

Seconds Count

The cost of misuse of emergency medical services.

Kerry Carpenter

dingdingdingding "Engine 4, Medic 19, code 3 medical aid to Shady Acres skilled nursing, 123 4th street, 123 4th street, cross of D street, for a victim of a fall, time out 0723."

Chair legs screech on the linoleum floor and the kitchen door slams open as firefighters pour into the apparatus bay and clamber aboard the engine. The diesel rumbles over and the garage outside flashes red as the lights burn to life. As the engine clears the doors the siren pierces the morning calm and the engineer stomps on the accelerator, belching smoke from the exhaust. It weaves around the morning traffic, its presence intermittently punctuated by a blast from the air horn. The facility is only a few blocks from the station and they pull into the driveway in moments. The siren whines down as they snap on latex gloves and grab their medical equipment: in house bag, airway and oxygen kit, narcotics, cervical spine bag, heart monitor, traction device, and backboard.

Falls, especially among the elderly, often result in a femur fracture (better known as a broken hip.) These can be excruciatingly painful and, because the femur can bleed heavily, life threatening if not cared for correctly and promptly. Care for broken hips taxes emergency resources heavily and is time consuming as traction must be applied to the leg and the patient completely immobilized. During this time the patient's vitals must be monitored continuously, ensuring that their health does not deteriorate.

Laden with gear, the firefighters crash through the front door and pull up short. Next to the lobby desk an elderly woman is laying on the ground. People walk around her, minding neither her placement nor the firefighters' presence. The receptionist looks up for a moment then goes back to shuffling her papers. The firefighters unload their gear and the medic kneels next to the woman.

"Hello ma'am. I'm a paramedic. Can you tell me what happened here?"

She begins to speak but is cut off by a new tone from firefighters' radios. Annoyed, the medic shuts his off. The captain muffles his with his hand and steps aside to hear the call.

"-ing. Battalion 1, Engine 1, Engine 6, Engine 9, Truck 1. Unconfirmed structure fire at 306 4th street, 306 4th street, cross of F street. Utilize Control 3 and Tac 6. Time out 0728."

He curses under his breath. The fire is literally only blocks away. It is right in the middle of Engine 4's district, meaning all the units responding will take longer than normal to cover the extra distance. He tries to tell himself that it is probably nothing - another false alarm, just like so many others they get. Then he switches his radio to scan which will allow him to listen in on the action, if there is any.

The ambulance crew comes through the front door pushing their gurney. They shoot the captain a look: they know what he is thinking, they heard it too.

He steps back to the medic's side, who is talking to the smiling woman on the ground. He has her hooked up to the monitor and is checking her heart rhythm for any abnormalities while the engineer swiftly grabs a blood pressure. As a team the crew of three has done this thousands of times. They know that, while there does not appear to be anything wrong with the woman, falls are often a symptom of another problem - a heart condition, dropping blood pressure, or neurological issues. Or she may have just tripped.

The woman has no pain and no sign of injury. Her vitals are good and her rhythm appears normal on the monitor. She is alert and oriented, showing no signs of confusion. So far there does not appear to be any medical reason for her call. So far there is no medical emergency. They decide to help her to her feet and reevaluate her. The paramedic takes one hand and the captain the other while the engineer circles around her to hoist her up. Their combined strength is

more than enough to move a horse, but they want to ensure their patient's comfort. As they lift her gently to her feet the captain's radio squawks to life again.

"4th street fire update. Report of flames seen and children trapped inside."

All three members of the crew curse vehemently, causing their patient to glare at them. Fortunately, she is stable on her feet.

"Battalion 1 is almost one scene. Go ahead and start a second alarm." The battalion chief's voice is always stone cold but there is the slightest tremble in it today as he flies through traffic.

The medic looks out the glass doors. He imagines he can just make out smoke. The captain looks at the ambulance crew like a deranged caged animal, trying to escape.

"We got it cap'; she'll be fine. Go."

That is enough for him. He barks into the radio, "Engine 4 back in service, attach us to the fire." The paramedic rips the lead out of his monitor and hands it to his counterpart on the ambulance crew. The firefighters grab their gear and blow out the door.

Compartment hatches slam and Engine 4 screams out onto the street. In seconds they have made the transformation from their station blues to their turnouts, structure boots, and helmets. As they pull around the corner they can see a plume of smoke reaching for the sky and at its base a home surrounded by engines 1 and 9 and the battalion chief's buggy. Truck 1 is rolling towards it from the other direction.

"Engine 4 on scene, where do you want us?" the captain radios on the control channel.

"Take another hydrant then get up here." the radio replies.

The engineer pulls over to the nearest hydrant short of the house. Checking for traffic, the firefighter in back scrambles out and pulls off a stack of four inch supply line.

"Go!" he shouts as he wraps the fire hose around the hydrant. The engine surges forward. Hose flops out of the back as it stretches towards the fire.

