



RAND

Q-DART

Tools for Assessing & Responding
to Disparities in Health Care Quality

Gender-based Analysis in Health Services Research: Making the Research Actionable

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VA Cyberseminar

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Poll Question #1

- What is your primary role in VA?
 - Student, Trainee, or Fellow
 - Clinician
 - Researcher
 - Manager or Policy-maker
 - Other

Poll Question #2

- Which best describes your research experience?
 - have not done research
 - have collaborated on research
 - have conducted research myself
 - have applied for research funding
 - have led a funded research grant

Outline

- Moving beyond sex and gender as a control variable
- Assessing gender differences in care and outcomes
- Engaging stakeholders and decision-makers
- Putting gender on the map

Moving Beyond Gender as a Control Variable

- Too often research on health and health care adjusts for gender, race/ethnicity and socioeconomic status (SES) rather than assessing differences
- Average answers may not speak to the problems of any major population subgroup
- Actionable research needs to assess whether and how health and health care differ by sex/gender and for sexual minorities

Assessing Gender Differences in Care and Outcomes

- Gender-based analysis systematically assesses whether and how men's and women's health, healthcare, or both differ
- Gender-stratified analyses may be necessary to determine whether, and to what extent, key predictive or causal relationships differ for men and women
 - think of stratified models as fully interacted
 - report where gender differences are significant and where they are not

For the Love of Odds Ratios

- To have an impact research needs to be accessible.
- Findings need to:
 - speak to decision-makers and address their questions
 - be in the metrics they use to understand and assess impact
 - be specific and actionable
 - be relevant to local situations and organizations

Making Findings Actionable

- Differences in men's and women's health may be social, biological, or both
- Understanding when and where disparities occur in processes of care and outcomes is key to effective intervention
- Efforts to improve men's and women's health and health care may require different interventions
- Differences in incidence or prevalence may be addressed through prevention but not through diagnosis and treatment

Identifying Action Points

- Addressing differences in health trajectories raises additional questions regarding patterns of care and outcomes
 - Are the differences at the level of care delivery (process measures such as screening diagnosis, treatment, and follow-up) or intermediate outcomes (achieving control over biological risk factors such as high BP or LDL cholesterol)?
 - Are there time trends with a diffusion curve (initially men get newer treatments) or are women getting similar care but not similar outcomes?

Constrained Choice

- Whose behavior and what choices or actions are you seeking to impact?
 - Clinicians, patients, decision-makers who affect the organization of care or payment structure
- Individuals have agency but their choices/actions differ in part because options differ and the costs and consequences of particular choices differ
- To change behavior you need to also consider what other levels of decision-making impact individuals' options and the relative costs of specific choices

Identifying Decision-makers

- Change is more likely to be achieved if you can identify and reach relevant decision-makers
- Few changes are achieved only by individual patients and/or their respective clinicians
- Identifying the levels of decision-making relevant to addressing a specific problem can reveal additional action points and potential bottlenecks

Engaging Stakeholders and Decision-makers

- To gain the interest of stakeholders and decision-makers, findings need to:
 - Be clearly relevant to the outcomes of interest to specific stakeholders
 - How does addressing gender differences in care align with meeting their primary goals?
 - Be demonstrable as a problem locally – within the purview of specific decision-makers
 - Have clear levers to address the problem

How Do Actionable and Traditional Academic Research Differ?

- Actionable research needs to speak to the decision-makers and stakeholders who can make a difference
- Measuring the size and nature of disparities is not sufficient
- Analyses need to:
 - identify action points
 - identify the mix of issues that must be addressed in order to act/intervene locally rather than (or in addition to) nationally

Assessing Gender Differences in Care and Outcomes

- Moving beyond measuring average gender gaps and their determinants
- Think differently about generalizability
- Drill down to make findings actionable where you, your client, the stakeholders, or other decision-makers want to intervene

Audiences Matter

Many studies share these objectives and give some consideration to gender differences in health or outcomes, but without being actionable

- To be effective, actionable gender research has to
 - engage decision-makers
 - speak to multiple audiences at many levels of decision-making
 - be relevant to local situations and organizations

