#### **Chapter Two**

#### **KAISER PERMANENTE SET CARE DISPARITY ELIMINATION GOALS**

As the last chapter noted and as the introduction to this book pointed out, a real-world test of the 2003 disparity report recommendations to use a combination of group-specific data, focused care support tools, and medical best practices that are aimed specifically at reducing disparities in care is happening today at Kaiser Permanente. Kaiser Permanente is a health care delivery and financing organization that serves more than 9 million people.<sup>68</sup> The people who are served by Kaiser Permanente constitute one of the most diverse patient populations in America. The Kaiser Permanente membership is currently more than half minority.<sup>69</sup> In the rest of the country, about 30 percent of all patients today are from minority groups.<sup>70</sup> More than half of the patients who get care in the Kaiser Permanente care system come from one minority group or another. So Kaiser Permanente is not only a useful setting for looking at care trends today, Kaiser Permanente already looks like the rest of America will look in a decade or two. Kaiser Permanente has already recognized a broad range of implications that can result from a high level of patient diversity, and the care teams have worked both strategically and functionally to directly address multiple issues that relate to care differences and to disparities in care delivery. The care teams at Kaiser Permanente have been able to do that work with a robust set of care support tools. The new databases and tool kits also reflect the new tool kits that will be available relatively soon to support care in other care sites across the country.

So Kaiser Permanente is a diverse care system serving a very diverse set of patients and doing that work using a set of computerized care support tools that are likely to be the next generation of care support tools. In that context, addressing care disparities has been a high priority.

A wide range of issues relating to care disparities, care differences, and various methods of dealing with delivery processes and delivery issues for various groups of people have been the focus of very serious thinking and careful planning at Kaiser Permanente. That has been true for the past several years. This has been an important and pioneering area of work for care delivery. That will be a useful model and experiment for American care sites. That work has been a high-value learning experience for the Kaiser Permanente care teams who do that work. It has been very useful and educational to record, monitor, and utilize the results. Kaiser Permanente has been very directly addressing the multiple challenges and opportunities that are presented by a complex and changing care environment and a diverse set of patients.

Why did Kaiser Permanente do that work?

Kaiser Permanente is functionally accountable for both the care and the health of more than 9 million people. That is obviously a major and large-scale commitment to population health. The Kaiser Permanente organization decided to set an official and very specific goal of eliminating internal care disparities for the 9 million people who are served by that organization several years ago. The Kaiser Permanente care teams have been using their resources, tool kits, and a wide of array of care expertise to accomplish that goal.

## Addressing Disparities Has Been a Process of Continuous Learning

That work has been a process of continuous learning. As a result of that commitment and that agenda, Kaiser Permanente now has had several years of learning, experimentation, and process improvement operational rollouts that are worth describing, sharing, and explaining to the rest of the health care world at this point in time.

A number of policy experts who have focused over the years on various aspects of caredisparity issues have tended to look at the overarching issues of care differences and at care disparities from a theoretical, academic, high level, often only vaguely functional macro policy perspective. That kind of macro analysis and theoretical thinking is good work to do -- but those efforts usually do not change the actual delivery of care in any functional care site. Kaiser Permanente, by contrast, has looked at those same sets of issues very explicitly and very directly from the highly immediate and very practical perspective of being -- at its core -- an operational care delivery organization and a functional infrastructure of care. That work that is being done on those care disparity and core differences issues at Kaiser Permanente in the context of that care infrastructure may well be somewhat useful to other caregivers across the countries who are actually wrestling with those same sorts of issues from a functional and operational perspective.

#### Kaiser Permanente Is a Large-Scale Microcosm

The rest of the country is becoming more diverse. That fact of our increasing diversity was cited again as a key issue for us all to think about in the newest federal study of care gaps in this country -- The National Health Care Quality Report 2012.<sup>71</sup> That study suggested that our increasing diversity as a nation should call for us to increase our focus on eliminating intergroup disparities in care. As noted above, Kaiser Permanente already has over half of its patient population from one minority group or another and is dealing with those issues now.

In addition to having a diverse set of patients, Kaiser Permanente is serving all of those diverse people in the functional context of being a basically self-contained care and financing

system. This is an important fact to understand because it creates great opportunities for structured care improvement processes. Kaiser Permanente doesn't just "insure" care. Kaiser Permanente actually delivers care -- from its own internal, vertically integrated care system. It is very important to understand the pure functional fact that Kaiser Permanente is a somewhat unique care delivery organization. Kaiser Permanente is, in fact, an almost unique combination of care delivery and care financing. Kaiser Permanente enrolls those roughly 9 million members in a health plan, and then provides care to those 9 million people primarily through care delivery sites that are owned and operated by Kaiser Permanente.<sup>72</sup>

## **The Kaiser Permanente Workforce Is 58 Percent Minority**

Kaiser Permanente has about 180,000 internal employees -- with over 160,000 of the Kaiser Permanente people involved in delivering care or supporting the people who deliver care.<sup>73</sup> It is also important to note that the workforce at Kaiser Permanente is even more diverse than the patient base.

Roughly, 58 percent of the people who are working at Kaiser Permanente today come from one minority group or another.<sup>74</sup> In other words, the workforce at Kaiser Permanente today looks a lot like the total workforce of America will look like in relatively a few years. A major workforce change will actually happen relatively quickly for the rest of America because a majority of the young people who will be entering the American workforce over the next few years will be coming from one minority group or another. Kaiser Permanente has achieved that level of minority workforce already and can also serve as a template and a model for the impact of diversity on the care delivery workforce.

Kaiser Permanente is not a small organization. That fact also makes this set of work relevant. The disparity-reduction and gap-closure work that is being done at Kaiser Permanente has not been done in isolated and small care sites. Kaiser Permanente is actually one of the larger hospital systems in the country -- with 38 licensed hospitals.<sup>75</sup> It is also one of the larger care site owners in the world -- with roughly 630 owned and operated care sites.<sup>76</sup>

Two of the seven Permanente Medical Groups are the largest private medical groups in the world.  $^{77}\,$ 

Kaiser Permanente owns labs, pharmacies, imaging centers, and multiple other categories of care sites. The Kaiser Permanente laboratory system runs roughly 81,000 tests every day<sup>78</sup> -- and the pharmacy system fills roughly 200,000 prescriptions a day.<sup>79</sup>

It was noted earlier that Kaiser Permanente serves more people as a care system than 40 states and 146 countries.<sup>80</sup> Total revenues at Kaiser Permanente exceed \$50 billion a year.<sup>81</sup> That money is almost entirely collected in monthly premium payments from each patient. Collecting money through premiums is a very different cash flow approach than the cash flow

used by most other care organizations in America. Most other care sites sell care by the piece -not by the package. The standard piecework business model for American health care involves having all revenue for each care site collected from a fee schedule -- with separate bills charged by each care site to each patient for each piece of care. The rest of health care tends to use that very basic piecework payment model, and most care sites sell care entirely and only by the piece. Kaiser Permanente primarily uses a lump sum cash flow model, and the cash flow at Kaiser Permanente is not based on selling pieces of care.

