crico

Shifting Patient Safety into High Gear

Boston, MA, November 16, 2012

Shifting Patient Safety into High Gear

crico

Lessons from Ambulatory Care

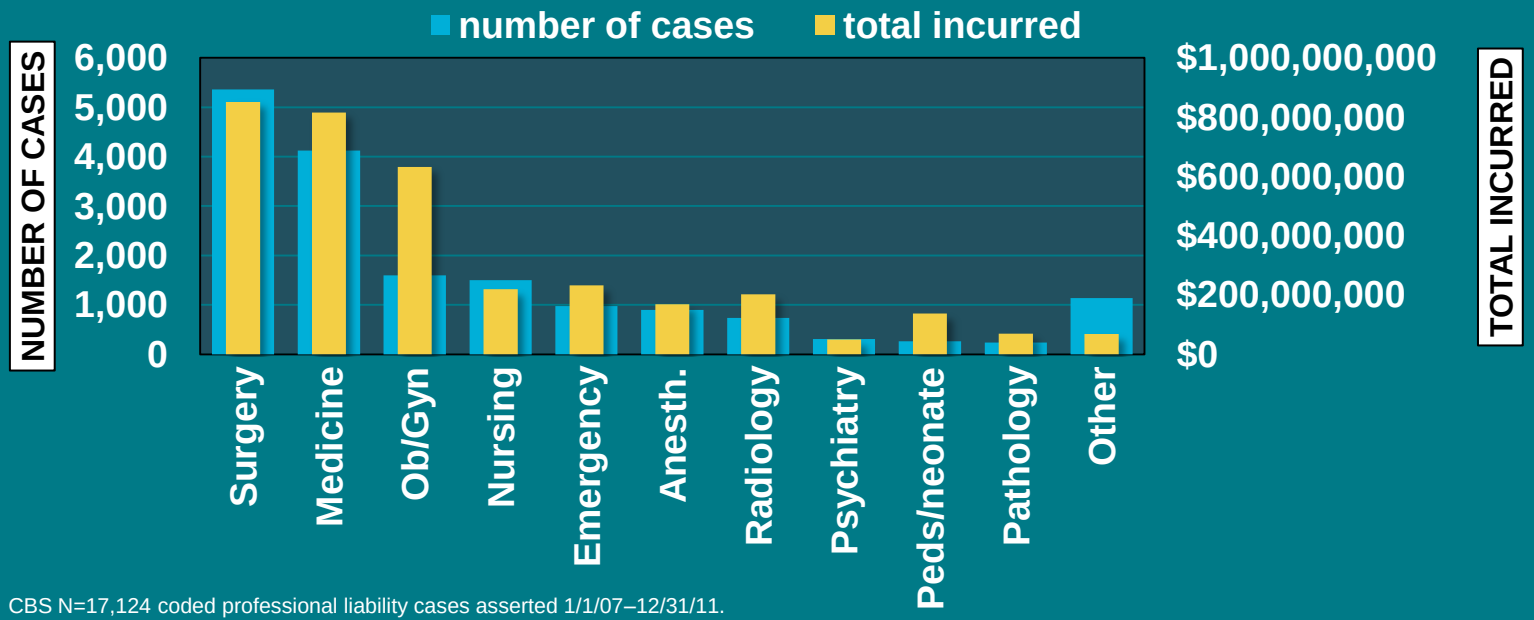
Blair Fosburgh, MD | Massachusetts General Hospital

Steve Atlas, MD | Massachusetts General Hospital

Andy Ellner, MD | Brigham and Women's Hospital

Surgical services top the list in malpractice cases

National Landscape: Primary Responsible Services



CBS N=17,124 coded professional liability cases asserted 1/1/07–12/31/11.

Total incurred includes reserves on open cases and payments on closed cases.

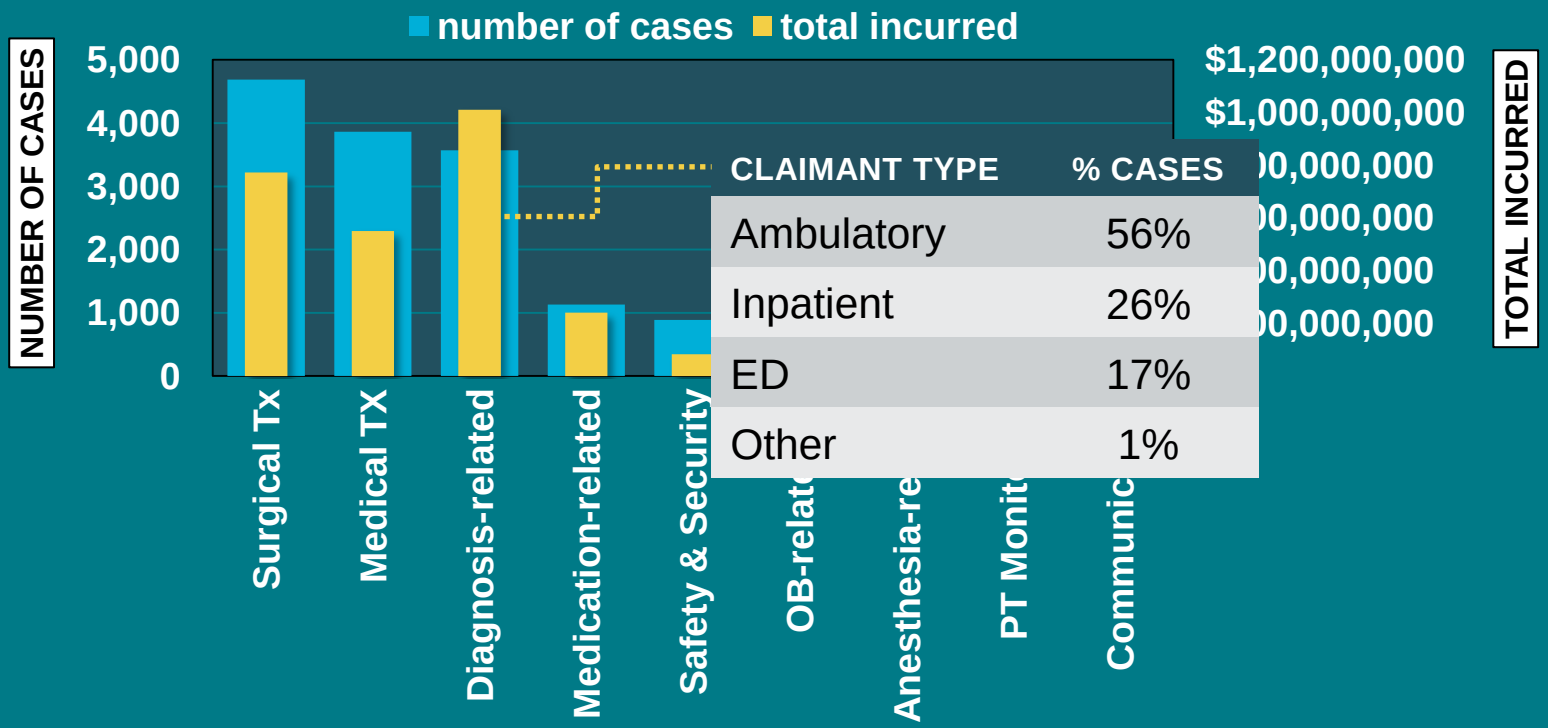
Surgery includes: General Surgery, Neurosurgery, Orthopedics, and Surgery Subspecialties (Bariatric Surgery, Colorectal Surgery, Cardiac Surgery, Otorhinolaryngology (with Plastic), Hand Surgery, Ophthalmology, Otolaryngology (No plastic), Plastic (NOC), Pediatric Surgery, Oncology (Surgical), Thoracic Surgery, Urology Surgery, Vascular Surgery, Transplant, Podiatry).

Medicine includes: General Medicine and Medicine Subspecialties (Cardiology, Dermatology, Endocrinology, Gastroenterology, Genetics, Geriatrics, Hematology, Hospitalist, Immunology and Allergy, Infectious Disease, Oncology (Medical), Nephrology, Neurology, Physical Medicine/Rehabilitation, Pulmonary Disease, Rheumatology).

Other includes: Dentistry/Oral Surgery, Allied Health, Non-clinical, and Pharmacy.

