

Kaiser Permanente Policy Story, v1, No. 1

Improving Quality and Reducing Cost – Preventing Hospital Readmissions for Heart Failure

- Several new federal policy initiatives seek to reduce preventable hospital readmissions.
- Among Medicare beneficiaries, one in five hospitalizations results in a readmission within 30 days. In 2006, nearly 4.4 million hospitalizations were potentially preventable.
- Kaiser Permanente implemented a program to improve hospital-to-home transitions for heart failure patients, leading to a 30% reduction in preventable hospital readmissions.
- Enablers of Kaiser Permanente’s success include: information technology, patient engagement, and ongoing monitoring of discharge processes and outcomes.

Policy Context

Policymakers are providing incentives for reducing preventable hospital readmissions, including financial penalties for hospitals with high rates of preventable readmissions and the posting of hospital readmission rates. Under the Affordable Care Act’s Hospital Readmissions Reduction Program, hospitals with relatively high preventable readmission rates for selected conditions (heart attack, heart failure, and pneumonia) will see a reduction in Medicare reimbursement beginning October, 2012. Beginning in 2015, the Secretary of Health and Human Services may expand the list of applicable conditions beyond the three noted.

Further, the Centers for Medicare and Medicaid Services added all-cause hospital readmission rates to the 2012 STAR rating system for Medicare Advantage and Part D plans. These ratings are used to evaluate plans based on quality of care and customer service. Under the Affordable Care Act, STAR ratings are linked to quality-based payments.

The Challenge

Hospital care accounts for one-third of total health care spending. One in every five hospitalizations among Medicare beneficiaries results in a readmission

within 30 days of discharge. In 2006, nearly 4.4 million hospitalizations were potentially preventable.¹ Heart failure accounts for the greatest number of potentially preventable readmissions, and it is one of the conditions selected by Medicare to receive reduced reimbursement in hospitals with high readmission rates. Reducing potentially preventable heart failure readmissions could save \$903 million.²

Kaiser Permanente Solution – the Heart Failure Transitional Care Program

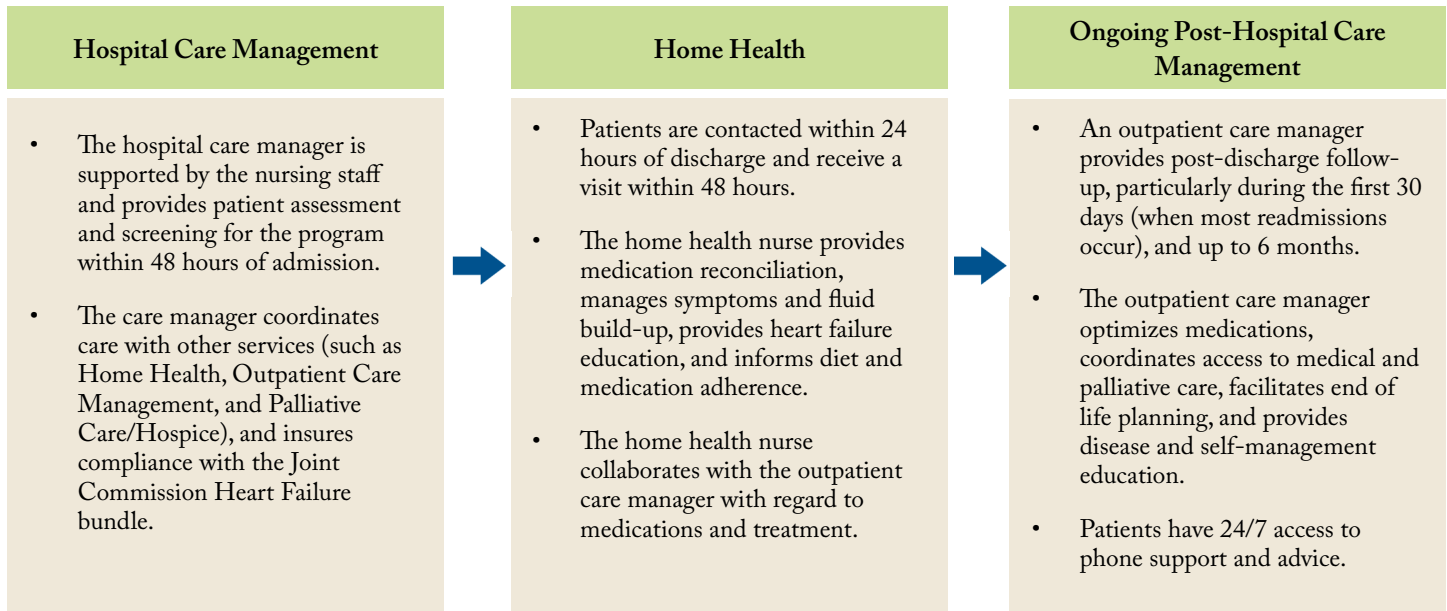
Reducing preventable hospital readmissions is a complex challenge for health care systems. Kaiser Permanente identified the transition from hospital to home as a critical stage in reducing readmissions.

In 2007, we implemented an evidence-based program to improve clinical quality, reduce hospital length of stay and readmission rates, and improve the quality of life and safe transitions for patients with heart failure. The Heart Failure Transitional Care Program (Figure 1) includes three components: hospital care management, home health evaluation, and ongoing post-hospital care management. These three elements combine to provide a seamless model of care for high-risk heart failure patients.

“There is no magic bullet for these complex heart failure patients; it is imperative to have an interdisciplinary integrated approach in caring for these patients across the continuum of care.”

Dr. Sandra Koyama, Regional Physician Co-Lead, Heart Failure Program,
Kaiser Permanente Baldwin Park Medical Center

Figure 1. The Heart Failure Transitional Care Program



Outcomes

The Heart Failure Transitional Care Program led to:

- An improvement in the quality of care;
- A 30% decrease in hospital readmission rates for patients with heart failure;
- A significant reduction in mortality rates, resulting in an estimated 410 lives saved;
- Cost savings of about \$12 million; and,
- High levels of satisfaction with care expressed by 70-80% of patients.

Practical Implications and Transferability

Kaiser Permanente’s experiences in improving heart failure transitions to reduce preventable readmissions

can serve as a model for other organizations. We operate on a global budget, so the financial incentive to stay within budget is aligned with reducing preventable hospital readmissions. Although a heart failure transitional care program may be easier to implement within a prepaid delivery system, the interventions can be applied in other models, especially Accountable Care Organizations.

Key enablers include:

- The use of electronic health records to standardize templates and identify recently discharged patients who need follow-up calls and visits;
- A commitment to engage patients in every aspect of the transition process; and,
- Monitoring of the process and outcomes to assure quality, effectiveness and patient satisfaction.

For more information, please contact:

Kaiser Permanente Institute for Health Policy at <http://www.kp.org/ihp>

¹ Russo, C. A., Jiang, H. J. and Barrett, M. *Trends in Potentially Preventable Hospitalizations among Adults and Children, 1997-2004*. HCUP Statistical Brief #36. August 2007. Agency for Healthcare Research and Quality, Rockville, MD.

² *Report to Congress: Reforming the Delivery System*. Rep. MedPac, June 2008.

Kaiser Permanente Policy Story, v1, No. 2

Aggressive Outreach Raises Mammography Screening Rates

- Several provisions of the Affordable Care Act, including the elimination of cost-sharing for mammograms, will help improve the rate of mammography screenings.
- Current mammography screening rates fall short of the US Preventive Services Task Force guidelines.
- As a result of Kaiser Permanente's aggressive mammography screening programs, Kaiser Permanente's female members have significantly better chances of surviving breast cancer than most women in the general population.
- Enablers of Kaiser Permanente's success include: information technology; aggressive outreach; streamlined workflow processes; multidisciplinary clinical teams; and committed clinical leadership.

Policy Context

Recent health policy changes should help increase the rate of mammography screenings. The Affordable Care Act created the unprecedented National Prevention, Health Promotion and Public Health Council to elevate and coordinate prevention activities and design a focused strategy across federal departments. The ACA also eliminates cost-sharing for certain preventive care services, including mammograms. In addition, by extending coverage to the previously uninsured, the ACA is likely to increase the number of women receiving appropriate screenings. Also, the Centers for Medicare and Medicaid Services will provide financial incentives to Accountable Care Organizations that meet certain quality of care measures, including mammography rates. Finally, the 2010 stimulus legislation promoted the use of electronic clinical data systems that make it easier to identify women who need mammograms.

