



ALL WOMEN  
DESERVE AN  
**EQUAL CHANCE**  
AT SURVIVAL



How Far have we come?: Battling breast cancer mortality disparities through quality improvement

SCREENING **SAVES LIVES**



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Kathy Tossas-Milligan, MS, PhD(c)  
Associate Director, Quality Consortium  
Metropolitan Chicago Breast Cancer Task Force

SCREENING **SAVES LIVES**

# Overview & Disclaimer

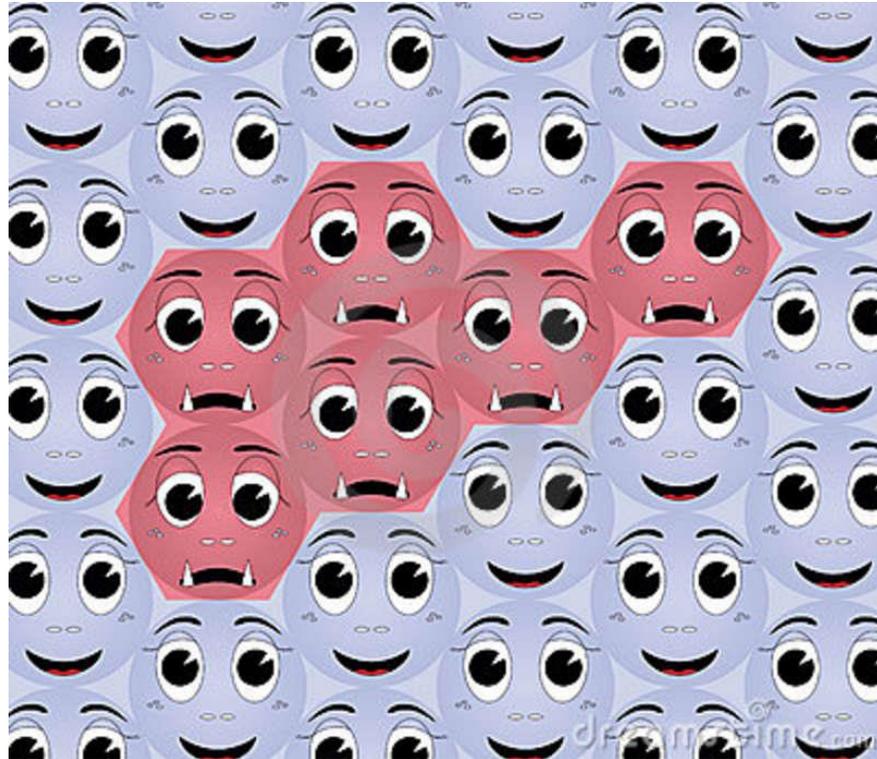
- 1) Cancer(abridged)
  - a) Background
  - b) Risks
  - c) Disparities
- 2) Breast cancer (less abridged)
  - a) Background
  - b) Risk
  - c) Disparities
  - d) access & equity
- 3) 3. Breast cancer screening quality
  - a) Why?
  - b) How?
  - c) What?
- 4) Discussion/questions

Cancer advocate, NOT cancer expert



# What is cancer?

uncontrolled cell growth



External factors  
(tobacco, infectious  
organisms, chemicals,  
radiation)

Internal factors  
(genetics, hormones,  
immune conditions,  
metabolism)

# Who is at risk of cancer?



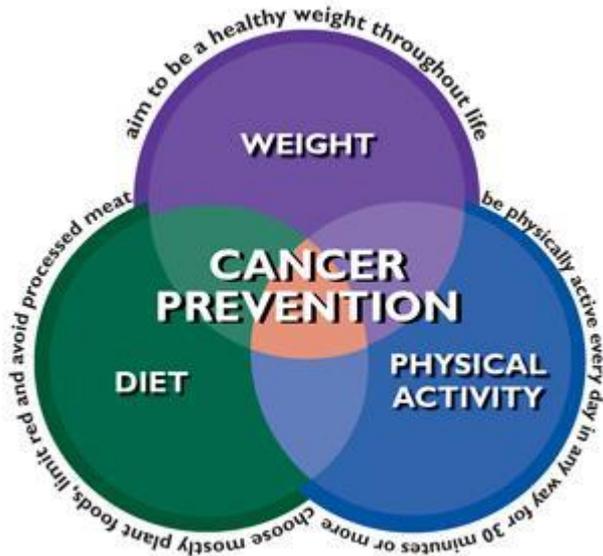
- Men (1:2) & Women (1:3)
- 77% > 55 y/o
- genetics, family hx & lifestyle

# The good news is...1/3 cancers preventable

- Most Cervical (HPV vax)
- Colorectal (colonoscopy)



176K of 586K deaths from smoking in 2014



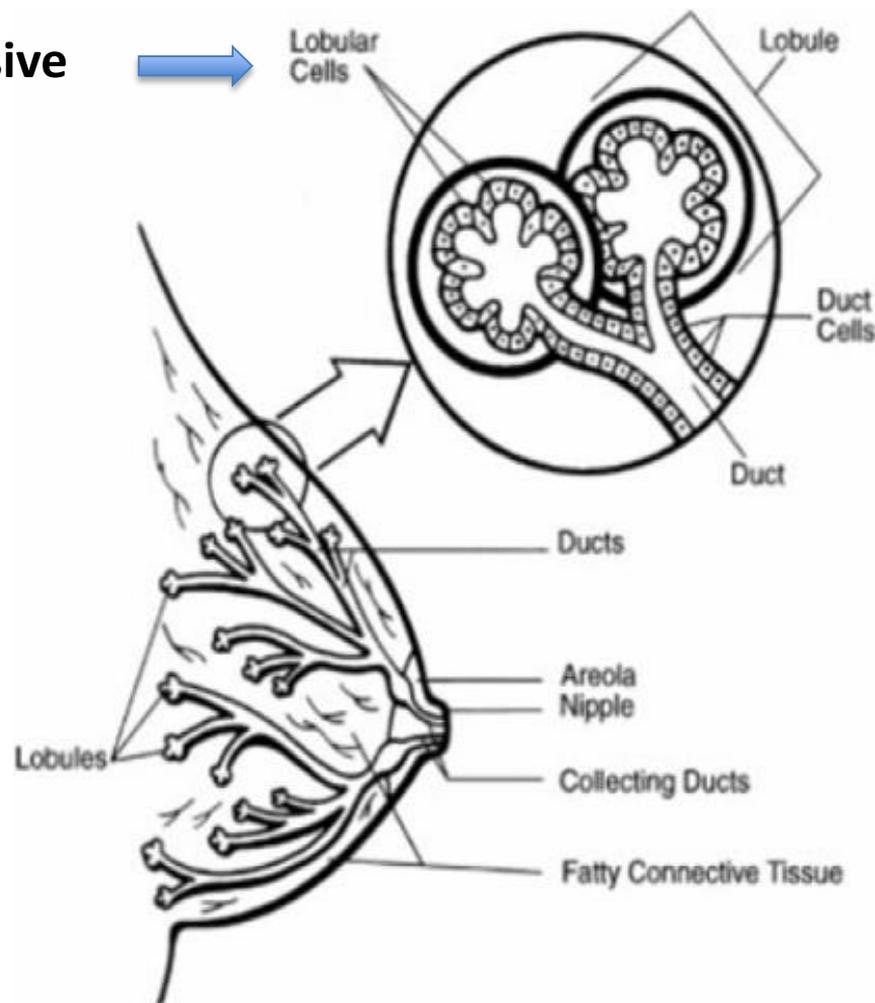
Screenings for early detection

- Prostate
- **Breast** ←
- Skin
- Lung
- Oral

# Breast Cancer - less abridged

2nd deadliest and 2nd most common cancer in the US (which is first?)

About 1 in 10 invasive BC are ILC



About 8 in 10  
invasive BC are IDC

# Risk factors – uncontrollables

- #1 risk factor – is being a Woman
- Age
- Family hx
- Race
- Genetics
- Menstrual hx



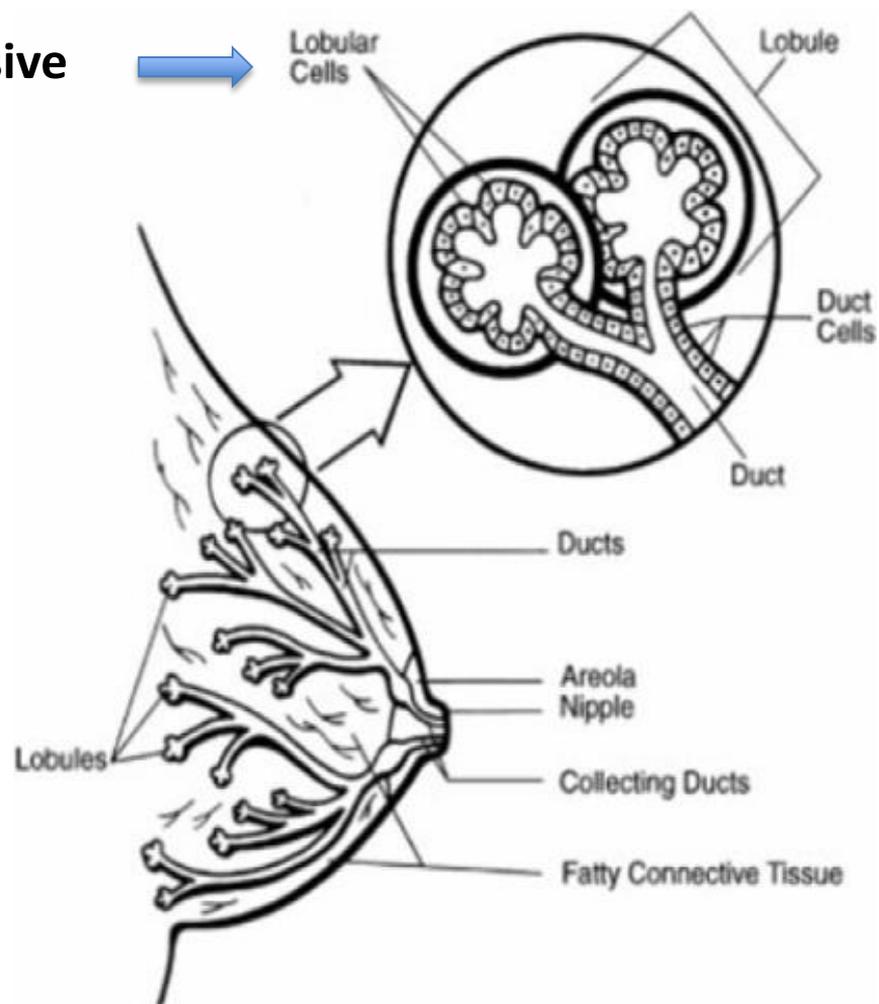
# Risk factors – controllable

- Reproductive hx
- Obesity
- Exercise
- Breastfeeding
- Parity
- Alcohol
- Smoking
- Birth control pills
- Hormone replacement therapy



