



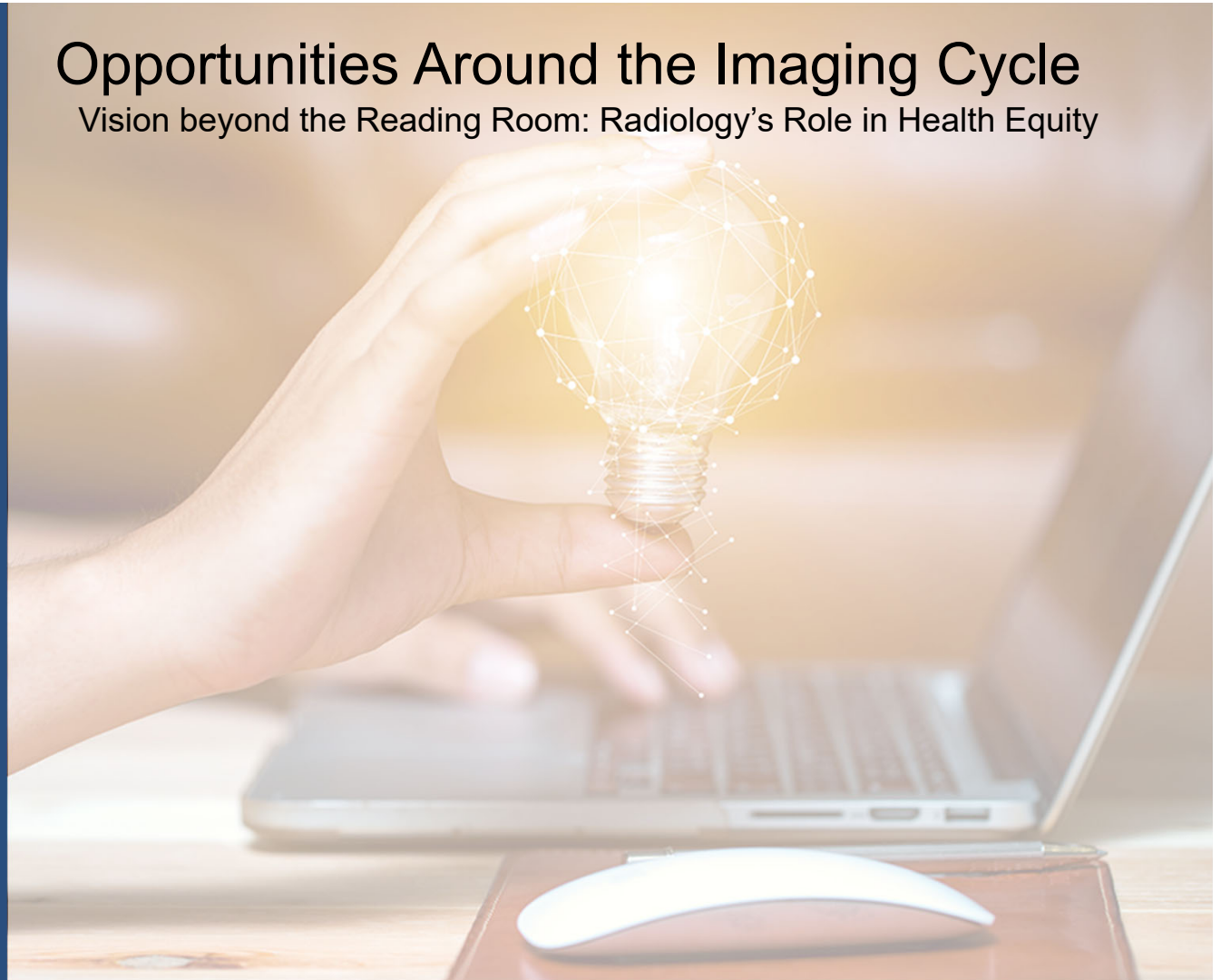
RLI Power Hour

6/16/2021

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Opportunities Around the Imaging Cycle

