UCSF Department of Medicine
ZUCKERBERG
SAN FRANCISCO GENERAL

WARD 86 CELEBRATES 40TH ANNIVERSARY

ZSFG's Ward 86, one of the world's first outpatient clinics for people living with HIV, turned 40 this year. Since the beginning it has pioneered care: providing compassionate, multidisciplinary care even before there were any treatments, championing game changing developments like antiretroviral therapy (ART), and continuing to innovate – with the ultimate goal of ending the HIV epidemic.

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Ward 86 providers and staff

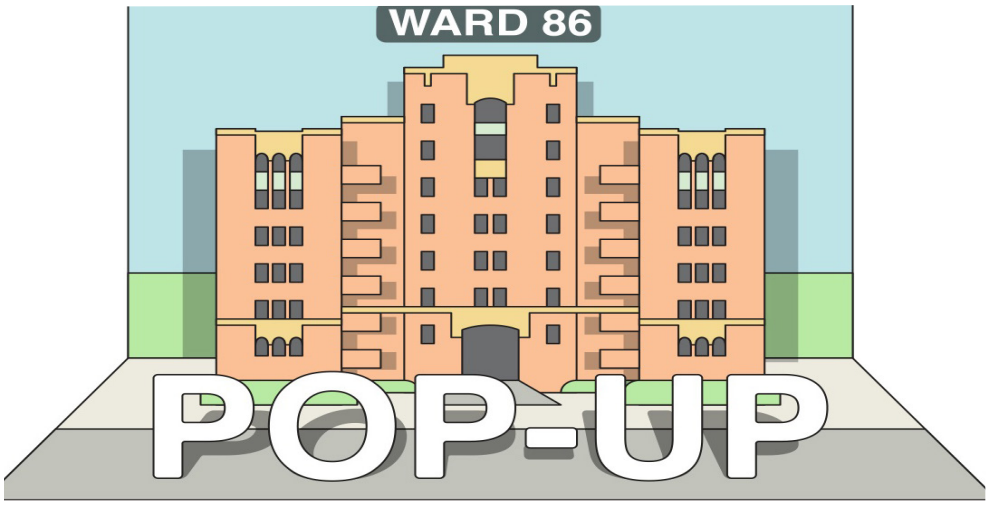
Ward 86 was established on the sixth floor of ZSFG Building 80 in January 1983. Its founders included oncologists Paul Volberding, MD, and Donald Abrams, MD; the late Constance Wofsy, MD, an infectious disease specialist. "Ward 86's founders were compassionate, starting one of the first HIV care programs in the country, and launched a clinic focused on innovation and optimization of care," said Monica Gandhi, MD, MPH, professor in the ZSFG Division of HIV, Infectious Diseases and Global Medicine, and medical director of Ward 86 for nearly a decade. "It's a privilege to follow in their footsteps, and every medical director at Ward 86 since then. There is an impulse towards ongoing innovation that makes me really proud to be affiliated with it."

Monica Gandhi, MD, MPH

Ward 86 has always pushed the boundaries of HIV care, developing approaches that have since been adapted nationally and internationally. They developed the "San Francisco model" of HIV care, which emphasized interdisciplinary care all under one roof, as well as close partnerships with community organizations and treating patients with the utmost respect and compassion. Ward 86 also led investigational trials of new HIV medications in the 1980s and 1990s, created a Women's Clinic in 2008, and initiated universal ART for all patients with HIV, regardless of CD4 count, in 2010. More recently, they pioneered RAPID ART, a program which starts HIV therapy on the day a patient is diagnosed, or as soon after as possible. They also led initiation of pre-exposure prophylaxis (PrEP), in which people at risk of acquiring HIV take ART to greatly reduce risk of infection.

