

2025 ANNUAL REPORT

Advancing the collective **POWER OF RESEARCH**



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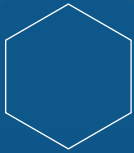
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INTRODUCING KAISER PERMANENTE RESEARCH NORTHERN CALIFORNIA

Focused, local efforts can evolve to create broad impact. For example, Alaska Airlines: Founded as a local airline where others dared not fly. The Mayo Clinic: Started by two brothers in a Minnesota community hospital. IKEA: A small mail-order business in Sweden. Each started as a local endeavor, strategically evolved to provide something people broadly needed, and innovated to position itself for future success. Similarly, Kaiser Permanente, started to provide local healthcare to workers building the Colorado River Aqueduct, evolved into a nation-leading health care system bringing high-value, equitable health care to diverse communities. In the pages that follow, we describe a new, integrated, region-wide research model to further this mission: Kaiser Permanente Research Northern California.

Research is integral to Kaiser Permanente. In 1942, Henry Kaiser recognized that “research would be a tool to bring advances in medicine” and determined it would be “embedded in the medical care program from the outset.” Multiple distinct initiatives followed. The

first residency program, established in 1948, developed into more than 37 residency and fellowship programs, with hundreds of scholarly projects. Morris Collen, MD, in 1961, created the Medical Methods Research group, a home for professional research that foreshadowed our current Division of Research. Medical centers established local research chairs to support clinician researchers, which united into a regional Central Research Committee. New oncology and HIV clinical trials programs — co-founded by Louis Fehrenbacher, MD, and Jeff Fessel, MD, in 1988 and 1990, respectively — tested innovative treatment options. Individual trials groups were then connected by Alan Go, MD, into our regional Clinical Trials Program. Tracy Lieu, MD, in 2012, initiated the Delivery Science Program to link researchers with operational leaders. This was expanded, in 2018, into our Delivery Science and Applied Research (DARE)



program, with physician researchers and new specialty research networks embedded into clinical care.

These distinguished research programs are now united into Kaiser Permanente Research Northern California. This new structure builds on our history and positions us for the future. Created with extensive stakeholder engagement, it brings together our people, ideas, and resources into a powerful engine for evidence-based change, where anyone can be fueled by the energy of scientific inquiry to advance care.

Kaiser Permanente Research Northern California (KPRNC) unites skilled leaders for a common purpose, while preserving the highly functioning identities and structures within our Division of Research, Clinical Trials Program, Delivery Science and Applied Research program, Local Research Chairs/Central Research

Committee, and Medical Education-Sponsored Research. It decreases silos, strengthens links between research and clinical practice, boosts efficiency, and facilitates cross-group initiatives. It supports inter-regional Kaiser Permanente Research efforts while maintaining our strong regional identity. And it stimulates new possibilities for region-wide thinking, strategy, philanthropic opportunities, and more.

Together, within this new structure, we will make research easier, more inclusive, and more impactful to empower Henry Kaiser's vision: Mobilizing discovery, clinical trials, delivery science, and health services research to drive evidence-based, equitable, high-value health care for our communities.

**Division of
Research**

**Clinical Trials
Program**

**Delivery Science
and Applied
Research**

**Medical
Education-
Sponsored
Research**

**Central Research
Committee**

KPRNC Executive Council

Douglas Corley, MD, PhD, *co-chair*
Chief Research Officer,
The Permanente Medical Group,
Kaiser Permanente Northern California

Rachel Ramoni, DMD, ScD, *co-chair*
Director, Division of Research,
Kaiser Permanente Northern California

Paradi Mirmirani MD, Interim Medical
Director, Clinical Trials Program

Juleon Rabbani, DrPH, Director,
Biostatistical Consulting Unit

Jacek Skarbinski, MD,
Director, Delivery Science and
Applied Research

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BUILDING COMMUNITY THROUGH TRUST AND TEAMWORK

I joined the Division of Research (DOR) in early 2025, to become the organization's sixth director. This also happened to be a time of tremendous change and uncertainty for America's research enterprise. Looking back now, I'm so proud of the resilience and creativity with which DOR's research scientists, administrators, and research teams have responded to these challenges.

That's not to say it's been easy. But our colleagues have been resourceful, pivoting to adjust their research trajectories for the greatest chance of success in a new climate. They sought new sources of funding, explored new partnerships, and worked together to maximize opportunity for every member of the DOR community.

The theme of this Annual Report reflects this spirit of collaboration, of recommitting ourselves to our mission and to each other. In my view, the "collective power of research" can have multiple meanings. We join forces to maximize the good that we can do. We also are brought together by the research itself, drawn together to do work that can only be accomplished through trust and teamwork.

Having a name for the community and purpose that we share is a powerful reflection of our trust and teamwork. As an overarching entity, we are now known as Kaiser Permanente Research Northern California (KPRNC). This is more than a change of logos and letterheads, but an opportunity to launch a robust collaborative working environment. Crucially, KPRNC brings us together without asking any member to give up who they are. DOR is and will continue to be the home for professional research scientists, as it has been since its founding in 1961. The collective power of DOR and its sibling research groups is synergistic and has tremendous potential to bring about advancements we haven't even imagined yet.

KPRNC brings together all the research-oriented parts of [Kaiser Permanente Northern California \(KPRNC\)](#), so our clinical trialists, biostatistical experts, research scientists, physician-researchers, and medical residents can share resources, capabilities, and ideas. We can all dream together and support one another in our collective mission to be the engine of evidence-based health care.

DOR is proud to lead the production of this KPRNC Annual Report as a tangible expression of our shared purpose with our sister organizations, and as a celebration of the work that brings us together.

[Rachel B. Ramoni](#), DMD, ScD
Director
Division of Research
Kaiser Permanente
Northern California



Travel is not a solo activity. Even when parts are undertaken alone, experienced travelers help build our skills. People create maps and plans to inform our path. Travelers we meet along the way provide perspectives to help navigate a mountain trail, parse a confusing train system, or tackle treacherous terrain. Trusted friends by our side and advanced preparation can be lifesavers if something unexpected happens and we need to be airlifted out of a tricky spot. (Trust me on this one.)

Research is also not a solo endeavor. It similarly needs mentors, mapmakers, planners, colleagues, and safety nets. Even when we work alone or in small teams, we are linked to and benefit from the many people, relationships, and structures around us. And the broader those connections, the more successful we can be. Clinical colleagues develop impactful questions, inform research collaborations, and facilitate next-step implementation. Scientific colleagues help write grants, design studies, and disseminate results. Operational leaders develop programs to test and connect knowledge to implementation. Expert research partners and workflows provide crucial contracting, budgeting, human resources administration, information technology, knowledge, and tools.

Research and health care within Kaiser Permanente is a further leap in connection, collaboration, and possibility. It provides unparalleled opportunities to transform health care and directly improve the lives of our members and communities. Larger than some countries, KPNC has the collective research heft of 4.6 million members, 21 hospitals, more than 200 medical offices, close to 10,000 physicians of [The Permanente Medical Group \(TPMG\)](#), and thousands more medical professionals, all inside an integrated health care program.

In this year's report, we introduce Kaiser Permanente Research Northern California KPRNC) — a new concept, officially

established in 2025, that embraces all our people and potential. As a region-wide structure, it is inclusive and supportive, and it positions us to scale for the future. It connects ideas and resources to allow the evidence created by research to be further tested and implemented. Within this structure, we are building together, to make research easier and more impactful, and expand our potential.

Importantly, what we learn from our studies reaches beyond our walls. Findings from our research studies, clinical trials, and investigations into ways to improve health care delivery and policy are disseminated broadly, making it possible for them to be adopted by other health care providers.

Our potential is realized through the strengths of our researchers, teams, and the people who support them to create evidence-based innovation — which is on full display in this year's Annual Report. I want to congratulate and thank everyone at KPRNC on their success in improving the health of our members and communities. Together, we will go fast — and go far.

[Douglas Corley](#), MD, PhD
Chief Research Officer
The Permanente Medical Group
Kaiser Permanente
Northern California



HIGHLIGHTING THE POWER OF COLLABORATION

Research invites and produces creativity, curiosity, and collective discovery. Throughout 2025, we worked together to extend our research enterprise; pivot to solve new challenges; deepen our understanding of health and health care; convene experts among our peers; and celebrate the achievements of our investigators.



MARCH

Clinical Trials Program inaugural Academy of Clinical Trialists

Expanding opportunities for
physician involvement
in clinical trials.

[Read more](#)

MAY

9th annual KPNC Cardiovascular Symposium

Showcasing cutting-edge
research, highlighting
cardiology fellows.

[Read more](#)

SEPTEMBER

2nd Annual Infectious Diseases/HIV Research Symposium

Drawing researchers and
clinicians together to
explore the latest findings.

[Read more](#)

SEPTEMBER

INEBRIA global conference

Hosting an international
3-day meeting on brief
intervention for problem
alcohol use.

