A Helipad on the Roof of San Francisco General Hospital?

San Francisco General Hospital (SFGH) has requested that the City Planning Department approve a helipad on the roof of the main hospital building, at 1001 Potrero Avenue x 23rd Street. The Draft Environmental Impact Report (EIR) will be published in March or April by the City Planning Department. The Department spokeswoman, Carol Roos, says that the EIR primary focus will be the noise and danger created by the helicopters. It is these two issues have galvanized neighborhood opposition.

The Hospital estimates there will be approximately 3 helicopter landings and takeoffs per day, 24 hours a day. SFGH hopes it will become a medical transportation hub with ever-increasing use over the next five years, which will generate positive cash flow to offset the hospital budget deficits. Helipad opponent Chris Sabre, speaking for the SFGH Neighbors Association, points out that San Francisco General is unwilling to set any limit on the helicopter arrivals and departures at its rooftop.

Saving Lives

Should flights be limited? If a person is critically injured and must be flown to a hospital, surely no one would wish to prevent that? A careful reading of the Hospital’s Initial Study, released in October 2005, reveals that only 53 of the expected 700 yearly flights will actually be trauma scene rescues. These 53 rescues will come primarily from car accidents on the Peninsula, or recreational activities in Marin. No helicopter rescues will be made within the City of San Francisco, which is far more rapidly served by ground ambulance. Currently, these 53 yearly rescues are flown to other surrounding Bay Area hospital helipads at hospitals located in Oakland, Palo Alto, Walnut Creek, Hayward, Richmond, Santa Rosa, to name a few. It is not clear that any of these estimated 53 yearly trauma victims would experience a better outcome if flown to SF General Hospital, which is often extremely overcrowded.

The patients rescued from an actual trauma scene represent just 8% of the expected helipad traffic. The remainder of the yearly helicopter arrivals, estimated at about 640 predicted flights to SFGH’s rooftop, are “Interfacility patient transports”: patients admitted to other hospitals in Northern California (some as far as the Oregon border) who need to be transferred to a San Francisco hospital. 240 of these transfers need the specialty care available at the City’s premier hospitals (for example, burn patients are transferred to St Francis Memorial Hospital, patients requiring extremity re-implantation go to Davies Medical Center). 400 of the patient transfers are trauma cases, initially stabilized at outlying hospitals, but in need of a Level I Trauma Center, such as SFGH.

In the past, these interfacility patient transports were flown to helipads located at Pier 32, or to Chrissy Field and most recently to Hunter’s Point (Pier 94), which is less than 1.5 miles from San Francisco General Hospital. They then move the patients to ground ambulance for transport to the appropriate specialty hospital,
or the SFGH Trauma Center. The Pier 94 helipad location is still available, but was deemed unsatisfactory in the 2003 Needs and Feasibility Study, because it is “poorly lighted” and access involves “a bumpy ride over railroad tracks and roads in disrepair”. That study gave no consideration to road repair and improved lighting at the Pier 94 helipad, so since July 2004, the stabilized transfer patients have flown to the San Francisco’s Airport, from there they travel via ambulance to a final hospital destination.

Time is an important consideration for all transport patients, however, when the entire trip takes 2-3 hours from Eureka or Mount Shasta, for example, the additional 5 minutes that a Pier 94 helipad would add, versus a SF General rooftop helipad, is considered inconsequential.

Christine Wachsmuth, SFGH Medical Helipad Project Leader, points out that doctors recommend as few vehicle changes for the transferred patients as possible. For those patients headed to SFGH, a rooftop helipad would eliminate the vehicle transfer from helicopter to the ground ambulance. But this is not a life-threatening transfer for patients that have been stabilized at surrounding hospitals. Indeed, no Manhattan’s hospitals utilize rooftop helipads; all use ground ambulance to move patients from a heliport on East 34th Street to various NYC hospitals. There is no dispute that ground ambulance transport can provide an extremely advanced medical environment approximating an Intensive Care Unit, at about one tenth the cost of helicopter transport.

The Hospital’s Bottom Line

If delivery to a hospital rooftop is not essential to save patient lives, are there other reasons to build this helipad? According to the SFGH Feasibility Study conducted in 2003, “an influx of air medical transport patients from the broader suburban and rural regions of Northern California is likely to contribute to a beneficial payer mix at the hospital”. This is the politically correct way to say that expensive helicopter transfer will import patients who have more money than the local residents who currently flood the SFGH trauma unit. The hospital hopes this will improve its bottom line. If patients have medical insurance coverage, or the economic resources to pay for helicopter transfer, then they will be transferred by helicopter to the Level I trauma center at SFGH.

San Franciscans want San Francisco’s public hospital to have a viable bottom line, but not if the cost is local residents’ lives and emergency trauma care. The Hospital is currently so overcrowded that it must turn away 18% of ambulances on a yearly basis. Local residents worry that this number of “diversions” will increase if helicopters deliver even more patients to SFGH from other Northern California counties. The Planning Department must not lose sight of the hospital’s declaration of purpose: “The Mission of San Francisco General Hospital is to deliver humanistic, cost-effective, and culturally competent health services to the residents of the City and County of San Francisco…” (emphasis added.)
Cost Of Helicopter Rescue And It's Overuse

Helicopter Emergency Medical Services, referred to by the acronym, HEMS, is extraordinarily expensive. The cost ranges from $5000 to $15,000 per transport, depending on the distance flown and the in-flight services provided. Ground ambulance ranges from a base rate of $500, to the high-end of $1240 for "Critical Care" ambulance transport. When high-speed transport is required to save a life, then expensive helicopter use is justified. However, a number of published studies, including research at Stanford University and the University of Texas, show that the flights often transport minimally injured patients when ground transport frequently could get them to a hospital faster, and with less risk to others.