So overall, Kaiser Permanente is large and basically self-contained as a care delivery infrastructure -- and Kaiser Permanente has a revenue stream that buys entire packages of care for groups of patients rather than just having individual patients paying for individual pieces of care. The Kaiser Permanente model may also be the future model for care financing. Health care reform efforts for the country are attempting in many ways to create a similar cash flow model for other care sites. Those issues and those efforts are addressed more directly in the next chapter of this book. The reality today is that the integrated care delivery structure and the packages of care and cash payment cash flow approach has allowed Kaiser Permanente to put in place an extensive set of care tools that do not exist in most other care settings. That new tool kit includes what is probably the largest electronic medical record support system in the world as a care support tool for its caregivers. Kaiser Permanente now has an electronic medical record in place for all 9 million of its patients.

That massive electronic health record care support system supports the function of allowing each doctor to have all of the medical information about each of their patients available to the doctor in real time when the information about each patient is needed by the doctor at the point of care. The rest of American health care is currently moving in basically that same direction -- with the goal of having electronic data about each patient in place in each care site in this country relatively soon. Significant progress is being made in that regard in many American care sites. Care information about each patient is being computerized in a rapidly growing number of care settings across the country. Kaiser Permanente has already achieved that foundational, operational, and functional status as a fully computerized care system, and the care team uses those tools to support care delivery today. That has also been an important part of the learning process. Kaiser Permanente is both developing and refining the operational use of that new information resource, and that new care-support tool kit in an internal process of continuous improvement.

#### **Top Quality Scores**

In total, Kaiser Permanente has built a very useful tool kit for its caregivers that really does improve care delivery. The work that has been done to date to help improve care delivery using those new tools has resulted in dozens of health care quality scores where the highest scores in

the entire country -- and, therefore, probably the highest scores in the entire world -- are now at Kaiser Permanente.

That information about Kaiser Permanente and that new care support electronic tool kit that is being used at Kaiser Permanente is relevant to this book about health care disparities, and it is relevant to the differences in care that exist today among groups of people in this country because the Kaiser Permanente experiment proves that the 2003 IOM taskforce authors were correct about the need for tools to end disparities. The IOM disparity team identified some key tools that they believed would be needed to reduce disparities in care. Kaiser Permanente has invested more than \$4 billion to put those tools in place and to learn how to use them.<sup>82</sup>

In other words, the process of systems rollout at Kaiser Permanente has shown that the IOM authors were correct, and that we do need the bulk of those tools to be in place in order to reduce many of the care gaps that exist in care delivery in this country. We can't reduce the gaps in care without care improvement tools, and when those tools are in place, care can be improved.

The IOM report called for better tracking of care data by race and ethnicity.

Kaiser Permanente is doing exactly that -- recording care delivery and care performance data by race and ethnicity. The charts shown later in this chapter show the care levels for various ethnic and racial groups of patients, and that data shows some performance gaps among patients of different races and ethnicities that were not expected. The data showed that gaps in care outcomes and processes can happen even in a fully integrated care delivery infrastructure that is committed to having no care gaps of any kind.

# Kaiser Permanente Is Highly Diverse -- at Every Level

It was particularly surprising to learn about those gaps because there is no majority group today inside Kaiser Permanente for the Kaiser Permanente staff and care team. Fifty-eight percent of the caregivers and the workers today and more than half of the patients at Kaiser Permanente are minority.<sup>83</sup>

Kaiser Permanente has a diverse staff, a diverse patient base, and Kaiser Permanente also has a very diverse senior leadership group. That leadership diversity is also an important point to mention in discussing the disparity issues that were discovered when the data was reviewed.

There are a number of organizations in this country that currently have a diverse overall workforce. The pattern of diversity in most companies is that they are fairly diverse at the very front level of the workforce, but they are increasingly less diverse when you get to the senior leadership levels. The corporate board rooms of America, for example, tend to be

overwhelmingly white and overwhelmingly male. So are the executive suites of most major American companies.

That isn't the pattern at Kaiser Permanente.

Last year, there were eight regional presidents at Kaiser Permanente who were responsible for the eight health plan regions. Only two of the eight presidents were white males. Kaiser Permanente had three group presidents. None were white males. The chief operating officer last year was African American, and the chief financial officer was a woman.<sup>84</sup> As was the controller. The board of directors last year was also only 40 percent white male.<sup>85</sup> In a world where the board of directors of those organizations that have more than \$50 billion in annual revenue tend not to be very diverse -- Kaiser Permanente has a highly diverse board, a diverse leadership team, a diverse workforce, a diverse patient base, and a diverse membership. As noted earlier, that level of diversity makes Kaiser Permanente almost a perfect template and setting to look at some of the key issues that relate to growing levels of diversity in American health care and in America as a nation.

### That Diverse Organization Rates Number One in Multiple Performance Areas

How well does that very diverse organization function and perform compared to the rest of American health care on various categories of service and care quality? Some people in other organizations have expressed concern about the impact of growing diversity on the performance levels for their organizations. The opposite result has been the reality at Kaiser Permanente. That very diverse blend of people in the Kaiser Permanente workforce has earned some important quality and service recognitions for both caregivers and health plans. The care and service levels at Kaiser Permanente often rate at the number-one level for the entire country.

As one example, Medicare officially rated all health plans in America last year using 55 measures of quality and service. Medicare used that 55 data-based measure set to judge all 563 Medicare health plans across the country on a scale of one star to five stars.<sup>86</sup> The plans with the best quality and the best service scores in the country were awarded five stars by Medicare. The worst plans in the country received one star.