[Read more](#)





NOVEMBER

2nd Cancer Research Symposium

Directing attention to pioneering studies and practice-changing findings.

🔗 [Read more](#)



NOVEMBER

Physician Researcher Program graduates shine

Celebrating research achievements of the first cohort of TPMG physicians.

🔗 [Read more](#)

DECEMBER

Inaugural Postdoctoral Research Poster Showcase

Highlighting fellows' innovative research.

🔗 [Read more](#)



Our researchers gained major funding awards

In an ever-changing research funding environment, our investigators continued to identify opportunities from federal and other sources. Every funded proposal accelerates discovery — including these notable awards:

- A \$3.3 million award from the National Cancer Institute to allow **Melisa Wong, MD, MAS**, to study the treatment experience for older adults with lung cancer
🔗 [Read more](#)
- A \$12 million award from PCORI to study suicide prevention methods, led by **Esti Iturralde, PhD**
🔗 [Read more](#)
- A \$5 million grant from the American Heart Association to study artificial intelligence in cardiovascular care, led by **David Ouyang, MD**
🔗 [Read more](#)



“The Behavioral Health and Aging section members continue to study and develop innovative techniques to solve clinical problems for patients and doctors. Their work spans topics including problem alcohol and drug use screening, cannabis use health effects, genetics, and dementia, all of it relevant to everyday care delivery.”

— [Michael Silverberg](#), PhD, MPH
DOR Associate Director, [Behavioral Health and Aging](#) and [Infectious Diseases](#)

Alcohol use disorder, type 2 diabetes often go together

Unhealthy alcohol use can occur in patients alongside poor type 2 diabetes outcomes. [Esti Iturralde](#), PhD, and colleagues published an [analysis](#) in the Journal of General Internal Medicine to explore the relationship between the 2 conditions in more than 222,000 Kaiser Permanente patients with a diagnosis of type 2 diabetes between 2016 and 2021, and compared those with and without diagnosed alcohol use disorder. They found those with both conditions had more diabetes complications such as hypoglycemia, cardiovascular complications, and neuropathy. “Patients with co-occurring type 2 diabetes and unhealthy alcohol use may benefit from additional, targeted clinical supports during specialty addiction treatment,” Iturralde said.

[Read more](#)



Expanding measurement-based care for mental health

In a [paper](#) in Psychiatric Services, [Kathryn Erickson-Ridout](#), MD, PhD, addressed ways to make a scientific approach to mental health care more broadly adopted.

“These techniques give us a way to actually see and quantify the patient’s status so the psychiatrist or therapist can take action that is responsive to the patient’s needs.”

Measurement-based care uses data-oriented techniques to track patient symptoms and inform treatment, and is incorporated into mental health care at KPNC. “We don’t have tests like blood pressure

or hemoglobin in psychiatry,” Erickson-Ridout explained. “But we do have what the patient’s telling us, so most of these measurements relate to the symptoms of whatever disorder they have, like depression or anxiety. It gives us a way to actually see and quantify the patient’s status so the psychiatrist or therapist can take action that is responsive to the patient’s needs.”

[Read more](#)



Study of cannabis retailers finds mixed advice on safety in pregnancy

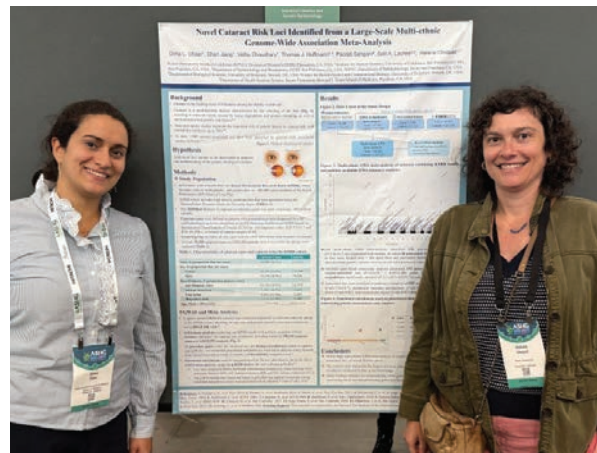
Pregnant people may be getting inaccurate information about the risks of cannabis use in pregnancy from employees at California cannabis retailers, according to a [study](#) published in JAMA Network Open that involved a telephone survey of 505 cannabis retailers. The caller posed as a pregnant person wanting to know whether tobacco, cannabis, and blunt (tobacco and cannabis combined) use is safe in pregnancy. One-fifth (20.6%) of the retailers told the caller that prenatal cannabis use is safe, while two-fifths (40%) said it was unsafe. “Misinformation around the safety of prenatal cannabis use is concerning,” said lead author [Kelly Young-Wolff](#), PhD, MPH. “National medical guidelines recommend against using cannabis during pregnancy due to potential health risks, but many pregnant individuals perceive cannabis to be safe.”

◊ [Read more](#)

Doctor-patient talk about problem alcohol use could reduce health care use

Patients who reported problem alcohol use used less medical care if they had a conversation with their primary care doctor about their drinking, according to a [study](#) published in the journal Addiction. The research looked at the cost effectiveness of a “brief intervention,” which is a short conversation initiated by a physician using specific techniques. “This study is showing short-term benefits in lowering utilization after brief intervention,” said senior author [Stacy Sterling](#), DrPH, MSW. “The next step is learning whether there are long-term benefits of having these ongoing conversations with your doctor each time you come in, about how your drinking fits into your overall health.”

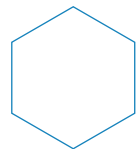
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Exploring genomic factors in abdominal hernia susceptibility

A [study](#) led by [Dima Chaar](#), PhD, MHI, and [Hélène Choquet](#), PhD, and published in HGG Advances dug into previous work identifying the genetic locations for abdominal hernia to identify novel genes associated with hernia subtypes. Their transcriptome-wide association study (TWAS) of 4 hernia subtypes used data from up to 57,291 hernia cases and more than 400,000 controls of European ancestry. The study identified 211 unique genes related to hernia, of which 85 did not overlap with known hernia-related genetic locations. It also found 4 genes that are related to all 4 hernia subtypes. “Overall, our results demonstrate the benefits of imputation-based TWAS approaches to characterize previously identified risk loci and prioritize novel candidate genes that may increase our understanding of abdominal hernia etiology,” Choquet said.

◊ [Read more](#)





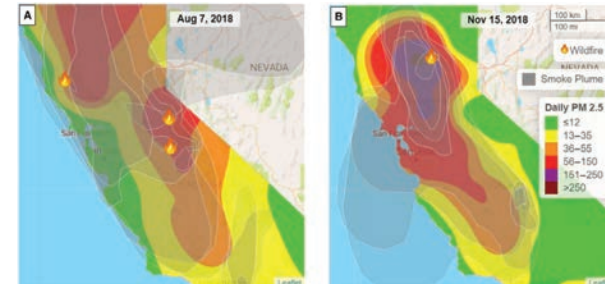
“Investigators in the Biostatistics section lead and collaborate on research that generates rigorous, reproducible evidence to improve clinical care and health policy. We design studies, develop analytic strategies, and apply advanced quantitative methods to turn data into valid and interpretable results across the full spectrum of research, from patient-focused clinical research and systems-level health services research to methodological development. In so doing, we help Kaiser Permanente learn from its own data while contributing durable knowledge to the broader scientific community.”

— [Charles Quesenberry](#), PhD
DOR Associate Director, [Biostatistics](#)

California wildfires may increase risk of heart attacks, heart failure, and stroke

A [study](#) published in the Journal of the American Heart Association found that the high concentrations of fine particulate air pollution seen during the Mendocino Complex fires in 2018 were associated with a 23.1% increased rate of heart attacks, heart failure, stroke, and cardiovascular deaths. But investigators found no increased cardiovascular disease or death during the 2018 Camp fire. “This finding surprised us because we know from many previous studies of air pollution that the high concentrations of pollution we saw are not safe,” said lead author [Stacey E. Alexeeff](#), PhD. “It will be important for future studies to quantify how many people are taking protective actions and how many heart attacks we are preventing and how many lives we are saving because of public health warnings.”

🔗 [Read more](#)



Researchers explore COVID-19 genome for clues to virus behavior

Kaiser Permanente researchers — working with colleagues in public health and other research institutions — identified 78 new locations on the genome of SARS-CoV-2 that could relate to how the virus infects a person and impacts their health. The [study](#) was published in the journal PLOS One. “The continuing waves of SARS-CoV-2 infection show its remarkable ability for immune evasion,” said lead author [Joshua Nugent](#), PhD. “That’s why it’s important to look beyond the spike protein to other parts of the virus genome for clues about its behavior.”

🔗 [Read more](#)

“The continuing waves of SARS-CoV-2 infection show its remarkable ability for immune evasion.”

