INSIDE THIS ISSUE:

New leadership at STARS

Road crew worker saved by STARS

Unprecedented response to Manitoba highway tragedy

Carla Minogue
STARS Very Important Patient

STARS®

HORIZONS

We provide critical care, **anywhere.**

New leadership at STARS focused on ensuring stability and critical care, anywhere

In September, STARS saw a leadership transition which introduced the third-ever president and CEO. While a leadership change can often be a major shift for organizations, Katherine Emberly's initial priority is to ensure the crucial work continues of protecting the health and safety of communities across the Prairies.

In her first few months on the job, Katherine has been busy meeting with community members, government officials, business leaders and STARS allies to listen to their ideas and deepen our partnerships. At the same time, she's been diving into understanding more about STARS' medical care and clinical operations, shadowing our highly trained staff. These conversations and activities enable STARS leadership and allies to make sound decisions for the future of critical care.

"STARS is a people and community focused organization. Our first priority is to build relationships," said Katherine. "We want to get out and continue to build our reputation in the community, say 'thank you' to the people that support us and ensure that we've got their support and partnership moving forward."

Right now, Katherine is working with the leadership team on critical projects for the stability and long-term success of STARS. As part of that goal, she is aiming to ensure we continue to be an organization of choice for our many donors and partners. Having stable and reliable funding allows our team to focus on the important work of providing critical care, anywhere.

"No matter where you sit in the organization and no matter what your job, there's an overarching acknowledgement that it takes all of us," said Katherine. "I am so honoured to come into this organization that has such a clear and impactful purpose."

Katherine's additional long-term goals for STARS include continuing to lead industry transformation, forging stronger connections with corporate partners and supporting the growth in innovation and technology.

Beyond her work leading STARS' critical care mission, Katherine serves on the boards of Alberta Blue Cross, Calgary Economic Development and Axis Connects. Through her passion for equity, inclusion, and diversity, Katherine continually finds ways to give all contributors a voice and ensure that doors are open for everyone who works alongside STARS. As a mother of two teen girls, Katherine is excited to use her leadership position to be an example to women and girls across Canada.

Groundbreaking blood protocol launches in Manitoba

"This program has saved the lives of countless individuals."

— **Nichole Bandura**
LABORATORY SUPERVISOR FOR HEMATOLOGY/
TRANSFUSION MEDICINE, MANITOBA SHARED HEALTH

THE TECHNOLOGY

The field of critical care changes rapidly, so STARS must stay on the leading edge of new advances in technology and medicine that can lead to better outcomes for our patients. One of the most effective tools that STARS provides onboard is blood for critical patients. This summer, an innovative protocol that ensures patients have access to life-saving blood products while being cared for by STARS, was introduced in Manitoba.

The Massive Hemorrhage Protocol (MHP) was initiated in Manitoba on June 30, 2023. It provides access to two new products that can help stop bleeding — one to reverse anticoagulation and the other to help blood clots form.

The protocol was first introduced in Saskatchewan in 2022 and is being used regularly to care for patients in that province.

"I think it's the first of its kind in Manitoba," noted Jennifer Fosty, a STARS flight nurse who helped lead the implementation of the protocol in partnership with Manitoba Shared Health.

STARS crews have brought blood along on missions since 2013. Initially, STARS stocked two units of type O negative blood. O negative is known as the 'universal blood type,' as it's safe to be given to anyone — particularly helpful in a traumatic situation when a patient urgently needs blood and their blood type is unknown. Based on need, STARS increased onboard blood supply to four units in 2019.

The blood is carried in temperature-controlled coolers, and if it's not used within 72 hours it's placed back in the blood supply to avoid any wastage. STARS then receives fresh blood for the crew to use on the next patient who needs it.

STARS works closely with Manitoba Shared Health's Blood Bank at Winnipeg's Health Sciences Centre to ensure the MHP products are always on hand. The Blood Bank supplies STARS with MHP packages several times per week.

"If any products are used on a patient during transport, the Blood Bank is notified and quickly replenishes stock in order to have another MHP package in our hands, so that we're ready for the next patient who may need it," added Fosty.