Only 11 health plans in the entire country were awarded all five stars by Medicare.<sup>87</sup> Kaiser Permanente had all eight regions included in that scoring system. Seven of the eight Kaiser Permanente regions earned all five stars and the eighth region earned four point five stars.<sup>88</sup> Likewise -- J.D. Power and Associates rated all commercial health plans for their performance levels last year. For each of the larger Kaiser Permanente regions, J.D. Power and Associates rated the Kaiser Permanente plans number one in service.<sup>89</sup> The Leapfrog Group is a national organization that does an overall safety rating of American hospitals. The Leapfrog group rates hospitals from A to F, based on their relative safety.<sup>90</sup> Thirty-six of the thirty-eight Kaiser Permanente hospitals were given A ratings. The other two hospitals received B ratings.<sup>91</sup>

The Joint Commission has adopted a couple of Kaiser Permanente care innovations as best practices, and The Commission rates Kaiser Permanente hospitals highly.<sup>92</sup>

Several other awards for quality, service, creativity, and functionality are listed in the appendix to this book. The top scores that were given by the Healthcare Information and Management Systems Society (HIMSS) annual review of hospitals computerization success across the country went to 66 out of 4,000 total U.S. hospitals. Kaiser Permanente hospitals made up 36 of the 66 top HIMSS-rated hospitals.<sup>93</sup> Kaiser Permanente is the only health care organization to be recognized with the top Uptime Award for its computer systems availability<sup>94</sup> -- and a major Kaiser Permanente data processing site is the only healthcare LEED Platinum-certified data site in the entire country.<sup>95</sup>

Satmetrix rated Kaiser Permanente as having the most credible brand among its members of any major health plan in the country.<sup>96</sup>

So the answer about the relative performance levels that are being achieved by the highly diverse Kaiser Permanente organization is that a highly diverse health plan and care system with a highly diverse staff, a highly diverse membership, a highly diverse leadership, and a highly diverse patient base has ended up being recognized repeatedly as being among the very top performers for the entire nation in multiple objective competitive scoring situations for both care quality and care and health plan service levels.

Diversity is clearly an asset and a strength for Kaiser Permanente performance. In that context, it is entirely understandable that the care team leadership at Kaiser Permanente set the goal several years ago of not having any disparities in care delivery outcome levels for any groups of its patients.

To achieve that goal -- and to clearly focus on any health care differences and disparities that might exist -- Kaiser Permanente very strategically added ethnic and racial group categories to its internal reporting for multiple issues of quality and service. Kaiser Permanente keeps track of about 75 ethnic and racial categories in its recordkeeping.<sup>97</sup> Adding that data to the electronic health record system was a very important thing to do. Kaiser Permanente isn't limited to looking at just the macro, overall performance levels for major areas of care delivery. That macro and blended performance data for all patients is how most care systems and health plans record data. That blended data approach is functionally insufficient to identify real care differences and real care disparities and to identify exactly where they are occurring. More detailed data is needed. Kaiser Permanente accepted that reality and that need for more group-based data and made the system changes that were needed to support that work. Kaiser Permanente now measures both overall performance in those areas as an organization and

measures many areas of performance in targeted areas of care based on race and ethnicity. That is pioneering work. It may be unique. That set of data differentials has proven to be an extremely useful and highly educational thing to do. Without that data, Kaiser Permanente could not identify disparities and could not deal effectively with them.

# Kaiser Permanente Collects Performance Data by Race and Ethnicity

That work very much resembles the approach to data collection that was suggested by the 2003 IOM report on care disparities. That work has been even more useful than many people suspected it might be when the new data sets were built into the database. Issues like blood pressure control -- where the Kaiser Permanente overall quality scores for the entire population of patients have led the entire country -- were looked at both as an overall score for all Kaiser Permanente patients and as separate performance levels for each group of patients. Key data for each Kaiser Permanente site was collected and reviewed for each major patient group. That data review looked, for example, at blood pressure control for white patients, Black patients, Asian patients, and Hispanic patients. That is a very useful way to look at that set of data -- and it was not possible to do that level of data review until relatively recently. The ability to do that work, to track, record, and report performance by group had to be built into both the electronic medical record database and into the reporting system. That work was done deliberately, intentionally, systematically, skillfully, consistently, and very carefully by Kaiser Permanente.

With data on more than 75 racial and ethnic groups, it was useful to group the datasets into a couple of key categories. Those summary categories were, not coincidentally, the same basic categories used by the U.S. government to do some of its key data reporting.

#### **Race and Ethnicity Performance Data**

Almost no one else who delivers volumes of care in this country has that capability to do that level of reporting -- and no one in private health care has that kind of information for 9 million patients. That functionality is now being used to identify how well Kaiser Permanente is doing on a number of key performance measures for each of those groups of patients.

#### That Data Has Been a Gold Mine for Research

The ability that was set up by Kaiser Permanente to look at care data by race and ethnicity has been a gold mine for medical research as well as for functional improvement. As one

example of a recent research gold nugget, the standard belief in health care has long been that Black women were less likely to have Multiple Sclerosis (MS). That longstanding belief is built into many care textbooks. That belief is, in fact, entirely wrong. Medical science now knows the old belief was wrong because Kaiser Permanente has now been able to look at real data for millions of people to see who was really at risk for that disease. The old belief was "MS is primarily a disease of Northern Europeans." The researchers at Kaiser Permanente looked at data for millions of diverse patients and discovered that Black women are actually 47 percent more likely to have MS.<sup>98</sup> It took the new electronic Kaiser Permanente database to uncover that piece of key information about actual risk levels by group. That piece of research is now creating a new core belief about that disease, and it is likely to help many caregivers make accurate diagnoses much earlier with Black patients.

Another important study done with the new database looked at the impact of uterine infections during pregnancy on subsequent asthma risk for children. That study was mentioned in the introduction to this book. The study discovered that higher asthma risk exists for those children -- and that the risk varies by group. As noted earlier, the data showed that Black children have a 90 percent higher asthma risk if their mothers had that infection during pregnancy. Hispanic children have a 70 percent higher risk. White children have a 66 percent higher risk. And Asian American children, the researchers learned, have no additional risk of any kind. Zero.<sup>99</sup>

ine Infection During Preg	nancy Li	nked to A
African Americans	<mark>98</mark> %	increase
Hispanics	<b>70%</b>	increase
Caucasians	66%	increase
Asian/Pacific Islanders	0%	increase

That new electronic database is allowing some extremely important scientific learning to happen.

