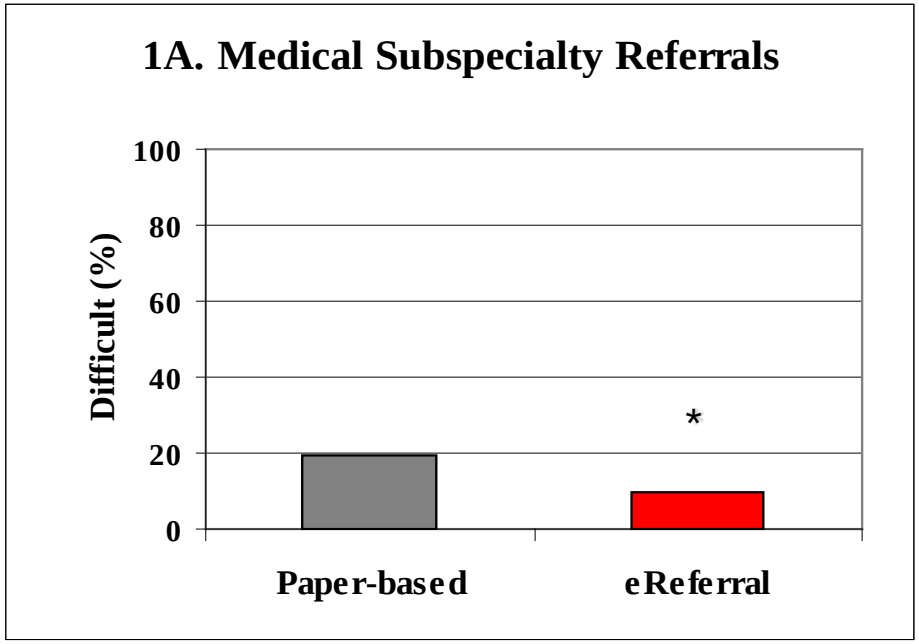
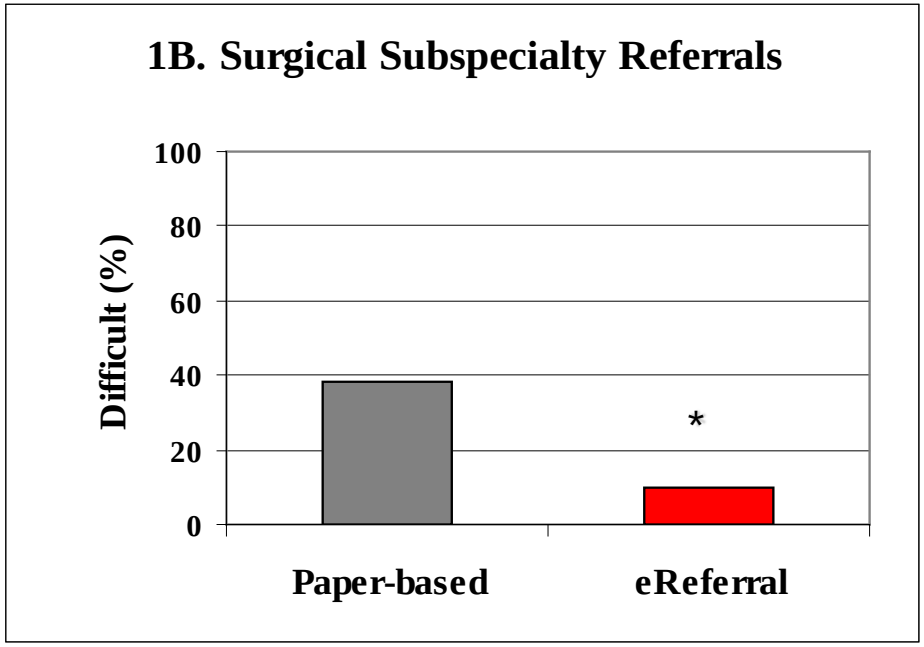
Impact on specialty clinics

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)

Kim-Hwang JE, Chen AH, Bell DS, Guzman D, Yee HF, Jr., Kushel MB. Evaluating electronic referrals for specialty care at a public hospital. J Gen Intern Med 2010;25:1123-8.

