

2021 Oregon Health & Science University Community Benefit Report Narrative Feb. 25, 2022

Oregon Health & Science University is Oregon's only academic health center and serves the entire state, as well as in Southwest Washington and portions of Idaho. OHSU operates more than 200 outreach and service programs that focus on improving the health and well-being of Oregonians through health care, research, and education. OHSU educates health care professionals in medicine, dentistry, nursing, pharmacy, and public health to meet the workforce needs of communities across the state.

Community Health Needs Assessment

OHSU is a member of the Healthy Columbia Willamette Collaborative, which includes 15
hospitals, four health departments, and one coordinated care organization (CCO) in the
Clackamas, Multnomah and Washington counties of Oregon, and in Clark County,
Washington. The collaborative is a unique public-private partnership that aims to strengthen
relationships between communities, coordinated care organizations, hospitals, and public
health agencies. The collaborative conducts community health assessments to inform health

improvement plans for participating hospitals, CCOs and local public health authorities. It aims to eliminate duplicative efforts, prioritize needs, and enable collaborative efforts in implementing and tracking improvement activities that leverage collective resources to improve the health and well-being of our communities. It issued a community health needs assessment report in 2019 to provide a road map for future collaborations and health improvement projects in the region, which had a total population of about 2.2 million and was about 81% white at that time. OHSU continues to participate in the collaborative, which plans to conduct a new community health needs assessment in 2022. The 2019 assessment identified the following factors as affecting the region's health and well-being:

- Key drivers of the community's health needs are discrimination and racism, which can lead to health inequity, toxic stress and more.
- Another key driver is trauma, which affects long-term health, and highlights the need for trauma-informed health care practices.
- Identified needs included:
 - Increased behavioral health services, with nearly a quarter of the region being diagnosed with depression;
 - Treatment for chronic conditions such as heart disease and diabetes, which impact communities of color at higher rates than white communities;
 - Support for sexually transmitted infections, which have seen rates increase;
 - Improved access to health care, which is too often limited by cost, availability, language barriers, transportation, housing, and more;
 - Removal of language and cultural barriers that prevent immigrants and refugees from receiving needed health care;
 - And the reduction of geographic and social isolation in both rural and urban areas, which limits access to services as well as involvement in the community.

Addressing community health needs

This report describes OHSU's major initiatives to meet community health needs, including the needs identified in the Healthy Columbia Willamette Collaborative 2019 health needs assessment report.

These initiatives span OHSU's multifaceted mission of health care, education, and research, and through a network of partnerships, bring vital health and education services to every county in Oregon. Many of

these programs address multiple community health needs at once. For example, OHSU's Intercultural Psychiatric Program provides behavioral health care services to a diverse group of over 1,000 patients in the Portland area, specifically addressing language and cultural barriers through the use of 14 multilingual counselors and contracted interpreters. Similarly, many of OHSU's programs address social determinants of health at both the individual and systemic levels. OHSU's Northwest Native American Center of Excellence works to increase the number of American Indian/Alaska Native individuals in the health professions, which both improves access to education for individuals and seeks to impact health outcomes at the population level by increasing representation. The activities are organized by theme as a result, to reflect the interconnectedness of this work:

- Pandemic services for Oregonians (pages 3-5)
- Services for Oregon's children (pages 5-10)
- Services for Oregonians with disabilities (page 10)
- Services for working Oregonians (pages 10-11)
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Pandemic services for Oregonians

OHSU offers a range of COVID-19 vaccination options for Oregonians. Today, OHSU offers appointment-only vaccination at its outpatient pharmacies and a Portland clinic. In addition, OHSU's Vaccine Equity Committee partners with a variety of community organizations to organize pop-up vaccination events throughout the Portland area without requiring an appointment. Such events specifically aim to welcome Black, Asian, Pacific Islander, Native American, Latino/a/x, immigrants, refugees, LGBTQ+ and other historically underserved communities, and are staffed by multilingual, culturally aware volunteers. When vaccination demand was high in 2021, OHSU was involved in four low-barrier, mass-vaccination sites, all of which were possible thanks to partnerships with local agencies, health systems and other

- organizations. To date, OHSU has collectively facilitated more than 431,000 COVID-19 vaccine doses for community members.
- OHSU has provided the Portland metropolitan area's only low-barrier COVID-19 testing services since 2020. OHSU's drive-through sites haven't required a referral, are free to patients (although insurance is charged if a patient has it), and are available to OHSU and non-OHSU patients alike. Low-barrier sites like these provide effective access to testing for anyone who needs it. Having been located at various places in Portland and Hillsboro, OHSU's sites have collectively processed more than 133,000 tests and have detected more than 14,000 COVID-19 cases to date. OHSU also deployed specially equipped vans to offer remote testing services in Clatsop, Columbia, and Clackamas counties in 2021. OHSU's community testing services enable patients to be connected with needed care in a timely manner and prevent the novel coronavirus from spreading further.
- With the support of a \$1.6-million donation from the Morris-Singer Foundation, OHSU established the COVID-19 Connected Care Center hotline in March 2020. Since then, specially trained registered nurses have operated the hotline seven days a week to answer calls from the public about the novel coronavirus and connect callers with care whenever needed. Hotline staff also make outgoing calls to touch base with OHSU-confirmed COVID-19 patients. Since 2020, the hotline has responded to more than 136,000 incoming calls and shared test results with more than 250,000 patients.
- Much of OHSU's research community pivoted its focus during the pandemic to better
 understanding the novel coronavirus and evaluating potential COVID-19 treatments and
 vaccines. For example, faculty continue to lead and support 32 COVID-19 clinical trials that,
 among other things, are investigating both vaccine candidates and treatments. To date,
 OHSU has received about \$74.5 million in funding from a variety of sources to conduct
 research and similar activities related to COVID-19.
- OHSU's Office of Advanced Analytics, directed by Peter Graven, Ph.D., develops a weekly
 COVID-19 Data Trends and Forecast Brief that helps guide the state's response to the ever-

changing pandemic and enables OHSU and others to better prepare for increases in sick patients weeks before they arrive in hospitals.

