Evidence-based Synthesis Program (ESP)

Interventions to Improve Minority Health Care and Reduce Racial and Ethnic Disparities

A Systematic Review

Portland VA Medical Center

February 16, 2012

Evidence-based Synthesis Program (ESP)

Acknowledgements

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Disclosure

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Evidence-based Synthesis Program (ESP)

VA Evidence-based Synthesis (ESP) Program Overview

- Sponsored by VA QUERI Program.
- Established to provide timely and accurate syntheses/reviews of healthcare topics identified by VA clinicians, managers and policy-makers, as they work to improve the health and healthcare of Veterans.
- Builds on staff and expertise already in place at the Evidence-based Practice Centers (EPC) designated by AHRQ. Four of these EPCs are also ESP Centers:
  - Durham VA Medical Center; VA Greater Los Angeles Health Care System; Portland VA Medical Center; and Minneapolis VA Medical Center.

Evidence-based Synthesis Program (ESP)

- Provides evidence syntheses on important clinical practice topics relevant to Veterans, and these reports help:
  - develop clinical policies informed by evidence,
  - the implementation of effective services to improve patient outcomes and to support VA clinical practice guidelines and performance measures, and
  - guide the direction for future research to address gaps in clinical knowledge.
- Broad topic nomination process – e.g. VACO, VISNs, field – facilitated by ESP Coordinating Center (Portland) through online process:

http://www.hsrd.research.va.gov/publications/esp/TopicNomination.cfm

Evidence-based Synthesis Program (ESP)

- Steering Committee representing research and operations (PCS, OQP, ONS, and VISN) provides oversight and guides program direction.
- Technical Advisory Panel (TAP)
    - Recruited for each topic to provide content expertise.
    - Guides topic development; refines the key questions.
    - Reviews data/draft report.
- External Peer Reviewers & Policy Partners
    - Reviews and comments on draft report
- Final reports posted on VA HSR&D website and disseminated widely through the VA.

http://www.hsrd.research.va.gov/publications/esp/reports.cfm

Evidence-based Synthesis Program (ESP)

Current Report

Interventions to Improve Minority Health Care and Reduce Racial and Ethnic Disparities (September 2011)

Full-length report available on ESP website:

http://www.hsrd.research.va.gov/publications/esp/reports.cfm

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Questions for the Audience

(Respond in your "Q&A" tab, upper left corner)

- Question 1: What is your reason for joining us on the cyberseminar today?
  - I am a PI conducting research on this topic
  - I am a general researcher interested in this topic
  - I am a clinician interested in the topic
  - None of the above

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Questions for the Audience

(Respond in your "Q&A" tab, upper left corner)

- Health disparities research has been conceptualized as progressing through 3 sequential phases or generations:
  - Detecting disparities (first generation)
  - Understanding root causes (second generation)
  - Designing interventions aimed at reducing or eliminating disparities in health and health care (third generation).
- Question 2: Are you involved in third generation research?

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Questions for the Audience

(Respond in your "Q&A" tab, upper left corner)

- Question 3: If you are involved in third generation research,
  - I am involved in *intervention* research in VA settings
  - I am involved in *intervention* research outside VA settings
  - I am involved in *intervention* research both outside and in VA settings

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Questions for the Audience

(Respond in your "Q&A" tab, upper left corner)

- Question 4: Challenges to intervention research conducted in the VA include:
  - Lack of funding
  - Need more first and second generation research first
  - Infeasible—potentially effective interventions are too big
  - Few well-researched interventions to test
  - Existing interventions don't affect meaningful outcomes

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Overview of Today's Presentation

- Background: Why is this topic of interest
- Scope of the review
- Results
  - Findings by clinical area
  - Summary of findings across clinical areas
  - Conceptual framework
  - Lessons to further the field
- Limitations
- Future Research
- Discussion

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Background

- A 2007 report from the Portland Evidence-based Synthesis Program (ESP) found that racial/ethnic disparities were prevalent in several clinical areas within Department of Veterans Affairs (VA).

- The report identified several promising avenues for future interventions in order to reduce racial/ethnic disparities in VA populations.

- This current report was commissioned to assess the evidence provided by VA intervention research efforts to reduce disparities in care and outcomes.

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Scope of the Review

- Key Question 1: What is the state of research on interventions to reduce race/ethnic disparities or to improve health and health care in minority populations within VA health care settings?

- Key Question 2: What are the results of interventions (within and outside the VA) to reduce racial/ethnic disparities or to improve health and health care in minority populations?