Diabetes medications vary in ability to reduce heart attacks and strokes

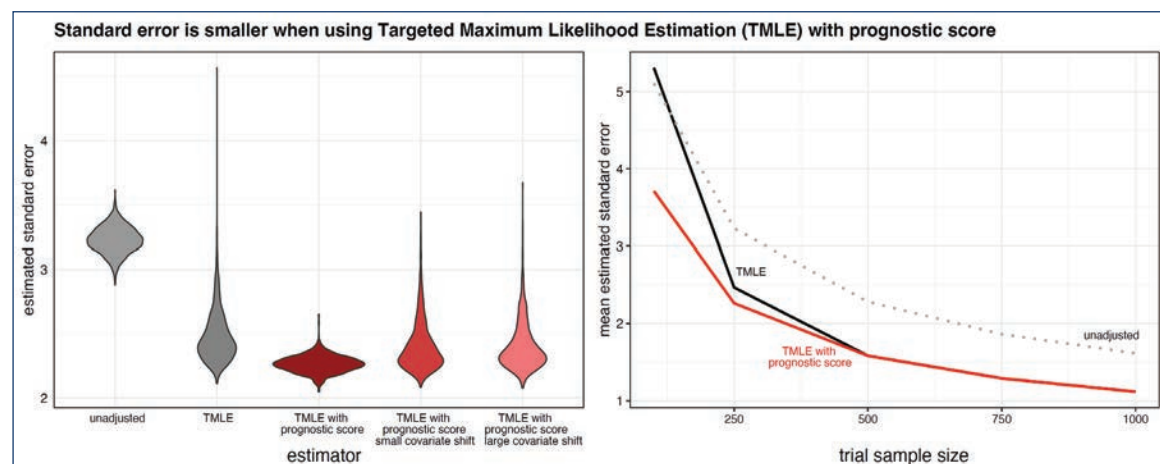
A [study](#) published in JAMA Network Open compared how well 4 different types of glucose-lowering medications reduce the risk of heart attack and stroke, providing important new information for patients with type 2 diabetes. The researchers analyzed data collected on close to 300,000 adults with type 2 diabetes who had recently been prescribed one of 4 types of diabetes medications: GLP-1 receptor agonists, SGLT2 inhibitors, sulfonylureas, and DPP4 inhibitors. “It is important that physicians and patients are aware of which medications not only can effectively control diabetes but can also improve heart health,” said lead author [Romain S. Neugebauer](#), PhD.

[Read more](#)

Leveraging previously collected data can improve efficiency in randomized trials

DOR investigator [Lauren Liao](#), PhD, led a methodological study to address the challenge of limited sample size in randomized controlled trials by integrating historical data to strengthen statistical power. Published in The International Journal of Biostatistics, the [study](#) proposes an estimator that employs prognostic covariate adjustment that requires no additional assumptions and increases efficiency without introducing bias. The study simulation validates the theory, where prognostic adjustment can decrease uncertainty even in small randomized controlled trials. The type 2 diabetes trial application demonstrates the potential of using this method in future research and practice.

[Read more](#)



Pioneering causal machine learning to target post-discharge care

A study in Nature Digital Medicine evaluated an expansion of the Transitions Program — a post-discharge intervention designed to prevent hospital readmissions — targeted to lower-risk patients using a causal machine learning model. The pragmatic randomized trial of 10,000 inpatients compared model-guided targeting with usual care. Patients randomized to the intervention arm experienced significant improvements in observed-to-expected readmission ratios following deployment. “This is the first time causal machine learning has been deployed in routine care and the first randomized evaluation to be published,” said lead author [Ben J. Marafino](#), PhD. “Our novel Predicted Benefit Intervention score continues to guide care for hundreds of thousands of patients each year.”

[Read more](#)



“It is impossible to overstate the significance and benefit that result from our ability to conduct cancer research within an integrated health care system delivering state-of-the-art care. Our investigators are positioned to conduct studies that can rapidly translate into improved clinical care and care delivery. They are also able to design and implement large prospective studies that would not be possible in most health care settings. And their commitment to collaboration goes beyond the walls of Kaiser Permanente. Many of our cancer epidemiologists and researchers have leadership roles on national initiatives, programs, and networks.”

— [Theodore R. Levin, MD](#)
DOR Associate Director, [Cancer](#)

Colorectal cancer screening program doubled screening rates and halved deaths

KPNC’s integrated colorectal cancer screening program reduced cancer incidence by a third, halved deaths, and eliminated racial differences in outcomes, showed research presented at Digestive Disease Week 2025. “Our study shows that consistent and comprehensive screening outreach to all eligible members, with no in-person visit required, can make an extraordinary difference in reducing colorectal cancer incidence and deaths and eliminating racial disparities,” said lead researcher [Douglas Corley, MD, PhD](#). KPNC started its comprehensive colorectal cancer screening program in 2006. The [initiative](#) reminds people it is time for their colorectal cancer screening test and sends them a fecal immunochemical testing (FIT) for at-home testing.

◊ [Read more](#)

“Our study shows that consistent and comprehensive screening outreach ... can make an extraordinary difference in reducing colorectal cancer incidence and deaths and eliminating racial disparities.”

Earlier identification of cachexia in advanced cancer possible

[Research](#) published in the Journal of the National Cancer Institute suggests doctors can identify patients at high risk of cachexia within 3 months of an advanced cancer diagnosis. “These findings position us to be able to test new treatments and introduce supportive services much earlier, which could help improve these patients’ quality of life,” said senior author

[Elizabeth M. Cespedes Feliciano](#),

ScD. The study included adults diagnosed with the cancer types most at risk for cachexia: advanced lung, pancreatic, and colorectal cancer. It is part of a larger coordinated effort by a group of U.S. and U.K. researchers from [Cancer Grand Challenges](#) team CANCAN (Cancer Cachexia Action Network).

◊ [Read more](#)



Colonoscopy follow-up after polyp removal safe in adults over age 75

Age alone should not determine whether a patient who previously had polyps removed should continue to have follow-up colonoscopies, [research](#) published in Clinical Gastroenterology and Hepatology suggests. “There is some risk associated with every colonoscopy, and these risks increase with the patient’s age,” said lead author [Jeffrey K. Lee](#), MD, MPH. “But as adults are living longer, we’ve recognized that age is only one factor that should go into decisions on how long to continue colorectal cancer screening and surveillance.” Currently no guidelines recommend for or against surveillance colonoscopy in adults over age 75 — when routine colorectal cancer screening is also no longer recommended.

◊ [Read more](#)



Blood test for cancer screening can identify adults with colorectal cancer

An investigational colorectal cancer screening blood test was effective at identifying tumors, but less effective at identifying precancerous polyps, [research](#) published in JAMA showed. The study enrolled 27,010 adults at average risk of colon cancer at 201 centers, mostly in the U.S. The study looked at the blood test’s ability to identify the patients that had a cancer or polyp found on a colonoscopy. “The best test for colorectal cancer screening is the test that someone will do,” said senior author [Theodore R. Levin](#), MD. “Right now, that is a colonoscopy or a stool test. An effective blood test could potentially be another option.”

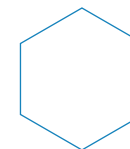
◊ [Read more](#)

Skin cancer risk calculator improves screening and cancer detection rates in organ transplant patients

A [study](#) published in JAMA Dermatology found a risk assessment-based skin cancer surveillance program improved screening and detection rates in solid organ transplant recipients. “The findings reaffirm the clinical importance of the skin cancer screening program we implemented,” said first author [David S. Lee](#), MD. The program uses a tool, called KP-SUNTRAC, that reviews a transplant recipient’s electronic health record to assess their skin cancer risk. The immune-suppressing medications these people take put them at high risk for skin cancer. “We believe this is the first study to evaluate this risk calculator in a community-based health setting,” said senior author [Marilyn L. Kwan](#), PhD.

◊ [Read more](#)

“The findings reaffirm the importance of the skin cancer screening program we implemented.”





“We are committed to conducting translatable research that will reduce the health impact of cardiovascular, kidney, and metabolic health risk factors and conditions across the lifespan. Our productive partnerships with TPMG and Kaiser Foundation Hospitals clinical and operational leaders, and our ability to apply innovative methods and technologies at scale, allow us to conduct research focused on the epidemiology, prevention, management, and quality of care that yield insights to improve care effectiveness and efficiency while improving clinical and patient-centered outcomes.”

— [Alan Go, MD](#)
DOR Associate Director, [Cardiovascular, Kidney, and Metabolic Health](#)

More than half of Native Hawaiian and Pacific Islander young adults suffer from obesity

A growing number of Asian American, Native Hawaiian, and Pacific Islander young adults in northern California have obesity, a research team led by [Joan C. Lo, MD](#), reported in the Journal of the American Medical Association. “This obesity epidemic has been hiding in plain sight because all too often studies have not focused in on the distinct ethnic subgroups that make up the broader Asian, Native Hawaiian, and Pacific Islander community in the U.S.,” said Lo. The [study](#) of more than 1.1 million adults ages 30 to 49 looked at trends in 8 Asian and Pacific Islander populations. KPNC’s large, diverse population made the research possible.

