

Time to Diagnosis/Treatment and Health Disparities

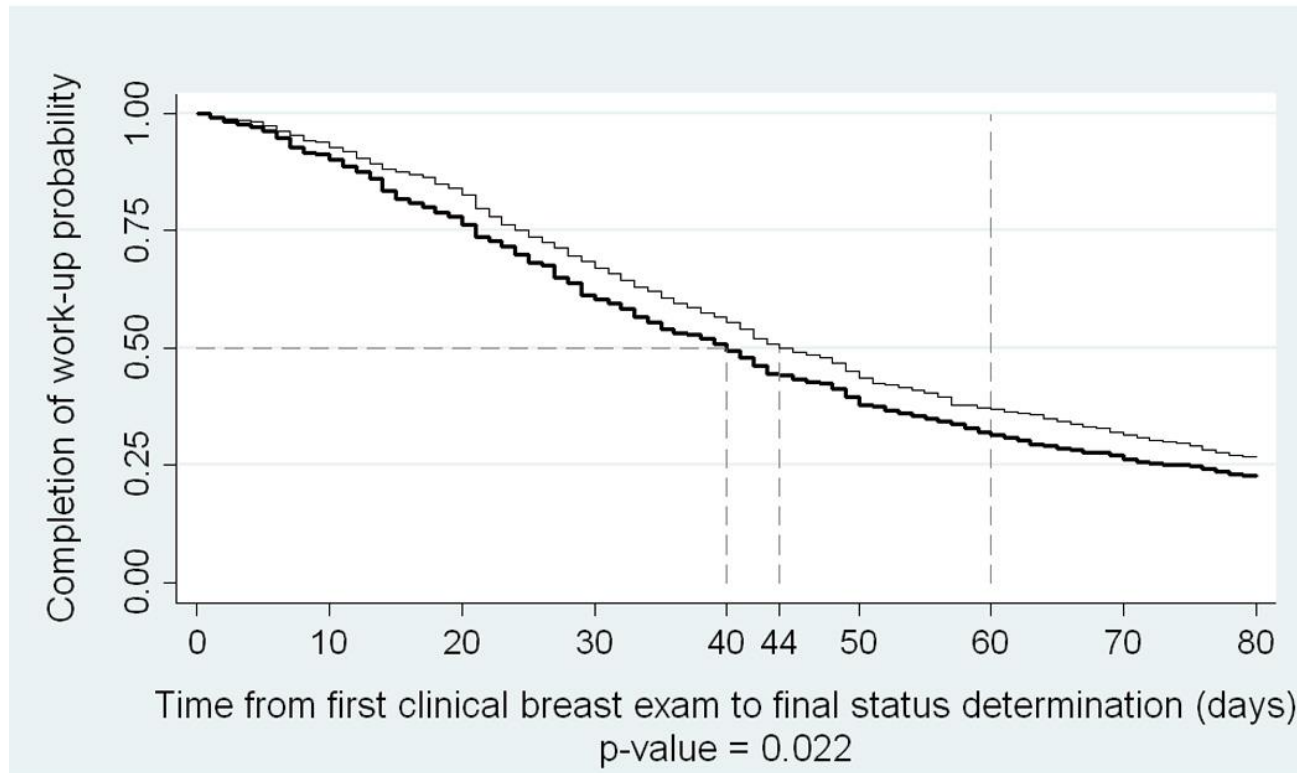
- Starting appropriate treatment soon after diagnosis is another way to improve breast cancer prognosis and reduce mortality rates
- Differences in time between screening and diagnosis or treatment are related to several factors:
 - Race/ethnicity
 - Income level
 - Educational attainment
 - Insurance status
 - Facility accreditation
 - Others
- Basing analyses off a standardized benchmark (e.g., 60 days between screening and final status determination) is key

TABLE 3. Diagnostic Delays by Race/Ethnicity, Socioeconomic Status, Access/Utilization, and Facility Factors (N= 606)

	> 60 d [n (%)]	P
Race/ethnicity		<0.0001
nH white	263 (13)	
nH black	245 (28)	
Hispanic	98 (32)	
Socioeconomic status		
Income*		0.002
< 20,000	136 (28)	
20–<75 K	288 (25)	
≥ 75 K	182 (13)	
Education*		0.009
< HS	92 (32)	
HS	119 (27)	
> HS	395 (19)	
Concentrated disadvantage*		0.003
Tertile 1	201 (15)	
Tertile 2	200 (22)	
Tertile 3	203 (30)	