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Scope of the Review

- Organizing language to categorize intervention studies

- *First order*: categorize according to study design
  1. Single-race
  2. Comparative

- *Second order*: categorize according to intervention type
  1. Generic
  2. Tailored

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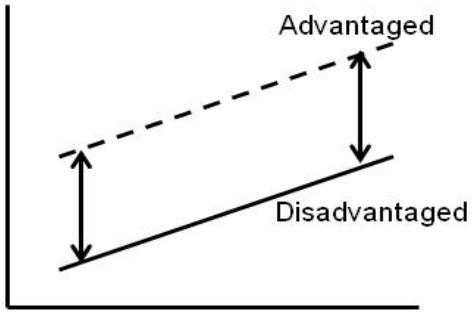
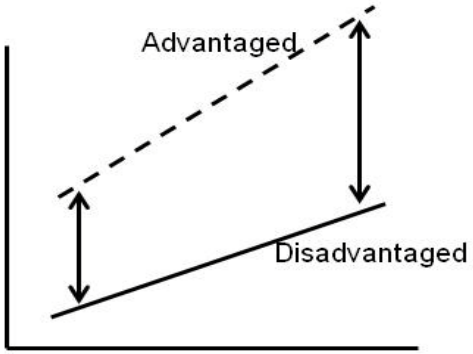
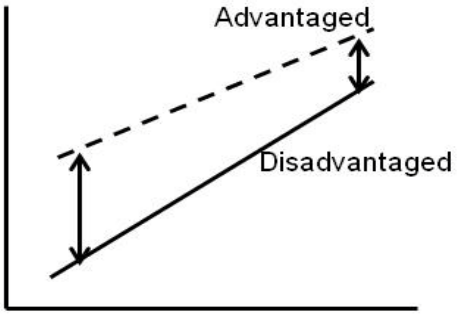
Intervention Effects for Multiple Groups



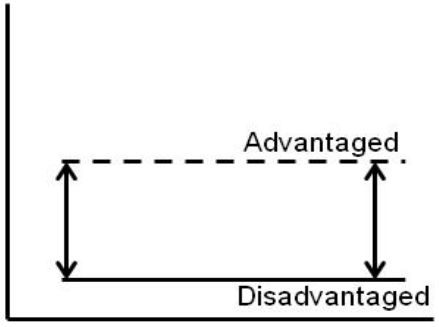
2a. Intervention improves outcome for both groups. **No change** in disparity.



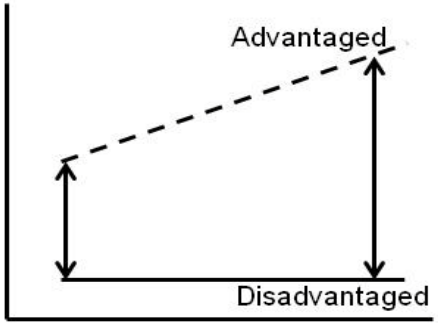
2b. Intervention improves outcome for both groups. **Increased** disparity.



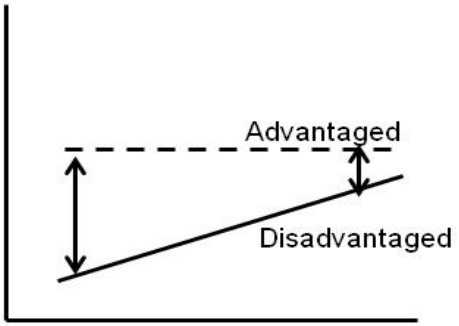
2c. Intervention improves outcome for both groups. **Decreased** disparity.



2d. Intervention does not improve outcome for either group. **No change** in disparity.



2e. Intervention improves outcome for advantaged group. **Increased** disparity.



2f. Intervention improves outcome for disadvantaged group. **Decreased** disparity.

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Methods

- Searched MEDLINE, Cochrane Database of Systematic Reviews, Cochrane Database of Systematic Reviews, and PsycINFO through 2010 for primary studies conducted with VA populations and systematic reviews not limited to VA populations
- Additional articles and reviews considered for inclusion were obtained from reference lists and reviewer suggestions
- Excluded:
  - Non-English language
  - Study population non US adults
  - Study did not evaluate an intervention, or did not include minority groups
  - Review did not meet methodological quality criteria

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Results

- Search yielded 3,417 citations; 120 were selected for full-text review
- 34 systematic reviews not limited to VA populations were included; 5 primary studies involving minority Veterans were included.
  - Diabetes interventions (5 reviews; 1 primary study)
  - Arthritis interventions (1 review; 1 primary study)
  - Preventive care interventions (14 reviews; 0 primary studies)
  - Cardiovascular interventions (3 reviews; 0 primary studies)
  - HIV/AIDS interventions (4 reviews; 0 primary studies)
  - Mental health interventions (2 reviews; 2 primary studies)
  - Cross-cutting interventions (5 reviews, 1 primary study)

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Results

- Key Question 1: What is the state of research on interventions to reduce race/ethnic disparities or to improve health and health care in minority populations within VA health care settings?