Vision beyond the Reading Room: Radiology's Role in Health Equity



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Reviews and Commentary

Narrowing the Gap: Imaging Disparities in Radiology

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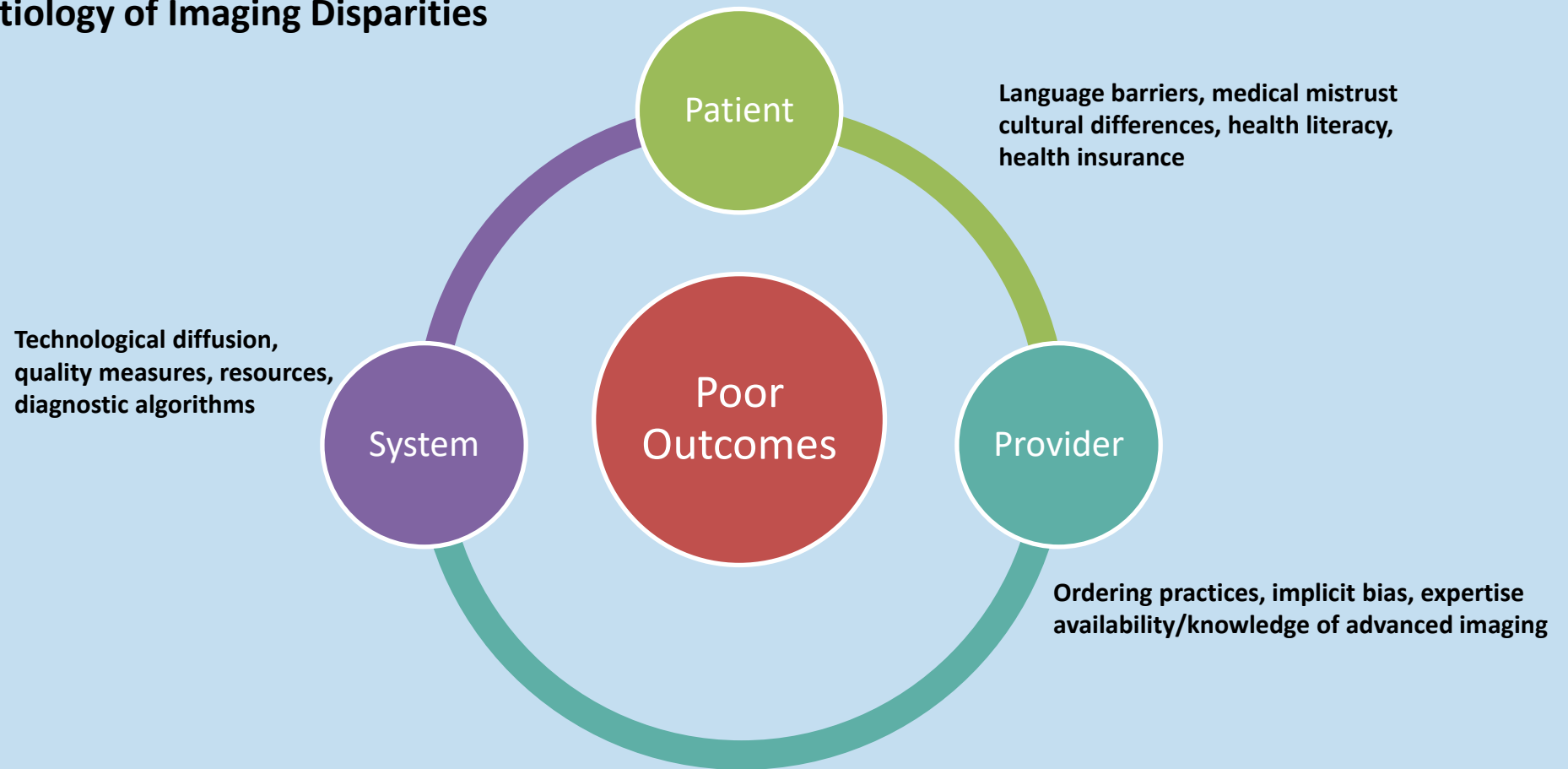
To view the list of Figures you need to have access to the full text

Objectives:

