The impact of medical team communication on health care associated outcomes

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Health Disparities

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- Definition: "A particular type of health difference that is closely linked with social, economic, and/or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion."

- Source: Healthy People 2020

Health literate health care organizations

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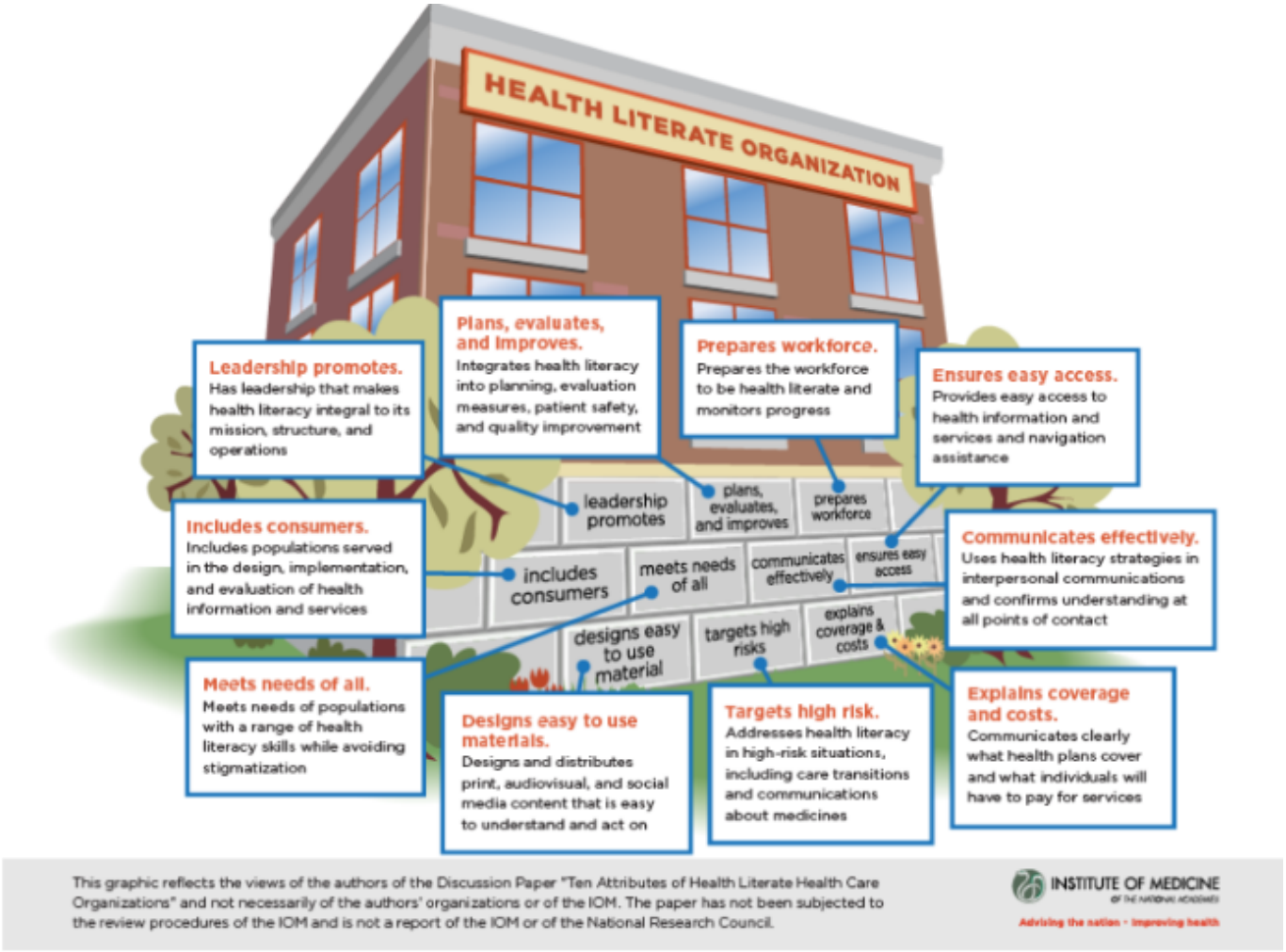

Project support

Results prepared by MITRE Corporation through a CMS Alliance to Modernize Federally funded research and development center (FFRDC) project titled: “Reducing Racial/Ethnic and Other Disparities in Preventable Adverse Health Outcomes”.