🔗 [Read more](#)



Email reminders that the flu vaccine protects the heart did not increase vaccination rates in 2025

People who received an email reminder that the flu vaccine protects the heart and reduces the risk of hospitalization and death had similar vaccination rates as those who received a routine email reminder that explained the flu vaccine helps keep you safe. The findings are from KP-VACCINATE, a [study](#), published in NEJM Evidence, that included more than 3.6 million patients in 2 Kaiser Permanente regions in 2025. It is believed to be one of the largest-ever individually randomized clinical trials conducted worldwide. “Getting more people vaccinated against the flu is an important public health goal,” said lead author [Ankeet Bhatt, MD, MBA, ScM](#). “It is especially important for people who have pre-existing heart conditions, and more effective approaches are needed to increase vaccination rates.”

🔗 [Read more](#)



Researchers build largest-ever AI model to interpret echocardiograms

Investigators [reported](#) in *Nature* that they had built the largest-ever AI model to produce interpretations of echocardiograms. “Echocardiograms are the most commonly used cardiac imaging test,” said co-senior author [David Ouyang](#), MD. “We built this AI model to help clinicians quickly and easily provide more accurate and precise interpretations of echocardiograms to their patients.” Existing AI models have only been trained on limited datasets and often only assess one or two specific heart functions. The new AI model, called EchoPrime, can learn from both images and text. It was trained on more than 12 million videos paired with expert cardiologists’ interpretations.

[Read more](#)

Blood pressure patterns in women during early pregnancy tied to long-term risk of hypertension

Routine blood pressure measurements taken during the first 20 weeks of pregnancy can be separated into 6 distinct trajectory patterns that reveal an increasing gradient of risk for developing hypertension up to 14 years after giving birth, a [study](#) in *Hypertension* found. The early pregnancy blood pressure patterns also identified increasing levels of risk regardless of whether a woman developed a hypertensive disorder of pregnancy. “A woman’s blood pressure pattern during the first half of pregnancy tells a story about how well her blood vessels are adapting to the demands of pregnancy that can also reveal her risk of developing hypertension later in life,” said senior author [Erica P. Gunderson](#), PhD, MPH.

[Read more](#)



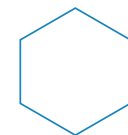
Heart failure risk varies among Asian ethnic subgroups

“We must look closely at the variations that exist within these populations to understand and address the unique risk factors that may be new targets for intervention.”

Native Hawaiian, Pacific Islander, and South Asian adults without previously known cardiovascular disease have a higher adjusted risk of developing heart failure than non-Hispanic White adults, a [study](#) in the *Journal of the*

American College of Cardiology found. In contrast, Chinese, Filipino, Japanese, Korean, Vietnamese, and other non-Vietnamese Southeast Asian adults had a lower adjusted risk than non-Hispanic White adults. “We must look closely at the variations that exist within these populations to understand and address the unique risk factors that may be new targets for intervention,” said senior author [Alan Go](#), MD. Asians currently comprise about 10% of the U.S. population, yet little was previously known about their risk for heart failure.

[Read more](#)





“Health Care Delivery and Policy research is an essential part of a learning health system. We work closely with TPMG clinicians and operational leaders to analyze and implement the most effective health care delivery processes that will support each patient’s unique needs and concerns. Our research is guided by our mission to ensure all KPNC members have equal access to high-quality care.”

— [Julie Schmitt diel](#), PhD
DOR Associate Director,
[Health Care Delivery and Policy](#)

Risk tool improves emergency department care for patients with heart failure

A [study](#) in the Journal of the American College of Cardiology: Heart Failure showed that a risk tool could identify heart failure patients in the emergency department with new or worsening symptoms at low risk of experiencing a heart attack, another serious problem, or dying, who could potentially be cared for outside the hospital. “It took us 10 years to go from identifying the need to better differentiate low- and high-risk patients to optimizing their care to implementing a novel risk tool that provides accurate, personalized risk estimates at the point of care to help guide physician decision-making,” said lead author [Dana Sax](#), MD, MPH.

◊ [Read more](#)

Putting type 2 diabetes into remission doesn’t happen often, but it is possible

A diagnosis of type 2 diabetes typically means a future of blood sugar monitoring and glucose-lowering medications. But some people can control their disease with diet and exercise alone. A new [study](#) in Diabetes Care sheds light on the patients most likely to reach this goal. “Our findings suggest that remission is more likely in adults with less severe disease, which would include those who have not had

diabetes for a long time, have lower HbA1c levels, and are on fewer medications,” said senior author [Luis A. Rodriguez](#), PhD. “These factors likely show that the body’s insulin-producing cells are working better and responding more effectively.”

◊ [Read more](#)

Emergency department triage accuracy and delays in care for high-risk conditions

A retrospective cohort [study](#) in JAMA Network Open found emergency department undertriage was associated with small, but statistically significant, delays in computed tomography orders and medication orders for patients with subarachnoid hemorrhage and aortic dissections. However, undertriage was not associated with delays in time to electrocardiogram and troponin orders for patients with ST-elevation myocardial infarction (STEMI), likely because all STEMI patients in all triage groups had a rapid electrocardiogram. The research team led by [Dana Sax](#), MD, MPH, and [Mary E. Reed](#), DrPH, said their findings suggest that accurate triage matters for timely emergency department care, specifically for conditions without a rapid, universal screening test.

◊ [Read more](#)

AI-assisted notetaking gains steady support from Kaiser Permanente physicians

A year into the rollout of a generative AI scribe for notetaking, TPMG doctors in Northern California used the technology more than 2.5 million times to assist with visits. Surveys of physician users and their patients found most were pleased with the technology; an analysis also found AI scribe use saved nearly 16,000 hours in documentation time. “We have now shown that this technology alleviates workloads for doctors,” said [Vincent X. Liu](#), MD, MS, a co-author of the [article](#) in NEJM Catalyst. Scribe users were more likely to be in mental health, emergency medicine, or primary care. “We found the highest adoption rates in departments that typically suffer from the highest levels of documentation and burnout,” said lead author [Aaron Tierney](#), PhD.

[Read more](#)

“We want our patients to choose the optimal type of visit to deliver safe, high-quality care.”

Simple online e-visits growing in use among Kaiser Permanente patients

Many patients seeking care for common outpatient conditions selected a simple online e-visit rather than talking to a doctor in-person, by phone, or by video, showed a [study](#) published in JAMA Network Open. The research also showed that follow-up rates for these visits were comparable to those for other types of visits.

[Mary E. Reed](#), DrPH, said the findings support the rapid expansion of e-visits in KPNC. E-visits, which are currently available for about 30 health concerns, “are a great, convenient, safe choice for most patients,” said co-author [Khair Tran](#), MD. “We want our patients to choose the optimal type of visit to deliver safe, high-quality care.”

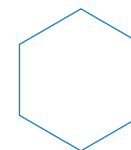
[Read more](#)



Evaluation of an Advanced Care at Home pilot program

A quality improvement [study](#) in JAMA Network Open found that patients in the KPNC Advanced Care at Home program had lower odds of acute care visits after the restorative phase but the same odds counting from the acute phase. The research team led by [Laura C. Myers](#), MD, MPH, said this finding may indicate that restorative phase services provide benefit during a critical post-acute window. Advanced Care at Home provides high-quality care to adults with acute illness, leveraging telehealth monitoring and in-home intravenous antibiotics, phlebotomy, mobile imaging, and clinician assessment.

[Read more](#)





“This was a challenging year for the infectious diseases and public health communities, and our investigators showed great resilience in both forging ahead with their ongoing research goals and pivoting to adjust their focus where needed. I am proud of the work this group continues to do to contribute key evidence on diseases with national and global implications.”

— [Michael Silverberg](#), PhD, MPH
DOR Associate Director, [Behavioral Health and Aging](#) and [Infectious Diseases](#)

Mothers' flu vaccination in pregnancy benefits babies

Mothers' vaccination against influenza during pregnancy also protects their infant, particularly in the first few months of life, according to a [paper](#) published in Obstetrics & Gynecology. “Our study emphasizes that when you are vaccinating yourself in pregnancy, you are protecting yourself, but you are also protecting your infant at a crucial time,” said lead author [Ousseny Zerbo](#), PhD. The analysis found the strongest protection when the mother received a flu shot later in pregnancy. However, only about half of pregnant patients get vaccinated against flu, a proportion that has declined since the COVID-19 pandemic.