Since 2020, OHSU creative and social media staff have created and distributed **public** awareness campaigns to help Oregonians better understand COVID-19 and what they can do to protect themselves. OHSU's first campaign initially urged Oregonians to "Stay Home. Save Lives." during the pandemic's early days, and later transitioned to "Oregon Forward" messaging to share practical tips from recommended public health best practices. In 2021, these two campaigns posted more than 1,000 messages, which received nearly 1.4 million impressions across various social media channels. And to keep the public informed during the delta and omicron variant-driven surges of 2021 and 2022, OHSU's social media channels routinely shared information about OHSU's hospitalized COVID-19 patient volume, including the percentage of patients who were vaccinated, illness severity, and age ranges. OHSU has shared more than 250 such surge data posts to date, which have received more than 25 million impressions combined.

Services for Oregon's children

• OHSU Doernbecher Children's Hospital takes pediatric care to children all over Oregon with traveling subspecialty clinics. For families who live outside the Portland metropolitan area, these clinics offer specialized medical care without the need to leave home. As a result, about 1,250 pediatric cardiology patients received care in Bend, Coos Bay, Corvallis, The Dalles, Eugene, Medford, Salem, Klamath Falls, Pendleton, Salem and Vancouver. OHSU also served about 750 pediatric endocrinology patients in Bend, Eugene, Salem, Coos Bay, Medford, Klamath Falls and Vancouver in the same time period, along with about 1,980 pediatric gastroenterology patients Eugene, Medford, Salem and Vancouver; about 70 pediatric pulmonary patients in Salem; about 260 pediatric nephrology patients in Eugene, Salem and Medford; nearly 230 pediatric urology patients in Eugene and Salem; and more than 50 pediatric surgery patients in Salem.

The **Pediatric and Neonatal Doernbecher Transport** team stabilizes and monitors young patients while they are en route to OHSU's emergency department or intensive care units. The team serves Oregon, Washington Idaho and Northern California, and is available to

transport from other states if needed. It is the largest and busiest pediatric and neonatal transport program in Oregon.

The **Novel Interventions in Children's Healthcare** program helps stressed families manage their child's complex and chronic health condition. Trained interventionists work with families to solve issues that prevent a child from following medical instructions. Specifically designed for families with limited resources or who have experienced social challenges such as homelessness or unemployment, it is Oregon's first intensive intervention program that focuses on children.

- The OHSU Doernbecher Injury Prevention Program is an industry-leading and comprehensive injury prevention program dedicated to keeping kids safe. As the most trusted injury prevention programs in the region, it offers education and resource support to families and staff throughout the OHSU Health system and the broader community. It strives to always operate to do what is best for kids by ensuring children, families, and health care providers in our communities have access to information and resources. The program provides services through OHSU Doernbecher Children's Hospital's inpatient injury control program, along with our two safety resource centers, the Tom Sargent Safety Resource Center at Hillsboro Medical Center. In fiscal year 2021, the program provided both virtual and inperson educational services to families across Oregon and Southwestern Washington state. The program's health educators worked with more than 4,343 patients; inspected 1,524 car seats; and provided 304 car seats, 467 portable cribs, 236 helmets, and more than 375 home safety items. These items are offered at no cost to Oregon families in an effort to support caregivers in providing a safer environment for children.
- The **OHSU Institute on Development and Disability** includes five centers dedicated to improving the lives of people with disabilities and their families:
 - o Child Development and Rehabilitation Center
 - o Oregon Center on Children and Youth with Special Health Needs
 - o Oregon Office on Disability and Health
 - Leadership Education in Neurodevelopmental and Related Disabilities Program

University Center for Excellence in Developmental Disabilities

Its five centers work together to improve service, provide education and training, enhance communities, and develop research projects to improve the lives of people with suspected or known disabilities and special health needs throughout Oregon and beyond.

The Institute also partners with many community organizations to determine the needs and resources required to encourage healthy living for youth and adults with disabilities who reside in those communities. This happens through state-sponsored needs assessments, community education events, screening events, and other efforts designed to better understand and enhance the capacity of local communities.

Initially the only state-funded organization to provide care for children and individuals with disabilities, the institute's **Child Development and Rehabilitation Center** provides care in permanent clinics located in the Portland metro area and Eugene, as well as clinical outreach teams in Medford, Bend, Hermiston, Redmond, and Klamath Falls. OHSU estimates these clinical programs provided more than 63,000 services in 2021, including many not available anywhere else in Oregon. Due to COVID-19, clinical care continues to be a blend of in-person and virtual care due, ensuring continued care for Oregonians with known or suspected disabilities.

The **Oregon Center for Children and Youth with Special Health Needs** is Oregon's Title V public health agency for children and youth with special health care needs. The center's mission is to improve the health, development, and well-being of impacted children and youth in Oregon.

The center operates in concert with the Oregon Health Authority's Maternal and Child Health section, and partners with county public health agencies, community-based organizations, and health care providers statewide to serve thousands of children and youth with special health care needs. It supports a variety of programs across the state, including the CaCoon nurse home-visiting program, which helps families coordinate care through

complex systems, and helps their children and youth with special health needs to thrive. The center also focuses on addressing social determinants of health by facilitating family-centered, community-based teams to build family agency and resilience. It leads health system improvement through education, collaboration, surveillance, and policy work, and is recognized as a national leader in the incorporation of equity and anti-racism into the work of Title V. Center staff represent the interests of this vulnerable population on state and local boards, councils, advisory committees, and work groups.

