

The toddler who is at the center of the dramatic story told on these pages is now a father himself. Adam Dubriske, in the brown t-shirt, is pictured here with his wife, Colleen; their son, Tanner, age 1; and their daughter, Addison, age 4. Adam nearly drowned in his family's backyard swimming pool on the Fourth of July in 1981.

THE RESTORY...

Part I: The primary source

his is the tale as it was told—in the words of its protagonists—in the 1982 Mary Hitchcock Memorial Hospital Annual Review. The setting of the story is the southern New Hampshire town of Spofford, on the Fourth of July in 1981. Its dramatis personae are:

Adam Dubriske: the two-year-old who is at the heart of the tale

Paul and Gail Dubriske: Adam's parents

Dr. Bill Toms: a family physician in Keene, N.H.

Dr. David Glass: the director of Critical Care Medicine at DHMC

Dr. Susan Edwards: a pediatrician at DHMC

Dr. Harvey Bograd: a resident in pediatrics at DHMC **Melissa Trimble:** a staff nurse in the DHMC intensive

Ann Rubright: a physical therapist at DHMCCarol Levin: a physical therapist with the Cheshire,N.H., Home Health Agency

Paul Dubriske: "Adam left my father-in-law and me in the garden across the dirt road and headed for the house, where Gail, his mother, had gone. A few

Part I of this story is reprinted with permission from the 1982 Mary Hitchcock Memorial Hospital (MHMH) Annual Review, a precursor of today's Dartmouth-Hitchcock Medical Center Annual Report. Parts II and III are the work of Dr. Bill Toms, a family physician who retired in 2005 as medical director of the Dartmouth-Hitchcock Clinic in Keene, N.H. This is not Toms's first contribution to these pages; in a feature titled "So Can You," in Dartmouth Medicine's Summer 2008 issue, we shared some of his insights regarding poetry as a medium for reflection about medicine, plus a selection of what he calls his "stories in verse."

minutes later I saw the screen around the pool in the backyard move, and I thought Gail was taking a swim. Shortly, I went to the house; we couldn't find Adam. I went to look in the woods nearby, thinking he had gone for a walk. Gail headed for the pool. I was near the woods when I heard her scream.

"When I got to the pool, Gail had jumped in and pulled Adam up off the bottom and handed him to me; then she headed for the house to call the ambulance. I saw that he was blue and purple and wasn't breathing at all.

"As a diving instructor in the '70s, I was certified in CPR, lifesaving, and first aid; I also taught CPR to others. Now here I was putting this training to work for the first time—on my son.

"After a minute of CPR, I still couldn't detect a pulse or heartbeat, so I thumped him in the chest and resumed the 'heart massage' and mouth-to-mouth resuscitation. Adam responded almost immediately. I got a strong heartbeat and a good pulse, and his color improved a lot.

"When the ambulance got here, the Emergency Medical Technicians, all of whom I'd certified, worked with me another 10 minutes to prepare him for the run to Cheshire Hospital in Keene."

Dr. Bill Toms: "When Adam arrived [at the Cheshire Hospital Emergency Room], resuscitation was being maintained. It was unclear as to how long he had been in the water. We treated him as if he were in full respiratory arrest, which included the placement of an airway tube, starting him on 100% oxygen, and starting IV lines with medications.

"The results of initial blood tests indicated that

The 1982 Hitchcock annual report told a tale involving a toddler, a swimming pool, a near-drowning, and the specialists who restored the little boy to health.

Now, more than 25 years later, one of his doctors reveals a crucial but unheralded role played by a crusty colleague.



Pediatrician Susan Edwards



Anesthesiologist David Glass

"Our first order of business
was to get as much oxygen
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make every effort to deliver
as much of that oxygen
to his brain as we could."

his respiratory function was almost nil. The extent of his neurological damage was unknown but worrisome. With medications, subsequent blood sample results showed marked improvement in his assisted respiratory status. He remained unresponsive, and arrangements were made to transfer him to Mary Hitchcock Memorial Hospital in Hanover."