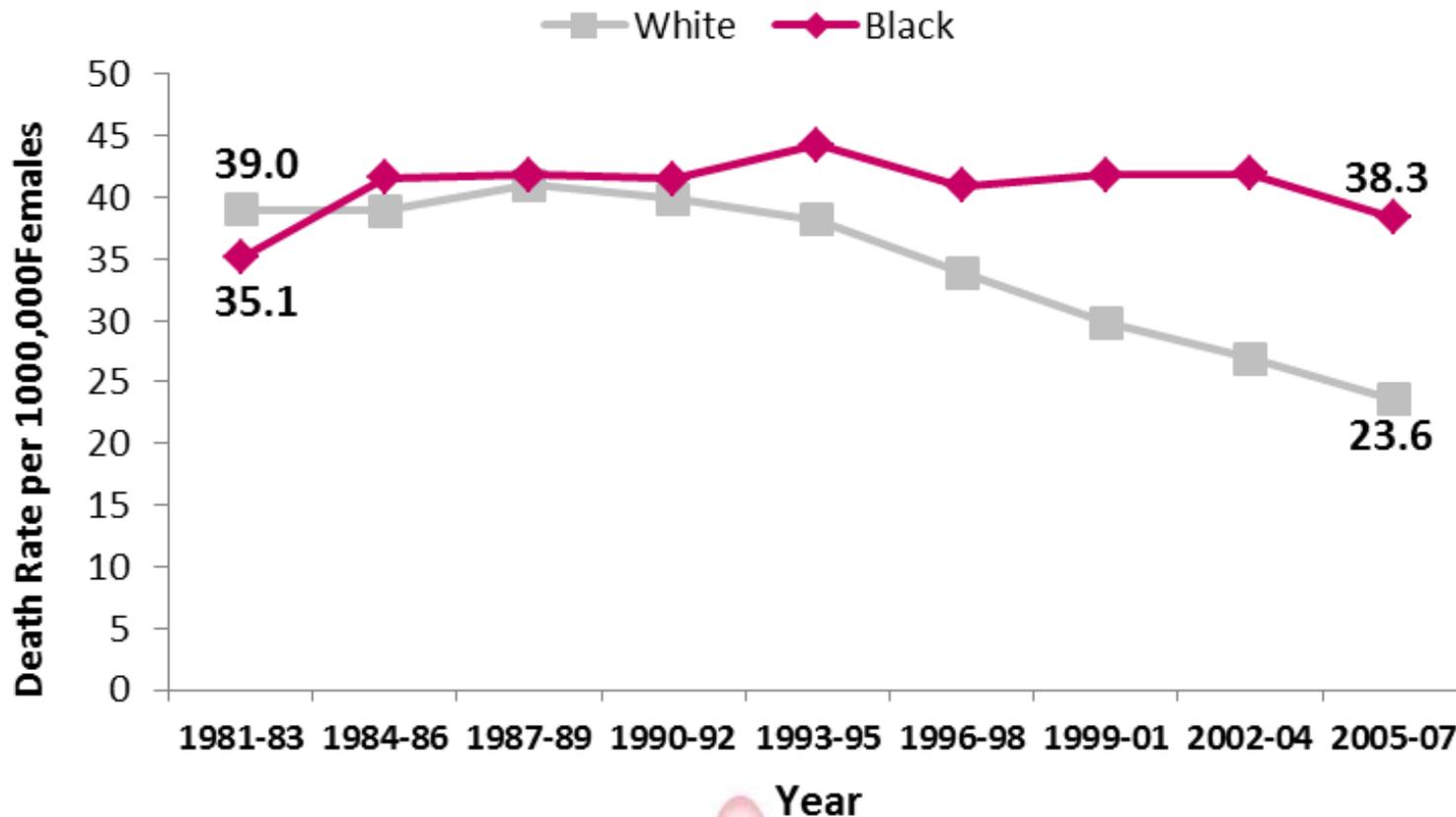
# Breast Cancer - less abridged

About 1 in 10 invasive  
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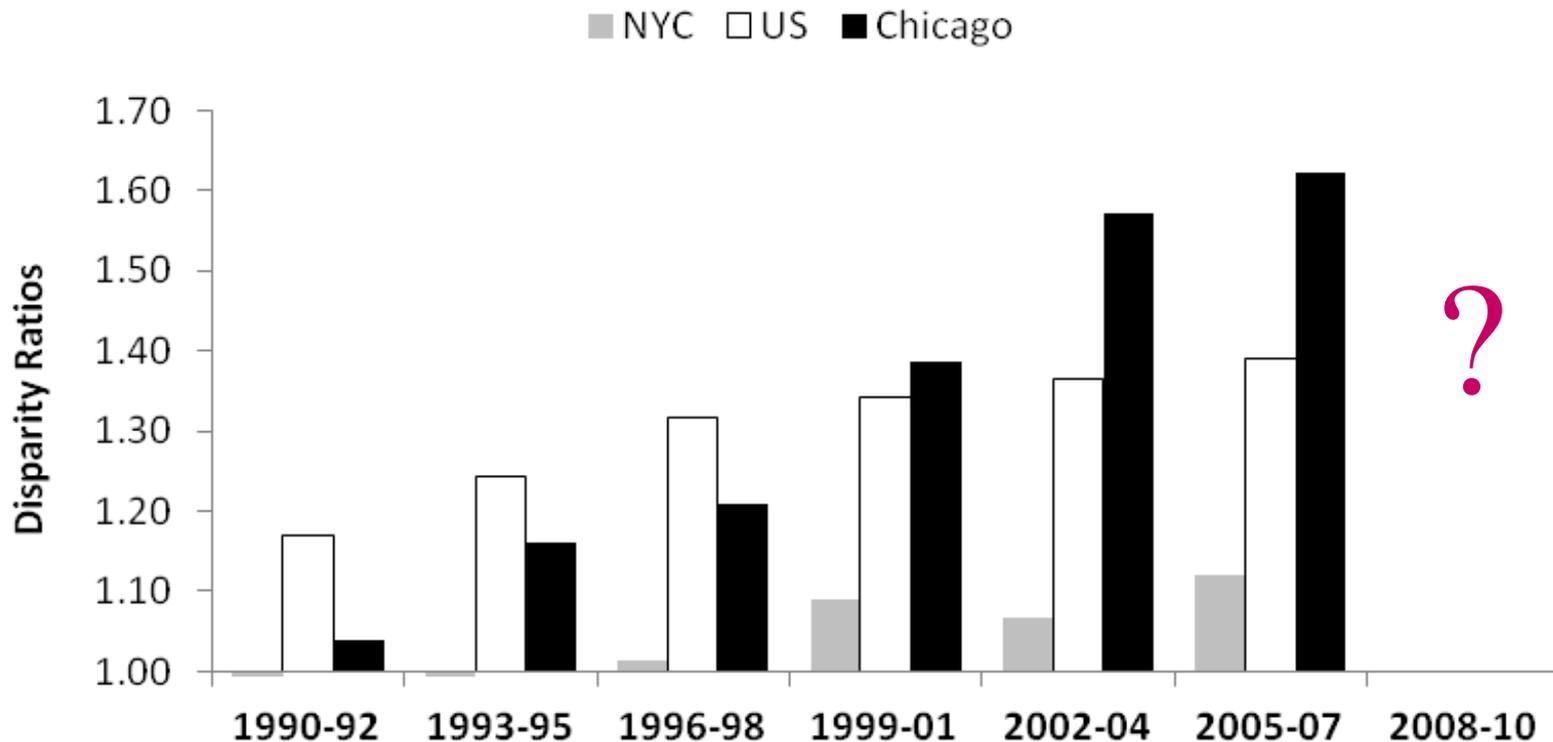
# The disparity



Data Source: Illinois Department of Public Health Vital Statistics

Data Prepared By: Sinai Urban Health Institute

# Racially and ethnically diverse cities showed great variation in their level of this disparity



# Our central hypothesis regarding health disparities in Chicago

Unequal access to **high quality healthcare**  
is a significant driver in overall healthcare  
disparities including breast cancer  
mortality disparities in Chicago



# Call to Action: The founding summit of the Metropolitan Chicago Breast Cancer Task Force

- March 2007, over 200 concerned advocates, breast cancer survivors, breast cancer experts and concerned citizens came together to organize over this issue.
- Action Groups were formed in the areas of:
  - ❖ Access barriers to Mammography for Black Women
  - ❖ Quality of Mammograms received by Black Women
  - ❖ Quality of Treatment received by Black Women
- This led to 37 recommendations for change, which are far reaching and at times complex. They include public education and outreach, advocacy and public policy changes, healthcare quality improvements, and healthcare delivery system change in Chicago.