It is another example of how STARS is a trusted partner in the delivery of critical care.

"STARS and the Blood Bank operate cohesively to ensure trauma patients are treated in a timely manner," explained Nichole Bandura, laboratory supervisor for Hematology/Transfusion Medicine with Manitoba Shared Health. "STARS effectively communicates with the Blood Bank so both parties are prepared for the needs of incoming trauma patients. The rapid response of both STARS and the Blood Bank ensures the best care is provided to the patient."

The partnership between STARS and the Blood Bank, driven by a spirit of innovation and a passion for finding new ways to save lives, has made a real difference for patients.

"It is so important for critical patients to have access to blood products during pre-hospital transport," said STARS' Fosty. "The Massive Hemorrhage Protocol will definitely improve patient outcomes."

"Having an organized plan of action and effective communications skills makes STARS and the Blood Bank a successful team," added Manitoba Shared Health's Bandura. "This program has saved the lives of countless individuals, ensuring the healthcare needs are met for Manitobans in some of the most traumatic situations."

Stan Grad 1944 — 2023

One of STARS' supporters and advocates, Stan Grad, passed away at the age of 78. Stan was a passionate ally and philanthropist who wholeheartedly supported STARS' lifesaving mission. His fervent passion and dedication are key reasons for STARS becoming what it is today.

"I just want to say thank you to the sponsors and the donors and the partners for supporting STARS and supporting people like me."

— Carla Minogue, STARS VERY IMPORTANT PATIENT

Road crew worker saved by STARS

City road crews are essential to navigable communities, but working right next to oncoming traffic comes with serious risks, as Carla Minogue knows all too well.

In May 2004, she was working as the designated traffic flagger for a road crew repairing a section of the Trans-Canada Highway in a rural community.

"I was holding the sign that said slow or stopping people if they needed to be stopped," said Carla. "It was the end of the day, and I was picking up cones and putting them into the truck ahead of me and a car came out of the lane that was still open on the highway and hit me from behind. It then rear-ended the truck that was parked in front of me. I was somewhere in the mess of vehicles, and nobody really knew what to expect when they came to see me."

As her crew members rushed to remove her from the wreckage, a call was placed to 911 who alerted STARS Emergency Link Centre that an air medical crew was needed.

"I remember being on the highway, on the pavement and hearing that STARS was coming and we were just waiting for the helicopter to arrive," said Carla.

"Highway landings are a common procedure for STARS crews, but you have to be careful because no landing is the same. There are a multitude of hazards whether its weather, visibility, wires, trees, or the condition of the landing area," said Greg Curtis, the STARS pilot who flew the helicopter on Carla's mission. "Doing it successfully is only possible through following our strong standard operating procedures and with flight crew being in constant communication with first responders on the ground. I'm glad we were able to be there for Carla."

Carla's injuries were life-threatening, with extensive injuries throughout her body.

"I broke two areas of my back, T five and six, which was a pretty serious break, and I had to have surgery. I have rods beside my spine now, holding it upright. I had a cracked pelvis and a broken foot and some damage to my knee, broken ribs, crazy bruises everywhere and probably a concussion of some sort from the impact. The impact was really strong, so strong that it blew my tied-up steel-toed boots right off my feet. They were found in the ditch later."

When severe spinal injuries occur, the smoother transit that a STARS' helicopter provides is critical for the recovery of the patient, as a bumpy transit on the road can worsen the injury. In Carla's situation, the highway was shut down by local first responders so that STARS could land directly at the site of the incident, load Carla into the helicopter, and take her to a trauma centre.

By the time the helicopter arrived, paramedics on the ground had stabilized Carla's spine for transit, and the STARS crew was able to provide a smooth transit and essential critical care enroute to a major hospital. This collaborative approach prevented further injury and ensured that with the assistance of her medical team, once she recovered, she could walk on her own again.

Specific to spinal injury, the STARS Critical Care Medical Control Protocols have been developed to guide air medical crews on how to manage and transport potential spinal-injured patients. This includes how to immobilize and protect a potentially unstable spinal cord injury from any further damage during transport. The protocol has been developed and guided by nationally-accepted evidence.