In 2020-21, the center had active contracts with 27 Oregon counties, directly impacting the lives of hundreds of children and families, even as much of its was done virtually due to the COVID-19 pandemic. It has also led distance-based learning collaboratives for dozens of health professionals across Oregon, developing local and regional expertise and leadership capacity in cross-sector care coordination for children and youth with special health care needs and autism.

The **OHSU School of Dentistry** curriculum educates dentistry students about the widening gap between the oral health of insured and uninsured people and provides strategies to address these disparities. Each year, dental students participate in Give Kids a Smile day to provide dental services to children from underserved communities in Portland and Vancouver, Washington. The school organizes at least two sealant days annually to provide sealants for Oregon Health Plan children who have not been to a dentist. In 2021, the school saw nearly 1,500 pediatric patients during a total of more than 4,500 visits. Pediatric patients account for about 13% of the school's total patient population, and about 70% of OHSU's pediatric patients are covered by a Medicaid dental plan from Oregon or Washington state.

Throughout Oregon, an estimated 24% of children ages 6 to 8 experience untreated tooth decay due to a lack of dental access. That percentage is higher in Oregon's southeastern counties. And nearly two-thirds of adults statewide experience premature tooth loss as the result of decay or advanced periodontal disease. With these numbers in mind, OHSU has its student dental practitioners participate in **community dental rotations** throughout the state

for a total of nine weeks. Combined, rotating students and affiliated clinical faculty provide more than \$6 million in dental care for patients at a variety of community health centers and rural private dental practices across Oregon. Some of the many communities served through rural rotations include: Baker City, Eugene, Burns, Klamath Falls, Enterprise, Salem and Albany. In addition to providing better access to oral health care in Oregon, the dental rotation program also creates a steady stream of oral health professionals with a greater awareness, willingness, and desire to practice in the state's rural communities.

- Faculty and residents of the OHSU Department of Family Medicine staff the Benson Wellness Center to blend community health, resident education, and foster the pipeline of future health care professionals. Benson Polytechnic High School is a highly diverse magnet school that draws students from all Portland neighborhoods. About 64% of students are economically disadvantaged and would otherwise have to travel long distances for routine health care, if not for this school-based wellness center. The center, which is temporarily operating out of Marshall High School while Benson Polytechnic is being remodeled, also provides learning opportunities for students enrolled in the school's Health Science Pathway.
- In Oregon, it is mandatory for children to provide proof of a vision screening before entering public preschool or kindergarten. With support from the Oregon State Elks Association,
 OHSU Casey Eye Institute's Elks Preschool Vision Screening Program offers free screenings in public classrooms and libraries across the state. The screenings are performed by OHSU staff with the assistance of Elks volunteers. These screenings focus on detecting and treating vision disorders while the visual system is developing. Many vision disorders, such as amblyopia, can be successfully treated and even reversed if detected early.

The program specifically screens Head Start children for vision problems throughout Oregon. In addition to the screenings, bilingual educational resources have been developed for parents. When children are identified as having a vision problem, they are referred to their local provider for a complete dilated eye exam. So far during the 2021-22 school year, the program has completed more than 2,600 screenings, and has facilitated follow-up care

for about 730 children whose initial screening results indicated further investigation with a vision provider was needed.

Services for Oregonians with disabilities

- The Oregon Office on Disability and Health's mission is to promote the health and wellness of Oregonians with disabilities through public health surveillance, health promotion, training, education, community engagement activities, policy development and recommendations, and dissemination of materials and information. Its work aims to promote and maximize health, prevent chronic disease, improve access to health care, and increase the quality of life among the approximately 900,000 Oregonians with disabilities. This is done through community outreach programs that are designed to meet the needs of individuals with disabilities, family members and caregivers of people with disabilities, educators, and/or health care professionals. The office serves all 36 Oregon counties.
- The OHSU University Center for Excellence in Developmental Disabilities is one of 67 national centers that share a common vision in which all Americans including those with disabilities participate fully in their communities. The center is part of the OHSU Institute on Development & Disabilities, within the OHSU pediatrics department. Independence, productivity, and community inclusion are key components of this vision. To build communities' capacity to sustain all their citizens, the center works with people with disabilities, members of their families, state and local government agencies, and community providers in projects that provide training, technical assistance, service, research, and information sharing. The center's Community Partners Council, an advisory group of people with disabilities, is involved in research and clinical activities, and serves to provide information about the needs they identify within communities.

Services for working Oregonians

 The Oregon Institute of Occupational Health Sciences promotes safety, health, and wellbeing, and prevents disease and disability among working Oregonians through basic and applied research, outreach, and education. It applies research discoveries, integrates workplace safety, health and well-being, and creates actionable strategies to support the whole health of workers.

In addition to research, the institute trains health and safety professionals, disseminates its research products, provides consultations, and offers occupational health and safety information through its resource center. It is home to the Oregon Healthy Workforce Center, one of six federally funded Total Worker Health Centers.

The institute includes more than 70 scientists and research and outreach staff who explore the prevention of injury and disease and the promotion of health in the workforce. Its outreach team brings cutting-edge research to practice in communities and organizations throughout the Northwest. As the pandemic progressed in 2021, the institute's work grew even more critical to meet the growing occupational, health, and well-being needs of community, state, and national partners. Faculty and staff developed and disseminated multiple resource materials and trainings, and provided their expertise to support occupational pandemic response efforts.

Behavioral health services for Oregonians

- The Unity Center for Behavioral Health is a collaborative effort among OHSU, Legacy
 Health, Kaiser Permanente, and Adventist. The 24-hour adult psychiatric emergency services
 center provides crisis stabilization, intervention and counseling; inpatient care; medication
 management; social work and case management; and family and peer support. It is a firstof-its-kind facility in the Pacific Northwest.
- The OHSU Avel Gordly Center for Healing is one of a few practices in the Pacific Northwest that focuses on culturally sensitive care for African and African-American communities. The center employs trauma-informed counseling practices and strives to remove the stigma associated with mental illness for underserved communities. It also provides training for other healthcare and social service providers about sensitive and culturally responsive treatment for African-Americans.