Surgical Treatment cases are most prevalent; Diagnosis cases are most costly

National Landscape: Top Major Allegations

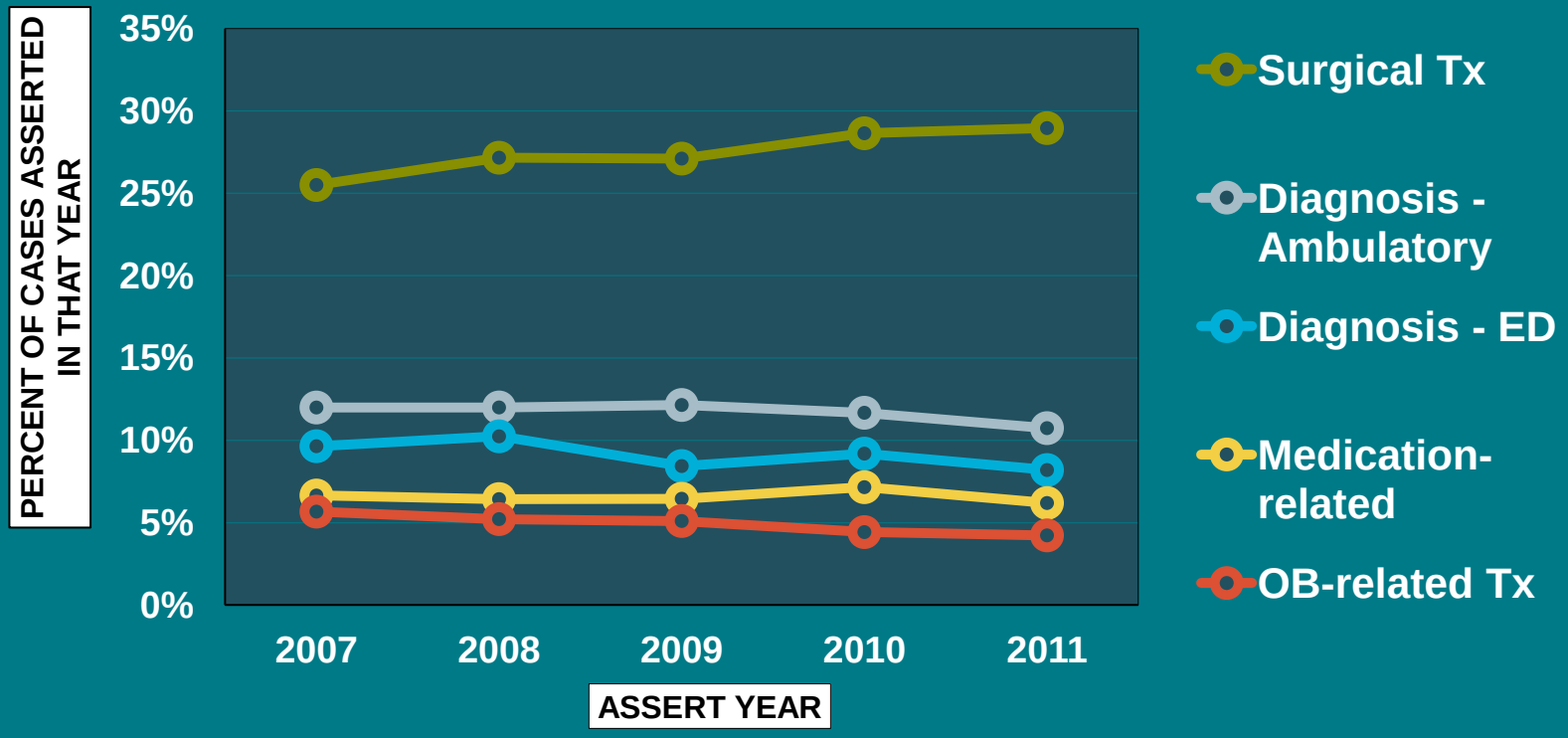


CLAIMANT TYPE	% CASES
Ambulatory	56%
Inpatient	26%
ED	17%
Other	1%

CBS N =17,124 coded professional liability cases asserted 1/1/07–12/31/11.
Total Incurred = reserves on open cases and payments on closed cases.

Percentages for top allegations remain fairly stable

National Landscape: Trends by Top Major Allegations



CBS N=17,124 coded professional liability cases asserted 1/1/07–12/31/11.

CBS N=10,245 cases with a Diagnosis, Surgical treatment, Obstetrical treatment, or Medication related major allegation.

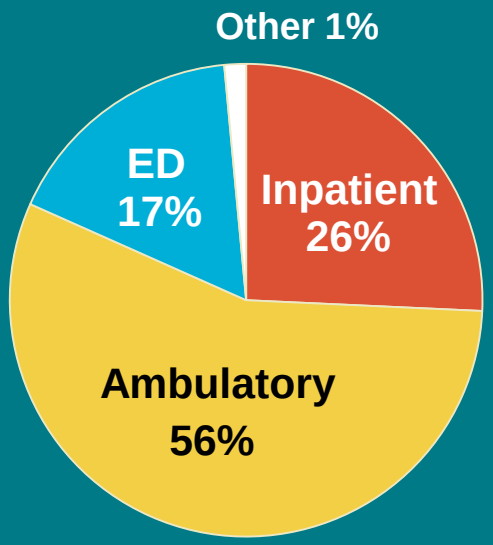
Ambulatory Care Diagnosis-related Malpractice Data

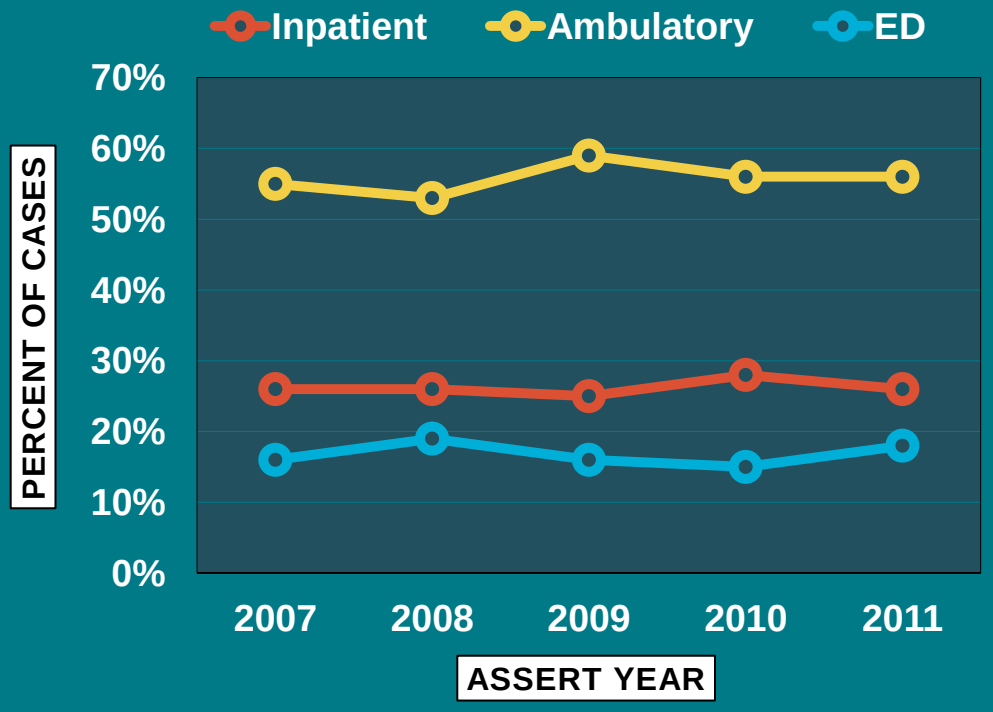
1,998 cases | $569M total incurred

2007-2011

Dx cases dominate malpractice claims in the ambulatory setting

National Landscape: Claimant Type Trends in Diagnostic Cases





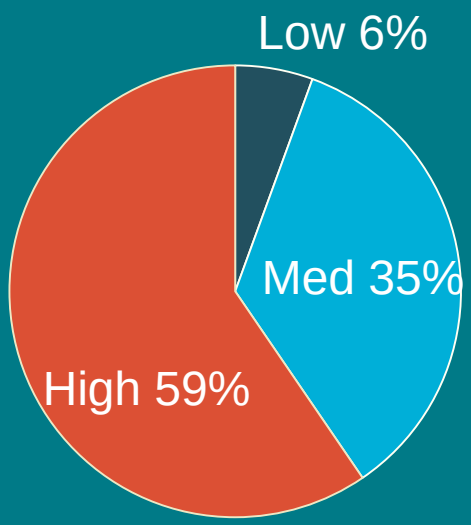
CBS N=3,572 professional liability cases asserted 1/1/07–12/31/11 with a diagnosis-related major allegation.

*Other includes class action, employee, visitor, and unclassified cases due to limited availability of information.

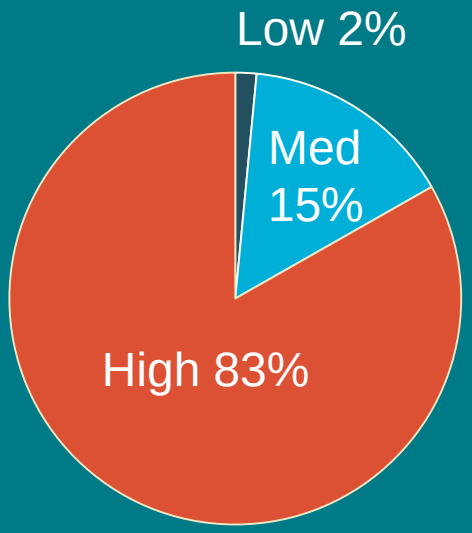
60% of cases involved high severity injury

Injury Severity in Ambulatory Diagnostic Cases

PERCENT OF CASES



PERCENT OF TOTAL INCURRED



CBS N=1,998 coded professional cases asserted 1/1/07–12/31/11 involving outpatients (excl. ED) with a diagnosis-related major allegation.

Total incurred reserves on open cases and payments on closed cases.

Severity scale: High: death, permanent grave, permanent major, or permanent significant
Medium: permanent minor, temporary major, or temporary minor
Low: temporary insignificant, emotional only, or legal issue only

1,998 cases | $569M total incurred

50% involve delay/failure to dx cancer

Top Final Diagnoses in Ambulatory Diagnostic Cases

DIAGNOSIS	# CASES
Cancers	953
Diseases of the heart	119
Fractures	88
Complications	81
Diseases of arteries, arterioles, and capillaries	41
Gastrointestinal disorders	33
Cerebrovascular disease	31
Eye disorders	29
Other injuries/conditions due to external causes	26
Bacterial infection	25
Respiratory infection	22

TOP CANCERS	# CASES
Breast	174
Lung	113
Colorectal	112
Gastrointestinal	71
Prostate	64
Benign neoplasms	59
Skin	59
Uterus and Cervix	41
Lymphatic and hematopoietic tissue	41

Professional liability cases asserted 1/1/07–12/31/11 involving outpatients (excl. ED) with a diagnosis-related major allegation.

50% of Outpatient diagnostic cases involve test ordering

Ambulatory Diagnostic Process of Care

STEP	# CASES*	% CASES*	TOTAL INCURRED
1. Patient notes problem and seeks care	31	2%	$12,198,000
2. Hx/physical and evaluation of symptoms	532	27%	$223,309,000
3. Order of diagnostic/lab tests	999	50%	$383,004,000
4. Performance of tests	69	3%	$22,957,000
5. Interpretation of tests	622	31%	$243,689,000
6. Receipt/transmittal of test results	172	9%	$54,367,000
7. Physician follow up with patient	234	12%	$100,272,000
8. Referral management	404	20%	$142,942,000
9. Patient compliance with follow-up plan	271	14%	$61,870,000

*A case will often have multiple factors identified.