Responding to an Unmet Need

True to its mission, Ward 86 continues to identify opportunities for improvement, especially for patients who fall through the cracks. Today, it provides comprehensive primary care to about 2,400 patients. "Some patients are very stable in their disease and lives, but others were missing prescheduled appointments because of psychosocial complexities and structural factors," said Jon Oskarsson, RN, MN, nurse manager of Ward 86 since 2017. "We rescheduled missed appoint-



ments over and over, knowing that those probably wouldn't work out either."

The Ward 86 team identified a huge unmet need – the stark health disparities experienced by unhoused people with HIV. "We saw really big differences in viral suppression – 27 percent of unhoused patients were virally suppressed, compared with 75 percent of housed patients," said Elizabeth Imbert, MD, MPH, associate professor in the ZSFG Division of HIV, Infectious Diseases and Global Medicine.

She and her colleagues also identified a housing dose-response relationship: the more unstable someone's housing, the greater their viral load. "As people went from renting or owning, to living in a SRO [single-room occupancy hotel room], to couch-surfing, to living outdoors, their viral load went up," said Dr. Imbert. "We also found that people who were temporarily housed or homeless actually came into our health system more than people who were housed, but they were coming into urgent care and the Emergency Department, which are not set up to do longitudinal HIV primary comprehensive care. These patients also said the most important thing to them was a care team that knew them as a person. The second most important thing was drop-in visits – no appointments needed."

Helping Patients Navigate Complexities of Life

After conducting this research, doing an extensive literature review, and studying a high-intensity drop-in HIV clinic in Seattle, the Ward 86 team launched the Positive Health Onsite Program-Unstably Housed Populations (POP-UP) program in 2019 to better serve these patients. "Usual care wasn't working at this point in the HIV epidemic for the people who are still unsuppressed," said Dr. Imbert. "For this 'last mile' population, which is so impacted by poverty, housing instability, mental illness, racism and substance use, they needed a whole different model that is low-barrier, flexible, responsive and patient-centered."

POP-UP was designed to be just such a program. It focuses on patients who are both unstably housed as well as viremic or off their HIV medications. Since inception they have enrolled 211 people, and currently follow 146 patients who drop in for comprehensive primary care any weekday afternoon between 1 pm and 5 pm, and no appointment is needed. To recognize the effort that patients make to participate in the program, POP-UP distributes modest grocery store gift cards each time they come in.

POP-UP has a dedicated team of HIV doctors, nurses, social workers and case manager, as well as an on-call psychiatrist through a partnership with Alliance Health Project who helps guide care related to psychosis mental illness or methamphetamine use. They also work closely with ZSFG's addiction medicine team, who help manage issues related to substance use disorders.

"The care is extremely patient-centered," said Dr. Imbert, who has served as medical lead of POP-UP since its founding. "We try to develop relationships, get to know people, and figure out what they want, knowing they may have a lot of mistrust of the health care system. Our nurses triage every person who walks in the door. They say, 'We're so excited to see you! What do you want to accomplish today? What brought you in? Do you want to see the social worker? The doctor?'" We have huddles at the beginning and end of every day where a lot of good teamwork happens, and also check in with each other during clinic, trying to sequence a patient's care." Team members staff a dedicated cell phone, so patients can call or text with questions and access telehealth visits when needed. If a patient is hospitalized, the POP-UP team visits them in the hospital and coordinates care with the inpatient team.

"People come into the program with very complex medical and psychosocial issues," said Mr. Oskarsson. "We try to be a dependable presence that receives you as you are, and shows interest in teaming up with you to deal with the complexities of life, in addition to health. When we meet with patients, we start scoping out what those issues are, and ask, 'What are the things that matter to you in this moment, and how can we support you?' Often, it's not necessarily their HIV or any of their medical problems – it may be housing, income, or mental health or substance use. Our staff form relationships with patients that are built on mutual trust and respect, and they are there for them. People know they can come in, have access to our team, and that they'll be received with warmth and competence."


