FORT LAUDERDALE FIRE RESCUE



Support Services Division

Medical Director Report

April 2022

Summary

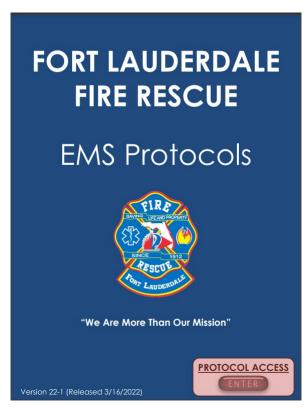
Dr. James Roach, D.O. began his tenure as the new medical director for Fort Lauderdale Fire Rescue (FLFR) on March 1st, 2021. We are excited to present this report summarizing the improvements, involvements, and initiatives he is currently leading.

Medical Protocols

Prior to taking the helm as medical director, Dr. Roach and members of FLFR began reviewing and revising our



EMS Medical Protocols. This involved every member of the Emergency Medical Services (EMS) Bureau, several members of our Training & Special Operations Bureau, subject matter experts from our Marine/Dive Rescue and Hazardous Materials Teams, and representatives from our Emergency Services (formally Operations) division. Every part of the former protocols was reviewed. The final product was a new dynamic document that can be quickly updated and shared with all paramedics as new and innovative procedures are implemented.



The first version of the new FLFR EMS Protocols was disseminated on February 23 through Informational Bulletin (IB) 21-040, and the finalized new protocols went live on March 1 through IB 21-053. Version 22-1 (the 5th iteration and most current revision) was released on March 16, 2022 and are continuously updated based on the latest science and data. The protocols are available on both **FLFR EMS** website our new (https://flfremsprotocols.org) on the and Broward County EMS app available for smart phones and tablets.

Familiarization & Interaction

To fully understand the capabilities and needs of our fire rescue department, Dr. Roach spent time with multiple bureaus. He has participated in every Continuous Quality Improvement (CQI) meeting and many Health & Safety Meetings. He attended live fire training with the Training & Special Ops Bureau. This provided him the opportunity to see firsthand the stresses we





undergo while wearing our structural firefighting gear and to assess the relevance and effectiveness of our medical rehab protocols. He met with our SWAT medics and the members of the FLPD SWAT Team. He attended a training session to assess their needs in terms of medical treatment, procedures, and equipment. We are currently planning bleeding control and QUIK-CLOT training with the SWAT Team to be conducted over the summer. He has responded to many incidents with EMS Bureau staff where he was able to assist in patient care as well as see our crews in action.

Dr. Roach continues to visit multiple firehouses throughout the city. He has personally met with many of our personnel and spoken to many of them over the phone. Through this interaction, he was able to answer questions related to protocols, training, and future goals.

He attended the Fort Lauderdale Air Show on May 8, 2021. He met with Command staff and toured the area, focusing specifically on our response to incidents at large events. He continues to be involved with special events throughout the City.

On August 24, Dr. Roach boarded Fire Boat 49 with the Marine Team to observe the transfer and treatment of a COVID-positive patient that needed transport to the local emergency room. Dr. Roach was



able to see firsthand not only our patient care, but how one of our specialty teams operates in rough seas and inclement conditions.





Recently, Dr. Roach joined the EMS Bureau on a Mobile Integrated Healthcare (MIH) patient follow-up. Dr. Roach is very supportive of our new MIH Program and has offered insight on how we can further enhance this initiative.

Dr. Roach attended all three days of the 2022 Tortuga Music Festival held on April 8^{th} through April 10^{th} , 2022. He once again was able to observe the event action plan put into play during an event that attracted over 100,000 attendees over the span of the festival. He also served as a liaison between the crews in the field and the Broward Health Medical Center medical and first aid tents.

Dr. Roach has been a constant positive presence helping our personnel with personal and family medical issues. He has been available whenever called upon, day or night. In all these interactions, Dr. Roach has brought value to the organization and to our members.

CAAS Accreditation

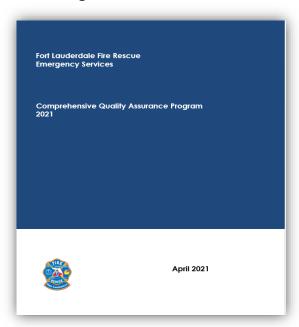
On April 29 and 30, 2022 Dr. Roach participated in our Commission on Accreditation of Ambulance Services (CAAS) site visit for reaccreditation. Dr. Roach met with assessors virtually during those two days and provided answers to multiple inquiries. At the end of the process, the accreditation committee verbally confirmed that we were reaccredited for one

year, pending the completion of one single item out of a total of 308 items. In January of this year, FLFR was accredited for the full three-year accreditation status.

Though the CAAS team was pleased with our current CQI process, they were ecstatic to hear Dr. Roach's ideas on system improvements. They were especially intrigued on the concept of system analysis and "Just Culture" that his system is based upon. His approach focuses on organizational culture and accountability, rather than directing the blame on the individual.

Continuous Quality Improvement

Dr. Roach chairs our monthly CQI meetings and recently wrote language into the Fort Lauderdale Police Department (FLPD) protocol to improve the utilization of NARCAN. Also, with his role as the Broward County Dispatch Medical Director he can provide timely answers to questions related to operational issues. For example, during one CQI meeting there was a question about dispatch providing a three-minute stop clock for police to administer Narcan at three-minute intervals. This question was answered that same day and a solution was provided.



As the medical director for Broward County regional communications, he continues to focus on decreasing the time to bystander chest compressions in out-of-hospital cardiac arrest (OHCA). This ability to impact bystander CPR positively and directly will be crucial in our goals of increasing overall patient survival.