Conditions benefitting from eReferral

Rheumatology: Osteoarthritis, gout

Endocrinology: hypothyroidism (includes subclinical), thyroid nodules

Pulmonary: asthma/COPD initial evaluation, cough workup

Gastroenterology: dyspepsia, GERD, hemorrhoids

Cardiology: short QT on ECG, management of stable CAD

Neurology: Headaches, initial dementia evaluation, peripheral neuropathy

Hematology: iron deficiency anemia, thrombocytopenia

Liver: proper biochemical evaluation for liver disease/hepatitis

Gynecology: fibroids

Urology: BPH, nephrolithiasis

Impact on clinic complexity

Endocrinology

Fiscal Year 2011 - 2012

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

Variation among specialties

Specialty	Reviewer	Referral volume (unique referrals/year)	Referral management		
			% immediately scheduled	% scheduled after pre-consultative exchange	% pure electronic consultation
Medical					
Allergy	MD	123	30.1	10.6	59.3
Cardiology	MD	1374	64.0	14.8	21.2
Pulmonary	MD	806	54.1	20.2	25.7
Diabetes	NP	945	52.3	34.5	13.0
Endocrinology	MD	704	27.2	34.8	37.9
Gastroenterology	MD	2494	50.9	19.6	29.5
Hematology	MD	542	44.2	14.0	41.7
Hepatology*	MD/NP	808	28.6	24.1	47.3
Nephrology	MD	543	39.8	27.8	32.4
Neurology	NP	1622	76.6	15.7	7.7
Oncology	MD	505	58.4	13.7	27.9
Rheumatology	MD	576	56.6	17.7	25.7
Surgical					
General Surgery	NP	1930	69.5	11.0	19.5
Otolaryngology	NP	1952	82.8	7.4	9.8
Neurosurgery	NP	496	57.7	13.3	29.0
Orthopedics	NP	3493	57.2	20.3	22.5
Urology	MD	1853	67.2	18.2	14.5
Women's Health					
Gynecology	MD	2206	64.7	20.0	15.2
Obstetrics	MD	387	53.7	17.8	28.4

Tuot DS, Murphy EJ, McCulloch CE, Leeds K, Chan E, Chen AH. Leveraging an electronic referral and consultation (eCR) system to provide high quality coordinated specialty care. Healthcare*, 2015.*

SFHN Experience – lessons learned

Strengths

- Closed network
- Investment in pilot
- Intuitive design
- Academic, salaried specialists committed to underserved patients
- Implementation team responsiveness through surveys, outreach, suggestion box
- Commitment to evaluation

Challenges

- Home grown system requires tending
- Variability among specialist reviewers
- Variability in workflow and clinical expertise among PCPs
- Fragmentation with new ambulatory EMR

What drives successful implementation in other systems?

Key informant interviews

- Drivers
- Facilitators/barriers to eCR implementation
- Best practices
- Evaluation metrics

e-consult

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Get started at refer.uclahealth.org

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Secure Patient Case Collaboration

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Access to information. Access to care.

Study participants

California

- AccessOC
- Alameda Health System
- L.A. Care Health Plan
- Los Angeles County Department of Health Services
- Marin Community Clinics
- Riverside County Regional Medical Center
- San Mateo Medical Center
- UCLA Health
- UCSF Medical Center
- Ventura County Health Care Agency

United States

- Brigham and Women's Hospital
- Community Health Center, Inc
- Denver Health
- Harborview Medical Center
- Hawaii Medical Service Association
- University of Massachusetts Memorial Health Care

International

- Bruyere Research Institute (Ottawa, CA)
- National Health Service (England)

Tuot DS, Leeds K, Murphy EJ, Sarkar U, Lyles CR, Mekonnen T, Chen AH. Implementation and evaluation of electronic referral and/or consultation systems: a qualitative study. *Under review.*