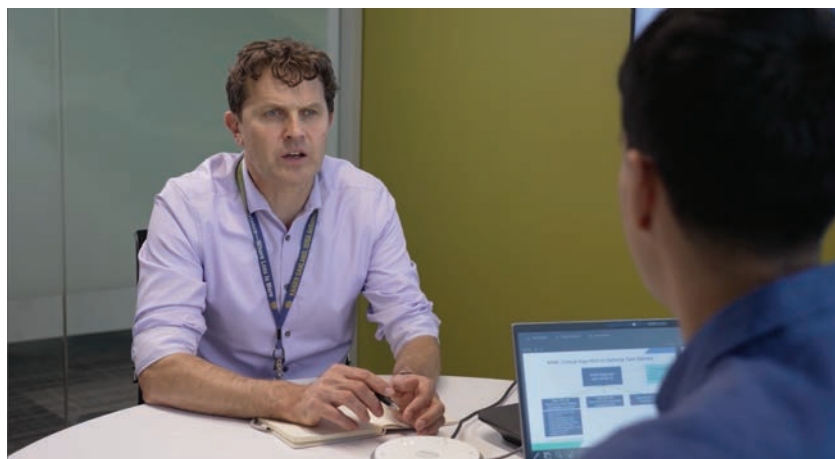
🔗 [Read more](#)

Large study of tuberculosis incidence highlights who is at risk

“Our findings help us focus our screening resources toward our highest risk patients.”

People born in countries with a high burden of tuberculosis (TB) and living in the U.S. have higher rates of TB disease and may need more focused screening. The [study](#), published in Open Forum Infectious Diseases, also found higher rates of TB among KPNC patients with certain high-risk medical conditions. “Our findings are important because they look at all previously identified risk factors for TB disease in one very large cohort,” said lead author [Jacek Skarbinski](#), MD. “They help us focus our screening resources toward our highest risk patients.”

🔗 [Read more](#)



Two-pronged approach to infant protection against RSV gets strong start

Nearly 80% of infants born at KPNC in late 2023 and early 2024 received protection from the respiratory syncytial virus (RSV) from one of 2 new methods, according to a [study](#) published in JAMA Network Open. The study examined use of the RSVpreF vaccine in mothers late in their pregnancies and the use of nirsevimab in infants. “That is pretty high uptake, particularly since these methods are fairly new,” said lead author [Karen Jacobson](#), MD, MPH. “This widespread use may be because doctors and parents are worried about RSV in young infants. RSV is the number one cause of hospitalization for children under a year old.”

◊ [Read more](#)



STI prevention method shows promise

Taking the antibiotic doxycycline after sexual exposures for prevention of sexually transmitted infections (STIs) — a method known as doxyPEP — was effective in reducing cases of syphilis, chlamydia, and gonorrhea in patients at risk for STIs. DoxyPEP involves taking doxycycline within 72 hours after sexual exposures to reduce risk of acquiring bacterial STIs such as chlamydia, syphilis, and gonorrhea. A [study](#) of Kaiser Permanente patients published in JAMA Internal Medicine found incidence declined 79% for chlamydia, 80% for syphilis, and 12% for gonorrhea. “After doxyPEP became available, we have seen a dramatic decline in positive STI tests and less need for treatment after STI exposures,” said study co-author [Jonathan Volk](#), MD, MPH.

◊ [Read more](#)

Second MMR dose does not increase risk of rare condition

Publishing in Pediatrics, [Ousseny Zerbo](#), PhD, and colleagues examined whether the small fraction of children who experience immune thrombocytopenic purpura (ITP) after their first dose of a measles-containing vaccine will be likely to experience it again after the second dose. The [study](#) examined data over 22 years and 1 million children and identified 52 confirmed cases of ITP after the first dose and no cases of ITP after the second dose. “The study may provide some reassurance to pediatricians and parents who are hesitant to revaccinate children who had ITP after the first measles vaccination dose,” Zerbo said. ITP is an autoimmune disorder that increases risk of bleeding and bruising.

◊ [Read more](#)

“The study may provide some reassurance to pediatricians and parents who are hesitant to revaccinate children who had ITP after the first measles vaccination dose.”



“In 2025, our [Women's and Children's Health](#) research demonstrated how integrated, multidisciplinary science can reveal the social, environmental, and biological forces shaping health across the life course. Leveraging rich clinical data and community driven questions, we turned real-world experiences — such as food insecurity, early adversity, prenatal mental health, and glucose intolerance — into actionable evidence for care, prevention, and policy for families nationwide.”

— [Monique Hedderson](#), PhD
DOR Associate Director,
[Women's and Children's Health](#)



Benefits from skipping early gestational diabetes screening

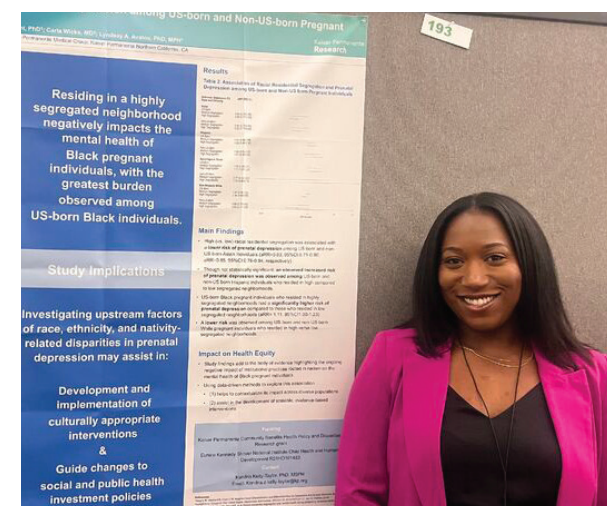
People with risk factors for gestational diabetes can safely skip an early pregnancy glucose screening test, according to a [study](#) in Obstetrics & Gynecology. Instead, they can be offered early pregnancy screening for type 2 diabetes, nutritional counseling, and gestational diabetes screening at 24 to 28 weeks gestation. “The purpose of screening for gestational diabetes is to regulate fetal growth and development, and much of the interaction between blood sugar and the fetus takes place later in pregnancy,” said lead author [Mara Greenberg](#), MD. “We used to assume earlier detection is always better, but we also have to weigh whether managing glucose intolerance for many more weeks is worthwhile.”

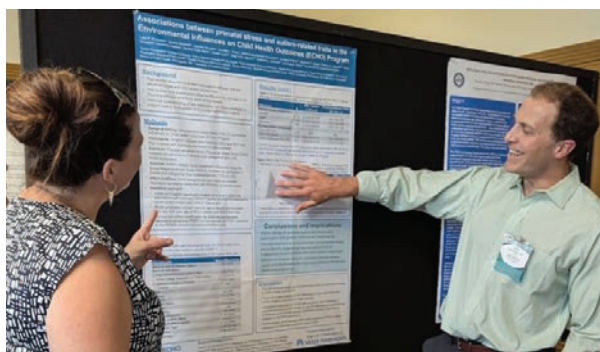
🔗 [Read more](#)

Prenatal depression may vary by patient's country of birth

In a [study](#) in JAMA Network Open, DOR investigators looked at country of birth related to prenatal depression among patients giving birth between 2013 and 2019. Those born outside the U.S. were less likely to be diagnosed with prenatal depression than patients born in the U.S., but were as likely to report moderate to severe depression symptoms on a survey. The differences could relate to willingness to discuss symptoms with a doctor, and to life experiences. “It's also possible that people who have less exposure to social and systemic discrimination in the U.S. have lower depression risk,” said lead author [Kendria Kelly-Taylor](#), PhD.

🔗 [Read more](#)





Autism study supports role of elevated blood sugar in pregnancy

An analysis of KPNC mothers and children published in JAMA Network Open added to the evidence that maternal blood sugar metabolism in pregnancy could play a role in a child's likelihood of being diagnosed with a neurodevelopmental disorder. The [study](#) of 4,546 mother-child pairs found an elevated risk associated with gestational diabetes among girls only, and in children of both sexes whose mothers were diagnosed with gestational diabetes early in pregnancy. "This study provides some important areas for future research, such as why there may be a difference in likelihood of autism by sex of the baby, and a greater likelihood of developmental delays in girls if the mother had a milder version of metabolic disorder in early pregnancy," said lead author [Luke Grosvenor](#), PhD.

◊ [Read more](#)

Food insecurity linked to increased risk of complications in pregnancy

People who experienced food insecurity during pregnancy were more likely to have complications with the pregnancy, according to a [study](#) in JAMA Network Open.

There were 19,338 individuals included in the study, and 14% reported food insecurity. The increased risk did not appear among those who received food assistance.

"These findings are significant, as very few studies have specifically examined food insecurity and health outcomes during pregnancy," said lead author [Rana Chehab](#), PhD, MPH, RD. "Our study highlights the importance of discussing food access with pregnant individuals and connecting those with food insecurity to support programs."

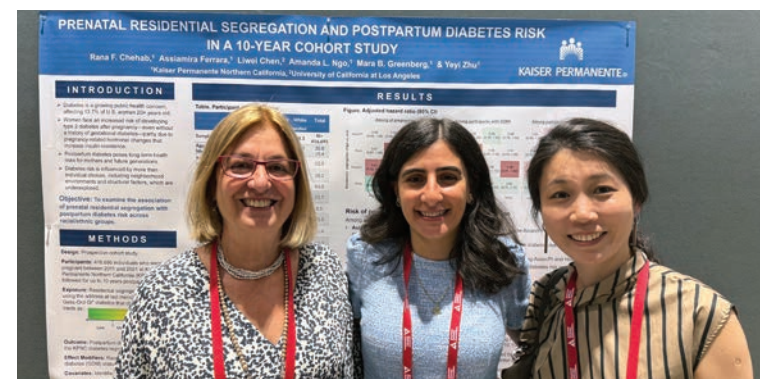
◊ [Read more](#)

"These findings are significant, as very few studies have specifically examined food insecurity and health outcomes during pregnancy."