The Challenge

One in eight women develops breast cancer, and nearly 40,000 die from it every year.¹ Regular mammograms – which can identify breast cancer early, when it is most treatable – can reduce breast cancer deaths by more than 30 percent.² The United States Preventive Services Task Force recommends screenings every one to two years for women aged 50-74 years.³ However, current screening rates fall short of these guidelines, and they have been steadily declining.⁴ Women do not get mammograms for

various reasons, including being too busy, being embarrassed, or experiencing pain. Although the Affordable Care Act is likely to reduce financial barriers to mammography by ending cost sharing, evidence indicates this will not be enough to ensure high screening rates.

Kaiser Permanente Solution

To reverse the trend of declining mammography screening rates, Kaiser Permanente has implemented aggressive outreach programs. The following are a sample of successful programs:

Reminder Programs

1. Every woman due for a mammogram receives a postcard or letter with information about breast cancer screening and instructions on the location and phone number for a mammogram screening.
2. Members also receive automated calls reminding them to schedule a mammogram.
3. Women who do not schedule a mammogram after written and telephone reminders receive personalized follow-up letters and telephone calls from a clinician to address their concerns.
4. Specially-trained “welcoming committees” greet patients when they arrive for unrelated scheduled office visits and offer them same-day mammogram appointments during their visit.

Cheryl Morel is a Kaiser Permanente physician and member who never made time for her own health. She received a reminder for her mammography screening, but carried the letter around for months. When a service representative was scheduling Dr. Morel's pap exam, she noticed that Dr. Morel did not have her mammogram scheduled, and she coordinated the two exams. Dr. Morel's test results came back with a diagnosis for ductal carcinoma in situ (DCIS) – the lowest grade of breast cancer.

“She wasn't responsible for scheduling my mammogram, but she saw that I needed it, and she scheduled it. Kaiser makes it so easy to make the appointments, and it really pointed out to me that I need to take a look at my own health care – pay attention to myself as well as my patients and my family.”

Dr. Cheryl Morel, Pediatrician
Kaiser Permanente San Diego, Kaiser Permanente Member

Proactive Office Encounter

When a patient presents for care anywhere at Kaiser Permanente, the patient's electronic health record generates a list of preventive care gaps, including whether the patient is due for a mammogram. Each person caring for the patient, including the receptionist, is responsible for informing the patient that she is due for a mammogram and arranging an appointment. In some cases, staff will even walk the patient to the mammogram unit – essentially a “no escape” policy for mammography.

The Mobile Health Vehicle

Kaiser Permanente's mobile health vehicle includes a digital mammography unit that takes the latest technology in breast cancer detection on the road to women in some regions where mammography screening is not available or convenient. Mobile mammography outreach has been instrumental in providing mammography screening services in underserved communities.

Outcomes

Kaiser Permanente leads the nation in breast cancer screening. In most of our regions, between 80 and 90 percent of eligible women receive their recommended mammograms. In the past three reporting years

(2009–2011), Kaiser Permanente plans, on average, scored above the 90th percentile on HEDIS measures of breast cancer screening among all reporting plans nationwide. Furthermore, in each of those years, a Kaiser Permanente plan ranked in the top three among all health plans reporting the HEDIS mammography screening measure nationwide. Over the past five years, we had the highest scores of any local plan in each Kaiser Permanente region.

Practical Implications and Transferability

Many of the factors responsible for our success in mammography screening— automatic IT-enabled identification of eligible patients, aggressive outreach at all patient contacts, streamlining of workflow processes, multidisciplinary clinical teams, and committed, focused clinical leadership – can be replicated by other health systems.

For more information, please contact:
Kaiser Permanente Institute for Health Policy at
<http://www.kp.org/ihp>

¹ American Cancer Society. Breast Cancer Facts & Figures 2011–2012. Atlanta: American Cancer Society, Inc.

² Tabar, L, Vitak, B, Chen, THH et al. (2011) . Swedish Two-County Trial: Impact of Mammographic Screening on Breast Cancer Mortality during 3 Decades. *RADIOLOGY* vol. 260, (3) 658–663.

³ U.S. Preventive Services Task Force. Screening for breast cancer: U.S. Preventive Services Task Force Recommendation Statement. *Ann Intern Med* 2009;151:716–726.

⁴ American Cancer Society. Breast Cancer Facts & Figures 2011–2012. Atlanta: American Cancer Society, Inc.

Kaiser Permanente Policy Story, v1, No. 3

Preventing Violence and Promoting Healthy Eating and Active Living

- Many new federal initiatives seek to foster healthier communities through community-based prevention and health promotion strategies.
- Violence and fear in communities can undermine attempts to promote healthy eating and physical activity, thereby exacerbating existing illnesses and increasing the risk of chronic disease.
- Kaiser Permanente has sponsored innovative research and pilot programs to determine which approaches most effectively limit the impact of violence on efforts to promote healthy eating and active living.
- The lessons learned from the community-based pilot projects will inform policymakers and community health practitioners about emerging strategies for making the connection between preventing violence and promoting healthy eating and active living.

Policy Context

Community-based prevention and health promotion strategies are central to many new federal initiatives to foster healthier communities across America. The Patient Protection and Affordable Care Act of 2010 appropriates \$15 billion over the next 10 years for chronic disease prevention and wellness initiatives—including upstream approaches to address the underlying determinants of health within communities. However, such chronic disease prevention strategies—encouraging walking and bicycling, accessing healthy food outlets, or promoting recreation in parks—are less effective when fear and violence pervade the environment.¹ In light of the federal government’s unprecedented commitment to community-based prevention and health promotion, policymakers need to understand which strategies most effectively limit the impact of violence on community efforts to promote healthy eating and active living.

The Challenge

Each year, Kaiser Permanente commits millions to Community Benefit grants and related programs that aim to increase opportunities for physical activity and improve access to healthy food. Our efforts take us beyond the doctor’s office to make a direct impact in schools, neighborhoods, and workplaces. However, as we engaged in community-based chronic disease prevention strategies, we became increasingly aware of

the need to address community violence as a critical part of our efforts. For example, the children of parents who perceived their neighborhood as unsafe were four times more likely to be overweight than those of parents who perceived their neighborhood as safe.² Furthermore, individuals who described their neighborhood as unsafe were nearly three times more likely to be inactive compared to those who describe their neighborhood as extremely safe.³

Kaiser Permanente Solution — Addressing the Intersection

Kaiser Permanente has worked to address community violence through a variety of initiatives, including hospital-based peer violence intervention programs, school-based health education programs, and community violence prevention grants. To address the knowledge gap relating to the impact of community violence on healthy eating and active living, Kaiser Permanente commissioned the Prevention Institute to research and write an in-depth study. The result, “Addressing the Intersection: Violence Prevention and Promoting Healthy Eating and Active Living,” offers findings and recommendations that have already served to support practitioners and advocates working to prevent chronic disease in communities heavily impacted by violence. The report calls for a violence-prevention framework based on:

1. Inclusion of all community sectors —nonprofits, municipal departments, and agencies—in

development of a comprehensive and sustainable strategy that integrates violence prevention into all activities and mandates;

2. Integration of a violence prevention perspective into all healthy eating and active living strategies, which include creating safe spaces, promoting community development and employment, and fostering social cohesion;
3. Taking greater advantage of the skills and knowledge of existing healthy eating and active living advocates to enhance support for violence prevention.⁴

Outcomes

In 2010 and 2011, strategies for improving food and physical activity while addressing community violence were tested in six communities across the nation. The communities were chosen as pilot sites by Kaiser Permanente and the other members of the Convergence Partnership,⁵ a national collaboration of funders that supports multisector policy change to improve food and physical environments. The pilot project cities include: Chula Vista, CA, Denver, CO, Detroit, MI, Louisville, KY, Oakland, CA, and Philadelphia, PA.