Paul Dubriske: "When they told me Adam had to go to Hanover right away, I felt, for the first time, that he was in real trouble. I went outside with my father and cried a little bit. I felt better after that."

Bill Toms: "Paul Dubriske's presence of mind and his control had been remarkable. Now, with Adam in the care of others, he could let down; he could be a father again.

"The trip by ambulance was uneventful. Adam was still unresponsive. He required assisted ventilation, for he could only manage an occasional spontaneous breath. We were in radio contact with Mary Hitchcock's Emergency Department, so that they were ready when we arrived."

Dr. Susan Edwards: "When Adam arrived in the emergency department, our main concern was his respiratory status and resulting pneumonia. I met with [MHMH anesthesiologist] Dr. [David] Glass the night of Adam's admission and agreed on a plan. Over the next few hours we knew he was going to get worse, and we tried to prepare his parents."

Dr. David Glass: "When Adam was brought to the Intensive Care Unit, it was obvious that he was in severe respiratory distress and had minimal brain function. Our first order of business was to get as much oxygen into Adam as possible and make every effort to deliver as much of that oxygen to his brain as we could. At first, Adam's treatment consisted of mechanical breathing support, and the establishment of monitors to measure pressures in his heart and to measure the amount of blood the heart was pumping, in an effort to minimize any further brain damage."

Susan Edwards: "As a pediatrician, I was Adam's primary physician and coordinated his care. The excellent cooperation that exists between the pediatric service and the intensive care specialists is necessary, for we were especially dependent on them for advice and help in managing his severe pneumonia."

Dr. Harvey Bograd: "I was part of the team that had formed to help Adam. My role as a member of the pediatric housestaff was, in part, to help assess the

multiple medical complications Adam encountered, and to help implement the treatment necessary to solve those problems. Also, in communicating with the family, I endeavored to explain clearly the medical problems, to answer all of their questions as fully as possible, and to provide emotional support to the family during this crisis."

David Glass: "Our major concern came on the second day, when his damaged lung began to leak air into the closed chest cavity. The resulting pressure collapsed the lung and severely interfered with his heart's function as well.

"At that point, Dr. [Stephen] Plume, a cardiac surgeon, drained air from around the heart, which helped the heart function, but we were not able to get the necessary amounts of air into Adam to adequately oxygenate his blood without putting more air outside the lung. We discussed with the Dubriskes the use of a new type of respirator. Although we were not certain of its success, we had enough experience with it to give us some optimism that it might be successful."

Paul Dubriske: "When the doctors talked to us about the new respirator, I was apprehensive, but I could understand that because of Adam's condition, it was the best thing to try."

David Glass: "This respirator utilized very, very high rates of ventilation and small volumes of air, much like a panting dog, rather than the larger volumes and higher pressures generated by conventional respirators. We hoped to minimize the amount of air leaking from the lung by producing a lower pressure, and in doing so be able to get more oxygen into Adam's blood.

"Almost miraculously, Adam's oxygenation improved and over the next three days, he had less and less air leaking from the lung because the respirator was successful in doing its job."

Harvey Bograd: "Throughout their ordeal, Adam's family demonstrated strength and the utmost concern for Adam. His parents worried about their son's survival, and they were keenly aware of his discomfort. It was important to keep them well-informed in an effort to ease their natural fears of the unknown."

Melissa Trimble: "Near-drowning victims are one of the most critically ill patients we treat in the ICU, and Adam being a two-and-a-half-year-old child made the situation even more of a nursing challenge.

"Initially, his respiratory status was the most un-

stable factor. We had to keep the tube that was placed down his throat to his lungs clear of secretions, take samples to measure the amount of oxygen in his blood, and monitor his breath sounds. We watched his cardiac monitor to detect any irregularities in his heart rate and rhythm, and monitored his neurological condition by checking his pupils, his response to stimulation, and asking him to follow voice commands. By now, Adam was awake. He was also extremely restless and needed to be sedated.

