# **APPENDIX A. SEARCH STRATEGY**

## I. SEARCH FOR INTERVENTION STUDIES TO REDUCE RACIAL DISPARITIES

Search	Most Recent Queries	Time	Result
<u>#12</u>	Search systematic[sb] AND (#9)	15:47:12	2129
<u>#9</u>	Search (#8) OR #6	15:43:46	83980
<u>#8</u>	Search (#4) AND #7	15:43:29	25879
<u>#7</u>	Search "Evaluation Studies "[Publication Type] OR "Clinical Trial "[Publication Type]	15:43:08	751037
<u>#6</u>	Search (#5) AND #4	15:42:49	65155
<u>#5</u>	Search address OR program OR intervention* OR reduce OR eliminate[Title/Abstract]	15:42:38	1106596
<u>#4</u>	Search ((#3) OR #2) OR #1	15:42:29	491858
<u>#3</u>	Search (("Population Groups"[Mesh] OR "Race Relations"[Mesh]) OR "Minority Groups"[Mesh]) OR "Health Services Accessibility"[Mesh]	15:41:47	229846
<u>#2</u>	Search ethnic* OR race or Racial OR disparity OR disparities OR blacks OR black OR hispanic* OR equity OR sociodemographic OR discrimination OR minority OR minorities OR "African american*"[Title/Abstract]	15:41:36	425423
<u>#1</u>	Search ((("African Continental Ancestry Group"[Mesh] OR "Hispanic Americans"[Mesh]) OR "Indians, North American"[Mesh]) OR "Inuits"[Mesh]) OR "Asian Americans"[Mesh]	15:41:16	77830

## II. UPDATE SEARCH FOR RECENTLY PUBLISHED STUDIES USING THE STRATEGY DESIGNED FOR THE 2007 VA- ESP REVIEW OF PRIMARY VA STUDIES

Search terms in PubMed Database Searched August 12, 2010

((VA [tw] OR veteran\* [tw]) OR (United States Department of Veterans Affairs [mh] OR veterans [mh] OR veterans hospitals [mh])) AND ((ethnic\* [tw] OR race [tw] OR racial [tw] OR disparity [tw] OR disparities [tw] OR blacks [tw] OR blacks [tw] OR Hispanic\* [tw]) OR (population groups [mh] OR race relations [mh])) AND (("2006/10/01"[PDat] : "3000"[PDat]))

## Result: 533

Search terms in HSRProj Database Searched August 12, 2010

VA and (disparity OR disparities OR equity) and Project Status = Ongoing & Completed (Default) and Initial Year from: 2006 To: 2010 States: All

**Result: 31 Projects** 

#### III. Search for systematic reviews of intervention studies on racial disparities

Search	Most Recent Queries
#12	Search systematic[sb] AND (#9)
#9	Search (#8) OR #6
#8	Search (#4) AND #7
#7	Search "Evaluation Studies "[Publication Type] OR "Clinical Trial "[Publication Type]
#6	Search (#5) AND #4
#5	Search address OR program OR intervention* OR reduce OR eliminate[Title/Abstract]
#4	Search ((#3) OR #2) OR #1
#3	Search (("Population Groups"[Mesh] OR "Race Relations"[Mesh]) OR "Minority Groups"[Mesh]) OR "Health Services Accessibility"[Mesh]
#2	Search ethnic* OR race or Racial OR disparity OR disparities OR blacks OR black OR hispanic* OR equity OR sociodemographic OR discrimination OR minority OR minorities OR "African american*"[Title/Abstract]

#1 Search ((("African Continental Ancestry Group"[Mesh] OR "Hispanic Americans"[Mesh]) OR "Indians, North American"[Mesh]) OR "Inuits"[Mesh]) OR "Asian Americans"[Mesh]

# APPENDIX B. INCLUSION/EXCLUSION CRITERIA FOR PRIMARY STUDIES AND REVIEWS

1. Is the full text of the artic	cle in English?
Yes	Proceed to #2
No	Code <b>X1</b> . Go to #6
2. Does the study population	on include adults in the U.S.?
Yes	Proceed to #3
No	Code <b>X2</b> . Go to #6
3. Does the article evaluate	the effects of an intervention within one or more racial/ethnic minority
group(s), or between rac	ial/ethnic groups including at least one racial/ethnic minority group?
	Proceed to #4
No	Code <b>X3</b> . Go to #6
· · ·	ary study conducted in a VA population, or a systematic review or meta- /A) that meets methodological quality criteria?
Yes	Proceed to #5
No	Code X4. Proceed to #6
5. Is the intervention applic	cable to VA care settings?
(Applicability refers to p	atient populations and disease entities of documented disparities in the
VA setting. Qualifying in	terventions must target services provided at the VA. Obstetric care and
interventions designed to	o improve access are examples of exclusions)
	Code 15. STOP
No	Code X5. Proceed to #6
6. Is the article potentially	useful for background, discussion, or reference-mining?
	Add code B. STOP
No	STOP

## **PICOTS**

*Population*: adults in the US. Studies exclusively on children or adolescents are excluded. *Interventions:* third generation studies that evaluate the effects of an intervention within one or more racial/ethnic minority group(s) or between racial/ethnic groups including at least one racial/ethnic minority group.

*Comparator:* control group within same racial/ethnic minority group, or comparison between racial/ethnic groups.

Outcomes: not limited. outcomes of interest include the following:

- i. Utilization of health care services
- ii. Quality of health care services
  - 1. Process of care measures (e.g., use of appropriate screening tests)
  - 2. Outcome measures used by VHA as quality metrics (e.g., blood pressure control)
  - 3. Patient evaluations of care (e.g., patient satisfaction)
  - 4. Direct observations of care (e.g., communication patterns)
- iii. Potential mediators of racial/ethnic disparities in utilization or quality
  - 1. System-level mediators (e.g., distribution of services)
  - 2. Provider-level mediators (e.g., racial bias)
  - 3. Patient-level mediators (e.g., trust)
- iv. Patient-provider level mediators (e.g., communication)
- v. Health outcomes (e.g., diabetic complications)
- *Timing:* any length of followup

Setting: US

# **APPENDIX C. QUALITY RATING CRITERIA FOR REVIEWS**

Overall quality rating for systematic reviews is based on the questions below. Ratings are summarized as: *Good, Fair, or Poor*:\*

- Search dates reported? Yes or No
- Search methods reported? Yes or No
- Comprehensive search? Yes or No
- Inclusion criteria reported? Yes or No
- Selection bias avoided? Yes or No
- Validity criteria reported? Yes or No
- Validity assessed appropriately? Yes or No
- Methods used to combine studies reported? Yes or No
- Findings combined appropriately? *Yes or No*
- Conclusions supported by data? Yes or No

## Definitions of ratings based on above criteria

<u>Good</u>: Meet all criteria: Reports comprehensive and reproducible search methods and results; reports pre-defined criteria to select studies and reports reasons for excluding potentially relevant studies; adequately evaluates quality of included studies and incorporates assessments of quality when synthesizing data; reports methods for synthesizing data and uses appropriate methods to combine data qualitatively or quantitatively; conclusions supported by the evidence reviewed.

<u>Fair</u>: Studies will be graded fair if they fail to meet one or more of the above criteria, but the limitations are not judged as being major.

<u>Poor</u>: Studies will be graded poor if they have a major limitation in one or more of the above criteria.

#### \*Created from the following publications:

Harris RP, Helfand M, Woolf SH, et al. Current methods of the US Preventive Services Task Force: a review of the process. *Am J Prev Med.* 2001:20(3S); 21-35.

National Institute for Health and Clinical Excellence. The Guidelines Manual. London: Institute for Health and Clinical Excellence; 2006.