Puberty in girls tied to adverse childhood experiences

Girls with a history of adverse childhood experiences (ACEs) are more likely to begin puberty earlier than girls who have not had these potentially traumatic experiences — but the same is not true for boys, according to a [study](#) in the Journal of Adolescent Health. Girls with ACEs were more likely to start their period before age 12 than girls with no ACEs, and there was a clear relationship between the number of ACEs girls experienced and the odds of earlier menstruation. "The findings also highlight the need for pediatricians who screen for these early traumas to think about early puberty onset as one of the potential negative health outcomes girls with many ACEs may experience," said lead author [Ai Kubo](#), MPH, PhD.

◊ [Read more](#)



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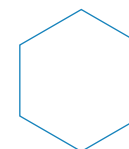
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Associate Director

Monique M. Hedderson, PhD

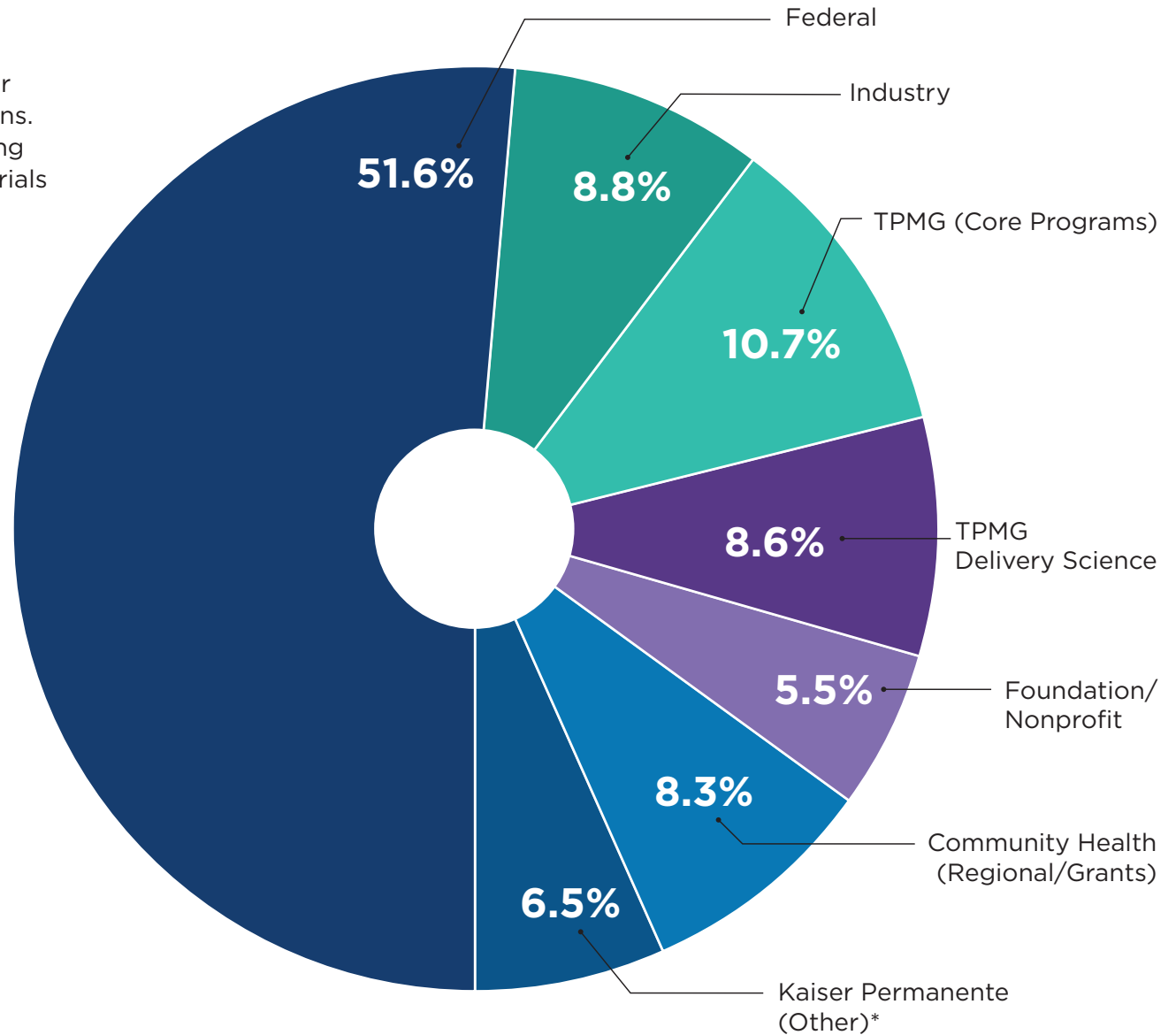
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* Staff Scientist
 § Fellow
 + TPMG Adjunct Investigator

The Division of Research (DOR) is currently home to **73** research scientists and staff scientists, **17** research fellows, and more than **674** employees. The DOR also has **46** adjunct investigators from within Kaiser Permanente and other academic institutions. DOR's scientists are involved in **612** ongoing research projects, and the KPNC Clinical Trials Program supports and guides **326** active clinical trials following **3,917** members. Since 2000, DOR researchers have published more than **8,100** peer-reviewed articles and, across all KPNC researchers, there were more than **1,000** papers published in 2025 alone.

2025 TOTAL REVENUE: \$148.08 MILLION



*(Incl. CESR, Garfield, KP Biobank, etc.)



“Connecting our members to cutting-edge therapeutic options both in small studies and large multi-site clinical trials creates opportunities for research to touch individual lives. The efforts we take to integrate clinical trials into everyday care across diverse communities are rewarded by the discovery we accelerate and the evidence we strengthen.”

— [Paradi Mirmirani](#), MD
Interim Medical Director,
[Clinical Trials Program](#)

Adjuvant regional nodal radiation in breast cancer patients with negative axillary nodes after neoadjuvant chemotherapy

Kaiser Permanente was one of the highest accruing institutions for a randomized phase 3 [clinical trial](#) that found the addition of adjuvant regional nodal radiation did not decrease the risk of breast cancer recurrence or death in patients who had negative axillary nodes after neoadjuvant chemotherapy. The [study](#), co-authored by [Samantha Seaward](#), MD, and published in the New England Journal of Medicine, established a new standard of care for women with node-positive breast cancer. Enrolled patients were followed by their physicians and research staff, who ensured follow-up provider visits, mammography, symptom assessments, and completion of quality-of-life and patient-reported outcome questionnaires for more than 10 years.

[Read more](#)

A phase 3 randomized study to evaluate a C. diff vaccine in older adults

The [Vaccine Study Center](#), led by [Nicola Klein](#), MD, PhD, is enrolling patients in an international, double-blinded clinical trial, called [Beethoven](#), that is evaluating the safety, efficacy, and tolerability of a Clostridioides difficile (C. diff) vaccine in adults 65 and older. KPNC aims to enroll 1,000 of the 32,000 study participants, who will be randomized to either the C. diff adjuvanted vaccine or a placebo. To qualify for the study, an individual must have recent or future planned contact with the health care system or have recently received antibiotics. C. diff is the leading cause of health care-associated infectious diarrhea.

[Read more](#)





A heart valve device designed to alleviate mitral regurgitation

Patients with severe, symptomatic mitral regurgitation are being enrolled in a global, prospective, non-randomized trial called [APOLLO](#) evaluating transcatheter mitral valve replacement with a new type of replacement system. The mitral valve moves blood from the heart's upper chamber to its lower chamber. If the valve is not working properly, and does not close tightly, blood can leak back into the upper chamber. This condition, known as mitral regurgitation, causes the heart to work harder, and, if severe, can cause fatigue, shortness of breath, and fluid buildup in the lungs. The study is being conducted at KPNC San Francisco under principal investigator [Andrew Rassi](#), MD.

◊ [Read more](#)

Determining treatment for children with favorable histology Wilms tumors

This phase 3 [clinical trial](#) is investigating how well combination chemotherapy works in treating newly diagnosed stage II-IV diffuse anaplastic Wilms tumors or favorable histology Wilms tumors that have reoccurred. Wilms tumor, or nephroblastoma, is a rare kidney cancer that most often affects children ages 3 to 4. The study is designed to tailor therapy based on age and risk factors. It will also help advance the understanding of ways to reduce unnecessary therapy and, in turn, improve long-term qualitative outcomes. The study is being conducted at KPNC Oakland, Roseville, and Santa Clara medical centers under principal investigator [Aarati V. Rao](#), MD.