- The OHSU Intercultural Psychiatric Program serves about 1,100 people in the Portland area, including 200 survivors of torture from Iraq, Iran, Somalia, Ethiopia, Bosnia, Syria and elsewhere. Its 14 multilingual counselors and contracted interpreters provide support and treatment for a wide range of mental health issues, ranging from dementia to depression and post-traumatic stress disorder.
- The OHSU Department of Psychiatry offers a tele-psychiatry service for patients who live in rural or remote areas and also operates outpatient psychiatry clinics for adults and children who are closer to Portland. In addition, the department offers a hotline to help primary care providers meet their adult and pediatric patients' psychiatric needs.
- OHSU trains the next generation of mental health providers through a doctoral program in clinical psychology, an adult psychiatry residency program, and fellowship programs in addiction psychiatry, child and adolescent psychiatry, consultation liaison psychiatry, forensics psychiatry, and geriatric psychiatry. OHSU graduates make up the majority of Oregon's psychiatric workforce.

Collaborations to improve care in Oregon's communities

Through a network of partnerships and collaborations, OHSU is enhancing community-based care, serving Oregon's most vulnerable citizens, increasing access to health care education, and bringing groundbreaking health research to rural communities. OHSU's community service programs bring health and education services to all counties in Oregon. In addition to geographic access, OHSU's public service mission includes serving as a safety net for people across Oregon. For more than a century, OHSU has provided a disproportionately large share of health care to uninsured patients and those with public health insurance, in comparison to its size and market presence.

OHSU employs provider relationship managers to travel around the state and meet with community physicians and hospitals on a regular basis. They share information on specialty care provided at OHSU should patient referral be necessary. They also serve as a link to OHSU resources if more formal partnerships would be better for the community, such as sending OHSU health care providers to rural locations. In addition, both communities and hospitals approach OHSU for needs assessments on an ongoing basis.

- OHSU partners with the American Heart Association to support Oregonians dealing with heart failure. The two organizations have created a public campaign to increase education, resources and support for those living with heart failure in Oregon and Southwest Washington. The collaborative effort includes a website with heart failure resources, educational seminars, and heart failure education handouts for patients.
- OHSU collaborates with others to offer a variety of services to treat and prevent sexually transmitted infections (STIs), including:
 - OHSU's adult Infectious Disease Clinic offers consultation and treatment for adults with infectious diseases, including STIs.
 - OHSU's Division of Infectious Disease offers an STI referral service to aid community doctors in the diagnosis and treatment of their patients.
 - OHSU's outpatient HIV clinic offers comprehensive, evidence-based HIV treatment and prevention services for adults living with HIV and those at risk for the HIV infection.
 - OHSU HIV clinic providers have an ongoing partnership with the nonprofit Mountain West AIDS Educational & Training Center to provide educational seminars to community providers around HIV and STI management.
 - OHSU Doernbecher's Pediatric HIV Clinic is the only clinic in Oregon specializing in pediatric HIV care and treatment. It provides comprehensive, family-centered care and education for children from infancy to young adulthood with HIV, as well as for children born to mothers with HIV.
- The OHSU Partnership Project provides services to people living with HIV. It does this with the support of a consortium of 13 public and private medical and social service agencies in the Portland metro area. The project focuses on ensuring people living with HIV have access to affirming, competent, and high-quality health care. The core values of all project programs are collaboration, community building, and client-centered work. Its specific programs include:
 - HIV case management (including nursing and medical case management)
 - Culturally appropriate care navigation for refugees and immigrants living with HIV

- Medical care navigation for persons living with HIV
- o Insurance enrollment assistance
- Providers across the state to improve patient access to respectful and quality health care, regardless of gender identity. OHSU has one of the largest and most comprehensive transgender health programs in the U.S., and cares for more than 6,000 adult and youth transgender patients. To better serve patients outside the Portland area, the program started its Transgender Health Virtual Consult Clinic in 2021. The virtual service connects patients who are referred by their local primary care provider with an OHSU provider for a consultation about hormone therapy and other gender care. The program also launched a grand rounds lecture series in 2021. The online series, which is geared toward health care professionals, invites patients to serve as guest speakers and share their unique experiences and perspectives as individuals who seek and receive gender-affirming care. Oregonians who represent the transgender and non-binary community help guide the program's direction as members of its Community Advisory Board.
- OHSU has created a Portland-based health system that is designed to reduce duplication of services, deliver greater value to patients, and most importantly ensure that more Oregonians have access to the services that OHSU uniquely provides. OHSU has services in Central Portland, at OHSU Hospital, OHSU Doernbecher Children's Hospital, and OHSU's Marquam Hill and South Waterfront outpatient clinics. Additionally, OHSU has other services in Washington County, provided by Tuality Healthcare; and still other services in East Portland, provided by Adventist Health Portland. The system has the geographic reach required to expand the impact of Oregon's only public academic health center in the most densely populated area of the state.

Unlike out-of-state mergers or acquisitions, OHSU and its health system affiliates are committed to an Oregon-based approach to Oregon's health problems, delivering the highest standards of care to patients and the greatest value to the communities served. The system allows all parties to share in a coordinated approach to clinical operations — utilizing

health resources more efficiently than any of its individual parts could accomplish independently.