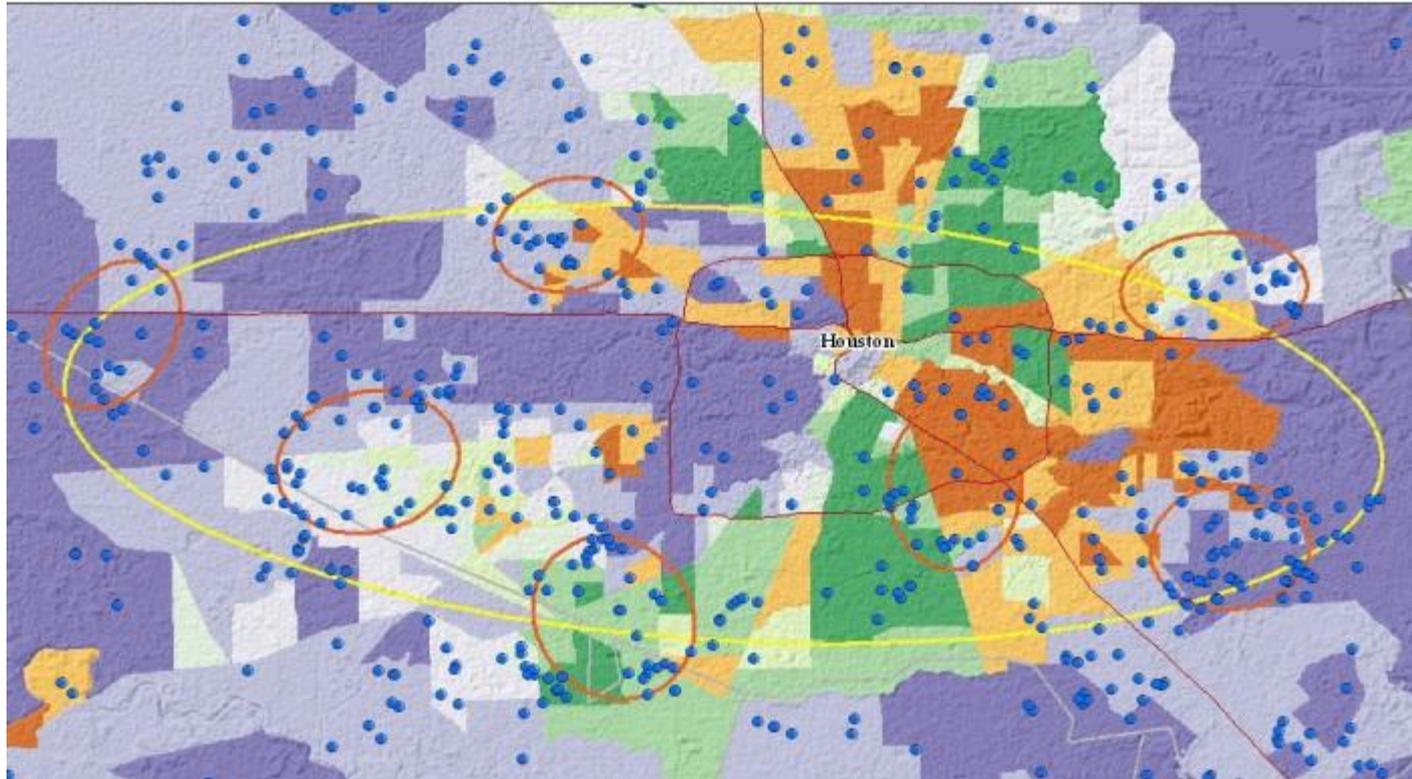
Poll Question #3

- Do you provide care to women VA patients?
 - I don't see patients
 - I see only men at the VA
 - I see both women and men patients
 - I only see women patients

Putting Gender on the Map

- Mapping disparities can reveal or confirm the location and geographic boundaries of hot spots of highly prevalent specific health problems, low quality care, or poor outcomes
- Mapping can also reveal or highlight where men's and women's health and health care:
 - differ more than would be expected by chance
 - are markedly above or below average

Example Hotspot Analysis within County Area



Nearest-neighbor hierarchical clustering of diabetics not receiving HbA1C
primary clusters in red, secondary clusters in yellow, predominant
race/ethnicity in background

Mapping – Beyond Geography

Mapping can also make patterns of predictors and disparities accessible

- Reveal where and whether specific relationships are or are not significant
 - Do disparities map on to racial/ethnic or socioeconomic neighborhood characteristics or the availability of specific health services?
- Maps can go beyond individual-level data to assess patterns of care
 - Are those getting better and worse care treated at the same clinics and by the same providers?

