

## INTRODUCTION

Disparities kill.

People die every day in this country from health care disparities.

The life expectancy of an African American runs more than four years shorter than the life expectancy of a white American.<sup>1</sup> Four years is a lot of years to lose.

Multiple studies have shown higher rates of several key diseases for both African Americans and Hispanic Americans. There are higher death rates as well for both African Americans and Hispanic Americans when those particular diseases occur.<sup>2</sup>

The risk levels and the death rates for those key diseases are even higher for our Native American people.

It is absolutely clear from the data that differences among the various racial and ethnic groups who make up the American population are very real and highly significant. Many people die every year who would not die if every ethnic and racial group in this country had the same health care outcomes and the same disease levels as our most healthy groups for those same diseases.

A major study of health care disparities that was done by the Institute of Medicine (IOM) in 2003 pointed out both patterns of care and care outcomes that differed significantly from group to group.<sup>3</sup> Some studies included in that report had data about care gaps among the groups that were so significant that they were hard to believe.

In a country that spends 2.8 trillion dollars on care each year<sup>4</sup> -- more money than the total economies of all but five entire nations<sup>5</sup> -- we should not have those kinds of care gaps and we should not experience those kinds of outcome differences among groups of people for our care.

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## Bias, Biology and Behavior

When you drill down into each of the care gaps that exist, it becomes clear that there are three primary causes for those care differences by group. The three primary causes of those care differences are bias, biology, and behavior.

All three of those causes have an impact. Sometimes the care gaps we see are the result of two or three of those causes working together to jointly impact care, and sometimes the differences we see are the result of just one of those factors. In either case, we need to identify

and deal with the relevant causes to reduce the disparities in both care outcomes and consequences.

We need to recognize the unfortunate reality of bias as a cause of disparities. Bias happens. There are multiple cases -- several described in this book -- where care differences among groups of people are simply and directly based on biased decisions made by caregivers. When African American patients and Hispanic patients are both significantly less likely than whites to get a pain reliever when having a heart attack,<sup>6</sup> that pattern of care is clearly based on some level of bias, and it is not based on biology, medical science, or patient behavior. When African Americans and Hispanics and other non-white children with autism who are seen at the same major academic treatment centers are 38 percent to 68 percent less likely than whites to see specialists or subspecialists for nutrition services, gastrointestinal services, neurology or psychiatric services, there is a clear indication of caregiver bias driving those differences in care.<sup>7</sup>

Sometimes the bias is conscious -- and sometimes the bias is unconscious -- but it is never a good thing when bias is part of the care process. We clearly, as a nation, need to address both unconscious and conscious bias as we work to reduce the care gaps and the care disparities we see in America today.

The most recent National Health Care Quality Report, showing care performance levels for 2012, produced this year by the Agency for Healthcare Research and Quality -- described many of those care gaps clearly and pointed out that some of the gaps are actually widening rather than shrinking.<sup>8</sup>

The level of bias that exists in too many instances and that too often causes those gaps in care to happen is not being addressed in any systematic way in this country at this point in time. The bias problem is real -- but there are no plans to make it shrink or disappear.

Biology is also an important factor.

A number of care differences have underlying causes that are clearly biological. The high rates of some cancers for some of our population groups seem to stem primarily from biological issues. The fact that African American women are 47 percent more likely to get multiple sclerosis (MS) than white women seems to be entirely biological -- although it is not impossible that there might be some currently unknown behavioral or environmental issues that are increasing the risk levels of MS in Black women.<sup>9</sup>

One of the best examples of biological differences in risk by group came from a study done by Kaiser Permanente using their electronic medical record database to look at care links and causality factors.

The Kaiser Permanente study showed that when pregnant women have uterine infections during pregnancy, their children are much more likely to have childhood asthma a couple of years later. The data showed that linkage clearly exists.<sup>10</sup>

What makes that important study relevant to this book on care disparities and care differences is that the Kaiser Permanente researchers also used their data to look at the variable impact of that set of infections for children of different racial and ethnic groups.