Adams SA, et al. Racial Differences in Follow-up of Abnormal Mammography Findings among Economically Disadvantaged Women. *Cancer* 2009, 115(24):5788-5797.
 Molina Y, Silva A, Rauscher GH. Racial/Ethnic Disparities in Time to a Breast Cancer Diagnosis: The Mediating Effects of Health Care Facility Factors. *Medical Care* 2015 Oct;53(10):872-8

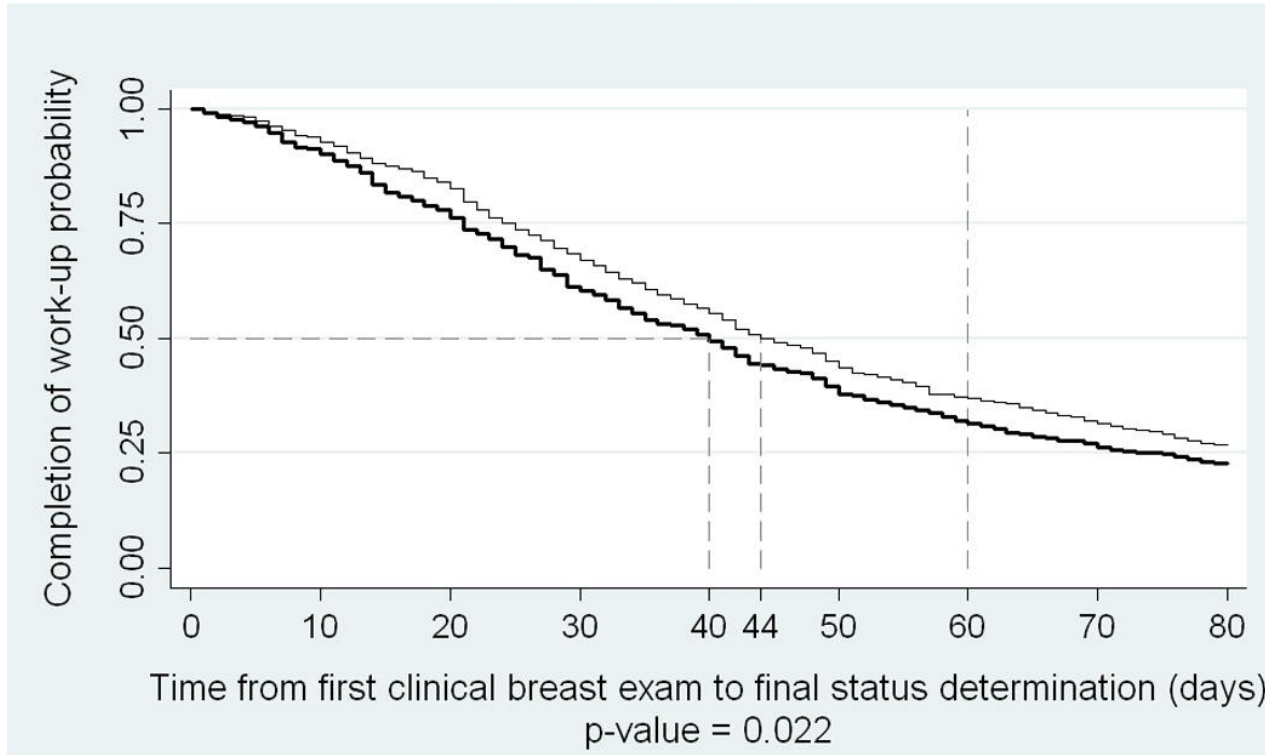
Time to Treatment: Survival Analysis



- Survival analysis can be used to determine if two or more groups are different with regards to time between examination and diagnosis or treatment by comparing entire trends instead of just benchmark performance
- These data are from South Carolina's Best Chance Network, a program that provides free mammograms to underserved women

Adams SA, et al. Racial Differences in Follow-up of Abnormal Mammography Findings among Economically Disadvantaged Women. *Cancer* 2009, 115(24):5788-5797.