"When he was placed on the high-frequency ventilator, we continuously checked to see that the ventilator tube was correctly placed for optimum ventilation. Adam had become highly agitated and really fought the ventilator, and additional sedation was needed to keep him from trying to remove the various tubes that were connected to his body."

Gail Dubriske: "I was very concerned about Adam—he was medicated so much to keep him from pulling out all the tubes and IV lines. It was a hard thing to see, but the doctors and especially the ICU nursing staff were wonderful. They really helped us deal with the situation."

Melissa Trimble: "All the technology employed in modern nursing did not obscure one of the most important ingredients in patient care. Stated simply, it is emotional support for both child and family. Gail and Paul Dubriske made the ICU their 'home' for 12 days. Seeing Adam in a busy, threebed ICU room, with tubes and IV lines, surrounded by machines that beeped and sighed, made it difficult for them to believe that the child in that bed was their son. We encouraged them to bring favorite family photos, a favorite toy, and to talk to Adam as they would at home.

"After Adam was off the respirator and was no longer receiving narcotics and barbiturates, he began experiencing withdrawal symptoms. This was another difficult time for his parents. We encouraged them to visit him as much as possible and talk to Adam calmly. Within two days Adam had improved enough to be transferred to the Pediatric Unit."

Paul Dubriske: "When Adam went to the Pediatric Unit, we felt a little relieved. At this point, even though Adam was groggy from the medications, unable to walk, or even talk because his throat was sore from the ventilator tubes, Gail and I felt strongly that he was going to be all right."

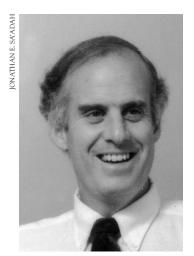
David Glass: "Many near-drowning victims ultimately die because of the lung insult. We now have

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This is one of the photos taken for the 1982 Hitchcock Annual Review. Pictured are Adam Dubriske, right, about a year after his near-drowning; his younger sister, Patricia; and his father, Paul. Paul Dubriske's prompt resuscitation efforts; the unheralded role of a crusty Keene, N.H., pediatrician; and the use at MHMH of a brand new type of respirator were among the factors crucial to Adam's recovery.

enough expertise to usually correct this, so that our major concern becomes the amount of brain damage that has occurred. Because of the excellent and prompt treatment Adam received from his father at the time of the drowning, there was adequate blood flow preserved to Adam's brain. It would have done very little good for us to have successfully treated his lung if the brain was damaged beyond repair at the time of his drowning. Conversely, a brain that was salvaged would have been of little help if we were unable to ventilate and correct his



Family Physician Bill Toms



Pediatrician Charlie McMurphy

This quiet and efficient lifesaving maneuver didn't get
mentioned in the Annual
Review story. Until recently,
even Adam's family was
unaware of Dr. McMurphy's
role in Adam's recovery.

lung problem to the point that oxygen exchange was possible. It's this interrelationship of bodily systems which necessitates an extensive team effort in the care of the critically ill. Adam exemplifies the importance of a strong chain, not only at the scene of the accident, but also during transport, at Cheshire Hospital, and in the multidisciplinary approach by physicians, nurses, and therapists, as well as in follow-up visits made by members of homehealth agencies."

Ann Rubright: "I first saw Adam during his last day in the ICU. He was off the respirator and not too responsive because the medication effects had not yet worn off. The lower lobes of his lungs were congested, and his breathing was very shallow and rapid. I employed chest physical therapy techniques—such as percussion, vibration, positioning, and coughing and deep breathing—to help clear the lower lobes. These techniques would have to be repeated for many days to remove the congestion and allow the lower lobes to receive air.

"After Adam was transferred to the Pediatric Unit, I instructed his parents in how to perform the therapy when Adam went home. When I went to visit Adam on the second day in the Pedi Unit, he was alert. The medication effects had worn off, and he was like a different person. He was dressed and ready for discharge. I made a quick evaluation of his motor skills and noted his balance was still affected by the accident. I made arrangements for the home health agency near Spofford to assist the Dubriskes with Adam's follow-up therapy at home."