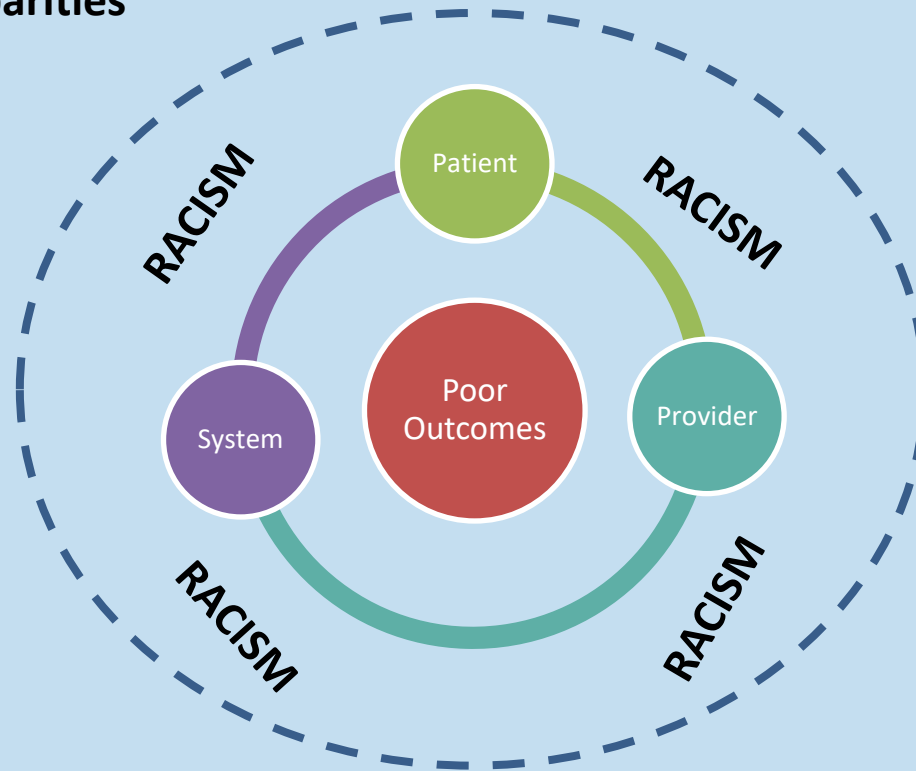
1. Describe the patient, provider and systemic factors that perpetuate disparities in Radiology
2. Highlight how imaging disparities lead to poorer outcomes in minority communities
3. Describe the patient, provider and systemic level interventions that can potentially decrease disparities in imaging



Etiology of Imaging Disparities



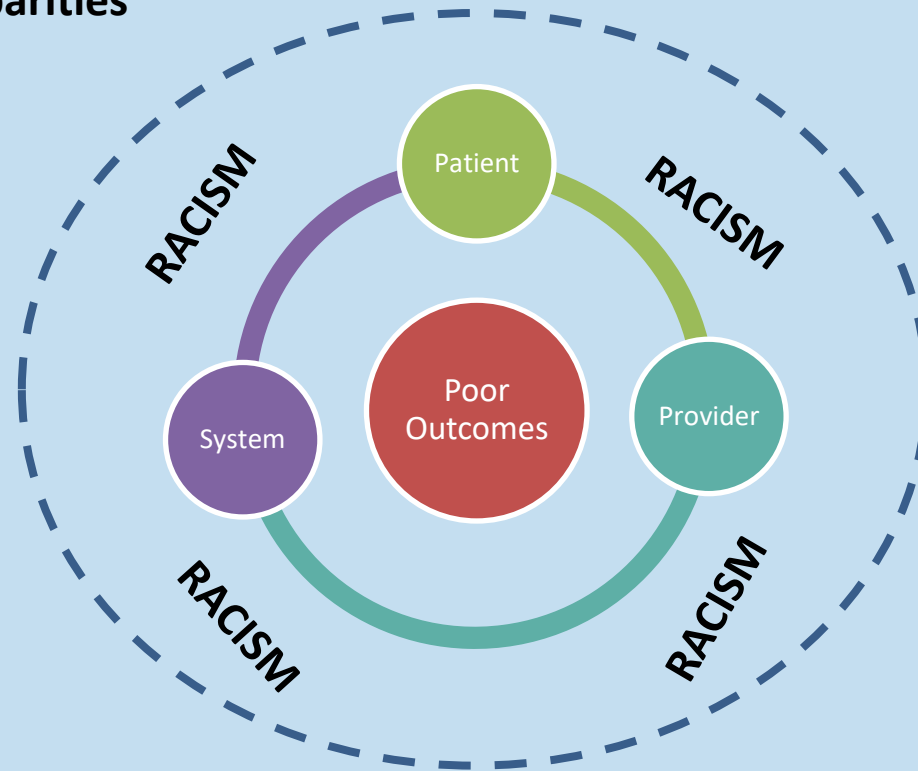
Etiology of Imaging Disparities



“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.”