# MCBCTF Background

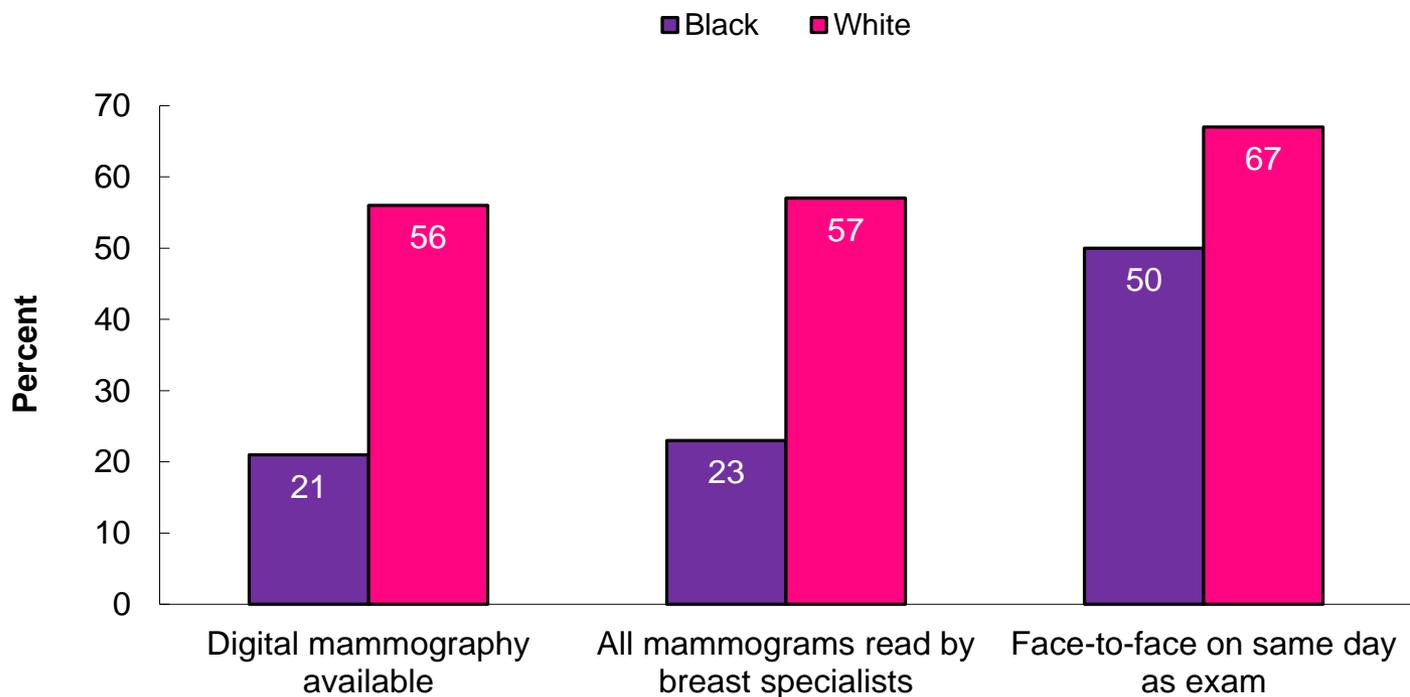
- In 2008, with generous funding from Avon Foundation for Women (\$1million) and Susan G. Komen for the Cure (\$1 million), the Task Force opened its doors.
- The MCBCTF is charged with putting into effect the recommendations that came from the Summit, expanding and developing new solutions that will eliminate the breast cancer disparity.



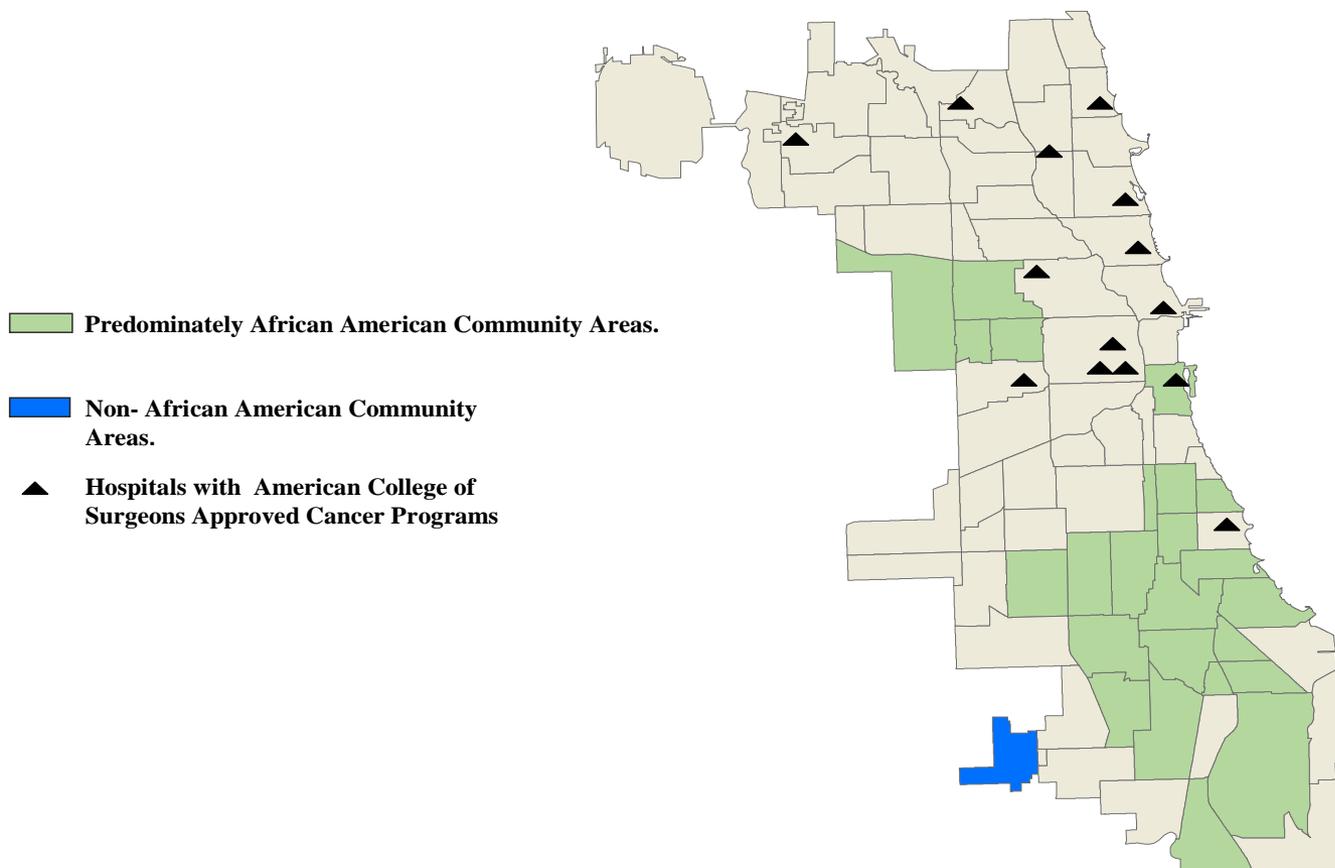
# Early Data Suggesting Inequity in Healthcare

## Mammography Facility Survey

Characteristics of Mammography Services Offered, by Race, to Women Living in Chicago (2007)



# Chicago community areas with the highest 2000-2005 average annual breast cancer mortality rates



# Chicago Breast Cancer Quality Consortium funded by Susan G. Komen for the Cure \$2.1 million over 6 years

- Healthcare providers from all across Illinois sharing breast cancer screening and across Metro Chicago sharing treatment quality data.
- Unique in that we have participants from all academic, publics, all major hospital systems and most safety net and community hospitals – even those that are not generally involved in research and don't have large quality departments.
- First Patient Safety Organization federally designated exclusively working on breast health and racial health disparities.

## **Mammography Metrics:**

### *Radiologist quality*

cancer detection rates

% minimal and early stage

### *Facility Quality*

Timeliness and loss to follow up

## **Treatment Metrics:**

Radiation after Lumpectomy

ER/PR testing

Hormone recommended for those receptor positive

Timeliness from diagnostics to treatment



# What is unique about Consortium?

- Nation's only federally designated PSO for breast health and racial health disparities
- Very broad participation with large scale inclusion of safety net hospitals
- Provides technical assistance to safety net venues to help with participation
- Very inclusive – broad participation on advisory groups
- Ability to provide resources to participating provider (free trainings, Rapid cycle Improvements)
- Goes beyond research to implement change
- Moves research to policy change
- Is informed by the everyday lives of women struggling with our inadequate healthcare delivery system (Task Force's Navigation programs).