Examples of Actionable Mapping

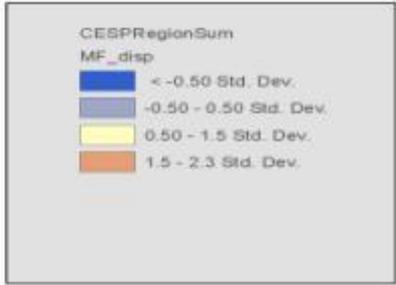
Mapping can also make patterns of predictors and disparities accessible

- Examining geographic data and understanding patterns across states, congressional districts, counties, service areas, VISN, or markets
 - Do gender differences in care differ for those near women's health centers or those living farther from medical services?
- Examining patterns of care by delivery site rather than patient characteristics
 - Are some facilities doing better by women?
 - Are men and women getting care at different or the same facilities, and from different or the same clinics or providers?
 - Do the patterns differ more for diagnosis than for treatment?

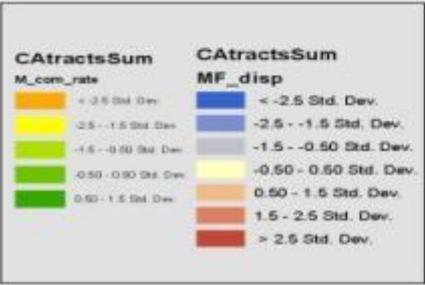
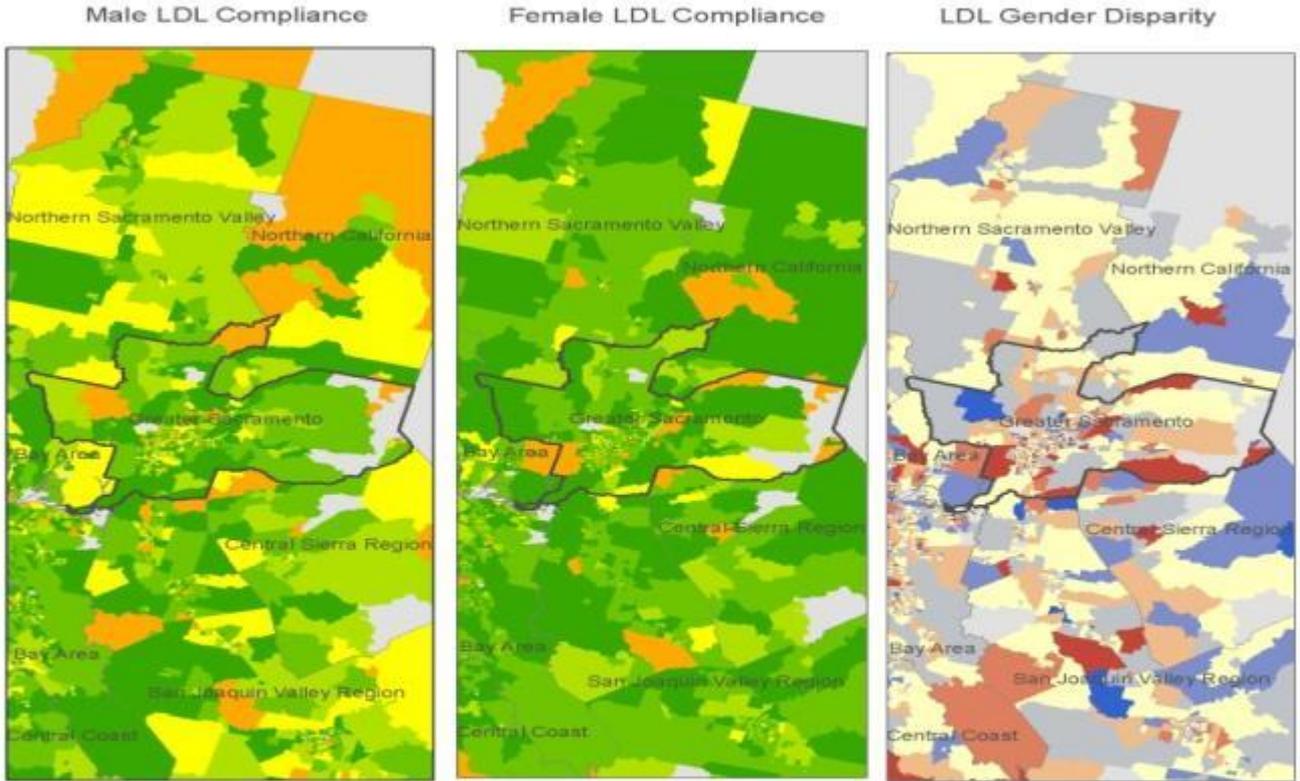
Diabetes Management in the Greater Sacramento Area