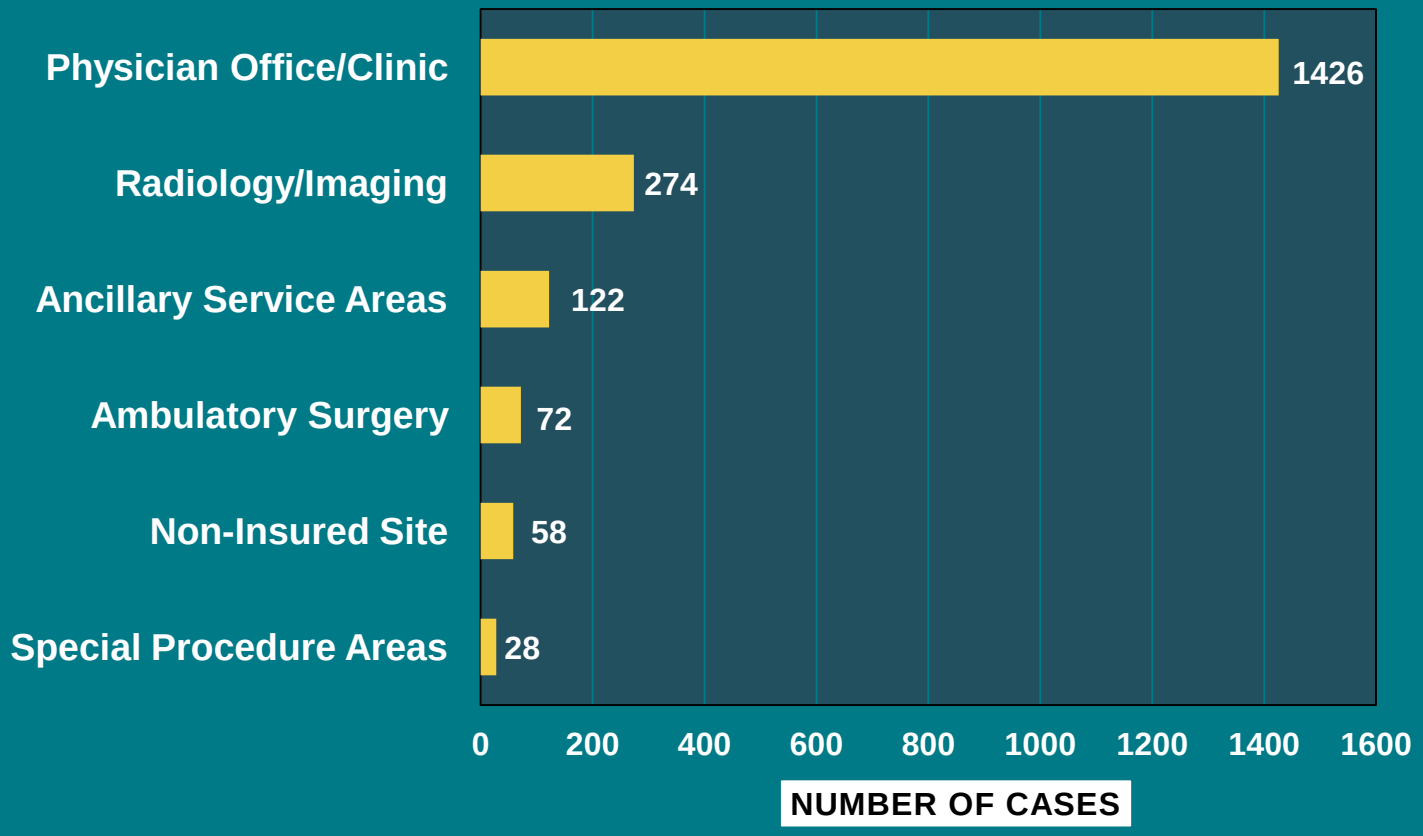
Professional liability cases asserted 1/1/07–12/31/11 involving outpatients (excl. ED) with a diagnosis-related major allegation.

Total Incurred = reserves on open cases and payments on closed cases.

1,998 cases | $569M total incurred

Physician office or clinic is the top location

Top Locations in Ambulatory Diagnostic Cases



Professional liability cases asserted 1/1/07–12/31/11 involving outpatients (excl. ED) with a diagnosis-related major allegation.

crico

Case Study (video not included)

crico

Case Study Analysis

- **Provider factors**
  - Did not obtain important family history
  - Narrow diagnostic focus
  - Interruption led to missed opportunity to obtain key history

crico

Case Study Analysis

- **Communication factors**
  - Patient comprehension; overwhelmed by information
  - Missed opportunity for important provider to provider communication due to technical problem

1

Case Study Analysis

- **System factors**
  - Interruption of visit for non-emergent communication
  - No system for following up whether tests completed
  - No system for tracking referrals
  - No system for flagging change in patient status such as significant weight loss
  - No system for tracking whether patient returns in desired time frame

Case Study Analysis

- **Patient factors**
  - Not consistently compliant with recommendations and follow up
  - Multiple competing medical issues
  - Lack of clear understanding of medical issues

Shifting Patient Safety into High Gear

crico

Lessons from Ambulatory Care

The Role of Patient Centered Population Management

Steve Atlas, MD | Massachusetts General Hospital
Director, MGH Primary Care Practice-Based Research & Quality Improvement Network

Redesigning Primary Care Delivery

- How to “fix” the current state of mediocre, unsafe, inequitable, doctor-centric, and costly care
- Role of health IT to transform care delivery
- Designed around a team-based practice model
- Requires a population-based perspective
- Understands how patients connect with providers
- Takes a patient centered, whole person outlook
- Integrates knowledge about disparities in care into routine practice

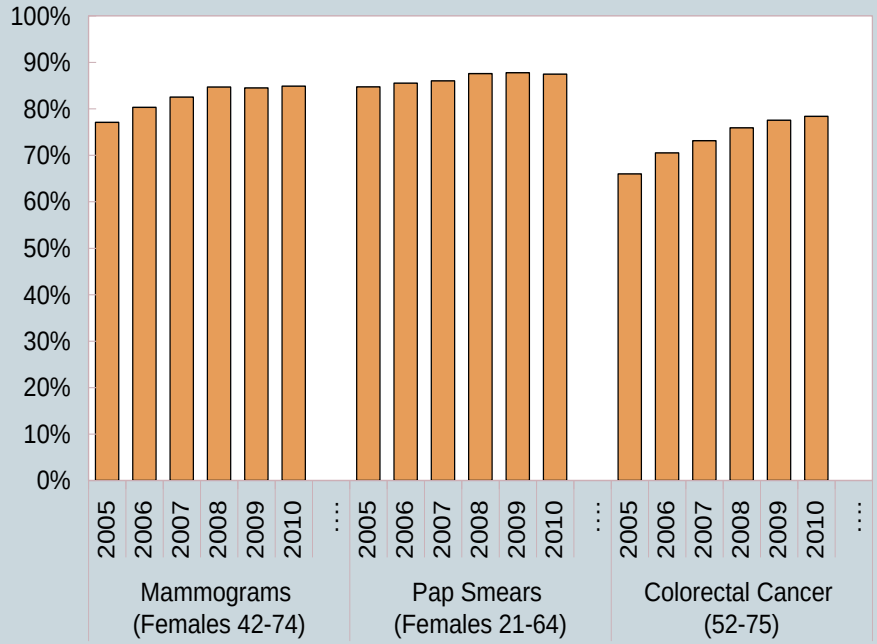
MGH Adult Primary Care Network

- Patients: ~200,000 adults
- Providers: 200 primary care physicians
- Practices: 17
  - 4 community health centers
  - 8 community-based practices
  - 5 hospital-based practices