That particular study showed a significant difference in risk level by group. African American kids were over 90 percent more likely to have childhood asthma if their mothers had that infection. Hispanic children were 70 percent more likely to have childhood asthma if their mothers had that same infection.<sup>11</sup>

White children were 66 percent more likely to have childhood asthma if their mothers had that infection.<sup>12</sup>

So there were clear differences in the disease risk levels for each group of children that were not behavior-based or bias-based in any way for those mothers or for those children.

The most startling finding that resulted from that particular piece of research was for the Asian American mothers and children in the study. Asian American children actually had a zero increase in childhood asthma risk if their mothers had that same infection. There was no additional risk for Asian American children.<sup>13</sup>

All of the expectant mothers from all of the ethnic groups were treated by the same Kaiser Permanente caregivers. They were treated in the same care settings using basically the same care protocols and the same care approaches.

Likewise, all of the children were seen by the same Kaiser Permanente pediatricians in the same care settings using the same basic care approaches.

Bias-based care delivery differences were not the cause of that particular risk factor disparity for those children. Neither was the behavior of the mothers or the behaviors of the children. The risk factor difference for that medical condition was clearly biological...the second B of care differences.

That research is one of the reasons why the Kaiser Permanente organization is now collecting DNA samples from a number of patients who have voluntarily -- with full disclosure and with full written approval -- agreed to have their DNA used for medical research. One goal of that research will be to help discover why those kinds of biological differences in risk levels exist and also to figure out what can be done about them.

In that particular disparity -- the causality factor for the differences by racial and ethnic group relative to who is more susceptible to the disease clearly links back to biology.

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## Behavior Creates Risk Differences

Maybe the most important factor to look at relative to difference in care outcomes and care process needs, however, is behavior. We can't change biology -- but we can change behavior. Patient behavior creates major differences in patient risk levels, in disease incidence, and in disease outcomes. To end some of the current care disparities and close the care gaps for some conditions, we need to help patients from each high-risk group successfully achieve healthy behaviors in targeted areas.

What behaviors need to be changed?

Healthy behaviors that improve care outcomes can be as simple as people getting their basic medical tests and having their basic cancer screens done.

Most chronic diseases can be steered to better outcomes with early diagnosis and with ongoing disease monitoring and consistent and continuing treatments.

We know from the data that there are some significant disparities among the racial and ethnic groups in both of those key areas of patient behavior.

This book will show disparities in early diagnosis levels and disparities in care follow-up by patients -- with significant care gaps among the groups of patients in some important areas of care -- like blood pressure control.

Those particular disparities can be ended -- but it takes a clear focus on each group and on each disparity area to have success in eliminating gaps in those areas of care.

Likewise, there are significant differences in cancer survival rates among the racial and ethnic groups that relate back to differences among groups in the early detection of cancer. Again, a major remedy for that particular outcome disparity is to get people from each group to improve their cancer testing levels. Hispanics, for example, are significantly less likely to have colon cancer testing done.<sup>14</sup> That difference in behavior by those patients results in a care gap and in a much higher death rate for the people whose cancer is detected late.

The death rate is significantly higher.

When colon cancer is detected very early in a high quality care setting, the death rate over five years is less than 5 percent. Ninety-five percent of the patients whose cancer was detected early are still alive.<sup>15</sup> When colon cancer is detected late, however, and not discovered until it has reached its more advanced stages -- the death rate for those patients is much higher. Only 12 percent of those late-diagnosed patients are still alive -- on average -- in five years.<sup>16</sup>

Those disparities in care outcomes and those differences in death rates are caused in part by behaviors. The key behavior change that is needed in that instance to end the care gap among groups of people is to get all people to have their colon cancer tests done frequently so that more cancers for every group can be detected at an early stage.

This book describes the impact of those cancer-screening behavioral differences relative to some key cancers. That is an important area of focus on behavior change if we want to reduce some of the major disparities in cancer care outcomes that exist today.

