The Permanente Medical Group

Performance

Z

Physicians







THE PERMANENTE EXPERIENCE

Celebrating 65 Years of Physician Leadership and Innovation



Letter from the CEO

In 1948, Sidney Garfield, MD, and a group of six pioneering colleagues founded The Permanente Medical Group (TPMG). They were courageous visionaries with a set of beliefs about how health care should be delivered and a strong commitment to providing superior quality and personalized service in the most efficient and effective ways possible. They understood that an independent, physician-led, selfgoverned medical group would consistently place the needs of patients ahead of other competing interests. And they were convinced that by aligning the interests of patients and physicians, through a focus on prevention, exceptional quality and a strong physicianpatient relationship, the best health care would be provided in the most professionally fulfilling ways.

If our founders were here today, they would be incredibly proud of the outstanding medical care that our 8,000 physicians and 33,000 staff provide to our patients, and the recognition we have received as a model for health care in this nation. They would celebrate our success at reducing our patients' overall rate of mortality from cardiovascular disease to 30% below that of patients receiving care outside our system. They would be thrilled that, as a result of our nation-leading success in managing hypertension, our patients have a significantly lower risk of experiencing a stroke. They would applaud the remarkable outcomes we have achieved in the prevention, early detection and treatment of a variety of cancers. And they would be pleased that we have become

the largest and one of the best medical groups in the country.

This book highlights several of our recent achievements, but it is by no means a comprehensive inventory of all that we have accomplished. It does serve to illustrate and provide examples of what is possible when great doctors work together in an environment in which their sole focus is the health and medical care of their patients. It demonstrates how the combination of an integrated delivery system, prepayment, an emphasis on prevention and early detection of disease, advanced information technology systems, and committed physician leadership produces unmatched health care for 3.4 million people in Northern California.

In the pages that follow, you will learn about our leading performance in important clinical areas including cardiovascular care, sepsis survival, perinatal services, HIV treatment and neurosurgery. You will meet some of our exceptional physicians. Their stories illuminate how highly our physicians value the technology we offer our patients, the collegiality we share with each other, and the opportunities we provide them to teach residents, conduct research, mentor colleagues, contribute to global health, and provide medical care to a diverse patient population.

Robert Pearl, MD

Board Certified in Plastic Surgery Executive Director and CEO, The Permanente Medical Group

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You will read about how we use 21st-century technology to help our patients stay healthy and connected with their doctors. And, finally, you will come to appreciate the essential role that physician leaders play both in delivering exceptional performance and in cultivating a culture that continually innovates and improves care.

As we commemorate the 65th anniversary of TPMG, we celebrate the exceptional clinical outcomes that have been achieved by dedicated physicians working together with colleagues to transform health care. With the implementation of the Affordable Care Act, our nation begins a new chapter. As doctors and hospitals across the country struggle to develop accountable care organizations and move from "pay for volume" to "pay for outcomes," we hope our success will serve as inspiration to those who have begun the journey.

Thank you for joining in celebrating our six-and-a-half decades of remarkable performance, powered by physicians. I feel privileged to lead this extraordinary medical group. We look to these next few years of dramatic change in health care with optimism and excitement.

If our founders were here today, they would be incredibly proud of the outstanding medical care our physicians and staff provide to our patients, and the recognition we have received as a model for health care in this nation."

Table of Contents



The Permanente Experience: Committed to Excellence



Setting the Bar for Sepsis Care



HIV Care



Spotlight: Donald Dyson, MD



Celebrating 65 Years: Milestones in TPMG History



Connecting with Our Patients: Technology and Teamwork in Action



Spotlight: John Chuck, MD



Enhancing the Physician-Patient Relationship Through Technology



Empowering Our Patients to Stay Healthy and Live Longer



Helping Patients at Risk Stay on Track



Physician Leadership: An Unparalleled Competitive Advantage



Developing the Leaders of Today and Tomorrow: TPMG Leadership Institute



Spotlight: Nicole Moayeri, MD



Taking the Lead in Cardiovascular Care



Excellence in Perinatal Care: Helping Mothers and Babies at High Risk



Our History Is Integration, Innovation Is Our Future





Spotlight: Sharon Levine, MD



Breaking New Ground: Eradicating Conflict of Interest



Physician Leadership and Governance: Bringing It All Together



Our Facilities





Attracting the Best and Brightest in Medicine



Spotlight: Vivian Reyes, MD



Sources



Acknowledgments

The Permanente Experience: Committed to Excellence

World-class performance doesn't happen by chance. At The Permanente Medical Group (TPMG), it's the result of more than 8,000 dedicated, diverse and exceptional physicians working together across specialties to help over 3.4 million Kaiser Permanente Northern California patients live healthier, happier and longer lives.

From excellence in cardiovascular, hypertension, stroke and HIV/AIDS care to cancer prevention and the treatment of sepsis, TPMG is recognized as a gold standard in health care. Not only do we deliver outstanding, leading-edge care, but we've also gained national recognition for our accomplishments.

Most recently, TPMG received the 2013 Acclaim Award from the American Medical Group Association. The award is the AMGA's most prestigious, and honors excellence and innovation in high-performing medical groups and health systems.

In addition to the accolades we receive as a top-performing medical group, TPMG also has been recognized along with Kaiser Foundation Health Plan for the combined excellence of Kaiser Permanente Northern California. The National Committee for Quality Assurance (NCQA) ranked KP Northern California third in the country, out of 395 plans, in the NCQA's Medicare Health Insurance Plan Rankings for 2012–2013. It ranked Kaiser Foundation Health Plan of Northern California eighth nationally, out of 473 plans, in NCQA's Private Insurance Plan Rankings for 2012–2013. In the latter category, the next best performer in California, outside of Kaiser Permanente, is ranked 139.

We've also scored four stars—the highest rating possible—for clinical quality from the California Office of the Patient Advocate five years in a row. And Hewitt Value Health Initiative results show Kaiser Permanente is the highest ranking health care plan in California for clinical quality in 2013.

As a result of this superior performance, we are one of only 11 health care

organizations—and the only one in California—to earn a five-star rating from the Centers for Medicare & Medicaid Services, out of a total of nearly 600 plans.

The combination of expert physicians, the most advanced information technology systems in the industry, and stellar performance make The Permanente Medical Group not only world class, but a class unto itself.



2013 Acclaim Award American Medical Group Association

The Permanente Medical Group has earned the AMGA's most prestigious quality award, which honors excellence and innovation in high-performing medical groups and health systems.



2010 2011 2012 2012 2013 + + + + +

2013 Health Care Quality Report Card

Kaiser Permanente Northern California earned 4 stars—the highest rating possible—for clinical quality from the California Office of the Patient Advocate 5 years in a row.

of only 11

We're one of only 11 health care organizations in the nation in 2012 and the only one in California to earn a perfect 5 stars—the highest rating possible—out of nearly 600 plans from the Centers for Medicare & Medicaid Services.

Setting the Bar for Sepsis Care

Our pioneering work to reduce mortality from septic shock—the number-1 cause of death in U.S. hospitals—has resulted in a mortality rate of 17.6%. The Surviving Sepsis Campaign's international rate is 30.8%. With approximately 750,000 people developing sepsis each year in the U.S. alone, an achievement like ours doesn't go unnoticed.

New York Governor Andrew Cuomo cited Kaiser Permanente California's innovative sepsis program as a model for sepsis screening and mortality reduction when he introduced statewide sepsis regulations in 2013. And in Decisive: How to Make Better Choices in Life and Work, bestselling authors Chip Heath and Dan Heath wrote: "Kaiser Permanente in Northern California ... [has] driven down risk-adjusted mortality from sepsis to 28% below the national average. This solution has astonishing potential. If all hospitals could match Kaiser Permanente's 28% reduction, it would be the annual equivalent,

in lives saved, of saving every single man who dies from prostate cancer and every single woman who dies from breast cancer."

Most people who get urinary tract infections or pneumonia don't die. But common infections can sometimes result in infection spreading throughout the body. The combination of the bacteria itself and the associated inflammatory process leads to multiple organ failures.

Physicians like Diane Craig, MD, a hospital medicine specialist and assistant physician-in-chief at the Santa Clara Medical Center, have demonstrated that to avert harm you need to recognize sepsis early by checking a patient's lactic acid level, and treat it aggressively with intravenous fluids and antibiotics. Dr. Craig collaborated with Alan Whippy, MD, medical director of quality and safety for The Permanente Medical Group, to turn that knowledge into action throughout Kaiser Permanente's 21 hospitals in Northern California.

They started in 2009 by harnessing the power of Kaiser Permanente HealthConnect, our electronic medical record system. KP HealthConnect was programmed to ensure that when a physician orders a culture to check for a potential blood-borne infection, the test for lactic acid is added automatically to the laboratory order. Once sepsis is identified, the evidencebased treatment guidelines call for administering antibiotics within an hour and completing a series of clinical interventions within 6 hours.

Achieving this level of consistency in clinical performance took more than a computer program—it required extensive clinician training, as well as seamless coordination among multispecialty teams of physicians, nurses and other hospital staff. Our multispecialty approach to identifying sepsis and improving care delivery, supported by technology, contributed to a 35% decline in the mortality rate for our patients with severe sepsis between 2009 and 2012. It also reduced the average length of stay for our patients hospitalized with sepsis by 20% between 2010 and 2012.

What's unique about this achievement, in addition to the many lives saved, is that it represents the successful adoption of a single standard of sepsis care across 21 hospitals. From San Jose to Sacramento and Santa Rosa to Fresno, our patients are in good hands.

Alan P. Whippy, MD

Board Certified in Emergency Medicine and Internal Medicine Medical Director of Quality and Safety Joined TPMG 1983

Diane Craig, MD

Board Certified in Internal Medicine Assistant Physician-in-Chief Joined TPMG 1988

Our multispecialty approach contributed to a 35% decline in the mortality rate for our patients with severe sepsis between 2009 and 2012 because of the successful adoption of a single standard of sepsis care across 21 hospitals.



"Kaiser Permanente Northern California . . . [has] driven down risk-adjusted mortality from sepsis to 28% below the national average. This solution has astonishing potential. If all hospitals could match Kaiser Permanente's 28% reduction, it would be the annual equivalent, in lives saved, of saving every single man who dies from prostate cancer and every single woman who dies from breast cancer."

35%

—Chip Heath and Dan Heath, Decisive: How to Make Better Choices in Life and Work

SPOTLIGHT ON

Nicole Moayeri, MD NEUROSURGERY

Nicole Moayeri, MD, specializes in solutions, whether she is performing delicate surgery on a patient's brain or enhancing operating room performance at her medical center. Always focused on the patient, Dr. Moayeri applies a philosophy of striving for excellence in both her own practice and the systems that affect patient care.

Dr. Moayeri began practicing in The Permanente Medical Group (TPMG) after serving as a chief resident at Massachusetts General Hospital, an instructor in neurosurgery at Harvard Medical School, and an attending neurosurgeon performing cerebrovascular research and neurosurgery at Brigham and Women's and Boston Children's hospitals. She brings to our Neuroscience and Neurosurgery Centers of Excellence diverse neurosurgical skills and subspecialty expertise in cerebral

revascularization, a variety of operative techniques that restore blood flow to the brain. Very few medical centers in the country offer this cutting-edge subspecialty, and it requires finely honed skills on the part of neurosurgeons like Dr. Moayeri.