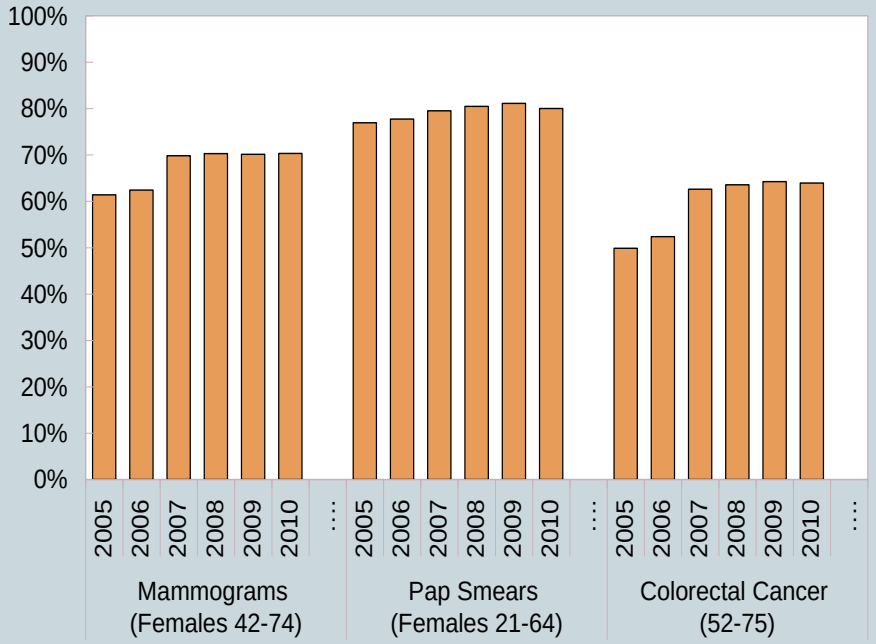
crico

Cancer Screening Rates based on Patient-PCP Connectedness (Linkage)*

PCP-Linked



Practice-Linked



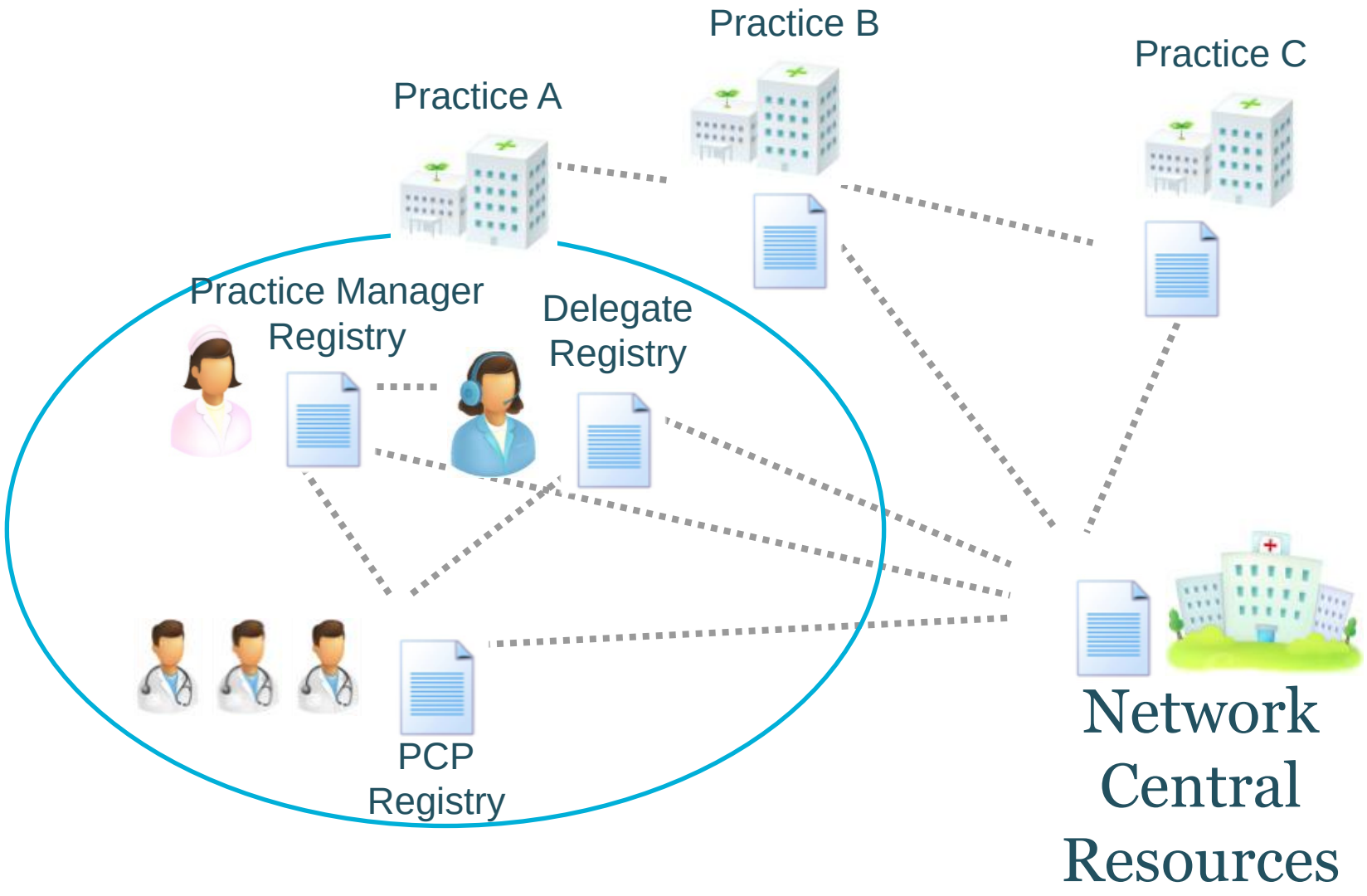
* Atlas, Ann Intern Med 2009

TopCare* Cancer Model

- Population management system for a primary care practice network
  - Non-visit based IT surveillance
  - Patient identification, provider action, systematic tracking
- Patient centered care comprehensive cancer screening
  - Patients eligible for breast, cervical and colorectal cancer screening
  - “Fail safe” system complements visit/specialty-based efforts

* TopCare = Technology for Optimizing Population Care in a Resource-limited Environment

TopCare = Integrated Network of Task-Specific Registries with management tools to coordinate population-based care

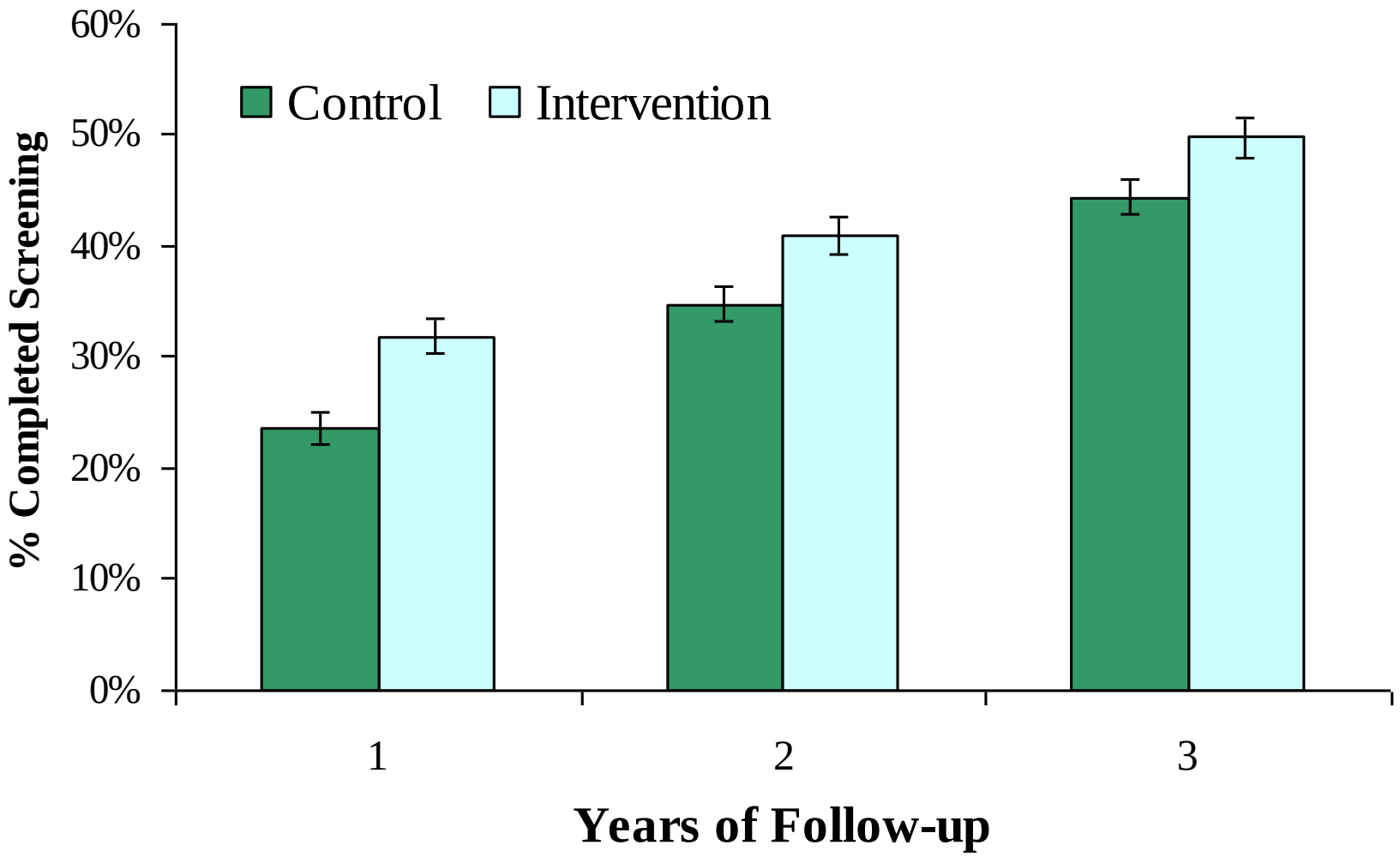


crico

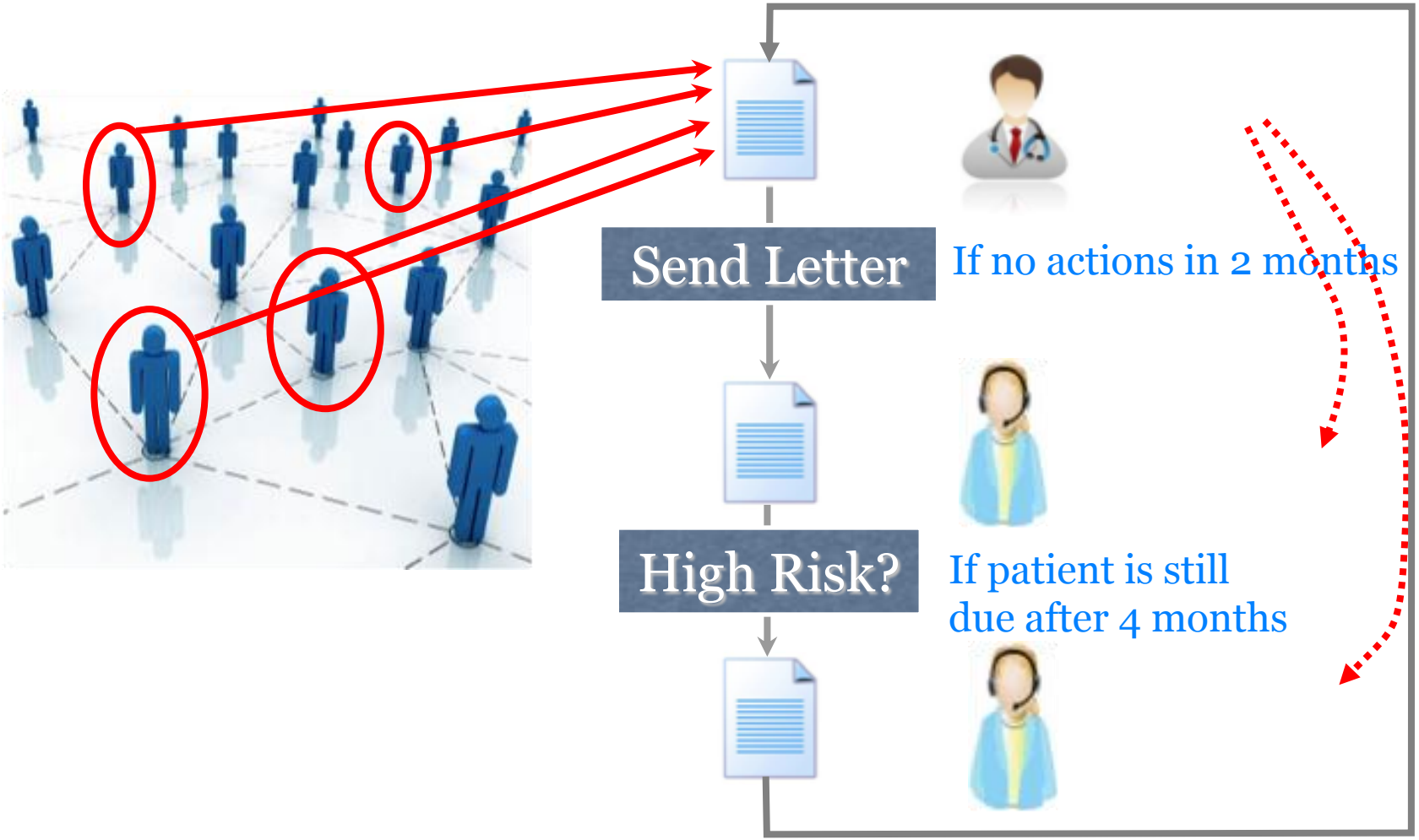
Proof-of-Concept: Mammography FastTrack

- Study goal: increase mammography rates in women overdue for screening
- Study period: 3/20/07 – 3/19/10
- Physician/practice case manager reviewed overdue list
  - Selected patients for reminder letter
- Study design: 6 of 12 practices randomly assigned to use tool (control practices = usual care)
  - 4487 patients in intervention practices
  - 59 of 64 (92%) intervention providers used tool
  - Actions taken: 64% letter, 12% deferred, 24% none