◊ [Read more](#)

Kaiser Permanente
Research

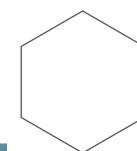
KP Study Search

KPStudySearch was created to inform patients, caregivers and investigators about the ongoing clinical trials and research studies conducted at Kaiser Permanente.

A phase 3 randomized trial of ritlecitinib for nonsegmental vitiligo

This [clinical trial](#) is studying the safety and effectiveness of ritlecitinib, an oral JAK inhibitor, for treatment of nonsegmental vitiligo. Vitiligo is a chronic autoimmune skin disorder that causes patches of skin to lose pigment or color. It affects less than 2% of the world's population. People with nonsegmental vitiligo have the condition on both sides of their body. Ritlecitinib was approved in June 2023 to treat severe alopecia areata, and earlier studies suggest it may also be an effective treatment for nonsegmental vitiligo. There are currently no FDA-approved oral medications for the treatment of vitiligo. The study is being conducted at KPNC Oakland under principal investigator [Bhavnit Bhatia](#), MD.

◊ [Read more](#)



CLINICAL TRIALS PROGRAM

The Clinical Trials Program oversees the clinical trials and expanded access programs available to Kaiser Permanente members. Participating in clinical trials creates an opportunity for patients to receive treatment that includes novel drugs and devices while helping to advance and improve clinical care.

CLINICAL TRIALS PROGRAM LEADERSHIP

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Sue Hee Sung, MPH
Managing Director

CTP Team Leads

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Director, Clinical Research Compliance

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Vaccine Study Center

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Amy Weisner
Administrative Director





“The Delivery Science and Applied Research program — or DARE — is a driving force of the practice change that occurs when researchers and clinicians partner to find new ways to provide care. We are privileged to work in an integrated health system and to be able to provide [grant funding mechanisms](#) for physicians that can advance critical research projects, including the Delivery Science Grants Program, the Rapid Analytics Unit, and the Targeted Analysis Program and to offer training opportunities through our Physician Researcher Program and Delivery Science Fellowship Program.”

— [Jacek Skarbinski, MD](#)
Director, [Delivery Science and Applied Research](#)

Simple blood test can identify pregnant patients unlikely to have a blood clot in their lung

A blood test used to detect evidence of a pulmonary embolism can determine which pregnant patients experiencing chest pain or trouble breathing can safely avoid additional advanced imaging tests, [research](#) published in JAMA Network Open showed. “Advanced imaging tests, like CT scans, can be used to diagnose a pulmonary embolism, but they add time and risk to a patient’s evaluation,” explained first author [David Vinson, MD](#). “Our study shows there is no need for every pregnant patient who might have a pulmonary embolism to have a CT scan when a D-dimer blood test — coupled with a simple decision aid — can identify a large proportion of patients for whom a CT scan is unnecessary.”

🔗 [Read more](#)



Study underlines importance of COVID-19 booster for cancer patients

[Research](#) published in JAMA Oncology found that people being treated for cancer were much less likely to get severe COVID-19 if they received booster vaccinations against it. The study looked at people being treated for cancer with chemotherapy or immunotherapy in 4 health systems. All had received the initial primary series of COVID-19 vaccination. “These findings are important for the field of oncology,” said lead author [Jacek Skarbinski, MD](#). “COVID-19 vaccination should be a part of routine cancer care and will reduce high-risk hospitalizations for these vulnerable patients.” The analysis is the largest study of vaccine effectiveness for preventing COVID-19 hospitalizations among cancer patients in the U.S.

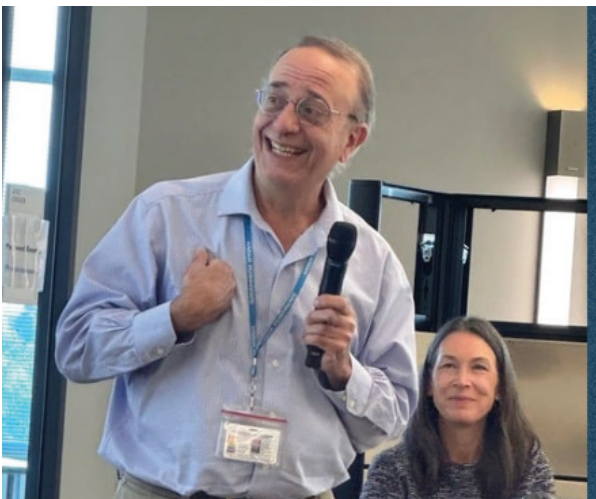
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“COVID-19 vaccination should be a part of routine cancer care and will reduce high-risk hospitalizations for these vulnerable patients.”

Researchers identify optimal treatments for *Helicobacter pylori*

The findings from a [study](#) in Clinical Gastroenterology and Hepatology can help patients and physicians identify their best options for eradicating *Helicobacter pylori* (H. pylori). “Over the past two decades, we have used many different regimens to treat H. pylori,” said senior author [Dan Li](#), MD. “But as antibiotic resistance has become more widespread in recent years, we are encountering patients for whom the treatments we regularly use are not as effective. Our study provides the information we need on how to treat these patients.” This is the largest population-based study to date in the U.S. to compare the effectiveness of the multi-drug treatment regimens for H. pylori.

◊ [Read more](#)



Prediction model could inform emergency surgery risks for older patients

For patients over 65 who may need emergency surgery, clinicians often need to make difficult judgment calls. A new predictive model, called Assessment of Geriatric Emergency Surgery (AGES), described in a [study](#) published in BMC Anesthesiology, could help clinicians assess risk more objectively and quickly. “We thought, wouldn’t it be great to have a tool that is integrated into the electronic health record, provides valuable information, and saves doctors’ time,” said lead author [Edward Yap](#), MD. “A score that predicts risk of downstream health effects doesn’t necessarily preclude the patient from having surgery, but it gives the clinicians an objective data point to discuss options with the patient.”

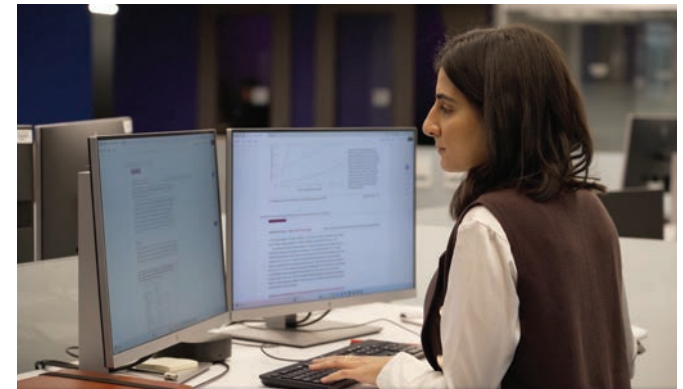
◊ [Read more](#)

“We thought, wouldn’t it be great to have a tool that is integrated into the electronic health record, provides valuable information, and saves doctors’ time.”

Cold drinks can trigger atrial fibrillation

One of the first [studies](#) to look at the experiences of people with atrial fibrillation whose flare-ups are triggered by cold foods and drinks — a phenomenon known as “cold drink heart” — was published in The Journal of Cardiovascular Electrophysiology. “We did this study because for decades there have been people telling their health care providers that cold foods and drinks trigger their atrial fibrillation episodes — but many providers have dismissed this possibility,” said senior author [David Vinson](#), MD. “Yet, the more patients with atrial fibrillation are asked about — or read about — this trigger, the more often we hear, ‘Yes, that’s happening to me, too.’” Atrial fibrillation affects about 10.5 million adults in the U.S.

◊ [Read more](#)



DELIVERY SCIENCE AND APPLIED RESEARCH

TPMG's Delivery Science and Applied Research (DARE) program provides infrastructure, connections, and analytic support to clinician-researchers who are answering questions that have the potential to change care within KPNC. The program, a collaboration between clinician investigators and DOR scientists, informs large numbers of rapid-cycle, evidence-based innovations. It has 3 grant funding mechanisms — Rapid Analytics Unit, Targeted Analysis Program, and Delivery Science Grants program — and 2 training programs — Physician Researcher Program and Delivery Science Fellowship — that support TPMG clinician researchers embedded within clinical practice.

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Manager



MEDICAL EDUCATION-SPONSORED RESEARCH



“Our regional Graduate Medical Education (GME) Program has made a strategic investment in developing infrastructure to enable resident, fellow, and faculty involvement in research and scholarly activities. With support from our research project managers and the Biostatistical Consulting Unit, our GME programs in 2025 had 345 conference presentations and 129 manuscript publications. With several hundred scholarly projects ongoing, our trainees and faculty are poised to continue this academic excellence.”

— [Ted O'Connell, MD, FAAFP](#)
Director of Medical Education,
[Northern California Institute of Medical Education](#)



“In 2025, Medical Education-Sponsored Research became a powerful engine of collective discovery and expanded opportunities for learners across the region. Our medical education community unites students, residents, fellows, faculty, and researchers around shared priorities in community health and our learning health system.”