New Equipment and Training

On April 5, 2021, Dr. Roach approved new airway devices to allow our paramedics to treat patients using nebulized medications. During the pandemic, the use of these aerosol-creating devices was halted due to increased risk of exposure to the virus. The new masks contain HEPA-rated filter material that allows for the safe administration of aerosolized medications for treating respiratory distress, such as COPD or asthma. Dr. Roach also approved new airway adjuncts to be used in cardiac arrest for ventilatory management. The Training Bureau began delivering training on these devices in October 2021, with distribution and placement on our apparatus shortly after.

Dr. Roach also spearheaded innovative changes in the way we deliver certain medications, such as dextrose and epinephrine. He also added fentanyl and ketamine to our medication

cache augmenting our ability to treat multiple patient modalities such as pain and behavioral crises. Training on these medications has been completed and these changes are in place.

Dr. Roach is an integral part of our extensive Paramedic Sign-Off Process. He physically sits down and evaluates every paramedic prior to allowing them to serve as a stand-alone paramedic on a suppression unit or medical rescue unit. The last class to graduate at the end of 2021 placed 24 paramedics in the field. This next class starting in April will produce 15 more paramedics to train, assess, and properly prepare for the field. This is a time- and schedule-demanding part of his role as medical director, but also one of the most crucial.

Assistant Medical Director

On May 1, 2022, Dr. John Cunha was brought on board as an Assistant Medical Director and liaison to Holy Cross Hospital. He is EMS Director for Holy Cross Hospital and the Medical Director for Oakland Park Fire Rescue. He also serves as the Medical Issues Liaison for the EMS Subcommittee for the Fire Chief's Association of Broward County (FCABC). During the month of May 2021, a meeting was held with Assistant Chief Shaw and Battalion Chief Moran to plan and organize priorities. We agreed on metrics that will be collected from Holy Cross as well as training opportunities that Dr. Cunha will provide. Currently, Holy Cross Hospital has reached out to us to determine what ways we can collaborate in the are of Mobile Integrated Healthcare.

Dr. Cunha was also awarded the 2021 Broward County EMS Award - Physician with Outstanding Contribution to EMS for his work as the FCABC liaison as well as his collaboration and communication with EMS agencies during the initial rise in COVID.

Current and Future Initiatives

Dr. Roach was a huge supporter of our collaboration between Broward Health and emergency department wait times during the pandemic. Because of our strong relationship, we were able to quickly develop a protocol on how to navigate through the challenges of excessive wait times for our medical rescue units. Working together with Dr. Roach, we plan to continue strengthening our relationships with our hospital partners that best fill the needs of our dynamic community.

Dr. Roach approved our agency to vaccinate members of our community who were having trouble getting to vaccination sites. Members of our EMS and Community Engagement Bureaus collaborated to bring the vaccine to 18 people. In addition, Dr. Roach and the EMS Bureau were able to obtain several doses of Regeneron (monoclonal antibodies) so that we could treat those who were exposed to or became COVID positive.

Dr. Roach is working closely with the EMS Bureau to spearhead multiple initiatives. He presented a version of an Emergency Treatment, Triage and Transport (ET3) program. This

program also includes a telehealth component with a physician available 24/7 to assist paramedics on the scene of emergency incidents. We are in the process of determining its validity within our system. If deployed, this program will provide the ability to transport patients to non-traditional facilities where they will receive the proper care for their illness, rather than always being transported to the emergency room. This program may lead to decreasing the load placed on local hospitals due to unnecessary patient transports.

There are also many opportunities to develop programs with local hospitals to do Mobile Integrated Healthcare (MIH) and Community Paramedicine (CP). From a high level these service lines include decreasing hospital readmissions, ED discharge follow-up, medication assistant treatment programs for opioid addiction, and analyzing frequent utilizers of the 911 system.

On April 12th, 2022, the EMS Bureau led a Community Needs Assessment with our external stakeholders to explore areas where our MIH program can further develop. Present at the assessment were influential residents and community members, leadership from hospitals such as Broward Health, Holy Cross, Florida Medical Center, and HCA, and several executives from our various healthcare industry partners. Dr. Roach and Dr. Cunha attended as participants and supporters of this event. He was able to answer many questions from the group and provide further details to the attendees during the assessment.

Special Thanks

On March 15, 2021, one of our firefighters was flown via air ambulance to Fort Lauderdale from New Jersey. Dr. Roach was intimately involved in conversations regarding the status of the firefighter from the week prior up until him arriving back home. Dr. Roach knew our firefighter was very ill. When Dr. Roach was made aware of the plans for the firefighter to return home, he cleared his schedule in order to be at the airport when the air ambulance landed.



At the onset of his medical direction services to the department, Dr. Roach stated he wanted

to be intimately involved with every aspect of our job. This meant observing a variety of emergency incidents, putting on bunker gear and operating a hose line, and in this case on March 15, it also meant to experience how it feels to see the fire family care for one of its own. When the air ambulance came to a stop on the tarmac and our firefighter was being prepped for removal and transfer into a ground transport unit, Dr. Roach was the first person to approach the door of the plane. When the door opened, Dr. Roach introduced himself to the crew and asked for updates on the status of the firefighter. Dr. Roach was the first person in line to help physically remove our firefighter from the plane and place him on a department stretcher. Dr. Roach then approached the firefighter's mother to comfort and reassure her that her son was in great hands and everything that could possibly be done was in motion. Dr. Roach's presence and empathy during this difficult time was invaluable for all – the sick firefighter, his family, and the members of our fire rescue department.

Thank you to the Mayor, the Commissioners, and to the City Manager and his team for the support in bringing Dr. Roach into our agency! We are excited to provide this report as we continue to strive for excellence!

S. Shaw