Harvey Bograd: "The images I will remember most clearly are how ill Adam looked those first days in the Intensive Care Unit contrasted with the day he was discharged from the Pediatric Unit. He turned around to wave good-bye to me and broke out in a happy smile."

Paul Dubriske: "Gail and I drove Adam home. His appetite came back with a roar. He polished off a hamburger and a mountain of grapes during the ride. At home, his therapy treatments continued with the visiting nurses and Gail."

Carol Levin: "When I first saw Adam, he was unable to walk unassisted, not because of any neurological problem but because he had been so sick. In addition to helping Gail to continue the chest therapy, I suggested some methods of play that would encourage Adam to walk. He liked being with his younger sister, Patricia, for example, so by playing with her at some distance from Adam, he was strongly motivated to walk over to her. He picked

up his motor skills quickly, and within three weeks home visits were no longer necessary."

Gail Dubriske: "Today, thanks to the help of many wonderful people here and in Hanover, Adam shows no effects of the accident. It's a small miracle that he has the potential to live a full, productive life."

Bill Toms: "Even in our profession, it is rare to have the opportunity to give life to someone, and rarer yet to give life to a loved one. Paul is a hero, yes, but beyond that, he had the *honor* of giving life. That he kept his composure and was able to use his training on his own son made this episode even more unusual.

"All of us can learn CPR, and we should, to be prepared for the unexpected. Any of us might be in a position to render similar help to someone. Without Paul's action at the scene, all subsequent effort to save Adam would have been in vain."

Paul Dubriske: "After it was all over, and Adam was home again, I kept reflecting on a conversation Gail and I had with Dr. Dennis Coombs, at breakfast early one morning in the hospital cafeteria. He was one of the anesthesiologists who cared for Adam in the ICU and had done much of the work to develop the high-frequency ventilator.

"With some knowledge of the respiratory system from my diver's training, I was able to understand much of what he told us about research in this field. That conversation, coupled with the fact that Adam completely recovered from his accident, led me to think that prompt rescue action might allow more drowning victims to benefit from the technology that is being developed.

"I knew of Hal Brown, a Keene police sergeant, who had been working on a rescue team concept for a couple of years. We got together, and with my training as an accountant, Hal and I worked out a plan and established an incorporated, nonprofit divers' rescue organization called the Connecticut River Valley Underwater Rescue Team. We have raised \$15,000 for equipment and are part of the community's emergency response network. One of our 35 divers can be in the water anywhere in the Connecticut River Valley area around Keene within 15 minutes after we get the signal. We hope to encourage others to form similar units. Adam's accident was a near-tragedy, but I think something good has been established because of it.

"Adam? Well, he took his first swimming lessons at the Red Cross pool this summer. He doesn't seem to be afraid of the water. We may just have the makings of another diver in the family."

Part II: The saga revisited By Dr. Bill Toms

Ill Toms was one of the first doctors to treat Adam Dubriske upon Adam's arrival at Cheshire Hospital in 1981. And when Adam was transferred to DHMC, Toms traveled with him in the ambulance. In 2005, Toms again crossed paths with the Dubriske family in the Cheshire ER. He writes here about the two encounters—and rectifies an omission in the 1982 MHMH Annual Review story about Adam's near-drowning.

Epilogue: It was a pleasantly warm and languid July afternoon, and I was taking a brief walk in the garden when I experienced the sudden gutchill that occurs whenever a siren out on the highway screams "Hurry." Then my beeper went off—a staccato "Hurry now." Such was the sequence of events back in 1981 when a speeding rescue squad brought an unresponsive two-year-old boy, who'd been found at the bottom of a backyard pool, into the Cheshire Hospital.

What followed were like scenes from ER—but with tension that lasted much more than an hour and with much less star-power. The heroics were there, though, starting with immediate CPR administered by the boy's father and aggressive resuscitation by the Spofford, N.H., rescue squad; continuing with further care in the Cheshire ER and a fast, fearful trip up I-91 to DHMC; and culminating in the innovation and dedication of the staff in Hitchcock's then-rudimentary Pediatric ICU.