"STARS uses evidence, accepted international guidelines, and a committee of physicians and researchers to develop evidence-based, best practice protocols for the treatment of spinal injuries," said Justin Mazzolini, STARS' Critical Care Medical Control Protocols lead. "Often patients with spinal injuries have associated traumatic injuries, so in addition to caring for the spinal injury, multiple treatments and protocols may be employed by air medical crews to stabilize blood pressure, ensure adequate oxygenation and ventilation and rapidly transport patients to tertiary care."

Despite her successful recovery, Carla continues to deal with the lingering impact of her injuries. However, she is grateful for the impact that STARS has had on her life.

"I remember thinking, oh no, this must be really bad," said Carla. "But at the same time, having some reassurance knowing that I was going to be in the best hands, in the best care. I was very close to being paralyzed," said Carla. "I'm very grateful to STARS for taking such good care of me to keep me walking."

"I got to meet Carla 19 years after her accident," said Greg Curtis. "Getting to connect with her was one of the most meaningful visits of my entire career. It really was a treat to meet her."

Since her accident, Carla and her family have become even more involved with STARS, including volunteering their time to raise funds for STARS' critical care mission and spreading awareness of STARS' essential work.

"I just want to say thank you to the sponsors and the donors and the partners for supporting STARS and supporting people like me," said Carla. "Because without you, lots of us may not be here or maybe looking and feeling a lot differently than we are today, so thank you."

MUNICIPAL HAIL INSURANCE

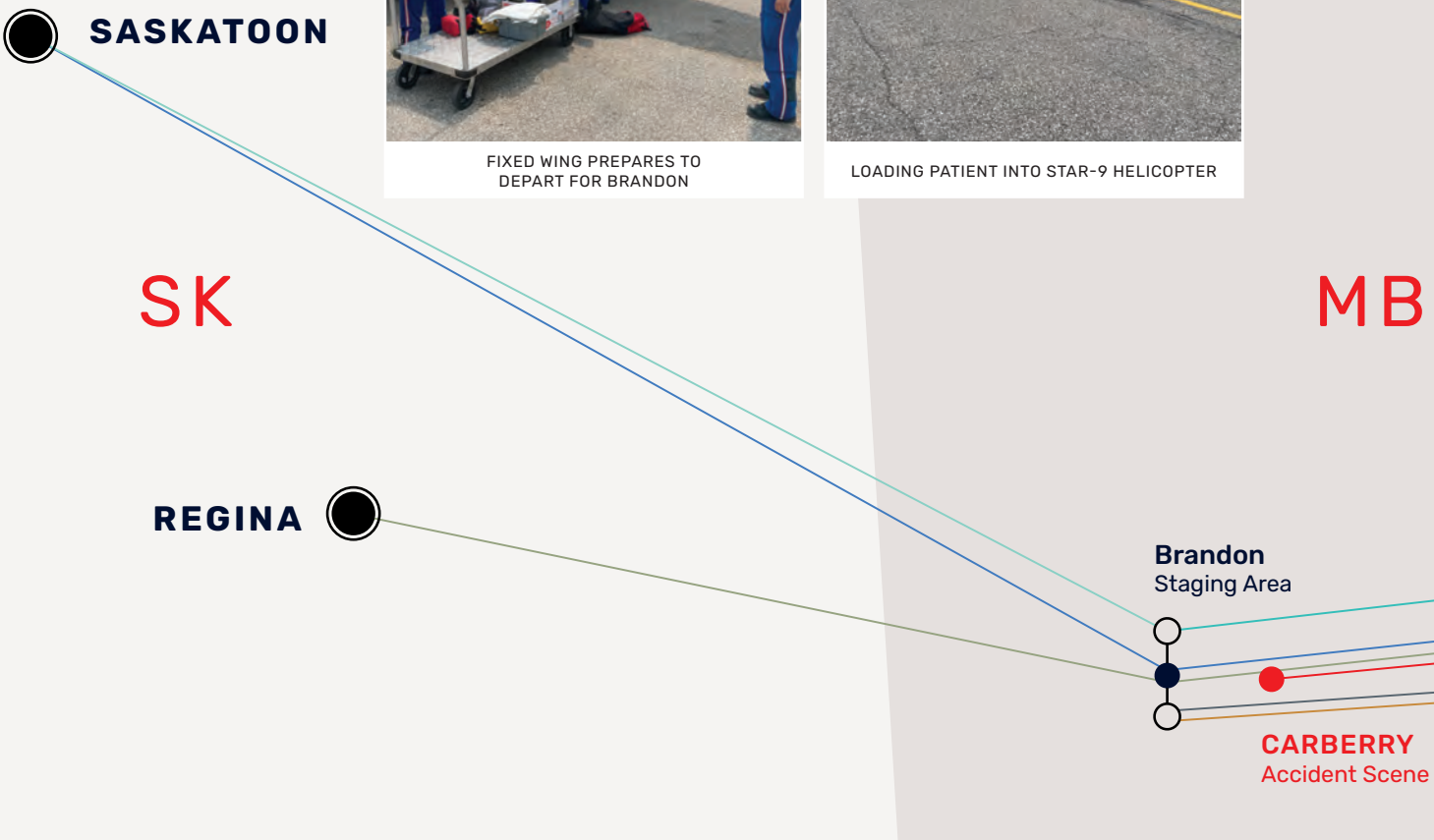
Municipal Hail Insurance understands the value and importance of planning for unforeseeable events in the future. Because of Municipal Hail Insurance's support for STARS, we can reach the next patient with an unforeseeable critical care emergency within Western Canada for generations to come. Since 2016, Municipal Hail Insurance has helped STARS to use any transportation and tools necessary to reach patients and deliver the care that can save lives.