Kaiser Permanente is actually an almost perfect setting to do that kind of research into multiple intergroup issues. It is an almost perfect research site for those kinds of studies because all of the patients from every group at Kaiser Permanente receive their care at the same care sites from the same caregivers. For the mothers in the study that showed the link between uterine infections and childhood asthma, all of the care for all of the mothers and all of the care for all of the kids came from the same care teams and the same care sites. The care protocols used for our patients were fundamentally the same. Also, all of the patients in the Kaiser Permanente database tend to have basically the same insurance coverage. That fact creates basically the same financial reality for care costs for all patients as the financial reality relative to those costs for every other patient who is served by those care sites and those caregivers. In many other medical research circumstances and settings, the patients who are being studied in the research projects who do come from various ethnic groups often can be patients who are using different care sites, different care teams, and they can also very easily be patients who have very different insurance coverage and provider reimbursement realities. At Kaiser Permanente -- for all practical purposes -- the only significant variable that changes for each of the studies of care differences by race and ethnicity is literally the race and ethnicity of the patient. That is a wonderful data environment for doing important medical research on those issues.

The most useful short-term use of that data, however, was to see what actual performance data showed relative to care differences and care disparities when Kaiser Permanente looked at the care performance for multiple quality measures by race and ethnic group.

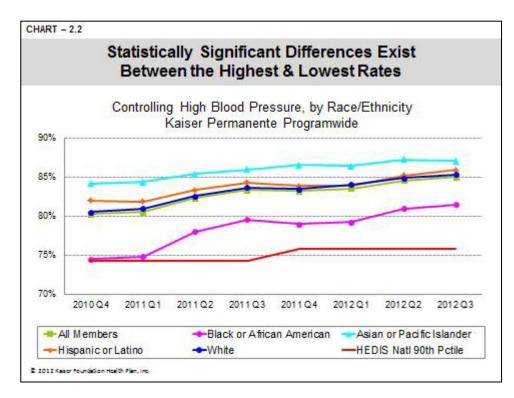
#### The Results Were Not Identical by Race and Ethnicity

Some of the researchers who looked at the first data runs about relative care performance were shocked. Some people believed that the care results at Kaiser Permanente would be close to identical for every group. They expected almost identical care outcomes and care processes exactly because all of the patients were going to the same care sites, had the same health coverage, and were seeing the same doctors and care teams. The expectation was that all of that functional care delivery consistency would create an equivalent performance consistency for each group of patients. When the actual performance data was reported, however, it was clear that differences among groups existed. Some of the differences were significant. That was an extremely important thing to learn. The performance data variations that existed inside Kaiser Permanente by race and ethnicity showed that even inside a closed care system with the same basic benefit plans for every patient, there can be significant differences in care outcomes and in care performance levels among various ethnic and racial groups. It turned out that there were some entirely unintentional care outcome differences, and it turned out that some care delivery modifications were actually needed to bring all care to the same care level set as the goal of complete equity that was set by the Kaiser Permanente care leaders.

As so often happens for health care quality issues, real data dislodged prior expectations about care performance levels. That learning and that ability to look at real-time data about those issues coupled with the ability to work to correct any problems that might exist makes the Kaiser Permanente experience and learnings on those issues very relevant to this book about health care disparities and differences and to people who are doing health care policy work relative to care disparities and differences.

## **Actual Results Varied by Race and Group**

The next chart shows the actual results by ethnic group inside Kaiser Permanente for the control of blood pressure. Blood pressure control is an extremely important medical goal for the Kaiser Permanente care system. High blood pressure can create heart damage and strokes. Kaiser Permanente has set a major goal for the overall program and care infrastructure of helping patients keep their blood pressure under control. Multiple tools are being used by the Kaiser Permanente care teams to support that goal. The electronic medical record tool kit at Kaiser Permanente and various care reminder support systems are all being used to encourage both caregivers and patients to manage each patient's blood pressure levels.



As you can see from that blood pressure chart, the results by ethnic group and by race were not identical. The actual performance data showed that there was a clear difference relative to the Kaiser Permanente success levels on blood pressure control for Black patients compared to white patients, Hispanic patients, and Asian patients. That finding triggered some significant internal concern. That data also focused intellectual energy in multiple ways for members of the Kaiser Permanente care team. As noted earlier, it was clearly not acceptable to the Kaiser Permanente care team to have internal differences among groups and to have measurable gaps in performance by race or ethnicity group for any key areas of care performance. Those same types of comparative process reports that showed those results for blood pressure health were run for multiple performance areas. Other areas of performance generally had similar results -- with care gaps of some kind in every intergroup comparative performance report. The overall data relative to all performance gaps showed that those gaps were not limited to blood pressure control. The data showed similar patterns involving similar gaps in success levels for several other key quality measures. As described below, the variation in performance lines by race and ethnic group on several other performance charts looked a lot like the separate lines by group on this blood control pressure chart.

#### The Red Line Is 90 Percent for the Rest of the Country

It is useful to put this particular set of data into perspective.

For blood pressure data shown on this chart, the lower solid red line that is shown as the bottom line on the performance chart actually is an external data-point line. The data on that line includes current performance data from other care sites. That red performance line on the chart is not a Kaiser Permanente performance level. That red line is actually the 90<sup>th</sup> percentile for all of the other health plans in America who also measure performance on this particular quality metric.

As you can see, even though the Black patients at Kaiser Permanente were doing less well on blood pressure control than the white, Asian, or Hispanic patients at Kaiser Permanente, those Black patients at Kaiser Permanente were doing better on blood pressure control than 90 percent of all of the other patients in all of the other care sites across America who report their performance on that particular measure.

That fact made the lower performance scores for that set of patients inside Kaiser Permanente slightly more tolerable -- but the differences in results and the performance gap between the Black patients and other groups of patients were still not acceptable to the Kaiser Permanente care team. Care leaders looked at those performance gap numbers and decided that the overall care team needed to figure out how to narrow or eliminate those gaps. That care improvement work and that data analyses were done at a very local level as well as at our overall level. The performance reports by race and ethnicity were not run just at a macro level across all of Kaiser Permanente. It's hard to improve site-specific care when you only have national care data. The data drill-downs for comparative performance were very local. Performance improvement reporting for those operational purposes is very local because care delivery is always very local. Because care is local, the Kaiser Permanente database currently looks at each of those performance levels by region and by care site. That data review discovered that the performance levels and the gaps among the groups varied from site to site. There was a remarkable, overall consistency in intergroup differences across all care sites -with the care gaps in Honolulu looking very much like the care gaps in Washington, D.C., and that performance tended to look a lot like the care gaps in Sacramento. That was another major learning insight. The performance patterns among the groups looked very similar in all sites. And it was clear, therefore, that shared solutions and joint strategies might be possible to help a diverse set of care sites resolve similar sets of problems.

