Accountability for Cancer Care thru Undoing Racism and Equity (ACCURE)

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Physician Champions And Clinical Performance Reports

Informing Policy With Race-Specific Findings On Equity In Cancer Treatment Outcomes

Authors

Sam Cykert	UNC –Division of General Medicine and Gillings SPH
Dwight Herron	University of Pittsburgh Medical Center
Brian Cass	Cecil G. Sheps Center for Health Services Research
Michael Davis	University of Pittsburgh Medical Center
Eugenia Eng	UNC Gillings School of Global Public Health
Steven Evans	University of Pittsburgh Medical Center
Ziya Gizlice	UNC Gillings School of Global Public Health
Christina Hardy	UNC Gillings School of Global Public Health
Skip Hislop	Cone Regional Cancer Center
Kalsoom Khan	Cone Regional Cancer Center
Matthew Manning	Cone Regional Cancer Center
Sheri Mouw	UNC Gillings School of Global Public Health
Lyn Robertson	University of Pittsburgh Medical Center
Jennifer Schaal	The Partnership Project
Jeff Wilson	Cone Regional Cancer Center
Byron Raines	UNC Gillings School of Global Public Health

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Background

- African Americans diagnosed with early stage lung cancer when compared to whites
  - Treatment is initiated later
  - Less likely to undergo surgical treatment
- African American women diagnosed with breast cancer
  - Initiate treatment later
  - Less likely to complete full course of chemotherapy
- Results
  - Worse treatment outcomes
  - Shorter survival

ACCURE Intervention

Transparency Components

- **Retrospective** analysis, by race, of EHR **data** from 2007-2011
- Automated **Real-Time** Registry with **warnings** for missed appointments and unachieved milestones
- Automated **prospective** analysis, by race, of EHR **data**
- **Power analysis** of cancer care system for "pressure points"
- **Healthcare Equity Training** + quarterly booster sessions for providers

Accountability Components

- ACCURE **Navigator** specially trained in exploring and responding to patients social and belief-specific barriers, and using ACCURE's Real-time Registry
- Site-specific **Clinical Feedback** Reports, according to race and co-morbidity status, delivered by ACCURE Physician Champion to clinicians
- **Healthcare Equity Training** + quarterly booster sessions for providers

The Real Time Registry

- Warning:
  - Patient misses procedure or appointment
- Response:
  - Re-engage patient then assess barriers and educate
- Warning
  - Missed an expected milestone in care
- **Re-engage provider

** Physician Champion Task

Primary Outcomes

1. For enrolled patients, completion of optimal care for Stages 1 and 2 breast and lung cancer

2. Total Cancer Center Population analysis regarding completion of optimal care for Stages 1 and 2 breast and lung cancer in relationship to the progression of Health Equity Training sessions

Roles of the Physician Champion

- Support the study among cancer center staff
- Encourage clinicians to enroll patients
- Discuss missed milestone warnings
- Clinician race-specific feedback re: the real time registry and cancer center population data
- Participate in Health Equity Training planning and delivery
- Planning solutions per qualitative input

Progress To Date

- Support the study among cancer center staff
- Encourage clinicians to enroll patients

  - These 2 functions have been very successful at one center with breast and lung champions who are visible and verbally supportive

  - The 2nd Center has had tremendous turnover among breast oncologists and only mild buy in on the lung cancer physician side.
    *Despite these limitations, breast cancer patient enrollment was excellent while lung cancer patient enrollment was spotty

Progress To Date

- Discuss missed milestone warnings

  - The transparency of the real time registry seems to have minimized this role. In the few instances that milestones have not been met the special navigator has felt confident enough to approach the treating clinician without engaging the physician champion.

Progress To Date

- Clinician race-specific feedback re: the real time registry and cancer center population data
  - PI Cykert and Site PI Robertson have delivered retrospective and real time registry data at initial sessions
  - Whole population prospective data are pending
  - Plan to phase in Champions as data presenters at next sessions

Progress To Date

- Participate in Health Equity Training (HEET) planning and delivery

  - Initial participation encouraging

  - As sessions have progressed, participation has become more sporadic (clinical duties, competing interests)

  - Will reduced participation affect the perception of HEET and alter Cancer Center Population outcomes?