"I was thrilled to join Kaiser Permanente," she said. "We have a diverse patient population of 3.4 million, which affords me the opportunity to use my surgical skills to help patients with some incredibly rare disorders. Without that kind of volume, it's difficult to develop the expertise necessary to excel at taking care of those patients."

Dr. Moayeri values the unique opportunity for specialists and subspecialists in TPMG to collaborate. "I can pick up the phone and contact any specialist

Board Certified in Neurosurgery

Assistant Physician-In-Chief, Operating Room and Surgical Services

Past Leadership	Chief of Operating Room Services
Medical School	Stanford University Medical School
Residency	Massachusetts General Hospital
Joined TPMG	1998

to get their input. They'll walk right over to see the patient who's sitting in my exam room. It's so simple, because it's all so integrated," she said. "Having everyone on the same team for the benefit of the patient is incredibly rewarding and fulfilling."



I can pick up the phone and contact any specialist to get their input. They'll walk right over to see the patient who's sitting in my exam room. It's so simple, because it's all so integrated."

Dr. Moayeri is particularly proud of the comprehensive team of neurosurgeons, neurointerventionalists and neurointensivists involved in cerebrovascular surgery. They meet weekly to review cases from all over Northern California. "We're not one doctor in one office making a decision; we're many minds

together looking at the unique needs of each patient and making a recommendation based on all of our opinions," she said. "We identify the most effective treatment based on data, outcome studies and a wealth of experience." In settings outside of our medical group, fellow specialists are less accessible and often unwilling to collaborate or exchange knowledge, because they risk losing patients to another physician. But Dr. Moayeri, like all Permanente physicians, knows that two minds are better than one, and that a culture of collaboration means that the needs of patients come first.

In addition to her neurosurgical role, Dr. Moayeri is the medical center leader for surgical services, a role in which she has led numerous initiatives to enhance patient care. She streamlined preoperative processes and strengthened patient-physician communicationsefforts that have increased quality, efficiency and patient satisfaction.

When Dr. Moayeri describes what she loves about her practice, it is clear that all of the solutions and bridges she builds in TPMG start and end with the patient. "It is a great privilege to be able to help someone with an illness or injury that's causing them stress, or fear, or pain," she said. "Playing this part in people's lives is such a blessing."

Attracting the Best in Neuroscience and Neurosurgery

Centers of Excellence provide 24/7 consultative support and care for adult and pediatric patients with disorders in Northern California. Our centers are powered by some of the best surgeons and physicians in the country.

Specialist physicians by the numbers

26 adult stereotactic \bigcirc neurointerventional

Comprehensive Services

radiologists

Neurosurgery (cranial and spine) Virtual Neuro-ICU • Peripheral Nerve



Taking the Lead in Cardiovascular Care

Anyone familiar with our track record for cardiovascular care would turn to Permanente physicians in a heartbeat.

At Kaiser Permanente in Northern California, we have lowered mortality from heart disease to the point where it is no longer the leading cause of death for our patients. This distinction has earned us the highest rating possible for cardiovascular care—4 stars—from the California Office of the Patient Advocate. Along with Kaiser Permanente Southern California, we are the only 4-star plans in the state.

Our excellence in prevention, combined with our extensive disease registries and our ability to provide sophisticated and rapid diagnostic and therapeutic interventions, have produced unrivaled performance.

Permanente physicians have cut the rates of uncontrolled hypertension, smoking and high cholesterol—the leading risk factors associated with cardiovascular disease—and dramatically decreased our patients' incidence of heart attacks and strokes. Between 1999 and 2008, heart attack rates among our patients declined 24%, and the

most deadly type of heart attacks plunged 62%.

Gaining control over hypertension begins with screening, where Kaiser Permanente has a distinct advantage. Our integrated and technologically advanced systems of care provide patients with ready access to convenient blood pressure checks anytime. For those who do have high blood pressure, we've achieved blood pressure control in nearly 85% of our hypertensive patients—through diet, exercise and/or medications—compared to the national average of 54%.

With our Smoking As a Vital Sign program, patients are asked about their tobacco use during office visits. Patients who want to guit are supported with a wide range of classes, online programs, in-person counseling, telephone coaching and pharmacotherapy. As a result, only 9.2% of our adult patients in Northern California currently smoke. The state average is 12%, and the national rate is 19%

Our Body Mass Index (BMI) As a Vital Sign and Exercise As a Vital Sign programs help stimulate discussion with physicians at every appointment and engage patients in considering healthy behavior changes. And our online, telephonic and in-person tools available to patients range from multisession nutrition classes at every medical center to Healthy Weight Online webinars, to social-networked physical activity programs and more.

A marked reduction in the incidence of heart attacks and strokes isn't just about numbers. At TPMG, we take saving lives to heart.

A Model for HIV Care

The Permanente **Medical Group** transforms HIV care and shares its expertise with the nation to save lives.

Kaiser Permanente Northern California National Average

Proportion of HIV patients that are diagnosed early

The Permanente Medical Group (TPMG) may be the gold standard for cancer, cardiovascular, hypertension and stroke care, but for HIV/AIDS. we're platinum. The excellence of the care we provide to our HIV patients, from early diagnosis to prompt treatment and outstanding viral load control has resulted in our patients having mortality rates that are half the national average:

- » 72% of our patients with HIV are diagnosed early, before the onset of immunologic AIDS, compared to less than 50% nationally.
- » 92% of diagnosed patients receive HIV-specific care within 90 days, compared to the national average of just 52%.
- » 97% of our HIV-positive patients in care and on treatment achieve maximal viral control, compared to the national average of 76%.

» The annual death rate for our patients diagnosed with HIV is just 1%, which is half the national average of 2%.

These achievements are the result of three decades of commitment to HIV populations. "Our success in the treatment of patients with HIV/AIDS results from the excellence of our physicians, our advanced IT systems, our integrated delivery system and our effective coordination across specialties," said Robert Pearl, MD, executive director and CEO of TPMG.

But with more than 1.1 million Americans living with the virus and 56,000 new infections each year, HIV is still an epidemic. That's why HIV specialists in TPMG joined with their Kaiser Permanente colleagues around the country to issue the HIV Challenge—a public effort to help other health care providers across

Annual mortality rate for patients diagnosed with HIV at Kaiser Permanente Northern California is 1%, half the national average.



the nation increase access to care and improve outcomes for people living with HIV.

"Improved HIV testing and treatment In addition, Permanente physicians for all groups is urgently needed and researchers conduct studies to stem the continuing HIV and share their findings at national epidemic," said Michael Horberg, and international meetings. For example, research published in MD, director of HIV/AIDS for Kaiser Permanente and a member of the the Journal of General Internal U.S. Presidential Advisory Council Medicine demonstrated that in on HIV/AIDS. Dr. Horberg noted that Kaiser Permanente, Northern California, an integrated system with almost one in five people with HIV don't know they are infected. access to comprehensive care for all patients diagnosed with HIV, there is As part of our commitment to no disparity with respect to clinical outcomes for racial/ethnic minorities.

improving the care of all patients with HIV/AIDS, we are sharing our best clinical practices and tools with community health clinics and private health care providers, through the HIV Challenge, to help them replicate our success. This includes providing information about our multidisciplinary care team approach, screening and

"Kaiser Permanente challenges other private health care providers and community health clinics to increase the number of HIV-infected people getting treatment by sharing Kaiser Permanente's toolkit of clinical best practices, tools, mentoring, training, and health IT expertise."

-Miguel Gomez, director, AIDS.gov, and Senior Communications Advisor, Office of HIV/AIDS and Infectious Disease Policy, U.S. Department of Health and Human Services

treatment practice resources, quality measures, and patient and clinician education materials.

"Delivering the highest level of HIV care in the nation is simply not enough," said Dr. Pearl. "Our true measure of success lies in the improvement in health equity and outcomes for all people living with HIV."

Kaiser Permanente Northern California

National Average

Percentage of **HIV+** patients on treatment who achieve maximal viral control

SPOTLIGHT ON

Donald Dyson, MD MATERNAL AND FETAL MEDICINE

A pioneer in the field of maternalfetal medicine, Donald Dyson, MD, epitomizes the breadth of possibilities that exist for Permanente physicians. His 31-year career

practicing perinatology with The Permanente Medical Group (TPMG) demonstrates the unparalleled opportunities for making a difference in patients' lives. As a researcher, teacher and now associate executive director, Dr. Dyson has played a major role in advancing evidence-based medicine and achieving exceptional clinical outcomes.

When Dr. Dyson joined TPMG in 1982 as its first perinatologist to care for women with high-risk pregnancies, he arrived with enthusiasm for research

and a preapproved study proposal in hand. During his fellowship at Stanford University, he began to question the standard clinical protocol for women with prolonged pregnancies. The consensus at the time was that as long as the fetus was healthy, it was better to wait than to induce labor. "I saw far too many complications during my training with this strategy in practice," he said.

Dr. Dyson believed that there was no better place than Kaiser Permanente to conduct a major

Board Certified in Obstetrics and Gynecology, and Maternal and Fetal Medicine Associate Executive Director of The Permanente Medical Group

Past Leadership	Medical Director of the Northern California Perinatal Service Center
	Assistant Physician-in-Chief of Outpatient Services
	Chief of Obstetrics and Gynecology
	Sub-Chief of Obstetrics and Gynecology
Awards	Morris F. Collin Research Award, 2005
	James A. Vohs Award for Quality, 1998
	Golden Apple Teaching Award, Obstetrics and Gynecology Residency Program, 1998
	Best Outcome Study, Society of Perinatal Obstetricians, 194
	TPMG Outstanding Career Achievement, 1989
Medical School	University of Alabama School of Medicine
Residency	Stanford University Medical Center
Fellowship	Stanford University Medical Center
Joined TPMG	1982

research study. Our large and diverse further improve pregnancy outcomes patient population, combined with or the early detection of preterm the unique willingness of TPMG labor. The significant findings of this physicians to refer their patients study, published in the New England to him, enabled him to perform a Journal of Medicine, inspired Dr. prospective, randomized trial of low-Dyson to develop the Regional risk women with healthy fetuses who Perinatal Service Center and its Preterm Birth Prevention Program for were at least one week overdue. He showed that inducing labor in women high-risk pregnant women. who are 7 to 14 days past their due date produces more successful Dr. Dyson teaches residents in deliveries and fewer Cesarean TPMG's obstetrics and gynecology sections than a wait-and-see residency program, and until three approach. His findings, which were years ago, served as an assistant clinical faculty member at Stanford published in the American Journal of University School of Medicine. He Obstetrics and Gynecology, forever has won awards for excellence changed the clinical care protocol not in teaching from both Stanford only at Kaiser Permanente, but across University and Kaiser Permanente. the United States.

Dr. Dyson then turned his attention to preventing preterm births, a major cause of perinatal morbidity and mortality. "Children born prematurely have a significant chance of suffering long-term handicaps," he said. The home monitor of uterine activity, a popular preterm labor assessment tool of the time, had been tested in various studies with inconclusive results on whether it enabled earlier detection of preterm labor. Dr. Dyson decided to conduct his own study to determine its efficacy when used in addition to an organized preventive education program and weekly patient contact by phone. In a prospective, randomized trial of more than 2,400 women at high risk for preterm delivery, he showed that the home uterine monitor, in fact, did not

"I really enjoy teaching, and TPMG provides unparalleled opportunities for it. Our physicians teach residents in a setting that feels like an independent private practice but has all the specialties and subspecialties of academic medical centers. The combination provides residents with an outstanding clinical education," he said.