Working together to save lives

STARS joins partners in unprecedented response to Manitoba highway tragedy

FIXED WING PREPARES TO DEPART FOR BRANDON

LOADING PATIENT INTO STAR-9 HELICOPTER



The morning of June 15 began like most others at the STARS Winnipeg base. The day crew started their shift at 7 a.m. and went through their daily checks to ensure they and their aircraft were ready for the next mission. Like many other days at the base, several off-duty crew members were also on hand taking part in the ongoing training that STARS regularly undertakes to keep their skills as sharp as possible.

Shortly before noon, however, a series of events would unfold that ensured that what started out as an average day would turn out to be one of the largest coordinated responses in STARS' history.

At approximately 11:35 a.m., a semi-truck collided with a passenger bus on a busy stretch of the Trans-Canada Highway near Carberry, Manitoba, roughly 170 kilometres west of Winnipeg. Given the amount of traffic that regularly travels through the area, local RCMP and first responders were notified almost immediately and were the first to arrive on scene.

Minutes after the collision occurred, a 911 operator alerted Manitoba's centralized dispatch centre — the Medical Transportation Coordination Centre (MTCC) — of the event. The MTCC immediately called STARS, alerting them of a potentially major event. This resulted in an automatic launch of STAR-7, the on-duty aircraft and flight crew in Winnipeg. They were in the air less than 12 minutes after the collision took place.

At the same time, numerous ground ambulances from the southwest region were also enroute to the scene.

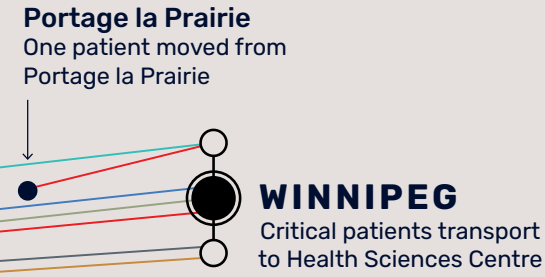
Dr. Doug Martin, STARS medical director for Manitoba and a transport physician, was working that morning and was quickly pressed into action to help deploy and direct the aircraft and medical crew that would be required to transport a large number of patients.

Continued...