The pilot project teams brought together neighbourhood associations, youth, public health professionals, violence prevention advocates, and other community stakeholders to work in partnership to reduce violence and increase opportunities for

physical activity and healthy food access. Each team has taken a different route to the goal. For example, to positively influence perceptions of safety and to encourage more residents to be active in the neighbourhood, several teams have spurred action among local stakeholders and decision makers to increase street lighting, improve landscaping and concrete infrastructure, and decrease graffiti and blight. One team is working to limit alcohol promotion to decrease alcohol consumption and violence. Another team has engaged youth in comprehensive stewardship of a community park, including developing a community garden and farmers' market in the park.

Practical Implications and Transferability

Kaiser Permanente's sponsorship of innovative research and community-based pilot projects serves as the beginning of a movement to improve food and activity environments while addressing community violence. The findings and recommendations offered in *Addressing the Intersection*, as well as the lessons learned from the community-based pilot projects, will continue to inform policymakers and community health practitioners about the connection between preventing violence and promoting healthy eating and active living.

For more information, please contact:
Kaiser Permanente Institute for Health Policy at <http://www.kp.org/ihp>

¹ Addressing The Intersection: Preventing Violence and Promoting Healthy Eating and Active Living, Prevention Institute, 2010.

² Burdette HL, Wadden TA, Whitaker RC. Neighborhood safety, collective efficacy, and obesity in Women with young children. *Obesity* (2006); 14;518-25.

³ Johnson SL, et. al. Neighborhood violence and its association with mothers' health: assessing the relative importance of perceived safety and exposure to violence. *J Urban Health*. 2009, 86;4;538-50.

⁴ Prevention Institute, 2010.

⁵ The Convergence Partnership members include: the California Endowment, Kaiser Permanente, the Kresge Foundation, Nemours, the Robert Wood Johnson Foundation, and the W.K. Kellogg Foundation.

Kaiser Permanente Policy Story, v1, No. 4

Saving Lives Through Better Sepsis Care

- Every year, 750,000 people develop sepsis, and nearly one in four dies – making sepsis the number one cause of death in hospitals in the United States.
- Kaiser Permanente developed an innovative program that led to increased rates of sepsis detection, reduced mortality rates, and reduced average length of stay for patients with sepsis.
- If the U.S. achieved Kaiser Permanente’s level of results around sepsis care, each year there would be 72,000 fewer deaths, 5 million fewer hospital days, and reductions in hospital costs of over \$11 billion.
- Enablers of Kaiser Permanente’s success can be replicated in community hospitals.

Policy Context

The U.S. Department of Health and Human Services (HHS), along with representatives of hospitals, employers, health plans, physicians, nurses, and patient advocates, launched the Partnership for Patients in 2011. This public-private partnership was intended to make hospital care safer, more reliable, and less costly by reducing millions of preventable injuries and complications in patient care by the end of 2013.¹

The Challenge

Sepsis is the number one cause of death in U.S. hospitals, accounting for more deaths than cancer, heart disease, or stroke. Every year, 750,000 people develop sepsis, and nearly one in four of these patients dies. Sepsis is a severe infection that is spread through the bloodstream, and any kind of infection—bacterial, viral, parasitic, or fungal—can trigger it. The majority of sepsis cases are among elderly, immune-compromised, and critically ill patients. Because the infection can develop quickly, immediate detection and treatment are critical.

Kaiser Permanente Solution

In 2008, Kaiser Permanente developed a comprehensive approach to screen and provide effective treatments to hospital patients identified as at-risk for sepsis.

Increasing Screening and Detection

Beginning the moment a patient enters the hospital, staff identify patients with signs of infection or abnormalities in vital signs that could signify sepsis. In addition, Kaiser Permanente implemented a policy promoting specific blood testing for sepsis for every patient hospitalized for an infection.

Improving Treatment

“The key to reducing sepsis mortality is to find sepsis and find it early.”

Alan Whippy, MD, Medical Director of Quality and Safety, The Permanente Medical Group

Early detection is followed by aggressive treatment: eliminating the underlying infection with anti-infection agents or surgery, and placing a central venous catheter (“central line”) when appropriate. A central line is used to administer medication or fluids in a timely manner and allows doctors and nurses to measure oxygen saturation and central venous pressure. Depending on the patient’s condition, other treatments may include fluids, drugs to raise low blood pressure, mechanical ventilators to support breathing, or dialysis for kidney failure.

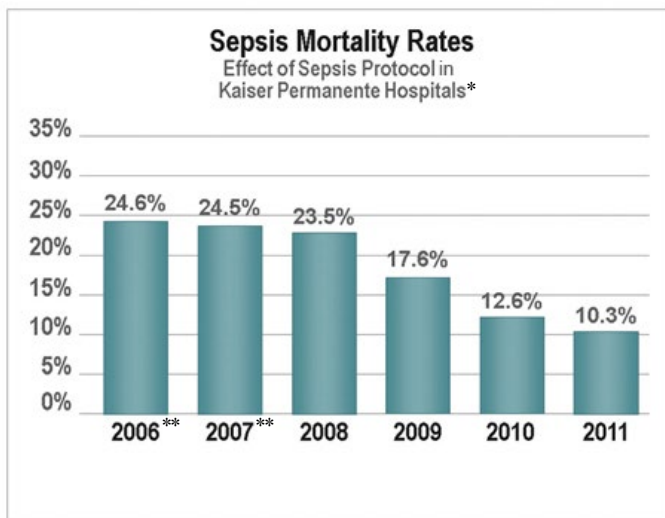
Innovative Training to Ensure Safety

Kaiser Permanente uses simulation mannequins to train emergency physicians in the placement of central venous catheters under ultrasound guidance to ensure that patients with sepsis have safe treatment. Further, Kaiser Permanente has embedded standardized orders, documentation tools, and alerts in its electronic medical record to prompt effective interventions for sepsis.

Outcomes

Since implementing its sepsis program, Kaiser Permanente has achieved:

- a threefold increase in the rate of sepsis detection;
- a 60 percent reduction in mortality for patients with sepsis; and,
- a 25 percent drop in the risk-adjusted average length of stay for patients with sepsis.



Source: Quality Operations Support, The Permanente Medical Group

* Data for Northern California hospitals.

** Data for 2006 and 2007 represent the organization's baseline before the sepsis program was implemented in 2008.

Practical Implications and Transferability

If the U.S. as a whole achieved Kaiser Permanente's results in sepsis care, each year there would be 72,000 fewer deaths, 5 million fewer hospital days, and reductions in hospital costs of over \$11 billion.² Kaiser Permanente's integrated system allows for rapid sepsis detection and treatment. However, many of the enablers of its sepsis care model can be replicated in hospitals outside of the Kaiser Permanente system.

Key enablers include:

- an integrated approach to performance improvement;
- mentors and improvement advisers within the medical centers to support cross-functional teams;
- fully engaged, committed leadership at all levels; and,
- timely, actionable data.

For more information, please contact:

Kaiser Permanente Institute for Health Policy at <http://www.kp.org/ihp>

¹ www.healthcare.gov/compare/partnership-for-patients/

² Kaiser Permanente projections based on: Elixhauser, Ann, Bernard Friedman, and Elizabeth Stranges. Septicemia in U.S. Hospitals, 2009. Issue brief. Agency for Healthcare Research and Quality, 2011. Print. Healthcare Cost and Utilization Project; Angus, DC et al Epidemiology of Severe Sepsis in the United States: Analysis of Incidence, Outcomes and Associated Costs of Care. Crit Care Med 29(7): 1303-10. 2001; Shorr, AF, Economic Implications on an Evidence-Based Sepsis Protocol: Can we Improve Outcomes and Lower Costs? Crit Care Med 35(5): 1257-1262.2007.

Kaiser Permanente Policy Story, v1, No. 5

Meeting HIV/AIDS Workforce Challenges with Multidisciplinary Care Teams

- The gap between HIV care workforce supply and demand in the United States is widening.
- Kaiser Permanente—the largest private provider of HIV care in the U.S.—has found that the HIV multidisciplinary care team model is more effective than ordinary ambulatory care.
- Compared with other Americans with HIV, Kaiser Permanente patients with HIV live longer and healthier lives. The national HIV mortality rate is 3.4 percent; Kaiser Permanente’s HIV mortality rate is 1.6 percent.
- Kaiser Permanente’s multidisciplinary care team model can be replicated by other care systems to provide optimal patient care while maximizing workforce capacity.