Elizabeth Imbert, MD, MPH

In addition to accessing care to help manage their HIV, such as ART, the team provides vaccinations, screening for STIs and cancer, mental health services and addiction medicine care. They also help connect patients with housing, substance use treatment programs, food resources and social services.

A Vibrant Research-Clinical Partnership

Building these trusting relationships has paid off: the team found in 2022 that about two-thirds of

A rainbow shines over Ward 86

Ward 86 patients obtained viral suppression. However, they also found that only about half of POP-UP patients retained viral suppression after 12 months, and that 59 percent had a gap between visits of 90 days or more. "That's far too long if you're viremic," said Dr. Imbert. "You can only do so much to make the clinic as low-barrier as possible." Their research data allowed them to make a case for creating a mobile outreach arm in 2022. Now POP-UP has a dedicated conference to discuss patients who haven't come in for several months, and can send a social worker into the field to engage patients wherever they are.

As POP-UP has grown and demonstrated success, they gradually ramped up staffing. In August of this year, they secured more space, moving from a single clinic room and staff room in Ward 86 to an area on the first floor of Building 80 which has four exam rooms, a triage room, two private consultation rooms and a team room. "With that space, POP-UP has become more seamless and is flowing better," said Dr. Imbert.

"What's really cool about POP-UP is that we're a clinical entity, but we also have research capacity," said Dr. Imbert. "We've been following this cohort since Day One." Matthew Hickey, MD, Assistant Professor in the ZSFG Division of HIV, ID, and Global Medicine, is the research lead for the program. "It's a tremendous partnership," she said. "Matt and I are both providers in the clinic. We're able to say, here are our questions, and here's how we want to analyze the data. Not only are we publishing papers to share with other programs, but we're actually able to make changes in our own program. That research-clinical partnership has been really excellent for doing quality improvement."

"People who are working on cure research or HIV research also do clinical care with us," said Mr. Oskarsson. "This marrying of the two is part of the secret sauce that makes this such an innovative place to practice. People often talk about the research-to-practice gap – when large studies come out, the results are moved into clinical guidelines, which eventually get transferred into change practice on the ground. In many specialties, it often takes a very long time to effect change at the point of care, whereas at Ward 86, it's interesting how short the cycle often is."

Jon Oskarsson, RN, MN

As part of the effort to understand how POP-UP could be scaled up, Dr. Imbert, Dr. Hickey, and Katerina Christopoulos, MD, MPH, professor in the ZSFG Division of HIV, Infectious Diseases and Global Medicine, received an R01 grant from the National Institutes of Health to adapt this model at three other Bay Area sites – a syringe access site on Sixth Street in San Francisco, and two Federal Qualified Health Centers in the East Bay. They just finished conducting focus group interviews with patients, clinic staff, referring partners, emergency departments, street medicine teams, hospitals, and other stakeholders affiliated with each program site. They will study whether the POP-UP model improves care engagement and viral suppression as well as how much it costs, and perform economic modeling to estimate the cost of operationalizing this at a much larger scale.

"Sometimes when we present nationally, people say, 'Oh, that's San Francisco exceptionalism,'" said Dr. Imbert. "There's always the question of whether these innovations can be done elsewhere. Part of what we need to do is think about how much it costs, does it work, and how to adapt these programs across different settings. We really want to be the model, demonstrating how we could reach the last 40 percent of [people living with HIV] who are not yet suppressed. This is not just in the treatment space – these models could naturally extend to how we're doing service in the prevention space, or people who inject drugs or are homeless or have mental illness."

'Rogue with Rigor'

The success of POP-UP laid the foundation for one of Ward 86's latest innovations: helping the most vulnerable patients access long-acting injectable ART. In 2021, the U.S. Food and Drug Administration (FDA) approved two new medications to treat HIV, one of which can also be used to prevent HIV infection. Because these long-acting medications can be administered as a shot every one or two months, they can be life-changing for patients who have difficulty taking daily pills.