## A Health Care Disparities Summit Was Convened

The leadership care teams at Kaiser Permanente looked at those gaps and convened an internal care disparities summit to address those issues. The caregivers at the care disparities summit looked at the data and then set up an internal goal of narrowing the performance differences among groups -- with care improvement targets set annually -- with the overall goal of having those intergroup gaps disappear entirely over a couple of years.

That work was done at a very practical and nonacademic level -- because Kaiser Permanente is inherently a care delivery infrastructure and not a policy research organization or an academic think tank.

Before looking at the various steps that were taken inside of Kaiser Permanente to achieve those gap-reduction goals, it is useful to look at the couple of other performance areas where similar care difference gaps were uncovered by the reporting system.

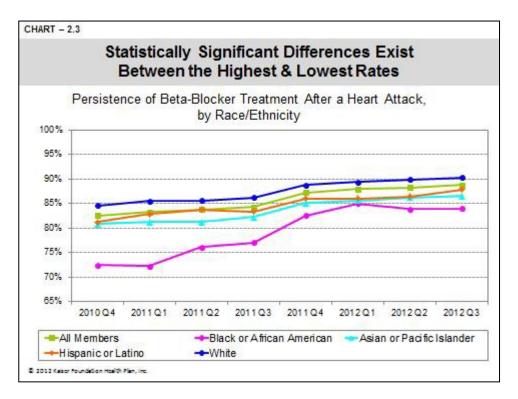
One other point should be made about the blood pressure control chart (Chart 2.2). It is worth mentioning that the average scores for blood pressure control for all patients across all care sites in the rest of the country -- in or out of health plans -- now runs very close to 50 percent of all patients in America who now have their blood pressure under control.<sup>100</sup> Kaiser Permanente had overall performance numbers for blood pressure control that were somewhat closer to those fairly low national care performance levels a decade ago or so. Programs were put in place at that time to improve that area of performance. Those programs succeeded. Kaiser Permanente's overall blood pressure control across the entire care system and across all care teams now averages over 80 percent for all members.<sup>101</sup> Kaiser Permanente currently uses a combination of direct care, medical best practices, patient-focused team care, and systems-supported care to make care better in a continuously improving consistent way for blood pressure control and for multiple other areas of care delivery. The reasons why those approaches are used at Kaiser Permanente are discussed in Chapter Four of this book.

At Kaiser Permanente, the preferred approach of using patient-targeted care that is supported by electronic care tools to help improve care performance in key areas clearly is obviously working for the overall blood pressure control agenda. Lives are being saved. The stroke death rate at Kaiser Permanente has actually dropped by almost 40 percent over the past four years.<sup>102</sup> That particular performance area has been both a high priority and an operational success for Kaiser Permanente, but -- as the data on these charts show -- there were still differences among those racial and ethnic groups inside Kaiser Permanente and -- very specifically -- there is still an intergroup internal performance gap on blood pressure control that needs to be eliminated.

### Beta Blocker Persistent Use Was a Gap Area

Another area where Kaiser Permanente discovered that there were surprising and unsatisfactory differences among ethnic and racial groups was in the persistent use of betablockers after a heart attack. Like stroke prevention, preventing both the first and second heart attacks has also been a major performance goal for Kaiser Permanente for a number of years. The overall number of heart attacks is down at Kaiser Permanente by more than 30 percent over the last half decade.<sup>103</sup> Reducing those heart attacks has been an explicit goal of the overall care agenda -- and the appropriate use of beta blockers is a key tool in that effort.

The chart below shows both the overall success levels and the difference in persistence levels by group.

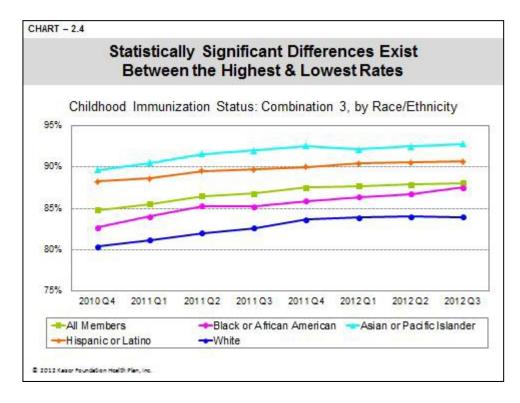


As you can see, the African American success levels for beta blocker use were significantly below the white levels when the measurement process started. That variation and that intergroup performance gap triggered an array of strategies that included focusing on culturally competent training materials, building targeted communications approaches, and improving caregiver coaching skills. Those efforts to deliver better care have resulted in care improvements for all patients on that measure. That very specific, focused improvement plan for minority patients have resulted in a narrowing of the gap among the groups over the past couple of years.

In each area where a performance gap exists, the diversity-focused care strategists at Kaiser Permanente work systematically to figure out best ways of improving the performance levels for the lower scoring patient groups in each gap area. The final chapter of this book includes some segments of the agenda and the care topics that were addressed at the most recent Kaiser Permanente Diversity Conference. A look at those agenda topics can give the reader a sense of the topics being addressed and of the plans that are being used to achieve the various gap-reduction goals. The summit presentations are just a portion of the work being done -- but they are a very important piece of that complete body of work.

### **Childhood Immunization Has a Stubborn Gap**

Childhood immunization is another area where there are significant differences in care success levels by race and ethnicity. The set of results that are shown on the charts below follows a slightly different pattern than most other performance levels for the highest and lowest groups compared to many of the other gap areas. This particular chart points out why it is important to understand each gap area issue on its own merits and in its own context.



In this set of measurements, the highest performing group is clearly the Asian patient population. The immunization rates for those children are among the very best in the world. The Hispanic success levels for childhood immunization are close behind.

The lowest performance levels on this particular quality score are for the white children. Immunizations levels for the white population have been running well below the rates of the other groups inside Kaiser Permanente. That seems to be true in the world outside Kaiser Permanente, as well. That particular difference in vaccination levels by group is triggered largely by an unfortunate array of parental concerns about vaccine safety that seem to be believed most strongly by white patients.<sup>104</sup> Those concerns about various issues of vaccine safety for children have not been supported by actual specific research data. Major studies have shown, in fact, that the suspected and feared link between childhood vaccinations and childhood autism actually does not exist.<sup>105</sup> Some of the early invalidated data that once seemed to show parents that kind of relationship existed turned out not to be accurate data. Kaiser Permanente actually functionally did some of the subsequent scientifically valid autism and vaccination research studies to show that there actually was no link with autism. In spite of those reassuring studies showing that no linkage existed, however, there is still a significant level of concern about that issue with some parents, and that has created a reluctance to have some immunizations done.

