

Case Study

A Perfect Storm of Good Fortune

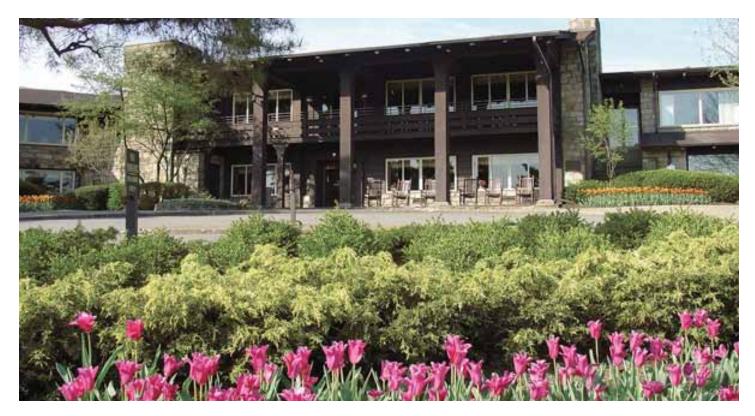
August 25, 2008 was a busy day for Jim Niskanen. Two days earlier he flew from his home in Modesto, California to Pittsburgh and then drove about an hour to the picturesque and luxurious Oglebay Resort and Conference Center outside Wheeling, West Virginia. Oglebay is the largest self-sustaining public resort in the USA. Nestled in the mountain foothills, Oglebay offers 1700 acres of relaxation and recreation, and includes a conference center, fine and casual dining, a spa, three golf courses, tennis, a zoo, horseback riding, swimming and many other activities.

Parks and recreation fundraising expert gets the shock of his life

Jim's trip was work related. A well known speaker in the parks and recreation field, he was participating as a faculty member of The Directors' School sponsored by the National Recreation and Park Association, one of many associations that schedule conferences at Oglebay.

According to the Association, the primary aim of the Directors School is to "provide dynamic educational programs for 'new' park and recreation administrators, and for management personnel who are being trained to assume positions as agency administrators".

Jim enjoyed a morning of golf and prepared for his presentation to an evening class of recreation and park professionals. As he organized



Oglebay Conference Center and Resort is nestled in the beauty of West Virginia's mountains. It offers 1700 acres of relaxation and recreation, including a conference center, fine and casual dining, a spa, three golf courses, tennis, a zoo, horseback riding, swimming and many other activities.

"Jim was giving his lecture and walking back and forth, and then he stopped and fell forward. I don't remember my feet moving. I did the breathing and Amy did the compressions....I was praying, please let this gentleman pull through...."

-Lisa Cline, director of community services, Odessa College, Odessa, Texas



Jim Niskanen, former director of parks recreation and neighborhoods, City of Modesto, Modesto, California

his materials for his talk about fundraising for public agencies, he commented to the resort's foundation director, Bill Koegler, "This is what I want to be remembered for [helping agencies raise money], not building parks and swimming pools. I want this to be my legacy."

Little did Jim know how close to leaving a legacy he was. Forty-five minutes into the class he collapsed, unconscious and without a heartbeat, in sudden cardiac arrest (SCA). What could have been a tragedy, however, turned out otherwise, because an

automated external defibrillator (AED) was close by and many people all along the way were prepared and not afraid to jump in and help Jim.

Colleagues apply their professional emergency training

Lisa Cline and Amy Fortenberry, of Odessa and Plano, Texas, were two of those people. With years of recreation experience between them, they were trained in CPR and use of an AED. Both women watched in shock as Jim toppled to the floor, striking his head hard on the podium. Both rushed forward to assist, with Amy beginning chest compressions and Lisa providing CPR while others rushed to call 9-1-1 and to find out if the resort had an AED.

Lisa said. "Jim was giving his lecture and walking back and forth, and then he stopped and fell forward. I don't remember my feet moving. I did the breathing and Amy did the compressions....I was praying, please let this gentleman pull through. Amy and I worked as though we had worked together for years, making eye contact and talking to each other." Yet this was the first time they had met.