- In partnership with the nonprofit Transitions Projects, the students who run the Bridges Collaborative Care Clinic offer free, transitional medical care and social services to Portland residents experiencing homelessness. The nonprofit clinic was established in 2017 by medical, nursing, dental, pharmacy, public health, and other students from OHSU, Portland State University and Oregon State University. More than 300 people have received care through the clinic since it opened. During 2021, student leaders created women's health kits, provided harm-reduction programming, and hosted five COVID-19 vaccination events.
- Through partnerships with programs serving low-income, uninsured, and underinsured Oregonians, the Casey Eye Institute Outreach Program offers free vision screenings at an expanding network of community locations. The program's mobile ophthalmology clinic travels throughout Oregon and collaborates with other organizations serving people in need to identify common treatable causes of blindness. Participants are examined at no cost and community groups assist with follow-up for individuals needing continued medical support.

Since its inception in 2010, the Casey Outreach Program has provided services to more than 10,000 community members who don't have other access to eye care across the state. The program operates with the help of more than 70 community partners, which are Oregon social service agencies, programs, and safety net clinics that serve low income, uninsured, or underinsured members of the community.

In 2021, the program established the **Oregon Vision Health Network**, which aims to improve access to quality eye care for traditionally underserved communities such as agricultural workers. Through the network, OHSU is partnering with community health clinics across Oregon and training participating clinics' community health workers to evaluate patients' need for glasses as well as screen them for sight-threating conditions. OHSU will also provide advanced eye imaging equipment to up to eight participating clinics, which will operate the equipment locally. OHSU ophthalmologists will remotely review the

resulting scans to help diagnose and manage the treatment of eye conditions in clinic patients. OHSU will provide this service for free during the networks' first five years with the support of two generous private donations.

- OHSU collaborates with providers across Oregon on the IMPACT project to improve care for
 hospitalized adults with substance use disorder. IMPACT or Improving Addition Care Team —
 provides comprehensive inpatient addiction consultations, including care from addiction
 medicine physicians, social workers, and peers with lived experience in recovery, and
 provides connections to community addiction care. Studies show IMPACT is associated
 with reduced substance use severity, increased treatment engagement after hospital discharge,
 increased trust in health care providers, and improved provider understanding of how to treat
 addiction.
- Health care screenings are crucial to OHSU's mission to improve the health of all Oregonians.
 Regular screenings enable early detection of disease, increasing survival rates and decreasing costs. OHSU collaborates with numerous partners to offer free such screenings, including breast health awareness for women with disabilities; eye, heart, and dental screenings; and wellness screenings for the uninsured.
- The **OHSU Oregon Poison Center** is a 24-hour regional poison emergency information and resource center for the public and health care professionals. The center serves Oregon as well as Alaska and Guam. Its services save millions of dollars annually by keeping many people out of the hospital and helping those who are in the hospital to recover as quickly as possible.

The center fielded nearly 23,000 calls in 2021, with about half of those calls addressing accidental poisoning or toxic exposure in children and teens. In 2021, the Oregon Poison Center successfully managed 89% of cases it received over the phone, preventing Oregonians from having to drive to the hospital and saving over an estimated \$23 million in health care costs.

The center closely works with public health partners at the Oregon Health Authority to actively assist in surveillance monitoring and patient management regarding many emerging public health concerns such as opiates, cannabis, and e-cigarettes. This collaboration has been presented at national conferences so Oregon can serve as a model for other states.

- The **OHSU Stroke Center** has developed a streamlined transfer process that quickly works with local health care providers to help stroke victims access the treatment they need in the shortest time, and also trains health care facilities across the state.
- The OHSU Physician Advice and Referral Service provides the link for community physicians to connect with OHSU physicians for clinical advice and tertiary referrals. The service provides 24hour, toll-free telephone access to OHSU expertise for practitioners throughout Oregon and the region.
- The Oregon Rural Practice-based Research Network is a statewide network of over 400 primary care practices and others in public health, health insurance payors, and community services. It coordinates clinical research and helps participating practices transform how they operate while extending the benefits of medical research to rural communities, connecting community primary care clinicians with each other, and including the voice of practicing clinicians in medical research decisions. Through regionally based research coordinators, clinicians and their practices participate in pragmatic clinical trials and implement research and quality improvement initiatives. The network is nationally recognized for its success in working with rural primary care practitioners and their communities to improve health outcomes and equity through dialogue, research, coaching, and education. In 2021, the network surveyed primary care practices statewide to explore the effect of the state's health care worker COVID-19 vaccine mandate on staffing and practice experience.

Among its programs is the **Oregon ECHO Network**, which helps primary care physicians treat chronic and complex illnesses from their hometown clinics and increase patient access to care. ECHO connects primary care clinicians with OHSU specialists for live, weekly video teleconference related to topics ranging from psychiatric medication management to using

buprenorphine to reduce opioid overdose-related deaths. More than 900 providers have participated in addiction medicine ECHO sessions since 2016, which has also increased the number of buprenorphine-trained providers in Oregon. When the pandemic hit, the network quickly created an additional weekly ECHO program to offer the latest COVID-19 information and connections to community resources to more than 2,300 participants. In the fall of 2022, the network will support a long COVID series for primary care clinicians.

Providing telemedicine services is one way that OHSU fulfills its mission to expand access, reduces costs, and improves the health and well-being of all Oregonians. The OHSU

Telemedicine Network provides immediate access to specialty medical care throughout Oregon and Southwest Washington. Using secure videoconferencing technology, specialists at OHSU Hospital and OHSU Doernbecher Children's Hospital connect with community hospitals, local providers in outpatient clinics, skilled nursing facilities and in many cases, directly with patients in their own homes.

For acute care coverage for stroke, pediatric and neonatal emergencies, each hospital in the OHSU Telemedicine Network is equipped with a mobile videoconferencing unit that is moved to the patient's bedside when a medical provider at a local hospital decides a consultation is needed. An OHSU physician connects to the mobile unit with a special laptop computer or one of the OHSU telemedicine workstations. The doctor in Portland can then examine the patient, monitor vital signs, read X-rays or CT scans, consult with the local physician, and answer a family's questions with the secure two-way audio/video connection.