Notes: In the maps above, compliance rates for the areas are shaded according to standard deviation units. In the "stoplight" maps, red is the lowest compliance area, green is the highest compliance area. In the disparity map, blue and red areas are those with highest gender differences. In blue areas, women have higher compliance rates than men; in red areas women have lower compliance rates than men.



Diabetes Management in the Greater Sacramento Area



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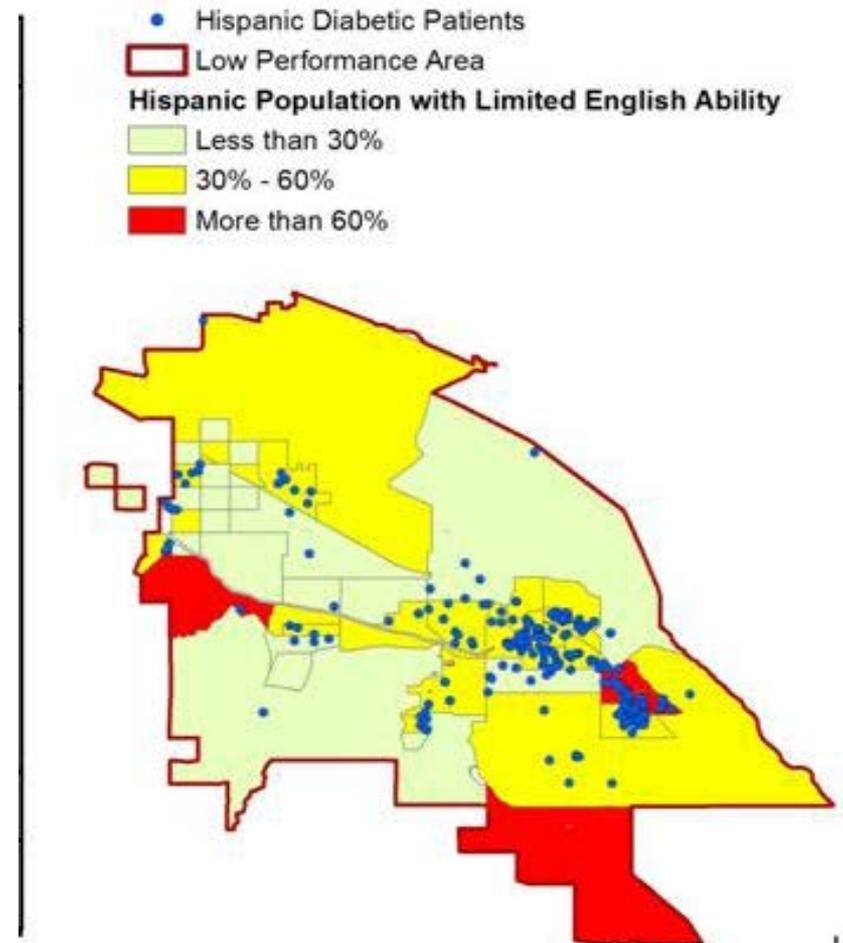