Evidence-based Synthesis Program (ESP)+

Results

- Primary Studies of VA Interventions
  (4 comparative; 1 single-race)
  - **Broad set of interventions**
    - **Tele-mental health**
    - **Home screen phone-assisted care coordination**
    - **Decision aid for knee replacement surgery**
    - **Home-based primary care interventions**
  - **Mixed results on effectiveness of reducing disparities**

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Results

- Key Question 2: What are the results of interventions (within and outside the VA) to reduce racial/ethnic disparities or to improve health and health care in minority populations?

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Results: Diabetes

- Five good quality reviews
- Mostly conducted in single-race populations
- Mix of generic and tailored
- There was some evidence of benefit for interventions focused on community health workers, care managers, and culturally tailored health education for patients
- Provider-focused interventions reported improvements in process measures, although computerized reminders for physicians resulted in negligible or negative results

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Results: Arthritis

- One fair quality review
- Comparative studies
- Mostly tailored
- Limited evidence from a single RCT that exercise interventions may be effective in improving pain and disability for both black and white patients

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Results: Preventive Care

- 14 good quality reviews
- Mix of single-race and comparative studies
- Mix of generic and tailored
- Included cancer screening, smoking cessation, and physical activity & diet
- There is some evidence that community health workers may improve rates of preventive health service utilization
- Overall, improvements in preventive and ambulatory care for minorities are inconsistent and do not evaluate effects of interventions on more distal health outcomes

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Results: Cardiovascular

- Three good and fair quality reviews
- Mostly single-race and a few comparative
- Mix of generic and tailored
- Focused on hypertension and smoking cessation
- Overall, nurse-based interventions, culturally tailored education may improve proximal outcomes and reduce hospitalizations

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Results: HIV/AIDS

- Four good quality reviews
- Single-race studies
- Mostly tailored
- Indirect evidence that behavioral interventions can be effective in improving service utilization and outcomes for black and Hispanic populations

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Results: Mental health

- Two good quality reviews
- Mix of comparative and single-race studies
- Mix of generic and tailored
- Good evidence that case management, and care coordination are helpful in reducing depression disparities
- Insufficient research on effectiveness of culturally tailored interventions to reduce depression health disparities, although preliminary evidence is positive

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Results: Cross cutting

- Five good quality reviews
  - Cultural competency interventions (four)
  - Quality of care delivered in primary care (one)
- Mix of comparative and single-race studies
- Combination of generic and tailored
- Overall, interventions designed to improve the standardized delivery of care for all patients are effective
- Insufficient evidence of disparity reductions in health outcomes for patients

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Recap of Results

- **Many of the reviews include studies of single-race populations or do not report improvements in minority groups relative to white groups.**
  - ***Need more comparative studies to provide direct evidence of disparity change***

- Strength of evidence is limited by methodological issues, small sample sizes, and reliance of bulk of evidence stemming from non-VA populations