As you can see from those group-specific scores, the fear that resulted from the earlier beliefs about that particular set of concerns seems to be most difficult to address for the white patients. There clearly is not a total boycott of immunizations by white parents. Most white parents obviously do immunize their children -- but as you can see on this chart, an unfortunate

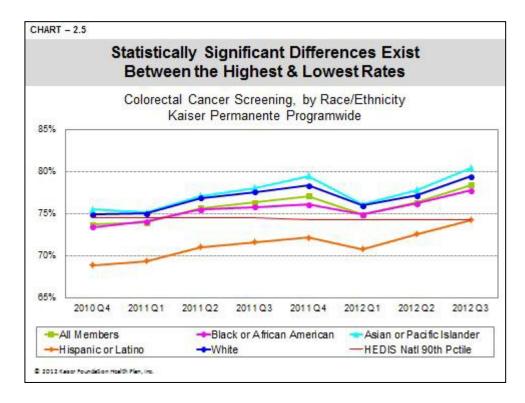
number do not. This is another area of targeted activity for Kaiser Permanente care teams. Work is underway to create more persuasive materials and better information support that can be used to help those parents deal with those issues for that particular population.

#### **Cancer Screening Gaps Need to Be Reduced**

One of the most important areas where gaps exist among the population groups is in cancer screening. Studies have shown major screening gaps exist in care sites outside of the Kaiser Permanente care system. The recent national care disparities report highlighted some of the gaps by race and ethnicity. That is important information. Lives are literally at stake. Cancer screening levels can obviously have a huge impact on people's lives. Cancers that are detected early have a much higher cure rate than cancers that are detected late...so early detection clearly saves lives. When people from any ethnic group or race are less likely to have early screening for any cancer -- the people from those groups are much more likely to experience early death. People often underestimate how significant the differences in the death rates can be. It's good to look at real numbers to get a sense of the differences in risk levels.

As the real numbers on the actual cancer survival charts below show, the very lowest survival rates -- and the highest death rates -- for each cancer are for the patients who have their cancer detected very late in the process. The very best survival rates are for the people whose cancers are detected early. When Kaiser Permanente started measuring cancer detection rates by race and ethnicity, some of the same kinds of care gaps among groups that exist for other care performance areas (like blood pressure and beta blocker follow-up) were evident immediately.

The next chart shows the performance levels by group for colon cancer in one of the Kaiser Permanente region -- Southern California. The pattern is basically the same for each of the other regions but the Southern California care team led the way in working to eliminate deaths from this cancer, so their charts are included in this book.



In each of the Kaiser Permanente regions across the country, the best and highest level of colorectal screening has been for the Asian patients. The lowest screening level for that same cancer in each care site and each geographical site has been for the Hispanic patients.

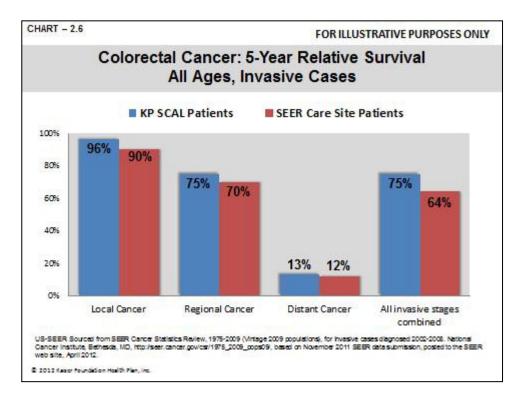
In this chart, the performance level for colon cancer screening for the Hispanic patients started ten full points lower than the Asian patients. The Hispanic performance levels have now improved significantly but, interestingly, the gap between the groups hasn't narrowed much in four years because the performance levels for all of the other groups have also gone up significantly. The Hispanic screening level inside Kaiser Permanente is now over the 90<sup>th</sup> percentile for all patients for all other health systems in America who measure that performance, but it is still ten points lower than the best ethnic group level screening levels -- the levels for Asian patients -- inside Kaiser Permanente.

The caregivers involved in reducing that specific gap have learned that there are some relevant differences in attitude, beliefs, and behaviors about cancer screening for many of the Hispanic patients. Those differences needed to be addressed skillfully and with great cultural competence by the care team in order to improve the screening levels for the Hispanic group of patients -- with the ultimate goal of bringing the gap among the groups down to zero.

This is very good work to do.

Colon cancer is a disease where early detection is incredibly important. The next chart shows the actual five-year survival rates for the patients at Kaiser Permanente who have that particular cancer. It's easy to see from the survival rates why early detection of that cancer is so

important. On that chart, the survival data for each set of patients is based on how early in the progression of the cancer that the cancer was detected. To offer an interesting comparison data set, that chart also includes the survival rates for similar patients with that same cancer who are being treated in the other cancer programs who also report their performance levels for cancer treatments through the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) cancer survival database.<sup>106</sup> The SEER sites use that data reporting mechanism as a care improvement tool. It can be extremely useful information for any cancer care site.



As you can see, regardless of the care site -- Kaiser Permanente or SEER site -- when the cancer is detected as a local stage-one cancer -- the very earliest stage -- people live longer. More than 96 percent of the patients at Kaiser Permanente and more than 90 percent of the patients being treated at other SEER cancer care sites are still alive five years later when that particular cancer is detected early.

But when that same particular cancer is detected in the late and most widely dispersed stage -- the most dangerous stage -- only 13 percent of the patients at Kaiser Permanente and only 12 percent of the patients at the other SEER cancer care sites are still alive 5 years later. Four percent and eighty-eight percent are a huge difference in the death rate. At Kaiser Permanente only 1 in 20 patients die in that timeframe when that cancer is detected early, and nearly 9 out of 10 patients dies within 4 years when that same cancer is detected late. Early is clearly better.

This survival chart shows the results of the Kaiser Permanente Cancer Program in Southern California. The data for other Kaiser Permanente care teams is very similar to the Southern

California numbers. As noted above, the second bar on the chart shows the results for patients who are being treated in other care sites that report SEER data. Those care sites show a very similar difference in the death rates for patients whose cancers are detected early and patients whose cancers are detected late. That data from all sites clearly confirms and reinforces the Kaiser Permanente belief about the great value of early cancer detection for all patients. The SEER data is for other care systems outside of Kaiser Permanente who are in the National SEER cancer reporting network. SEER sites all use that data for care improvement.