Dr. Dyson launched his administrative medical career in 1982 at the Santa

> I believe it's the best place in the world to practice medicine."

Clara medical center where he practices perinatology. He served first as sub-chief, and then as chief, of Obstetrics and Gynecology. He also served as an assistant physician-inchief for Outpatient Services before becoming an associate executive director in 1999. In this role, he oversees adult primary care medicine, obstetrics and gynecology, pediatric primary and subspecialty care, mental health services, and genetics as well as our appointment and advice call centers. "I'm now in a position where I have some impact on the care of every single patient in the region," he said. "It's extremely rewarding to see the direct connection between what you've worked on and the resulting improvement in patient care."

Nearly all physician leaders in TPMG provide patient care in addition to their administrative work, and Dr. Dyson is no exception. "By continuing to practice, I have wonderful opportunities to interact with patients and physicians in a care setting, which can help inform my administrative duties," he said.

From clinical practice and research to teaching and administrative medicine, Dr. Dyson has made impressive contributions and blazed trails for others to follow. "I've found a real diversity of opportunities and experiences at Kaiser Permanente," he said. "I believe it's the best place in the world to practice medicine."

Excellence in Perinatal Care: Helping Mothers and Babies at High Risk

The Kaiser Permanente Regional Perinatal Care program is a unique service that integrates cutting-edge research, technology and evidencebased medicine to identify and care for women in Northern California with high-risk pregnancies. Donald Dyson, MD, a nationally renowned perinatologist and associate executive director of The Permanente Medical Group (TPMG), created the program in 1991 to translate his published research about preterm births into saving lives of mothers and their babies. Today the Perinatal Care program continues to raise the bar nationally with a host of specialized services to help women with difficult pregnancies deliver healthy, full-term babies.

Preterm Birth Prevention, the program's inaugural service, ensures that every pregnant woman seen in an obstetrics department at any of our medical centers is screened for the possibility of going into preterm labor using a specifically designed risk-assessment tool. Expectant mothers whose babies are determined to be at risk are enrolled in the service, where they learn about the warning signs and symptoms of preterm labor and how to assess themselves twice each day for contractions.

In addition to preterm birth prevention, the Perinatal Care program also offers home hypertension management, home diabetes management and hyperemesis support services. These and other evidence-based protocols improve the care of expectant mothers by providing education, clinical services, regularly scheduled visits and 24/7 access to clinicians via phone and the Internet, which augments each mother's plan of care between visits. Perinatal Care program clinicians also conduct nationally recognized research outcome studies and clinical trials.

The Perinatal Care program's innovative services have achieved impressive results. Thanks to this program and the excellent care provided by all of our obstetricians, our pregnant patients have an overall preterm delivery rate (under 37 weeks gestation) of just 7.5%—well below the national average of 11.7%.

Now in its third decade, the Perinatal Care program continues to set the standard for helping expectant mothers complete healthy pregnancies through risk assessment, education and regular physicianpatient visits. And the results show.

Reducing Early Elective Deliveries

The Permanente Medical Group initiated a campaign in 2011 to reduce elective deliveries between 37 and 39 weeks gestation, because such early elective inductions and cesareans are associated with increased neonatal morbidity and neonatal intensive care admissions.

Since then, our rate of early elective deliveries dropped from approximately 10% to 1% The national average is approximately 11%



Shaping Modern Maternal Care

TPMG founder Sidney R. Garfield, MD, instituted the "Baby in the Drawer" design concept in the Kaiser Permanente medical centers that were built in the 1950s in San Francisco and Walnut Creek. On the obstetrics floor, Dr. Garfield arranged each mother's room adjacent to a small soundproofed nursery. A mobile bassinet, set in a standard metal file drawer, could be slid through the wall between the mother's room and the nursery. This encouraged crucial early contact between mother and infant and resulted in more mothers choosing to breast-feed.



Our History is **INTEGRATION**

The Permanente Medical Group (TPMG) has been a transformational force in American medicine for the last 65 years—providing outstanding quality medical care and service in the nation. We attribute much of our success to our foundation as a fully integrated health care organization.

We are integrated structurally.

In partnership with Kaiser Foundation Health Plan and Hospitals, we form Kaiser Permanente—the nation's model for integrated health care financing and delivery.

We are integrated physically. Patient access to care is more

convenient because most of the services a patient needs are colocated on a single campus or nearby. A visit with their TPMG physician is easily combined with stops at the pharmacy, laboratory or radiology department.

We are integrated clinically.

Our culture of collaboration means patients receive coordinated care from TPMG primary care and specialty physicians, who share a common electronic health record and work together to provide rapid, high quality medical care to patients. As a result, we combine treatment with proactive prevention, checking health indicators at every visit.

We are integrated virtually.

Our online connectivity tools, such as secure messaging and mobile device applications, encourage communication and connectivity between patients and our doctors outside the traditional office visit. We are proud to lead the nation in offering our patients the online ability to email their doctors, schedule routine appointments, order medication refills, view laboratory results, and track preventive screenings and immunizations.

Our integration enhances both quality and efficiency. President Barack Obama recognized this when he said that, if the U.S. health care system could reach the efficiency levels of Kaiser Permanente, "We actually would have solved our [health care] problems."

The innovations of multi-specialty group practice, a focus on health promotion and disease prevention, and the use of information technology to improve health care delivery introduced by Dr. Sidney Garfield create a strong foundation for TPMG. As a result, as we look to the future and how health care will be delivered in our nation, we are prepared to lead.

Dr. Garfield's powerful innovations have inspired generations of TPMG physicians who continue to create and implement new ideas to improve the health of our patients.

We innovate using information

technology. TPMG's own Technology Group designs new ways to use health information technology to enhance the patient's care experience, assist physicians in their practice, and stimulate new approaches to care delivery across Kaiser Permanente.

INNOVATION is Our Future

We innovate through research. Our own Division of Research, the largest outside a university

or government setting, serves as a research resource for clinicians across our medical group. We have conducted a broad array of studies examining the behavioral, medical, genetic and environmental factors that influence common diseases, such as heart disease, cancer, diabetes and Alzheimer's disease. Our unprecedented Research Program on Genes, Environment and Health will enable us to build a biobank of DNA from 500,000 consenting Kaiser Permanente patients. Linking it with our comprehensive electronic health record system allows us to fuel new medical discoveries for improved clinical practice and to position TPMG at the cutting-edge of medical knowledge.

We innovate by teaching.

We train the next generation of physicians through our residency training programs and strategic partnerships with medical schools across the country. In addition, we established our School of Allied Health Sciences to ensure a strong pipeline of well-trained allied health professionals—including sonographers, radiographers, nuclear medicine technologists, and phlebotomy technicians—roles crucial to the care we provide our 3.4 million patients.

We innovate by developing physician leaders. Through our TPMG Leadership Institute, we invest in thousands of TPMG clinicians as leaders. By doing so, we build the mindset, capabilities, skills, and competencies needed to be the innovators of tomorrow.

TPMG's investment in novel solutions both assures our continued success and will advance 21st century health care across the nation.

1940

1942

Surgeon Sidney Garfield, MD, opens the Permanente Foundation Hospital in Oakland, California. The Permanente Foundation is established. Henry J. Kaiser serves as a trustee.

1945

The Health Plan begins accepting enrollees from the general public. Previously, the plan was limited to construction workers on Kaiser projects and their families.

1948

Drs. Garfield, Cutting, Collen, Baritell, Fitzgibbon, King and Friedman establish The Permanente Medical Group (TPMG).



1953

TPMG invents and initiates first multiphasic examination, a comprehensive health checkup.

1955

The "Tahoe Agreement" preserves and strengthens partnership between TPMG and Kaiser Foundation Hospitals and Health Plan (KFH/HP). The integration of KFH/HP and the Permanente Medical Groups came to be known as Kaiser Permanente.

1957

Cecil Cutting, MD, a founding partner of TPMG, is elected as first executive director and CEO.

1959

Prepaid group practice model is approved by the American Medical Association.



1961

TPMG's Division of Research (DOR) is established. Permanente physicians serve as principal investigators in such areas as cardiovascular disease, cancer, diabetes, allergies and psychosomatic disorders.

1965

The first TPMG residency training programs are established, providing training to interns and residents in a number of specialties.

1969

The first Health Education Center opens, featuring in-person classes, recordings and films on a variety of health topics.

1970

1970

Scientific American publishes Dr. Garfield's article "The Delivery of Medical Care," which describes using the computer as a central piece of an effective health care delivery system.

1971

TPMG Physicians are now responsible for the care of 1 million patients. Our first neurosurgery center opens.

1973

The Association of American Medical Colleges and the Commonwealth Fund co-sponsor 3-day symposium featuring our model of care delivery. Commonwealth Fund publishes paper titled "The Kaiser Permanente Medical Care Program: One Valid Solution to the Problems of Health Care Delivery in the United States."

1976

Bruce Sams, MD, elected second executive director and CEO of TPMG.



1980

1986

TPMG physicians are now responsible for the care of 2 million patients.

1988

TPMG produces a videoconference called "Sharing the Care," which early in the epidemic educates physicians about best care for patients with HIV.

1988

Dr. Garfield is inducted into Modern Health Care's "Health Care Hall of Fame."



1991

W. H. Caulfield, MD, is elected third executive director and CEO of TPMG.

1997

First Spanish and Chinese bilingual, bicultural primary care modules open.

1997

Preventive Health Prompts are added to the appointment registration slips to remind patients of their current status and when tests are due.

1998

Robert Pearl, MD, is elected fourth executive director and CEO of TPMG.

1999

Regional Perinatal Service Center opens for women with high-risk pregnancies.



2000

TPMG physicians are now responsible for the care of 3 million patients.

2002

U.S Preventive Services Task Force adopts TPMG's recommendations for colorectal cancer screening.

2004

Preventing Heart Attacks and Strokes Everyday (PHASE) is launched to help hundreds of thousands of patients control cholesterol and blood pressure.

2004

TPMG adopts a conflict of interest policy that becomes an exemplar for the nation.

2005

DOR begins Research Program on Genes, Environment and Health (RPGEH) to investigate genetic and environmental influences on health.

2009

TPMG and Mid-Atlantic Permanente Medical Group (MAPMG) affiliate; Dr. Pearl is CEO of both.



2010

Comprehensive electronic medical record system installation is complete, connecting members to their personal health information and physicians.

2010

My Doctor Online website is launched, providing patients with health information and the multiple convenient tools to make appointments, access laboratory data and obtain advice from their physicians.

2012

"HIV Challenge" is launched nationally, based on our success at early detection and treatment.

2012

A majority of our patients have signed up to access their health care needs electronically. 7.3 million secure email messages are sent to physicians.

2013

Video Visits, a secure way for physicians to consult with patients online, is launched.

Connecting with Our Patients: Technology and Teamwork in Action

The Permanente Medical Group (TPMG) delivers nation-leading quality and service through a simple, yet powerful approach: We make patient care personal.

We meet patients where they are, recognizing their need for personalized care that considers physical, mental, and spiritual well-being, and connecting them to their physicians, anytime and anyplace. Thanks to our world-class electronic health record system, KP HealthConnect, our physicians deliver personalized care at every encounter, whether in the medical office, emergency department, or hospital or during a telephone or video visit. Patients who sign on from kp.org are able to exchange secure email messages with any of their Permanente physicians. And every physician has a *My Doctor* Online home page describing their background and showing their photo to help our patients choose the doctor who is right for them.