Oxman AD, Guyatt GH. Validation of an index of the quality of review articles. *J Clin Epidemiol*. 1991;44:1271-8.

## **APPENDIX D. EVIDENCE TABLE**

Author, Year, EN ID	Clinical topic	Population	Setting	Single-race (included only minority study participants)	Comparative (included minority and majority participants with pre and post intervention comparison)	Mostly generic or tailored interventions?	Study methodology (e.g., systematic review, meta- analysis)	Study period/search dates	Number and hierarchy of studies included	Intervention types (i.e., community health workers)
Primary Studies										
Chang, 20091	Preventive	Veterans n=183 patients 71% black, 29% white	Urban VAMC (Washington DC)	No	Yes. Multiple groups, but do not analyze pre-post by race	Generic	Primary article; retrospective chart review of HBPC enrollees. Pre-post enrollment (no control)	Patients enrolled for at least 6 months during the period of January 2001-December 2002	n/a	Multiprofessional home-based primary care (HBPC) team: medical director, nurse practitioners, registered nurses, social workers, pharmacists, registered dietician, dental hygienist and program director.
Dang, 2007 <sup>4</sup>	Preventive	Veterans age 60 or older n=41 patients n=21 white (51%) n=14 black (34%) n=6 Hispanic (15%)	Urban VAMC (Miami)	No	Yes	Generic	Primary study (pre-post no control group)	Patients enrolled for at least 9 months from May 2000-January 2002	n/a	Care coordination: 2 care coordinators (nurse pract, licensed clin social worker), secretary and geriatrician (oversight) Telemedicine: telephone-based in-home messaging device for patient monitoring. Patients input blood sugar levels and answer educational questions. Data transmitted to messaging center, stratified into high/med/ low risk for care coordinators following morning.
Dang, 2008 <sup>2</sup>	Mental health	Veterans with dementia (MMSE < 25) and live-in caregivers; white = 72, AA = 32, Hispanic = 9.	Homes of caregivers/ recipients.	No	Yes. Multiple groups, but do not analyze pre-post by race	Generic	Primary article; pre-post with no control group	n/a	n/a	Screen telephones and support by care coordinators.
Shore, 2008 <sup>3</sup>	Mental health	American Indian Vietnam Veterans	In person and telephone interviews	Yes	No	Tailored	Primary article; tests of mean differences, comparisons of kappas.	n/a	n/a	Telephone and in person interviews to test the feasibility of SCID in this population/setting
Weng, 2007 <sup>5</sup>	Pain/arthritis	African American and white male Veterans n=102 patients at baseline (n=54 black and n=48 white) n=64 completed followup questionnaire (n=33 black, n=31 white)	Urban VAMC (Greater Los Angeles)	No	Yes	Tailored	Primary study (pre-post no control group)	n/a	n/a	Educational videotape and tailored total knee replacement (TKR) decision aid
Systematic Reviews										
Anderson, 2003 <sup>40</sup>	Cross-cutting	Minorities only	All medical settings	Yes. Most included studies are single- race.	No	Tailored	Systematic review	1965-2001	6 RCTs	Clinician bias: recruitment/retention of diverse staff, interpreter services, cultural competence training, ed materials, culturally specific health care settings.
Beach, 2005 <sup>39</sup>	Cross-cutting	Health professionals and ethnic minority patients	n/a	Yes. Most included studies are single- race.	No	Tailored	Systematic review	1980 through 2/2003	2 RCTs, 12 controlled, 20 pre-post.	Training programs varying in lengths generally effective in improving certain aspects of provider characteristics.
Beach, 2006 <sup>38</sup>	Preventive	Physicians, nurses and medical assistants and emergency medical personnel.	Hospital outpatient Community health center Group practice Community care	Yes. Some included studies are single-race.	Yes. Most included studies are comparative.	Tailored	Systematic review	1980-June 2003	n=27 RCT n=20 CCT n=7	Tracking/reminder systems, bypassing the physician, safe times questionnaires for pts, remote simultaneous translation

Author, Year, EN ID	Clinical topic	Population	Setting	Single-race (included only minority study participants)	Comparative (included minority and majority participants with pre and post intervention comparison)	Mostly generic or tailored interventions?	Study methodology (e.g., systematic review, meta- analysis)	Study period/search dates	Number and hierarchy of studies included	Intervention types (i.e., community health workers)
Corcoran, 2010 <sup>13</sup>	Preventive	Latinas in the US	Community (6) and clinic (3) settings in California, Texas, New Mexico, Colorado and Washington	Yes. All included studies are single- race.	No	Tailored	Meta-analysis	ended January 2009	n=9 Quasi-experimental n=6 RCT n=3	Lay-health advisor (promotoras), printed mailings, educational groups, television campaigns, access- enhancing (1 study)
Crepaz, 2007 <sup>31</sup>	HIV/AIDS	Black and Hispanic STD Clinic Patients	STD Clinics	No	Yes. Some included studies are comparative, but do not analyze pre-post by race.	Tailored	Meta-analysis	1998-june 2005	18 RCTs	Intervention delivered by health educator/counselor
Crepaz, 2009 <sup>30</sup>	HIV/AIDS	African American Females	Health Care and Community Settings	Yes	Yes. Some included studies are comparative, but do not analyze pre-post by race.	Tailored	Meta-analysis	January 1988 to June 2007	37 individual and groups level intervention studies and 4 community level intervention studies.	Patient activation
Crook, 2009 <sup>28</sup>	CVD	African-Americans	Ambulatory care and community settings	Yes	No	Generic	Systematic review	1996 - 2006	NR	Counseling/education for behavior change; screening; changes in delivery system; exercise, stress reduction, dietary modification
Davis, 2007 <sup>27</sup>	CVD	Minorities and whites	Community and health care settings. Interventions had to be connected to health care organizations.	Yes. Most included studies are single- race.	Yes. Some included studies are comparative, but do not analyze pre-post by race.	Generic	Systematic review	1995 - 2006	Overall: 52 RCT, 8 pre- post, 2 non-randomized controlled clinical trials	Provider and care delivery interventions (e.g., patient outreach, clinic reorganization, interventions with nurses alone or with community health workers included); patient and family interventions
Eyles, 2009 <sup>25</sup>	Preventive	Health or mixed-health status adults aged 18 to 85+	Non-face-to-face methods of contacting participants. Of the US studies, 6 were conducted in community settings, 4 were conducted in clinical/health care settings and 2 did not report recruitment activities.	Yes. One included study was single-race.	Yes	Tailored	Meta-analysis (and narrative summaries)	January 1990-December 2007	n=16 All studies were RCT or quasi-RCT All studies included experimental group that received tailored nutrition education and control group with either generic and/or no nutrition education. 11 were conducted in the US, 1 was conducted in US and Canada	Tailored nutrition education included print, email or other non-face-to-face format (excluded studies that used face-to-face delivery methods)
Han, 2009 <sup>15</sup>	Preventive	Adult Asian/PI, African American, Hispanic and white women	n=19 in community settings n=4 in health care settings	Yes. Most included studies are single- race.	Yes. Some included studies are comparative, but do not analyze pre-post by race.	Tailored	Meta-analysis	September 2000 - August 2008	n=23 RCT n=14 All studies were experimental or quasi- experimental design. Evidence tables offered as supplemental online content	directed print materials, peer/lay health advisor education and support, telephone counseling.
Han, 2010 <sup>18</sup>	Preventive	Adult women. N=4 predominantly African American; N=3 mostly Hispanic; N=8 mostly Asian; N=1 mostly Asian; N=1 mostly Asian; American; N=2 combination of Hispanic and African American	n=5 health care settings n=13 community settings	Yes. Most included studies are single- race.	Yes	Generic	Meta-analysis	1984-April 2009	n=18 RCT n=9 Quasi-experimental non randomized n=9	<ol> <li>individual-directed (in-person and phone counseling)</li> <li>Access-enhancing (reduced cost, mobile vans)</li> <li>Peer-navigator (lay health advisors)</li> <li>Community education (small group workshops/ seminars)</li> <li>Mass media (tv, newspaper, radio campaigns)</li> </ol>

