

Who Do We Care For: Guideline Concordant Care Delivery for Breast Cancer Patients

By: Taussia Boadi

Mentor: Dr. Yehoda Martei, MD, MSCE

1 IN 8 

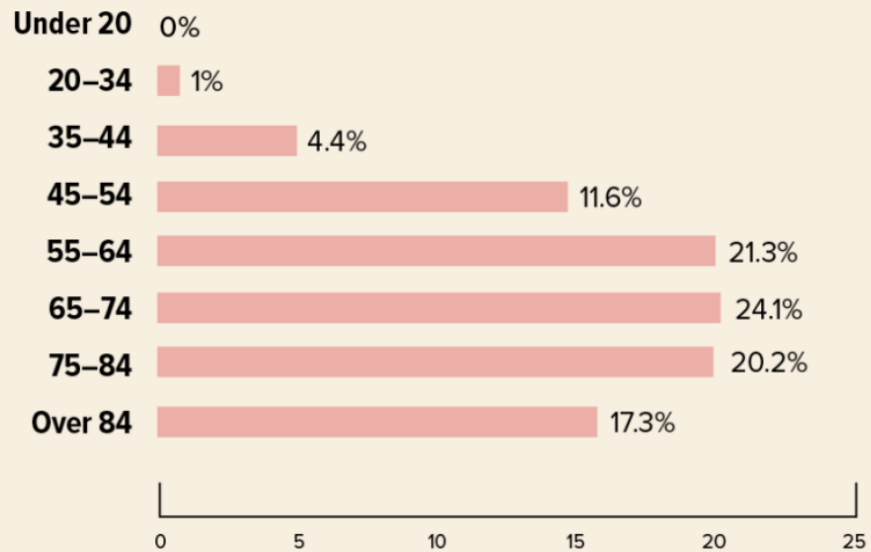
women will be diagnosed with breast cancer before the age of 85*

*Source: National Breast Cancer Foundation

Background

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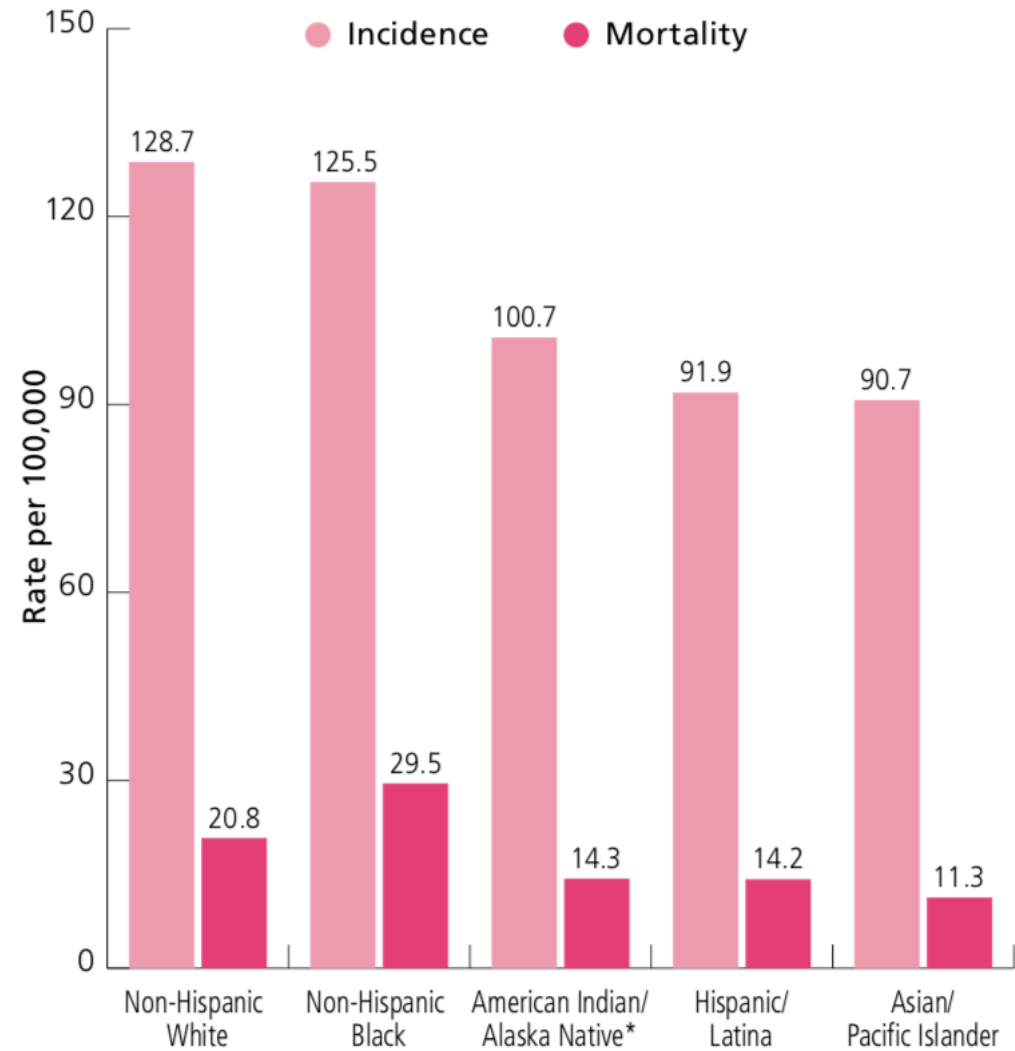
U.S. Women Breast Cancer Deaths by Age (2015-2019)