Health outcomes of interest

- Healthcare Associated Infections
- Adverse Drug Events
- 30- Day Readmission

Hospital Consumer Assessment of Healthcare Providers Systems (HCAHPS)

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- Provides a standardized survey for measuring patients' perspectives on hospital care
- Survey includes 32 questions
- Select questions and composite measures available via Hospital Compare
- Developed by the Centers for Medicare & Medicaid Services & the Agency for Healthcare Research and Quality

HCAHPS Measures

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HCAHPS composite measures	Questions		
Communication with Nurses	Q1. During this hospital stay, how often did nurses treat you with courtesy and respect?	Q2. During this hospital stay, how often did nurses listen carefully to you?	Q3. During this hospital stay, how often did nurses explain things in a way you could understand?
Communication with Doctors	Q5. During this hospital stay, how often did doctors treat you with courtesy and respect?	Q6. During this hospital stay, how often did doctors listen carefully to you?	Q7. During this hospital stay, how often did doctors explain things in a way you could understand?
Responsiveness of Hospital Staff	Q4. During this hospital stay, after you pressed the call button, how often did you get help as soon as you wanted it?	Q11. How often did you get help in getting to the bathroom or in using a bedpan as soon as you wanted?	
Pain Management	Q13. During this hospital stay, how often was your pain well controlled?	Q14. During this hospital stay, how often did the hospital staff do everything they could to help you with your pain?	
Communication about Medicines	Q16. Before giving you any new medicine, how often did hospital staff tell you what the medicine was for?	Q17. Before giving you any new medicine, how often did hospital staff describe possible side effects in a way you could understand?	
Cleanliness of Hospital Environment	Q8. During this hospital stay, how often were your room and bathroom kept clean?		
Quietness of Hospital Environment	Q9. During this hospital stay, how often was the area around your room quiet at night?		
Discharge Information	Q19. During this hospital stay, did doctors, nurses or other hospital staff talk with you about whether you would have the help you needed when you left the hospital?	Q20. During this hospital stay, did you get information in writing about what symptoms or health problems to look out for after you left the hospital?	
Overall Hospital Rating	Q21. Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay?		
Recommend the Hospital	Q22. Would you recommend this hospital to your friends and family?		

Hospital Compare

Patients who reported that their nurses "Always" communicated well	71%	72%	70%	80%
Patients who reported that their doctors "Always" communicated well	76%	75%	77%	82%
Patients who reported that they "Always" received help as soon as they wanted	54%	56%	52%	68%
Patients who reported that their pain was "Always" well controlled †	63%	65%	64%	71%

30-day readmission Study Methods

Study Design: Retrospective cross-sectional study
Time period: 2010 and 2011
Outcome Measure: risk-adjusted odds of all-cause 30DR
Data sources:

- Healthcare Cost and Utilization Project California state data (HCUP)
- American Hospital Association (AHA) annual survey on hospital characteristics
- Hospital Compare (HC) annual survey on patient reported hospital performance