The airbrakes hiss as the engine again pulls to a stop just short of the house. The captain swings out and slams open a compartment, prying out his breathing apparatus. The engineer climbs out his side and begins unscrewing the supply line, shortening it to the proper length. He threads it to the pump intake on the engine and shouts "Ready!" towards the hydrant as he loops the supply line on the grass where it will not tangle. The firefighter opens the hydrant and the line writhes on the ground as it inflates. Water surges into the pump.

Mask in place, the captain steps to the battalion chief's side. The truck's aerial ladder swings overhead, stretching through the smoke towards the roof. Flames are visible flicking up from the back of the house.

"Take your firefighter and get inside. Engineer stays out. Fast, we haven't found those two kids yet." The battalion chief sounds composed but a nervous sweat glistens on his face under his white helmet. The captain turns to his crew, pointing his firefighter to the hose and the engineer to the truck. The captain and firefighter will make entry into the building while the engineer coordinates with the truck, ensuring that there are significant personnel outside to make a save if a firefighter goes down. The firefighter shoulders a stack of hose and heads for the building and the captain follows with his halligan tool. Two members of the truck crew hustle up the ladder toting a chainsaw.

Smoke is billowing out the front door as they kneel beside it. The door hangs from its hinges and the splinters lay on the ground - another company had made quick work of it. The other crew's hose line is already in place, stretching into the house and to the right. They will go to the left. The firefighter takes the nozzle and the captain hoists the hose behind him. As they

crawl into the building the chainsaw screams overhead and bites into the roof. Soon the smoke will be able to escape out of that hole. In the meantime though, smoke is banked to the floor and the world is black. They advance the line, feeling their way and swinging the handles of their tools under furniture and stretching for the middle of the room, begging to feel the touch of the missing children.

The other search team is pleading the same as they force open another door. Smoke rushes out at them but they push in and begin their search. Overhead there is a crashing sound: the truck crew has pierced the roof. Hooks stab through the ceiling, smashing it to make a vent to let the smoke and heat escape. Mercilessly slowly the smoke lifts and suddenly the firefighter's heart rates spike higher. Children's toys lay on the floor, blackened and disfigured. Desperately they search, hoping not to find anything. Nobody in this room could have survived. Please let them be anywhere else. And then the lead firefighter feels something. "Found one!" he shouts. His partner rushes to him as the smoke continues to rise. Suddenly they can see both children, sprawled on the floor. A thin layer of blackened char over ghostly white skin. Without pause they each scoop one into their arms and hustle out of the room. Heat sears them as they run, cooking them. They follow their hose line back to the broken door.

They stumble out of the house bearing the children. On the grass they fall to their knees and lay them down, tearing off their masks and letting their helmets roll aside. Their exposed skin steams in the morning air. Other firefighters converge on them immediately. Care is initiated on the children while the rescuers are braced from collapse. Their exhaustion now is physical. When their bodies recover their emotions will feel the brunt of the trauma.

CPR. Firefighter's muscled paws compress two tiny chests. A mother screams. Two code 3 ambulances for two burn victims, both pulseless. Request a helicopter. Get an airway. Oxygen.

Monitor: flat line. Shocking: clear! A small body convulses. Flat line. Continue CPR. On to the ambulance. Get an IV: epinephrine and atropine. Shocking: clear! Flat line. The ambulance's sirens scream and the tires struggle to hold the road. Faster. Epinephrine. Shocking: clear! Nothing. The doors swing open. Hospital. CPR. Narcotics pushed through veins. Shocking: clear! Nothing. Nothing nothing nothing.

Time of death.

With all the apparatus in place the fire is quickly put out and the house drowned. Nothing is untouched by flame and what is not destroyed by heat is finished by water. Nothing is worth saving, not now. The fire is out but there is no victory.

Two children dead. They should not have been. A fire engine made an emergency response to a facility where there was no emergency and was unable to respond when truly needed. Fires kill and destroy too quickly: seconds count. The fall victim lived; she walked off once she was back on her feet. All she needed was help up, something supposed skilled nurses should have been able to diagnose and treat without calling for emergency aid. Without taking away help from those who truly need it.

This is not an uncommon occurrence. Every day people dial 9-1-1 for thousands of reasons; some for genuine emergencies, some that are not actual emergencies but remain well-intentioned, and some for less legitimate reasons.

This essay will focus on fire departments and emergency medical services as components of the 9-1-1 system. To be able to discuss them in depth an understanding of their operations and the system they work within is necessary.

Everywhere in America has some type of fire protection. There are federal, state, county, city, and private fire departments; but we are going to focus on the most commonly encountered types: state and municipal. State departments usually provide fire protection to rural areas that do not have the population to warrant or finance a separate department. Additionally, these areas frequently lay in wild land settings that cause significant threat from wildfires. Wildfires take huge amounts of resources to fight, which state departments can provide.

Municipal fire departments are the most familiar type for most people. They reside in cities and larger population areas and are an intricate part of the community. Their funding comes from property taxes so they grow as the area they serve does.

