



FIRST RESPONDER
Center for Excellence

TELEMEDICINE

IN SUPPORT OF FIRE SERVICE
HEALTH AND WELLNESS

Focus Group Report

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Columbus, OH

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EXECUTIVE SUMMARY

The First Responder Center for Excellence (FRCE) has undertaken an extensive program to put research into practice in the area of firefighter health and wellness. The primary areas of focus for this initiative are cancer prevention, cardiovascular health, behavioral health, firefighter physicals, and general health and wellness. An extension of the program is initial research into how telemedicine, broadly defined, may be utilized to advance firefighter health and wellness in these and other areas. On September 15, 2021, FRCE convened a panel of firefighter health and wellness experts to review the subject of telemedicine to support firefighter health and wellness, and how telemedicine and assorted digital health methods might be used in the future to support this community. This meeting was conducted following a related discussion focused on health and wellness generally in the firefighter community and detailed in a separate report.

This report represents a record of the first comprehensive review of telemedicine specifically in this area of utilization. The report reviews the background of the current scope and capability of telemedicine related areas, key health priorities for the firefighter community, major issues for consideration for firefighters and providers, key potential partnerships for exploration, what is known about current telemedicine programs for the firefighter community, and short- and long-term proposals for action.

Broad conclusions of the expert panel discussion include the below and are detailed in the report.

- Telemedicine, broadly defined, has become a major part of the delivery of healthcare for many communities and across nearly all areas of medicine. This growth in utilization and evaluation has occurred over many years but has been accelerated significantly during the COVID-19 pandemic.



- The key areas of health and wellness needs within the firefighter community are well-matched to those outlined in previous FRCE work and are felt to be amenable to utilization of telemedicine for support. Other areas, such as substance abuse, nutrition, sleep disorders, reproductive health to include postpartum care, and weight management are thought to be areas for potential exploration.
- Areas for consideration for firefighters and providers are similar to those outlined in previous health and wellness programs, including perceptions of reluctance to seek care, concerns about being pulled from duty, and a general need for better understanding of the nature of firefighting work requirements among healthcare providers. Privacy, technology, and broadband capability are also areas of concern specifically related to telemedicine use to support firefighter health.
- The potential for partnerships to be sought for advancement of this agenda is broad. The groups include firefighter and first responder organizations, healthcare payers, insurers who support the firefighter community, healthcare organizations and providers, the telemedicine industry, and key publications.
- Current telemedicine programs focused on the firefighter community are limited. Expanding exploration of existing programs will be a key area for future exploration.
- Short- and long-term programs will be optimally focused on developing specific local or regional programs within well-defined health areas, utilizing partnerships with those who have resources and capabilities to achieve success. In the longer term, more complex programs may be achievable with expansion into more complex areas of care such as peer-to-peer support and provision of care in austere locations, along with more broad utilization of advanced technologies such as remote patient monitoring.



TELEMEDICINE BACKGROUND

At the outset of the session, the expert group reviewed comprehensive information regarding telemedicine as a method of delivery of care. While a detailed review of the history and current state of telemedicine is beyond the scope of this report, issues in the areas below will need to be considered for implementation of telemedicine into firefighter health and wellness programs regarding telemedicine.

Definitions

Many terms are used in and around telemedicine to describe various capabilities and programs. The terms telemedicine and telehealth have variable definitions depending on sources and are sometimes used interchangeably. For purposes of this work, FRCE will primarily use the term “telemedicine” to describe its work. Other terms that are relevant include:



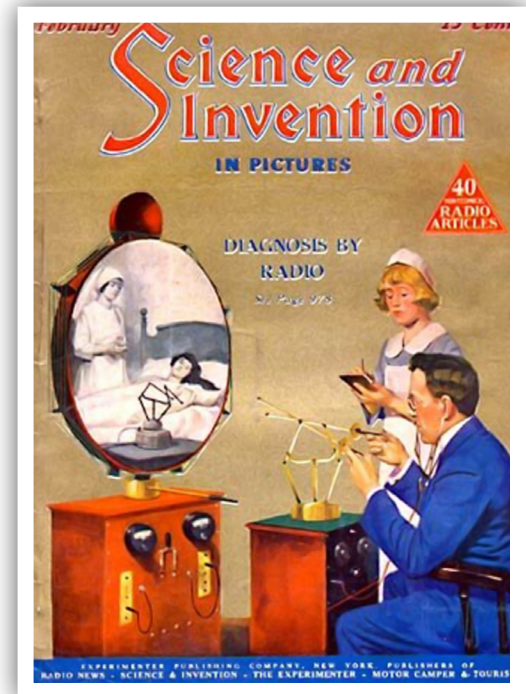
- **Direct to Consumer**—Description of multiple methods and companies that support direct physician to patient interaction outside the healthcare setting generally. This methodology is very common for less urgent conditions and for behavioral health applications.
- **Store and Forward**—Methodology of providing data such as images and physiologic information and sending it along to a provider or providers for review offline.
- **Remote Patient Monitoring**—A growing part of the industry that encompasses technological tools to monitor various physiologic parameters in either real-time or a delayed fashion.
- **Asynchronous versus Synchronous**—Asynchronous communications methods use combinations of text, email, and chat to provide physician to patient or physician to physician communications, versus synchronous communications which utilize video and/or audio in real-time.