"Jim was doing a wonderful job presenting," Amy said. "He was very eloquent. I noticed he was perspiring but thought, 'People can be nervous when they make presentations." She noted that when Jim first collapsed, people thought he was breathing, so she and Lisa checked for a pulse, and found none. Then she remembered a conversation she had with her firefighter husband a few years ago, about the agonal breathing that often occurs with sudden cardiac arrest. The breathing was "slow, sounded like a snore, and was heavy on the exhale side. I knew something wasn't right." According to the American Heart Association, agonal breathing is gasping, not breathing, and if someone is unresponsive, CPR should be initiated.

That is what Lisa and Amy did until the LIFEPAK 500 AED was delivered to Jim's side. Others also helped by running to notify Jim's best friend, Barry Weiss, who was teaching a nearby class, and going outside to direct the paramedics to the conference room where Jim collapsed.



Amy Fortenberry, recreation services manager, City of Plano, Plano, Texas

"I believe so much in AED units. Human life is not replaceable. An experience like this has touched my heart. To be a part of someone's life in this regard is a blessing and an honor."

-Lisa Cline, director of community services, Odessa College, Odessa, Texas

Fortunate, improbable events place Jim and his wife, Valeri, in the arms of close, lifelong friends

Barry Weiss has known Jim Niskanen both personally and professionally for nearly 30 years. Barry rushed to Jim's side and found him "blue and gray—dead." He said, "I held his hand, and said 'Stay with us, stay with us, Jim.'" Someone said, "Barry you've got to let go," before the AED could do its job and provide a shock. When the AED was attached and the first shock was delivered, Jim seemed to look at Barry, and then they "lost him again." With the second shock, a heart rhythm resumed and Jim began to wake up before the ambulance arrived eight to 10 minutes later. Without the AED and the quick action of Jim's colleagues, the outcome could have been very different for Jim, as SCA survival rates drop 7–10 percent every minute without defibrillation.²

Barry said, "The heart attack was a terrible thing but everything that followed was like a perfect storm of good fortune." Jim was in good hands from the time of his collapse through his recovery.

Back on the west coast it was two hours earlier and Jim's wife, Valeri, had a heavy heart. She had just dropped their fourth child off at San Francisco State University. Knowing it would be an emotional day for her, Jim had said he would call her at about three in the afternoon. She thought it odd when he did not call. She also thought, "I'm close to Barry [Weiss] and Ann's house, I think I'll drop in." She didn't feel quite ready to make the two-hour drive home. She placed a call to her longtime friend to let her know she was on the way over.

A bit later, Ann received a phone call from Barry who said something had happened to Jim, he thought heart related, but he wasn't sure yet exactly what. Ann said, "You won't believe this, but Valeri is on her way here to see me." Barry advised Ann to wait until Valeri wasn't driving to relay the news, and said he was at the hospital and would talk with the doctors and call later with an update.

When Valeri arrived, Ann appeared calm. She and Valeri talked for about 20 minutes, as Ann anxiously wondered about Jim's condition. Then Barry called. Ann pulled out pens and paper so she and Valeri could take notes.

"Barry said, 'We have a situation,'" Valeri recalled. "He said, 'Jim is here, he's had a heart attack, and he's going into surgery." I thought "It isn't happening. We're way too young. She thought Jim sounded "normal" on the phone when they spoke later. But Jim's cardiologist said, "Get here quick."



The breathing was "slow, sounded like a snore, and was heavy on the exhale side. I knew something wasn't right." [Referring to the agonal breathing present in many SCA patients]. The "breathing" is actually not breathing, it is gasping.

—Amy Fortenberry, recreation services manager, City of Plano, Plano Texas

Valeri was in the perfect place, surrounded by friends who organized everything, made her flight arrangements, packed her bag, and drove her and son Jason to the airport. "He [Jim] always says I'm his 16-year-old sweetheart," she said. "He's the rock, with leadership skills he applies at work. And he's the leader at home....He draws out the positive in people." She couldn't believe this was happening to their family.

Surrounded by advocates for SCA patients

Back in Wheeling, Jim was about to meet two people who are dedicated to improving SCA survival rates in their community. Mandy Bell, ER nurse, was on duty that evening. Mandy "walked away from nursing" a few years before, following the death of her mother from SCA. She was one of the responders who tried to revive her mom to no avail.