Author, Year, EN ID	Clinical topic	Population	Setting	Single-race (included only minority study participants)	Comparative (included minority and majority participants with pre and post intervention comparison)	Mostly generic or tailored interventions?	Study methodology (e.g., systematic review, meta- analysis)	Study period/search dates	Number and hierarchy of studies included	Intervention types (i.e., community health workers)
Hawthorne, 2010 <sup>6</sup> Hawthorne 2008; <sup>7</sup>	Diabetes	All included studies were conducted in single-race groups. Some populations don't apply to US (e.g. South Asian British).	Group and individual sessions in clinics, community medical centers, homes of participants, hospital and GP practices. Type of HE provider ranged from peer leaders, certified DM educators, bilingual nurse, CHW, podiatrist, dietician, exercise physiotherapist.	Yes. All included studies were conducted in single- race groups.	No	Tailored	Systematic review and meta- analysis	1966 or inception thru 2007	12 RCTs	Culturally appropriate health education (group sessions in the majority of included studies) defined as HE tailored to the cultural or religious beliefs and linguistic and literacy skills of the community being studied.
Herbst, 2007 <sup>33</sup>	HIV/AIDS	Hispanics	Health/drug treatment clinics, schools, community based organizations, and farm worker campsites	Yes	No	Tailored	Meta-analysis	1988-2006	20 studies included in meta-analysis	Variety of implementation methods from fotonovela to health educator/outreach worker
Johnson, 2009 <sup>32</sup>	HIV/AIDS	African Americans	Community and clinical settings	Yes	Yes. Most included studies are comparative, but do not analyze pre-post by race.	Tailored	Meta-analaysis	1981-2006	78 RCTs	Health education
Lie, 2010 <sup>36</sup>	Cross-cutting	All patient populations	All medical settings	Yes. One included study was single-race.	No	Tailored	Systematic review	1/1990-3/2010	2 quasi-randomized, 2 cluster randomized, 3 pre-post.	Cultural competence curricula
Martinez-Donate, 2009 <sup>14</sup>	Preventive	Latinas and non- Latinas in the US	Community setting; majority of included studies in the West and Southwest US	No	Yes	Generic	Systematic review	Through August 2008	N=14 RCT N=2 CCT N=6	Lay health advisors (education, phone counseling, media campaign, social support, community events, mobile screening)
Masi, 2007 <sup>16</sup>	Preventive	Minority and white female patients (mostly African American and Hispanic), providers	Health care settings	Yes. A few included studies are single- race.	Yes. Most included studies are comparative.	Generic	Systematic review	1986-December 2005	n=43 (n=36 on screening, n=5 follow up testing, n=2 treatment, n=1 survivorship) RCT n=33 CCT=10	Patient: reminder letters, telephone calls, written educational materials, in-person counseling, mammography vouchers, classroom education Provider: chart reminders, chart flow sheets, written education materials, chart autids with feedback
Mau, 2009 <sup>29</sup>	CVD	Native Hawaiians and other Pacific Islanders (NHOPI)	2 community based samples, 1 clinic sample	Yes	No	Tailored	Systematic review	1998 - 2008	2 pre-post, 1 nonrandomized controlled clinical trial	One study used community health workers to deliver a disease management program. Another study used group visits for hypertension counseling.
Morrow, 2010 <sup>20</sup>	Preventive	Multiethnic groups in the US, including at least 1 disadvantaged group	Community-based	No	Yes	Generic	Systematic review	1/2001 - 8/2009	N=15 All RCT	<ol> <li>Patient mailings (mailing, tailored mailing, tailored mailing &amp; phone reminder, brochure); N=3</li> <li>Telephone outreach (scripted and unscripted phone assistance with mailings, care manager calls, tailored phone education); N=3</li> <li>Electronic and multimedia (physician email system, preferences-based website, standardized website, multimedia computer program education, peer education/health professional video education); N=4</li> <li>Community education (pts receiving navigator services, community scheening behavior program, risk counseling, general counseling, cultural self-empowerment) N=5</li> </ol>
Ngo-Metzger, 2010 <sup>s3</sup>	Cross-cutting	Asian American patients, though NO articles were found on this population.	All medical settings	Yes	No	Generic	Systematic review	1/1994-7/2009	None. Extrapolate from white patients.	Some recommendations at end, none based on any evidence.

Author, Year, EN ID	Clinical topic	Population	Setting	Single-race (included only minority study participants)	Comparative (included minority and majority participants with pre and post intervention comparison)	Mostly generic or tailored interventions?	Study methodology (e.g., systematic review, meta- analysis)	Study period/search dates	Number and hierarchy of studies included	Intervention types (i.e., community health workers)
Norris, 2006 <sup>10</sup>	Diabetes	SR that includes 8 RCTs; each RCT a single-race group. Minority populations were the target of all studies but 2; majority of participants female and middle-aged.	Unrestricted settings: community health workers could have delivered the intervention in the clinic, home or community setting, in either developed or undeveloped countries.	Yes	No	Generic	Systematic review	1966 to March 2004	18 total: 8 RCTs, 6 before-after studies, 3 non-randomized allocation of treatment and comparison groups, 1 study with postintervention measures only	Community health workers serving in a variety of roles
O'Malley, 200317	Preventive	Latino and white patients	Primary care settings (community health clinic or doctor's offices)	Yes. A few included studies are single- race.	Yes. Some included studies are comparative, but do not analyze pre-post by race.	Generic	Systematic review	January 1985-January 2003	n=14 RCT n=5 non-randomized controlled trial n=3 pre-post n=3 quasi-experimental n=3	Clinical reminders; peer health educators; culturally sensitive videos; audit with feedback; vouchers
Osei-Assibey, 2010 <sup>24</sup>	Preventive	Adults (18 and older). African Americans, Hispanics, Japanese- Americans and white Americans	All 19 included trials conducted in the US, though not specified if in community or health care settings.	Yes. Most included studies are single- race.	Yes. Some included studies are comparative.	Generic	Systematic review	not specified	N=19 all RCT	Culturally tailored advice/diet counseling; individual programs; family/group programs; peer discussion groups; web-based program;
Peek, 2007 <sup>8</sup>	Diabetes	42 studies in which minority patients were >50% racial makeup, or subgroups of larger trials that were specifically described.	Patient education settings included academic primary care clinics and community based health centers. Provider intervention settings included public hospital academic general internal medicine clinics and community based private physician practices. Health care organization interventions occurred in rural and urban locations, academic and community based primary care clinics, and a public hospital diabetes clinic.	Yes. Most included studies are single- race.	Yes. Some included studies are comparative, but the majority do not analyze pre-post by race.	Generic	Systematic review	1985-2006	22 RCTs, 7 RCTs, 13 before/after studies, 1 observational study.	Systematic review of patient-target interventions that sought to improve dietary habits, physical activity, or self-management activities; physician provider-target interventions; health care organization interventions; and multi-target interventions. Included culturally tailored programs. Many health care organization interventions used a registered nurse for case management and/or clinical management via treatment algorithms, often with a CHF for peer support and community outreach. 2 studies evaluated pharmacist-led medication management and patient education. Multi-target interventions involved more than one of the above targets, e.g. multidisciplinary teams.
Perez-Escamilla, 2008 <sup>28</sup>	Preventive	Latinos in the US	Community and health care settings	Yes.	No.	Tailored	Systematic review	Not specified	n=22 RCTn Pre-post n=13 Cost-benefit n=1 RCTs: 2 in diabetes peer counseling; 2 breastfeeding; 1 food nutrition education Pre-post: 7 in diabetes peer counseling; 2 in breastfeeding; 5 in food nutrition education	Peer educators; nutrition education; nurse case management
Powe, 2010 <sup>19</sup>	Preventive	Individuals aged 50+ and had a study sample of at least 50% African Americans	primary care settings and community based settings	Yes. A few included studies are single- race.	Yes. Most included studies are comparative, but do not analyze pre-post by race.	Generic	Systematic review	2000-2008	n=12 RCT n=8 Nonrandom n=4	Mailed personalized materials; reminder letters/calls; physician reminders; case manager calls; lay health advisors; tailored phone education; physician education