Our physicians are able to discuss preventive care at each visit, prompted by technologies linked with KP HealthConnect to help patients obtain the screenings and immunizations they need for better health. To take these reminders one step further, we built a preventive care mobile app that provides patients with customized alerts and ease of access to care when they are on the go.

Our integrated, multispecialty group practice enables Permanente physicians to work together as a team to link patients to the right specialists quickly. With a patient still in the exam room, our physicians can pick up the phone to reach a colleague in one of more than a dozen specialties, from allergy to urology, for immediate consultation.

Across specialties, TPMG physicians develop and introduce multifaceted approaches to health care that enhance the physician-patient relationship. Our Preventing Heart Attacks and Strokes Everyday (PHASE) program, for patients who are at high risk of heart attacks and strokes, and our state-of-the-art Prevention Reminder, Outreach Manager and Population Tracker (PROMPT) system, which automates multiple aspects of care such as reminders for tests that are due, are excellent examples of technology and teamwork in action. With integrated population-based programs and technologies like these, our patients receive continual medical care that is not limited to visits to the doctor's office.

With the right information and professional support at their fingertips, TPMG physicians deliver outstanding, personalized care that patients can count on. We believe there's no better way to practice medicine. 0

•

Every Patient Is a VIP

Dilbert creator Scott Adams may be a famous cartoonist, but his celebrity status isn't the reason for his hassle-free access to his personal TPMG physician and multiple online services. We offer the star treatment to every patient, every time.

My health care process looks like this...

- 1. Observe symptoms.
- 2. Search Internet for diagnosis and treatment.
- 3. If I'm not confident in what I find on the Internet, I email my doctor in the Kaiser Permanente system to describe my symptoms. Kaiser encourages email.

- 4. My doctor often replies in an hour with a prescription that has already been sent to my nearest pharmacy, some selfcare instructions, or a request to come in for tests.
- If I need to book an appointment, Kaiser's Website does an automated interview to advise me whether I should treat the problem myself or schedule a doctor.

—From "Knowledge is Health," April 1, 2013. Written by Scott Adams, creator of the syndicated Dilbert cartoon which is distributed by Universal Uclick.

SPOTLIGHT ON

John Chuck, MD FAMILY MEDICINE

John Chuck, MD, attributes his reputation as an exceptional mentor and communicator to the power of osmosis and learning. Energized by all of the people who work at Kaiser Permanente, Dr. Chuck radiates a passion for teamwork and collegiality, which has roots in his medical school and residency rotations. "The more I went through training, the more I realized I wanted to work as part of a team more than in isolation. I've often told physicians we recruit that if you join The Permanente Medical Group, it'll be like a lifelong residency in which you'll never stop learning new things," he said.

In addition to his busy primary care practice, Dr. Chuck contributes

extensively as a teacher. After serving as chief of Staff Education, he developed the award-winning New Physician Mentoring and Orientation Program. Inspired by his own mentors early in his career, Dr. Chuck believed it was simply too risky to leave great mentoring to chance. The program he created pairs each new primary care physician with a tenured physician and includes a 2-year series of lectures.

For the lecture series, Permanente specialists teach new colleagues in Adult Medicine how to maximize the impact of our integrated care model. "New physicians need to understand the powerful tools we have to support our patients and

Board Certified in Family Medicine

Chairperson of the Physician Health and Wellness Leaders Group Chief of Physician Health and Wellness Chief of Health Promotion and Information Technology Innovation

Past Leadership	Chief of Staff Education
	Chief of Professional Affairs
Awards	Sidney Garfield Exceptional Contribution Award, 2004
Medical School	David Geffen School of Medicine at University of California, Los Angeles
Residency	University of California, Davis Medical Center
Joined TPMG	1989

each other," Dr. Chuck explained. "They often can't believe that as primary care physicians in TPMG, we can confer with specialists in person, by phone, by video, or via eConsult software that integrates with patients' electronic health



records—a system unparalleled in medicine today."

As the chief of Health Promotion and IT Innovation. Dr. Chuck understands that technology works best when it personalizes the care we provide our patients and enhances their relationship with their physician. He oversees a variety of projects, such as TPMG physician home pages and his medical center website, as well as patient education videos and podcasts.

Dr. Chuck also serves as the "More than any other medical group chairperson of the Physician Health in America, TPMG is committed to and Wellness Leaders Group in promoting physician wellness as a Northern California, where he leads strategic priority alongside service, a host of programs and services that access, quality and affordability," support professional development Dr. Chuck said. "As physicians, we and foster personal resilience and can appreciate the importance of camaraderie. Wellness resources health and well-being." In response, range from physical fitness to thousands of Permanente physicians professional fulfillment, healthy attended his lectures. eating, healthy communities, Dr. Chuck also feels a deep sense of prevention, practice management, and even collegiality. "Physicians responsibility to the uninsured. In 1999, he founded an all-volunteer who know one another personally nonprofit organization called are much more likely to partner well Serotonin Surge Charities, which on behalf of the patient. Collegiality is a bridge to more effective funds safety net medical care collaboration between professional organizations and related causes. colleagues to get things done for Since its inception, Serotonin patients," he said. Surge has raised nearly \$3 million to improve medical care in In 2012, Dr. Chuck toured each of underserved communities. Dr. the 21 medical centers in Northern Chuck credits much of the California and delivered a lecture success to a partnership with titled "G.E.A.R. Up for Wellness," Kaiser Permanente's Community

which focuses on gratitude, exercise, adaptability and relationships. He shared tips on investing in meaningful relationships; the importance of being mindful and present; the value of learning from others and adopting best practices; and the benefits of taking pleasure in exercise. Dr. Chuck explained that by investing in their own wellness, physicians will feel more engaged in the joy of practicing medicine and ultimately deliver better care to their patients.

We can confer with specialists in by video, or via eConsult software that integrates with patients' electronic health records—a system unparalleled in medicine today.

Benefit program and the support and volunteerism of his TPMG colleagues.

Regardless of the task or the audience, Dr. Chuck applies his talents for the benefit of others. "In TPMG, I am able to impact the lives of physicians in ways that I would never have the opportunity to do elsewhere in medicine. It has been a great joy for me to watch many of the physicians whom I hired and helped mentor become great clinicians and leaders in our group."



Enhancing the Physician-Patient Relationship Through Technology

Implementing the world's largest nongovernmental electronic health record (EHR) system across Kaiser Permanenete is a remarkable achievement. Equally impressive is how The Permanente Medical Group (TPMG) uses this robust technology to enhance the physician-patient relationship.

Called KP HealthConnect, our EHR connects TPMG's 8,000 physicians across 21 hospitals and 73 medical offices, giving them access to vast amounts of clinical information 24/7. It also strengthens the personal relationships between physicians and patients. Much more than an electronic version of a paper chart, KP HealthConnect is the central nervous system for TPMG's online patient portal and our clinical call center. In addition, it supports our multispecialty consultation system, telephone appointments and video visits.

Using this information, we give patients web connectivity through our My Doctor Online portal. "My patients love that they can send me a secure, confidential email from their phone while they're in their pajamas and the kids are

asleep," relates Patricia Conolly, MD, associate executive director of TPMG. Like all of our physicians, Dr. Conolly has a personal web page that her patients access not only to send secure messages but also to view test results, refill prescriptions and explore interactive educational materials.

TPMG's Appointment and Advice Call Center is another source of round-the-clock connectivity for our patients, who use it nearly 13 million times a year to speak directly with someone about their health care needs. Thanks to our integrated system, the telephone staff and registered nurses at our call center have access to the patient's EHR, so they can offer personalized information and advice based on protocols developed by our physicians.

Call center staff can schedule a same-day telephone appointment with the patient's personal physician or, if it's after hours, with a TPMG physician who can access the complete EHR and add updated medical information. No wonder Philip Eulie, MD, chief of Internal Medicine for the Department

of Veterans Affairs in Northern California, called it "the best clinical call center in the country."

Our integrated EHR has fueled numerous innovations across our multispecialty medical group, including eConsult, an electronic system that connects patients to the right specialist, at the right time, in the right way—90,000 times a week. The system guides the referring physician to the most appropriate consulting specialist. It also can facilitate a real-time telephone conversation between the referring and consulting physicians—with both viewing the patient's EHR while the patient is in the exam room. The physician consulting by telephone can even speak directly with the patient-offering advice that may eliminate the need for an additional appointment or perhaps providing a same-day visit.

KP HealthConnect helps keep the lines of communication open between TPMG physicians and their patients, building trust and strong long-term relationships.

Empowering Our Patients to Stay Healthy and Live Longer

At The Permanente Medical Group (TPMG), prevention is not just in our bones, it is part of our DNA—a gene that gets expressed in every feature of our integrated system. Since 1948, our practice has been in the service of what TPMG founder Sidney Garfield, MD, referred to as a health plan, not a sick plan.

Our long history of preventive medicine has many benefits:

» Screening and lifestyle changes reduce the incidence of cancer and heart disease.

- » Evidence-based clinical practice quidelines reduce post-operative complications.
- Osteoporosis management and falls prevention programs lead to fewer fractures for our seniors.
- » Educational programs in women's health reduce the number of unwanted pregnancies.

As an integrated, multispecialty medical group armed with comprehensive electronic health records, we seize every interaction

the patient has with us-in person, on the phone, or via secure email as an opportunity for prevention. TPMG physicians are prompted at every point of care to review the patient's prevention plan, so that, for example, a woman being seen in the Allergy department can be reminded that she is due for her breast cancer screening. And before she leaves our medical center, she can schedule an appointment for her mammogram-or even have it done.

We check our patients' exercise. weight and smoking status as vital

National Average

Northern California

signs because, just like blood pressure, they are important indicators of a patient's overall health and can be addressed through lifestyle changes. Even when our patients are too busy to contact us, we reach out to them with personalized mail, phone and electronic reminders of their need for preventive health screenings and immunizations.

Our relentless focus on prevention has been a landmark success. Our breast cancer screening rates are ranked third in the nation by the National Committee for Quality Assurance (NCQA); for colorectal cancer screening rates, we're ranked fourth. Less than 1% of our patients treated by TPMG physicians develop serious pressure ulcers during their hospital stays—in contrast to the 7% of patients who develop them in other care sites across the country. And we have reduced ethnic disparities for breast and cervical cancer screening rates to less than 2% across all populations, and eliminated differences entirely for HIV mortality rates.

The Federal Affordable Care Act establishes preventive health services as a cornerstone of American medicine. In TPMG, it is already solidly built into our foundation.

Colorectal Cancer Screening

Breast Cancer Screening Women ages 40–69

Cervical Cancer Screening Women ages 21–64

National Average

86% Kaiser Permanente Northern California

KP Preventive Care App

Many of our patients rely on smartphones and tablets to manage their busy lives, so we designed a secure mobile app to help them stay on top of their health. The KP Preventive Care App interacts with our electronic health record system and delivers personalized alerts on the go when patients and their family members are due for screenings, tests and immunizations. To help them remember a scheduled doctor visit, the app displays detailed appointment reminders, with the optio

	• •
🚧 Kaiser Permanente.	িছু_∦ 📄 12:00 Sign Out
Preventive Care	Personal Doctors
Email Your Doctor	
B Timely Health Tips	
Locate a Facility	
📞 Contact	
🖏 Settings	
L	
↓ □	

to cancel or reschedule the appointment with a touch. Patients can view maps, directions, hours and phone numbers for our medical centers and offices, and get seasonal health tips from TPMG physicians—all in one app.