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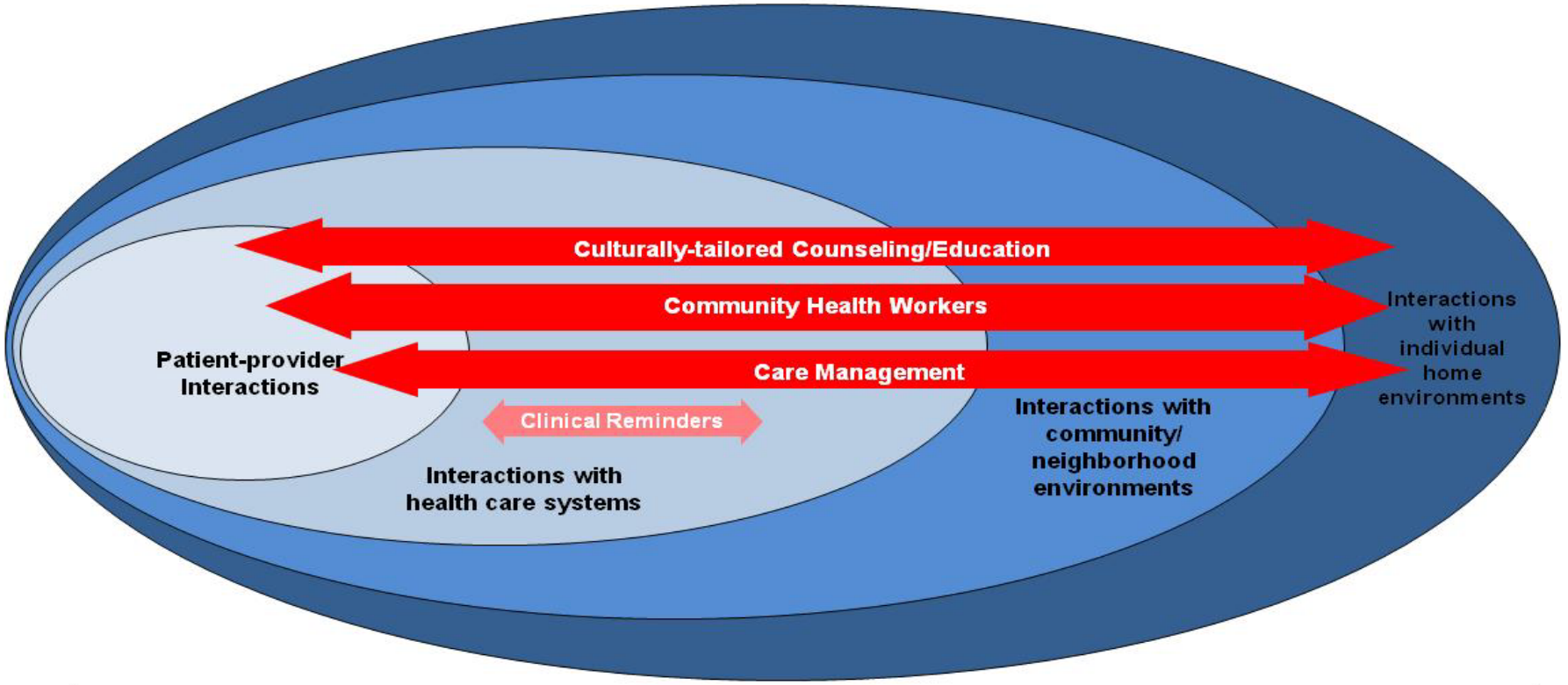
Discussion

- Based on our review, interventions that include personnel (e.g., care managers, community health workers) providing increased connectedness between patients and the health care systems provide some positive indirect and direct evidence of disparities reductions
  - ***Overall, the most promising interventions involved care coordination, care management, community health workers and culturally tailored education interventions***

Figure 3. Reach of Interventions



UNDERLYING FACTORS

INDIVIDUAL DEMOGRAPHIC (PREDISPOSING)	INDIVIDUAL SOCIOECONOMIC NEIGHBORHOOD STRUCTURAL (ENABLING)	INDIVIDUAL HEALTH STATUS (NEED)

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Limitations of the Literature

- Few studies testing interventions on VA populations
- Relatively few comparative intervention studies
- Few studies examine distal health outcomes
- Heterogeneity in intervention components
  - Composition, training, monitoring, frequency of contact, setting
  - Identify optimal characteristics (training protocols, forms, software)
  - Document implementation (unanticipated challenges and solutions)

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Future Research Priorities

- Long term studies
- Details of intervention elements
- Integration of community health workers into VA settings
- Enhance capacity to tailor patient educational materials to address specific needs of minority Veterans
- Consider funding studies explicitly designed to measure pre-post changes between minority and white Veterans
- Include less well studied minority groups

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Discussants:

Som Saha and Linda Lipson

- How do we take information from this report and implement changes to augment the evidence base and affect appropriate policy changes?
  1. What do researchers need to do to continue to build evidence base?
  2. How should we design and disseminate research to address the gaps in our knowledge?
  3. What does VA leadership need to do to encourage VA work that builds the evidence base?

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Questions?