Author, Year, EN ID	Clinical topic	Population	Setting	Single-race (included only minority study participants)	Comparative (included minority and majority participants with pre and post intervention comparison)	Mostly generic or tailored interventions?	Study methodology (e.g., systematic review, meta- analysis)	Study period/search dates	Number and hierarchy of studies included	Intervention types (i.e., community health workers)
Sarkisian, 2003 <sup>11</sup>	Diabetes	Studies were in single- race groups only. 2 studies were aimed at older adults and did not specify race.	Various: 1 urban hospital, 2 VA's, 1 rural NOS, 1 in Sweden, 1 in Cuba, others named by city NOS.	Yes	No	Generic	systematic review	Jan 1985 - Dec 2000	8 RCTs 3 Uncontrolled trials using a before/after design 1 RCT but results were presented using before/ after analysis	Self-care interventions that aimed to change the behavior of patients, rather than simply educating them. 4 studies were designed according to cultural criteria specific to the targeted group. Techniques for cultural tailoring included focus groups, and using specific recipes for the ethnic group being studied.
Saxena, 2007 <sup>9</sup>	Diabetes	US populations in 4 studies. Two studies included both African Americans and Hispanics, and 1 study included only African Americans. 1 study appears to have included only Hispanic African Americans.	Primary Care	No	Yes. Some included studies are comparative, but do not analyze pre-post by race.	Generic	systematic review	Database inception to December 2006	9 studies (4 in UK, 4 in US, 1 in Netherlands). The 4 US studies included 2 RCTs and 2 CCTs.	Primary care interventions, including case management, patient counseling, and reminder cards to prompt providers
Van Voorhees, 2007 <sup>34</sup>	Mental health	Ethnic minorities and whites; all ages.	Mostly primary care clinics.	No	Yes. Some included studies are comparative, but do not analyze pre-post by race.	Tailored	systematic review	1/1995 through 1/2006	20 interventions total. 12 chronic disease management (9 multicomponent (8 RCTs, 1 observational/ cohort) + 3 single component (1 RCT + 2 observational/cohort); 7 case management + 4 collaborative care) + 8 tailored (3 treatment programs + 4 preventive interventions + 1 psychoeducation).	Case management by trained layperson, nurse, or social worker. Some ethnic matching.
Ward, 2007 <sup>35</sup>	Mental health	Ethnic minority and white women (n = 5027 with 2136 ethnic minorities)	PCPs, MH clinics, WIC and other targeted service clinics	No	Yes	Generic	Systematic review	1981 through 2005	10 studies (7 RCTs, 1 observational retrospective design, 1 case series, 1 unclear).	QI, case management, guideline-based interventions, collaborative care, standard psychotherapies, cultural adaptations to psychotherapies.
Webb, 2008 <sup>21</sup>	Preventive	African American and whites	Clinical and community	No	Yes	Generic	Meta-analysis	1984-April 2006	n=20 Studies coded as quasi- experimental or RCT, but not reported	Pharmacological (sustained-release bupropion, nicotine patches, nicotine lozenge); individual, phone and group behavioral counseling; targeted print materials; community outreach; video/radio media; multicomponent of above
Webb, 2010 <sup>22</sup>	Preventive	healthy US Hispanic adults	Home visits, health care settings, community settings	Yes	No	Generic	Systematic review and mini meta-analysis	1991-2007	n=17 n=12 for SR RCT n=5 for MA	Self help; nicotine replacement therapy; community based interventions; individual counseling; group counseling; telephone counseling
Whitt-Glover, 2009 <sup>23</sup>	Preventive	African Americans	Community (churches, YMCA, community centers, public housing) and health care settings (doctor offices, hospitals)	No	Yes	Generic	Systematic review	September 2002- December 2006	n=29 (additional n=14 on children are not considered here)- RC=-NCT=4 (non- randomized controlled trials-UCT=10 (uncontrolled trial)	Telephone counseling; peer counselors; structured exercise program; group exercise sessions; unstructured/unsupervised exercise

Abbreviations: CHW – community health worker, CVD – cardiovascular disease, DM – diabetes mellitus, ESP – Evidence-based Synthesis Program, GP – general practitioner, HE – health education, HSR&D – Health Services Research and Development Service, MH – mental health, NOS – not otherwise specified, PCP – primary care provider, RCT – randomized controlled trial, VAMC – VA Medical Center, WIC - Special Supplemental Nutrition Program for Women, Infants and Children

# **APPENDIX E. REVIEWER COMMENTS AND RESPONSES**

Number	Comment	Response
Question 1:	Are the objectives, scope, and methods for this review clearly described?	<u>^</u>
<del>~</del> 1	Yes.	-
2	Yes.	-
3	Yes.	-
4	No. It appears that the objectives for this review evolved during the review due to lack of literature evidence supporting the initial objective. This results in the somewhat confusing review which seems to stray beyond understanding interventions to reduce disparities. Unfortunately, my interpretation of this is that the actual need for a publication of this type, given the limited literature in the area, should be questioned.	The primary stakeholder and nominator for this review topic was HSR&D. The primary purpose for nominating the topic was to take stock of VA race/ ethnicity disparities research efforts and to inform future research. We have attempted to deliver a report that serves this purpose.
4	In regards to methods, While a comprehensive literature search was done, it is not clear how the reviewers selected the articles that were retrieved for full text review. That is, approximately 3400 abstracts were reviewed which resulted in 150 articles that underwent further review. What criteria were used to select the articles for further review was not stated.	We have provided a summary of literature search methods and criteria in the methods section, pointing readers to the detailed inclusion/exclusion criteria specified in Appendix B.
5	Yes.	
6	Yes.	-
7	Yes. Generally, they are. However, clarification is needed regarding the choice of systematic reviews. Also, there needs to be some reference to broader objectives or goals beyond the two key questions – to inform future research and implementation of interventions – see individual comments in the text of the report for more detail.	We have provided a discussion of works in progress by VA disparities researchers as well as mention of informing future research in the report objectives.
8	Yes.	-
Question 2:	Is there any indication of bias in our synthesis of the evidence?	
1	No.	-
2	No.	-
3	No.	-
4	Yes. On Page 8 of the review in the background section, a sentence appears as follows, "The extent to which such intervention research has been conducted in VA populations is unclear, though a review of published studies suggests disparities intervention research in the VA may be lagging behind research of interventions conducted outside of the VA setting." It is surprising to me that such a statement would be made without either some citation of the "review" or more direct evidence that supports the statement. This suggests a bias in the reviewers that the VA has conducted little intervention research.	We believe there is some confusion about our usage of the word "review" in this selected sentence. We were not referring to a particular systematic review but were referring more generally to our review of the published literature in the report as a whole. We have amended this sentence.
5	No.	-