Preventive care	Appointment details
HOME PREVENTION APPTS DOCTO	PREVENTION APPTS DOCTORS
Theresa (You) MRN10000001	This is an office visit appointment for
Oblesterol Screen Due: September 26, 2013 Knowing your cholesterol level can help you better under Cervical Screen Due: September 26, 2013 Also known as a Pap smear, this test	Thursday, June 06 at 11:06 AM Lourdes Jimenez, MD Delta Fair Medical Offices Adult Medicine
View All Complete list including up-to-date preventive services prompts for you	3400 Delta Fair Blvd Antioch, CA 94509 Additional Info: MEDICINE DEPT. 2ND FLOOR
Alex MRN10546056 Flu Shot Up to Date This vaccine protects you against the seasonal flu.	Reschedule Share Cancel
This vaccine prove View All Complete list including up-to-date preventive services prompts for you	Pittsburg Lake Wilburk Age



Helping Patients at Risk Stay on Track

For patients who are at risk for a heart attack or stroke, prevention is about taking the appropriate medications, controlling blood pressure and "bad" cholesterol, and maintaining a healthy lifestyle. It's deceptively simple, but for our approximately 320,000 patients in Northern California who are at risk, we've got it covered.

Preventing Heart Attacks and Strokes Everyday (PHASE), is a one-of-a-kind TPMG program that focuses specifically on patients who are at greatest risk of having a heart attack or stroke—those with coronary artery disease, diabetes, chronic kidney disease or other risk-equivalent conditions.

Using teamwork and state-of-theart technology, the PHASE program enables physicians to identify and deliver consistent, appropriate care to help these patients stay on track. And our success shows: We rank in the top 10 in the nation in blood pressure control for patients with cardiovascular disease, and in lipid screening and LDL control for patients with cardiovascular disease and/or diabetes.

PHASE patients receive proactive care from a multidisciplinary team

that includes primary care physicians, cardiologists, endocrinologists, other specialty physicians, health educators, registered nurses, pharmacists and population management assistants. The team works together to ensure that each patient receives appropriate, evidence-based cardiovascular interventions in the areas of:

- » Lifestyle behaviors: healthy diet, exercise, weight management and smoking cessation
- Preventive medications: aspirin, statin, ACE inhibitor and beta blocker
- » Cardiovascular control goals: blood pressure, lipids and glucose

Effectively tracking and managing these multiple screening and treatment strategies for so many patients would likely be impossible without employing sophisticated database and population-management tools. These advanced IT systems help physicians and staff ensure our patients are reminded to do their preventive screenings, are seen by our clinicians for needed care and are provided with online resources to help them reach their PHASE goals.

TPMG's newest tool, Prevention Reminder, Outreach Manager and Population Tracker (PROMPT), goes even further to coordinate this care. Visible in KP HealthConnect, PROMPT tracks, reminds and reaches out to members who are due for A1c and LDL screenings and retinopathy testing via letters, email messages, automated calls and mobile push notifications. It also facilitates timely interventions for patients who are not within the target range for screenings and tests, and it expedites physicianauthorized lab orders.

"PROMPT is designed to handle the algorithmic component of care long before a patient arrives at the office, so that physicians can concentrate on what brought the patient into the office in the first place," said Patricia Conolly, MD, TPMG associate executive director. "This preserves the doctor-patient relationship and allows physicians to ensure their care is compassionate and personalized."

With a coordinated team approach and sophisticated population management tools, TPMG physicians not only are helping patients reduce or eliminate their risk of a cardiovascular event, they're also transforming patient care.



Physician Leadership: An Unparalleled Competitive Advantage

Capable, experienced and dedicated physician leadership has been at the heart of our success. And with the rapid pace of change that is occurring across all of health care, we believe that skilled physician leadership will be even more important in the future. The investments we have made in selecting and developing our physician leaders provide us with a powerful and distinct competitive advantage during this time of dramatic change.

In TPMG, physician leaders have broad accountability, including overseeing the totality of the medical care we provide to 3.4 million patients, driving innovation and continuous improvement, and implementing advances in medical practice. They use their leadership expertise to motivate, align and coordinate the efforts of thousands of clinicians and staff in more than 70 specialties and sub-specialties. To succeed at this complex task, they must effectively engage others in our vision for the future and

inspire them to work together to translate our strategy into action.

Over the past 65 years, we have demonstrated that innovation and quality improvement in health care happen most rapidly when physicians are led by other physicians. Our success as a leader in clinical quality and service today would not have been possible without strong physician leadership. We and our patients owe a debt of gratitude to these dedicated physicians.



Residents do rotations in our medical centers each year







Physicians on the faculty of leading academic institutions

Number of specialties/ sub-specialties





Clinician collaborators conducting studies through our Division of Research

Developing the Leaders of Today and Tomorrow: TPMG Leadership Institute

As a self-governed, physician-led group of 8,000 physicians delivering care in 21 medical centers and 51 medical facilities, The Permanente Medical Group (TPMG) depends on skilled physician leaders who are both respected as excellent clinicians and capable of leading change, recruiting outstanding colleagues, deploying the latest technologies, achieving nation-leading clinical quality, and overseeing the medical care we provide to patients in both the ambulatory and hospital settings.

Today, approximately 2,000 TPMG physicians serve in official leadership roles. And, unlike many organizations in which senior leaders spend all their time on administrative duties, virtually all TPMG physician leaders continue to see and care for patients.

While many medical groups rely on outside vendors and off-theshelf educational curricula for leadership training, we customize the educational programs and

training we provide through our own TPMG Leadership Institute. This world-class institute offers programs on strategy, leadership communication, organizational culture, leading change, coaching, team building, performance feedback, and negotiation. Each program is designed to meet the unique requirements of a diverse physician group, including young emerging leaders, newly appointed chiefs and senior executives. In addition, a differentiating feature of

Leadership Training Delivers Award-Winning Delirium Protocol

A member of the Emerging Leaders class of 2013, Clay Angel, MD, worked with a multi-disciplinary team to develop a one-of-a-kind delirium management program that he and his team implemented at the San Rafael Medical Center, where he practices as a hospitalbased specialist. The program defines a process for monitoring patients for common causes of delirium, reducing environmental triggers and using evidence-based therapeutic strategies to prevent

hospital-induced delirium. San Rafael's newly created delirium response team helped the medical center implement the program and instituted a simplified referral system for patients. Since the implementation, the average length of hospital stay for patients with delirium has decreased bv 23%.

"What was most attractive to me about participating in the Emerging Leaders program was that it offered something

tangible—they were actually asking us to develop programs that would benefit our respective medical centers and our patients, and they promised to help guide us through the process," said Dr. Angel. "I had several projects in the works before enrolling in the program, but the delirium management program was by far the most complex. It would never have been successful without the tools, education and networking provided by the Emerging Leaders program."

our approach is that every course offered is tailored by our TPMG Leadership Institute staff to ensure that participants can connect course content and frameworks with real-life application. At a TPMG Leadership Institute course, physician leaders learn to apply new concepts and skills to the circumstances in which they lead so that they can immediately use that expertise when they return to their medical centers and clinical departments.

Our TPMG Leadership Institute features faculty from Stanford University's Graduate School of Business; the Haas School of Business at the University of California, Berkeley; and the Kellogg School of Management at Northwestern University; as well as leading experts in specific technical aspects of business and health care. In addition, TPMG's CEO Dr. Robert Pearl teaches many of the courses offered, along with several other members of the TPMG executive team. This powerful combination contributes to our ability to apply theory to the real situations and challenges that our organization faces.

In reviewing the importance of physician leadership development to our success, Dr. Pearl has shared the following with the TPMG Board of Directors: "We need to ensure that we have an exceptional pipeline of physician leaders capable of

leading change in the complex and changing health care environment we face. Through excellence in leadership development, we can not only make a positive difference in the lives of our patients and colleagues, but also define how health care in the 21st century should be delivered."

Over the past decade, thousands of physicians have attended our Leadership Institute offerings, demonstrating a level of commitment to physician leadership development that we believe is essential and likely unsurpassed in health care today.

Emerging Leaders Program

A two-year program focused on building the next generation of physician leaders, Emerging Leaders combines residential inperson seminars with medical center peer group sessions, interfacility pods, individual projects and personal development plans. Participants are personally selected by the executive leadership of the medical group.

APP

Class of 2011–13 164

32

Class of 2013–15

190

38



SPOTLIGHT ON

Sharon Levine, MD PEDIATRICS

A highly respected pediatrician and courageous leader, Sharon Levine, MD, has been a crusader for effective, affordable and ethical patient care in The Permanente Medical Group (TPMG) and the general medical community for 36 years.

Dr. Levine by the Numbers

- First woman executive physician leader in TPMG
- 5 Prestigious awards and recognition by external agencies in the last year alone
- State and national 6 governing boards on which she currently sits
- 23 Years as Associate Executive Director Executive Director

36 Years with The Permanente Medical

Group to date

Dr. Levine has shaped pharmacy and health policy, government and community relations, medical ethics, and leadership development. In the process, she has also built a legacy that we are proud to stand behind. Her successes, which range from pioneering our groundbreaking conflict of interest policy to offering health benefits to the domestic partners of Kaiser Permanente physicians and staff, have helped secure our place as a national leader in public policy, health policy and highly ethical patient care.

In 1991, after having served in a number of roles in medical center leadership, Dr. Levine became the first woman to join TPMG's executive team. One of her early initiatives was the Path to Partnership for parttime physicians, which has allowed physicians who work part time, many of whom are women taking care of young children, to be eligible for partnership in TPMG. Dr. Levine also established the Women Physicians in Leadership Group, a mentoring and support forum for women physicians who are either in or aspire to a leadership role. Today within TPMG, women account for nearly half of physicians, and more than one-third are physician leaders.

Dr. Levine co-led the first Diversity Steering Committee in Northern California and was a member of the first National Diversity Council for Kaiser Permanente. She has been a strong advocate for Kaiser Permanente's community benefit programs and for our mission to improve the health of the communities we serve. She has debated on state and federal stages with insurers who were excluding coverage for preexisting conditions, with a focus on pregnancy. Dr. Levine has also taken the lead in building our Permanente physician presence in government relations and public policy at the state, local and national levels. Thanks to her efforts and the work of our Government Affairs team, TPMG is a respected voice on significant health care issues being discussed by elected officials in Sacramento and Washington, D.C.

The conflict of interest policy, which Dr. Levine spearheaded, prohibits TPMG physicians from accepting anything of value from pharmaceutical and equipment companies or medical device manufacturers. "Our patients at Kaiser Permanente never have to question whose interests are being served when a doctor writes a

prescription for a drug or inserts a medical device. We use evidencebased medicine to do what is best for the patient," she said.

In 2010, Dr. Levine was appointed to the 21-member Board of Governors of the new Patient-Centered Outcomes Research Institute (PCORI) in Washington, D.C. Established by the federal government under the Affordable Care Act of 2010, PCORI leads research projects and produces evidence-based information to improve health care delivery and help the public make informed health care decisions. Dr. Levine's outstanding track record as a champion of ethical, evidence-based patient care made her an obvious choice for PCORI's board.