As noted earlier, SEER is an excellent and well-designed cancer reporting mechanism. It helps care systems across the country track their own cancer treatment success levels and also helps those sites compare their own success with other care sites and other care teams.

The cancer centers who report data to the SEER program include many of the best cancer programs in the country. Individual survival rates for other specific cancer programs are not available from SEER by the name of each cancer treatment care site. Each care site only knows their own data and the range of data for other care sites. So the cancer survival charts in this book simply show the average performance of all other SEER sites compared to Kaiser Permanente performance levels for those cancers. People who are seeking care at those other care sites may want to ask those care teams and care sites for their own SEER data.

Overall, for all cases of colorectal cancer, the average five-year survival for all patients who have that cancer at Kaiser Permanente -- regardless of the time of diagnosis -- is 75 percent.<sup>107</sup> The average overall five-year survival rate for all patients with that cancer at the other SEER reporting systems is 64 percent.<sup>108</sup> That significant difference in the survival rates for all stages of that particular cancer is due in large part to the very solid and consistent effort that is being made at Kaiser Permanente to detect that cancer as early as possible for all patients. Early detection is a good priority to have. As those charts show, that is the right thing to do. Early detection clearly saves lives. All other cancer care sites in the world would save more lives if they could also figure out how to detect more of those cancers early.

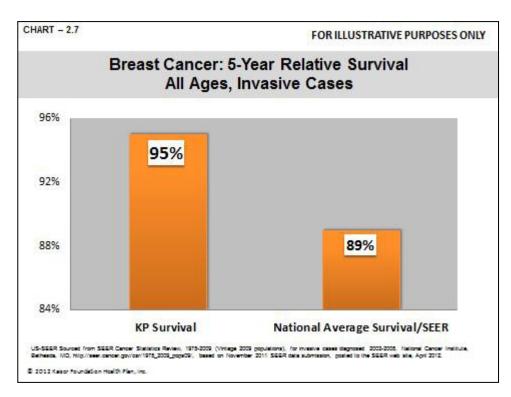
It is possible that the new accountable care organizations described in Chapter Three may have that agenda and share that early detection priority. The value of that priority is clear.

In any case, the clear difference between the 12 percent survival rate for late detected cancers inside Kaiser Permanente and the 96 percent survival rate for early detected cancers inside Kaiser Permanente shows why Kaiser Permanente places a very high priority in eliminating the performance gap among groups that now exist by race and ethnicity inside Kaiser Permanente relative to early detection of that cancer.

The higher overall cancer survival rates for several key cancers at Kaiser Permanente are driven partly by the strong and often successful focus on early detection processes at Kaiser Permanente. It also explains why disparities in cancer screening levels actually do create disparities in cancer death rates among groups of patients. As noted earlier, the average survival rates go up for all cancers when the cancers are detected early. It's important to note that the early detection levels only account for part of the overall Kaiser Permanente survival success level, however. When you directly compare survival rates for the late-stage cancers detected at Kaiser Permanente compared to the survival rates for those same late-stage cancers at other care sites across the SEER database, the survival rate for late-stage cancers also tends to still be a bit better for several cancers at Kaiser Permanente, as the next chart shows.

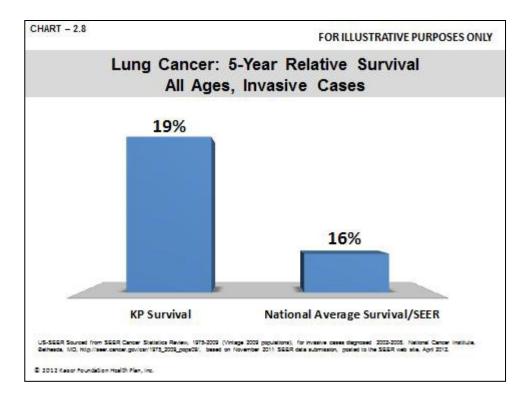
The higher average survival rates at Kaiser Permanente for the cancers that are detected late compared to the average survival levels in the SEER sites for late-stage cancers is due in part to the fact that the care teams at Kaiser Permanente who are treating late-stage cancers are supported by some of the most current care protocols in the world and by one of the best systematic process guidance and support approaches in health care. Those higher success levels for that cancer care are also due in part to the patient-focused team care approach that works to consistently and systematically and continuously improve patient outcomes for various medical conditions for Kaiser Permanente patients.

Colon cancer isn't alone in showing those positive survival rate performance levels. Breast cancer survival rates at Kaiser Permanente also tend to be better overall than the national average. Again -- like the colon cancer data -- that higher survival rate is due in part to early detection -- and it is also due to the slightly better than the SEER average survival rate for the late-stage breast cancers that are detected at Kaiser Permanente.



The five-year survival rates for all breast cancer cases at Kaiser Permanente run 95 percent.<sup>109</sup> That compares to the national SEER average survival rate for all breast cancer cases

of 89 percent.<sup>110</sup> The late-stage breast cancer five-year survival rates at Kaiser Permanente run at 29 percent<sup>111</sup> -- compared to a SEER average for those late-stage breast cancer patients of 24 percent.<sup>112</sup> The survival patterns based on the stage of diagnosis are exactly the same for all care teams. In all instances -- inside Kaiser Permanente or at any of the other cancer care sites - cancers that are detected early are much more likely to be cured. Mammography helps to detect breast cancer early. Kaiser Permanente usually leads the nation on mammography levels. But even though it is true, there are some differences inside Kaiser Permanente by race and ethnicity on that mammography performance area. Those differences in mammography rates by race and ethnicity are also targeted to be eliminated.



The chart above shows five-year survival rates for all lung cancer patients. The five-year survival rate for lung cancer patients obviously isn't good anywhere -- regardless of the point of detection. Those grim numbers in lung cancer survival rates for all of the care treatment programs show us all why helping people to stop smoking is so important to do. Relative to care outcomes and care disparities, the higher smoking levels for our minority populations is clearly another key area where persuading people to change behaviors can save lives, and it can help reduce the difference in the life expectancy among groups.