Telemedicine helps reduce risky, expensive and unnecessary transports. To date, the program has served more than 4,000 patients, many of which were able to remain in their home community thanks to telemedicine. The network has saved an estimated \$15 million in transport expenses alone.

OHSU's telemedicine services include offering virtual critical care services, which seamlessly bridges virtual and physical care for eligible patients. Advanced virtual ICU technologies allow OHSU care teams to continually monitor and track the condition of patients in remote ICU settings, such as at their local community hospital. This maximizes OHSU's ability to collaborate

with rural health care partners and to provide the right care to patients in their community whenever possible. Utilizing software platforms supported by a robust IT network infrastructure and audiovisual communication devices, a central virtual ICU clinical team can observe a patient's status remotely 24/7. Virtual ICU clinicians use clinical decision support tools to both proactively monitor for patient deterioration, and respond to requests for consults from the hospital where patient is physically receiving care. This collaborative care approach results in improved patient outcomes, including fewer complications, reduced length of stay, and eliminating the need for transportation to OHSU.

The OHSU Telemedicine Network has additional ambulatory services that improve access and clinical outcomes, while also decreasing costs. These additional services include:

- Telemedicine-Enabled Outreach Clinics: Several Oregon clinics have access to OHSU specialists via two-way video connections. Participating specialties include pediatric endocrinology (Klamath Falls and Eugene), adult cardiology (Medford), pediatric neurology (Medford), and hematology/oncology (Coos Bay and Salem).
- Virtual Visits—Urgent Care: Patients can connect via video from their home to an OHSU emergency medicine provider seven days a week with their smartphone, laptop, or tablet through Epic's MyChart app. These virtual urgent care visits can also be conducted through asynchronous connections similar to an eVisit. In 2021, more than 8,500 visits were completed by this team.
- Virtual Visits—Primary Care and Specialty Care: Secure video connections between
 OHSU providers and patients is available across all primary care and specialties at both
 OHSU and Hillsboro Medical Center. In 2021, more than 386,000 patients were serviced digitally, with more than 60% of those served through a video connection.
- eConsults: OHSU primary care providers can send secure messages to OHSU in 33 specialties and 144 diagnoses, and receive a written response from an OHSU specialist in 72 hours. In 2021, 5,542 eConsults were completed to support our community primary care providers by providing asynchronous consultative services decreasing the number of unnecessary referrals to OHSU specialists.

- eVisits: Patients may send secure messages to OHSU Dermatology via the online patient portal MyChart and have a dermatologist render an opinion within 48 hours.
- Remote Patient Monitoring: For some patient populations, remote patient monitoring has emerged as an effective tool for staying connected with our patients following hospitalization. Currently patients enrolled in our pediatric cardiac surgery and neonatal low birthweight growth programs receive technology to take home and stay connected to their OHSU providers by submitting answers to daily questions via a tablet. The goal of the program is to reduce re-admissions, allow for safe and earlier discharge, and decrease emergency room visits.
- Through our Mission Control command center, which uses deep-learning technology to oversee hospital operations and manage patient transfers, OHSU staff to track in real time how many patients are nearing discharge, as well as how many new patients are seeking hospital beds. OHSU has grown Oregon's tracking of hospital bed capacity by expanding OHSU's Mission Control technology during the pandemic. This expanded tool provides real-time information about most of Oregon's hospital capacity in collaboration with all health systems, hospitals, Oregon Health Authority and the Oregon Association of Hospitals and Health Systems to the benefit of all Oregonians. Combined with frequent meetings, this approach allows the state's hospitals to collectively function more like one health system for the most acute patients in need of critical care. As the number of COVID-19 cases has ebbed and flowed in Oregon, OHSU's advanced analytical tools have also helped inform decision-making by the OHA and individual hospitals about which hospitals need additional support, allowing them to pivot between providing emergency hospital care and scheduling more routine procedures.

Together with the OHA, OHSU also founded the **Oregon Medical Communication Center** in 2021 to better serve Oregonians needing critical care, by improving coordination among Portland's largest health systems which provide the state's highest level of critical care services. This allows Portland health systems to more effectively coordinate patient transfers to the next available ICU bed if one system isn't able to bring a patient into their system in a timely manner.

• The Northwest Native American Center of Excellence (NNACOE) at OHSU is an example of how we aim to address the health care needs of all people in Oregon by improving access of underrepresented populations into health professions. The center is a collaboration between

OHSU, the Northwest Portland Area Indian Health Board, and Portland State University. It has received nearly \$4 million in external funding since it launched in 2017, including \$3.4 million from U.S. Department of Health and Human Services to expand medical training for tribal citizens, Native American communities.

The center is made possible through a five-year grant from the U.S. Department of Health and Human Services, the OHSU School of Medicine, and the support of all 43 tribes in the Pacific Northwest. NNACOE is currently the only Native American-specific Center of Excellence funded by the U.S. government.

Twelve OHSU faculty members are Native, making the university home to one of the largest groups of Native faculty members in the country. The OHSU School of Medicine also has 47 Native learners, 11 of whom are participating in the center's Wy'east Post-Baccalaureate Pathway, a 10-month preparatory program that offers citizens of federally recognized tribes a pathway to be successful in the medical school admissions process. To date, 27 Wy'east students have completed the pathway, 22 of whom have enrolled in medical school. Wy'east's first class is expected to graduate from medical school in 2023.