However, there was a Catch-22: the FDA only

Ward 86

Special Program on Long-Acting Antiretrovirals to Stop HIV

apies for patients who had already achieved viral suppression using daily oral medications. This is nearly impossible for the most marginalized patients with HIV. "People who are street homeless may have their meds stolen or lose them in street sweeps, or keep their meds in a storage unit but they're staying at a friend's house," said Dr. Imbert. "Their insurance lapses, meeting other subsistence needs is more important, or mental health or substance use gets in the way."

Dr. Gandhi and her colleagues wanted to find a way to provide those patients access to these new medications. After careful thought and planning, they decided to prescribe them to Ward 86 patients whom they thought could benefit, even if they weren't already on oral ART. They established Special Programs of Long-Acting ART to Stop HIV (SPLASH), which currently provides long-acting injectables to more than 250 patients who are living with HIV – both controlled and uncontrolled – as well as using it as a form of PrEP to about 30 patients at high risk of acquiring HIV.

They recently published a paper in the Annals of Internal Medicine about a demonstration project showing that more than 95 percent of patients who started off with uncontrolled HIV achieved virologic suppression by accessing long-acting injectable ART, a success rate comparable to the clinical trials – even though many in Ward 86's demonstration project are homeless or unstably housed, and struggle with substance abuse. "This is a life-saving medication, and we did not require that they take oral medications or be virally ables," said Dr. Imbert. "It's very clear that this model can engage people, lead to improved viral suppression, and help us make significant strides towards ending the HIV epidemic."

"Some people said we were going 'wild West,' and thought we were going a little too crazy," said Dr. Gandhi. Those critics feared that patients would drop out of care after receiving a few injections, thereby increasing rates of community drug resistance to integrase inhibitors, which are the best initial therapy for HIV.

"To be honest, I was really nervous doing this," said Dr. Gandhi. "But the alternative was high rates of morbidity and mortality, and that's unacceptable. Anything we could do to move the needle for these patients would be important, even if it appeared a little too bold to others. Interestingly, I was talking with the FDA, asking, 'What do you think about what we're doing?' These were colleagues I've known for a long time. They said, 'You can prescribe a medication any way you want, once it's approved. That's up to the discretion of the provider. But do us a favor – document it, write it up, present your results at meetings, put papers out on it. If you're doing something that other people will do, put together a rigorous protocol around it.' Although we went rogue in the beginning, we did it in the context of rigor – rogue with rigor! That's emblematic of the Ward 86 way."

She and her team are constantly refining that protocol based on the extensive data they collect. They identify HIV mutations that may prevent patients from being appropriate candidates for this therapy, incorporate data from the latest scientific meetings, and fold in information from their biweekly meetings in which they discuss every single SPLASH patient.

For patients who are unhoused and face other challenges, the trusting relationships they had already forged with the POP-UP team provided an ideal support for their successful participation in SPLASH. The POP-UP team engaged in extensive patient education before enrolling them in SPLASH.

"We tell them that this medication is not something you can just start and stop," said Dr. Imbert. "This is serious. If you want to do it, you need to be committed, and we need to be able to get in touch with you." She and her colleagues collect extensive contact information – phone numbers, email address, and contact information for friends, family, SRO case manager, tentmates, and others. They also ask for patients' physical location, whether an address if they have housing, or street location if they are homeless. Patients have a seven-day window before and after their target injection date to receive their next injection. "We tell people, 'If you don't come in and we can't get in touch with you, we're going to come find you. Is that okay?'" said Dr. Imbert.

The program hired a pharmacy technician who helps manage medication supply and also maintains a list of which patients are due for their next injections. If patients haven't come in and can't be reached, she asks members of the mobile team to go out into the field to find them. SPLASH is also starting to partner with nurses with permanent support housing programs, street medicine teams and home health agencies to assess whether SPLASH would be a good fit for specific patients, and to assist with providing patients with injectable ART at home or in the field if that facilitates access. "We're working to expand where we inject folks, and building a workforce to do that," said Dr. Imbert.