In any case -- for the purposes of this book -- the fact that early detection means higher survival rates for each of the major cancers means that eliminating any care gaps that exist for cancer screening for colon cancer or breast cancer or any other cancer is a very good thing to do. Very specifically, improving the screening levels for Hispanic patients can help eliminate a significant intergroup difference in care outcomes for Hispanic patients -- a gap that doesn't need to exist if the care team works in an organized way to eliminate it. The fact that the gap

between the Hispanic patients and the Asian patients still exists at Kaiser Permanente would be obviously more disconcerting if the performance for the best group wasn't also improving so significantly.

#### **HIV Care Outcomes Vary by Race in Most Care Sites**

One of the most significant areas of care delivery where eliminating differences, disparities and care gaps by race and ethnicity is very important to do relates to HIV care. Like cancer, HIV/AIDS can kill people. For a very long time, the death rate for Black HIV and Hispanic HIV patients in most care settings has been nearly 50 percent higher than the death rate for white patients.<sup>113</sup> That fact was mentioned in the IOM report on care disparities. That historic difference in disease levels and disease outcomes for HIV/AIDS patients was an intergroup care results and care disparity issue that Kaiser Permanente explicitly addressed. Doing well in HIV care was particularly relevant for the Kaiser Permanente care system because Kaiser Permanente has one of the largest populations of HIV patients in the U.S. Kaiser Permanente probably cares for more HIV patients in this country than any other care team -- outside of the U.S. Department of Veterans Affairs (The VA).<sup>114</sup>

The decision was made a number of years ago at Kaiser Permanente to deliver the very best care to the entire HIV population and to deliver that best care for all patients with no disparities in care outcomes among the ethnic and racial groups.

## Eliminating Disparities Is Not the Same as Eliminating Differences

Eliminating disparities in care outcomes is not the same as saying there are no differences in care delivery. Sometimes culturally competent differences in care approaches and care support are actually needed to eliminate an existing gap in care outcomes. The Kaiser Permanente HIV team has built an HIV treatment agenda around each patient -- focusing on individual coaching, teaching, counseling, and treating each patient with the right level of care and with culturally competent information flows and feedback processes.

Focusing on each patient as an individual is the key. Respecting and dealing with cultural variations is a key part of the preferred individual patient focus and process. Getting each individual patient the care plan they individually need is another key element for HIV care success. So how well is that approach of individual focus for each HIV patient going at Kaiser Permanente?

## The Variations in HIV Death Rates Are Gone at Kaiser Permanente

This is another area where Kaiser Permanente care performance can be used as a microcosm and template for the entire country. There are a growing number of HIV cases in the country. The average death rates for HIV/AIDS patients tend to vary significantly by race across the total American care system. The outcome of the care for those HIV cases generally varies significantly from group to group and site to site. Kaiser Permanente has now successfully and completely eliminated those outcome differences by race -- proving it actually can be done. The Kaiser Permanente care plans and care support teams have managed to fully achieve their goal of eliminating outcome disparities for that particular category of care. The outcome gap between Black patients and white patients for HIV care is gone. The gap was eliminated by use of patient-specific care plans and by delivering culturally competent care for each patient. Care was improved for all patients, and the care gaps were eliminated in the process.

The overall HIV care that is delivered today by Kaiser Permanente for all of those very diverse patients might well be the best in the world. The disparities in care outcomes have been eliminated, and the overall HIV death rate for all patients at Kaiser Permanente is now less than half of the national average.<sup>115</sup>

So eliminating disparities in outcomes can be done. That HIV/AIDS work shows that it is possible to deliver great care with no significant differences among ethnic and racial groups for a very important category of care.

# The Tool Kit Includes Teaching, Best Practices, and Cultural Competency

The tool kit that is needed to create consistently great care for all groups of people includes teaching, health literacy for patients, cultural competence for caregivers, language skills, building patient and physician trust, consistent and skillful use of evidence-based clinical guidelines, and targeted patient outreach. Another book needs to be written by Kaiser Permanente that can describe all of those approaches in more detail. The care teams focused on those areas of care have done very creative work aimed at meeting the needs of each set of patients effectively.

The care team approach involves helping patient decision-making, creating outreach when needed to the home settings, and putting in place appropriate levels of community engagement and involvement.

The patients need trusted caregivers, trusted care processes, and trusted sources of information -- with targeted feedback to help each patient stay on the right path. Those are all possible to do -- and continuous improvement processes are supported and enhanced when the care database tracks both care performance and care delivery by patient in a way that reflects and respects the patient's race and ethnicity.

All of those care support tools and core improvement processes and components have been put in place at Kaiser Permanente for multiple areas of care. The processes are being developed and designed. They are far from perfect -- but they tend to be good, workable, and continuously improving processes. The proof of that systematic approach to continuously improving care processes is in creating overall outcome levels for care that are significantly better than the overall outcomes for the country, at large. Lower HIV death rates, higher cancer survival rates, and lower stroke and heart attack death rates at Kaiser Permanente all result from having both best medical practices and systematically supported care delivery in the context of patient-focused, continuously-improving team care.

# What Needs to Be in Place to Achieve Those Success Levels Elsewhere?

So how did all of that continuously improving care happen?

What kinds of circumstances, situations and business realities were necessary to make that whole care improvement and disparity-reduction agenda possible at Kaiser Permanente? How did Kaiser Permanente end up with consistently improving care results across racial and ethnical groups in important areas of care that are significantly better than the care delivered and received by most people in the rest of the country?

That question is worth asking and answering. It is particularly good to ask and answer that question at this point in our history because trying to solve the issues of care disparities and the widening gaps in care across the entire country without putting some of the key pieces in place that have worked to deliver continuously improving care at Kaiser Permanente are probably doomed to failure in most other care settings. The successes at Kaiser Permanente have not been accidental. The components of the current levels of success for the caregivers need to be understood -- with the goal of taking advantage of the best elements of that agenda and applying it to other settings where care is delivered.

Chapter Four more specifically deals with the issues of what makes Kaiser Permanente able to achieve those goals of reducing care gaps and achieving highest levels of success on care performance while the care gaps are growing in several ways for the rest of the country. Before looking specifically at how Kaiser Permanente has managed to achieve some of those successes, it makes sense to look briefly at how health care financing approaches and care delivery approaches are changing for the overall health care infrastructure of America.

This is a time of change for American health care. We are seeing changes in both care delivery and care financing. The changes are significant. Times of change create real opportunities for improvement. We need to take advantage of the current set of opportunities to achieve the best levels of improvement in the overall delivery of care and to significantly reduce the current set of care disparities and gaps in care.

To do that well, we need to know what those basic opportunities are. That is the next chapter of this book.