Policy Context

The factors contributing to an impending HIV care workforce shortage in the United States include:

Early Detection and Treatment of HIV—National HIV prevention strategies emphasize early detection and linking people to health care when they are first diagnosed with HIV.¹ Meanwhile, an estimated one-third of people in the United States who know their HIV status may not be receiving care.² As HIV testing and treatment outreach strategies ramp up, an influx of newly diagnosed patients will increase demand for providers experienced in treating HIV.

More Americans Living with HIV—HIV is still epidemic in the United States, with 56,000 people infected each year, and more than 1.1 million living with HIV. While the number of new infections has remained relatively constant, effective combination antiretroviral therapy and care management have dramatically increased the life expectancy—and thus the number—of people living with HIV.

Financial Disincentives to Practice HIV Care—About 40 percent of HIV patients rely on Medicaid for health care coverage, and in many parts of the country, reimbursement levels do not support the cost of their care. This makes HIV medicine an unattractive career choice for many clinicians.

Few Replacements for Retiring HIV Providers—The workforce that cares for people with HIV consists largely of first generation HIV health care

professionals who entered the field at the beginning of the epidemic—more than 20 years ago. The HIV workforce is increasingly constrained as these first generation providers retire or leave the field, relative to the number of individuals that require care.³

The Challenge

Kaiser Permanente is the largest private provider of HIV care in the U.S., with more than 20,000 HIV-positive patients. We perform over 300,000 screening HIV antibody tests annually. While we currently have sufficient workforce capacity to care for our HIV patients, this may not be the case in the future.

Kaiser Permanente Solution— Multidisciplinary HIV Care Teams

Kaiser Permanente has found that the HIV multidisciplinary care team (MDCT) model is more effective than traditional ambulatory care at engaging and retaining patients in care. MDCTs are composed of professionals from many disciplines, often including an HIV physician specialist, care manager, clinical pharmacist, social worker, mental health social worker, and nutritionist. The MDCT model emphasizes the medical home and a collaborative management approach to ensure the efficient provision of appropriate services. Key aspects of the MDCT model include:

Optimal Team Composition—The best-qualified person delivers needed HIV care services. For example, the inclusion of a clinical pharmacist on the MDCT improves adherence to antiretroviral therapies and decreases outpatient office visits.⁴

Collaborative Management—The MDCT model stresses collaboration among health care professionals from diverse disciplines to address patients' complex needs and/or multiple conditions.

Clinical Care Pathways—These tools optimize efficiency by outlining the best order and timing of interventions. The pathway can include protocols indicating when patients access care from the various team members, given their disease progression. For example, once the HIV provider identifies a new antiretroviral therapy regimen for the patient, the case manager sees the patient to reduce as many obstacles to successful care as possible. The patient also meets with the clinical pharmacist to ensure a high level of adherence.

Health Information Technology (HIT)—Health information technology facilitates coordination of care and provides decision support. HIT applications—including panel management tools and comprehensive individual patient records—also provide the team with valuable information to support continuous quality improvement.

Quality Improvement—Measuring and improving quality is essential to the continued success of MDCTs and HIV care in Kaiser Permanente. Our quality-related metrics assess a wide range of care, including retention in care, screening and prevention for infections, immunizations, and initiation and monitoring of antiretroviral therapy.

Outcomes

Getting Patients into Care—Kaiser Permanente's HIV care teams get newly diagnosed patients into care quickly. Among our HIV-positive patients, 89 percent are in HIV-specific care within 90 days—compared with 50 percent nationally.⁵

Care Results—Our HIV care team composition promotes antiretroviral adherence and maximizes viral

control, as reflected in our excellent performance on the following measures:

- Kaiser Permanente achieves more than 90 percent median treatment adherence among patients regularly in care and on antiretroviral therapy.⁵
- Nearly 70 percent of Kaiser Permanente's HIV-positive patients have maximal viral control, compared with 19 to 35 percent nationally.⁵

Kaiser Permanente Patients are Living Longer—Compared with other Americans with HIV, Kaiser Permanente HIV patients live longer and healthier lives. The national HIV mortality rate is 3.4 percent, while Kaiser Permanente's HIV mortality rate is 1.6 percent.

Practical Implications and Transferability

Kaiser Permanente's experience with multidisciplinary care teams for HIV treatment has made us an internationally acclaimed leader in the field. In January 2012, Kaiser Permanente challenged other private health care providers and community health clinics to increase the number of HIV-infected people receiving treatment by sharing Kaiser Permanente's toolkit of clinical best practices (including the MDCT), mentoring, training, and HIT expertise. The toolkit is available at the Kaiser Permanente HIV Challenge Website: http://info.kp.org/communitybenefit/html/our_work/global/hivchallenge/download_toolkit.html.

For more information, please contact:

Kaiser Permanente Institute for Health Policy at <http://www.kp.org/ihp>

- 1 National HIV/AIDS Strategy for the United States, July 2010.
- 2 HRSA, HIV/AIDS Bureau, Outreach: Engaging People in HIV Care, August 2006.
- 3 HIV Screening and Access to Care: Health Care System Capacity for Increased HIV Testing and Provision of Care (2011).
- 4 Horberg MA, et al, Determination of Optimized Multidisciplinary Care Team for Maximal Antiretroviral Therapy Adherence, J Acquir Immune Defic Syndr. 2012 Mar 19. [Epub ahead of print]
- 5 Horberg M, Hurley L, Towner W, et al. HIV quality performance measures in a large integrated health care system. AIDS patient care and STDs. 2011. 25(1):21-8.

Kaiser Permanente Policy Story, v1, No. 6

Tracking Surgical Outcomes: Kaiser Permanente's Total Joint Replacement Registry

- The demand for total joint replacements (new hips and knees) has been increasing rapidly in the United States and is expected to grow at an explosive pace in the coming years.
- Since 2001, Kaiser Permanente has operated a tracking system to determine which joint replacement implants work the best and last the longest, and which surgical methods produce the best results for total joint patients.
- Kaiser Permanente orthopedic surgeons and other caregivers have now tracked 150,000 hip and knee implants, creating by far the largest database of joint replacement outcomes in the country.
- This information has allowed Kaiser Permanente surgeons to share collective experience over time, alter practice patterns, and measurably improve patient outcomes.

Policy Context

Demand for total joint replacement surgery is accelerating rapidly as baby boomers reach retirement age. According to one estimate, the number of hip replacements in the United States will increase by 174 percent from 2005 to 2030, while knee replacements are expected to rise 673 percent.¹ Another estimate shows Medicare spending on total joint replacement surgeries rising from \$5 billion in 2006, to almost \$50 billion in 2030.²

The Affordable Care Act directs the Medicare program to test bundled payments for total joint replacement surgery—a single payment for all hospital, physician, post-acute, and home care involved in a surgical case, from three days before hospital admission until 30 days after discharge.³ Such a payment mechanism would put providers at greater financial risk for the cost of surgeries.

The Challenge

The safety of the implantable devices used in joint replacement surgeries has been a concern for many years. These devices have often been involved in product recalls, requiring patients to undergo repeat surgeries (known as “revisions”). The Food and Drug Administration (FDA) does not require

manufacturers to perform clinical trials for efficacy or safety if a new product is found to be sufficiently similar to earlier ones. Once a device is approved, the FDA only tracks patient outcomes after a sizable enough number of problems has been reported.

The U.S. has no central location where data on long-term patient outcomes from total joint procedures are collected or analyzed. The American Academy of Orthopaedic Surgeons has sought to establish a national joint replacement registry, but has encountered many obstacles, including privacy and litigation concerns, inconsistent data reporting, issues regarding the ownership and management of data, and funding.⁴ By contrast, Sweden maintains such a registry and has reduced its revision rate by 50 percent using outcomes information to identify best clinical practices.⁵

Kaiser Permanente Solution

Kaiser Permanente has operated its own total joint replacement registry since 2001. This registry—the largest of its kind in the U.S.—was specifically developed to: (1) notify surgeons of implant recalls; (2) identify the most effective surgical techniques and implant devices; (3) determine which patients might be at risk for poor clinical outcomes; and, (4) provide a foundation for research.