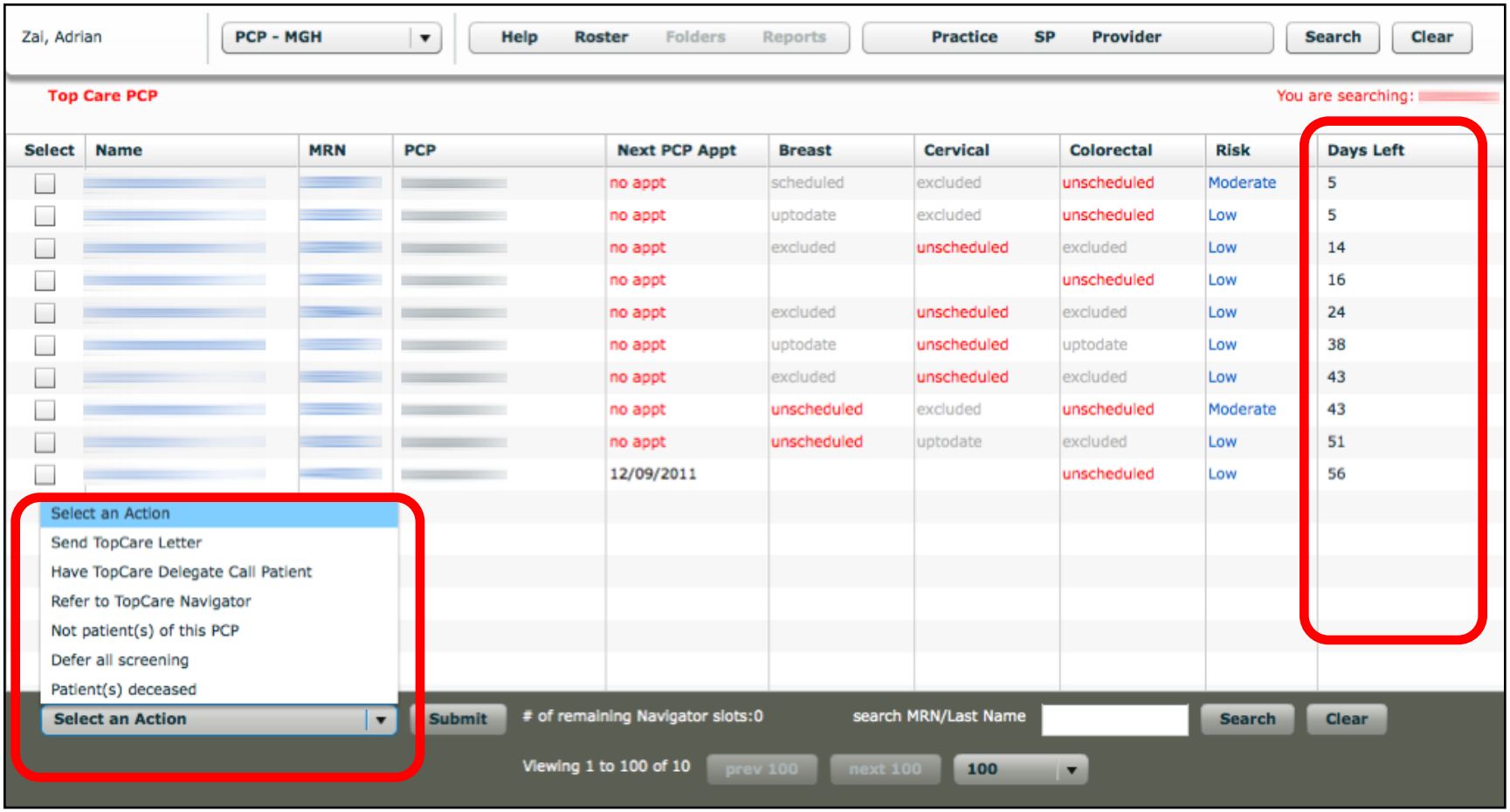
Overdue Patients Completing Screening by Year



TopCare has an Active Surveillance System



Cancer Screening: PCP's Registry



Custom Letters

Massachusetts General Hospital
Attn: Evanthia Katsaogoulis
Founders 736
55 Fruit Street
Boston, MA 02114-2696

MASSACHUSETTS GENERAL HOSPITAL

To: Jane Doe
25 Home Street
Cambridge, Massachusetts 02142
United States

Sep 18, 2011

Dear Jane Doe,

I am writing to check on whether you are up-to-date on cancer screening test(s). The goal of screening is to prevent cancer from developing in the first place, or to find it early, before there are any signs a patient or doctor can see, when it is easier to treat and cure. I want to make sure we schedule a screening test if you are overdue, or update your records if our information is not correct.

Women should consider having a mammogram at least every two years to screen for breast cancer. If you are overdue, please contact our Radiology department at **617-724-XRAY (9729)** or *www.massgeneralimaging.org/mymammo*.

Women should have a Pap test at least every three years to screen for cervical cancer. If you are overdue and would like to schedule a Pap test, please call the doctor's office where you routinely get your Pap test done.

All eligible patients should have colon cancer screening at least every ten years. If you are overdue and would like to schedule a colonoscopy, please call our gastroenterology specialist group at 617-726-2426.

Your medical records here show that you are eligible for cancer screening for the following tests, the date of your most recent test, and whether you are due for additional testing:

	Cancer Screening Test	Most Recent Date	Status
Breast:	Mammogram	No date recorded	Overdue
Cervical:	Pap Smear	No date recorded	Overdue
Colon:	NA	No date recorded	Overdue

If our records are incorrect and you are up to date on your cancer screening, please email us at *careupdate@partners.org* or call **617-643-0287** to let us know. You can leave a private message with our Care Update Service so that we can update your medical record. When you leave a message, please tell us your name, medical record number, the date of the screening test, what the test was, where you had it done, and what the results were (if it was not done here at MGH). If you are not sure of all the details, just leave as much information as you can. You may also send us any reports of your screening test by fax (**617-228-4560**) or mail:

MASSACHUSETTS GENERAL HOSPITAL

Sep 11, 2011

s de detección de cáncer. EL objetivo de estas pruebas es el de prevenir
empranamente, antes que aparezcan síntomas que el paciente o el
rlo. Quiero asegurarme de coordinar una cita para realizar la prueba, si
tros si nuestra información no es correcta.

al menos cada dos años para detectar cáncer de mama. Si ya está
ento de Radiología al **617-724-XRAY (9729)** o visite:

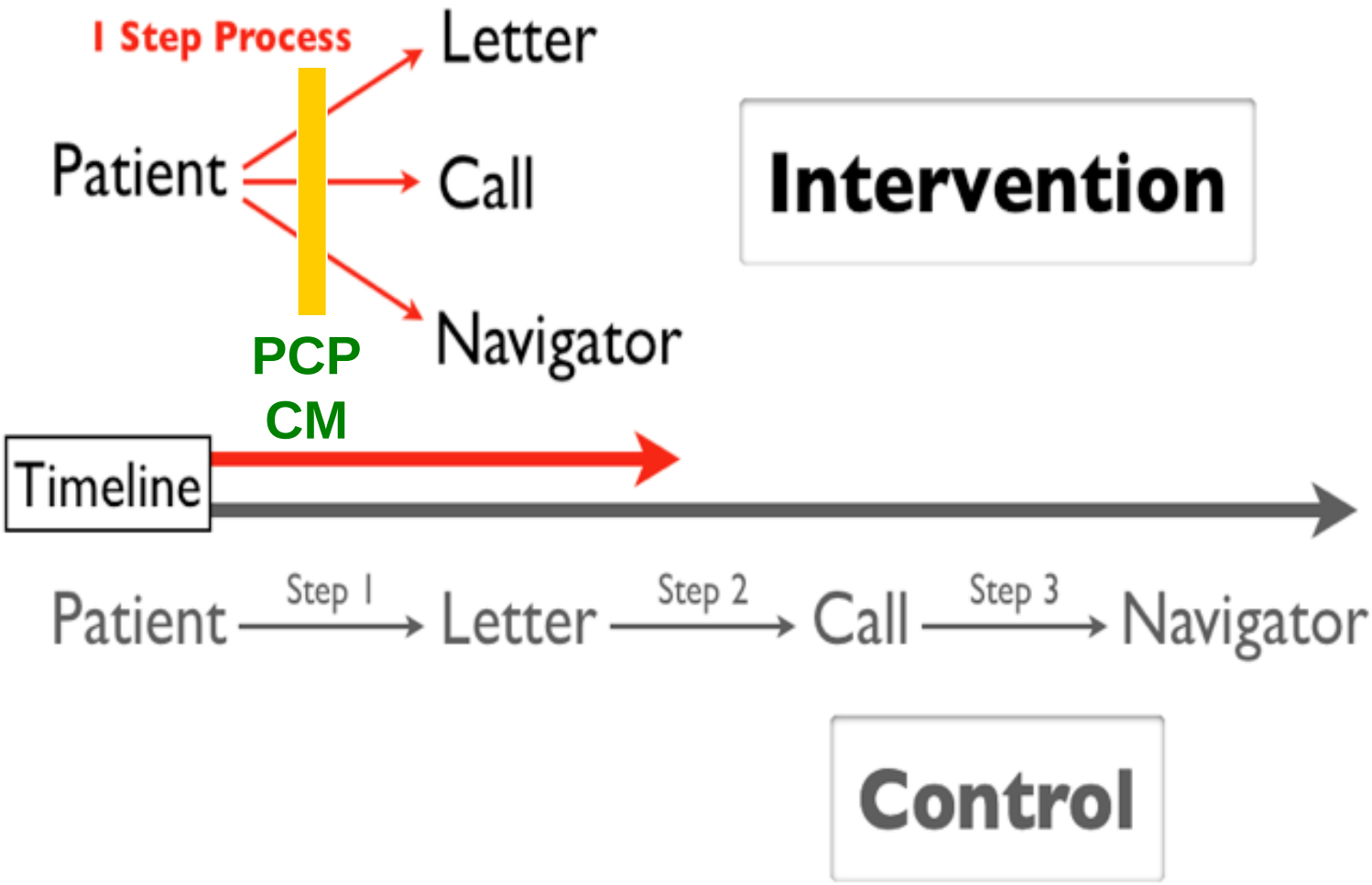
cada tres años para detectar cáncer cervical. Si ya debería hacerse la
u, por favor llame al consultorio del médico donde rutinariamente se lo