PATIENT TRANSPORT FROM STAGING AREA AT BRANDON AIRPORT

LOADING PATIENT INTO FIXED WING FOR TRANSPORT TO WINNIPEG

PATIENT HANDOFF FROM GROUND AMBULANCE TO STARS CREW



STAR-7 (Winnipeg)
STAR-9 (Regina)
STAR-207 (FW/Winnipeg)
STAR-208 (FW/Winnipeg)
Lifeguard (FW/Saskatoon)
Lifeguard (FW/Saskatoon)

Dr. Martin was one of four transport physicians on duty with STARS that morning. There was also a lead on-call transport physician and a second on-call transport physician overseeing STARS medical crew on the fixed-wing aircraft.

A fourth doctor, a senior resident in emergency medicine completing his very last month of training, was also with STARS that morning on an elective rotation.

"We very quickly determined that I was going to stay back and help coordinate the transport," explained Dr. Martin. The lead on-call transport physician and the senior resident doctor at the STARS base would deploy to the scene by air, while the second on-duty transport physician would handle any medical transport calls coming from elsewhere in the province.

Dr. Martin then jumped in his car and drove to the nearby Virtual Emergency Care and Transport Resource Service (VECTRS) operations centre. VECTRS is Manitoba Shared Health's centralized and coordinated source for clinical guidance and patient transport support. At VECTRS, Dr. Martin joined Dr. Rob Grierson, Shared Health's chief medical officer for Emergency Response Services, to help coordinate the inter-facility transport response to the accident.

Initial triage reports indicated that 10 patients were in either serious or critical condition. From Carberry, the nearest regional hospitals were in Brandon or Portage la Prairie. Most patients, however, were in a condition that required them to be taken to Manitoba's major trauma centre — Health Sciences Centre in Winnipeg. It became clear very quickly that more aircraft and more medical crews were needed to transport those patients.

With STAR-7 already dispatched from Winnipeg, Dr. Martin contacted the STARS Emergency Link Centre to connect with the STARS team in Regina, the next closest base. STAR-9 was then dispatched out of Regina and lifted off toward Manitoba shortly thereafter.

Meanwhile, back at the STARS Winnipeg base, efforts were underway to deploy additional medical crew via fixed wing aircraft. Grant Therrien, STARS provincial director, Manitoba operations, was leading these efforts.

"The STAR-7 crew had just been dispatched and our on-duty fixed wing medical crew were at the ready," explained Therrien. "We also had a clinical simulation happening at the base that day, so we had a number of additional air medical crew available. Dr. Martin phoned me and explained the situation and asked if we could not only send the on-duty crew, but if we could put together an additional team to travel on a second fixed wing aircraft."

"It was truly all hands-on deck, whoever could help, was assigned to help."

— **Grant Therrien**, STARS Provincial Director, Manitoba operations

Therrien's response to the request was simple and clear.

"Absolutely, we will."

With the on-duty fixed wing crew on their way in the first aircraft, Therrien then summoned all the off-duty medical crew members who were at the base and told them to get their flight suits on and start packing up additional supplies. Their clinical simulation day was about to become a major, real-life mission.

Therrien, who also serves as a STARS flight paramedic, assembled an additional five medical crew members — including himself — to travel on the second fixed wing aircraft. When they arrived at the hangar to load the second aircraft they learned that, because of the space taken up by the onboard stretcher, there were only enough seats for four medical attendants. Without hesitation, one of the STARS flight paramedics volunteered to be strapped to the stretcher for the flight to ensure that they could all be there to help in whatever way they could.

At the scene of the incident, STAR-7 had arrived from Winnipeg and the crew immediately began providing critical care to one of the patients. Dr. O'Leary, the physician who was also onboard STAR-7, began checking in with all other ground ambulance crews and first responders to assist with their patients.

"It was truly all hands-on deck," said Therrien. In addition to the STARS crew, there were first responders on the scene from local EMS services across southwestern Manitoba, area fire departments, and the RCMP. "Whoever could help was assigned to help."