Outcomes

Kaiser Permanente's total joint registry provides physicians with direct feedback about patient outcomes and has helped shape clinical best practice within the organization. Currently, 350 surgeons from 43 medical centers contribute to the registry, with a voluntary participation rate of over 90 percent. The database now includes 150,000 cases.⁶

In 2009 alone, registry data were used to investigate 15 product recalls and advisories associated with specific implant devices. In addition, registry data have been instrumental in identifying the most effective surgical techniques. For example, surgeons reduced partial knee replacements after registry data showed that the revision rate was 10 percent greater than for total knee replacement. When registry data demonstrated that the use of an uncemented compound in total knee operations was associated with shorter implant life and higher revision rates, surgeons increased their use of other alternatives.⁷

Registry data have also helped surgeons identify which patients are more at risk for poor clinical outcomes. For example, they learned that patients with diabetes are at greater risk for revision surgery. They learned, also, that patients with higher body mass index are at greater risk for surgical site infection.⁸

In addition to the total joint registry, Kaiser Permanente has developed four more orthopedic registries, plus others focused on heart valve replacement, pacemakers, and implantable cardioverter-defibrillators.

Practical Implications and Transferability

Kaiser Permanente has published numerous clinical findings from the total joint registry, helping to build scientific evidence that supports total joint replacement procedures. In addition, we have helped other organizations develop similar registries. Kaiser Permanente co-chairs the International Consortium of Orthopaedic Registries, established by the FDA in 2010, which includes 14 countries engaged in similar efforts.

Successful registry design and development hinge on the active involvement of medical groups. A key to the success of Kaiser Permanente's joint registry—both in terms of physician participation and impact on practice—is the work's origin as a clinician-led initiative focused on improving care for patients.

For more information, please contact:
Kaiser Permanente Institute for Health Policy at
<http://www.kp.org/ihp>

- ¹ Steven Kurtz, Kevin Ong, Edmund Lau, Fionna Mowat, Michael Halpern, "Projections of Primary and Revision Hip and Knee Arthroplasty in the United States from 2005 to 2030," *The Journal of Bone and Joint Surgery*, April 2007; 89-A(4): 780-785.
- ² Natalia A. Wilson, Eugene S. Schneller, Kathleen Montgomery, Kevin J. Bozic, "Hip and Knee Implants: Current Trends and Policy Considerations," *Health Affairs*, November/December, 2008; 27(6): 1587-1598.
- ³ Robert E. Mechanic, "Opportunities and Challenges for Episode-Based Payment," *New England Journal of Medicine*, September 1, 2011; 365(9): 777-779.
- ⁴ Wilson et al, *Health Affairs* (2008).
- ⁵ Elizabeth W. Paxton, Maria C.S. Inacio, Tamara Slipchenko, Donald C. Fithian, "The Kaiser Permanente National Total Joint Replacement Registry," *The Permanente Journal*, Summer 2008; 12(3): 12-16.
- ⁶ Kaiser Permanente Surgical Outcomes and Analysis (as of August 6, 2012).
- ⁷ Paxton, et al. 2008; Elizabeth W. Paxton, Maria C.S. Inacio, Mary-Lou Kiley, "The Kaiser Permanente Implant Registries: Effect on Patient Safety, Quality Improvement, Cost Effectiveness, and Research Opportunities," *The Permanente Journal*, Spring 2012; 16(2): 36-44.
- ⁸ Elizabeth W. Paxton, Maria C.S. Inacio, Monti Kahtod, Eric J. Yue, Robert S. Namba, "Kaiser Permanente National Total Joint Replacement Registry: Aligning Operations with Information Technology," *Clinical Orthopaedics and Related Research*, July 20, 2010; 468(10): 2646-2663.

Kaiser Permanente Policy Story, v1, No. 7

Supporting Individual and Environmental Health Through Sustainable Food Procurement

- Sustainable food is often described in terms of agricultural production and distribution that is socially just, humane, economically viable, and environmentally sound, and seeks to promote health in the broadest sense.¹
- Large institutions—such as health care organizations, school districts, universities, and government agencies—account for about 40 percent of all food purchased in the United States.
- By purchasing sustainable, locally produced foods, Kaiser Permanente reduces its carbon footprint and promotes the health of our members, staff, and the environment.
- Kaiser Permanente increased sustainable food purchases from seven percent to fifteen percent in only ten months using sustainable food criteria as a guide.

Policy Context

Although the United States is remarkably efficient in the production of food, we are learning that our large scale model of food production and distribution can have an adverse impact on health through the creation of antibiotic resistant bacteria, air and water pollution, the spread of foodborne pathogens, and the creation of climate-changing emissions. For example:

- About 30 percent of global emissions that lead to climate change are attributable to agricultural activities, including land use changes such as deforestation.²
- The U.S. food system accounts for an estimated 19 percent of the nation's fossil fuel consumption.³
- Experts agree that antibiotic use in agriculture contributes to rising drug-resistant infections in humans. An estimated 80 percent of all antibiotics consumed in the U.S. are used as non-therapeutic feed additives for poultry, swine, and beef cattle to promote growth and to compensate for diseases caused by poor animal husbandry.⁴

The Challenge

Large institutions account for about 40 percent of all food purchased in the United States.⁵ Health care institutions alone spend about \$12 billion per year on

food.⁶ These institutions can use their considerable purchasing power to promote sustainable agricultural practices and a healthier food system. However, there are many challenges associated with implementing local, sustainable food procurement programs:

- **Pricing**—The health care industry is under significant pressure to reduce health care costs to promote the affordability of care. Sustainably produced food is often more expensive, so maintaining cost neutrality can be a challenge.
- **Availability**—Large institutions often struggle to find vendors of local, sustainable products that can meet their needs in terms of volume, seasonality, and consistency of product.
- **Tracking and Reporting**—Many food and foodservice vendors do not have the infrastructure to track and report sustainable food sourcing for their customers.

Kaiser Permanente Solution—Sustainable Food Procurement Criteria

With support from Health Care Without Harm—a worldwide coalition dedicated to implementing ecologically safe and healthy practices in health care settings—Kaiser Permanente developed criteria for procuring sustainable, local, and healthy foods.

Products within each food category (dairy, produce, poultry, and so on) must meet at least one criterion to be considered sustainable. The criteria include:

- produced without added hormones
- grass fed (meats)
- produced on small to medium-scale farms (fruits and vegetables)
- third-party certified as humanely and/or sustainably produced
- produced without antibiotics
- locally produced (within 250 miles of the facility where it is served)
- third-party certified sustainable fisheries; locally and seasonally sourced (seafood)
- low in environmental toxins and sustainably produced or harvested (seafood)

Outcomes

- In 2010, Kaiser Permanente achieved a three-year goal in only ten months of increasing sustainable food purchases from seven to 15 percent of all food purchased by the organization.
- About 190 tons of the fruits and vegetables served to patients, visitors, and staff across the organization (nearly 50 percent of all fresh produce that Kaiser Permanente purchased in 2011) met our sustainable food procurement criteria.
- Kaiser Permanente now serves only rBST-free milk and yogurt in our hospitals, cafeterias, and vending machines.
- Kaiser Permanente has been able to achieve cost neutrality with our sustainable food initiatives by finding opportunities for cost savings in other areas of the food procurement budget.

Practical Implications and Transferability

Kaiser Permanente has taken a huge step to support healthy people and environments by providing sustainable food options. Other large organizations can replicate our success by establishing and aggressively implementing sustainable food procurement criteria. As more large institutions follow Kaiser Permanente's lead, America's food system will continue to shift in a more sustainable and healthy direction.

For more information, please contact:

Kaiser Permanente Institute for Health Policy at <http://www.kp.org/ihp>

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Kaiser Permanente Policy Story, v1, No. 8

Engaging Patients Online With My Health Manager

- The Centers for Medicare and Medicaid Services' Electronic Health Record (EHR) Incentive Program rewards health care providers who “meaningfully use” EHRs. Providers, such as hospitals and physicians, must offer online patient portal services to give patients timely access to their health records, and they must demonstrate that patients use the portal.
- Providers can take steps toward meeting meaningful use requirements by promoting their online services. My Health Manager, Kaiser Permanente’s online personal health record, was launched in 2007. Use of My Health Manager has grown substantially since then.
- Our success in engaging patients online stems from informing patients of My Health Manager’s features and benefits at many points of contact in our system.