Reviewer Number	Comment	Response
5	Appendix C indicates that the systematic reviews were assessed for selection bias (good). However, how they were assessed for selection bias is not described. Also, Appendix C implies that they were not assessed for other types of potential biases (e.g., how they assessed other types of potential bias of the individual studies included within them).	We appreciate that our quality criteria are not elaborated in detail; however, we provide citations that inform our quality guidelines.
5	The document would benefit from descriptions of methodology utilized to assess the risk of bias of any individual studies included in the primary literature review. The PRISMA guidelines for assessing bias might be helpful. <i>Citation: Liberati A, Altman DG, Tetzlaff J, Mulrow C, Gøtzsche PC, et al. (2009) The PRISMA Statement for Reporting Systematic Reviews and Meta-Analyses of Studies That Evaluate Health Care Interventions: Explanation and Elaboration. PLoS Med 6(7): e1000100. doi:10.1371/journal.pmed.1000100</i>	We thank the reviewer for providing PRISMA guideline references. The primary objective of the report is to inform VA stakeholders on the state of interventions research in the VA. We have included these primary studies according to inclusion criteria, as well as with regard to our study quality criteria, as indicated in Appendix C. Additionally, these quality criteria appear consistent with PRISMA guidelines.
5	The following statement on page 11 implies that some poor quality reviews may have been included (e.g., if there was only one review available for a given topic, covering a particular time frame, it was always included; even if poor): "If there were several reviews available for a given topic area covering a similar time frame, we excluded poor quality reviews as defined by previously developed criteria." If it is true, it might be more direct to say that all poor quality reviews were excluded.	We have made this change.
6	No.	-
7	No.	-
8	No.	-
Question 3:	Are there any <u>published</u> or <u>unpublished</u> studies that we may have overlooked?	
1	No.	-
2	No.	-
3	No.	-
4	No. I am not aware of other literature that was not reviewed in this report.	-
5	No.	-
5	The Robert Wood Johnson Foundation's Finding Answers: Disparities Research for Change program is currently conducting an evaluation of a provider incentive program designed to improve quality of care and outcomes for African American patients with hypertension. The evaluation is designed to assess the impact of the provider incentive intervention on disparities in the 12 participating VA medical centers. More information, including contact info for the PI, can be found here: <u>http://www.solvingdisparities.org/interventions/baylor</u>	Thank you for the information provided.
6	None that I am aware of.	-
7	Yes. I think there needs to be a discussion of current VA funded intervention research, which includes a number of studies that should be informative.	We thank the reviewer for the suggestion. We have included a discussion of ongoing race/ethnic disparities intervention projects in the Discussion section.

Reviewer Number	Comment	Response
8	No. Was the following paper included in any of your reviews? It is such a great disparities intervention trial: Peer Mentoring: A Culturally Sensitive Approach to End-of-Life Planning for Long-Term Dialysis Patients. Erica Perry, MSW, June Swartz, MA, Stephanie Brown, PhD, Dylan Smith, PhD, George Kelly, MSW, and Richard Swartz, MD	Thank you for this suggestion. This study did not get captured in our search because it was published prior to our search date, but it is very relevant to the topic. We have added this study to the section on cultural competence interventions.
Question 4:	Please write additional suggestions or comments below. If applicable, please indicate the page and line numb	ers from the draft report.
1	Page 1: I would refer to prior work as coming from the "VA HSR&D ESP", not the "Portland ESP".	We have made this change.
1	The distinction between Key Questions 1 and 2 is not particularly useful given the paucity of VA-specific studies, and the flow of the text is much improved by combining VA and non-VA intervention studies according to condition or disease. Suggest that your Executive Summary and Text both take that combined approach.	We thank the reviewer for the comment. Several reviewers had concerns about the wording of the two key questions. Consequently, we have reframed our presentation of Key Questions 1 and 2 to avoid confusion.
1	Page 8: Add "VHA Health System Leadership" as a key stakeholder for this evidence synthesis.	We have made this change.
1	I'm not clear I understand the distinction between "targeted" and "deficit" studies – I believe more explanatory text is needed.	Several reviewers were unclear about our categorization scheme. As a result, we have decided to revamp our taxonomic language for clarity and utility in categorizing existing disparities interventions studies. We hope the new scheme will serve this purpose.
1	Page 29 (and elsewhere): Given the likelihood that multicomponent interventions with at least some community-based effort are needed to address health disparities, what are the implications for study design? Are traditional RCTs really feasible? What is the role of community-based participatory research? Qualitative and mixed-methods designs?	We have added a brief discussion of implications for study design in the Discussion section. It will be important for researchers to conduct well-designed and clearly described interventions in Veteran populations to improve the evidence base. It remains to be determined what specific kinds of designs best address these important research questions.
1	Page 29: It is no longer the case that VHA does not consistently collect race/ethnicity data. It is a requirement of policy. However, it is taking the system some time to "catch up". Suggest contacting Denise Hynes or Steve Wright to get current assessment of the completeness and accuracy of race/ethnicity data.	We thank the reviewer for the up-to-date information on VA data collection activities. We are encouraged to hear that it is now a VA policy requirement to collect race/ethnicity for all Veterans. We have amended the recommendations of the report to reflect these developments.
1	I would not favor the recommendation to create a separate Race/Ethnicity Registry. Race/ethnicity data needs to be included in the VA Corporate Data Warehouse, and our data architecture needs to be configured to allow the flexible generation of specific patient cohorts according the shared characteristics that include race/ethnicity. Larry Mole is leading the effort to establish such design principles, so I suggest you contact him for further detail.	We thank the reviewer for the input, and have removed this recommendation from the report.

Reviewer Number	Comment	Response
2	I found the report's presentation confusing in a number of ways (detailed below), and the take home message hard to identify and digest. I do recognize that the authors were struggling with a fundamental problem – not much literature on the topic of interest and thus they needed to make an effort to find other literature to speak to the issues of the synthesis.	We thank the reviewer for the comment and acknowledgement of the difficulty of the report task. We have made vast changes in an effort to make the take-home message more clear and digestible.
2	I was not sure why this was referred to as a 'preliminary' review in the Exec Summary background – it seems pretty complete.	We removed reference to the review as "preliminary".
2	Throughout the report, I found it confusing that although the first section was entitled "Interventions within VA health care settings", studies of veterans and in VA were included in the second section, which was entitled "Interventions <u>outside</u> VA health care settings".	Several reviewers had concerns about the wording of the two key questions. Consequently, we have reframed our presentation of Key Questions 1 and 2 to avoid confusion.
2	It was not clear to me why in the summary of key question #1 on page 2, results were described which were not statistically significant. The terms used to refer to the strength of the results were also a bit confusing – e.g. "XX intervention 'may' reduce disparities" or "the intervention's impact on disparities is 'uncertain'" – these words were hard to interpret.	We have revised our discussion of the results in Key Questions 1 and 2 to be clearer about the strength of evidence.
2	Under "Cardiovascular Disease Interventions" on page 3, reference is made to smoking cessation interventions in the prior section, but that information did not seem to be there.	Reference to smoking cessation findings from the previous section is omitted in the Executive Summary of Cardiovascular Disease Interventions.
2	Given that there is a lot of reference to the quality of the evidence, e.g. 'good', etc. – seems important to define these terms early in the report, rather than solely in the appendix.	We now introduce our quality criteria from Appendix C in the Methods section.
2	Acronyms need to be defined at first use – e.g. HBPC on page 4 and many others throughout (TKR, etc).	We have made this change.
2	The statement on page 6 that 'Minority recruitment efforts to diversify VA personnel will not be effective without commensurate minority patient data recording" comes out of nowhere – no supporting information prior to that summary statement is provided.	We agree that it is unclear how this recommendation derives directly from the results presented in the report. We have removed this recommendation.
2	Page 9 – second bullet under #1 – should probably clarify that interventions could be oriented towards either process and/or outcome.	We have made this change (#1, bullet 2)
	Under 'setting', should indicate that non-VA settings were included.	For #1, only primary studies involving VA settings were considered; non-VA settings were only considered for systematic reviews discussed in #2.
	Under #2, in sentence beginning 'In addition' – could add, after 'the following' "approaches to intervention delivery".	We have made the suggested change (#2, sentence starting with "In addition)".
2	Page 11, under Key question #1, focused on studies of 'interventions involving multiethnic Veteran populations' – but since these were not necessarily disparities reduction interventions, should probably clarify that. Then, still on page 11, under DM interventions, Summary section, it is mentioned that 5 systematic interventions of interventions in _single race_ populations were reviewed. This is confusing – how can these be relevant to disparities reduction?	We have provided a discussion of our inclusion of single-race and multi-race (comparative) studies as potentially offering indirect and direct evidence of disparities reduction, respectively. This discussion is presented with the taxonomy of intervention studies in the state of intervention research subsection.