Over time, a comprehensive guide to telemedicine for the first responder community would include a detailed listing of terminology and service descriptions to guide program planning.

History and Current State

The expert panel briefly reviewed the history of telemedicine, which is particularly relevant for perspective. Through the 1950's and 1960's early efforts focused on applying the first available video links to various use cases, including space travel and support to remote clinics from hospitals. The early justification for telemedicine use was to bridge distance between physicians and patients. Since 2000 and before COVID several key forces have combined to drive growth in telemedicine:

- Improved technology and acceptance of video communications – While obvious, technology has evolved rapidly such that by 2015 fully 2/3 of Americans owned a smartphone
- Payment – While limited, Medicare authorized reimbursement for telemedicine in certain underserved areas, setting a precedent for future growth
- Investment – Pre-COVID venture funding has driven growth totaling approximately \$8.2B/year in 2018



The telemedicine industry gradually grew through the twenty years prior to the beginning of the COVID-19 pandemic. As patients have become more focused on their role as consumers, the healthcare industry has responded by incorporating technologies into diverse patient interactions. Now, nearly all health systems incorporate telemedicine strategies into their growth plans, 2020 venture investment nearly doubled to \$15B over 2019 investments. The industry now includes multiple publicly traded companies, perhaps hundreds of small companies, and telemedicine programs embraced by major payers, technology companies, and health systems.

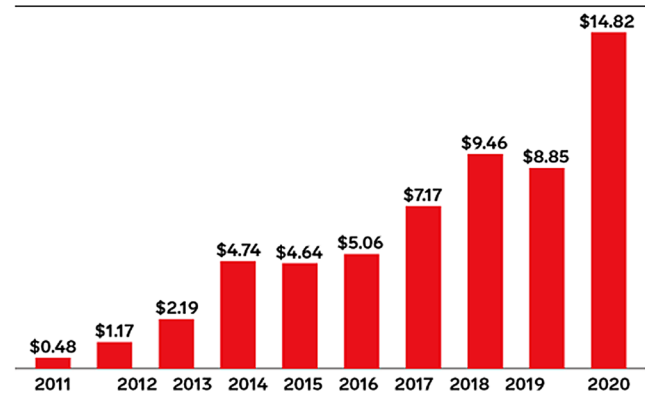
COMMON APPLICATIONS AND USE CASES

While many companies are well-known in the industry, the report will not specifically name companies, but will provide examples of concepts and categories.

Direct to Consumer Care

This category consists of numerous small and large companies and organizations that provide for or facilitate a direct connection between providers and patients, typically driven by patient requests. These requests can come as a result of a patient search, or through a preferred relationship with an employer, payer, or other affinity group. The discussion centered on the most common applications including primary/urgent care, behavioral health, and men's health. Companies and provider entities in these areas frequently utilize technology, operational infrastructure, and provider assets to cross these lines in order to provide combinations of services. Many in the first responder community no doubt have experienced these services through existing relationships through payers, employers, or other sources.

Digital Health Venture Capital Funding Worldwide, 2011-2020
billions

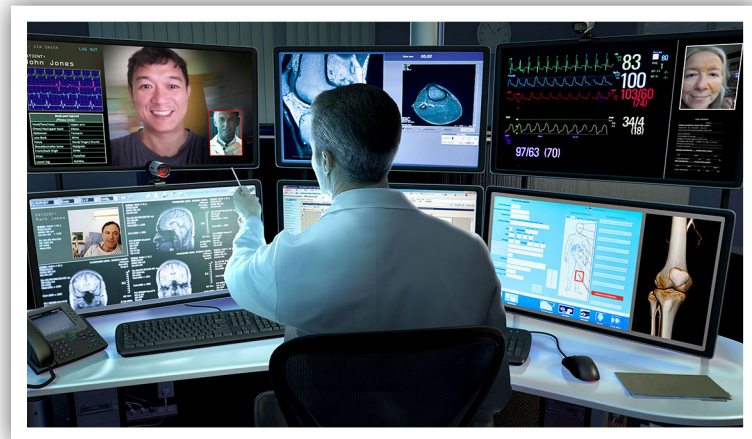


Note: includes private equity and corporate venture capital; 615 deals in 2019; 637 deals in 2020
Source: Mercom Capital Group, "Digital Health Funding and M&A: 2020 Fourth Quarter and Annual Report" as cited in the company blog, Jan 11, 2021
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Hospital Based Specialty Care