The 1982 MHMH Annual Review account above detailed the challenges and heroics involved in Adam's care, as well as his complete recovery. The story might have ended there but for two events 24 years apart.

The first occurred in 1981, after Adam's arrival in the Cheshire ER. He was in vascular collapse due to a combination of factors, including his age and the fact that he'd gone into shock. As a result, we weren't able to establish access for an IV line, in either a central or a peripheral vein (this being before intraosseous infusions made it possible to deliver medication into the bone marrow). So Dr. Charlie McMurphy, a senior pediatrician in Keene, rapidly and skillfully performed an infrequently done procedure known as a cutdown. It involves slicing through the skin on the lower leg; isolating a vein from the surrounding tissue; then inserting a small tube directly into the vessel. That access, which allowed us to start delivering medication to Adam, was critical to his eventual recovery. Unfortunately, this quiet and efficient life-saving maneuver didn't get mentioned in the Annual Review story. Until recently, even Adam's family was unaware of Charlie McMurphy's role in Adam's care.

The second event occurred 24 years later, when Adam's grand-mother was brought to the Cheshire ER, and I ran into Adam again. We had time to exchange only brief best wishes before I had to leave to attend to his grandmother.

I mulled over these two events so distant in time but adherent in meaning. A boy who had come close to dying was now a man. One of the men who had saved his life, Charlie McMurphy, had died in 1995. And no one really knew of his heroics back in 1981.

This struck me as a story worth honoring. So I wrote "Siren." It's a "story in verse" about the visceral foreboding I still feel whenever I hear a siren, about the automaticity of effective resuscitation, about the cycles that connect generations. And, most of all, it's about heroes like Charlie McMurphy. Quiet heroes who—in an age of pontificat-

ing pundits, loudly proclaiming what needs to be changed about health care—are the people who make a difference. These are the people who, without fanfare, save lives and relieve suffering. They are the physicians and nurses and therapists who work in the ERs, ORs, ICUs, and exam rooms of the nation's labyrinthine hospitals and clinics. They are the people who bring sun to the days and stars to the nights of the patients who trust them with their fragile, hurting lives. They are the people who make a difference, quietly.

In that "story in verse," I make a promise to tell Adam about one of the unheralded but dedicated people who had saved his life. That promise has now been kept.

Part III: The "story in verse" By Dr. Bill Toms

n the poem below, Toms celebrates the serendipity of his two encounters with the Dubriske family. In the most recent one, Adam Dubriske's grandmother was brought to the Cheshire ER with an abdominal aortic aneurysm (an AAA, also referred to as a "triple-A"), which is a bulge in the portion of the aorta that travels through the abdominal cavity. (See dartmed.dartmouth.edu/su08/f01 for more of Toms's "stories in verse.")

Siren

Summer siren, Route 9, coming in fast, again, like that July afternoon when Adam, age two, was found at the bottom of the family pool. His father offered his own breath, a plea to stay alive.

Doctors, nurses, trauma-tough,
dulled by daily death, melt before a blue, lifeless child.
Roles rehearsed, skills unleashed,
you do what you must.
But we can't get a line, peripheral or central.
Charlie does a cutdown, threads the catheter.
We start to balance electrolytes.
We push air down a tube to squeeze out
backyard water with just enough chlorine
to keep it safe. We resuscitate, we stabilize, we monitor.
We transfer to the PICU.

The PICU pulls out more heroics, new ideas. Adam lives, his brain lives, everything's okay.

They do a story, interview, photograph the young doctor "who saved Adam."

They don't mention Dr. McMurphy, the old, grumpy, so-good pediatrician who got the cutdown. Charlie doesn't care.

He doesn't care about those things.

He is old school.

Saw Adam recently. He's twenty-six, married, all grown up. We talked briefly about his "near-drowning," then we had to attend to his grandmother, whose triple-A was oozing in the ER.

Next time I see him, I'm going to remind him about Charlie.