Reviewer Number	Comment	Response
2	Page 13 – middle paragraph – a study is described which only kept 13 patients over time – is this making too much of a very, very small study?	We thank the reviewer for bringing this to our attention and have addressed these points.
	Through the report, the tense varies within paragraphs, which makes the text harder to follow. Suggest choosing one tense, past or present, and sticking with it throughout.	
2	Page 17 – Cardiovascular Disease Interventions – it states "no intervention studies were specifically designed to reduce disparities" – so I wondered, "why were they included?"	We agree with the reviewer that these studies do not provide direct evidence of interventions to reduce disparities; however we see value in including studies conducted in single-race populations to assess the state of disparities interventions research and to examine specific interventions that appear promising.
2	I thought the proposed new categorization of approaches to delivering interventions was interesting, and can be helpful to the field in the future.	We thank the reviewer for the encouraging remarks.
3	The organization of both the Executive Summary, as well as the full body of the report was somewhat confusing. In particular, I continually wondered why the results of primary studies involving multiethnic Veteran populations, subsumed by Key Question 1, were summarized and presented under the results for Key Question 2.	We thank the reviewer for the comment. Several reviewers had concerns about the wording of the two key questions. Consequently, we have reframed our presentation of Key Questions 1 and 2 to avoid confusion.
3	Part of the confusion on the presentation of findings for Key Question 1 and 2 seems to be an inconsistency in how Key Question 2 is defined throughout the report. In many sections, the question states that interventions "outside VA healthcare settings" will be assessed, whereas in others, the question states that interventions "not limited to VA healthcare settings" will be assessed.	We have referenced Key Question 2 throughout the document as interventions "not limited" to VA settings.
3	The entire report would benefit from a consistent definition of Key Question 2, and it would benefit from findings from Key Questions 1 and 2 being presented under appropriately labeled sections.	We have made this change.
3	On page 5, paragraph 1, the topic sentence beginning, "Examination of non-VA reviews"	We have revised this sentence.
3	Throughout the report, I had a difficult time discerning the differences between targeted and deficit third generation research studies. Improvements to increase clarity would be helpful.	We have significantly revised our taxonomic language presented in the report. Specifically, we categorize studies by population included – single-race or comparative studies as potentially offering indirect and direct evidence of disparities reduction, respectively. We also present categorization of intervention types as generic or tailored. This discussion is presented with the taxonomy of intervention studies in the state of intervention research subsection, which we hope is more digestible than the "generic," "tailored" and "deficit" distinctions.
3	On page 6, bottom, 4 <sup>th</sup> bullet, beginning "Integrate the use" is awkwardly stated and requires better wording for clarification.	We have made this change.

Reviewer Number	Comment	Response
3	I wonder whether the concept of "improving health and healthcare <u>quality</u> " rather than "improving health and healthcare" should be added to the Key Study Questions.	Thank you for this suggestion. We have made this change.
3	Page 10, paragraph 1, the search strategy for Key Question 2 again states, "studies not limited to VA Patients."	We have kept this reference to "not limited to" consistent throughout the report.
3	The Study Results and Methods do not adequately describe how quality was assessed and factored into the presentation of Results. I realize quality scoring is described in an Appendix, but it is not well integrated into the report.	We have better integrated a discussion of quality ratings in the Methods section and throughout the report.
3	The report still needs to have better integration of citations throughout.	Thank you for this suggestion. We have endeavored to improve the integration of citations in the report.
3	Page 17, bullet 1, line 2, there is a typo, "or" should be "of."	We have made this change.
3	Page 18, first full paragraph, I question whether the study should be kept if no data and purely an opinion piece.	Noted.
3	Page 22, summary paragraph, second sentence, I am not sure what is meant by "are characterized by poor evidence."	We have clarified this sentence.
3	Page 23, third full paragraph, not sure why you used a quote from this article, but none of the others. This does not appear to be objective or evidence-based.	We have edited this paragraph.
3	Page 25, paragraph 1, sentence three, please clarify what is meant by "interpersonal connections between patients and the healthcare system."	We have clarified this sentence.
3	In the Discussion Section, the authors make the point that very few difference in differences studies (AA vs. White, etc.) are performed. A more detailed discussion of the sample size, feasibility, and cost implications of carrying-out a multi-center RCT of this nature would be very informative.	We have provided a discussion of the methodological and practical challenges (sample size, feasibility, cost) involved in providing more robust difference- in-difference study designs, and the advantages of partnering with existing large demonstration projects in order to benefit from large outlays in research efforts.
3	Page 26, paragraph 3, Again, I am having a hard time understanding the difference between target and deficit third generation studies.	We have revised the categorization language for improved clarity.
3	Page 28, paragraph 1, Topic sentence, This concept of CBOCs Networks is not well explained or justified. In particular, how often do CBOCs actually exist where low-income, minority Veterans reside?	We have removed mention of CBOCs in the results section (in Summary of Results Across Interventions) and have instead limited discussion of community based outpatient clinics to the Discussion section, where we elaborate on the ability of CBOCs to increase care access for Veterans in less-populated areas.
3	Page 28, paragraph 3, Last sentence; Please clarify what is meant by "boast a robust primary care personnel base."	We have amended this sentence.

Reviewer Number	Comment	Response
3	Page 28, last paragraph, In addition to comprehensively collecting accurate race data, it will be important to have information on ethnicity, sex, literacy, and SES given the complex interrelationships of these social variables.	We agree with the reviewer's assessment. We have included a brief discussion of the importance of considering patient demographics (e.g., SES, gender and literacy) when designing interventions in the Conceptual Framework section of the Discussion.
3	Page 29, paragraph 1, Topic sentence is not clear and requires revision.	We have made this change.
3	Page 29, paragraph 3 discusses distal health outcomes, but I believe references BP, lipid levels, and hemoglobin A-1C which are actually intermediate outcomes.	We have clarified this sentence.
3	Page 29, bullet 2, not sure how minority recruitment efforts to diversify personnel relates to the actual review. This concept and its background needs to be better explained.	We agree that it is unclear how this recommendation derives directly from the results presented in the report. We have removed this recommendation.
4	I found the organization of the review quite confusing. I read the executive summary and put myself in the place of the end user of such a summary. The summary of findings are organized by the 2 key questions which concern studies of interventions for disparity reduction in VA healthcare settings and results of interventions outside the VA health care setting. Despite this clear organization, much of what is mentioned in the non-VA health care settings actually concerns VA studies. While there is some justification for this that is listed much later and buried in the review, this organization was quite distracting.	We thank the reviewer for the comment. Several reviewers had concerns about the wording of the two key questions. Consequently, we have reframed our presentation of Key Questions 1 and 2 to avoid confusion.
4	Again, when I read the title of this report "Interventions to Reduce Racial and Ethnic Disparities" and then find that the major content of the report concerns articles that frankly are not designed to reduce disparity but only to improve outcomes in minority populations, the actual report is quite disappointing. This may reflect the state of the literature in that there are few studies regarding interventions that are published but if that's the case, again, the actual need for such an extensive report, I think, is questionable.	We thank the reviewer for their very frank comments. We have worked to improve the organization and title of the report to reflect the contents more accurately. However, we do believe there is benefit to assessing the current state of intervention research in the VA and highlight opportunities for improving the evidence base.
4	The reviewers might consider reorganizing this report and changing the title to "Interventions to Improve the Health of Minority Populations" as most of the articles that were reviewed and the statement summarizing patterns that seem to improve outcomes concern this topic.	We have revised the title of the report in response to the suggestion.