Fire departments are either professional, volunteer, or a combination of the two. Places that are more rural and opt not to have state coverage often have volunteer departments. A volunteer department does not have firefighters waiting at stations but instead unpaid volunteers wear pagers and respond to the fire station from their homes when there is an emergency. Their response times are severely slowed by this. Professional departments have firefighters at the stations ready all the time day or night. This requires a larger community to support financially. Finally, some departments are a combination of the two, with a small number of professional firefighters ready to go that can be augmented by volunteers when additional manpower is required.

What many people misperceive is the job of the fire department. No longer do fire departments only fight fires. Instead, the largest demand placed on fire departments today is medical emergencies. The fire service has become the largest provider of emergency medical services (Compton, 2006.) To integrate these responses into their operations firefighters are cross trained as emergency medical technicians and paramedics. Firefighters are also responsible for

responding to dangerous incidents like vehicle accidents, building collapses, swift water rescues, high and low angle rescues, hazardous material spills and leaks, and every combination of these incidents. Departments that respond to all these are considered all-risk fire departments. With fire departments constantly being called upon to respond to new types of emergency, there is a constant demand on their immediate services.

Ambulances have become a close counterpart of fire departments. On every medical or injury call an ambulance needs to respond to transport the patient to the hospital. If there is more than one patient an equal number of ambulances are required. Like fire crews, ambulances are in constant demand.

There are a couple ways that ambulance units are set up. Large municipal fire departments sometimes are able to run their own ambulances. This takes a significant amount of financing to set up the entire infrastructure and to hire additional firefighters to staff the new ambulance fleet. What many counties opt to do instead is to contract a private ambulance company to respond with the fire department. While this is functional and logistically easier for the city, there are downsides. Private ambulances are not paid for with taxes like fire department ones are. Instead, the cost is passed on to the patient. Transporting a patient begins with an initial cost and then any procedure performed after charges the patient extra. Quickly it becomes extremely costly for the patient. For some the expense of using private ambulances has become a deterrent to using 9-1-1 in situations when it is truly necessary.

There are other agencies involved in the 9-1-1 system as well. Emergency dispatchers receive the 9-1-1 calls and relay the information. They are the only contact with the patient until emergency responders arrive on scene and are therefore solely responsible for assessing the severity of the emergency and prioritizing response accordingly. Like ambulances, dispatchers

are often from private companies. Unlike ambulance companies, dispatch is funded by a phone tax instead of use-based fees. Thus, people are not hesitant to dial 9-1-1 on account of financial reasons.

Air ambulances or medical helicopters are also private companies, sometimes owned by hospitals, that function like regular ambulances. These are prohibitively expensive to patients but in cases where a patient is severely sick or injured and has a significant distance to travel to reach specialized care it is often the best chance of the patient surviving. Helicopters are dispatched when called for by on scene responders and are therefore rarely used when not truly needed.

Fire departments are arranged geographically to be able to respond anywhere in the city as fast as possible. Every fire station has a fire engine in it: they are the bread and butter of the fire service. Engines are responsible for flowing water at fires and are the most numerous piece of apparatus in the fire department fleet. This means that they are also the choice to be the primary form of medical response. Because they are dispersed throughout the city they are usually first on the scene of any incident, at which point they stabilize the patient and begin treatment while waiting for the ambulance to arrive.

Fire trucks are different than fire engines. Trucks carry larger ladders, usually supplemented by an aerial device, and are essentially large toolboxes that are used more sparingly, reserved for incidents where they are demanded. Fires, car accidents, entrapments, and rescues all require the equipment trucks carry. They are usually much larger and therefore slower to respond, especially because there are fewer of them in the department and they most likely have a longer distance to travel. For large incidents trucks are indispensable, but in most cases they are uninvolved on most medical emergencies that do not require large equipment.

Fire departments are paramilitary organizations with each member having a clearly defined rank and responsibilities. The basic rank in a fire department is the firefighter whose role is to respond to emergencies and make the situation better. Above the firefighter is the engineer or lieutenant who drives and operates the apparatus. Usually there is only one engineer per apparatus, but tiller trucks with a driver in the front and rear require two. Finally, each apparatus has one captain who is the commanding officer of that unit and responsible for the other firefighters on board.

Fire stations are divided into battalions, grouping them to make it possible to manage them. Each battalion has a battalion chief. The battalion chief's role is to respond to emergencies that require coordination between multiple units and to take command, directing the incident to ensure it is brought under control as quickly, efficiently, and safely as possible. Battalion chiefs are the last "line units" that are stationed to respond to an emergency all the time. All the line units together are the operations division, headed by the operations division chief.

The prevention division is sibling to operations division. This is a relatively new aspect of the fire service: the first engagement in being proactive in preventing emergencies instead of reacting to them. Usually, fire prevention's specified duties are entirely fire related - they do not engage in medical activities like operations does. Their primary work is usually in plans checking and building inspections. When a fire department's income is shrunk, prevention is usually the division that takes the cuts because operations is considered more critical to daily life safety. Because of the second-place importance of prevention in most places it has not developed into a sufficiently strong body capable of enacting far enough reaching change to free operations from its need. Operations is the last line of help for many people. The fire service does not leave them uncared for in the interest of enacting social change that, in the long run, might improve

their condition. First, the necessities for life safety need to be secured. Only then forward progress can be made. In the fire service, people who fall through the cracks die.