healthline

Background

Figure 2. Female Breast Cancer Incidence (2010-2014) and Mortality (2011-2015) Rates by Race/Ethnicity, US



1



2



3

Evaluate

- Evaluate trends in the receipt of guideline concordant care among population of interest

Determine

- Determine survival trends among population of interest

Analyze

- Analyze disparities in time difference between diagnosis and initiation of treatment between population of interest

Project Aims

Population of
Interest

Population of
Interest

Non-Hispanic Black (NHB) and
white (NHW) women

Elderly women (≥ 65)

Women diagnosed with stage I-
III non-metastatic breast cancer

Big Question

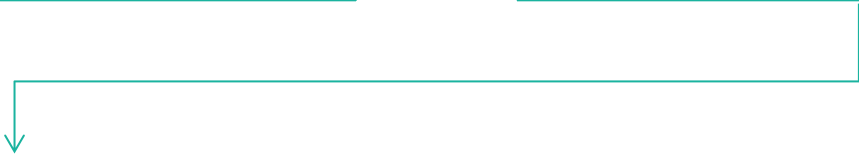
Who is receiving guideline
concordant care?



**1. DETERMINE
WHAT GUIDELINE
CONCORDANT CARE
IS**



**2. CREATE A CODE TO
DEFINE GUIDELINE
CONCORDANT CARE**



**3. APPLY CODE TO
NATIONALLY SOURCED
DATA**

Methodology

What is Guideline Concordant Care?

- Guideline Concordant Care (GCC) is a standard of care for certain health conditions determined a governing medical body

For breast cancer, GCC is determined by the presentation of the following factors

1) Receptor Status (estrogen & progesterone receptors, HER2)

2) Tumor Size

3) Axillary Nodes

4) Metastasis

Determination of Guideline Concordant Care



National Comprehensive
Cancer Network®

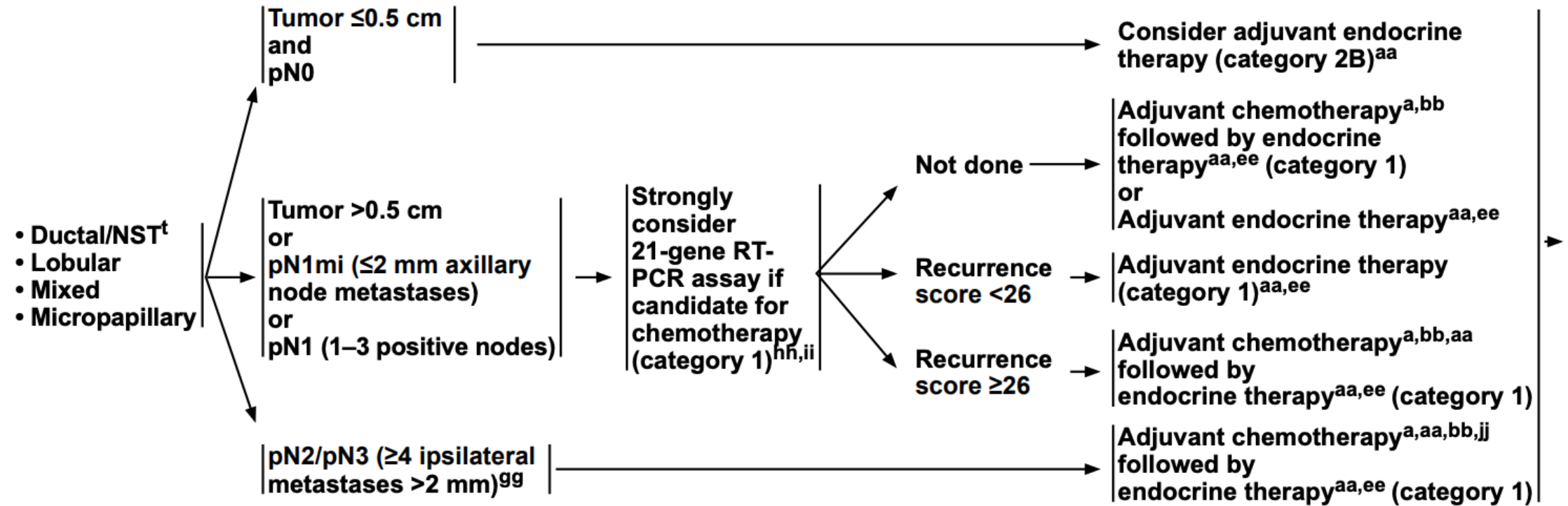
NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®)