Reviewer Number	Comment	Response
5	<ul> <li>The report might want to reference work by Tom Sequist in which he presents findings that a) providers are likely to acknowledge the existence of disparities in general, but less likely to acknowledge the existence of disparities in their own health care system/clinic and least likely to acknowledge the existence of disparities in their own patient panel. Thus, the importance of collecting RE(L) data is important not only to identify disparities, but also begin to help providers become more aware of, and open to, the existence of disparities within their own organization and practice. Sequist's work also shows that simply providing providers with data/reports on disparities with their own patients (along with cultural competence training) is, while essential, likely not sufficient to reduce or eliminate disparities. Disparity interventions will likely need to be more intensive in order to have a measurable impact. Citations: <ol> <li><i>Cultural Competency Training and Performance Reports to Improve Diabetes Care for Black Patients: A Cluster Randomized, Controlled TrialAnn Intern Med. 2010.152:40-46</i></li> <li><i>Physician Performance and Racial Disparities in Diabetes Mellitus CareArch Intern Med. 2008. 168(11):1145-1151</i></li> <li><i>Primary-care Clinician Perceptions of Racial Disparities in Diabetes CareJ Gen Intern Med. 2008. 23(5): 678-684</i></li> </ol> </li> </ul>	Thank you for suggesting this body of work by Tom Sequist. We have added the findings from the intervention study (suggested paper #1) to the section on cultural competence interventions and have included some of your suggested phrasing.
5	The recommendations on page 7-8 are strong. However, it is not clear how recruiting a more diverse staff his hindered by the lack of patient-level RE data. Is the recommendation that patient-level RE data is a pre-requisite to recruiting a staff that is representative of the patient population?	We thank the reviewer for the encouraging remarks. We agree that it is unclear how this recommendation derives directly from the results presented in the report. We have removed this recommendation.
5	I'm not sure if it is relevant due to my lack of exposure to language disparities in VA populations (or lack thereof), but I wanted to offer the possibility that language may be more of an important factor in VA health disparities than the review assumes. Even if all Veterans speak English, is it possible that many still have a preferred language that is not English? In such cases, these patients might experience a higher quality of care and outcomes if their health care is provided in their preferred language. Also, if families and communities are to be incorporated into specific interventions, or the care system in general, they may require services in their preferred language.	We considered this issue. However, language barriers have not been identified as a concern in published studies in Veteran populations. It may be a topic of interest for future research, particularly given that the family and communities supporting Veterans may be non-English speaking.
5	Also, in this section and perhaps elsewhere, there is an implied assumption that relevant disparities are always between white patients (better care and outcomes) compared to racial/ethnic minority groups (worse care and outcomes). However, relevant disparities may exist in which a minority group has better care and outcomes compared to whites, one minority group has better care and outcomes compared to another minority group, etc. Adler (2006; Appendix D in Examining the Health Disparities Research Plan of the National Institutes of Health: Unfinished Business. Gerald E. Thomson, Faith Mitchell, Monique Williams, Editors, Committee on the Review and Assessment of the NIH's Strategic Research Plan and Budget to Reduce and Ultimately Eliminate Health Disparities; PDF is available from the National Academies Press at: http://www.nap.edu/catalog/11602.html) provides a informative overview of different methods to conceptualize and measure disparities. Different approaches may be relevant for a variety of VA settings.	We thank the reviewer for this nuanced discussion point. Although reverse disparities and disparities between minority ethnic groups are indeed important considerations, the commission of this report is focused on taking stock of intervention studies that have potential for reducing and eliminating disparities for minority Veterans, as identified in the 2007 ESP report. We have not sought to exclude studies comparing multiple minority ethnic groups, and have also described the results of interventions with these study populations in this report.

Reviewer Number	Comment	Response
5	The recommendation to incorporate and evaluate the use of community health worker (CHW) and/or other peer-based interventions can be strengthened by advising the use of focus groups, consisting of the target patient population, to explore what they believe are the relevant characteristics of CHW identity that will be the most helpful/important (e.g., from the same neighborhood/community, same R/E, Veteran status, gender, health status/disease diagnosis). The relevant characteristics may vary widely by patient population and/or VA health center. This may significantly influence the potential impact of a CHW program. In other words, it is not necessarily advisable to standardize what defines CHW status because this may change by the patient population and/or health disparity targeted. Finally, directly involving the target population (and resisting the use of proxies) in the design of any intervention will increase the chances of reducing the targeted disparity.	We thank the reviewer for pointing this out. We have re-worded our recommendation so as not to imply that standardization of interventions is necessary. What we do recommend is for components of interventions to be clearly and fully described to allow for comparison across studies.
5	I found the definitions of "generic", "targeted" and "deficit" at the bottom of page 10, and elsewhere, confusing. My confusion comes partly because the term "targeted" is often used in the wider disparities and QI literature to describe intervention design (not study design). In the context of intervention design, it is often used in conjunction with the term "tailored" (targeted - an intervention that is not designed for a particular population/group, but simply directed at them; tailored - an intervention that is specifically designed to meet specific needs, in a culturally competent manner, of a particular population/group). The individual terms/definitions offered do not seem to be complete and/or encompass more than one concept. How are the terms fully differentiated from one another (e.g., the target populations of the intervention, who receives the intervention -or not, and what process and outcomes are measured -or not)? Perhaps it would be easier to characterize the existing disparities research by study design, what process and outcome variables are measured and the adequacy of the control/comparison group (none, internal, external).	We have significantly revised our taxonomic language presented in the report. Specifically, we categorize studies by population included – single- race or comparative studies as potentially offering indirect and direct evidence of disparities reduction, respectively. We also present categorization of intervention types as generic or tailored. This discussion is presented with the taxonomy of intervention studies in the state of intervention research subsection, which we hope is more digestible than the "generic," "tailored" and "deficit" distinctions.
5	Figure 2 may be more accurate if the arrows for "community health workers" and "care coordination" extend through all spheres, including community, neighborhood and individual/home environments. The definitions of the underlying factors and their contributions to the model are not clear.	We have made the suggested change, and have provided more discussion of the underlying factors in the conceptual framework section.
5	The review contains many important/critical recommendations. I have not taken the time to write about the ones I think are strong and clearly defined. However, I want to acknowledge that they are there and appreciated. Thanks!	We appreciate the reviewer's encouragement.
6	Although their numbers are small in comparison to African American/Hispanic Veterans, efforts should be taken to include Asian/Pacific Islander and American Indian Veterans as these groups experience significant disparities in health outcomes also.	We have included this recommendation in our discussion of Future Research Gaps and Implications for VA Health Care Settings (p. 31 last bulleted item).
7	I've used the comment review option to make extensive comments throughout the report. I'm also attaching a current list of HSR&D funded studies (some have been completed). The abstracts are available through our website and ART.	We have addressed the comments in the tracked- changes copy of the report, and have provided a summary table of ongoing HSR&D funded intervention studies.
8	See attached comments in text.	We have adopted the edits and addressed comments made in the text.