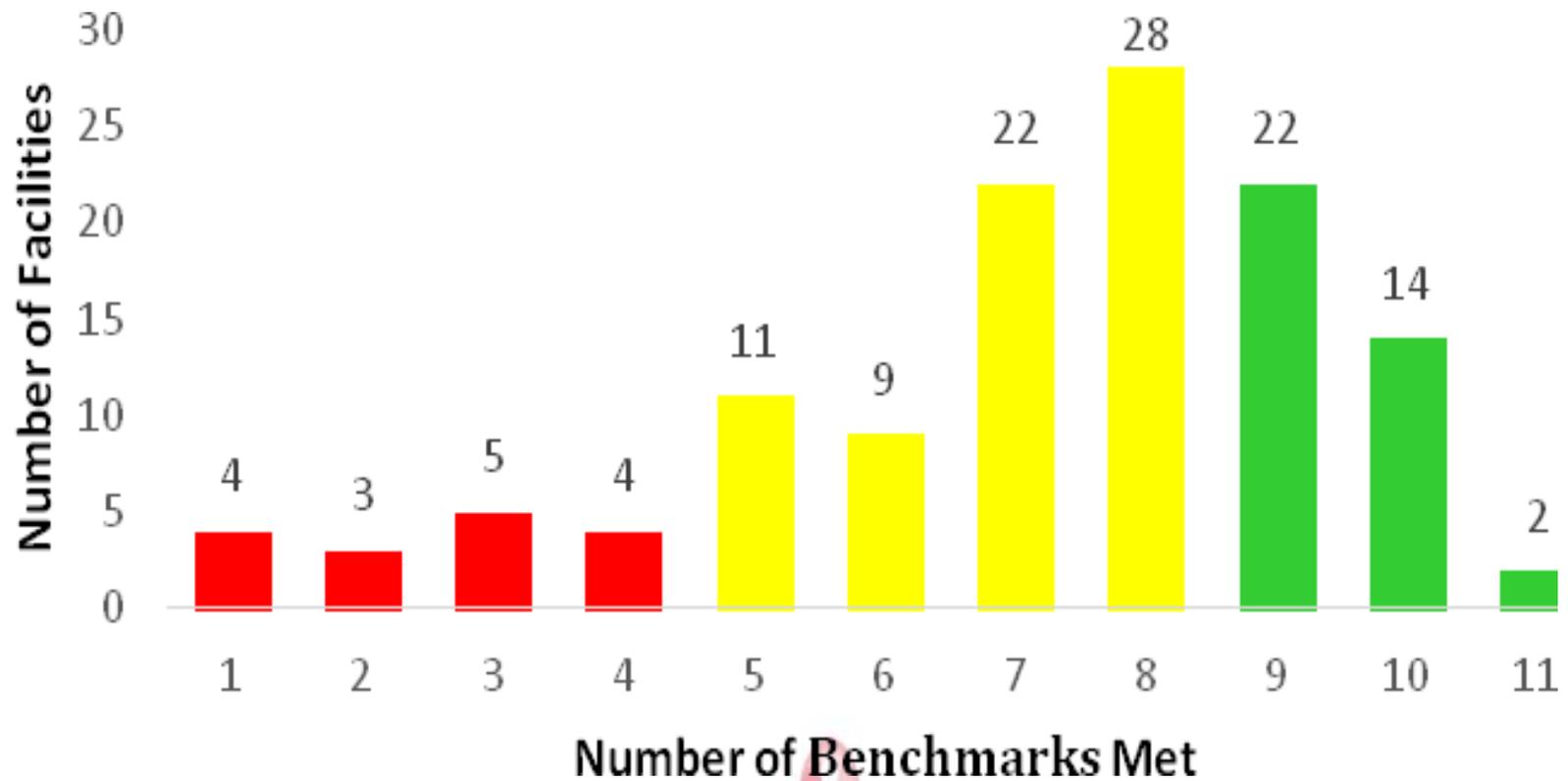
# Screening Mammography Measures and Targets

	Measure	Participants meeting benchmark	Consortium Benchmarks	BCSC 2009
<b>Radiologist Quality</b>	Cancer detection rate (cancer among screened)	68%	3-10 per 1000	4.1 per 1000
	Proportion minimal	81%	>30%	53.6%
	Proportion early stage	59%	>50%	73.6%
	Abnormal screen resolved as needing biopsy (biopsy recommendation rate)	59%	8-20%	12.2%
	Cancer among abnormal screens (PPV1)	57%	3-8%	4.2%
	Cancer among biopsied (PPV 3)	67%	20-40%	26.9%
	Recall Rate	63%	5-14%	9.2%
	<b>Facility Care</b>	Follow-up imaging in 12 months	75%	>90%
<b>Process</b>	Follow-up imaging within 30 days	53%	>90%	NA
<b>Quality</b>	Biopsy received in 12 months	81%	>70%	70.6%
	Biopsied within 60 days	53%	>90%	NA

# Quality Varies

## Mammography

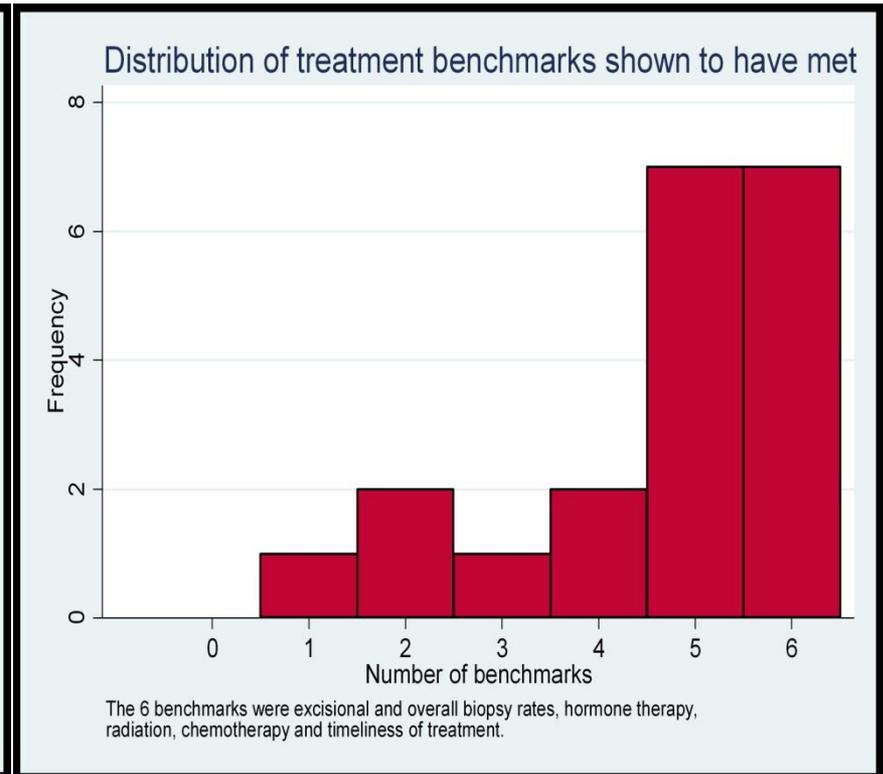
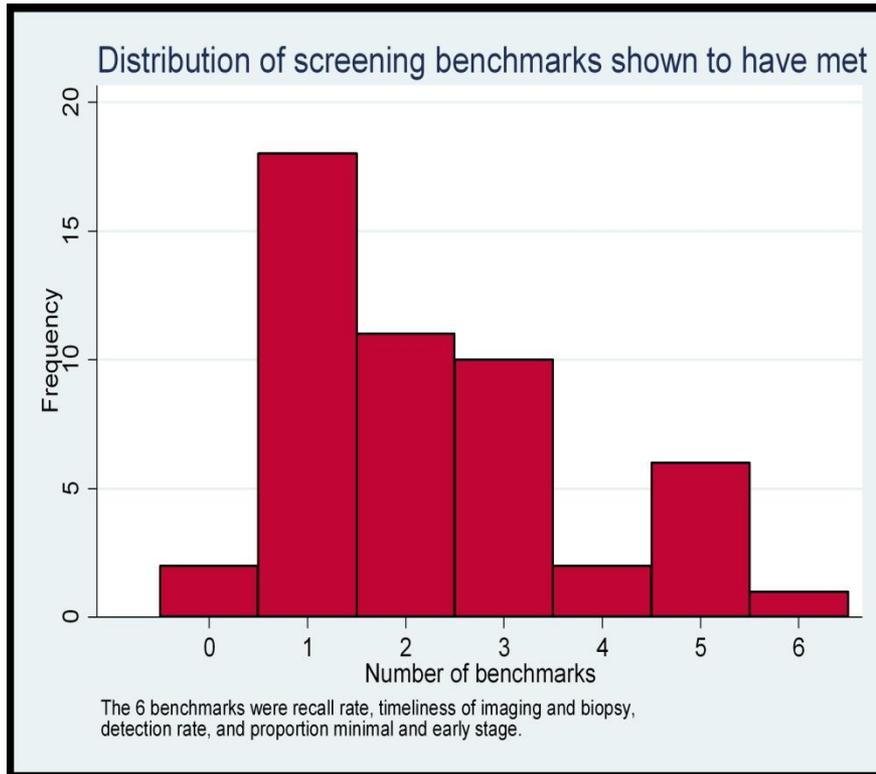
## Treatment