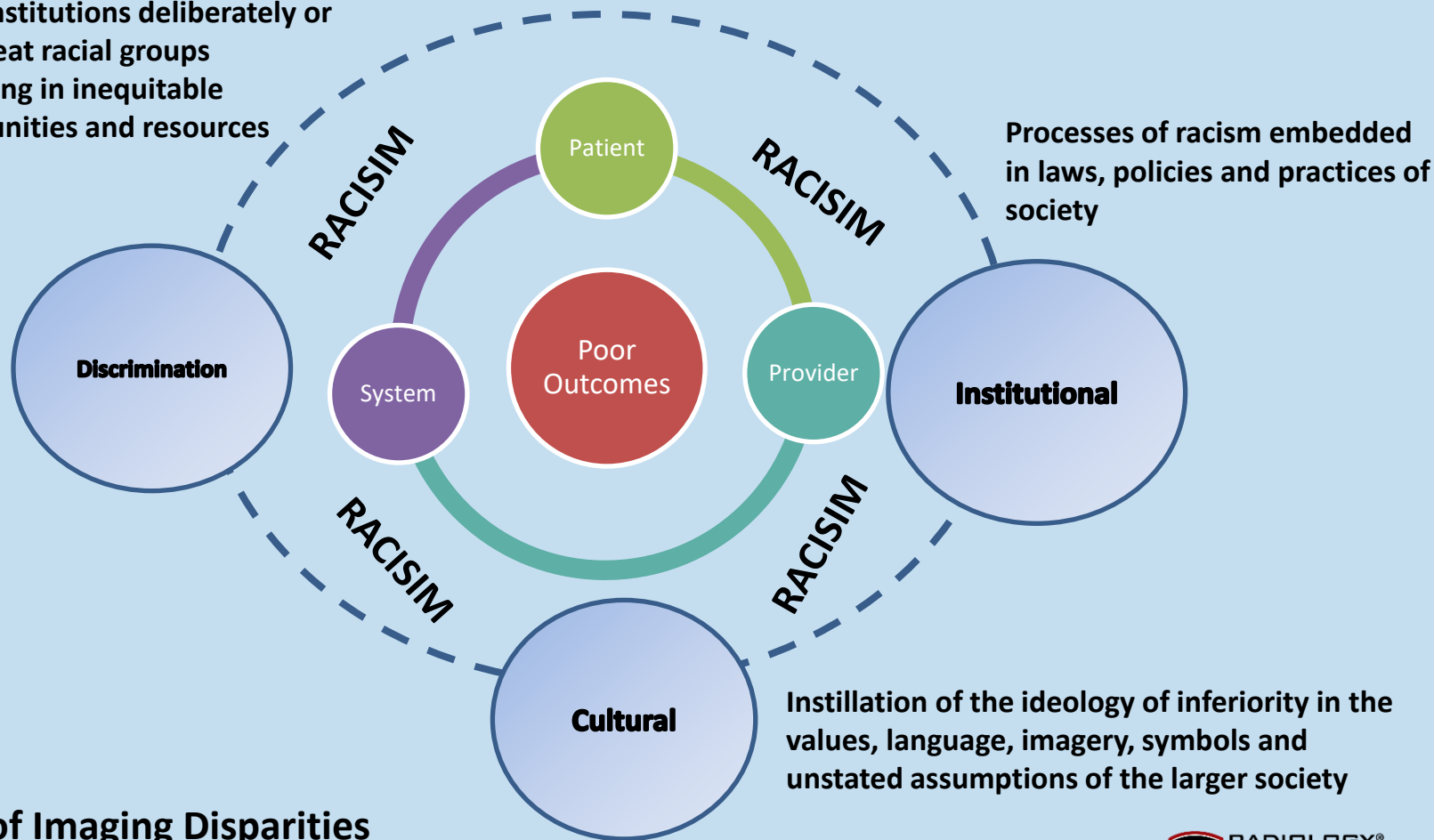
Willarda V. Edwards, MD, MBA

Etiology of Imaging Disparities



“Racism is insidious and its structure and ideology can persist in governmental and institutional polices in the absence of individual actors who are racially prejudiced.” Dr. David Williams *Annu Rev Public Health*. 2019 Apr 1;40:105-125. doi: 10.1146/annurev-pubhealth-040218-043750. Epub 2019 Feb 2