A growing number of companies provide hospital-based care through telemedicine. Typically, this care involves a specialty service provided through a telemedicine version of what is more traditionally a face-to-face physician consultation.

Broad utilization of this type of service initially focused on care for acute ischemic strokes supporting the treatment with thrombolytic agents. Services now include psychiatry, critical care, cardiology, infectious diseases, and multiple other services that have continued to grow during COVID-19.



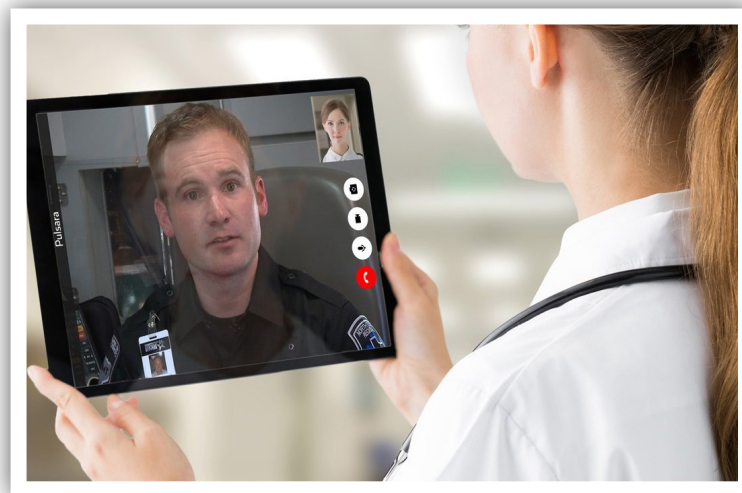
Technology-Based Monitoring

Rapid improvements in technology have driven development of a wide array of wearables and other monitoring devices that can assist in monitoring of vital signs, glucose levels in diabetics, complex medical device performance, weight, home safety, and a variety of other issues. Increasingly this type of technology application is incorporated into ongoing continuity of care strategies in multiple areas of medicine. The firefighter community represents an opportunity for broad application of these technology innovations to support a broad range of health and wellness needs.

POTENTIAL USE CASES FOR FIREFIGHTER COMMUNITY

As preparation for broader planning for telemedicine within the firefighter community, the expert panel was presented with a preliminary series of potential use cases for consideration, to include:

- Primary/Urgent Care
- Behavioral Health
- Specialty Care
- Cardiology
- Oncology
- Neurology
- Others
- Occupational Medicine
- Employee Assistance Programs and,
- Long term Care and Rehab



These and other areas could be serviced using some combination of video/audio based live visits, asynchronous exchanges, chat/text, remote patient monitoring, and multispecialty collaborative care.

Telemedicine and COVID-19

As with other areas of telemedicine, much has been written about the expansion of telemedicine utilization during the COVID-19 pandemic. In general, usage climbed rapidly in March and April of 2020 and has now settled to a steady state that is still markedly above utilization seen pre-COVID. Several factors have driven this utilization rise:

- Clinical need and safety – Telemedicine has been used to reduce infection risk for providers, staff, and patients, allowing clinical care to continue in nontraditional ways.
- Payment – Many waivers were granted by CMS and others, allowing much broader third-party payment for telemedicine.



- Privacy – The HHS Office of Civil Rights waived restrictions on the use of certain technologies that had been judged to be noncompliant with provisions of HIPAA privacy rules.
- Physician licensure – Most states issued some type of waiver on licensure, bypassing typical requirements for physician licensure to practice in their states if other state licensure in good standing could be demonstrated.

Considerations and Barriers for the Future

Prior to discussion of specific use, cases for the expert panel considered known barriers to broad future growth of telemedicine programs including:

- Payment—While waivers exist, many are tied to the declared COVID-19 Public Health Emergency (PHE) or require specific legislative language for potential extension. Thus, future payment from third parties is not guaranteed.
- Technology/Bandwidth—Major gaps still exist in both urban and rural areas with homes and businesses not served by broadband delivering at least 25 Mbps, the level considered sufficient for effective video communication.
- Licensing—Licensing for providers is controlled by state boards, some of which waived certain requirements for the PHE. However, a return to prior rules will make broad applications of telemedicine services more difficult to deliver.
- Liability—Frequently mentioned as a concern, provider liability should be considered within any program. However, there remains very little case law in this area to guide planning.
- Acceptance—While previously a concern, COVID-19 experience has demonstrated broad, although not universal, acceptance of telemedicine as a method of care in many situations.