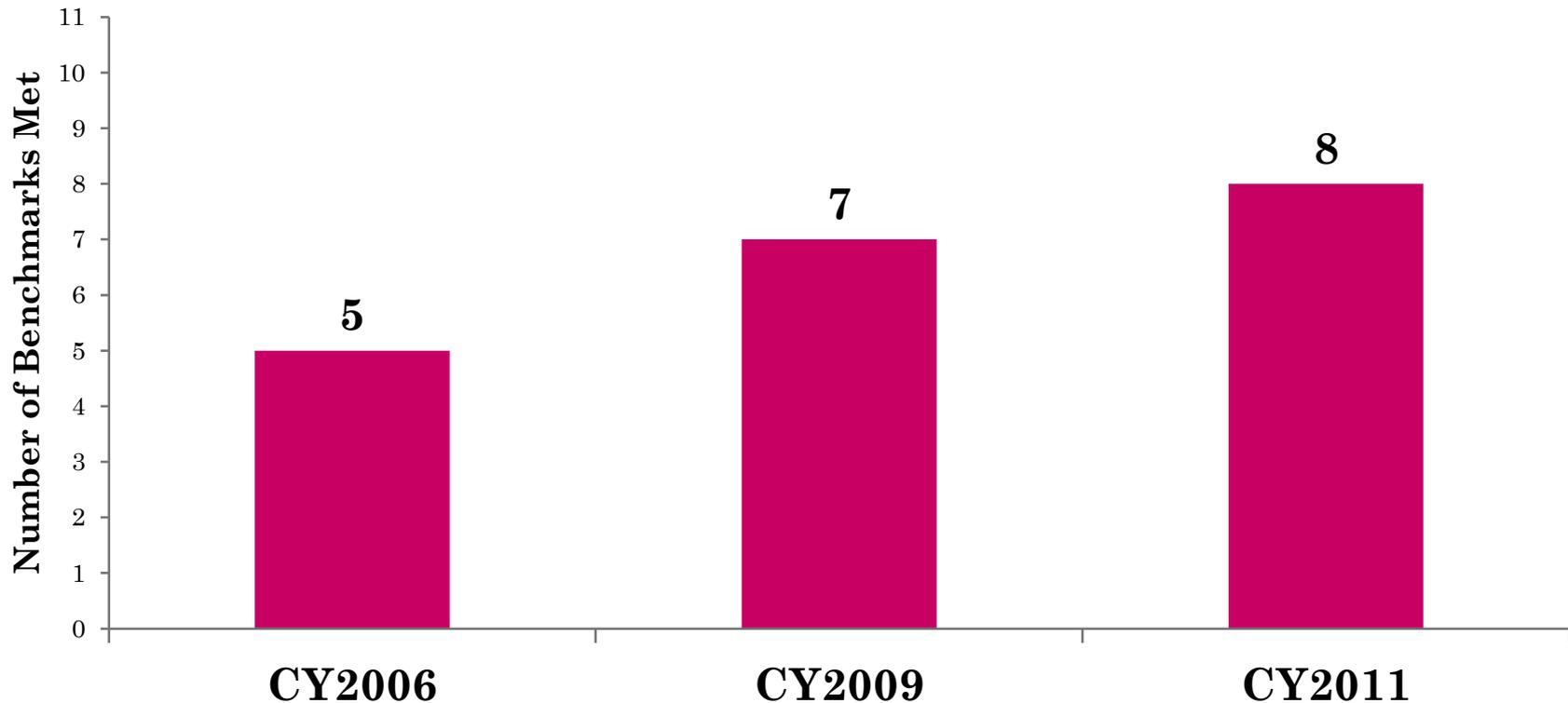
# Quality Varies

## Mammography

## Treatment



# Evidence of Impact & Improvement: Meeting mammography quality benchmarks



# CHICAGO SUN-TIMES

75¢ CITY & SUBURBS \$1.25 ELSEWHERE | LATE SPORTS FINAL | THURSDAY, OCTOBER 21, 2010 | SUNTIMES.COM | SMOOTH 60° 38° Page 66 

CHICAGO HOSPITALS' GRADE ON BREAST CANCER:

# Not good enough

WV: 693 WVL 2383 Zoom: 1.00 ROT: 0° FL:  
ASD: 1.89mGy ESE: 4.42mGy 0.30 PROC. 1  
50mAs Mo/Rh Grid AOP/S 7daN 36.0mm



New study says 2 out of 3 Chicago hospitals are not able to show that they find cancer when it's small nor provide timely treatment after diagnosis  
MONIFA THOMAS REPORTS ON PAGE 15

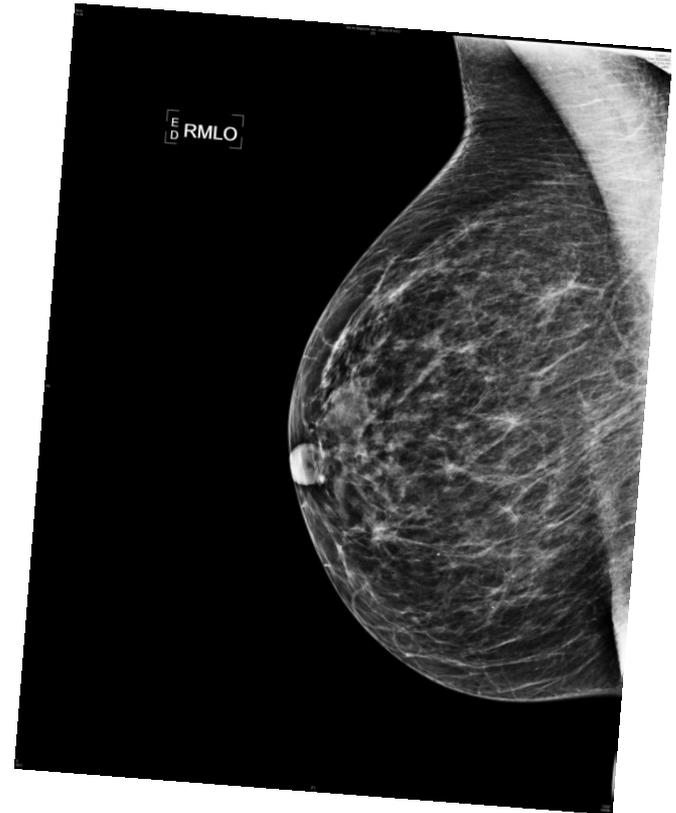


# University of Illinois study on potentially missed breast cancers

Looked at diagnosed with breast cancer and their prior mammograms:

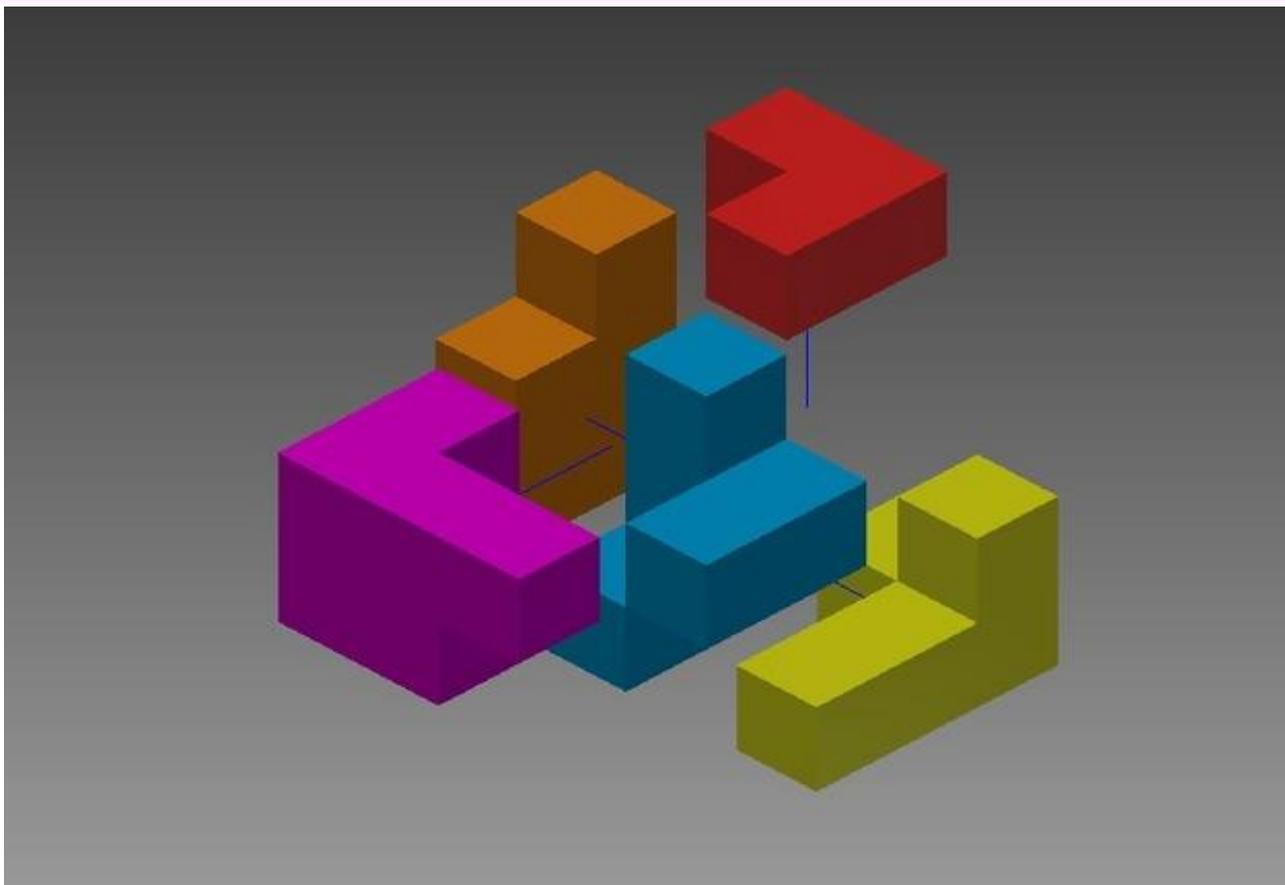
- Poor women
- Women with less education and
- Publicly insured women

Had the highest rate of potentially missed breast cancer



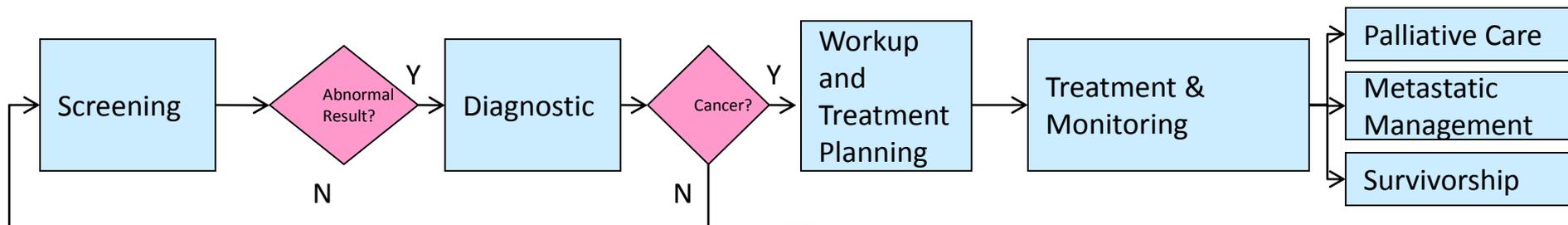
Rauscher GH, Khan J, Berbaum ML, Conant EF. Potentially missed detection with screening mammography: does the quality of radiologist's interpretation vary by patient socioeconomic advantage/disadvantage? *Annals of Epidemiology* 2012; 23(4): 210-214