Reviewer		
Number	Comment	Response
	Are there any clinical performance measures, programs, quality improvement measures, patient care service	es, or conferences that will be directly affected by this
report? If so	p, please provide detail.	
1	This work will help inform the efforts of the Health Equity Workgroup that has been established by Dr Jesse.	Thank you for the suggestion.
2	I don't think so.	-
5	NIH Conference on the Science of Dissemination and Implementation ( <u>http://conferences.thehillgroup.com/obssr/di2012/index.html</u> ) and IHI National Forum on Quality Improvement in Health Care (http://www.ihi.org/offerings/Conferences/Forum2011/Pages/default.aspx)	Thank you for suggesting these conferences.
6	Newly established VHA Health Care Equality Work Group – "chartered to leverage talent across VA to determine what VA's response should be to ensure equity for all Veterans."	Thank you for the suggestion.
7	HSR&D research funding.	Thank you for the suggestion.
Question 6:	Please provide any recommendations on how this report can be revised to more directly address or assist imple	ementation needs.
1	Important to highlight how little is known about what works. Our investments need to be in multiple pilots of innovations rather than huge initiatives.	We thank the reviewer for the suggestion. Our discussion now includes recommendations for enhancing the evidence base by funding future pilot intervention studies.
5	Currently, one of the major hindrances to disseminating promising practices/interventions to reduce disparities is the lack of specific information about intervention implementation and maintenance costs (and cost- benefit analyses). Cost information is critical for obtaining buy-in from organization leadership and payers of healthcare. Therefore, recommendations for future research should include gathering, at minimum, basic start- up and maintenance costs for the intervention being evaluated. Whenever possible, cost-benefit analyses should also be encouraged. Also, the lack of specific information about the intervention design and implementation specifics is a significant obstacle to dissemination and ongoing evaluation of best practices and promising strategies. As the review noted, interventions utilizing community health workers or other peer-based models vary widely in terms of identifying staff/volunteers, training methodologies, supervision methodologies, scope of work with patients (e.g., education, counseling, home interventions) and the degree of integration into the medical team. This lack of necessary details (training protocols, forms, software programming) is inherent in the vast majority of intervention evaluation literature. Whenever possible, the documentation and dissemination of implementation details (including unanticipated challenges and solutions) should be encouraged.	We profusely thank the reviewer for the eloquent discussion of one of our key findings of the report. We have elaborated on these points, per the reviewer's suggestion, in the Future Research and Implications in the Discussion section of the report. Thank you for your insightful comments.
6	See comment in #4.	-

Reviewer		
Number	Comment	Response
7	The planned follow-up survey should be helpful. But I also think that further discussion of what the health care system is able to do regarding the social determinants (if anything is possible) would be helpful.	We thank the reviewer for making this important point. We have included a discussion of the importance of considering social factors in the delivery of health care (Conceptual Model section of the Discussion). More work needs to be done on how best to incorporate this information to help shape interventions and tailor clinical encounters to improve care and outcomes for minority Veterans.
8	I do have some major comments. You mention in the last review you included studies that were underway without to date results. You only found 5 published studies. I think it would be very important to know how many VA disparities studies have not been publicly reported on and why. You might also include some information about currently underway studies. As an FYI I am hoping my (I think) targeted intervention study that was not funded by the VA but conducted in the VA will soon be accepted for publication. It will probably come out too late to be included in this report.	We have reviewed the abstracts of recently funded and ongoing projects in the HSR&D Equity Portfolio and have added our findings to the Discussion. We agree that it would be useful to understand why VA disparities studies have not been publicly reported and have proposed a qualitative survey that hopes to gather insights on this issue.
8	I never quite understood the taxonomy of 3 <sup>rd</sup> generation studies. You define it three times and I was never sure I got what a deficit study was and how it was different from a targeted study.	We have significantly revised our taxonomic language presented in the report. Specifically, we categorize studies by population included – single- race or comparative studies as potentially offering indirect and direct evidence of disparities reduction, respectively. We also present categorization of intervention types as generic or tailored. This discussion is presented in the state of intervention research subsection, which we hope is more digestible than the "generic," "tailored" and "deficit" distinctions.

Reviewer	Comment	Demense
Number 8	Comment You need to include a section addressing the methodological challenges of performing intervention studies	Response We thank the reviewer for bringing up this
0	designed to look at differences in differences. There is a reason there are so few intervention studies of this nature	important point. We have included a discussion of
	both in and outside of the VA. Differences in differences studies usually require huge numbers to detect significant	power implications/methodological challenges for
	and clinically meaningful differences in outcomes. They are usually performed with secondary administrative data	performing the interventions recommended.
	and include large populations. They have been mostly used to look at the association between policy changes and	
	disparities in quasi-experimental designs. Below are some issues relating to choosing intervention designs.	We appreciate your careful examination of the
	a. For example a problem might be much more prevalent in minorities (e.g., poor colon cancer screening) but	methodological design challenges inherent
	the intervention helps all people with the problem (e.g., care coordination). You do a study offering colon	in conducting "optimal" disparities reduction
	cancer care coordination to all people who have not been appropriately screened and see no differences	intervention studies. As the reviewer points out,
	between blacks and whites in uptake of screening. That does not mean the intervention would not reduce	large demonstration projects need to serve multiple purposes, and providing large populations of minority
	disparities. To really do a difference in difference study you need to study the entire population (including	Veterans to conduct intervention demonstration
	those who have been screened and those who have not). But this is not feasible. What should you do?	projects seems a good opportunity to do so.
	<ul><li>i. Well first you do a targeted study showing the program works in the at risk population.</li><li>ii. Then you do an implementation generic study showing it works in a broad array of patients who</li></ul>	projecto secino a good opportante to do so.
	are unscreened and that a program of this nature can be implemented.	
	iii. You then convince the VA they should pay for this.	
	iv. Then only after it becomes policy and it is broadly adopted can you do a quasi-experimental study	
	looking at change over time in colon cancer screening by race to determine if the intervention	
	really reduces disparities in colon cancer screening.	
	Clearly I am being a bit over the top but unless you think your intervention is going to be much more effective	
	in minority groups over the majority population it is very hard to show that an intervention reduces disparities.	
	There are very few interventions that are as effective and race specific as the paper on advanced directives cited	
	earlier. Most interventions work on all people with the problem but as you mention in the report, because of social	
	determinants, more people in minority groups are affected by the problem. I think you made an excellent point	
	about tying interventions to large existing programs like PACT but need to address specifically the methodological	
Ou antian 7.	difficulties with doing these studies. Please provide us with contact details of any additional individuals/stakeholders who should be made aware of	Calie and a
~		
1	Suggest contacting Victoria Davey to get input from the Office of Public Health in VHA. Also, you may wish to	Thank you for the suggestion.
2	speak to Larry Mole at Palo Alto to talk about the Registry/Cohort capabilities of the Corporate Data Warehouse. Robert Jesse, MD, PDUSH, who is convening an Equity Healthcare Working group currently (and Susan	Thank you for the suggestion.
2	Schiffner, who works with him and is coordinating that effort)	Thank you for the suggestion.
3	This report clearly should be made available to the Center for Minority Veterans and to Dr. Jesse's VA Health	Thank you for the suggestion
5	Equality Work Group.	mank you for the suggestion.
5	Comments: Thank you for this opportunity.	Thank you for the suggestion.
6	Dr Tracy Gaudet, VHA, Director, Patient Centered Care and Cultural Transformation and Dr Garth Graham,	Thank you for the suggestion.
	HHS's Director, Office of Minority Health and ExOfficio member of VA's Advisory Committee on Minority	
	Veterans.	