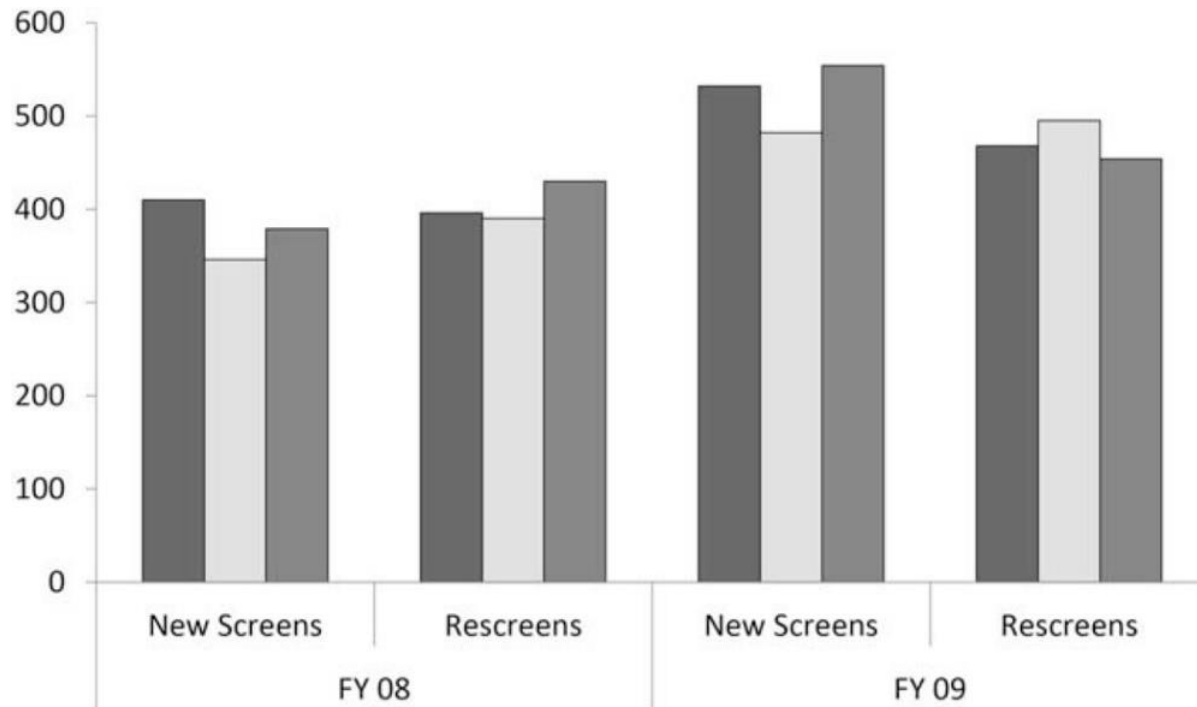
Time to Treatment: Exam to Status



- This graph displays performance at a 60-day benchmark and shows when half of white women (40 days, darker line) and half of black women (44 days, lighter line) learned of their final status
- The above visual illustrates a statistically significant time difference between clinical exam and status determination among white and black women

Adams SA, et al. Racial Differences in Follow-up of Abnormal Mammography Findings among Economically Disadvantaged Women. *Cancer* 2009, 115(24):5788-5797.