# Treatment: What Matters?



# Beyond Quality Measurement – Care Process Analysis

- Assess patient interactions with the healthcare system and information provided to patient
- Review handoffs between different services / phases of care, and where breakdowns may occur
- Review services supporting patient tracking and follow-up (information systems, administrative support, patient tracking processes, etc.)
- Identify and document good practices, as well as opportunities to address problematic practices



# Select Examples of Findings

Process	% facilities
Provision of Navigation Services	33%
Breast Imaging Center directs patient to follow up care	29%
Tracking of patient with cancer diagnosis	52%
Allows Self Referrals for Screening Mammograms	14%
Breast Imaging Center calls patients with abnormal results to explain results and advise on next steps	52%
Radiation oncology consult prior to breast conserving surgery	33%
Have a survivorship care plan	15%





# TESTING MODELS FOR CHANGE

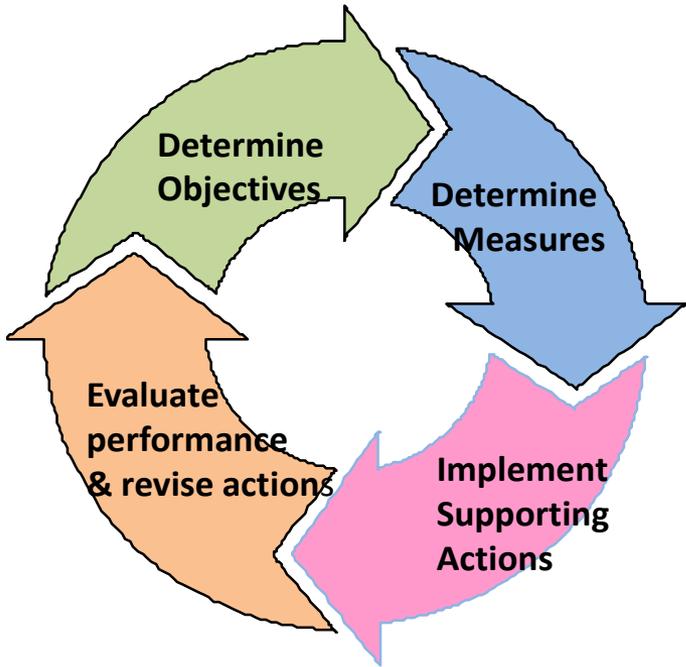
A METRO-WIDE MAMMOGRAM SCREENING INITIATIVE

# Quality Improvement Interventions

- Rapid Cycle Improvements (RCI)
- Mammography Technologist Boot Camp
- Train the Trainer Initiative
- Breast Imaging Team Education
- Mammography and Treatment Quality Reports
- Navigation



# Interventions – RCI



Did patient reminders reduce no shows and loss to follow up?	BASELINE		POST IMPROVEMENT	
	All sites N=27	RCI sites n=14	All sites N=27	RCI sites n=14
Reminder call about appointment	48%	21%	85%	93%
Call no-show patients	19%	0%	63%	86%
Call to follow up with patients who have abnormal results	56%	50%	78%	93%
No show rate for screening mammograms	22%	29%	18%	21%

Adapted Deming PDCA cycle for continuous improvement

# Interventions - Mammography Technologist Boot Camp



Scores Improved

N = 234

94%

	Pre Quiz	Post Quiz
Mean	4.6	7.9

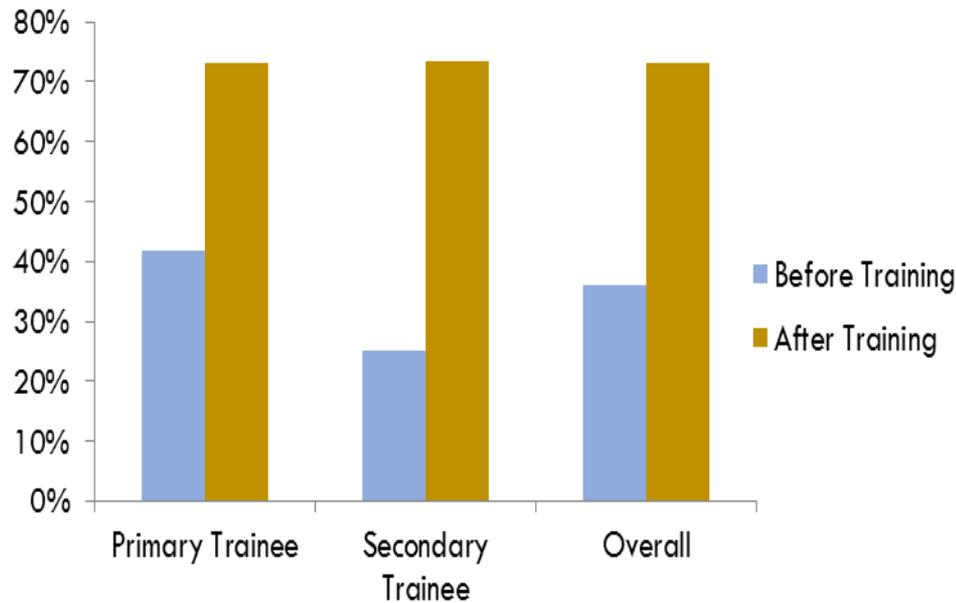
# Train the Trainers, class 2014



- 11 trainings completed or scheduled
- 25 mammography technologists
- Unquantifiable partnership & camaraderie
- Quantifiable improvements!



# Interventions - Mammography Technologist Training



“Excellent tool for mammography technologists, especially older technologists that learned from another technologist and then cross trained. Now, on to use them and break old habits!”

# Interventions - Mammography & Treatment Quality Report

2011

## Screening Mammography Quality Data



Your Facility Name Here  
Site Report





Dear Partner,

Thank you for your participation in the Statewide Screening Mammography Quality Initiative. The goal of this initiative is to collectively increase the quality of mammography across Illinois by actively monitoring mammography quality metrics and working with providers to make improvements when quality deficits are identified.

This is the fourth year of data collection and our first year featuring data from our statewide expansion, with participation from 160 facilities (75 facilities and respective affiliates submitting data for the first time). This data represents nearly 80% of mammography facilities by volume of Medicaid patients across the state of Illinois. Participating facilities receive **enhanced** Medicaid reimbursement for mammography. Facilities submitting data over several years, saw improvements in the quality of data submitted due to lessons learned and experience gained through everyone's efforts. Results from the first two years of data collection were published in the American Journal of Roentgenology in a paper entitled: Beyond the Mammography Quality Standards Act: Measuring the quality of breast cancer screening programs.

**Interpreting this report:** This report is based on data submitted by your facility using the data collection forms provided, reflecting breast cancer screening practices in Calendar Year 2011. It requires both accurate numerator and denominator data and accurate inclusion of data that originated solely from **screening** mammograms. The report contains a description of each measure and when available, a benchmark, guideline, or average relevant to each histogram for comparison purposes.

**Your Facility Data Summary:** The table below is a brief overview of the measures, respective benchmarks, your facility measures and whether your facility met  or did not meet  each benchmark for the year.

Measure	*BCSC 2009	*CBCQC Benchmark	Your facility	Met Y/N
Recall Rate	9.2%	5-14%	9%	Y
Follow-up imaging within 12 months	NA	>90%	93%	Y
Follow-up imaging within 30 days	NA	>90%	75%	N
Abnormal screen resolved as needing biopsy (biopsy recommendation rate)	12.2%	8-20%	16%	Y
Biopsy received if recommended	70.6%	>70%	100%	Y
Biopsied within 60 days	NA	>90%	77%	N
Cancer among abnormal screens (PPV1)	4.2%	3-8%	3%	Y
Cancer among biopsied (PPV 3)	26.9%	20-40%	20%	Y
Cancer detection rate (cancer among screened)	4.1 per 1000	3-10 per 1000	2.9 per 1000	Y
Proportion early Stage	73.6%	>50%	67%	Y
Proportion minimal	53.6%	>30%	48%	Y

\*BCSC 2009: Breast Cancer Surveillance Consortium data as of 2009, representing the median or average for facilities submitting to BCSC. CBCQC Benchmarks are those developed by the Chicago Breast Cancer Quality Consortium in collaboration with our expert mammography advisory committee.