hacerse una prueba de detección de cáncer de colon al menos cada diez
para una colonoscopía, por favor llame a nuestro equipo especialista en

os requisitos para realizarse las siguientes pruebas de detección de
ientes, y si ya debería hacerse pruebas adicionales:

ncer		Fecha más reciente	Estado
		Fecha no documentada	Atrasado
Cervical:	Papanicolaou	Fecha no documentada	Atrasado
Colon:	NA	Fecha no documentada	Atrasado

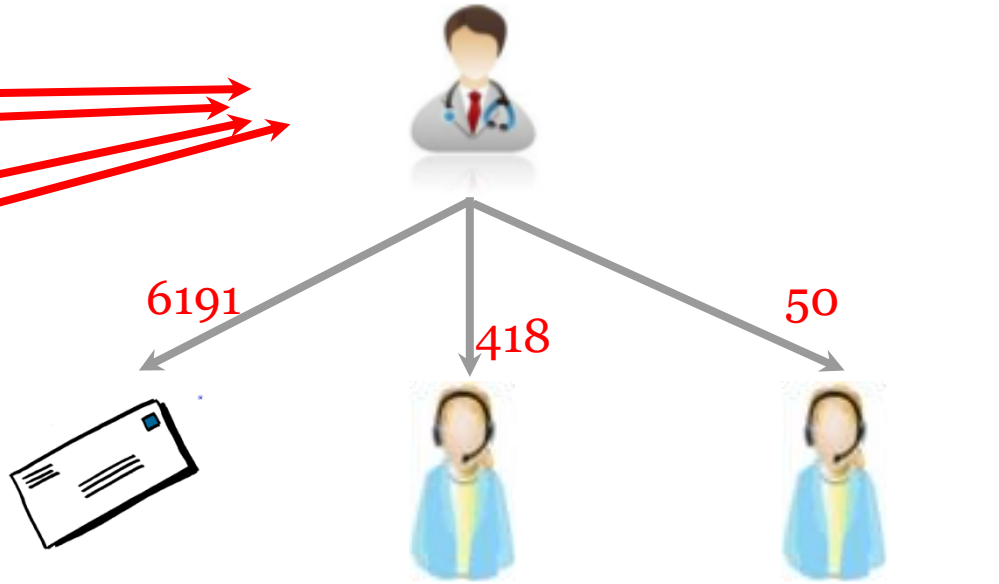
Si nuestros registros son incorrectos y está al día con sus pruebas de detección de cáncer, por favor, envíenos un correo electrónico a *careupdate@partners.org* o llame al **617-643-0287**para hacérnoslo saber. Puede dejar un mensaje privado en nuestro Servicio de Actualización de Cuidados para que actualicemos los registros. Cuando deje un mensaje, por favor, díganos su nombre, número de registro médico, fecha de la prueba, qué prueba se realizó, dónde se la realizó y cuáles fueron los resultados (si no fue hecha aquí en MGH). Si no está seguro de todos estos detalles, deje toda la información que conozca. También puede enviarnos por fax los informes de resultados que tenga al **617-228-4560**, o por correo a:


1 Step Process
Letter
Patient
Call
Navigator
PCP
CM
Intervention
Timeline
Patient
Step 1
Letter
Step 2
Call
Step 3
Navigator
Control

TopCare Trial between 6/11 – 6/12

Intervention
Control

June 14, 2012:
97 out of 107 (91%) intervention providers reviewed 8447 patients



Total intervention letters: 12,111
Total control letters: 17,035
(↓29%)

Defer/Exclude from contact: 1468

Shifting Patient Safety into High Gear

crico

Lessons from Ambulatory Care

A closed loop system for colorectal cancer screening in a residency training practice

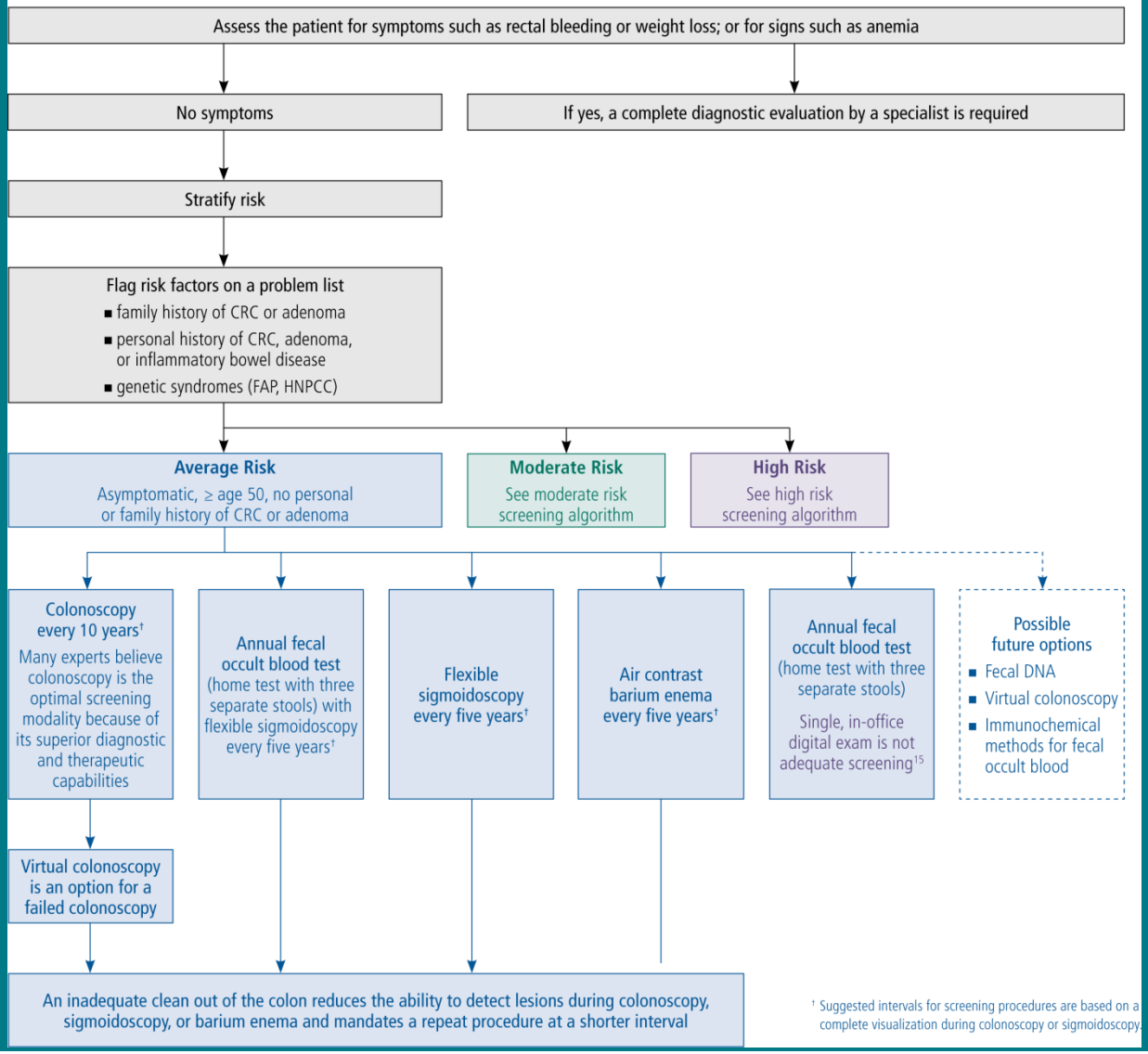
Andy Ellner, MD, MSc | Brigham and Women's Hospital
Co-Director, HMS Center for Primary Care and Assistant Medical Director, Phyllis Jen Center for Primary Care

crico

CRICO/RMF Colorectal Cancer Screening Algorithm

A Decision Support Tool

Colorectal Cancer Screening Recommendation for Individuals at Average Risk (asymptomatic patients age 50 years or older)