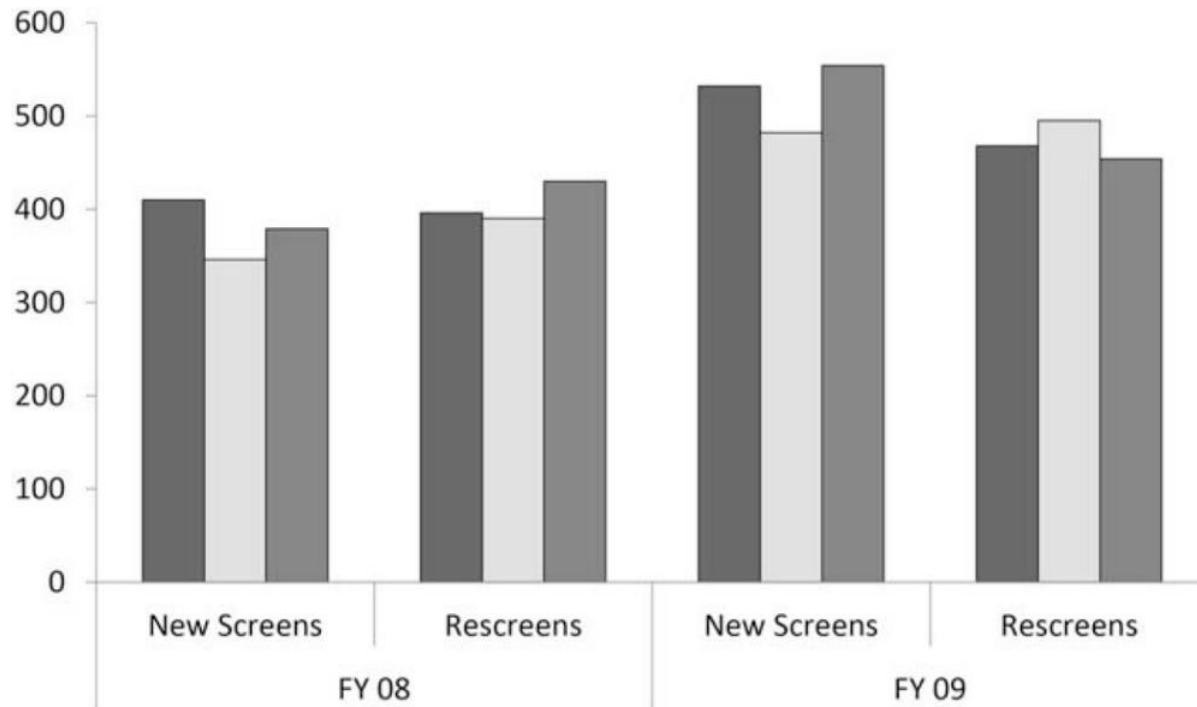
Time to Treatment: Timely Initiation



- The CDC National Breast and Cervical Cancer Early Detection Program (NBCCEDP) is a program implemented through cooperative agreements with health departments, which in turn contract with clinics to deliver breast and cervical cancer screening services
- The NBCCEDP sets benchmarks for performance with regards to screening and initiation of treatment, and two of these benchmarks are time-based
 - Diagnostic follow-up should be completed within 60 days of abnormal breast cancer screenings in at least 75% of patients
 - Treatment for breast cancer should be initiated within 60 days of diagnosis in at least 80% of patients

Yancy B, et al. Using Data to Effectively Manage a National Screening Program. *Cancer* 2014;120(16 suppl):2575-83.

Time to Treatment: Timely Initiation



- These data come from a Breast, Cervical, and Colon Health Program contractor in Washington State that participates in NBCCEDP
- Each bar represents total in screenings and re-screenings performed in September, August, and July in that year
- The use of benchmarks in an intervention can help improve the number of screenings and re-screenings that a single clinic is able to perform, which can in turn cut down on the time between screening and treatment initiation

Yancy B, et al. Using Data to Effectively Manage a National Screening Program. *Cancer* 2014;120(16 suppl):2575-83.

Time to Treatment

TABLE 3. Diagnostic Delays by Race/Ethnicity, Socioeconomic Status, Access/Utilization, and Facility Factors (N= 606)

	> 60 d [n (%)]	P
Race/ethnicity		<0.0001
nH white	263 (13)	
nH black	245 (28)	
Hispanic	98 (32)	
Socioeconomic status		
Income*		0.002
< 20,000	136 (28)	
20–< 75 K	288 (25)	
≥ 75 K	182 (13)	
Education*		0.009
< HS	92 (32)	
HS	119 (27)	
> HS	395 (19)	
Concentrated disadvantage*		0.003
Tertile 1	201 (15)	
Tertile 2	200 (22)	
Tertile 3	203 (30)	

- The Breast Cancer Care in Chicago study, which conducted interviews and obtained medical record data from a sample of breast cancer patients (n=606)
- Percentages of women in the sample who received a diagnosis after a 60-day benchmark from medical presentation are displayed here based on selected factors.

Questions and Data Considerations

- In what other ways should the data be visualized?
 - Other data sources that should be considered to make a more representative map for your state?
 - Next steps?
- Vital Statistics
 - State cancer registries
 - Medicaid
 - Behavioral Risk Factor Surveillance System (BRFSS)
 - National Cancer Institute (NCI)
 - Insurance providers such as BlueCross BlueShield
 - Susan G. Komen and other non-profit organizations
 - United States Cancer Statistics (USCS)
 - Electronic Health Records (EHRs)
 - Ambulatory Surgical Treatment Centers
 - Hospital discharge data
 - Federally Qualifying Health Centers (FQHCs)
 - Health Information Exchanges (HIEs)
 - FDA data on mammography locations (available with Freedom of Information Act request)
 - Commission on Cancer (CoC)