Everybody loves firefighters. Kids wave as they drive by on the street and adults shake their hands and thank them for their service. The chrome on the red engine gleams: a well recognized sign of safety known throughout the world. But their lives are not as idyllic as the coloring books portray. People call firefighters when they are at their worst: they or somebody they love is sick, hurt, or losing everything. Firefighters see everything from the triumphs of saving lives and delivering babies to the devastation of death, loss, and the feeling of not being able to make a difference. Only firefighters are welcomed into every situation when people are desperate for help. To do their job right the adoration of the public is critical; without it they would not be trusted in these situations.

It is quite possible that firefighters know their respective cities better than anyone: every address, every hazard, and every patient. Perhaps more than anything, they know the poverty. From these observations many firefighters have come to formulate their own social theories. Forefront among them is Dennis Smith of the New York City Fire Department, who worked on Engine 82 in the South Bronx - at the time, the busiest engine in the world. In his novel Report from Engine Co. 82 he writes,

Firefighters know that one out of seven people in this town are on welfare. They know that ninety percent of those are black or Puerto Rican... They look at the Fire Department statistics and see that the busiest areas of the city - where the false alarms are greatest, the garbage fires greatest, and the incidents of harassment are greatest - are where minority groups live.

There is no doubt that the firefighters' job is more difficult, and more dangerous, in black and Puerto Rican areas than in other parts of New York City... conditions make their job tough, not people. People only reflect the conditions. Poverty is manifest in fire statistics - that's a safe generalization (168.)

The study of poverty is nothing new, but this is a new angle of observation on it. Firefighters recognize themselves as the last caregivers many people have - in many ways, the closest thing to universal healthcare there is in America. The reason for this is the commodification of health in America - that is to say, that a price value has been put on health. When this happens people are inherently left without the health care they require.

dingdingdingding "Engine 98, Medic 76, code three medical to 555 Urban Street, 555 Urban Street, cross of City, for a woman who believes she is having a stroke. Time of dispatch 1328."

A firefighter groans as he shoulders open the door and we pour into the bay behind him. "Please, no." he whispers as he hoists his boots and turnouts onto the engine. I want to ask what he means, but there is no time for explanation. The tires cheep and the suspension bounces as we pull onto the Los Angeles street. The engineer blitzes us down the street with abandon, more desperately than he had been even for the shooting we had responded on earlier that morning. The captain's face is lined with concern. There is something different about this call. Faster. The air horn roars and the siren screams.

We pull up in front of a dilapidated house. Firefighters pour out of the engine and grab their gear. Uncharacteristically they do not hesitate at the door but march straight in without

knocking. Inside we are met by an African American family who squeeze aside to let us pass through the narrow halls. We head straight into the back bedroom which has rubbish stacked up the walls. An elderly woman is perched in her rocking chair next to the window. Our firefighter kneels next to her and begins his examination. Outside the department ambulance screeches to a stop and two firefighters race to pull the gurney out of the back.

The firefighter is running through the Cincinnati Pre-hospital Stroke Scale. Can you show me your teeth? Can you hold your arms out for me? Can you repeat this sentence? She has pain in her back and arm but does not appear to be having a stroke. The paramedic enters the room and confers with the firefighter who has been speaking with her. They decide it is more likely a nerve related issue, as her vitals appear normal. Painfully, she is helped into the stair chair - the only means of transporting her small enough to fit down the narrow confines of the hallway and into the room. The firefighters do not blink upon realizing that she has defecated herself. She is gently wheeled out of the house and loaded into the ambulance.

Usually at this point we leave. But the captain turned and re entered the house, followed by his crew. They chat with the family, telling them they believe their patient will be alright. Evidently there are many people living in the house: at least three generations, aunts, uncles, and cousins. Our patient was the grandmother. The firefighters know each by name. The floor is bare concrete. The firefighters are talking with a man and pointing at the makeshift ceiling tiles stacked over the rafters. I discover later that, per the firefighters' recommendations, the family had moved the scrap stereo wire they used to wire all the lights in the house to the run through the ceiling - before, the same wires had run across the ground. It remained an incredible fire hazard, but at least now the wires were not being trod on, which had been an even greater risk. As we leave the house the captain tells me, "I was there when those kids were born and I was

there when their grandpa died and, someday, I'll be there when that house burns down. There is a family with nothing else."

People with nothing in America do not even have their health. Health has been made a commodity most often provided by insurance that comes from an employer. Without health people cannot get a job and without a job people cannot get health insurance and, in turn, people cannot get healthy without their health insurance to pay for it. In their book Uninsured in America, Susan Starr Sered and Rushika Fernandopulle coin this phenomenon the death spiral and trace several individual's descent through it. What is seen repeatedly is that victims of various medical ailments are unable to afford early preventative care and screenings, missing the opportunities when their conditions would have been most easily and affordably treatable. As the condition worsens so does the victim's social condition. Treatment becomes further inaccessible with both of these changes with no hope of turnaround. To the layperson this is known as a chain reaction. In the fire service it is called a conflagration.