De-risking Novel Approaches

"For people who have had a really hard time getting their HIV under control, particularly those

with psychosocial complexities that impede their ability to regularly take pills, this modality is totally transformative," said Mr. Oskarsson. "It's amazing to bear witness to people who have gotten onto injectables, and to be there when they find out that suddenly, their HIV is undetectable. To work in a place that enables this to happen is an honor and an absolute privilege."

"Patients are sometimes virologically suppressed for the first time in their lives," said Dr. Gandhi. "Patients have said, 'I used to be embarrassed to go to the clinic. I'd use meth before I got here, because I didn't want you to know that I wasn't taking my meds.' That reduction of stigma, and the internal positive motivation that comes from feeling excited, keeps them coming back again and again."

Once again, Ward 86's meticulous, pioneering work has helped de-risk approaches that others may have found too difficult to attempt. "The drug company chose to study this combination [of drugs] only in patients who were previously on oral ART and virologically suppressed," said Dr. Gandhi. "Thus, we don't actually have data from randomized controlled trials in a patient population that is viremic. So the FDA just put whatever has been studied on the packet insert. I wanted to take it a step further."

Dr. Gandhi has a leadership role with the AIDS Clinical Trials Group (ACTG). Together with her colleagues, they approached the drug company and asked for permission to study long-acting injectables at multiple ACTG sites among patients with uncontrolled HIV. "They said, 'We're not going to let you do it – we will actually do it,' and they've started their viremic trial," said Dr. Gandhi. "Our demonstration project led the drug company to do this, and the FDA allowed them to do a single-arm trial because our work served as proof of concept." She is optimistic that because of Ward 86's carefully documented work, the guidelines will eventually be changed to officially allow long-acting injectables to be used in patients who are viremic without first requiring them to take oral medications.

Responding to a Mature Epidemic

Ward 86's programs continue to evolve in response to the needs of the patients it serves. Thanks to lifesaving ART, for many people HIV has evolved from a fatal disease to a chronic illness – resulting in an aging patient cohort. "We now have a mature epidemic, and about 73 percent of the population living with HIV in San Francisco is over 50," said Dr. Gandhi. "We have older patients who have lived with HIV for a long time, and older people who are getting HIV." In response, Ward 86 created the Golden Compass program in 2017, working with geriatrician Meredith Greene, MD, associate professor in the Division of Geriatrics. "She sees our patients, but we should all be doing geriatrics care in our practice, so we're also getting trained in areas such as frailty and polypharmacy so we can disperse this expertise," said Dr. Gandhi.

Ward 86 medical director Monica Gandhi receives a state proclamation from California Senator Scott Wiener

The four main focus areas of Golden Compass are heart and mind, including an onsite cardiology clinic and brain health classes; bones and strength, including frailty and fall assessments as well as chair exercise classes; medical navigation to dental, hearing and vision services; and networking and navigation to social support groups and community programs.

In addition to deepening the team's geriatrics expertise, this year Ward 86 established the Revival of Care Program. "At Ward 86, we've been thinking about HIV for a long time and are pretty good at it, but we actually want to become better at everything else so we can take care of our patients very holistically, not just their HIV," said Dr. Gandhi. "In addition to HIV prevention and treatment, the other pillars of Revival of Care are primary and preventive care – including cardiovascular care, vaccines and other forms of preventative care; mental health care; and substance use disorder and addiction management. Every month we get trained in something, so we can be the best doctors we can be, because we're their primary care providers."