"I want to acknowledge all of the first responders, including volunteer responders, ground EMS, and RCMP that were the first to arrive on scene," added Therrien. "They arrived at a chaotic, devastating scene, and they did incredible work both prior to our arrival and in working together to care for as many people as possible."

Before long, STAR-7 departed with the first patient from the scene to Health Sciences Centre. With the two fixed wing aircraft enroute from Winnipeg and STAR-9 on the way from Regina, ground ambulances began transporting patients to the nearest major hospital. Most patients were transported to the Brandon Regional Health Centre, with two other patients taken by ambulance to the hospital in Portage la Prairie.

In addition, two patients were transported by ground directly to the Brandon Airport, which would become the staging area for patient transport. There they were met by the two fixed wing aircraft which had arrived in Brandon and were waiting to transport them immediately back to Winnipeg.

The Brandon Regional Health Centre, western Manitoba's major health centre, had received five critically injured patients in the span of 30 minutes. To assist with this influx of critical patients, several STARS crew members who were not yet transporting patients travelled to the hospital in Brandon.

Grant Therrien
STARS Provincial Director, Manitoba Operations

Grant is also an active STARS flight paramedic and was stationed at the Brandon Airport as on-site transport coordinator.

Dr. Doug Martin
STARS Medical Director, Manitoba

One of the transport physicians on duty, Dr. Martin was stationed at the VECTRS centre, working with Shared Health to coordinate the critical care transports.

They worked alongside the Brandon medical teams in stabilizing these critical patients in preparation for onward transport to Winnipeg. They also provided a clear line of communication to both Therrien, who was coordinating the staging area at the Brandon Airport, and to the team at the VECTRS centre in Winnipeg who could then relay information to the trauma teams who were receiving patients at Health Sciences Centre.

Coordinating the transport of the remaining patients from Brandon was the next task for Drs. Martin and Grierson and their team back at the VECTRS centre. It is common for neighbouring jurisdictions to provide additional support in a major incident such as this. In addition to STAR-9 from Regina already responding, more help was required. With all the critical care transport assets in Manitoba in use, a decision was made to request additional help from Saskatchewan from which two Lifeguard fixed wing air ambulance aircraft and crews were dispatched — including an additional STARS transport physician from Saskatoon - to the Brandon Airport.

As the aircraft from Saskatchewan began to arrive in Brandon, they were subsequently loaded with patients who had been stabilized at the Brandon hospital and departed again to transport them to Winnipeg.

Dr. Martin shared that the final transport tied to the accident came later that afternoon when STARS was dispatched for an inter-facility transfer from the hospital in Portage la Prairie. “A patient who had been initially transported by ground from the scene to Portage la Prairie had now worsened and required critical transport to Health Sciences Centre.”

And so, the crew of STAR-7, who were the first aircraft dispatched to the accident scene more than five hours earlier, launched once more to transport the last patient to the trauma centre in Winnipeg. As they returned to base early that evening, the magnitude of the day’s events was clear.

The tragic incident at Carberry was one of the largest scene responses in the history of Manitoba. As we honour and remember the lives that were lost, we recognize the efforts of so many who did everything they could to save as many lives as possible.

When all was said and done, a total of six aircraft and 20 STARS crew members travelled either to the scene or to Brandon to care for and transport critically injured patients that day. STARS was one of the many organizations who were involved in the enormous, multi-agency response to this tragedy.

STARS salutes the invaluable efforts of Manitoba Shared Health, the RCMP, Carberry North Cypress-Langford Fire & Rescue, Prairie Mountain EMS, Brandon Emergency Services, the Brandon Regional Health Centre, Manitoba VECTRS, the Manitoba Medical Transportation Coordination Centre, Vanguard Air, Saskatchewan Air Ambulance, and Winnipeg EMS.

We also recognize the 20 STARS crew members who were involved in our response, including seven flight paramedics, five flight nurses, four transport physicians and the four pilots who flew STAR-7 and STAR-9. These crew members have been thoroughly supported in the aftermath of this tragedy, given the difficulty of the scene and the value that STARS places on the mental health and wellbeing of our team.