Mandy eventually returned to nursing practice and told Dr. Robert Fanning, Jr.,a cardiologist at Wheeling Hospital, "I want what I want, when and where I want it," meaning she would like to have everything a cardiac patient might need for treatment right in the treatment room so nurses do not have to leave the patient to obtain the required medications. As a result the ER now makes standing orders and medications readily available to nurses caring for cardiac patients. Wheeling Hospital is also preparing for accreditation as a chest pain center, and Mandy has done considerable research about improving SCA survival rates, including reading about the Take Heart America™ initiative, a national four-city demonstration project designed to increase SCA survival rates.

Mandy's advocacy for cardiac patients has earned her the nickname "Chest Pain Guru" in the ER. When the ER staff heard there was a witnessed cardiac arrest patient on the way, they said, "This one is yours."

"When I first saw Jim, he was fully coherent and talking, with no chest pain, just slight discomfort. He had quite a 'shiner' [from the fall]. I saw his EKG and it had a wide complex. He told me he had no history of cardiac disease."



Mandy Bell, emergency room nurse, and Dr. Robert Fanning, Jr., cardiologist at Wheeling Hospital in Wheeling, West Virginia. Both became strong advocates for SCA patients following the death of a close family member.

The ER physician on call wanted to obtain a previous EKG before making a decision whether to activate the cath lab. After her mother's death, Mandy had resolved to pay attention to doubt, as her mom's only symptom preceding her cardiac arrest was indigestion. Mandy insisted Jim be taken to the cath lab and promised to "take the heat" if it turned out to be a wrong call.

As Mandy prepared Jim for the cath lab, he said, "What are you doing Saturday night?" An odd question, she thought, but she decided to play along. "What are you doing?" she asked. He replied, "I'm going to be the best man in my son's wedding."

At that instant, Mandy said she became "very protective" of Jim. Her mother's experience taught her that when patients "don't look that bad" sometimes health professionals can drop the ball. She decided to continue being Jim's advocate, because he was someone's parent, and a caring one. She knew all too well that you never get over losing a parent. She didn't want it to happen to someone else.

Sudden Cardiac Arrest at a Glance

The sobering statistics about SCA:

- It claims the lives of nearly 300,000 people in the US alone every year³
- Survival rates drop 7 –10 percent every minute without defibrillation²
- Emergency medical services vehicles can be delayed by traffic, remote locations and other factors
- Currently only about 5 percent of people who experience SCA survive³
- Although not everyone can survive SCA, studies show that survival rates as high as 74 percent can be achieved if defibrillation is provided within three minutes of collapse⁴



Jim and Valeri enjoying time together

Dr. Robert Fanning, Jr., cardiologist, arrived and was surprised to see his nurse of 15 years, Debby Koegler, in the ER with her husband Bill, the director at Oglebay who had talked with Jim just before his presentation. Dr. Fanning realized Jim Niskanen was important to Debby, and thus Jim became important to him. No stranger to the impact of sudden cardiac arrest, Dr. Fanning's younger brother died of SCA at the age of 28, when he was just out of law school and three months from getting married. As a result, Dr. Fanning is also a strong advocate for improving care and outcomes for cardiac patients. He immediately began to assess his patient's condition to determine the best course of action. Tests in the cath lab showed Jim had a major blockage of the arteries to the heart, and he required quadruple bypass surgery.

Jim asked Dr. Fanning if he could call his brother, Bob Niskanen, from the Seattle area to discuss his condition. In the course of the conversation Dr. Fanning learned Bob is an bio-medical engineer who worked many years in research at Physio-Control, the manufacturer of the LIFEPAK defibrillator that helped save Jim's life. In addition, Bob now leads the Take Heart America initiative that Mandy had previously researched for information on how to improve SCA survival rates, and serves as a founding board member of the Sudden Cardiac Arrest Foundation. He is well-known and respected nationally for his dogged determination to save more lives from SCA. "In all these years, I never imagined that SCA would hit so close to home," Bob said later. He quickly made travel plans to join Jim and his family in Wheeling to offer support.