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

RLI Power Hour Webinar Series

The Imaging Cycle



PRE-PROCEDURE





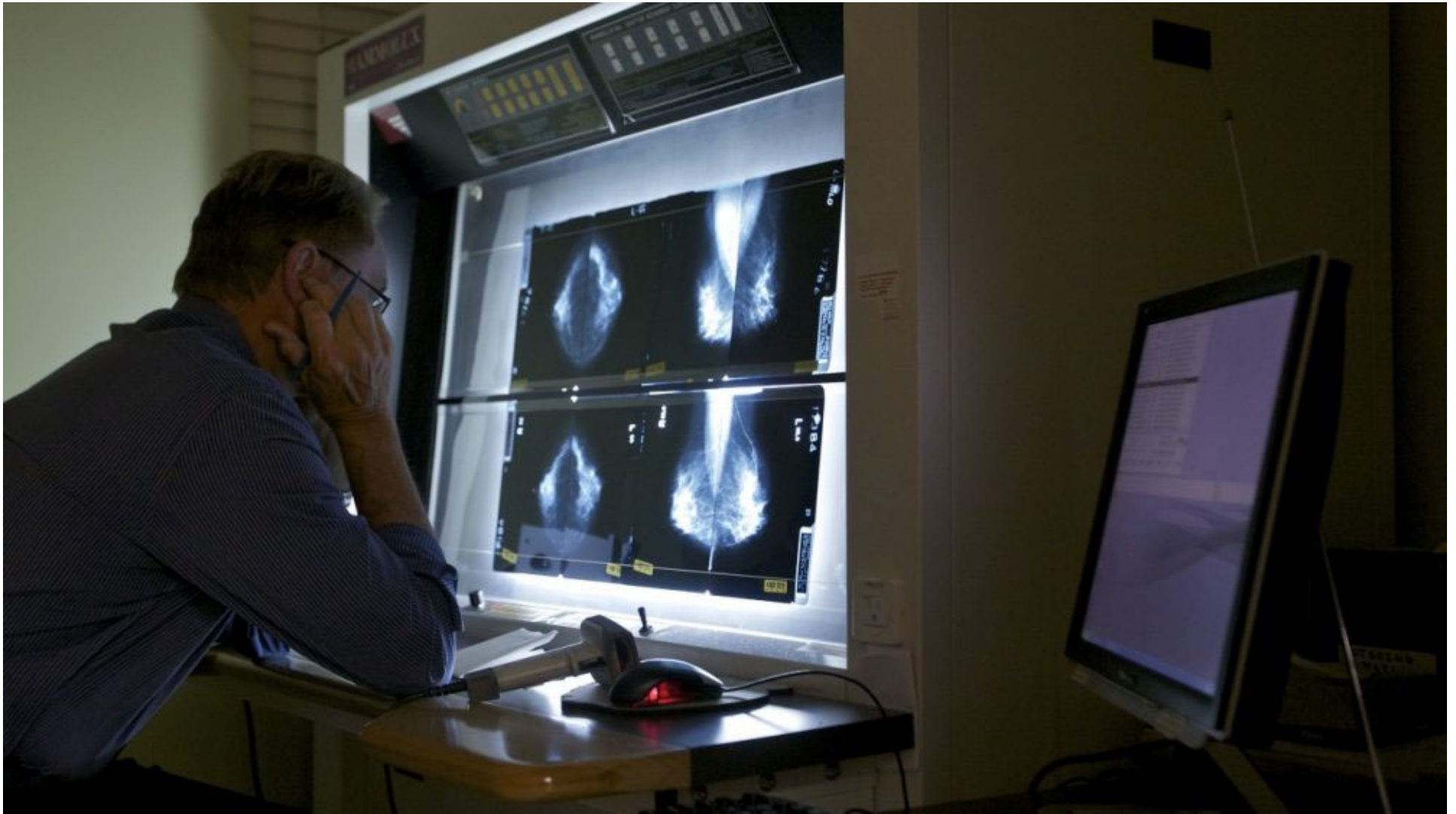




PROCEDURE

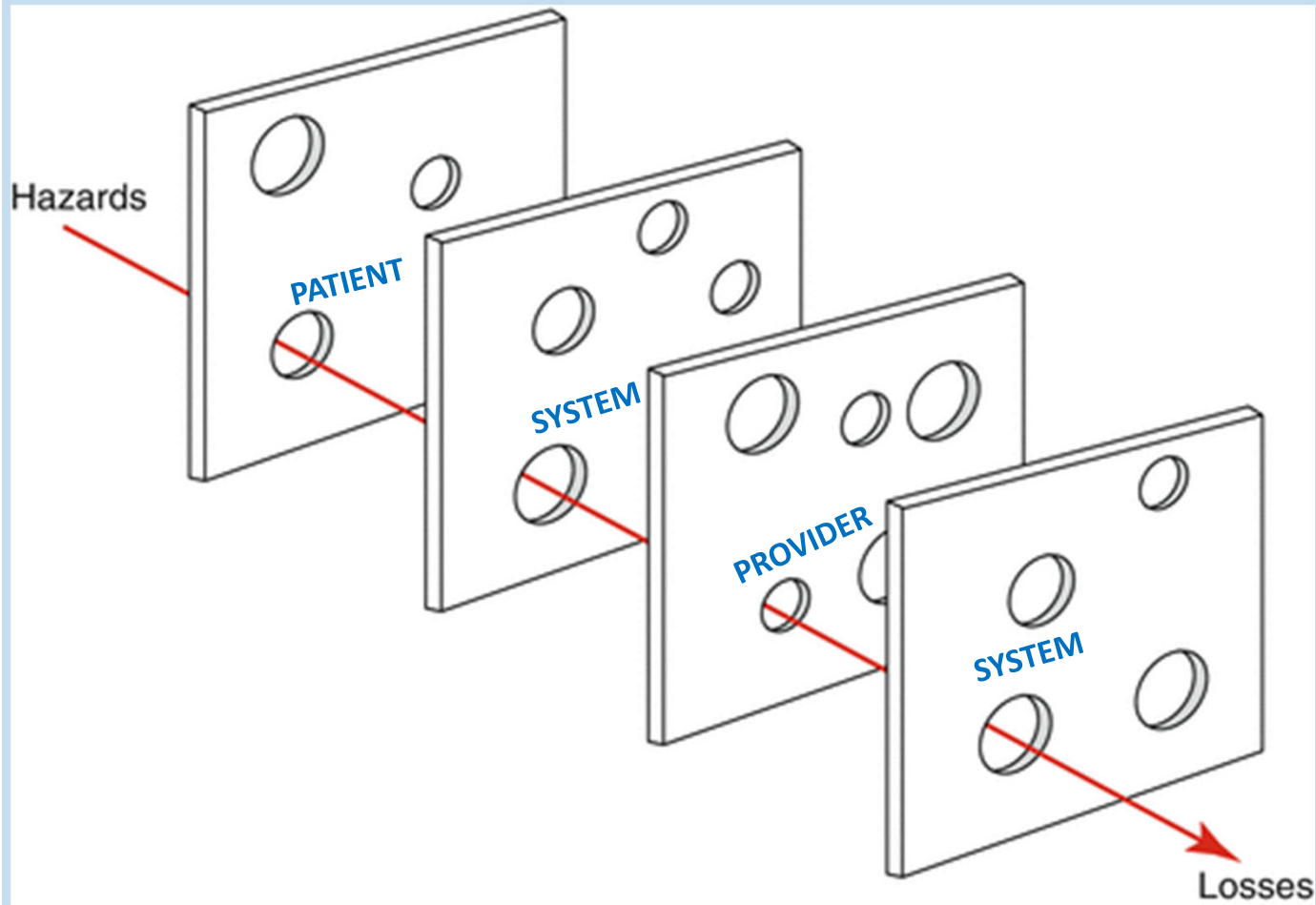


POST-PROCEDURE





Reason's Swiss Cheese Model





SYSTEM RELATED FACTORS

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

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**