Redesigning Primary Care Delivery

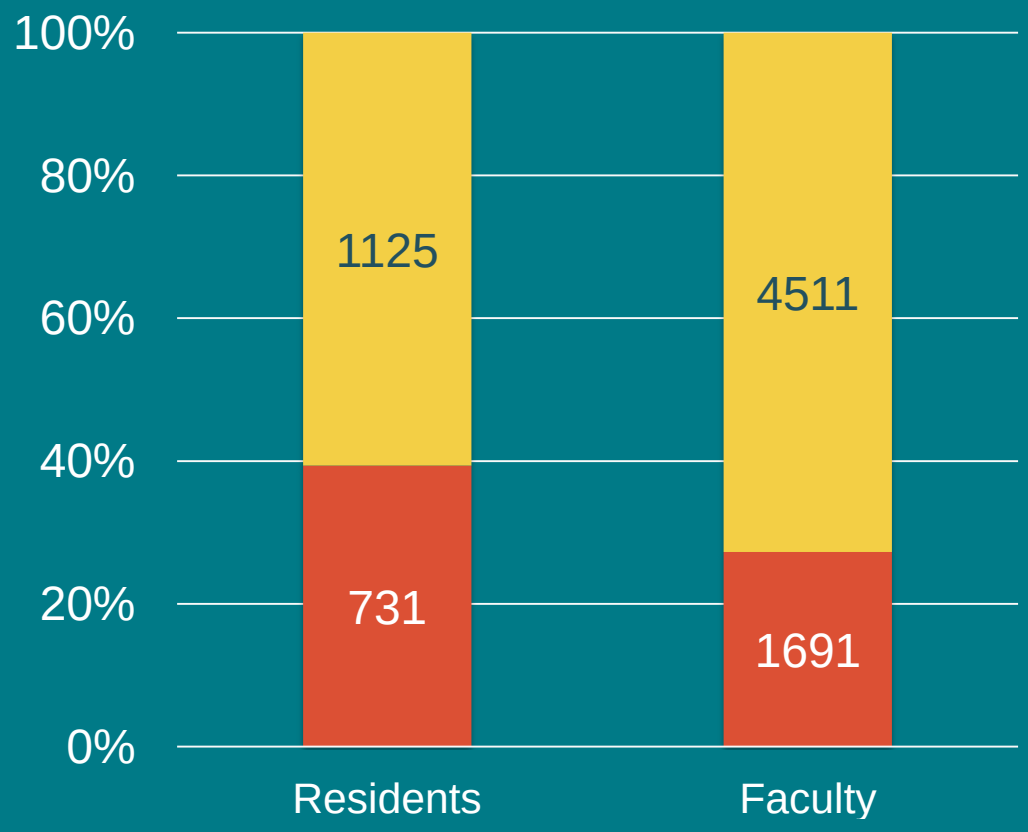
- Ensure adherence to evidence-based screening algorithms
- Offload highly algorithmic tasks from physicians so they can focus on complex diagnosis and management

Phyllis Jen Center for Primary Care (PJC)

- Patients: ~18,000 adults
- Providers: 126 primary care physicians
  - 86 internal medicine residents
  - 95% of providers practice 2 sessions a week or less
  - High medical and psychosocial complexity among patients

crico

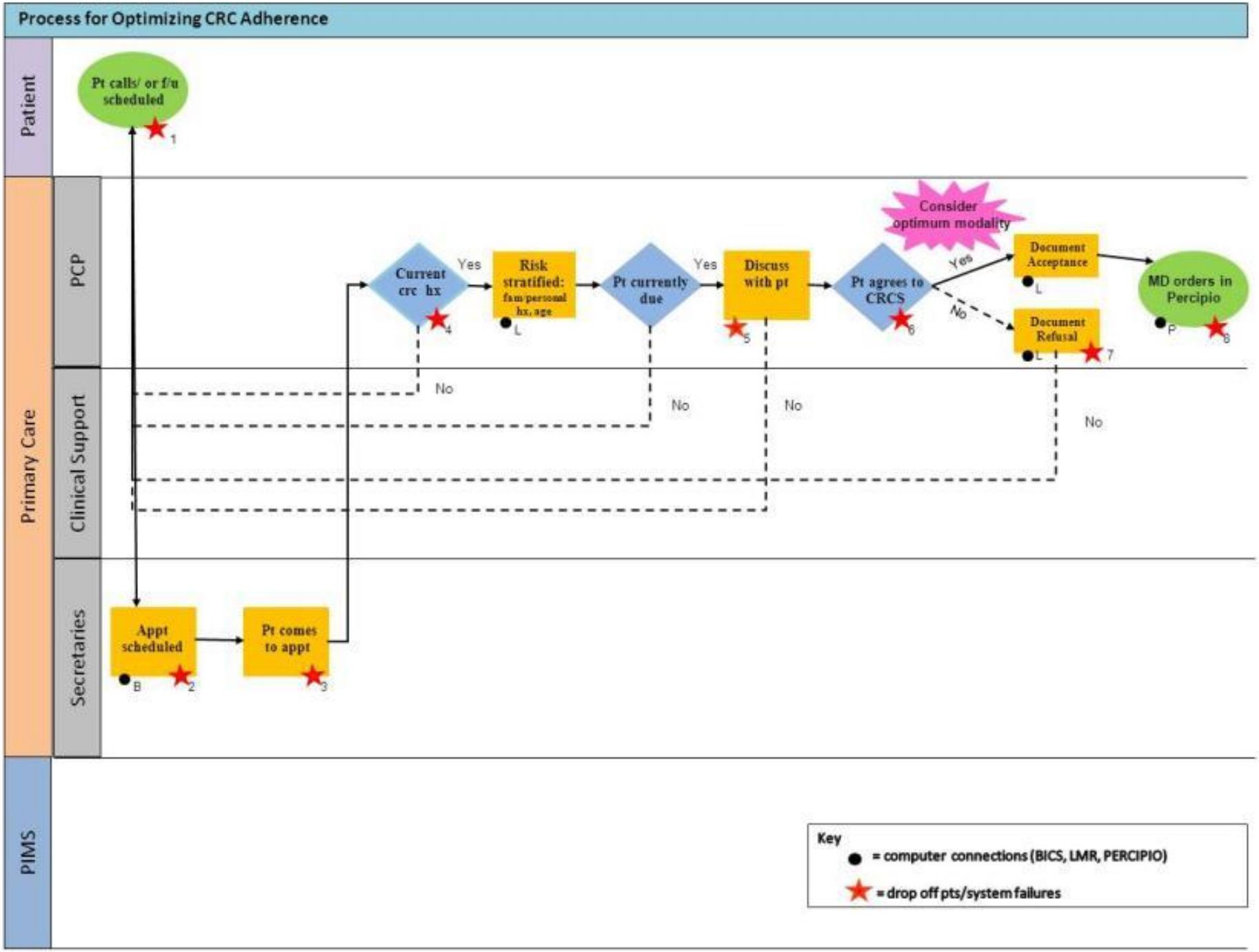
CRC Screening in the PJC

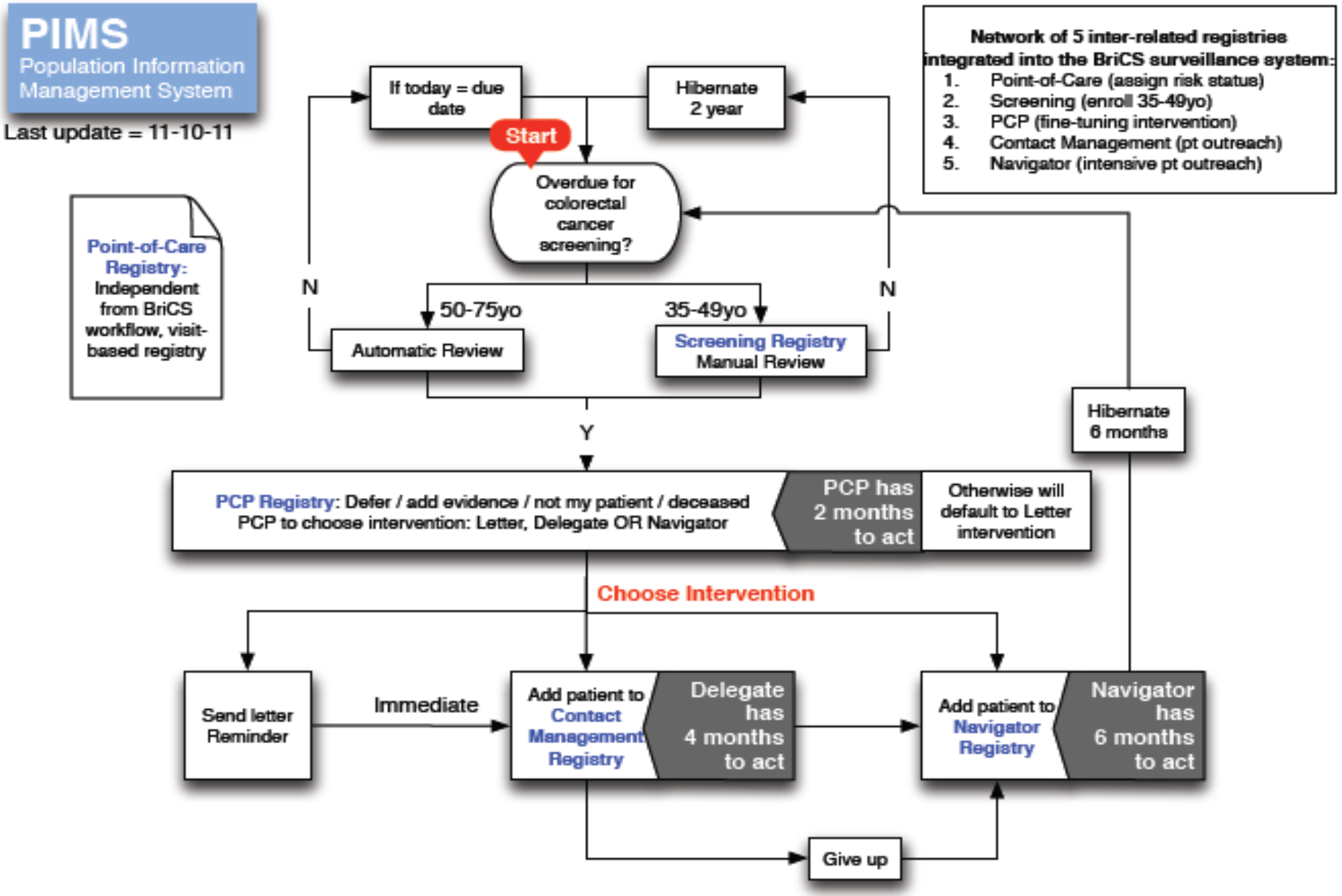


30-40%
Jen Center patients overdue for CRC Screening

Due for colonoscopy screening among patients between age 50 to 75.