Progress To Date

- Planning solutions per qualitative input

  - Brainstorming has occurred at as part of HEET sessions and has increased awareness of patient-centered issues

  - Champions have begun to be change advocates

Baseline Data

Cancer Center 1	Percent African-Americans Treated	Percent Whites Treated	P-value
Breast Cancer	N = 568	N = 6272	
Surgery Performed	97.3	98.5	0.09
Chemotherapy Completed	86.3	90.4	0.1
Radiation Therapy Completed	76.8	80.5	0.2
Lung Cancer	N = 476	N = 4106	
Curative Surgery Performed	59.2	67.8	0.03
Radiation For Cure	28.8	25.6	
No Treatment	12.0	6.6	0.03

Logistic Regression: Odds of Dying

Independent Variable	Odds Ratio	95% CI
Age < 54 yrs vs. ≥ 66 yrs*	0.30	0.21, 0.44
Age 54-65 yrs vs. ≥ 66 yrs*	0.42	0.30, 0.58
Comorbs 0-3 vs. ≥ 8*	0.58	0.33, 0.998
Comorbs 4-7 vs. ≥ 8	0.73	0.41, 1.3
White Race (vs. Black)*	0.50	0.34,0.73
Stage 1 vs. Stage 2*	0.32	0.24, 0.43
Not Married (vs Married)*	1.4	1.1, 1.9
Insured vs. Under Insured (self-pay + Medicaid)*	0.34	0.21, 0.54
Triple Negative R-status*	2.4	1.4, 4.1

* = $p \leq .05$

Logistic Regression: Odds of Dying

Independent Variable	Point Estimate	95% CI
Higher Age*	1.03	1.02, 1.04
Under Insurance	1.1	0.80, 1.5
Not Married*	1.1	1.0, 1.3
Lowest tertile CCI vs High*	0.69	0.58, 0.82
Middle tertile vs High*	0.75	0.61, 0.91
Stage 1 vs 2*	0.71	0.62, 0.91
Male vs Female*	1.4	1.2, 1.6
White vs Black	0.92	0.75, 1.1
Surgical Treatment*	0.18	0.13, 0.23
XRT*	0.60	0.44, 0.81

Enrolled Patient Data

Cancer Center 1	Percent African-Americans Treated	Percent Whites Treated
Breast Cancer	N = 80	N = 94
Surgery Performed	95	96
Chemotherapy Completed	97	92
Radiation Therapy Completed	88	87
Lung Cancer	N = 26	N = 76
Curative Surgery Performed	77	75
Radiation For Cure	23	22
No Treatment	0	1

Enrolled Patient Data

- All Recommended Treatment Complete
  (Excluding Lung Radiation For Cure)
  African-Americans 83%
  White Patients 79%

- All Recommended Treatment Complete
  (With Lung Radiation For Cure)
  African Americans 88%
  White Patients 89%

Logistic Regression

- Independent variables: education, age (above 70 vs younger), Charlson Score less COPD, COPD, race, gender, marital status

- All Recommended Treatment Complete
  (Excluding Lung Radiation For Cure)

	OR	95% CI
Older Age	0.4	0.2, 0.9
*Edu > HS	3.3	1.4, 7.6
Charlson > 1	0.4	0.2, 0.8

- **Race no longer an issue**

Cancer Center Population Data

- Pending

Conclusions

- Physician Champions have been effective as study advocates and recruiters
- Physician turnover can be an obstacle to health equity training planning and participation
- Physician Champions can be strong advocates for systems change – we do not have data yet for population effect
- Electronic systems and associated workflows (the people component) that create transparency and accountability seem to attenuate disparities and optimize care for all.
- The participation of the Physician Champion is important even if he / she does not have to re-engage providers on milestones missed (the Specter)