SYSTEM RELATED FACTORS
PROVIDER RELATED FACTORS

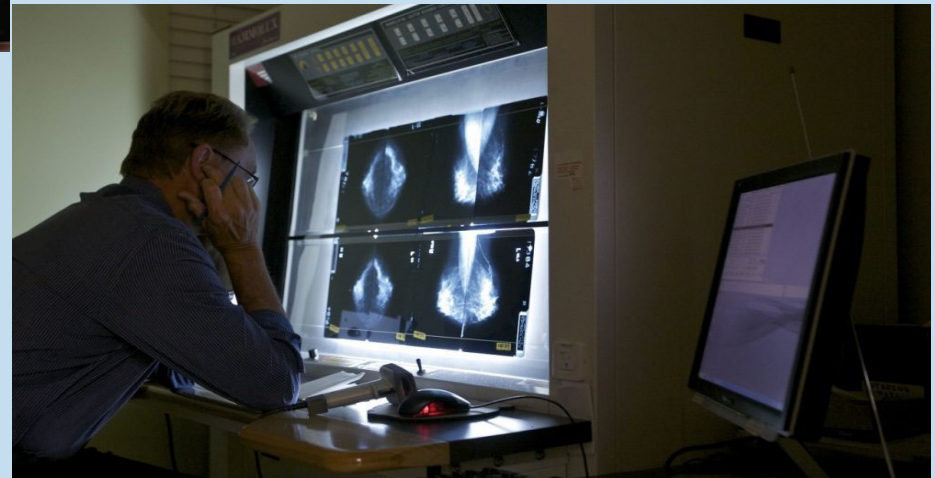
Underuse of screening mammography among Black women contributes to racial disparities in outcomes and mortality

- 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

- Lack of skilled technologists
- Lack of advanced technology
- Low-resource institutions that minorities visit may rely more on general radiologists.