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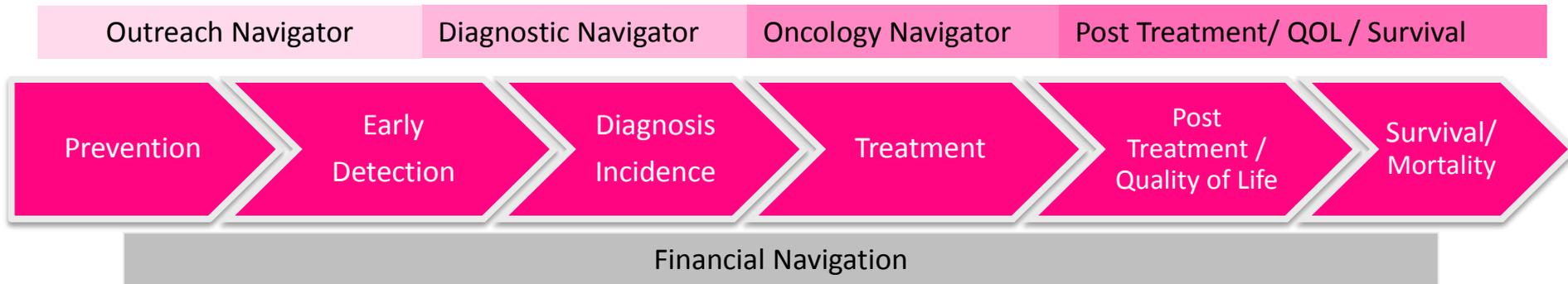


# SAVING LIVES ONE WOMAN AT A TIME

A METRO-WIDE MAMMOGRAM SCREENING INITIATIVE

# Patient Navigation Continuum

Freeman, adapted from Cancer Epidemiology Biomarkers & Prevention, April 2003

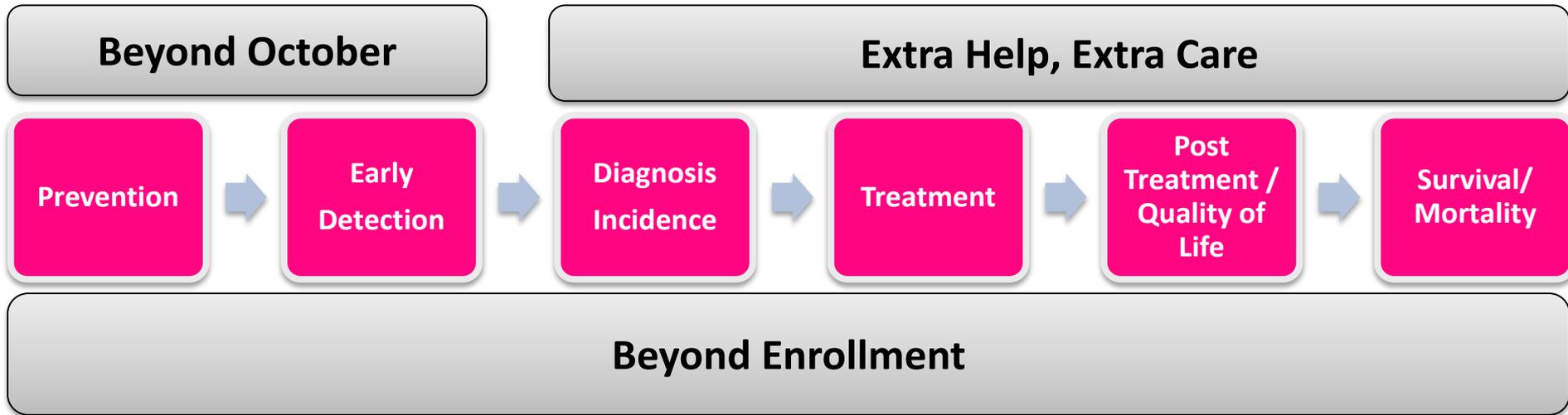


# Navigation Programs in Chicago

- 2012 Outreach Capacity Survey
  - N=44 respondents
  - 39 hosted educational sessions
    - 30 Provided Navigation
      - 18 Navigation to free or low cost mammograms
        - » 15 – Medical Facilities (In-reach)
        - » 3 – Nonprofits/Community Organizations – (Outreach)



# MCBCTF Community Health Interventions



# Outreach, Education and Navigation

## Areas of Impact

- Population Served
  - Metropolitan Chicago (Cook, DuPage and Lake Counties)
    - Primary focus for community-based outreach – Southside
- People
  - 1,200 -1,400 women navigated annually
  - Women of color aged 40+
  - Publically insured or uninsured, some newly insured through ACA
- Aims
  - Improving breast health outcomes
  - Improving women's access to primary and preventive healthcare
  - Assisting uninsured enroll in health insurance
  - Assisting newly insured to connect to high-quality PCPs

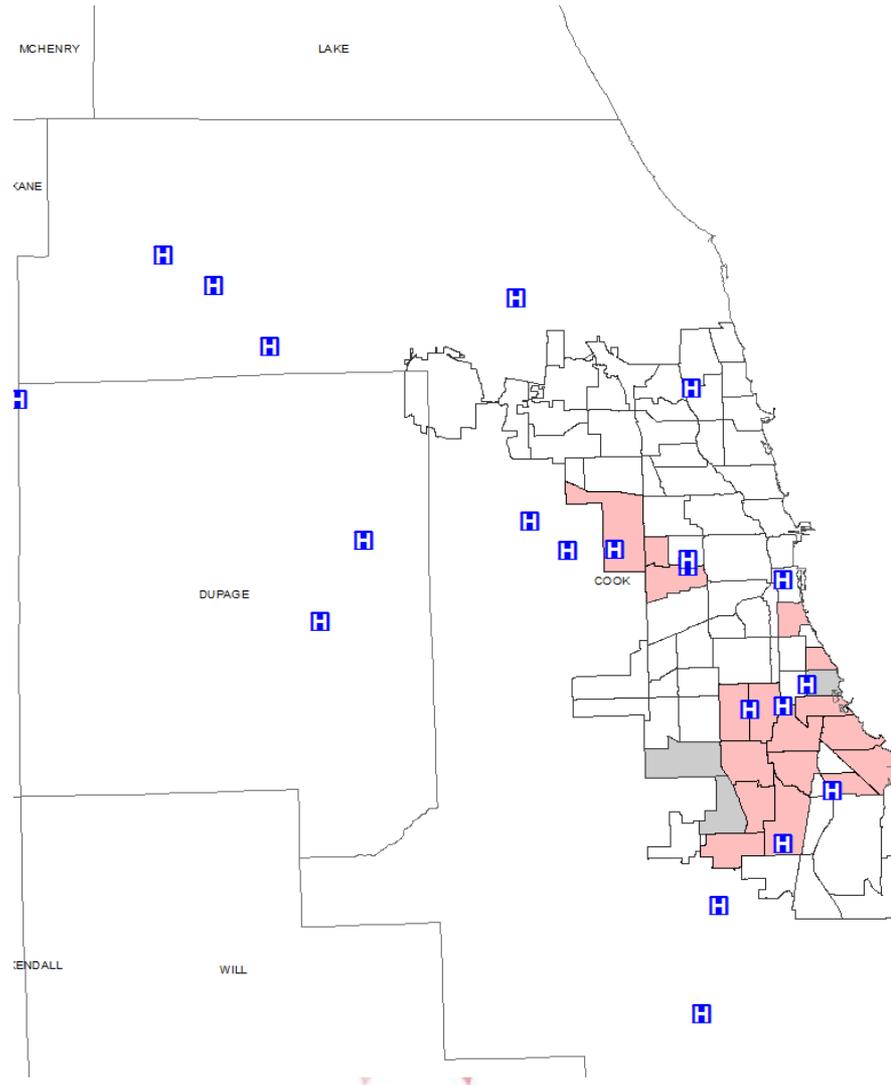
# Outreach, Education and Navigation Accomplishments

In CY 2014:

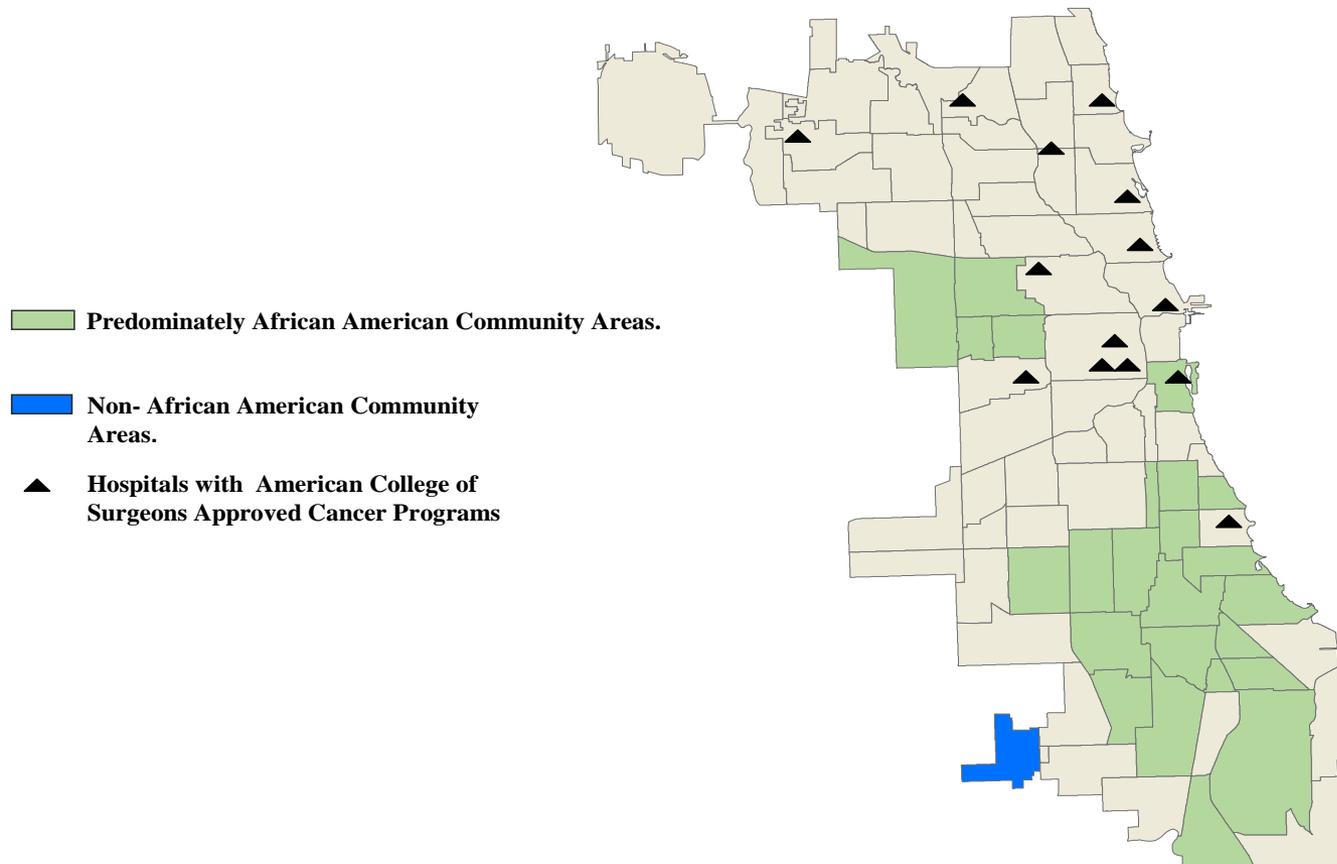
- We reached 6,916 women from targeted populations regarding breast cancer disparities and their causes, and the importance of primary care and health insurance.
- We educated 1,845 women from targeted populations on breast cancer and healthcare access.
- We navigated 1328 women and scheduled 806 screening appointments
- We navigated 595 women to completed screenings.
- We navigated 185 women through diagnostics; and 7 through treatment