Drivers of implementation

Electronic referrals

- Operational efficiency
  - Tracking
  - Legibility
- Clinical efficiency*
  - Redirection
  - Triage
  - Preconsultative diagnostic evaluation

**requires administrative screening or templates*

Electronic consults

- Access to specialty care
  - Supply/demand mismatch
  - Long wait times
- Decrease leakage
- Formalize "curbsides"
- Improve communication
- Enhance PCP capacity

Integrated eCRs: culture change; population approach

Facilitators and barriers

Facilitators

- Engaged leadership
- Established relationships between PCPs, specialists
- Intuitive technology
- Attention to workflow and expected practices
- Dedicated project management team
- Ongoing funding

Barriers

- Clinician resistance
  - PCP workload and workflow
  - Specialist reviewer workload
- Lack of integration with EHR
- Liability concerns
- Lack of systems support
- Lack of reimbursement

Take home points

- Potential for health IT to improve communication and efficiency of primary-specialty care interface
- Primary care and co-management support (versus gatekeeper role) enhances medical home-neighborhood model
- Opportunity to train PCPs and specialists in new ways of interacting (medical neighborhood)
- Need for ongoing evaluation

eReferral Community

Management team
- Director: Delphine Tuot
- Program Manager: Tekeshe Mekonnen
- Specialty Director: Lisa Murphy
- Applications Manager: Kjeld Molvig
- Senior Software Engineer: Peter Cheng
- Analyst: Whitneye Kidd
- SFHN CMO: Alice Hm Chen

Surgery Reviewers
- Breast Surgery: Diane Robbins, Kelly Ross-Manashil
- ENT: Marika Russell
- General Surgery: Danielle Berthold
- Neurology: Sean Braden
- Neurosurgery/Neurotrauma: Sean Braden with Geoff Manley
- Orthopedics: Dorothy Christian, Diane Putney
- Plastics: Kim Esther
- Podiatry: Michelle Afzali, Erica McDaniel
- Urology: Ben Breyer and Amjad Alwaal
- Vascular: Shant Vartanian, Allicia Elias

Women's Health Reviewers
- Breast Evaluation: Kristen Sligar, Dana Russ
- Gynecology: Rebecca Jackson and faculty
- Obstetrics: Naomi Stotland, Rebecca Jackson

Rehabilitation Services Reviewers
- PT: Dave Snyder, Bernadette Currier
- OT/ST: Karen Pitbladdo

Pediatric Services Reviewers
- Peds Developmental and Behavioral: Shon Jain, Janis Mandac-Dy, Amy Whittle

Medicine Reviewers
- Cardiology: Mary Gray
- Chest/Pulmonary: Adithya Cattamanchi, Antonio Gomez
- Diabetes: Mimi Kuo, Audrey Tang, Debbie Heuerman, Sarah Kim
- Direct Endoscopy Access: Lukejohn Day
- Endocrinology: Lisa Murphy, Jennifer Park
- Gastroenterology: Justin Sewell
- Geriatrics: Anna Chodos
- Hematology: Brad Lewis
- Infectious Disease: Sarah Doernberg
- Liver: Mandana Khalili
- Oncology: Judy Luce
- Renal: Sam James
- Rheumatology: John Imboden
- TB: Julie Higashi, Chris Keh

Diagnostic Services Reviewers
- Diagnostic Mammo: Diane Robbins, Kelly Ross-Manashil
- MRI, CT, U/S, Fluoroscopy: Nancy Omahen

Other Programs Reviewers
- Genetic Counseling: Robin Lee
- Health At Home: Jane Drobot
- Neuropsychology: Chris Weyer-Jamora and faculty
- Respite: Shannon Smith
- Transgender Health Services: Barry Zevin

Thank you

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www.ciaqsf.org

Questions

Care Integration Resource Center
http://www.careinnovations.org/knowledge-center/facilitating-care-integration/