Dr. Levine is a brilliant strategist, dedicated leader, and a mentor and role model for women across health care, both at Kaiser Permanente and in the community at large. Her efforts and accomplishments over the past four decades have made TPMG and the practice of medicine better for millions of patients and physicians.

Board Certified in Pediatrics

Director and Senior Advisor, Public Policy, Pharmacy and **Professional Development** Past Roles Associate Executive Director of The Permanente Medical Group

Physician-in-Charge, Fremont Medical Center, Kaiser Permanente

Chief of Pediatrics, Chief of Quality Assurance and Assistant Chief of Pediatrics

Awards 2012 Woman of the Year by Women Health Care Executives

> 2012 recipient of the Industry Leader award from the Professional BusinessWomen of California

2012 recipient of the Gary F. Krieger Speaker's Recognition Award from the California Medical Association's House of Delegates

2013 recipient of the Women of Influence award from the Silicon Valley Business Journal

2013 recipient of the Robert D. Burnett, MD, Legacy award from the Santa Clara County Medical Association

Board Member Patient-Centered Outcomes Research Institute Medical Board of California: President 2012-2014 Public Health Institute of California

California Hospital Association

California Association of Physician Groups

Insure the Uninsured Project

Tufts University School of Medicine Appointments and Affiliations Georgetown University School of Medicine

> Center for Health Policy/Center for Primary Care and Outcomes Research at Stanford University

Clinical Research National Institute of Child Health and Human Development

Medical School Tufts University School of Medicine

Residency The Boston Floating Hospital, New England Medical Center

Joined TPMG 1977

Academic

Breaking New Ground: Eradicating Conflict of Interest

Just because a drug has the best advertising doesn't mean it's the best drug. It just means the manufacturer has hired the best advertising agency. We have demonstrated that we can, in fact, create an influence-free zone."

> -Sharon Levine, MD, director and senior advisor Public Policy, Pharmacy and Professional Development

Nearly a decade ago, physicians in The Permanente Medical Group (TPMG) adopted a groundbreaking conflict of interest policy that prohibits accepting gifts, gratuities, or reimbursement of any kind from drug, medical device and equipment manufacturers. Today our policy remains one of the most comprehensive and effective of its kind in the United States: It ensures that Permanente physicians make decisions based on the best available evidence and clinical judgment, rather than on inducements from a commercial entity.

Pharmaceutical companies spend between \$12 and \$57 billion each year on promotion. The majority of

this investment is spent on sending drug company representatives to meet with physicians and provide them with drug samples and product information. Representatives of these companies understand that physicians are the best messengers to promote a new drug or device to their peers. But while the return on investment for the manufacturers has been extraordinary over the years, the health and economic value to consumers is questionable.

"Just because a drug has the best advertising doesn't mean it's the best drug. It just means the manufacturer has hired the best advertising agency," said Sharon Levine, MD, associate executive director of TPMG,

who drafted conflict of interest policy in 2004. "We have demonstrated that we can, in fact, create an influencefree zone within a medical group."

Strong physician leadership and a commitment to putting the patient first enabled TPMG physicians to accomplish what other physician organizations and academic medical centers had not. "We used a rigorous approach to address both the actual and the potential for perceived conflict of interest," added Dr. Levine. "That's a pretty high standard." Our conflict of interest policy prohibits physicians from taking any kind of incentive from a drug company, not even a pen or a coffee mug.

"In adopting a conflict of Interest policy, our physicians sent a message that preserving the sanctity of the physician-patient relationship and maintaining the trust of our patients are paramount," explained Robert Pearl, MD, executive director and CEO of the medical group.

Now, a decade later, others are taking steps in the same direction. The Physician Payment Sunshine Act, passed by Congress as part of the Affordable Care Act and in effect as of April 2013, requires drug and device manufacturers to disclose to the Centers for Medicare and Medicaid Services (CMS) any gifts, gratuities, or payments to physicians greater than \$10. CMS posts the

THE WALL STREET JOURNAL

"The Physician Payment Sunshine Act currently applies only to companies doing business with doctors. The act would shine even brighter if it were supplemented with a requirement that physicians provide full disclosure regarding potential conflicts of interest to any patient they treat. Honesty is essential to the doctor-patient relationship and to the quality of care."

details of these transactions on a public website.

However, in requiring only that the manufacturers disclose these payments, the new law is not nearly as rigorous as TPMG's policy, which prohibits these problematic arrangements in the first place. In an opinion piece published April 24, 2013, in the Wall Street Journal, Dr. Pearl argues that the Physician Payment Sunshine Act will help shed much needed light on the magnitude of the problem, but that unless physicians themselves stop participating in these relationships, patients will continue to be at risk.

-Robert Pearl, MD, executive director and CEO, The Permanente Medical Group Wall Street Journal, April 24, 2013





It's no secret among health care professionals that The Permanente Medical Group (TPMG) is a top choice for graduating residents and fellows in the United States, or that talented, seasoned physicians are leaving community practices and academic settings to join our integrated multispecialty medical group. Practicing in TPMG affords physicians advantages unmatched in other practice settings, including an organizational commitment to innovation, a wealth of research opportunities, clinical autonomy and industry-leading information technology. Our 8,000 physicians thrive in a performance-driven culture, where we celebrate great ideas and

Approximately a quarter of newly share best practices across our vast hired physicians are graduates of network of care. one of our 13 accredited, nationally recognized Kaiser Permanente When it comes to clinical training, residency programs, in specialties interpersonal excellence and such as internal medicine, pediatrics, diversity, Permanente physicians obstetrics and gynecology, and head stand apart. Our physicians hail and neck surgery. These programs from top medical schools, residency provide world-class academic programs and fellowships, with 22% training and expose residents to receiving their training at Harvard population management, evidence-University, Stanford University, or based medicine and team-based University of California, San Francisco. care—cornerstones of Permanente Because physicians who join TPMG medicine. We offer residents are attracted to our collaborative international opportunities through practice environment, they excel at TPMG's Global Health Program, communicating with patients and

Attracting the Best and Brightest in Medicine

colleagues. Permanente physicians also reflect the diversity of our patient population: 53% of our physicians are ethnically diverse, and more than half speak a language in addition to English, including Spanish, Mandarin and Hindi.

Although we recruit hundreds of new physicians each year, we never compromise our standards. All candidates undergo a rigorous interview process to ensure they are not only clinically proficient, but also a great fit for the medical group and our patients. With such high standards, only 1 in 10 physicians who applies is hired in TPMG.

which broadens their clinical skill sets and develops cultural competencies.

We also train residents from outside programs, including Stanford University; University of California, San Francisco; and University of California, Davis—for a total of 1,500 individual residents rotating through our medical centers each year. Many of the residents from these programs who choose a career with TPMG say that their residency rotation through Kaiser Permanente sold them on the benefits of our unique brand of care delivery. Additional reasons physicians give for joining TPMG include our seamless integration of electronic health records, the benefits of practicing in a multispecialty group, our internationally renowned Division of Research, and a practice environment that enables them to be the best.

The Permanente Medical Group attracts physicians who are excellent communicators, who are serviceoriented and who embrace our commitment to superior clinical quality. Permanente physicians are not just the best and the brightest in the United States, they're also personally committed to exceptional care for our patients.

SPOTLIGHT ON

Vivian Reyes, MD EMERGENCY MEDICINE

Vivian Reves, MD, understands the potential for knowledge to radiate far from its source, especially when that knowledge has the power to save lives. In less than a decade, Dr. Reyes has had a remarkable impact both on her colleagues in The Permanente Medical Group (TPMG) and within the community teaching disaster preparedness and practicing emergency medicine at Kaiser Permanente and around the world.

As an emergency physician, Dr. Reyes takes care of patients with chest and abdominal pain, broken bones, infections, and all manner of cuts and contusions. "I love that I can respond to emergency situations and treat patients as soon as accidents happen," she said. But it was while volunteering at a refugee camp in Kenya during her first year as a Permanente physician that Dr. Reyes discovered her appreciation for disaster medicine in particular. Since then, Dr. Reyes has traveled

to Nigeria to help manage a cholera outbreak, to Kenya to respond to post-election violence, to Cambodia to teach disaster preparedness in the wake of a fatal festival stampede, and to Haiti in response to the massive earthquake in 2010. "The Permanente Medical Group encourages physicians to find their niche and chase their passion, which can bring about some amazing, unexpected returns," she said.

In Haiti, Dr. Reyes was one of several physicians sent by TPMG to set up a tent clinic and provide medical care for earthquake victims. With full support from Permanente executive leadership and her colleagues, she spent six weeks in Port-au-Prince and Carrefour.

"In the field, we see a distinctive pattern emerge following a disaster," she said. "At first, the patients who come to the clinic are physically injured and need immediate medical attention. But a week or two later,

Board Certified in Emergency Medicine

Awards	TPMG Teaching Award for Excellence, Continuing Medical Education, 2012
Medical School	Albany Medical College
Residency	Highland General Hospital
Joined TPMG	2004

The Permanente Medical Group encourages physicians to find their niche and chase their passion, which can bring about some amazing, unexpected returns."

the patient population suddenly shifts to sufferers of chronic conditions—people who need medication or dialysis. And then, as the weeks pass, you start to see patients with psychological trauma. It's important to be prepared—with medical staff and with supplies—for each step of this process.'

Upon Dr. Reyes' return to the United States, she did grand rounds at a number of our Kaiser Permanente medical centers to

share important lessons with her peers and showcase potential medical center applications.

Encouraged by TPMG leaders to pursue her passion further, Dr. Reyes also teaches emergency management, which involves preparedness and actions to reduce the impact of disasters. "I see a huge need for this type of training," she said. "Emergency management is not commonly taught in medical schools, and many of us in emergency medicine are not prepared to respond to a major disaster." To help fill that critical gap, Dr. Reyes has conducted emergency management lectures for Permanente colleagues across Northern California, and her expertise has also led to requests to speak in the community. Her awardwinning efforts have helped expand the number of medical professionals and local residents who are able to assist in disaster preparedness, response and recovery.

Dr. Reyes' focus on emergency management has generated additional benefits. She had the opportunity to work with Hernando Garzon, MD, a fellow Permanente emergency physician and director of TPMG's Global Health Program, to construct a trauma clinic in Nairobi, Kenya, in 2008. The pair drew on that experience to build the infrastructure to support

Kaiser Permanente's role as the Official Medical Services and Health Care Partner for the 2013 America's Cup in San Francisco. "I would never have imagined I'd get the opportunity to co-lead a project like this, nor could I have anticipated how our experience in the field would come full circle. If the medical group hadn't been so supportive of us doing international events, our preparation for America's Cup wouldn't be as robust," she said.

At the end of the day, Dr. Reyes is most thrilled that her work in TPMG can have an impact reaching far beyond the tips of her fingers. "The content of what I teach can be lifesaving," she said. "But more importantly, when others spread what they've learned, the effect of that knowledge grows exponentially."



Dr. Reyes measures a boy's arm for malnutrition in Haiti.

Physician Leadership and Governance: Bringing It All Together

Over the past 65 years, the leaders of The Permanente Medical Group (TPMG) have demonstrated extraordinary vision and courage. Our medical group benefits from the clear strategic direction, distinctive capabilities, sound investments and effective oversight these leaders provided. Their work has built the foundation that enables thousands of TPMG physicians to provide superior quality medical care to patients every day.