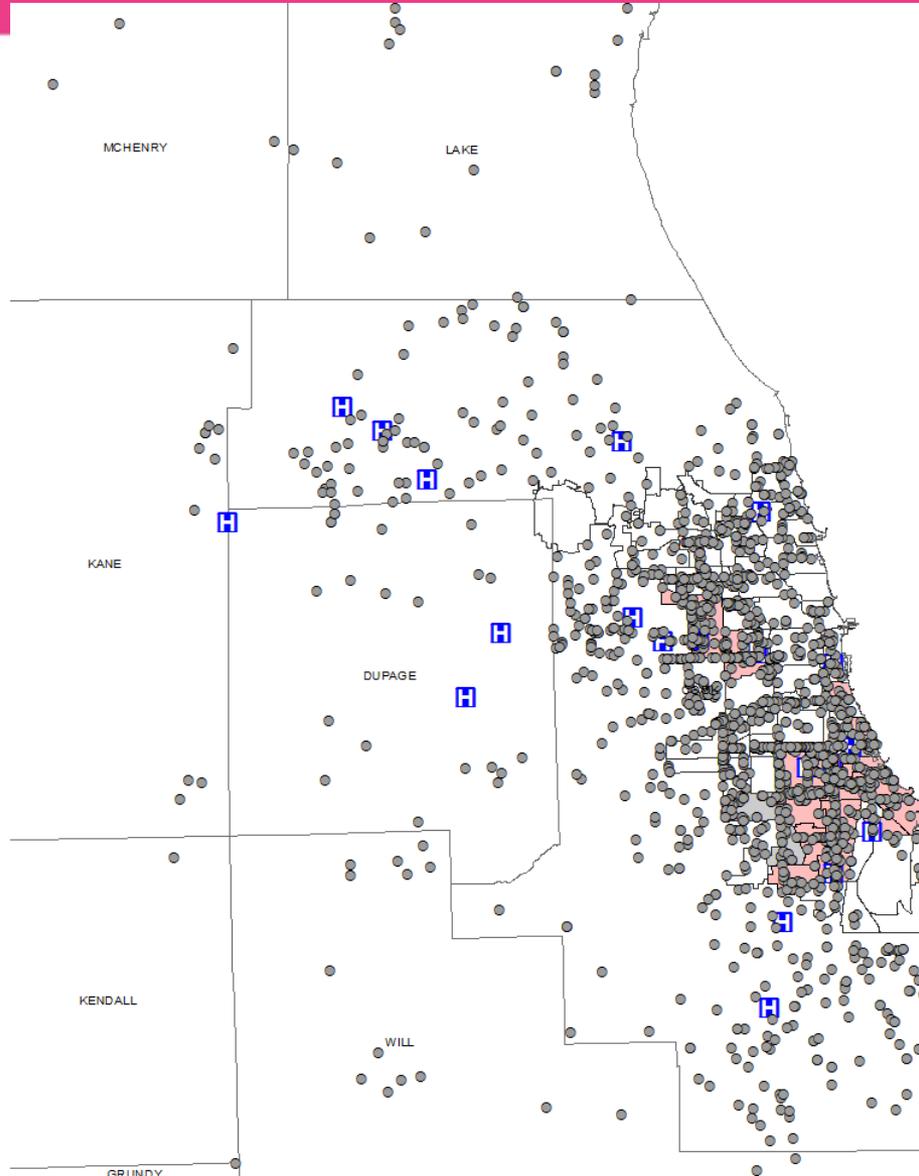
# Breast Cancer Disparity at the Community Level and Distribution of Partnering Mammography Facilities



# Recall: Chicago community areas with the highest 2000-2005 average annual breast cancer mortality rates



# Geographical Distribution of Navigation Clients





# PROMOTING SYSTEM CHANGE THROUGH POLICY ANALYSIS AND ADVOCACY

A METRO-WIDE MAMMOGRAM SCREENING INITIATIVE

# Many Policy Successes in Illinois

- PL 95-1045 and PL97-068 The Breast Cancer Disparities Reduction Act
  - Created the nation's first mammography quality surveillance program embedded in Illinois Medicaid, eliminated copays for screening mammograms, piloted navigation in Medicaid
  - Discouraged providers from charging image transfer fees
  - Funding for the Illinois Breast and Cervical Cancer Program
  - Encouraged city of Chicago to improve quality of mammography

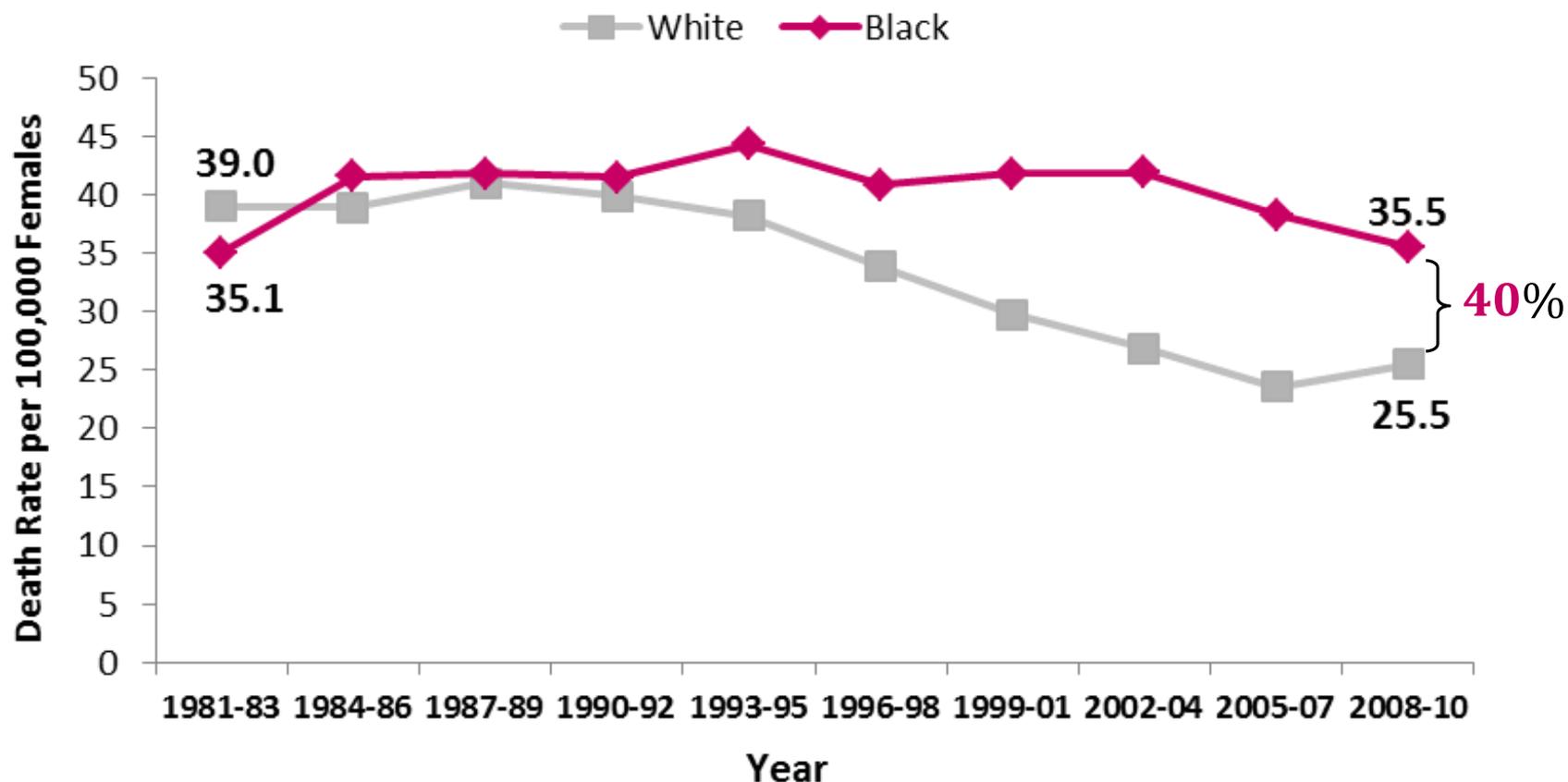


# National Policy Issues

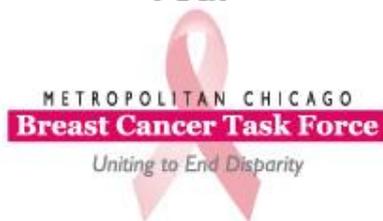
- Improving the Mammography Quality Standards Act to require rigorous mammography audits
- Adding breast care (mammography and treatment) quality metrics to Medicare and the National Breast and Cervical Cancer Early Detection Program
- Network adequacy – Are Centers of Excellence and Commission on Cancer Accredited Cancer Programs required to be in network?
- Medicaid reimbursement rates? How low is too low?
- Deductibles as a deterrent to diagnostic follow up and treatment



# Evidence of impact & improvement -



Data Source: Illinois Department of Public Health Vital Statistics  
Data Prepared By: Sinai Urban Health Institute



**Access + Quality = Best Chance at Survival**



# We can do this TOGETHER!

## Every Woman Deserves an Equal Chance at Survival