Policy Context

Following enactment of the American Recovery and Reinvestment Act of 2009, the Centers for Medicare and Medicaid Services (CMS) developed the Electronic Health Record (EHR) Incentive Program. This program offers financial incentives to eligible providers who use certified EHR technology to achieve specific objectives around quality, safety, and efficiency of care. Beginning in 2015, CMS will reduce payments to eligible providers who do not demonstrate meaningful use of EHRs.

A key objective of the meaningful use program is engaging patients in their health care. Providers must give patients timely, online access to their health records and show that at least 5 percent of patients viewed, downloaded, or transmitted this information during the reporting period. In addition, physicians (and some nurse practitioners and physician assistants) must show that at least 5 percent of their patients sent an electronic message through the EHR.

The Challenge

A 2009 survey found that almost 60 percent of health care consumers would like online access to view their medical records, schedule office visits, refill

prescriptions, and pay medical bills.¹ Fifty-five percent expressed interest in communicating with their doctors via email. While demand for access is high, little is known about whether patients would actually use these services. However, providers can take a step toward meeting meaningful use requirements by actively promoting the use of their patient portals, including the ability to securely email doctors and review personal health records online.

Kaiser Permanente Solution

Kaiser Permanente began offering online health services in 1996, including prescription refills and appointment scheduling. In 2007, we created My Health Manager, a comprehensive online personal health record. Members access My Health Manager by creating an account on our primary website, kp.org, enabling them to:

- view personal health information, including lab results, immunizations, past office visits, prescriptions, allergies, and health conditions;
- view, schedule, or cancel appointments;
- refill prescriptions;
- securely email doctors, pharmacists, and member services staff;

- take health assessments and programs that support healthy lifestyle changes and find information about health topics; and,
- manage health benefits, including viewing drug formularies and estimating the cost of treatments.

Kaiser Permanente's strategies to increase adoption and use of kp.org and My Health Manager include marketing, encouraging lab personnel to wear lapel buttons reminding patients to view their test results online, and noting on pharmacy receipts that patients can refill prescriptions online. In Southern California, our staff make computers and iPads available to help members visiting our hospitals sign up for kp.org and view the features of My Health Manager.

Finally, Kaiser Permanente works with employers who offer our health plans to encourage use of kp.org and My Health Manager. As part of their workplace wellness programs, employers can provide financial incentives for members to register on the site.

Outcomes

Almost half of Kaiser Permanente's nine million members are registered on kp.org, and most registered members have signed on at least once within the past year. Registration on kp.org and use of My Health Manager have doubled since 2008.² In 2011:

- members made 104 million total visits and an average of 286,000 daily visits to kp.org;
- 2.8 million appointments were scheduled online;
- 12.3 million secure emails were sent to providers; and,
- 29.7 million lab results were viewed.

Although use of kp.org and My Health Manager has grown, the increase has been uneven across demographic groups. Compared with nonusers, registered users are more likely to be older, female, and white. Additionally, our Medicaid members have lower kp.org adoption rates compared with Medicare and commercial members. Kaiser Permanente continues to

offer alternate methods for accessing services, and we are researching how to best engage members who do not currently use the site.

Practical Implications and Transferability

Boosting online engagement is crucial for meeting meaningful use requirements, but health care providers could also see additional benefits. For example, among Kaiser Permanente patients with diabetes, high cholesterol, or both, use of secure patient-physician messaging is associated with better blood pressure and diabetes control and more consistent use of appropriate screenings, which led to improvements in HEDIS scores. In addition, patients who are active on kp.org are more likely to remain members of Kaiser Permanente than are those who are not active. These findings may be of particular relevance to other health plans or delivery systems hoping to increase patient retention and to improve management of chronic conditions.⁴

Our approach to engaging patients online has been successful because we inform them about kp.org and My Health Manager at many points of contact – in the doctor's office, at community events, and in our communications campaigns. Health care leaders can learn from our approach by identifying the points of contact patients have with their systems and promoting their online services at each of those points.

For more information, please contact:

Kaiser Permanente Institute for Health Policy at <http://www.kp.org/ihp>

- ¹ Deloitte Center for Health Solutions, *Health Care Consumerism: Opportunities and Challenges for Health Plans*, 2009, http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/us_chs_Health%20Care%20Consumerism_OpportunitiesandChallengesforHealthPlans.pdf
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Kaiser Permanente Policy Story, v1, No. 9

Promoting and Supporting Breastfeeding

- Breastfeeding offers numerous health benefits to babies and mothers, but rates of breastfeeding in the U.S. remain low.
- Increasing breastfeeding rates has become a public health priority among prominent organizations, such as the World Health Organization, the United Nations Children’s Fund, the Centers for Disease Control and Prevention, and the Partnership for a Healthier America.
- Kaiser Permanente has made a major public commitment to promote and support breastfeeding. In 2013, all Kaiser Permanente hospitals will meet standards established by either The Joint Commission or the Baby-Friendly Hospital Initiative.
- Kaiser Permanente’s strategies for improvement in breastfeeding practices will be disseminated publicly to help improve care across the United States.

Policy Context

In 1991, the World Health Organization and the United Nations Children’s Fund launched the Baby-Friendly Hospital Initiative, which listed 10 actions that health care providers could take to support breastfeeding.¹ The Centers for Disease Control and Prevention developed its first breastfeeding targets in the *Healthy People 2000* plan, and has included additional targets in *Healthy People 2010* and *2020*.

In 2011, U.S. Surgeon General Regina Benjamin, MD, issued a “Call to Action to Support Breastfeeding,” enlisting health care providers, employers, public health organizations, and communities.² In addition, the U.S. Department of Health and Human Services has designated lactation counseling and support and breastfeeding equipment rentals as preventive services, which must, therefore, be provided by private health plans at no out-of-pocket cost. Finally, the Partnership for a Healthier America and Michelle Obama’s *Let’s Move* campaign endorsed breastfeeding as a strategy for preventing childhood obesity.

The Challenge

A strong evidence base demonstrates the numerous health benefits of breastfeeding. Breastfeeding protects against acute health conditions in infants, such as ear infections, diarrhea, and sudden infant death syndrome, and problems in later childhood,

such as asthma, diabetes and obesity.³ Breastfeeding mothers are at lower risk for breast and ovarian cancer later in life. The Institute of Medicine recommends that mothers breastfeed exclusively (no formula or food supplementation) for six months, and continue to breastfeed for at least one year.⁴ Although 75 percent of mothers in the U.S. breastfeed at birth, only 23 percent continue to breastfeed for one year, and only 14 percent breastfeed exclusively for the first six months.⁵ In 2010, researchers estimated that up to \$13 billion a year in medical and indirect costs could be saved in the U.S. if 90 percent of mothers breastfed exclusively for the first six months.⁶

Because they are in contact with mothers many times throughout pregnancy and in the child’s first year of life, health care providers have a unique opportunity to improve breastfeeding rates in the nation. However, mothers report receiving conflicting advice on breastfeeding from their doctors. Many providers do not have the training or resources to equip mothers with the knowledge and skills they need to be successful.⁷

Kaiser Permanente Solution

In November 2011, Kaiser Permanente signed a commitment with the Partnership for a Healthier America to support breastfeeding as a measure of hospital quality and a key strategy in improving the health of women and children. By January 1, 2013, all

Kaiser Permanente hospitals will participate in The Joint Commission's Core Measures program, which tracks rates of exclusive breastfeeding at hospital discharge, and/or will be designated as "Baby-Friendly." Hospitals must meet 10 criteria outlined by the Baby-Friendly Hospital Initiative:

1. Develop a written breastfeeding policy and routinely communicate it to staff.
2. Give staff the skills necessary to implement this policy.
3. Inform pregnant women about benefits and management of breastfeeding.
4. Help mothers initiate breastfeeding within one hour of birth.
5. Show mothers how to breastfeed and how to maintain lactation.
6. Give food or drink other than breast milk to babies only when medically indicated.
7. Allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Do not give pacifiers or artificial nipples to breastfeeding infants.
10. Foster breastfeeding support groups and refer mothers to them post-discharge.