Without outside intervention the victim is eventually left with nothing and nowhere to go. When their condition worsens to become life threatening they dial 9-1-1 and receive care. In this way emergency medical services are a safety net service: they help those who have no one else. Though they may have no means to pay for it, patients are transported by ambulance to the hospital where their care is continued until their condition is stabilized. At that point they are generally released. By necessity, emergency medical services cannot provide care to non emergency patients. There are too many people with what may be more demanding, immediately life threatening needs who need care more urgently. It is an endless juggling act: keeping patients from dying but unable to get them all the help they need. As more patients are made reliant on

emergency medical services, the demand becomes more tenuous. Fires take longer to get put out. Patients do not receive care as fast as they should. Some die. It is inherent in the system we live in.

Patients who have nowhere else to turn are not to blame for the problems faced by emergency medical services. They are a contributing factor to the ever-growing strain of increasing patient load, but they are not the source of the problem. Instead of intentionally overusing the service, they have been made to rely on it by their lack of access to any other form of care. Emergency medical services exist to help people exactly like these.

dingdingdingding "Engine 98, Medic 76, code three medical to Roads End skilled nursing, 555 City Street, 555 City Street, cross of Center, for a 78 year old female whose breathing tube fell out. Time out 1055."

"Oh god, three in a row." the engineer mumbles as we board the engine. Our first patient that day had died in his sleep. Our second had been shot. Patients at this skilled nursing home rarely live. Horror stories circulate of inpatients dying and not being noticed for hours. The engine roars down the street, motivated on by a distant hope.

We are met at the door by a short man dressed in gloves, a gown, glasses, and a mask. He holds out to us a box of masks, which we help ourselves to. In broken English he guides us to the room but refuses to follow us in. He stays in the hall.

Upon entering the room we find the remains of an elderly woman. Both arms and legs have been amputated - probably due to severe diabetes poorly cared for. Her breathing tube is whistling on the floor. Miraculously, a slight gasping sound can be made out of the hole in her neck where a tracheotomy had been performed. Quickly we place our own oxygen device into

place, which seems to calm her agitation. The ambulance crew wheels in the gurney behind us. She is amazingly light as we transfer her onto it, obviously because of the absence of much of her body.

There is nothing left to do but rush her to the hospital and hope they can help her recover. We return to station where we wash our hands vigorously, now fearful of whatever it was that scared the man in the gown out of the room.

Health care facilities, namely convalescent and skilled nursing homes, are huge users of emergency medical services. Many responses they demand are for true life threatening emergencies. However, many of these facilities, especially among the poor, reflect the poverty of their patients. Their quality of staff suffers. On this call we saw a patient almost die from a treatment not being done that should have been routine for people who should be working in those facilities. In the opening story where the two children died, the fire department was called repeatedly because it is cheaper to get them to help pick people up than to hire somebody capable of doing the same. Nursing homes are one of the most dreaded responses among firefighters: nothing good ever seems to happen there. Many patients end up in these facilities because they have nowhere else to go and no family to care for them. When they cannot care for themselves any longer they are put in these facilities to live out the rest of their lives. As patients are usually expected to die eventually while in care there, the facilities become a purgatory: a place of life between this one and then next. The expectation of death puts into question patient care: it only gets more expensive as the patient's health deteriorates - how much money do you spend before the patient eventually dies anyway?

Some emergency service providers have started to charge health care facilities for responses that should have been taken care of by the facility without emergency help. The idea behind this is not to make a profit but instead to deter facilities from utilizing emergency resources for responsibilities that should be their own (Emerson, 2011.) Like placing the blame on patients who have no choice, nursing homes equally have nowhere else to turn. Their patients, by nature, do not have an alternative to being in the facility and, therefore, do not have much money to pay for their care. Essentially, nursing homes and ambulance services share the same sick, impoverished patients who are unable to pay for either service. Because the nursing homes do not have enough funds to pay for staff and care, fining them further will compound the problem instead of fixing it.

dingdingdingding "Engine thirty-one-ten, Medic 6. Code 3 medical at CVS Pharmacy, 600 Front St, 600 Front St, cross of Soquel Ave, for a pregnant female, victim of a fall, with chest pain and difficulty breathing, at 1743 hours."

We have already raced down the steps and are scrambling onto the engine by the time the page finishes. The diesel roars to life and we slap our earpieces into place so we can hear one another, but nobody has anything to say. Everybody knows what needs to be done. The captain hits the lights and as we clear the doors he stomps on the Federal Q siren, bringing the Center Street traffic to a halt. The paramedic next to me is stone faced as he tosses me a set of gloves: while there is rarely anything particularly joyous on an emergency call, a sick or hurt pregnant woman weighs particularly heavily on the heart, and this one sounds like it could be particularly bad. The engine roars, the siren wails, and the tires cheep as we round a corner. CVS is not far but every second counts in an emergency - it could be the difference between life and death. The

captain curses and grabs the air horn and the engineer slams on the brakes as an oblivious driver pulls out in front of us. Tools crash in the compartments behind us but all the noise does not distract the medic as he snaps his gloves into place and all his procedures run through his mind.