Breast Cancer

Version 4.2022 — June 21, 2022

NCCN.org

**SYSTEMIC ADJUVANT TREATMENT: HR-POSITIVE - HER2-NEGATIVE DISEASE^{d,q,y}
POSTMENOPAUSAL^z PATIENTS with pT1-3 AND pN0 or pN+ TUMORS**



ER+/HER2-

Axillary Nodes	Tumor Size	Systemic Treatment	Radiation
negative	<0.5cm	optional	whole breast RT +/- boost
	0.5-1.0cm		
	>1.0cm		
1-3 positive	<0.5cm	optional	whole breast RT +/- boost
	0.5-1.0cm		
	>1.0cm	chemo + endocrine therapy	
4+ positive	<0.5cm	optional	whole breast RT + RNI +/- boost
	0.5-1.0cm		
	>1.0cm	chemo + endocrine therapy	

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Methodology

Code Creation
for Guideline
Concordant
Care

Cancer
PROGRAMS

AMERICAN COLLEGE OF SURGEONS



From Guidelines...

Tumor Characteristics

- ER-/HER2+ receptor status
- 1-3 positive axillary nodes
- Tumor size >1.0 cm

Guideline Concordant Treatment Expected

- Chemotherapy
- HER2 targeted therapy
- Breast Conservation Surgery
- Whole breast radiation

...To Codes

Tumor Characteristics

- ER-/HER2+ receptor status
- 1-3 positive axillary nodes
- Tumor size >1.0 cm



Tumor Characteristics

- CS_SITESPECIFIC_FACTOR_1 =0
CS_SITESPECIFIC_FACTOR_15 =1
- REGIONAL_NODES_POSITIVE
01-03
- TUMOR_SIZE_SUMMARY_2016
>010

...To Codes

Guideline Concordant Treatment Expected

- Chemotherapy
- HER2 targeted therapy
- Breast Conservation Surgery
- Whole breast radiation



Guideline Concordant Treatment Expected

- RX_SUMM_CHEMO 01-03
- RX_HOSP_SURG_PRIM_SITE
20-24
- PHASE_I_RT_VOLUME 40

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Methodology

```
/*CREATE GCC VARIABLE*/  
data ncdb.ncdb_puf; /*RENAME THIS TO WHATEVER YOU WANT*/  
  set origdata.ncdb_puf2; /*HAVE*/  
  /*KEEP ONLY VARIABLES YOU'LL NEED (REPLACE X Y Z) - THIS WILL MAKE IT RUN FASTER BC THE DATASET WILL BE SMALLER*/  
  keep x y z;  
  /*IF HER2+, AND CHEMOTHERAPY (YES) AND SURGERY (MAST/BCS).... (IF TOO LONG, SEE BULLET #1*/  
  if cs_sitespecific_FACTOR_1 =000 AND CS_SITESPECIFIC_FACTOR_15 =001 AND RX_SUMM_CHEMO IN (01-03) AND RX_HOSP_SURG_PRIM_SITE in (20-24) then GCC =1;  
run;
```

Translation to SAS Language

1

Complete language translation from
NCDB codebook to SAS

2

Create GCC code in SAS and apply to
dataset

3

Analyze results and begin
preparation for abstract presentation

Next Steps

Lessons Learned



SAS literacy and coding



Introduction to oncology



Maintaining diligence throughout
research process

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- Dr. Yehoda Martei, MD, MSCE
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Questions?