As part of a continuum of support, Kaiser Permanente goes beyond the certification criteria to offer online tools and information, breastfeeding classes, and referrals to lactation consultants. Expectant mothers are encouraged to enter prenatal care early and to develop a birth plan that includes preferences for feeding the baby. These preferences are discussed during prenatal visits and are used to guide the care team in providing tailored education.

Outcomes

In Kaiser Permanente's Southern California region, 12 out of 14 hospitals have been certified as Baby-Friendly, and the final two hospitals are in the process of being certified. Since we began the certification process, rates of exclusive breastfeeding at discharge

have nearly doubled in our Southern California region, from 33 percent in 2009, to 64 percent in 2011.⁸ In Northern California, where our providers began performance improvement efforts in 2011, hospital rates of exclusive breastfeeding climbed from 60 percent in 2010, to over 75 percent in mid-2012.⁹ With over 96,000 births occurring in our hospitals annually, Kaiser Permanente has an opportunity to make a major impact on breastfeeding rates through improvement in hospital practices.

Practical Implications and Transferability

As the final element of our commitment with Partnership for a Healthier America, Kaiser Permanente is creating a publicly-available "toolkit" that consolidates our strategies for increasing breastfeeding rates. Available in 2013, the kit will include tools for other organizations to use and adapt, such as planning resources, guidance documents, and patient education materials.

For more information, please contact:

Kaiser Permanente Institute for Health Policy at <http://www.kp.org/ihp>

¹ See: <http://www.babyfriendlyusa.org>.

² U.S. Department of Health and Human Services. *The Surgeon General's Call to Action to Support Breastfeeding*. Washington, DC: U.S. Department of Health and Human Services, Office of the Surgeon General; 2011.

³ Ibid.

⁴ Institute of Medicine. Early Childhood Obesity Prevention: Policies Goals, Recommendations, and Potential Actions. www.iom.edu/Reports/2011/Early-Childhood-Obesity-Prevention-Policies/Recommendations.aspx.

⁵ Centers for Disease Control and Prevention. *Breastfeeding among U.S. children born 1999–2007*, CDC National Immunization Survey, www.cdc.gov/breastfeeding/data/NIS_data/index.htm.

⁶ Bartick, M., and Reinhold, A., "The burden of suboptimal breastfeeding in the United States: a pediatric cost analysis," *Pediatrics*, 2010 May;125(5):e1048-56.

⁷ U.S. Department of Health and Human Services. *The Surgeon General's Call to Action to Support Breastfeeding*.

⁸ Southern California Permanente Medical Group, Department of Consulting and Implementation.

⁹ The Permanente Medical Group, Department of Quality and Regulatory Services.

Kaiser Permanente Policy Story, v1, No. 10

Transforming the Health Care Response to Domestic Violence

- Domestic violence affects one in four American women and one in 14 men during their lifetime and is associated with medical and mental health conditions for victims and their children.
- Health care costs are at least 19% higher in women with a history of domestic violence.¹
- Most health care settings do not consistently offer domestic violence screening and intervention.
- The U.S. Preventive Services Task Force recommends routine domestic violence screening and counseling among women of childbearing age and it is considered a core women's preventive service under the Affordable Care Act.
- Kaiser Permanente implemented a systems model approach to domestic violence assessment, resulting in a 10-fold increase in identification of members experiencing domestic violence. This approach can be adapted for other health care settings.

Policy Context

The Institute of Medicine estimates that domestic violence affects one in four American women and one in 14 men during their lifetime.² An estimated five million women are physically, sexually, or emotionally abused by their partners each year. Domestic violence is the most common cause of injury in women aged 18-44 and is associated with medical and mental health conditions for victims and their children. Domestic violence also increases victims' risk of obstetric complications, low birth weight infants, and chronic conditions, such as heart disease, stroke, and asthma.³

For almost two decades, the American Medical Association, the American Academy of Pediatrics, the American College of Obstetrics and Gynecology, and the American College of Physicians have recommended routine screening for domestic violence. In 2012, the U.S. Department of Health and Human Services (DHHS) endorsed a recommendation from the Institute of Medicine (IOM) that domestic violence screening and counseling be included as a core women's preventive service.⁴ Additionally, the U.S. Preventive Services Task Force recommends routine domestic violence screening among women of child bearing age. Following these recommendations, a Coordinating Committee for Women's Health under DHHS leadership was formed to facilitate implementation of the guidelines and sponsored a symposium in December 2013 to identify new research priority areas for intimate partner violence.⁵ Futures without Violence developed a website with tools to assist clinicians and clinics.⁶

The Challenge

Integrating recommendations into clinical practice is challenging for any health condition, and particularly so for a complex and stigmatized condition such as domestic violence. Traditional methods, focusing primarily on clinician training, have shown limited improvement in identification, intervention, and referral for domestic violence. Research indicates that the prevalence of screening for intimate partner violence differs across health care specialties and is, overall, relatively low. Furthermore, several studies indicate that not every clinician is equally likely to screen.⁷ Rapid integration of the IOM/HHS and U.S. Preventive Services Task Force recommendations into clinical practice will require a new approach that makes use of the entire health care environment, rather than relying solely on the physician:patient encounter.

Kaiser Permanente Solution

Over the past 10 years, Kaiser Permanente's Northern California region has implemented, evaluated, and disseminated an innovative approach to domestic violence screening and intervention that includes four components:

- information for patients and a supportive environment that encourages disclosure;
- routine clinician screening and referral supported by online tools and resources;
- on-site support services, including mental health care and/or access to a crisis line; and,

- community linkages to domestic violence advocacy services.

These components are enhanced by clinical tools embedded in Kaiser Permanente’s electronic health record; quality improvement measures; multidisciplinary implementation teams; and, advice and call center scripts and protocols. Strong leadership facilitates the spread of best practices and ensures that domestic violence identification and referral are part of everyday patient care.⁸ Figure 1 depicts the interconnected components of Kaiser Permanente’s approach to preventing domestic violence.

Outcomes

Since implementing this comprehensive program in Kaiser Permanente’s Northern California region, we have achieved a 10-fold increase in domestic violence identification, from about 1,000 new cases in 2000, to

Figure 1: Systems Model for Intimate Partner Violence Prevention



Source: McCaw, Brigid, 2011, Institute of ofMedicine.

over 10,000 new cases in 2014.⁹ The majority of identification now occurs in ambulatory care, rather than the emergency department, suggesting we are identifying members earlier, potentially before more serious injury happens. This trend also suggests that clinicians are more skilled in inquiry and documentation, and patients are more comfortable disclosing abuse.

Practical Implications and Transferability

We have implemented the Northern California approach in six of our seven regions, using online

tools to support dissemination. In response to inquiries from other health care organizations, we have also made these tools publicly available on the Agency for Health Care Research and Quality’s Innovations Exchange and at the United Nations’ website for Ending Violence Against Women and Girls.¹⁰ We also provide consultation to other health care systems. Kaiser Permanente’s integrated model, robust electronic health record, and quality improvement measures provide an ideal environment for a systems approach to domestic violence screening and intervention. However, the four key components of the model can also be effective in many different types of care settings, from safety net clinics to solo physician practices to large medical centers.

For more information, please contact:

Kaiser Permanente Institute for Health Policy at <http://www.kp.org/ihp>

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- ² Institute of Medicine, *Clinical Preventive Services for Women: Closing the Gaps*, July 2011, Washington, DC, www.iom.edu/Reports/2011/Clinical-Preventive-Services-for-Women-Closing-the-Gaps.aspx.
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- ⁵ See: <http://whr.nlm.nih.gov/ipv-symposium.html>
- ⁶ See: <http://www.futureswithoutviolence.org/health/national-health-resource-center-on-domestic-violence/>
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Kaiser Permanente Policy Story, v1, No. 11

Combating a Killer: Smoking Cessation at Kaiser Permanente

- Cigarette smoking is the leading cause of preventable disease and death in the United States and accounts for \$96 billion per year in medical costs. One in five adults smokes today.
- Recent policy changes—such as an increased federal cigarette tax, new federal authority to regulate tobacco, and increased access to cessation programs—are part of a comprehensive national strategy to reduce tobacco use.
- To curb smoking, Kaiser Permanente makes medical campuses smoke-free and uses our electronic health record to identify smokers and rapidly refer them to a range of online, telephone, and in-person cessation programs.