The engine pulls to a stop right outside the doors and we jump out and grab all the supplies we might need: in house bag, oxygen and airways, monitor, narcotics, and cervical spine bag. We rush for the door but are held up by a voice behind us.

"I'm the one you were called for."

We turn on a woman sitting in a bench. Her hair is grey and disheveled and her tattered clothing seems only too complementary for the trash strewn sidewalk we are standing on. She is holding a large foil-wrapped burrito in her hand, which she takes large bite out of as she stares at us. She does not appear to be pregnant, sick, injured, or in any particular type of distress.

The captain glances at the engineer. "Go check inside," he whispers out of the corner of his mouth. The engineer hands his bag over to the captain and steps through the sliding glass doors.

The medic kneels by the woman. "What's the problem this evening miss?"

"I'm sick, I need to go to the hospital."

"Can you tell me your symptoms?"

She pauses.

"Dispatch told us you were pregnant."

"Yes! And my chest hurts." She takes another bite of the burrito and chews with an open mouth. The captain looks skeptical and the engineer returns, confirming that there are no other patients inside.

"Did you fall?"

"Yes."

"Where does it hurt?"

"Everywhere." she spouts with a mouthful of food.

The medic instructs the engineer to stabilize her head, preventing her from hurting her neck further if it was injured in the fall.

"Don't touch me!" the woman shouts.

"He has to, ma'am. We're afraid you might have hurt your neck in the fall."

She continues to resist and the medic looks off the engineer. In the unlikely event that she really is hurt, it is more likely that she will hurt herself resisting than anything.

She takes another bite of her burrito.

"Are you having any trouble breathing?" She obviously is not; she has been talking plainly with us throughout the call.

"Yes," she replies again, compulsively.

People enter and exit the pharmacy and, despite the flashing red lights, hardly give the incident a second look. The ambulance pulls up in front of the engine. The paramedics jump out and gesture questioningly towards the gurney in the back of the ambulance. The captain closes his eyes and briefly shakes his head. The medic team joins us with knowing looks in their eyes. Our medic finishes checking her vital signs. Everything appears normal.

Resignedly, our medic asks if she wants to go to the hospital.

"Yes, to Watsonville." she stipulates. Watsonville is the more distant of the two hospitals, located on the other end of the county.

Indignant, the captain interjects "Why?"

"They don't like seeing me anymore at Dominican." she replies.

We glance sidelong at each other, but years of fire flare up in the captain's eyes. He turns on the patient.

"You can't go to Watsonville. Do you realize what that means? It means that you take one of the county's six ambulances out of service for the whole drive out there. The whole county only has six! And if you take this one for an hour, there will be one less for somebody having an emergency. What if it's a kid? What if some kid can't get to the hospital because you took the ambulance? You're not having an emergency! Are you really that selfish?"

She stares back with a look that says, indeed, she is. She chews her burrito noisily but says nothing. The captain stares back, their eyes meeting in a battle of wills.

Technically, the captain could not refuse to transport her - at least not without getting someone further up the chain of command to fill out some paperwork. If the woman wanted to be transported, she would be transported. However, the captain was correct in his assessment of the situation: there are a limited amount of ambulances and taking her all the way to the other end of the county would remove one from service for a dangerously long time. It is not uncommon for five or even all six ambulances to be busy at a time, and when that happens it can take over an hour for another to respond from a neighboring county. If somebody really is sick or hurt, very often a response time like that is far too long to make any difference.

Finally, the woman breaks eye contact and storms off, stomping and shouting indignantly. We peel off our gloves and climb back aboard the engine. The ambulance radios back in service and is quickly sent off to another call. We drive slowly; there is no hurry. There was no emergency on the way there either - she just told the dispatcher anything she could think of to get us there faster.

Patients who are not sick, not hurt, and still use 9-1-1 for personal gain are the most frustrating to emergency medical service providers. Everybody who works for an ambulance or fire department has stories of patients calling because they ran out of alcohol (Nolin, 2010,) or had an ingrown toe nail (Bledsoe, 2011,) or a blanket fell off the bed (Canning, 1997.) Responders consider it inexcusable when a real emergency response is delayed because of one of these calls. Frequently, when one of these calls is placed the caller will have already prepared to go to the hospital by packing bags and getting dressed. These patients are jokingly referred to as displaying "positive Samsonite signs" (for having a packed suitcase ready to go) (Ludwig, 2002.) They use the ambulance as nothing more than an expensive taxi to the hospital, taking it away from those who truly need it. Frequently all they desire at the hospital is a meal and a warm place to sleep.