The other area of needed behavior change is even more important. We need people from all groups to have a higher level of healthy behaviors in three key areas. For starters, we need fewer people to smoke. Smoking is the number one cause of lung cancer.<sup>17</sup> There are clear differences in smoking levels among various ethnic and racial groups. We need people from all ethnic groups to stop smoking to reduce the level of that cancer significantly for every group.

The other behaviors we need to change relate to chronic diseases. Chronic diseases drive more than 75 percent of the costs of care in this country today.<sup>18</sup> Chronic diseases are growing at an alarming rate for all ethnic groups. Diabetes, alone, now consumes over 40 percent of the total costs of Medicare, and the number of diabetics in this country is growing to epidemic levels.<sup>19</sup> Diabetes is the fastest growing disease in America and the risk levels for that disease are actually higher for Hispanics, Blacks, and Native Americans than they are for white patients.<sup>20</sup>

The point we need to recognize is this -- diabetes -- and the other key chronic diseases -- are all caused primarily by two basic behaviors. There are some biological risk level differences by group, and there are some neighborhood-related environmental differences that can vary by group -- but the most important behavior-linked risk differences that result in adverse and variable outcomes for those diseases happen at the individual patient level. The overall group level risk differences are increased or decreased hugely for each person by two basic sets of individual patient behaviors.

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## **Inactivity and Obesity Are the Two Key Drivers for Chronic Disease**

It isn't very complicated.

Two key behaviors drive almost all chronic diseases. People can change their risk significantly for those diseases by changing one or two of those behaviors. The two key behaviors that significantly increase risk levels for individual patients are personal inactivity and personal obesity.<sup>21</sup>

We currently have an epidemic of inactivity in this country. More than half of Americans do not achieve the minimum activity levels that are needed to be healthy.<sup>22</sup> Obesity is also at epidemic levels -- with over a third of Americans obese today and a growing number of people clearly on the way to being obese tomorrow.<sup>23</sup>

Both inactivity and obesity significantly increase the risk of our key chronic diseases.<sup>24</sup> Both of those behaviors need to be part of our health strategy if we want to reduce the rate of those key diseases. We need to increase our activity levels, and we need to reduce our weight levels in order to reduce our actual disease levels.

The science that tells us we need to increase our activity levels is very powerful and very encouraging. Walking seems to be an extremely high-value mechanism for improving activity levels. Walking is something we can assist people to do. The human body is clearly made to walk and needs to walk to be healthy. It doesn't take a lot of walking to have a major impact. When we walk 30 minutes a day, 5 or more days each week, the rate of new diabetes cases actually cuts in half.<sup>25</sup>

The diabetes risk level goes down over 60 percent for older Americans when that same level of walking happens for older individuals.<sup>26</sup>

Walking that same amount of time also reduces stroke risk for people by over 40 percent, heart attack risk by over a third, and that level of walking reduces the risk of colon cancer, prostate cancer, and breast cancer by more than a third.<sup>27</sup>

Depression levels go down -- and the functional effectiveness of antidepressant drugs can double -- when people walk that same half-hour a day, five or more days each week.<sup>28</sup>

That point about the need for physical activity and the benefits it creates is highly relevant to this book on care disparities because there are clear risk differences for those diseases by racial and ethnic group, and one of the best ways of making those differences among groups in outcomes and incidence levels disappear is to get people in each group to walk.

Likewise, obesity levels have a huge impact on each of those diseases. Helping people who are obese to eat healthier food and to eat lower quantities of food is clearly also the right thing to do. Both of those efforts to create healthier behaviors need to be linked to the culture and to the group behavior preferences of each set of patients, or they will have a much lower likelihood of success.

Behaviors impact diseases. We need to help the people who are at risk for those diseases to achieve healthy behaviors -- and we need to do that in ways that work in the context and the life reality of each patient and each group member.