“This was certainly one of the most difficult days we have experienced, not only as a medical and first responder community, but for the province as a whole,” stated Dr. Martin.

“It was one of the most challenging missions any of us will ever face, but it’s what we train for,” adds Therrien. “I’m proud that we were able to work together to save so many lives that day.”

Following her passion for medicine, ER doctor joins STARS

THE CARE | THE PEOPLE | THE RESPONSE | THE TECHNOLOGY

"I wanted to be able to assist people in an emergency, to help them with that crisis in their life. I thought of it as very fulfilling."

— **Dr. Darla Palmer,** STARS TRANSPORT PHYSICIAN

“Becoming a mom shifts so many things and changes the dynamics of your job.”

— **Dr. Darla Palmer,** STARS TRANSPORT PHYSICIAN

There’s something about a calling, a passion for a profession you just can’t ignore. Dr. Darla Palmer couldn’t deny the ambition to serve. It lived inside of her from the time she was a young girl, living in the community of Souris in rural Manitoba.

“When I was 13 years old, I lost my house in a fire,” recounted Dr. Palmer. “That certainly drew my attention to the importance of having fire services in rural communities.”

The loss of the only home she knew and the compassionate care she received from first responders that day left an indelible mark. She wanted to help people in the same way she was supported.

“I wanted to be able to assist people in an emergency, to help them with that crisis in their life. I thought of it as very fulfilling.”

As soon as she was able to immerse herself in emergency services, Dr. Palmer seized the opportunity.

“When I was 17, I joined the fire department as a junior member. When I turned 18, I was able to start going on calls,” Dr. Palmer said.

She also grew up with a role model, her stepfather, who served as an emergency medical technician (EMT).

“I watched him being on call and hearing the pager go off around the clock. It certainly inspired me,” Dr. Palmer recalled. “I always remember being aware that what he was doing was so vital and important. I wanted to be a part of that.”

Dr. Palmer joined the Canadian Armed Forces and served for years before she was nudged towards her true calling.

“I started in artillery and after working there for several years, I was encouraged by some of the military leadership who saw my potential to apply for a medic position. I became involved in the civilian side and was licensed as an EMT,” she said.

It was a gratifying part of her life journey, but she wanted to do even more. She continued working as an EMT while pursuing medical school.

“Eventually I decided to apply for medicine. There was something about it I was just drawn to.”

Dr. Palmer currently works in the emergency department at the Health Sciences Centre in Winnipeg and has recently completed her residency in emergency medicine.

“I’ll begin working with STARS after I graduate in November,” Dr. Palmer said. “I will be assisting with the logistics of transporting critically ill and injured patients in the province, in addition to providing consultant advice to other medical professionals.”

She will be on-call to oversee missions and, at times, travel on board the flights. “There will be situations where I will fly with the air medical crew to provide direct hands-on patient care.”

She is looking forward to the challenge, which she attests is a full circle moment.

“STARS is a way of bridging critical care and timely care to patients that live in rural areas,” she affirmed. “I think all people are deserving of timely health care, regardless of their place of residence.”

Dr. Palmer is also embracing the responsibility of being a parent. She is a new mother and is balancing her career with her 13-month-old son at home. Motherhood has brought a renewed purpose to her work, merging her personal and professional life.

It reinforced the parallels of selflessness, devoting her life to her patients and her new family.

“My career has taken on a whole different meaning. Certain calls and patient cases just hit differently,” she said. “Becoming a mom shifts so many things and changes the dynamics of your job.”

She admires what STARS represents and is humbled to be a part of the crew that saves lives.

“Just the thought of being able to provide comprehensive, timely, critical care to patients, regardless of their location, just drives me to provide the best patient care possible.”

Purchase your 2024 calendar today at starsgear.ca

When you support STARS, you enable us to deliver critical care, anywhere it's required. You propel our innovation, allowing us to deliver leading-edge care that saves lives.

STARS Horizons | Fall 2023
Return undeliverable items to:
1441 Aviation Park NE
Box 570, Calgary, Alberta T2E 8M7

Unsubscribe at newsletter@stars.ca

stars.ca