Methods: univariate, bivariate and multivariate analysis

Variables considered

Patient Characteristics

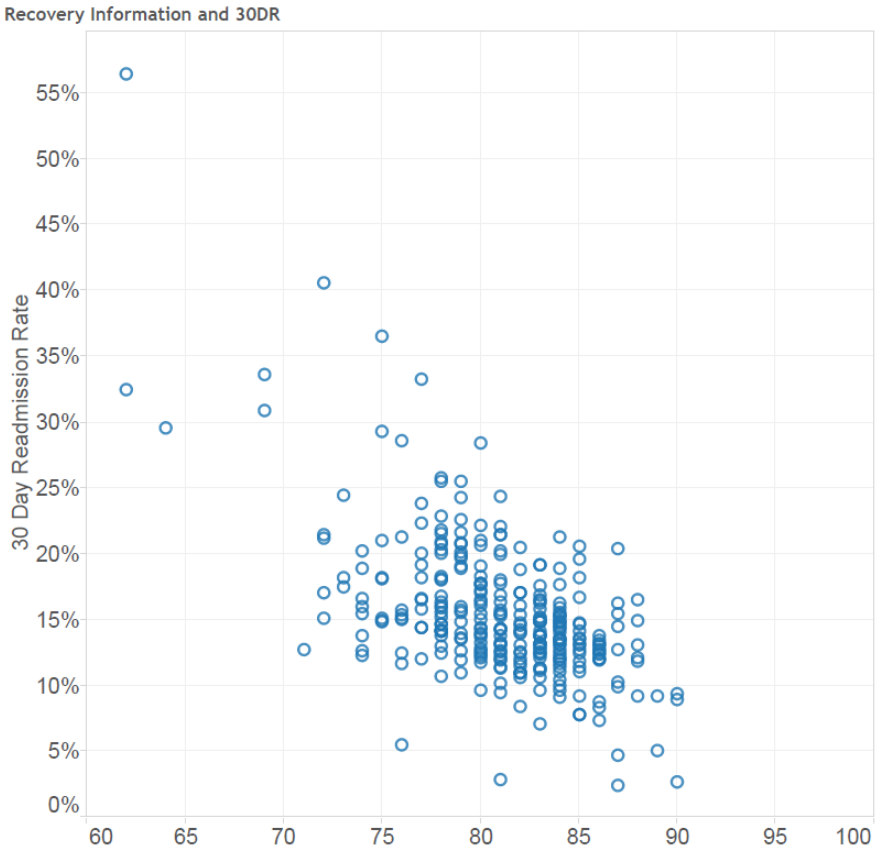
- Age categories (18-44, 45-64, 65+)
- Race (White, Black, Hispanic, Asian/Pacific Islander, Native American, other, missing)
- Sex (Male or Female)
- Insurance payer type
- Income quartile by zip code

Hospital Characteristics

- Hospital Type (Teaching/ Residency, Minority Serving Hospital, Critical Access Hospital)
- Characteristics categories:
  - **Patient reported Performance on medical team communication**
  - Structural factors
  - Staffing

30 Day Readmission results

- As the proportion of patients reporting that they received information at discharge increases, the observed rate of 30-day readmission declines
- For hospitals in which patients reported their doctor always communicates well, there is **a 4.6% reduction in readmission rate** between the highest and lowest performing hospitals for patient reported medical team communication
- The risk of readmission decreases for Medicare patients when in a hospital with positive patient reported medical team communication scores



% of Patients Reporting They Received Information at Discharge

HAI and ADE study methods

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Study design: Retrospective cross-sectional study

Data sources:

- The Medicare Patient Safety Monitoring System (MPSMS)
- AHA annual survey on hospital characteristics
- HC annual survey on patient reported hospital performance

Time period: 2010 – 2013

Outcome Measure: odds of ADE and HAI

Methods: Univariate and multivariate analysis

Variables considered

Patient Characteristics

- Age categories (18-64, 65-74, 75-84, 85+)
- Race / Ethnicity (White, Black, other*)
- Sex (Male or Female)
- Insurance payer type
- Condition: Acute Myocardial Infarction (AMI), Heart Failure (HF), Pneumonia (PN), Surgical Procedure (SCIP)
- Comorbidities
- Income quartile by zip code
- * Other for race / ethnicity ("Race") includes: American Indian / Alaska Native, Asian, Native Hawaiian / Pacific Islander, and patients with Hispanic ethnicity

Hospital Characteristics

- Hospital type
- **Patient reported Performance on medical team communication**
- Teaching / residency status
- Structural factors (e.g., number of beds – from AHA)

HAI and ADE Summary Results

- Sex, insurance type, hospital characteristics, and **medical team communication** correlate to age and racial disparities in HAI and ADE risk

- Hospitals with favorable patient reported scores for "**communication about medicines**" and "**communication with doctors**" had fewer HAIs and ADEs

- Hospitals that scored high in "Patients who reported that staff 'Always' explained medications well" were **4% less likely to have HAIs and 2% less likely to have ADEs**

Conclusion

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- Hospitals with positive patient-reported medical team communication scores are associated with a reduction in ADE, HAI & 30-day readmission rates

- There is an opportunity to improve outcomes by improving provider communication and cultural competency

Hospitals can incorporate:

✓ Provider education in health literacy and cultural competency

✓ Universal precautions (i.e. plain language, the teach-back method)

Contact us

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