Policy Context

Influencing people to quit smoking has been a top public health priority for decades. Smoking has been the subject of 27 reports from the U.S. Surgeon General since 1964, and the Centers for Disease Control and Prevention (CDC) have tracked tobacco use as a health indicator since 1965. As part of its evidence-based plan for tobacco control, the CDC supports cigarette taxes, enforcement of laws restricting tobacco sales to minors, bans on smoking in public areas, community and school-based prevention programs, and access to tobacco cessation programs.¹

Several recently-enacted policies support the CDC's multi-pronged framework for tobacco control. Twenty-seven states and the District of Columbia have instituted smoking bans in enclosed public spaces.² The 2009 Family Smoking Prevention and Tobacco Control Act gave the Food and Drug Administration full authority to regulate the sale and marketing of tobacco products for the first time ever.³ Also in 2009, the Federal excise tax on cigarettes was raised from 39 cents to \$1.01 per pack.⁴ The Affordable Care Act allocates \$16 million for tobacco cessation programs and education, and requires Medicaid to cover tobacco cessation drugs and provide tobacco cessation programs to pregnant women at no cost.

The Challenge

Cigarette smoking is the leading cause of preventable disease and death in the United States.⁵ The CDC estimates that 443,000 people die each year from smoking or exposure to second-hand smoke, and another 8 million people live with a smoking-related illness. The economic burden of smoking is substantial—tobacco use accounts for more than \$96 billion per year in medical costs and \$97 billion in lost productivity.⁶

Although the prevalence of smoking has declined dramatically since its health effects became known, about one in five adults in the U.S. smokes. Nearly 70 percent of smokers say they would like to quit, but many have a hard time doing so, especially without help.⁷ The American Cancer Society estimates that only four to seven percent of smokers quit on any given attempt without medications or other help.⁸

Kaiser Permanente Solution

Kaiser Permanente takes a comprehensive approach to curbing tobacco use among our members. Since 2007, all Kaiser Permanente medical campuses have been smoke-free. Our electronic health record, Kaiser Permanente HealthConnect®, tracks smoking status and prompts caregivers to counsel patients during office visits about the importance of quitting. Since 2004, adult members have had access to the online smoking cessation program, Breathe™. Members

receive a 16-page action plan that identifies their unique motivations to give up smoking, the factors favoring success, and the barriers to quitting. The plan gives personalized strategies for overcoming barriers and managing withdrawal.

Several of our regions have developed especially comprehensive smoking cessation programs. Our Hawaii region offers a telephone coaching program, and has partnered with the Hawaii State Quit Line to provide additional support, available from 3am-9pm, seven days per week. Hawaii members can receive a free two-week supply of nicotine patches when they decide to quit. Finally, nurses obtain smoking status from every patient admitted to the hospital or emergency department. Once identified, patients can be referred to outpatient programs and receive a one month supply of cessation medications immediately upon discharge.

In 1998, Northern California became our first region to record smoking status in the electronic health record. Physicians in Northern California have access to treatment support tools within Kaiser Permanente HealthConnect® and can easily connect members to a variety of evidence-based counseling programs. Ongoing training provides clinicians and staff with up-to-date tools and information to support their patients. Northern California collects data on how often patients receive advice to quit, cessation program attendance, cessation medication use, and smoking prevalence to continuously improve programs and provide performance feedback to caregivers.

Outcomes

In each of Kaiser Permanente's regions, the prevalence of smoking among our members is lower than that of the surrounding state.⁹ In 2012, just over 10 percent of Kaiser Permanente members smoked, compared to the national average of 19.3 percent.

Since 2004, more than 46,000 Kaiser Permanente members nationwide have participated in the Breathe™ program. Six months after they participated in the program, fifty-nine percent reported they remained cigarette-free.¹⁰

Practical Implications and Transferability

The key to our success in tobacco cessation is the use of our electronic health record to rapidly identify and refer patients to a wide range of smoking cessation programs. However, influencing our members to quit smoking remains a challenge. We continuously strive to improve our smoking cessation efforts by integrating them into routine patient care and using data on cessation program attendance, medication use, and number of referrals to provide caregivers with feedback and to inform performance improvement.

For more information, please contact:
Kaiser Permanente Institute for Health Policy at
<http://www.kp.org/ihp>

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- ² Public Health Law Center, <http://publichealthlawcenter.org/topics/tobacco-control/federal-regulation-tobacco>.
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- ⁴ Centers for Disease Control and Prevention, "Federal and State Cigarette Excise Taxes: United States, 1995-2009," *Morbidity and Mortality Weekly Report*, May 22, 2009, 58(19);524-527.
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About Kaiser Permanente Policy Stories

Kaiser Permanente Policy Stories are case studies that highlight our experience designing a health care system that provides high-value, evidence-based care. We hope these stories will inform and encourage the many public and private efforts underway to improve health care delivery in the United States, particularly in the context of the accountable care movement.

These stories are developed by the Kaiser Permanente Institute for Health Policy, whose mission is to shape policy and practice with evidence and experience from the nation's largest private integrated health care delivery and financing organization. All stories are available at www.kp.org/ihp.

In 2012, the Institute published the following stories:

Improving Quality and Reducing Cost – Preventing Hospital Readmissions for Heart Failure

Among Medicare beneficiaries, one in five hospitalizations results in a readmission within 30 days. Over four million readmissions can be prevented. Kaiser Permanente's Heart Failure Transitional Care Program led to a 30 percent reduction in preventable hospital readmissions.

Aggressive Outreach Raises Mammography Screening Rates

Kaiser Permanente's aggressive mammography screening programs have resulted in high screening rates among our eligible female members. Many of the factors responsible for our success can be replicated by other health systems.

Preventing Violence and Promoting Healthy Eating and Active Living

Kaiser Permanente's sponsorship of innovative research and community-based pilots serves as the beginning of a movement to improve food and activity environments while addressing community violence.

Saving Lives Through Better Sepsis Care

If the U.S. as a whole achieved Kaiser Permanente's results around sepsis care, each year there would be 72,000 fewer deaths, 5 million fewer hospital days, and reductions in hospital expenditures of over \$11 billion.



Meeting HIV/AIDS Workforce Challenges with Multidisciplinary Care Teams

Kaiser Permanente's multidisciplinary care team model, which emphasizes the medical home and a collaborative approach to care, is more effective than traditional ambulatory care at engaging and retaining patients with HIV in care.

Tracking Surgical Outcomes: Kaiser Permanente's Total Joint Replacement Registry

Kaiser Permanente's Total Joint Replacement Registry gives our surgeons the ability to document their collective experience over time, alter practice patterns, and measurably improve patient outcomes.

Supporting Individual and Environmental Health With Sustainable Food Procurement Criteria

The health care industry alone spends about \$12 billion per year on food. Kaiser Permanente has used its considerable purchasing power to promote sustainable agricultural practices and a healthier food system.

Engaging Patients Online With My Health Manager

Kaiser Permanente's approach to engaging patients online has been successful because we inform them of our portal, My Health Manager, at many points of contact with the system.

Promoting and Supporting Breastfeeding

By 2013, all Kaiser Permanente hospitals will meet breastfeeding standards established by The Joint Commission or the Baby-Friendly Hospital Initiative.

Transforming the Health Care Response to Domestic Violence

A decade ago, Kaiser Permanente implemented an innovative approach to domestic violence screening and intervention which has yielded a six-fold increase in identification of members experiencing domestic violence.

Combating a Killer: Smoking Cessation at Kaiser Permanente

Cigarette smoking is the leading cause of preventable disease and death in the United States. To curb smoking, Kaiser Permanente uses our electronic health record to identify smokers and rapidly refer them to online, telephone, and in-person cessation programs.

Questions?

Please visit www.kp.org/ihp to send us comments or questions.