We also need to deliver best care to each set of patients when patients from each group incur diseases. We need to eliminate care disparities among groups by significantly improving

care for all patients -- and by focusing on the needs of the groups who have a higher risk to keep that risk from disproportionately damaging those groups of patients.

Can that work be done? Can systematic care improvement for those patients and those diseases be done successfully in this country today for each group of people? That is an extremely important question to answer.

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## The Institute of Medicine Called for Better Data

The highly regarded Institute of Medicine (IOM) taskforce on care disparities a decade ago offered some thoughts about how disparities might be reduced.<sup>29</sup> The report called for better data about disparities -- because the truth is that we really can't deal effectively with disparities until we know exactly what they are and where they exist. The report also called for medical best practices -- with care protocols based on the best science and applied equitably to all groups of patients.

Kaiser Permanente has taken that guidance about both best care practices and the need for better data from that taskforce to heart and has done extensive work to build the database and the data tools that are needed to do that work. Kaiser Permanente has set up internal databases that can now identify care disparities and care differences for the 9 million<sup>30</sup> people who are now served by the Kaiser Permanente care system.

That is a very useful tool kit. It has been the anchor of a significant learning opportunity.

That work wasn't done in small, isolated silent studies.

It was done with a very large population of patients. The population of 9 million people who are served today by the Kaiser Permanente care system is bigger than 40 states and 146 countries.<sup>31</sup> It is also a very diverse set of people -- with over half of the Kaiser Permanente membership coming from one ethnic group or another. There is no majority population inside Kaiser Permanente at this point in time.

So the work that is being done at Kaiser Permanente to deal with differences in care delivery by ethnic group and by race are actually highly and directly relevant to the challenge of dealing with those same issues across all of American health care.

As one example -- one of the programs that was conducted and presented at the most recent annual Kaiser Permanente Diversity Conference was labeled "Designing Culturally Appropriate Tools to Reduce Disparities in Hypertension Control and Colorectal Cancer Screening in Diverse Populations." That work was based on actual care site experience in doing that set of work for those sets of patients in significantly large care settings.

This book deals at a macro level with health care disparities and care differences across America. This book also explains some of the approaches that are currently being used at Kaiser Permanente to improve care for the entire 9 million people and to specifically focus on areas of performance where there are care gaps and care disparities for specific subsets of Kaiser Permanente's 9 million very diverse patients.<sup>32</sup>

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## The Learnings Should Be Useful for Other Care Teams

Kaiser Permanente has been on a learning curve for those patients and those issues for several years. Mistakes have been made, challenges have been addressed, learning has improved, and a number of successes have been achieved. This book describes some key points of that learning and shares some of the conclusions that have been reached about dealing with those issues in the actual delivery of care.

Hopefully, this book will be useful for others in this country who are going down similar paths.

Ideally, in future years, other authors inside of Kaiser Permanente will continue to write about this set of programs at Kaiser Permanente. Future books on these topics could benefit everyone in health care.

It is clear that we, as a nation, do need to take steps to reduce health care disparities in America. Those disparities exist and people die because care disparities happen in too many places. Chapter One of this book helps point out how significant many of these national disparities are. Chapter Two deals with some care disparities that exist inside Kaiser Permanente -- and it explains what that organization is doing to deal with those issues. Chapter Three deals with the changing health care financing and health care delivery environment in America -- identifying ways that the new approaches to care delivery and care financing can reduce disparities. Chapter Four deals with some of the guidelines and strategies that Kaiser Permanente has used to succeed as a prototype accountable care organization (ACO), with a focus on how to use ACO tools to help eliminate care disparities. Chapter Five deals with the ways people align with groups that can result in divisive and problematic care -- as well as ways that people can align collectively to make care better and more inclusive.

Overall, it is a complex set of issues. Everything is, in the end, connected to everything else. So taking both a big picture look at the full set of issues and a highly focused look at the learnings of one care system who has focused on those issues is probably the right thing to do at this point in time. This book attempts to do that in a way that is useful to both policymakers and practitioners.

Enjoy the book.