— [Juleon Rabbani, DrPH](#)
Director, [Biostatistical Consulting Unit \(BSCU\)](#)

For heart failure patients, improvement may not be enough to stop treatment

Several medications used to treat heart failure with a reduced ejection fraction have been so effective that cardiologists have had to establish a new category: heart failure with an improved ejection fraction. But a [study](#), published in the Journal of the American College of Cardiology and led by [Kyung H. Min, MD](#), showed that patients with this condition still need treatment. “We found that nearly 1 in 3 patients saw their ejection fraction improve in their first year on these medications,” said senior author [Ankeet Bhatt, MD, MBA, ScM](#). “But although heart function improves, these patients are still at high risk for worsening heart failure, and they still need treatment.” The study is believed to be the largest, most contemporary assessment of U.S. patients with this form of heart failure.

[Read more](#)



Incident heart failure common in adults with mild to moderate chronic kidney disease

Publishing in JACC Heart Failure, [Michael P. Girouard](#), MD, MBA, and [Andrew Ambrosy](#), MD, MPH, reported on the incidence of new onset heart failure in patients at the earlier stages of chronic kidney disease (CKD). Among 351,218 adults with mild to moderate CKD, 8.6% developed heart failure over a median of 3.9 years. The results offer insights into cardiovascular-kidney-metabolic syndrome, the authors wrote. They noted the availability of several new promising therapies and the importance of slowing the progression of CKD and proteinuria at earlier stages of disease. “Given that the heart failure landscape is moving further upstream from treatment to prevention, this clinical overlap highlights the potential for synergistic management,” said the authors.

[Read more](#)

Health care system contact time trends for advanced cancer patients

Ali M. Duffens, MD, [Raymond Liu](#), MD, and team published a retrospective cohort study in JAMA Network Open comparing 6,558 pre-COVID-19 (January 2015 – February 2020) and 3,085 post-COVID-19 (March 2020 – June 2022) patients with stage 4 cancer who died

within a year of diagnosis to evaluate how the pandemic affected time toxicity — that is, the time burden of interacting with the health care system — through changes in health care use, including outpatient visits, hospitalizations, and telehealth. They found that even with an increase in telehealth use, these cancer patients continued to spend a large percentage of their time in contact with the health care system. The authors recommended efforts to refine time toxicity measures as standard outcome metrics.

[Read more](#)

Online search terms could help public health planners

Allison Beers Constant, MD, [Honor Hsin](#), MD, and team published a [study](#) in Scientific Reports investigating whether aggregate Google searches between 2017 and 2021 related to alcoholic beverages were associated with outpatient treatment for alcohol use-related diagnoses before and during the COVID-19 pandemic. The analysis found a weak positive correlation with a lag of several weeks. “The correlation suggests that an increase in relative interest for alcohol within Google search trends may be positively associated with future health care visits,” the authors wrote. They suggested further research into the potential utility of integrating

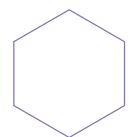
search term trends with standard surveillance efforts to enhance dedication of health care resources.

[Read more](#)

Analysis highlights variation in pelvic pain care by race and ethnicity

[Eve F. Zaritsky](#), MD, and team published a retrospective cohort study in the journal Obstetrics & Gynecology examining demographic, clinical, and treatment characteristics among 15,164 adult women with gynecologic disorders like endometriosis, pelvic pain, dysmenorrhea, and dyspareunia. The analysis found minor variation in specific treatment modalities (such as hysterectomy and resection of endometriosis) and referral to pelvic pain specialty care. It found no difference between Black and non-Black patients in surgical treatment followed by medical treatment for endometriosis. “Within an integrated health care system committed to eliminating racial and ethnic and socioeconomic disparities through the implementation of culturally responsive disease management models, we observed equitable patterns of care among Black women,” Zaritsky said.

[Read more](#)



KPNC Medical Education-Sponsored Research encompasses scholarly work from Graduate Medical Education (GME) — which maintains 19 residency and 18 fellowship programs — and Kaiser Permanente Bernard J. Tyson School of Medicine (KPSOM) students collaborating with TPMG physicians. The work is primarily supported by the DOR Biostatistical Consulting Unit (BSCU).

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Brooke Harris, PhD, San Jose

Cynthia Triplett, MPH, MA, Santa Clara

Kat Dang, MS, MAS, Napa

Lorlelei Lee-Haynes, MPH, Central Valley

Miranda Weintraub, PhD, MPH, Oakland

**Nirmala Ramalingam, MPP, Oakland,
Alameda**

Shannon McDermott, PhD, Santa Rosa

Stacie Lloyd, PhD, Sacramento

PHYSICIAN RESEARCH LEADS (organized by specialty)

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Anesthesiology

Edward Yap, MD

Bariatric Surgery

Gary Grinberg, MD

Cardiovascular Disease

Andrew Ambrosy, MD

Community Medicine & Public Health

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Kathryn Erickson-Ridout, MD, PhD

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Hematology Oncology

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Seema Pursnani, MD, MPH

Nephrology

Ali Poyan Mehr, MD

Obstetrics-Gynecology

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Maryl Sackeim, MD

Nikhil Joshi, MD

Orthopedic Spine Surgery

Ehsan (Ace) Tabaraee, MD

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“The most impactful research questions are often inspired by observations from actual clinical practice. Within KPRNC, TPMG clinicians have the unique ability to partner with biostatisticians, other researchers, data analysts, and operational leaders to not only study a clinical question but also translate the findings into changes in care or care delivery.”

— [Betty Suh-Burgmann](#), MD
Chair, KPNC Central Research Committee

New pain block technique as effective for reducing post-mastectomy pain

Two pain block techniques — a pectoralis nerve (PECS) block and an erector spinae plane (ESP) block — are equally effective in reducing opioid use after a mastectomy, a [study](#) published in the Journal of Pain Research showed. The PECS block is commonly used for breast cancer surgeries; the ESP block is newer to the breast cancer setting. The findings should provide reassurance to breast cancer patients who have concerns about optimal pain management. “There hasn’t been a lot of research comparing the PECS block with the ESP block, and we believed doing this study at Kaiser Permanente could help guide care provided to all breast cancer patients,” said first author [Edward Yap](#), MD.

🔗 [Read more](#)



COVID-19 illness and vaccines pose no risk to blood donation supply

It is safe to receive blood during a medical procedure from someone who has been vaccinated against COVID-19, a [study](#) published in Transfusion confirmed. “Some groups have raised questions about the safety of blood transfusions from blood donors who have been vaccinated against COVID-19,” said lead author [Nareg Roubinian](#), MD. “Our study is the first to link specific SARS-CoV-2 antibody data from blood donors with the patients who received their blood, and we found no evidence that patients who had received blood from vaccinated donors were affected in a negative way by that blood product. In many cases, the blood may have helped save their lives.”

🔗 [Read more](#)

“We found no evidence that patients who had received blood from vaccinated donors were affected in a negative way.”

Many patients with first-time psychosis diagnosed in emergency room

[Research](#) published in the American Journal of Managed Care found that among 1,726 patients aged 15 to 29 with a first-time diagnosis of a psychotic disorder, 42% were diagnosed in the emergency department, while about 46% were diagnosed in outpatient psychiatry clinics. “The emergency department is a critical,

and often underrecognized, entry point into mental health care,” said senior author [Icelini Stavers-Sosa](#), MD. “While outpatient psychiatry provides more comprehensive evaluations and more precise diagnostic clarity, the emergency department is where many young people first come to our attention during an emerging psychotic illness.”

[Read more](#)

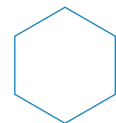


Simple online e-visits for oral contraceptives result in faster care

An online-only e-visit to obtain oral contraceptives resulted in patients picking up their prescriptions more quickly and needing less follow-up than talking to a doctor by phone, video, or in person, a [study](#) published in Obstetrics & Gynecology Open found. E-visits help reduce patient barriers to care, said co-lead author [Eve F. Zaritsky](#), MD. “It is encouraging to see that e-visits provide not just convenience but are also a safe and effective experience for patients seeking prescriptions.” KPNC has offered the online e-visit option for oral contraceptives since 2022. Patients follow an online process to answer health questions before receiving a prescription.

[Read more](#)

“E-visits provide not just convenience but are also a safe and effective experience for patients seeking prescriptions.”



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The Central Research Committee stimulates, develops, promotes, and evaluates clinician- and investigator-originated research within Kaiser Permanente Northern California; teaches and guides researchers; and advocates for research throughout the Kaiser Permanente organization.

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East Bay

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San Francisco

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San Jose

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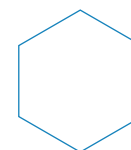
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Santa Clara

Michael Yoo, MD
Santa Rosa

Ben J. Balough, MD
South Sacramento

Lisa K. Gilliam, MD
South San Francisco





4480 Hacienda Drive
Pleasanton, CA 94588
DOR-Communications@kp.org

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Kaiser Permanente
Division of Research
Communications Department

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