Adding spatial perspective can increase understanding of contributing factors

Limited English Proficiency

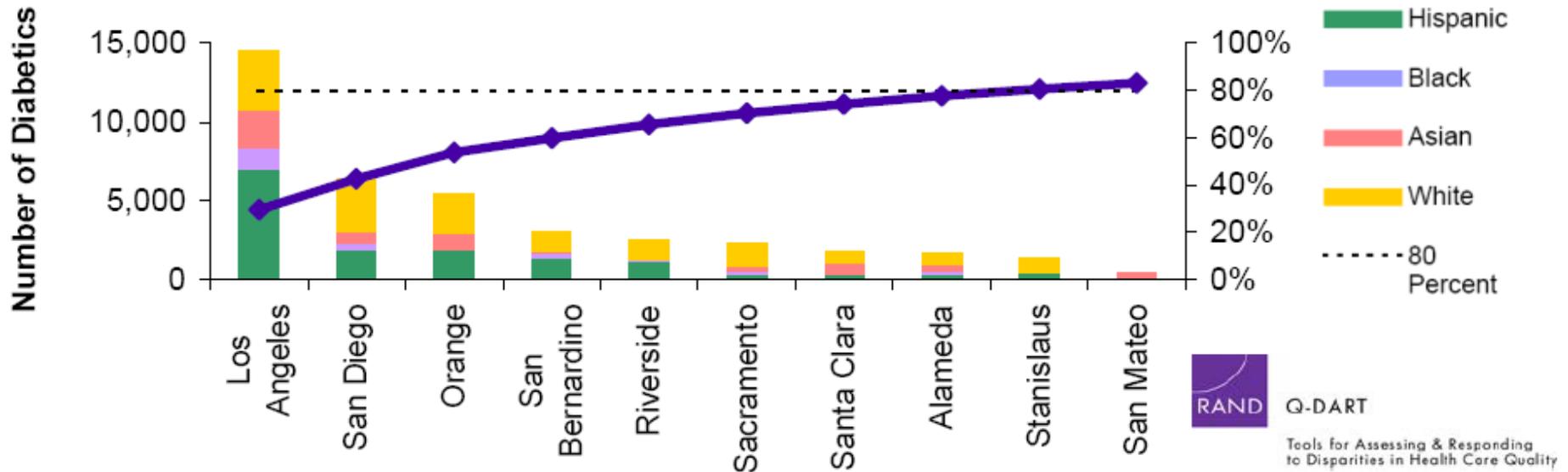
Inside Cluster: 43 %

Outside Cluster: 29 %



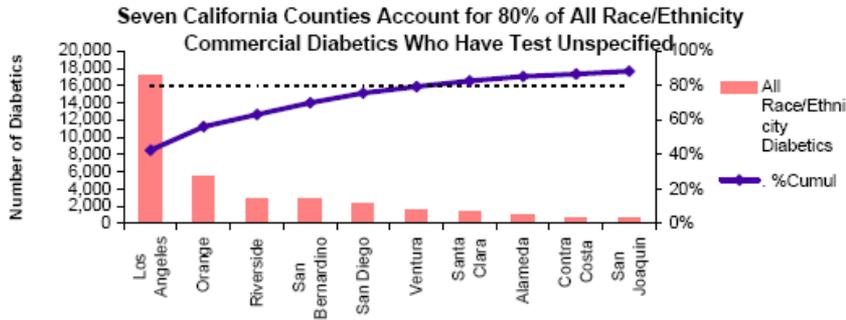
Illustrate Where to Target a Problem

About 10 California Counties Account for Nearly 80% of All Diabetics Overall Who Have Test Unspecified



Decision tools help focus in on quality hotspots and cold spots

| Pareto Principle Analysis | | | Blue Cross |
|---------------------------|--------------|--------------------|------------------|
| State | Product Line | Race/Ethnicity | HEDIS Measure |
| California | Commercial | All Race/Ethnicity | Test Unspecified |



| Cluster Analysis | | | Blue Cross |
|------------------|----------------|--------------|------------------|
| State | County | Product Line | HEDIS Measure |
| California | Riverside (CA) | Commercial | Test Unspecified |



(Priority based on cluster density)

Take Home Points

- Systematically assess gender differences and establish their patterns and impact including social and economic costs
- Identify actions and intervention points that can address gaps in prevention, care, and outcomes
- Target findings to the relevant decision-makers



Questions?

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