• The OHSU Center for Ethics in Health Care conducts regional and statewide outreach about ethics, palliative care, professionalism, health literacy, and serious illness communications skills. Its outreach efforts promote collaborative learning for health care professionals of all disciplines to improve the quality of health care in communities large and small. It also builds long-lasting connections with health care leaders throughout the state to strengthen Oregon's position as a national leader in ethics and communications skills. Its traditional conferences were transformed into virtual lectures in March 2020 due to the pandemic. In addition to hosting a two-day statewide virtual bioethics conference with over 300 attendees, the center also hosted 15 interactive bioethics seminars for health care professionals across our state in 2021.

The **OHSU Portland Alcohol Research Center** provides information about alcohol, the brain, neuroscience, and in particular, about how alcohol influences brain development. Center scientists provide training and laboratory experience in alcohol research to high school, undergraduate, graduate, and post-doctoral students. Its outreach program provides kindergarten through 12th grade students and their teachers with age-appropriate activities to illustrate how the brain works and how alcohol can affect it.

The Oregon Clinical and Translational Research Institute's **Community Research Hub** connects and supports researchers, community members, and organizations to facilitate, grow and strengthen community-engaged research partnerships that improve Oregon health.

Headquartered in Bend, the hub includes a team of five community research liaisons who live in different regions of the state and support their local community members and organizations through regional research coalitions. For researchers and other academic collaborators, the team provides connections to a network of community partners, expertise and guidance in community-engaged research, regional knowledge and on-the-ground project facilitation and data collection. Some examples of this work are:

Resilience Awareness and Readiness: TRACEs, a partnership in central Oregon is working to build resilience and mitigate the effects of trauma by understanding community knowledge about trauma and resilience and measuring community readiness to take action. Through this collaboration, the community wants to increase central Oregonians' sense of belonging and ability to thrive.

Tillamook County Wellness: A grassroots wellness coalition is reducing type 2 diabetes risk among community members by increasing access to physical activity, healthy foods, health screenings, worksite programs, and diabetes education, among other efforts. Through these collective efforts, the county aims to reduce diabetes' social and economic costs and increase residents' quality of life.

Oregon Family to Family Health Information Center: An HRSA-funded initiative in all 50 states, the center is housed at OHSU within the Oregon Center for Children and Youth with Special Health Needs, which is Oregon's Title V public health agency. The center is staffed by parents of children with a variety of special health needs, disabilities and developmental and behavioral health conditions. Each year, staff travel throughout the state teaching parents of children and youth with disabilities how to access services and supports for their children. This kind of personalized support is hard to find, as evidenced by the kinds of comments and concerns the center hears from families in rural Oregon.

The center is an important partner in health care for an often-neglected audience: families of children experiencing special health needs.

• As a result of donations raised through the Knight Cancer Challenge, the OHSU Knight Cancer Institute will invest \$10 million in Oregon communities over 10 years through the Knight Community Partnership Program, which provides funding for projects aimed at addressing the cancer needs of communities across Oregon. By providing funding, training, and technical assistance, the program supports community organizations in identifying and addressing their most pressing cancer-related needs.

Since its inception in 2014, the Community Partnership Program has distributed more than \$4.3 million in grant funds to 164 community-based projects across the state of Oregon. Grants fund the work of a variety of organizations including health care, education, and nonprofits. The top three cancer types addressed to date are colorectal, breast, and skin/melanoma, and 80% of the projects focus on rural cancer issues. The program provided 241 evaluation consults to prospective applicants, and 651 applicants, grantees, and community contacts have participated in a program-led training or professional development opportunity. The 112 completed projects have reached more than 61,500 Oregonians and contributed to 522 collaborations between community partners.

In 2021, the program awarded more than \$552,500 to 25 tiered grants that focus on issues across the cancer continuum — ranging from prevention to screening, and early detection to survivorship — and serve people throughout their lifespan.

Oregon communities and OHSU continue to mutually benefit from the new knowledge and new programs generated by this partnership.

The Knight Scholars Program aims to increase the number and diversity of students
who pursue careers in cancer research through paid summer internships for high school
students. Knight Scholars participants come from communities that are
underrepresented in cancer research, and hail from Woodburn, Culver, Madras,
Klamath Falls, and Northeast Oregon, as well as from two Portland metro area schools.

In summer 2021, the program trained a total of 50 high school students from throughout Oregon.

• In partnership with the nonprofit Transitions Projects, students who run the **Bridges**Collaborative Care Clinic offer free medical, dental, and social services to Portland residents experiencing homelessness. The nonprofit clinic was established in 2017 by medical, nursing, pharmacy, dental, public health and other students from OHSU, Portland State University, and Oregon State University to offer free, transitional medical care and social services to Portland residents experiencing homelessness. More than 200 people have received care since the clinic opened. In addition, over 50 students have facilitated workshops for nearly 800 participants on health topics such as managing chronic conditions, yoga, nutrition, smoking cessation, and oral hygiene.

Access to health information

OHSU provides events and lecture series to the public throughout the year. Most are free of charge and all bring public health education to the community:

- The OHSU Brain Institute presents a variety of outreach events to share OHSU's neuroscience expertise with the public:
 - The Brain Fair @ OMSI is a free, all-day event at the Oregon Museum of Science and Industry, where OHSU neuroscientists engage with learners of all ages. About 1,000 people visit the fair's more than 20 interactive tables. The 2021 Brain Fair was cancelled due to the pandemic, but the 2022 event is currently scheduled to once again occur in person, in June.
 - BRAINet Monthly Lecture are part of the institute's Brain Research and Information Network, which hosts a lecture featuring OHSU faculty neuroscientists. Lectures were held virtually in 2021 due to the pandemic, with each lecturing averaging about 50 viewers.
 - **OHSU's Brain Awareness Season** involves thousands of Oregonians, including scientists, clinicians, policy makers, advocacy group leaders, teachers, students, and the general public. It builds on the strength of OHSU Brain Institute, one of the largest and most celebrated groups of brain care and research experts in the country. Speakers from

OHSU and around the world gather to share the latest information on brain science. In 2021, three virtual lectures were attended by 3,000 live viewers from 46 U.S. states.