Often, we see these patients who call 9-1-1 for personal gain become repeat offenders. The idea that any 9-1-1 call could be an emergency necessitates that they get treatment and transport to the hospital. As a result, they usually get what they want. Soon, the behavior becomes a pattern. Paramedics know these patients by name and emergency dispatchers recognize their voice as soon as they pick up the phone. Steven J. Weiss, M.D., of the UC Davis Medical Center did a study in 2002 on repeat callers. He estimates that 40% of emergency medical service's time, resources, and personnel are spent on frequent flyers (Lacy, 2003.) Of repeat callers, nearly half are over the age of 65 and 11% suffer from a diagnosed neuropsychiatric disorder.

Obviously these people need help, but emergency medical services is not what should be providing their care. They need long term care that can help them through their problems, not patient stabilization and a trip to the emergency room. Emergency care is extremely specialized

to people who are dying right now. Aside from that, it is expensive to patients financially and, when not used properly, in human life to those who cannot get care fast enough.

A clear answer to this problem has not been found, but a couple attempts have been made. Firefighter/paramedic Jay Sumerlin of Lakewood Fire Department in Washington has pioneered a new program to pair his department with a 501(c)3 nonprofit taxi service. When they have a patient they believe to be a non-emergency they perform their evaluation to confirm and then contact the physician at medical control to confer. If the physician agrees, they call the taxi service and the patient is transported by taxi to wherever they request to go. The taxi service is much cheaper and, better, emergency responders are back in service sooner, ready for the next call (Ludwig, 2009.)

The state of Oregon has taken it a step further. The 76th Oregon Legislative Assembly has recently passed Senate Bill 213. It deals with misuse of the 9-1-1 system, recognizing the cost and clarifying in Section 2.1.b:

"Inappropriate use of emergency medical services is harmful to individuals and to the health care system, and emergency medical providers should provide leadership in discouraging the inappropriate use of emergency medical services."

But more significantly, the crux of the law is found in Section 2.3 which reads:

"An emergency medical technician has a duty to refuse to provide the inappropriate use of emergency transportation and to refer an alternative means of transportation to an individual

who the emergency medical technician determines does not have an emergency medical condition."

In a few other areas, there have been provisions made to allow emergency responders to provide non-emergency patients with alternative forms of transportation to locations other than the hospital emergency department. Never before has there been a law mandating it.

This seems like it would be a welcome change to the emergency medical technicians and paramedics who see the misuse most closely, but they are not pleased. Instead, most are more dubious about the law. While they agree that 9-1-1 misuse negatively impact emergency medical services, they do not think this is the way to solve it. They worry that new liability is being forced on them and they have no way to avoid it. One Oregon paramedic points out that transporting a patient requires a simple patient care chart. When a patient refuses care it requires much more charting to cover the liability. The extra forms required to refer a patient to alternative transportation are testimony to the increase in liability (McLean, 2011.)

Experienced emergency medical providers cite experiences where a call seemed routine and the patient healthy that resulted in the patient having a serious and fast acting medical condition that would have been tragic had they not been there. One tells the story of a homeless patient who called 9-1-1 every day for a ride to the hospital where he could get a warm meal. This continued until accommodations were made to transport him quickly without treatment until one day he really did have a heart attack and died (McLean, 2011.) There is little doubt in the mind of many providers that this new policy will cost some patients their lives. They do not believe that cost will be worth any savings from this policy.

What some Oregon paramedics would like to do is to have a basic life support ambulance designated for probable non emergency calls that could transport patients to locations other than the hospital. Operators would be trained to a lower level than paramedic but still enough to be able to recognize and begin treatment on emergency conditions should they present. This would keep normally staffed ambulances free to respond to real emergency calls while keeping medical personnel with the patient to assess any deteriorating conditions.

dingdingdingding "Engine 1, Medic 7-6-4. Code 3 medical to 1637 Santa Rosa Ave, 1637 Santa Rosa Ave, cross of Colgan, for a drunk man who wants an ambulance. Time out 1224."

Chairs squeak as we race out the door. We have to assume that when people call for help there is an emergency of some type, so we treat it as such. Calls never seem to turn out how they are initially dispatched, frequently what sounds like a routine call quickly develops into something more serious. We are weaving around traffic with the siren blaring. Dispatch updates us on our control channel, informing us that our patient will meet us at the pay phone.

Soon, we can see him in front of us. After a delayed moment he recognizes the big red loud thing with the flashing lights coming towards him and dramatically throws his arm across his forehead and gingerly lowers himself to sitting and then laying on the sidewalk.

"Looks like this just got serious," laughs the medic next to me into his microphone.

We pull up next to him and climb out. Though it is pretty obvious, we ask the man laying on the ground if he called 9-1-1.

"Yes," he slurs "I'm drunk, wanna go to the hospital."

"We can do that. Let me grab your vitals while we wait for the ambulance." The paramedic pulls out his stethoscope and cuff and checks the man. Everything is normal; minus the alcohol the man is healthy.

After a few minutes the ambulance arrives. The crew pulls out the stretcher and the man stands and collapses into it, leaving his bottle behind. The engineer takes the foot of the stretcher and begins wheeling it towards the rear of the ambulance.