At Oglebay, the parks and recreation directors were still buzzing about what had happened. Together with Bill and Debby Koegler, they raised funds to install an AED just outside the conference room so it is more accessible during conferences should someone need it again. The Koeglers took very good care of the Niskanen family, helping them with transportation, lodging and emotional support. One evening they held a banquet in Jim's honor, and Valeri, their son Mark and his fiancée Summer, Jim's brother Bob, Dr. Fanning, Mandy, and one of Jim's ICU nurses attended. It was a moving experience for all involved.

Jim's experience comes full circle

The Niskanen children pulled together to support their parents. Jason was there in the initial days following the event so his twin, David could remain in school. Their daughter, Jennifer, relieved Jason and helped her parents with logistics related to Jim's care and recuperation. Jim's son Mark and his fiancée, Summer, a registered nurse in the telemetry unit at a hospital in Modesto, flew back to help Valeri bring Jim home, wearing an external, wearable defibrillator vest, for the trip. Mark and



Jim was able to attend the wedding of his son, Mark, only a few months after the event. From left: Jason, Jennifer, Mark, Summer, Valeri, Jim, David.



Jason, Valeri, Jim and Jennifer at Oglebay Resort and Conference Center following Jim's rescue from sudden cardiac arrest.

Summer postponed their wedding until January, and Jim had an internal cardioverter defibrillator (ICD) from Medtronic implanted as an ongoing part of his treatment under the expert care of his new cardiologist at home, Dr. Kent Wong. A few months later, Dr. Fanning and his wife attended Mark and Summer's wedding, which the doctor said "brought closure" for him in the story of Jim's recovery.

Jim has decided to retire from full-time work. He and Valeri treasure their time with each other, their children and their spouses, grandson, extended family and close friends. Mandy and Dr. Fanning are both active in improving SCA survival rates in their community. On Valentine's Day they helped sponsor a CPR Marathon in which more than 200 people were trained in CPR and AED use.

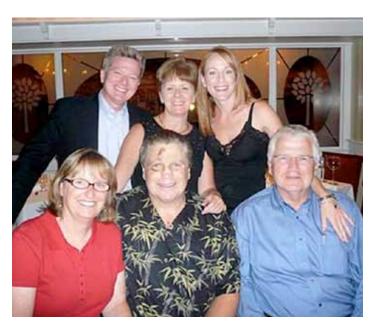
The Directors' school will meet again in August 2009 at Oglebay, and the same week, Dr. Fanning and Mandy are organizing a conference there about hypothermia treatment for SCA patients. Jim is planning to return to give the presentation he started in 2008.

"The heart attack was a terrible thing but everything that followed was like a perfect storm of good fortune." Jim was in good hands from the time of his collapse through his recovery.

-Barry Weiss, longtime friend of Jim Niskanen

All involved in saving Jim's life hope to meet and reminisce about their "perfect storm of good fortune."

In telling their stories, everyone who played a role in saving Jim's life echoed the sentiment that Lisa, one of Jim's rescuers, so aptly expressed. "I believe so much in AED units," she said. "Human life is not replaceable. An experience like this has touched my heart. To be a part of someone's life in this regard is a blessing and an honor to us."



Valeri and Jim with Jim's brother, Bob Niskanen (seated), with Dr. Robert Fanning, Jr. cardiologist, Chris Smathers, one of Jim's intensive care nurses, and Mandy Bell, emergency room nurse, Wheeling Hospital. All joined Jim, Valeri, Mark and Summer for a dinner honoring Jim at Oglebay Resort and Conference Center.



Jim reminisces with Bill Koegler, director at Oglebay Resort and Conference Center, at a dinner Bill organized to honor Jim.



Jim with Dr. Fanning

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LIFEPAK AEDs are prescription devices. Please consult your physician. AED users should be trained in CPR and use of the AED. Although not everyone can be saved from sudden cardiac arrest, studies show that early defibrillation can dramatically improve survival rates.

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Photographs courtesy of the Niskanen family, Mandy Bell, Oglebay Resort and Conference Center and Physio-Control, Inc.

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