SYSTEM RELATED FACTORS

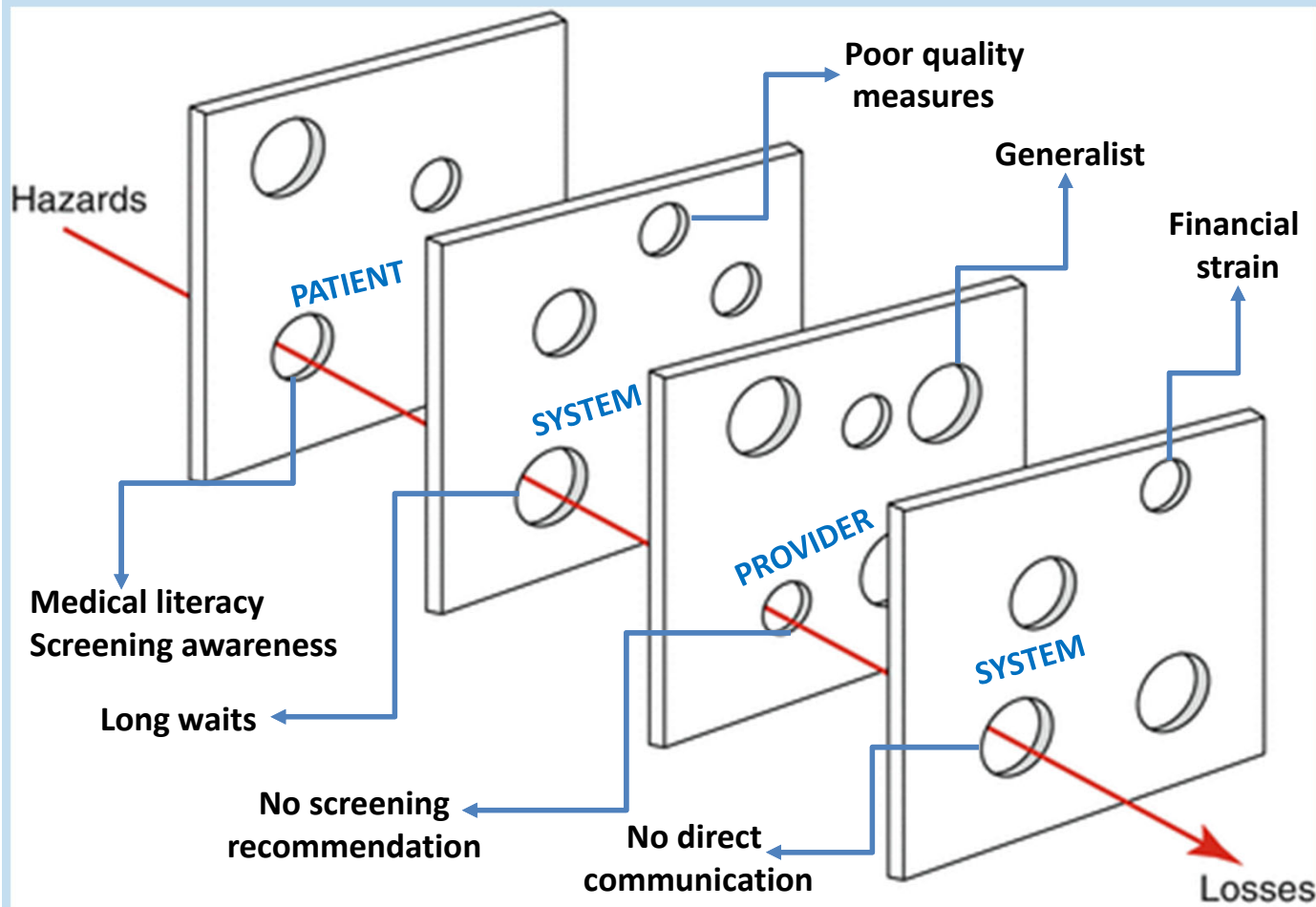
- Inadequate follow-up of abnormal mammograms associated with a higher likelihood of diagnosis of advanced breast cancer.
- Time between abnormal mammogram and biopsy longer in facilities serving high proportion of minorities (Karlner et al)