In January 2005, the journal, Prehospital Emergency Care, published an abstract reporting that a study of 37,500 helicopter-transported patients determined that two out of three had only minor injuries. Twenty-five percent had injuries too minor to require hospital admission. "The evidence says too many patients are being flown, and yet they keep flying more," says Bryan Bledsoe, a physician and a professor of emergency medicine at George Washington University in Washington, D.C., who co-authored the Prehospital Emergency Care abstract. Tom Judge, president of the Association of Air Medical Services, a trade group, confirms that patient transports are rising an estimated 59% a year.

"In 20 years of experience in urban critical-care helicopter transport, I can count on the fingers of one hand the number of times I thought flying a patient to the hospital made a significant difference in outcome compared to lights and siren," says David Crippen, an associate professor of critical care and emergency medicine at University of Pittsburgh Medical Center.

A 2002 study, published in the Journal of Trauma, Injury, Infection and Critical Care, conducted by Stanford University trauma surgeon Clayton Shatney, evaluated 947 patients flown to Santa Clara Valley Medical Center. He concluded that helicopter service potentially saved the lives of only nine of them; while potentially serving as detriment to five who could have arrived faster by ground. Despite many published reports of helicopter overuse, SFGH has no plans to limit the type or number of helicopter transports it will permit at the proposed helipad facility. Apparently, if you can afford it, you can arrive by helicopter, no matter how trivial your medical need. But Medicare and Medical only reimburse 25-30% of this cost (probably even less under the proposed budget cutbacks). Some private health insurance plans will pay for 50-75% of a helicopter transport; the patient pays the remainder. Medical helicopter transport companies admit they use collection agencies to enforce patient payments.
Safety Issues

SFGH helicopter flights will land and takeoff 24 hours a day. Contrary to popular belief, EMS helicopters do not fly to a location directly above the helipad and then drop vertically straight down. Such a maneuver is possible, but very dangerous; the steeper the angle of approach or departure, the greater the crash risk. For safety sake, Calstar pilot Prevost, prefers to use an 8 to 10 degree angle of approach. But a shallow approach/departure angle produces a louder noise effect, and gradual descent requires that the helicopter fly much lower as it makes it’s approach/departure over the city. With low altitude extending more than a mile from the SFGH helipad, the helicopters will be just a few hundred feet above the City homes as the choppers approach the hospital.

In 2005, the FAA investigated 22 helicopter crashes that killed 40 people. An FAA study, undertaken in response to the sharp increase in emergency rescue helicopter accidents was released in January 2006, it concluded:

“There are approx. 650 emergency medical service helicopters operating today.....The number of accidents nearly doubled between the mid-1990s and the HEMS [Helicopter Emergency Medical Service] industry’s rapid
growth period from 2000 to 2004. There were 9 accidents in 1998, compared with 15 in 2004. There were a total of 83 accidents from 1998 through mid-2004. The main causes were controlled flight into terrain (CFIT), inadvertent operation into instrument meteorological conditions and pilot spatial disorientation/lack of situational awareness in night operations. Safety improvements are needed.”

In the Bay Area, two air ambulance companies, Calstar and Reach, would fly most of the patients to SFGH; both companies’ nearest base is the Concord Airport. Both fly using only “visual flight rules”, if visibility is poor, as in fog conditions, they must not fly at all. However, the number of air ambulance companies has grown dramatically in the past decade, so they are prone to flying in less-than-ideal conditions to stay competitive, according to Dr. Bledscoe.

Fog caused the Police Helicopter crash into Lake Merced in 1971, which killed a Police Officer pilot and grounded the department’s small fleet based at Lake Merced. Subsequently, the San Francisco Police Department helicopters were not used for daily patrols or pursuits. But on Jan. 11, 2000, two more San Francisco police officers died in the crash of a department helicopter in a plowed field near the small farming community of Crows Landing. It was a routine flight for a maintenance check at the Porterville Airport in Tulare County. The helicopter crash was the second in less than four months involving Bay Area police helicopters. In late October 1999, a San Jose police helicopter crashed onto a busy San Jose street, killing an Officer and an aircraft mechanic.

Following these helicopter fatalities, Supervisor Ammiano observed that: “Unfortunately, the city of San Francisco has had a history of tragedy in and around the use of helicopters.”

The SFGH Helipad proposal must not be rubber-stamped by the Planning Department approval process; it requires extended discussion and evaluation. There might be a slight increase in patient benefit provided by a SFGH rooftop helipad, compared with helipads at SFO or Pier 94, but that must be weighed against the potential risk of mass casualties and widespread fire that a helicopter crash on the roofs of wooden houses in San Francisco could cause.

There will be a helipad question and answer session on March 12, 2 PM at Brava Theatre, 2781 24th Street x York (formerly the York Street Theatre). The San Francisco General Hospital Helipad website is: www.dph.sf.ca.us/helipad. The Helipad opponents website is: www.stophelipad.org.

Author, Rebecca Sawyer lives in the Mission, 4 blocks from the proposed helipad.