Looking Back, Looking Forward

As it celebrates its 40th anniversary year, the Ward 86 team looks forward to continued innovation. "I'm very excited about what lies ahead," said Mr. Oskarsson. "I look forward to doing everything within my power to continue to be responsive to the needs of our population, and making improvements in HIV medicine available to all those who need it. It's quite moving to work in a place that

Ward 86 staff celebrate Pride

was started at the very beginning of the HIV crisis. We've been part of the HIV fabric in San Francisco from the get-go, and it's an absolute honor to have the opportunity to contribute to it. My hope is that we can continue to build on that legacy."

"Jon makes everything possible in our clinic with his hard work, compassion, conscientious application of evidence-based medicine, and innovation," said Dr. Gandhi. "He has made key contributions to the Golden Compass program, ensures that POP-UP runs, and helped launch our SPLASH program. Jon is one of the most amazing people I have ever had the privilege of working with."

"I really love Ward 86," said Dr. Imbert, who first started working there in 2015. "It's just a really magical place where there is so much connection and desire to have the voices of people who are living with HIV in every part of what we do, whether it's envisioning a new model or implementing it. The end user is involved in a real way. The culture that [Division Chief] Diane Havlir and Monica Gandhi have created among the faculty and staff is just phenomenal…. Our team is so amazing. Our nurse brings in cupcakes when patients have a birthday, and buys plants for people when they get housing. I overhear our social worker talking with people, and he's so real with them.

"The other thing is, we're playing the long game," continued Dr. Imbert. "We meet someone, get to know them, ask them what they want, then slowly try to figure out what the barriers are, what makes them resilient, how we can support them. We're not looking for quick fixes. We're looking for actual health improvement, in the way they want it."

Diane Havlir, MD

"Under Liz's directorship, the POP-UP program has grown and served over 200 homeless individuals, increasing virologic suppression rates from 0 to 60 percent among this group with so many challenges," said Dr. Gandhi. "Her compassion and love for this population makes her the ideal person who both brought the program to fruition and continues to innovate on behalf of our homeless patients."

'It's Such a Privilege'

Dr. Gandhi herself knew that she wanted to become an infectious disease doctor in 1981, when she was in grade school. "That was the year that AIDS was first described by the Centers for Disease Control and Prevention, in two devastating Morbidity and Mortality Weekly Reports discussing terrible opportunistic infections among gay men in San Francisco, New York City, Los Angeles, Miami and Philadelphia," she said. "Very soon thereafter, it became clear that HIV was an infection of disparities, preying upon poverty, social injustice, stigma and prejudice."

After completing medical school at Harvard, she chose UCSF for her internal medicine residency and infectious diseases fellowship. "San Francisco was the epicenter of the epidemic, and I wanted to eventually be at Ward 86, since this wonderful clinic serves publicly-insured patients with concomitant challenges that I hoped to help mitigate," said Dr. Gandhi. She has now been treating people with HIV for 25 years, and was named medical director of Ward 86 in 2014.

"If you come to Ward 86, you will see people hugging in the hallways," said Dr. Gandhi. "The staff is so connected to the patients. It's such a privilege. I'm exactly where I want to be, and I couldn't be happier in my job…. I'm so grateful that today we get to think and talk about things like primary care for people with HIV, instead of just pure survival. That's the beauty of being in HIV for a long time."

Elizabeth Chur
Editors: Neil Powe, Laurae Pearson, Kevin Weil

SPOTLIGHT

Read more about **Ward 86 at 40**: https://www.ucsf.edu/news/2023/01/424646/ward-86-40-shaping-hiv-care-around-the-world

Alicia Fernández, MD, Division of General Internal Medicine, has been celebrated as a UC Changemaker - A doctor who recognized COVID-19's disproportionate impact on the Latino community and took action to help. A scientist devoted to helping underrepresented students succeed at the highest levels in STEM. A civil rights icon who shaped fundamental policy and law.

Rebecca Hoh, MS, RD, Division of HIV, ID, and Global Medicine, has received the SPIRIT of DOM Award which recognizes staff members who exemplify the UCSF PRIDE Values and make the DOM and UCSF a better place to work.