PATIENT RELATED FACTORS

- Lack of awareness in the general public
- Low income
- Lack of health insurance

Reason's Swiss Cheese Model





PATIENT LEVEL INTERVENTIONS

- 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





SYSTEM LEVEL INTERVENTIONS

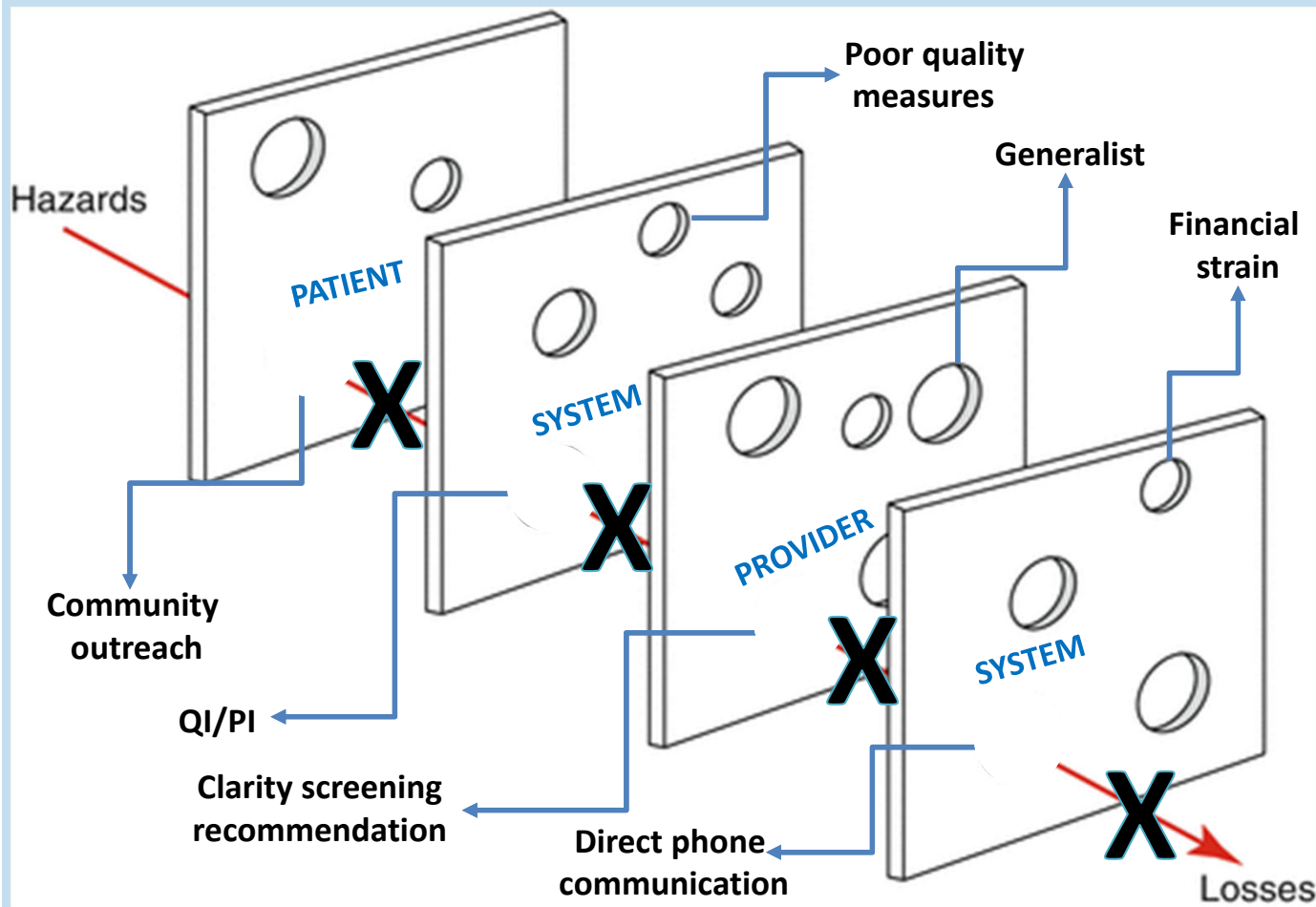
- Bundling screening appointments, offering off-hours imaging, and extending service hours
- Prioritize new technologies, hiring and retaining skilled radiologists and technologists
- Direct telephone communication with patients who had abnormal findings



PROVIDER LEVEL INTERVENTION

- 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



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THANK YOU!!

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