Since 1981, the OHSU Marquam Hill Lecture Series features OHSU faculty and their innovative
and cutting-edge biomedical research and clinical advances that are changing treatment and
approaches to disease and prevention. The series was restructured into virtual Marquam Talks
during the pandemic, and a total of about 700 people remotely attended two live talks in 2021.

Academic and workforce-enhancing activities

OHSU is Oregon's only public academic health center. It educates most of the state's health professionals and biomedical scientists, and partners with other Oregon colleges and universities to train allied health practitioners such as pharmacists and medical technicians. It is the only place in Oregon that grants doctoral degrees in medicine, dentistry, and nursing. Because of these roles, OHSU has made it a priority to address workforce shortages in health care.

The university designs its educational programs and policies to reflect the state's needs and other changing realities. For example, health care workforce shortages have led OHSU to train providers and inspire future clinicians to practice in parts of the state where their skills will be needed most. As health care reform continues to be important for the nation. OHSU is committed to joining others in helping to develop policy and care solutions that will improve access to high-quality health care for all Oregonians.

Because it costs much more to educate health care professionals than OHSU receives in tuition and state reimbursements, the university continually seeks new cost efficiencies, such as partnerships with other institutions, to extend its capacity while maintaining its excellence.

OHSU's Campus for Rural Health offers learners from the Schools of Dentistry, Medicine,
 Nursing, and Pharmacy, as well as the Human Nutrition program, an interprofessional
 experience that integrates learners into rural communities and encourages them to ultimately
 stay and work in those communities upon graduation. Learners collaboratively work with
 community organizations on projects that address local health needs. Since September 2015,
 Campus for Rural Health sites in Klamath Falls, Northeast Oregon and the South Coast have
 served more than 800 learners.

OHSU School of Medicine works with providers in clinics and hospitals all over Oregon to provide valuable training opportunities for medical students, physician assistant students, and physicians-in-training (residents/fellows). Examples include Heppner, John Day, Ontario, Pendleton and Warm Springs. In addition, the school has teamed up with University of California, Davis, to establish the California Oregon Medical Partnership to Address Disparities in Rural Education and Health, or COMPADRE, partnership. The joint project will prepare more learners to provide care in underserved communities by expanding the network of urban, rural, and tribal health care training sites across Oregon and northern California.

The **OHSU School of Nursing** provides nursing education across the state at five physical campuses located in Ashland, Klamath Falls, La Grande, Monmouth and Portland, and also provides additional access through distance learning. The school has long addressed the need to improve the health of communities across the state through access to skilled and compassionate nurses. It has been nationally recognized for programs focusing on social determinants of health, health disparities, and care for vulnerable populations, as well as rural and community-based practice. Additionally, through the **Oregon Consortium for Nursing Education**, students in nursing programs at 11 community college campuses enroll into a seamless curriculum that leads to a bachelor of science degree in nursing from OHSU without leaving their communities. The school also leads the **Interprofessional Care Access Network**, which helps students studying a variety of health care professions work together to understand and tackle social barriers such as poverty that influence health. Through the network, OHSU nursing, medical, dental, public health, and pharmacology students form interprofessional teams to help individuals and families in underserved Oregon communities address barriers related to social determinants of health.

- OHSU provides many grants and scholarships for students to help defray the costs associated with their higher education in high-tuition health science fields.
- The OHSU Office of Rural Health works with the Oregon Area Health Education Centers and to
 extend health care, health education, and research throughout the state. The centers have five

regional offices around Oregon, each dedicated to working with local health care systems and providers, community leaders, schools, and citizens to identify and meet local needs.

- OHSU provides resources needed to train future physicians in undergraduate medical education through Oregon's only M.D. degree program. State support and tuition cover only a fraction of the total cost of instruction of an M.D. student.
- The OHSU Office of Science Education Opportunities provides a single point of entry for kindergarten through grade 16 teachers and students, as well as the public, to access relevant experiences and information in the health sciences. The office collaborates with OHSU departments and community partners to deliver quality education programming and connect students and teachers with health science professionals in the OHSU workplace and in the classroom. Many pathways for young, well-prepared students to access biomedical and science education are vital to meeting the need for health and science workers. OHSU encourages faculty, staff, and students to serve by sharing their expertise and mentoring the next generation of health science professionals.

Financial contributions to research

OHSU contributes financial support to health science basic and clinical research not covered fully by their federal grants, including costs associated with recruitment, core lab support, bridge funding, and pilot or seed funding — institutional cost-share commitments on grants that is sometimes required by sponsoring agencies. It also attempts to quantify internally funded indirect costs (department/central administration as well as space) that support research at OHSU.

Financial assistance

OHSU Healthcare and the OHSU Practice Plan meet community obligations to provide financial assistance in a fair, consistent, and objective manner.

OHSU informs patients and families of the availability of financial assistance through a brochure about billing, collections and financial assistance that is available in waiting areas in all settings of clinical care, including inpatient and outpatient settings and in the emergency department. OHSU also details what is available through a financial assistance website. Finally, OHSU informs all patients of its financial

assistance program during the registration process for care and also has posted notices throughout our hospital areas.

Requests for financial assistance may be made at any point before, during, or after care is provided. Patients who contact OHSU's billing customer service and express concerns about paying their bill are provided information about or access to the financial assistance program. OHSU Healthcare/OHSU Practice Plan offers an application process for determining initial interest in, and qualification for, financial assistance. OHSU does not discriminate on the basis of race, color, religion, sex, age, handicap, or national origin.

OHSU follows state laws regarding financial assistance and screens all patients before referring to an outside collection agency. A patient is eligible for financial assistance consideration based upon the results of the financial screening process and meeting certain income eligibility criteria as established by the Federal Poverty Guidelines.