We benefit today from the clarity of Dr. Garfield's vision of TPMG as an independent multispecialty group practice that is financed though a system of prepayment and committed to maximizing the health of all. He recognized the need for physicians to possess the leadership expertise required for TPMG to be an equal partner with our not-forprofit health plan in co-managing Kaiser Permanente. Today his vision is manifested through our national recognition as a leader in disease prevention, health promotion and excellence in clinical care.

We benefit from the efforts of Morris Collen, MD, who established the TPMG Division of Research in 1961. Thanks to his efforts, we are

positioned today at the frontier of medical research, with hundreds of clinicians working side by side with investigators to study and evaluate innovative approaches for the prevention, diagnosis and treatment of disease.

We benefit from the decision made in the early 1960s to establish Kaiser Permanente residency programs with our own teaching faculty. At present, 1,500 residents rotate through our medical centers each year, many of whom will join TPMG when their training is complete.

We benefit from the insight of leaders who, in the 1970s, when information technology was in its infancy, understood the potential of computing power to transform care delivery. Decades before others, they introduced medical informatics and computer science into TPMG, giving us a considerable head start on the digital revolution. Today, our physicians provide medical care using a fully integrated inpatient and outpatient electronic health record system. In addition, through the efforts of our physician-led TPMG Technology Group, we are at the cutting edge of developing

and applying mobile and video technology in clinical care.

We benefit from the courage of our leaders in the 1980s and 1990s, who in the face of great uncertainty about the future decided to expand to new geographic areas and construct new facilities. This commitment to growth has enabled us to provide outstanding medical care in new communities and to care for an increasingly diverse patient population.

And over the past decade, we have benefited from leaders who are committed to "always doing the right thing," including holding ourselves to a rigorous standard to avoid conflicts of interest, sending volunteers around the globe to care for victims of disasters, and agreeing to provide leadership for the Mid-Atlantic Permanente Medical Group to lead their turnaround effort and significantly improve their performance.

Through our TPMG Board of Directors, executive staff and chiefs, we continue to build on the legacies of our past. Our culture of excellence has propelled TPMG to what we are today—a model for the rest of the nation.

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North Bay

- 1 Santa Rosa Medical Center
- 2 Rohnert Park Medical Offices
- **3** Petaluma Medical Offices
- **4** Novato Medical Offices
- **5** San Rafael Medical Center
- 6 Napa Medical Offices
- 7 Vallejo Medical Center
- 8 Fairfield Medical Offices
- 9 Vacaville Medical Center

San Francisco/ Peninsula

- 1 San Francisco Medical Center
- 2 South San Francisco Medical Center
- **3** Daly City Medical Offices
- **4** San Bruno Medical Offices
- **5** San Mateo Medical Offices
- 6 Redwood City Medical Center

South Bay

- 1 Santa Clara Medical Center
- 2 Mountain View Medical Offices
- **3** Campbell Medical Offices
- 4 Milpitas Medical Offices
- **5** San Jose Medical Center
- **6** Gilroy Medical Offices

East Bay

- **1** Pinole Medical Offices
- 2 Richmond Medical Center
- **3** Oakland Medical Center
- **4** Alameda Medical Offices
- **5** Hayward Medical Center
- **6** Union City Medical Offices
- 7 Fremont Medical Center
- 8 Martinez Medical Offices
- 9 Walnut Creek Medical Center
- **10** Walnut Creek at Park Shadelands Medical Offices
- **11** San Ramon Medical Offices
- **12** Pleasanton Medical Offices
- **13** Livermore Medical Offices
- **14** Antioch Medical Center
- **15** Antioch at Delta Fair Medical Offices

Central Valley

- **1** Stockton Medical Offices
- 2 Manteca Medical Center
- **3** Modesto Medical Center
- 4 Tracy Medical Offices
- **5** Oakhurst Medical Offices
- 6 Fresno Medical Center
- 7 Clovis Medical Offices
- 8 Selma Medical Offices

Sacramento Valley

- 1 Sacramento Medical Center
- 2 Sacramento at Point West Medical Offices
- 3 Rancho Cordova Medical Offices
- **4** Lincoln Medical Offices
- 5 Roseville Medical Cente
- **6** Folsom Medical Offices
- 7 Davis Medical Offices
- 8 South Sacramento Medical Center
- 9 Elk Grove at Big Horr Medical Offices
- **10** Elk Grove at Promenade Medical Offices

San Francisco/ Peninsula



Sources

The Permanente Experience: Different and Better

- 1. 3.4 million ... patients: Kaiser Permanente News Center. Fast Facts about Kaiser Permanente. http://xnet.kp.org/newscenter/ aboutkp/fastfacts.html. December 31, 2013. Accessed August 15, 2013.
- 2. TPMG received the 2013 Acclaim Award: Email from Danielle Casanova, American Medical Group Association, August 15, 2013.
- 3. NCQA ranked KP Northern California: NCQA's Private Health Insurance Plan Rankings 2012-2013 and NCQA's Medicare Health Insurance Plan Rankings 2012-2013.
- 4. 4 Stars: State of California, Office of the Patient Advocate. HMO Quality Ratings Summary 2013 Edition. http://reportcard. opa.ca.gov/rc2013/hmorating.aspx. Accessed August 21, 2013. Previous report cards: http://reportcard.opa.ca.gov/rc2013/ prioryears.aspx. Accessed August 21, 2013.
- 5. The Hewitt Value Health Initiative: Letter from Senior Vice President Kent E. Levihn. FSA, MAAA, and Actuarial Practice Leader Emmanuel S. Fong, ASA, MAAA, Aon Hewitt, April 3, 2013.
- 6. One of only 11 healthcare organizations: Centers for Medicare & Medicaid Services. 2013 Plan Ratings Data. vwPlanRating_ SummaryScores.cvs. Contract ID: H0524 http://www.medicare.gov/download/ downloaddb.asp Accessed September 6, 2013.

Setting the Bar for Sepsis Care

- 1. Septic shock—the number-1 cause of death: Petra Rattue. "Sepsis Common in USA Hospitals, Unawareness High." Medical News Today. April 16, 2012. http://www. medicalnewstoday.com/articles/244156. php. Accessed September 3, 2013.
- 2. Mortality rate of 17.6%: KP Department of Quality Report. Robert Thomas, Lead Analyst. Data from Clarity (the database underlying KP HealthConnect).

- 3. Surviving Sepsis Campaign's international rate: M.M. Levy. "The Surviving Sepsis Campaign: Results of an International Guideline-based Performance Improvement Program Targeting Severe Sepsis." Critical Care Medicine, 2012, 38(2):367-74.
- 4. 750,000 people developing sepsis each year: National Institute of General Medical Sciences. "Sepsis Fact Sheet." http://www. nigms.nih.gov/Education/factsheet_sepsis. html. Accessed August 16, 2013.
- 5. New York Governor Andrew Cuomo cited Kaiser Permanente California's innovative sepsis program: J. Dwyer. "Cuomo Plans New Rules in Fight Against Sepsis." New York Times. January 7, 2013. http://www. nytimes.com/2013/01/08/nyregion/cuomoto-order-hospitals-to-use-new-sepsisprocedures.html. Accessed August, 16, 2013
- Chip and Dan Heath wrote about Kaiser Permanente Northern California: Chip Heath and Dan Heath. Decisive: How to Make Better Choices in Life and Work. New York: Crown Business, 2013; pp. 72-73.
- 7. Our multispecialty approach: Critical Care 2012, 16(Suppl 3):P12 doi:10.1186/ cc11699.14 November 2012. Poster presentation. Kaiser Permanente Northern California sepsis mortality reduction initiative. B. Crawford, M. Skeath and A. Whippy. http://ccforum.com/content/16/S3/ P12. Accessed July 10, 2013.
- 8. Reduced the average length of stay: "Leading Quality" presentation to the TPMG Board of Directors. Alan Whippy, MD, TPMG medical director of quality and safety. April 2013.

Spotlight on Nicole Moayeri, MD

1. Specialist physicians by the numbers: "Centers of Excellence Overview." TPMG paper presentation. Philip Madvig, MD, TPMG associate executive director. August 20, 2013.

Taking the Lead in Cardiovascular Care

- 2. Heart disease no longer the leading cause of death: S. Sidney, M. Jaffe, M. Nguyen-Hyunh, L.H. Kushi, J.D. Young, M. Sorel, J.V. Selby, A.S. Go. "Closing the Gap Between Cardiovascular and Cancer Mortality in an Integrated Health Care Delivery System, 2000-2008: The Kaiser Permanente Experience." Presented to the American Heart Association, Orlando, Florida, November 2011. http://www. abstractsonline.com/Plan/ViewAbstract. aspx?sKey=4d7e2eb8-d1df-453b-a0f2-6fa5d1ff8846&cKey=fbbc4576-39e1-48c3 8f85-5c5873ccfd35&mKey=%7bFA42FAFA-40B7-42EE-A779-1A1AF9DA6ECE%7d#. Accessed August 28, 2013.
- 3. The highest rating possible for cardiovascular care: State of California Office of the Patient Advocate. Heart Care Summary, 2013 edition. http:// reportcard.opa.ca.gov/rc/hmotopic. aspx?Category=HMOHEDIS&Topic= HeartCare. Accessed August 26, 2013.
- 4. Heart attack rates ... declined 24%, and the most deadly type ... plunged 62%: Robert W. Yeh, Stephen Sidney, Malini Chandra, Michael Sorel, Joseph V. Selby, Alan S. Go. "Population Trends in the Incidence and Outcomes of Acute Myocardial Infarction." New England Journal of Medicine, 2010, 362:2155-65.
- 5. Blood pressure control in 85%: Thomas Frieden. "CDC Vital Signs: High Blood Pressure Is Out of Control for Too Many Americans." Press briefing transcript. September, 4, 2012. http://www.cdc.gov/ media/releases/2012/t0904_hypertension. html
- 6. National average of 54%: Thomas Frieden. See note 4.
- 7. 9.2% of our adult patients: Calculated from KP HealthConnect and the underlying data stored in Clarity. Data Analyst, Emory Torres, Quality and Operations Support.

- 8. State average is 12%: California Department of Public Health, California Adult Smoking Rate Reaches Historic Low. July 13, 2011. http://www.cdph.ca.gov/Pages/NR11-031. aspx. Accessed August 22, 2013.
- 9. National rate of 19%: Centers for Disease Control and Prevention. Smoking & Tobacco Use. Updated June 5, 2013. http:// www.cdc.gov/tobacco/data_statistics/ fact_sheets/fast_facts/. Accessed August 22, 2013.