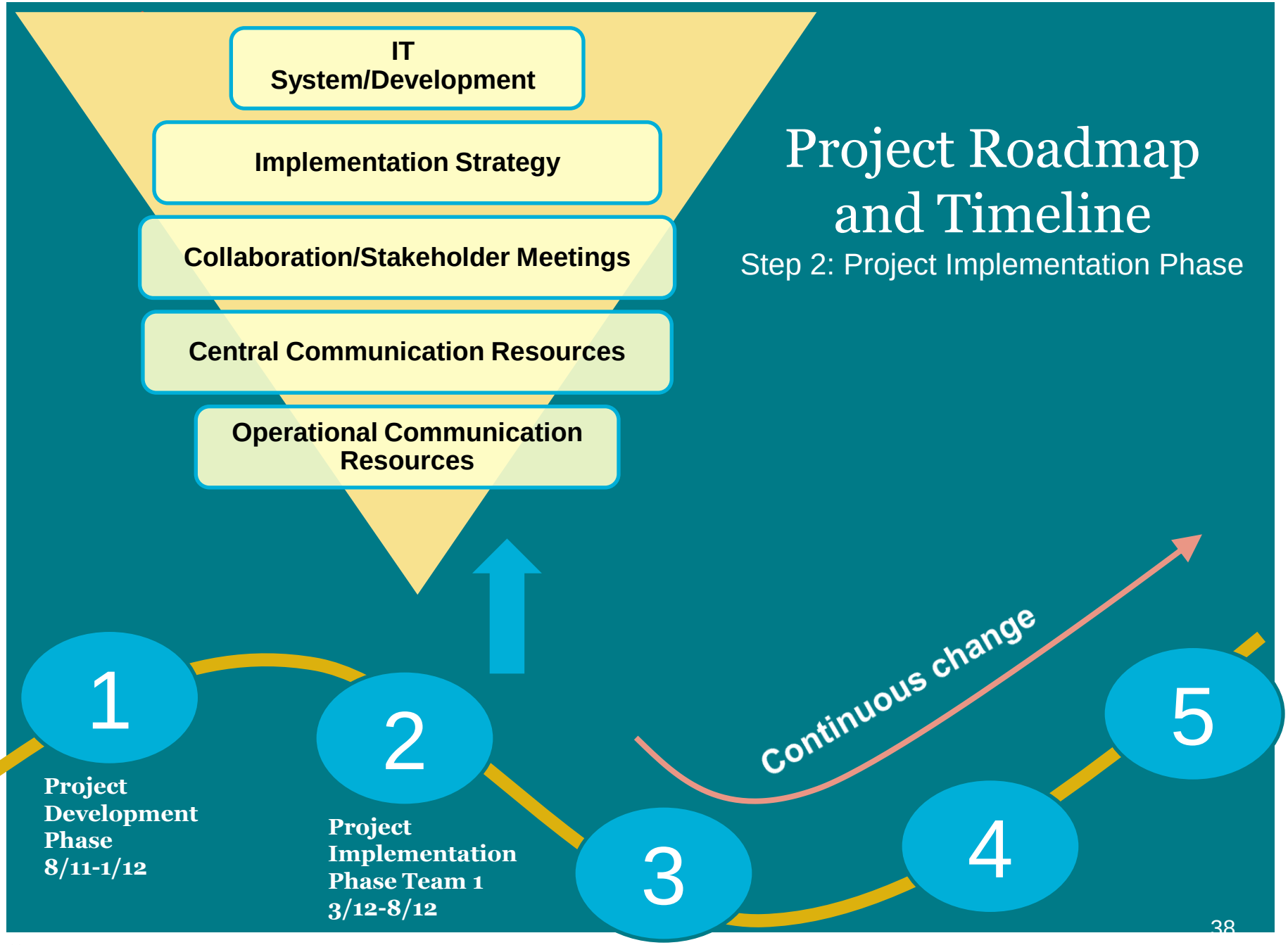
35


Process for Optimizing CRC Adherence
Patient
Primary Care
PIMS
PCP
Clinical Support
Secretaries
Pt calls/ or f/u scheduled
1
Appt scheduled
B
2
Pt comes to appt
3
Current crc hx
4
Yes
Risk stratified: fam/personal hx, age
L
Pt currently due
Yes
Discuss with pt
5
Consider optimum modality
Pt agrees to CRCS
6
Yes
No
Document Acceptance
L
Document Refusal
L
7
MD orders in Percipio
P
8
No
No
No
No
Key
= computer connections (BICS, LMR, PERCIPIO)
= drop off pts/system failures


PIMS
Population Information Management System
Last update = 11-10-11
Network of 5 inter-related registries integrated into the BriCS surveillance system:
1. Point-of-Care (assign risk status)
2. Screening (enroll 35-49yo)
3. PCP (fine-tuning intervention)
4. Contact Management (pt outreach)
5. Navigator (intensive pt outreach)
Point-of-Care Registry: Independent from BriCS workflow, visit-based registry
If today = due date
Hibernate 2 year
Start
Overdue for colorectal cancer screening?
N
50-75yo
35-49yo
N
Automatic Review
Screening Registry Manual Review
Y
Hibernate 6 months
PCP Registry: Defer / add evidence / not my patient / deceased
PCP to choose intervention: Letter, Delegate OR Navigator
PCP has 2 months to act
Otherwise will default to Letter intervention
Choose Intervention
Send letter Reminder
Immediate
Add patient to Contact Management Registry
Delegate has 4 months to act
Add patient to Navigator Registry
Navigator has 6 months to act
Give up

Project Roadmap and Timeline

Step 2: Project Implementation Phase



38

crico

Results from pilot phase

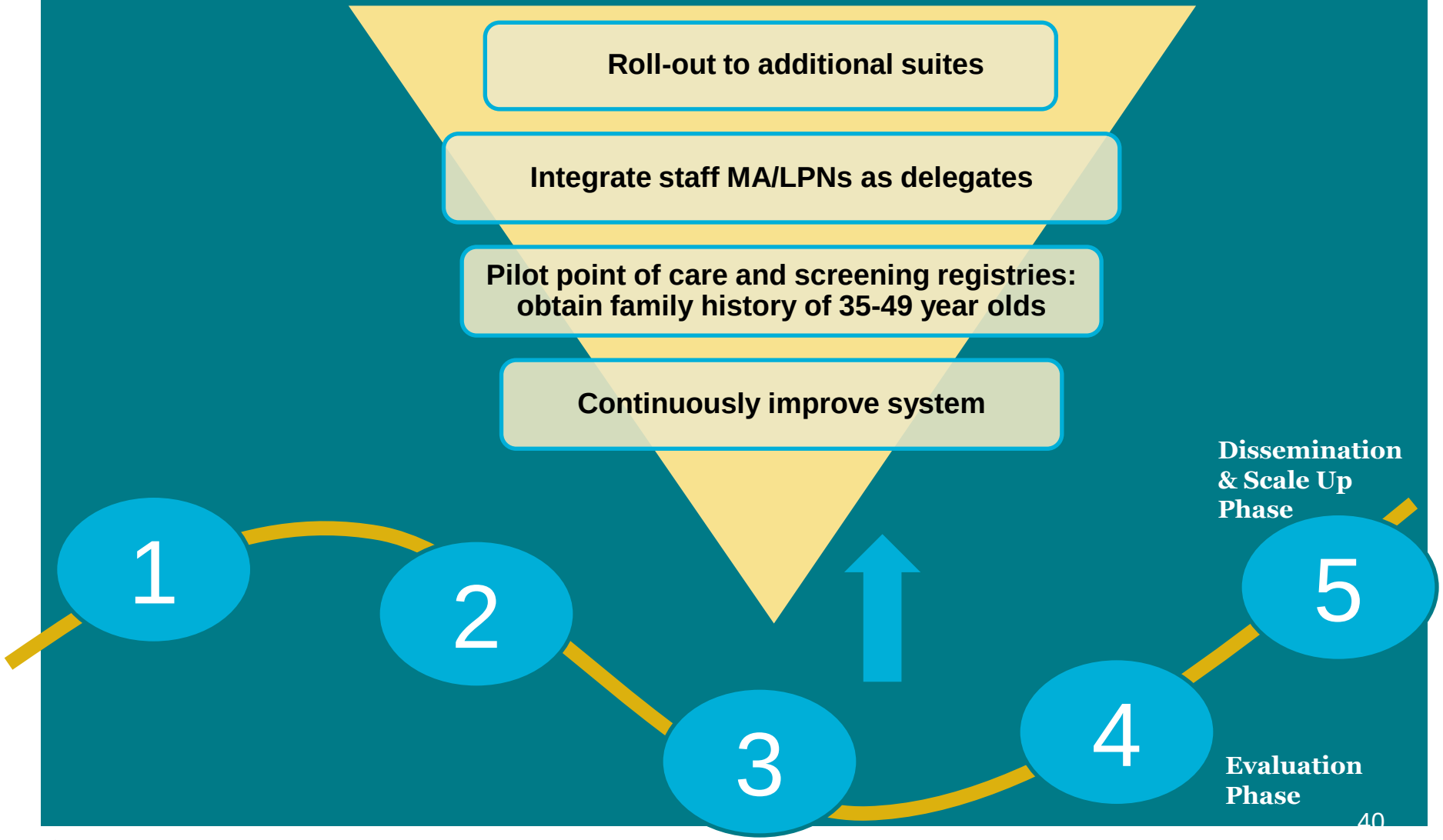
Three months:

- Calls to **445 patients** identified as overdue
- **44 new orders** placed (**19 colonoscopies completed**)
- Obtaining outside reports for **88 patients** to be scanned and documented; and
- **Screening deferred for 164 patients** after speaking with our delegate about the risks and benefits of screening or having been excluded by their PCPs; we will ensure documentation
- Overall, adherence increased (*roughly*): **58% → 83%.**

crico

Project Roadmap and Timeline

Step 3: Expansion/Evaluation Phase



40

crico

Early Lessons

Challenges

- Culture, culture, culture
- Provider & staff silos
- Tyranny of the urgent
- Competing initiatives

Opportunities

- Crisis = opportunity
- Integration & collaboration
- Improved efficiency = time
- Strategic alignment