Opportunities Around the Imaging Cycle
Vision beyond the Reading Room: Radiology’s Role in Health Equity

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Narrowing the Gap: Imaging Disparities in Radiology

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To view the list of Figures you need to have access to the full text.
Objectives:

1. Describe the patient, provider and systemic factors that perpetuate disparities in Radiology

2. Highlight how imaging disparities lead to poorer outcomes in minority communities

3. Describe the patient, provider and systemic level interventions that can potentially decrease disparities in imaging
Etiology of Imaging Disparities

Patient

Language barriers, medical mistrust, cultural differences, health literacy, health insurance

System

Technological diffusion, quality measures, resources, diagnostic algorithms

Provider

Ordering practices, implicit bias, expertise availability/knowledge of advanced imaging

Poor Outcomes
“The AMA recognizes that racism negatively impacts and exacerbates health inequities among historically marginalized communities. Without systemic and structural-level change, health inequities will continue to exist, and the overall health of the nation will suffer.”

Willarda V. Edwards, MD, MBA
Individuals and institutions deliberately or without intent treat racial groups differently resulting in inequitable access to opportunities and resources.

Processes of racism embedded in laws, policies and practices of society.

Instillation of the ideology of inferiority in the values, language, imagery, symbols and unstated assumptions of the larger society.

Etiology of Imaging Disparities
The Imaging Cycle

- **Clinical Action**: Clinical action based on examination findings
- **Pre-procedure**: Clinical question Request
- **Post-procedure**: Perceptron of images Interpretation & Interventional Activities Communication of Diagnosis
- **Procedure**: Patient preparation Technical Performance Presentation of Images

RLI Power Hour Webinar Series
PRE-PROCEDURE
PROCEDURE
POST-PROCEDURE
SAFETY NET HOSPITALS

• Disproportionately serve vulnerable minority and low-income communities that face financial and cultural barriers to health care

• More likely to rank poorly on quality measures

• Often associated with poorer outcomes secondary
  • Financial strain and limited hospital resources
  • Worse overall health of population
  • More advanced disease at time of presentation

SYSTEM RELATED FACTORS
SYSTEM RELATED FACTORS

THE WEIGHT OF WAITING

- Clinic wait times are significantly longer for racial and ethnic minorities (Ray et al)
- Differences are due to time spent in other activities
  - Completing paperwork
  - Interacting with nonphysician staff
  - Waiting
Underuse of screening mammography among Black women contributes to racial disparities in outcomes and mortality

- Black women utilize screening mammography at lower rates (Ahmed et al)
- Partly due to lack of physician recommendations (O’Malley et al)
- Lack of agreement on current recommendations on screening examinations

SYSTEM RELATED FACTORS

PROVIDER RELATED FACTORS
SYSTEM RELATED FACTORS

- Lack of skilled technologists
- Lack of advanced technology
- Low-resource institutions that minorities visit may rely more on general radiologists.
• Inadequate follow-up of abnormal mammograms associated with a higher likelihood of diagnosis of advanced breast cancer.

• Time between abnormal mammogram and biopsy longer in facilities serving high proportion of minorities (Karliner et al)
PATIENT RELATED FACTORS

- Lack of awareness in the general public
- Low income
- Lack of health insurance
• Develop outreach and education programs to improve health literacy regarding conditions that disproportionately affect disadvantaged communities

• Decrease risk of missing appointments

• Assessing and addressing social determinants of health

PATIENT LEVEL INTERVENTIONS
SYSTEM LEVEL INTERVENTIONS

- Bundling screening appointments, offering off-hours imaging, and extending service hours
- Prioritize new technologies, hiring and retaining skilled radiologists and technologists
- Direct telephone communication with patients who had abnormal findings
• Increasing the training, recruitment, and retention of Black faculty in radiology

• Ensure that clinicians are informed and knowledgeable about screening recommendations

• Keep abreast of updates in technology and techniques

• Interdepartmental efforts to curb inappropriate imaging use and improve efficiency through performance improvement efforts
Reason’s Swiss Cheese Model

- Hazards
- Community outreach
- QI/PI
- Clarity screening recommendation
- Poor quality measures
- Direct phone communication
- Financial strain
- Provider
- System
- Patient
- Losses
- Generalist
References:

References:


THANK YOU!!

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