A Model for HIV Care

- 1. 72% of our patients with HIV: Report on HIV Epidemiology, Care Services, Outcomes Report, figure 43a.
- and Quality Care. Northern California HIV 8. National average of 2%: HIV Surveillance Registry. KP Division of Research 2012 Report. Supplemental Report. Volume 23. Diagnoses of HIV Infection in the United 2. Less than 50% nationally: HIV Surveillance States and Dependent Areas, 2011. Table 11a. http://www.cdc.gov/hiv/surveillance/ Report. Supplemental Report. Volume 16, resources/reports/2011report/pdf/2011 Number 1. Reported CD4+ T-Lymphocyte Results for Adults and Adolescents with HIV HIV_Surveillance_Report_vol_23.pdf and Centers for Disease Control and Prevention Infection - 37 States 2005-2007, Centers "HIV in the United States: At a Glance" for Disease Control, Division of HIV/AIDS Prevention. Table 1a. Calculated by dividing (http://www.cdc.gov/hiv/statistics/basics/ ataglance.html). Accessed August 20, 2013. Stage 1 and Stage 2 (CD4>200), by all Divided deaths of persons diagnosed with people with a recorded CD4 level (Stages HIV (19,343) by the estimated number of 1, 2 and 3) 28,658/67,786 = 42% (rounded people in the US with a diagnosis of HIV to less than 50%). http://www.cdc.gov/hiv/ (940,000) = 2.056%. The number of people pdf/statistics_2005_2008_HIV_Surveillance_ in the U.S. with a diagnosis of HIV was Report_vol_16_no1.pdf. Accessed August derived from 1,148,200 persons living with 20, 2013. HIV, minus the 18.1% (207,600) who are 3. 92% of diagnosed patients: Report on HIV unaware of their infection. Epidemiology, Care Services, Outcomes
- and Quality Care. figure 42a. See note 1.
- 4. National average of just 52%: HIV Surveillance Report. Supplemental Report. Volume 16, Number 1. Reported CD4+ T-Lymphocyte Results for Adults and Adolescents with HIV Infection – 37 States 2005-2007. Centers for Disease Control, Division of HIV/AIDS Prevention. Table 5a.
- 5. 97% of our HIV-positive patients: Report on HIV Epidemiology, Care Services, Outcomes and Quality Care. figure 30.1.a. See note 1.

- 6. National average of 76%: CDC Fact Sheet—HIV in the United States: The Stages of Care, June 2013. Calculated by comparing the 33% of HIV+ patients who have been prescribed antiretroviral therapy, which indicates they are in treatment, with the 25% of HIV+ patients who are virally suppressed 25%/32% = 76% http:// www.cdc.gov/nchhstp/newsroom/docs/ HIV-Stages-of-Care-Factsheet-508.pdf. Accessed August 20, 2013.
- 7. Annual death rate of our patients: Report on HIV Epidemiology, Care Services, Outcomes and Quality Care. figure 7. See note 1.

- 9. Miguel Gomez guote: AIDS.gov blog. March 27, 2012. http://blog.aids. gov/2012/03/kaiser-permanente-sharesexpertise-with-other-health-care-providersto-improve-health-equity-for-people-livingwith-hiv.html. Accessed August 20, 2013.
- 10. 1.1 million Americans living with the virus and 56,000 new infections each year: U.S. Department of Health and Human Services. Human Immunodeficiency Virus (HIV) Fact Sheet. www.hhs.gov/opa/reproductive-

health/stis/hiv/index.html. Accessed August 8. 2013.

- 11. Almost 1 in 5 people with HIV: CDC Fact Sheet—HIV in the United States: The Stages of Care. June 2013. See note 6.
- 12. No disparity with respect to clinical outcomes: "Race/Ethnicity and Risk of AIDS and Death Among HIV-infected Patients with Access to Care." Journal of General Internal Medicine, 2009, 24(9):1065–72.

Spotlight on Donald Dyson, MD

- 1. His findings, which were published in the American Journal of Obstetrics and Gynecology: D.C. Dyson, P.D. Miller, M.A. Armstrong. "Management of Prolonged Pregnancy: Induction of Labor Versus Antepartum Fetal Testing." American Journal of Obstetrics and Gynecology, 1987, 156(4):928-34.
- 2. His study, published in the New England Journal of Medicine: D.C. Dyson, K.H. Danbe, J.A. Bamber, et al. "Monitoring Women at Risk for Preterm Labor." New England Journal of Medicine, 1998, 338:15–19.

Excellence in Perinatal Care: Helping Mothers and Babies at High Risk

- 1. Preterm delivery rate: Email Jenny Ching RN, Service Unit Director, KP Regional Perinatal Service Center. July 15, 2013.
- 2. National average of 11.7%: March of Dimes 2012 Premature Birth Report Card March of Dimes Foundation. http://www. marchofdimes.com/peristats/pdflib/998/ US.pdf. 2012. Accessed August 21, 2013.
- 3. Our rate of early elective deliveries: "Perinatal Monthly Report" from KP HealthConnect data. Email Zahra Jaffer, Director, Quality and Operations Support, August 26, 2013.
- 4. National average is approximately 11%: The Leapfrog Group. "New Data: Early

Continued on next page

Sources Continued

Elective Deliveries Decline at Hospitals as Health Leaders Caution Against Unnecessary Deliveries." Washington, D.C. February 21, 2013. http://www. leapfroggroup.org/policy_leadership/ leapfrog_news/4976192. Accessed August 21, 2013.

Our History Is Integration, Innovation Is Our Future

- 1. President Barack Obama recognized this: Karen Tumulty, "We've Provided More Guidance Than Advertised," Time Magazine, July 29, 2009. http://www.time. com/time/politics/article/0,8599,1913363,00. html#ixzz2YZUnGkbG Accessed August 27, 2013.
- 2. Build a biobank of DNA: KP Division of Research. The Research Program on Genes, Environment, and Health. http://www.dor.kaiser.org/ external/DORExternal/rpgeh/index. aspx?id=1065&terms=500%2c000+biobank. Accessed August 28, 2013.

Celebrating 65 Years: Milestones in TPMG History

- 1. Tom Debley and Jon Stewart. The Story of Dr. Sidney R. Garfield: The Visionary Who Turned Sick Care into Health Care. Oakland, CA: The Permanente Press, 2009.
- 2. John G. Smiley, MD. Can Physicians Manage the Quality and Cost of Health Care? The Story of The Permanente Medical Group. New York: McGraw-Hill, 1991.

Connecting with Our Patients: Technology and Teamwork in Action

1. My health care process looks like this: From "Knowledge is Health" April 1, 2013 written by Scott Adams. Creator of the syndicated Dilbert cartoon which is distributed by Universal UClick. http://dilbert.com/blog/ entry/knowledge_is_health/. Accessed August 29, 2013.

Spotlight on John Chuck, MD

1. Serotonin Surge has raised nearly \$3 million: Seratonin Surge Charities. http://www.serotoninsurge.org/home. php?target=content&c_id=4. Accessed September 6, 2013.

Enhancing the Physician-Patient Relationship Through Technology

- 1. Appointment and Advice Call Center: Email Lesley Levine, MD, Medical Director AACC. and Debbie Amaral, June 2013.
- 2. Philip Eulie, MD, guote: Dolores Radding. "VA Looks to KP for Call Center Solutions." Posted October 10, 2011 on Inside KP Northern California, intranet site.
- 3. eConsult ... connects patients to the right specialist: "Unleashing the Power of the Electronic Medical Record." TPMG Forum. June 2012. Approved by Craig Wargon, MD, Physician Lead, eConsult.
- 4. 5 million prescriptions refilled: KP Internet Metrics Report Q4 2012.
- 5. 14.3 million test results: KP Internet Metrics Report Q4 2012.
- 6. 7.3 million Emails sent: KP Internet Metrics Report Q4 2012.

Empowering Our Patients to Stay Healthy and Live Longer

1. Breast cancer screening: Quality Compass. The source for data contained in this publication is Quality Compass® 2012 and is used with the permission of the National Committee for Quality Assurance (NCQA). Quality Compass 2012 includes certain CAHPS data. Any data display, analysis, interpretation or conclusion based on these data is solely that of the authors, and NCQA specifically disclaims responsibility for any such display, analysis, interpretation, or conclusion. Quality Compass is a registered trademark of NCQA. CAHPS ® is a registered trademark of the Agency for Healthcare Research and Quality (AHRQ).

- 2. Cervical cancer screening: Quality Compass. See note 1.
- 3. Colorectal cancer screening: Quality Compass. See note 1.
- 4. Breast cancer screening rates: Quality Compass. See note 1.
- 5. Colorectal cancer screening rates: Quality Compass. See note 1.
- 6. Less than 1% of patients ... develop serious pressure ulcers—in contrast to the 7% of patients ... in other care sites: George Halvorson, former chairman and CEO, Kaiser Foundation Hospitals and Kaiser Foundation Health Plan. "Celebrating Winning the Battle Against Pressure Ulcers." Email message to Kaiser Permanente employees. February 15, 2013.
- Reduced ethnic disparities: "Quality Performance by Ethnic Segment" report 2013. Email Margaret Lapiz, TPMG vice president, Strategy and Integration.
- 8. Eliminated differences entirely for HIV mortality: M.J. Silverberg, W. Leyden, C.P. Quesenberry Jr., M.A. Horberg. "Race/ Ethnicity and Risk of AIDS and Death Among HIV-Infected Patients with Access to Care." Journal of General Internal Medicine, 2009, 24(9):1065-72.

Helping Patients at Risk Stay on Track

- 1. Approximately 320,000 patients: TPMG diabetes registry. Email Catherine A. Cella, Consulting Manager, Quality and Operations Support, August 21, 2013.
- 2. In the top 10 in the nation: HEDIS 2012 publication. As reported by NCQA.
- 3. Physician Leadership: An Unparalleled Competitive Advantage
- 4. 1,500 residents: KPNC GME MedHub Rotation Report 2012. Theresa Azevedo, associate institutional director, TPMG Regional Graduate Medical Education, August 2013.

- 5. 600 physicians on the faculty: TPMG Physicians with Academic Affiliations Report, based on a survey of physicians. June 2003.
- 6. 270 clinician collaborators: "Division of Research: Five Decades of Discoveries." TPMG Forum, First Quarter 2013. Approved by Tracy Liu, MD, MPH, director, TPMG's Division of Research.

Developing the Leaders of Today and Tomorrow: TPMG Leadership Institute

1. Delirium has decreased by almost 25%: Dolores Radding. "Solutions for Health Care: Managing Delirium." Posted March 18, 2013 on Inside KP Northern California, intranet site.

Breaking New Ground: Eradicating **Conflict of Interest**

- 1. The pharmaceutical industry spends between \$12 and \$57 billion: D. Evans, D.M. Hartung, D. Beasley, L.J. Fagnan. "Breaking Up Is Hard to Do: Lessons Learned from a Pharma-free Practice Transformation." Journal of the American Board of Family Medicine, 2013, May-June;26(3):332-38. http://www.jabfm.org/ content/26/3/332.full. Accessed August 20, 2013.
- 2. The Physician Payment Sunshine Act: Federal Register. Vol. 78, No. 27. Friday, February 8, 2013. Rules and Regulations. http://www.cms.gov/Regulations-and-Guidance/Legislation/National-Physician-Payment-Transparency-Program/ Downloads/Final-Rule.pdf. Accessed August 20, 2013.
- 3. In an opinion piece: Robert Pearl. "Medical Conflicts of Interest are Dangerous." The Wall Street Journal, April 24, 2013. http://online.wsj.com/ article/SB10001424127887324485004578 426591868602604.html, Accessed August 20, 2013.

Attracting the Best and Brightest in Medicine

- 1. Approximately a guarter of newly hired physicians: Theresa Azevedo, associate institutional director, TPMG Regional Graduate Medical Education, August 2013.
- 2. 1,500 individual residents: KPNC GME MedHub Rotation Report 2012. Theresa Azevedo, associate institutional director, TPMG Regional Graduate Medical Education, August 2013.
- 3. 1 in 10 physicians who applies: Email Marlene Sousa, Reporting Team Manager, Human Resources, and Bob Jako, HR Director, August 28, 2013.

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The Permanente Medical Group

57

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