"You know," he says "You can call us a thousand times and we'll come out here and do the same thing every time. But you know and I know both know that nothing is gonna change."

The man nods his head resignedly.

"If you want, the ambulance can bring you to a treatment center instead, and they'll help you out."

He thinks for a minute and then confesses "Yeah, I think that would be good."

For a moment, everybody there looks surprised. That never works. But they lift the stretcher into the ambulance and drive him to the treatment center. We return to the station pleased that, finally, someone has agreed to treatment.

Legally being able to transport a patient to anywhere but a hospital emergency department is rare in emergency medical services. It takes trust in the paramedics by the administrating doctor to make the right decisions and detect any medical issues the patient might be having. In this case, the ambulance used to transport was still an advanced life support unit - staffed by paramedics and taken out of service by the transport. But it remains a step forward because the patient was transported somewhere where he could get care that could actually help his condition instead of somewhere where he would be again evaluated and set aside.

The fire service has changed. More now than ever firefighters work all day and night to help people - whether their house is burning down, they are sick or hurt, or cannot get any other sort of help. With each newly adopted responsibility new problems rise, the misuse of emergency medical services being only one of them. There is no easy fix to this problem and, so long as health is tied so closely to money, a solution will take enormous reform in the way people are cared and provided for. Until then, people will continue to dial 9-1-1 and highly trained firefighters will always come, ready to deliver the best free emergency medical care that can be provided.

Works Cited

- American College of Emergency Physicians "Study Reveals Heaviest Users of Ambulance Transport." *Journal of Emergency Medical Services* (2010). 16 February 2011.
- Bledsoe, Bryan E. "EMS System Abuse." *Journal of Emergency Medical Services* (2010). 16 February 2011.
- Canning, Peter. *Paramedic: on the Front Lines of Medicine*. New York: Fawcett Columbine, 1997.
- Compton, Dennis. "Fire Department-Based EMS: A Proud Tradition." *Fire Engineering* (2006): 26. *Academic Search Complete*. 11 February 2011.
<http://www.FireEngineering.com>.
- Cunningham, Peter J., and Jack Hadley. "Availability of Safety Net Providers and Access to Care of Uninsured Persons." *Academic Search Complete*. EBSCO, 6 February 2011.
- Cunningham, Peter J., Jack Hadley, Genvieve Kenney, and Amy J. Davidoff.
"Identifying Affordable Sources of Medical Care among Uninsured Persons."
Academic Search Complete. EBSCO. 6 February 2011.
- Dohan, Daniel. "Managing Indigent Care: A Case Study of a Safety-Net Emergency Department." *Academic Search Complete*. EBSCO. 6 February 2011.
- Emerson, Sandra. "Fee Considered for California Nursing Facility Non-Emergency Calls." *Inland Valley Daily Bulletin. Journal of Emergency Medical Services* (2010). 16 February 2011.
- Fadiman, Anne. *The Spirit Catches You and You Fall Down: a Hmong Child, Her American Doctors, and the Collision of Two Cultures*. New York: Noonday, 1998.

Gresenz, Carole R., Jeannette Rogowski, and Jose J. Escarce. "Health Care Markets, the Safety Net, and Utilization of Care Among the Uninsured." *Academic Search Complete*. EBSCO. 6 February 2011.

Kavilanz, Parija B. "EMS Officials Speak Out on '911 Abuse'" *Academic Search Complete*. EBSCO, 25 Aug. 2009. 6 February 2011. <http://www.ems1.com>.

Lacy, David. "Frequent Fliers: The Increasing Burden of Repeat 9-1-1 Callers on EMS." *Academic Search Complete*. EBSCO, May 2003. 6 February 2011.

Ludwig, Gary. "911 Abuse: One Fire Dept. Finds An Answer." *Firehouse* 1 Nov. 2002. 1 February 2011. <http://www.firehouse.com>.

McLean, Gary. Oregon Paramedic. January 20, 2011.

Nolin, Robert. "Florida Dispatchers Frustrated Over 911 Abuse." Fort Lauderdale Sun-Sentinel. *Journal of Emergency Medical Services* (2010). 16 February 2011.

"Oregon's Senate Bill 213" EMTLife.com Forum. February 17, 2011.

Seibel, Eric J. "Building A Low-Cost Network of Advanced Life Support Services." *Fire Engineering* Apr. 2007: 40-46. *Academic Search Complete*. 11 February 2011. <http://www.FireEngineering.com>.

Sered, Susan Starr., and Rushika J. Fernandopulle. *Uninsured in America: Life and Death in the Land of Opportunity*. Berkeley, CA: University of California, 2005.

Smith, Dennis. *Report from Engine Co. 82*. New York: Grand Central Pub., 1999.

76th Oregon Legislative Assembly. *Senate Bill 213*. 2011.

Thanks to the Santa Rosa Fire Department, Santa Cruz Fire Department, and Los Angeles City Fire Department.

Patient information including age, location, date, and other identifying information has been withheld or modified to prevent the unlawful spread of patient identity.