If you have further questions,
feel free to contact:

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The full report and cyberseminar presentation is available on the ESP website:

http://www.hsrd.research.va.gov/publications/esp/

2/16/2012	12:00pm	Interventions to Improve Minority Health Care and Racial and Ethnic Disparities	Spotlight on Evidence-based Synthesis Program	Lipson, Linda O'Neil, Maya Quiñones, Ana Saha, Somnath

1. I am working on comparing generic vs. tailored navigation and support re: CRC screening in a study that includes white and nonwhite patients for screening.
   This sounds to be a very interesting study. We did not find many studies or reviews that compared generic vs. tailored interventions in our review (although there were some in the preventive health section so I encourage you to examine that section of the full report). This type of research study is important for implementation efforts to determine best practices for improving screening outcomes and reducing disparities between groups. Your type of work, when published, will help contribute to the somewhat thin evidence base we were discussing today.
2. I am currently working as a Case Manager one health care population that we are targeting are female veterans--our case managers are currently targeting gender disparities among diabetics--we do not have any specific literature or interventions tailored to the female diabetic—
   We did not focus on gender disparities among diabetics; however, examining the diabetic section of the full report might be informative to the participant. In addition, there are ESP systematic reviews on female Veterans that the participant may want to download as well. A recent one is published on the HSR&D site in October 2010, "Systematic Review of Women Veterans Health Research 2004-2008" by Bean-Mayberry, Huang, Batuman, Goldzweig, Washington, Yano and Miake-Lye.
3. The VA has amazing data in its medical record system, but research and program evaluation projects have shown that the data in the medical record on 'race' is very inconsistent or absent. How have other studies addressed this, and how would you suggest that future research or interventions identify the Veterans that would benefit from improved care to reduce disparities?
   Som mentioned and example of one study by Amal Trivedi and colleagues that was just published at the end of last year (2011) in Health Affairs, that took great pains to examine outcomes for minority Veterans in the VA electronic health record. Dr. Trivedi describes using a combination of VA race data corroborated by Medicare data and other triangulation procedures to best assess race. I believe other researchers looking at VA-wide and VISN-specific studies have taken similar steps. That said, the VA Office of Quality and Performance is continues to improve the consistency of reporting race/ethnicity information in VA data.
4. I know there was work from Trivedi, Grebla, Wright, and Washington out there recently. Can we follow the GRECC model?
   This is an interesting suggestion. I think it does fall in line with the findings from the Trivedi et al., paper as well as the discussion Som and Linda led on marrying research, education and clinical work in the VA, with the added component of implementation driving the collaboration.
5. I was a local PI for a study out of Palo Alto. The Palo Alto PA was a researcher and I am a clinician. It worked fairly well except that I had trouble getting protected time. Any advice? **[Answered during the seminar]**
6. Put them in the same office space. I, a researcher, am in the same office space as the PI, an MD clinician. Exchange of ideas is relatively easy. **[Discussed during the seminar]**
7. Are there any studies on disparity in awarding service connected disability ratings with minorities? **[Answered during the seminar]**
8. How did you determine the quality of the review? **[Answered during the seminar]**

2/16/2012	12:00pm	Interventions to Improve Minority Health Care and Racial and Ethnic Disparities	Spotlight on Evidence-based Synthesis Program	Lipson, Linda O'Neil, Maya Quiñones, Ana Saha, Somnath

9. I am not working in this area currently, but an interest is in the extent to which VA services and structural characteristics perpetuate/exacerbate disparities **[Answered during the seminar]**
10. As a disparity researcher interested in moving towards 3rd generation intervention research, I am wondering if HSR&D is interested in funding studies of NEW interventions or prefers researchers to apply existing interventions to the VA setting. On the one hand, testing new interventions may be of more interest to researchers, but using established interventions may be of more interest to VA. **[Answered during the seminar]**
11. I think it would be incredibly helpful to have a single portal (or something similar) for health disparities research. So much of what is difficult about this type of research in the VA, as you said, is gaining access to information about research that's already been done and that's in progress. It would be wonderful to have a virtual space to go to for discussion and dissemination. **[Answered during the seminar]**
12. Do we know the extent which various kinds of disparities among veterans' impact outcomes the VA is interested in (cost, use, etc)? **[Answered during the seminar]**
13. Should we define a positive outcome in terms of either narrowing the disparity or reversing the disparity? **[Answered during the seminar]**
14. Agree with the social/structural determinants emphasis. There is no reason VA cannot go in that direction, though it will take some rethinking of what we mean by veteran "health" **[Discussed during the seminar]**
15. I agree with Som, community-based work and community-VA collaborations remain untapped and have lots of potential for rich research and collaborative intervention development, as well as building capacity among different kinds of veteran communities **[Discussed during the seminar]**
16. Can you please elaborate on the interest from leadership on structural determinants research? What is the specific interest? **[Discussed during the seminar]**
17. Thanks! Also, are there any resources to locate positions/training programs/fellowships in health disparities within VA? I'm looking for a postdoc position and I've found one posting, but it's hard to know where to look. **[Answered during the seminar]**
18. Clinician: Is there a partnership with the Office of Diversity and Inclusion or the Minority Veterans Program with a center for research on this topic? **[Answered during the seminar]**