KEY HEALTH PRIORITY AREAS FOR THE FIREFIGHTER COMMUNITY

The preceding focused FRCE review of health and wellness identified key areas for focus for future programs. This list was expanded by the expert panel to include a broad array of areas for future work and consideration to support the firefighter community:

- **Behavioral Health**—Behavioral health was the most cited and discussed area for utilization of telemedicine to support the firefighter community, both because of the prevalence of behavioral health concerns and the relatively easy applicability of telemedicine to this type of care. Recent strides have been made in awareness of behavioral health as an issue to be addressed, as previously evidenced in a report done by FRCE.
- **Oncology and Cancer Screening**—Cancer prevalence is also felt to be high among the firefighter population. Similar to cardiovascular disease, preventive and ongoing care are amenable to telemedicine methods including multidisciplinary discussions frequently required for oncology care.
- **Substance Abuse**—As an area distinct from behavioral health, substance abuse has a significant prevalence in the firefighter community and represents an opportunity for telemedicine intervention.
- **Cardiovascular Disease and Stroke**—The prevalence of cardiovascular disease and related conditions is felt to be disproportionately high among firefighters. Potential reasons include poor screening and health management, lifestyle management, diet, and smoking. Preventive and ongoing care are both amenable to telemedicine methods.
- **Hypertension**—Hypertension is a common condition that is frequently ignored. The ready availability of monitoring technology allows for improved management by telemedicine.
- **Diabetes**—Diabetes is also quite amenable to ongoing management based on currently available technology. Endocrinologists have been shown to be quite effective at managing diabetes and its complications by telemedicine.
- **Sleep Disorders**—Sleep disorders are an increasingly recognized problem among firefighters. Improved technology supports this telemedicine use case.



- **Nutrition**—Innovative programs are now being developed to support improved firefighter nutrition, particularly in the firehouse. Telemedicine applications and techniques have found a place in this important area of health.

- **Reproductive Health**—Multiple areas of reproductive health bear consideration. One in particular, post-partum care, is a result of the increasing proportion of firefighters who are women.

- **Injury Prevention**—Education in this and other similar areas is recognized as needed and a cost- and time-effective use of telemedicine technologies.

- **Orthopedics and Physical Therapy**—Small programs have demonstrated success for certain portions of physical therapy in an area that is particularly important to firefighters.

- **Fitness**—Fitness guidance has evolved in the commercial space and can be applied to the firefighter community, and perhaps without licensing concerns associated with other applications.

- **Weight Management**—While a basic part of health, the firefighter community is as susceptible to weight issues as the rest of the adult population. This has direct ties to fitness and the ability to perform key job tasks.



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FIREFIGHTER COMMUNITY—ISSUES FOR CONSIDERATION

The expert panel identified several areas which need to be considered for any health and wellness program to succeed, whether telemedicine or otherwise. Many of the points are the result of extended anecdotal experience, which in many cases reflects an overwhelming reality with which providers must deal.

Cultural Competency of all areas of providers:

Understanding of Firefighter Culture

There is no doubt that firefighting culture is unlike that of other workplaces, and even different from that of other first responder populations. Firefighters work closely with small groups with whom they share quarters, while responding under conditions of physiological

and psychological stress to situations that are inherently dangerous. These and related cultural factors must be understood by any providers who work with this community, from occupational health specialists to cardiologists to nutritionists.



Understanding of Firefighter Work Requirements

NFPA Standard 1001 – Fourteen Essential Job Tasks and Job Performance Requirements

While well-known in the firefighter community, the fourteen essential job tasks and job performance requirements as outlined in NFPA Standard 1001 are less well-known in the healthcare community. An understanding of these job requirements is critical to providing proper care to firefighters whether in a face-to-face or telemedicine environment. These tasks and requirements as briefly summarized below include, but are not limited to:

- Performing difficult and demanding physical tasks for extended periods while wearing personal protective equipment (PPE) ensembles and self-contained breathing apparatus (SCBA)
- Repeated exposure to toxic fumes, other irritants, and various hazards

- Exposing oneself to physiologic stressors including clinical dehydration and heat exhaustion
- Climbing, lifting, and carrying objects and persons while wearing equipment that weighs at least 50 pounds
- Unpredictable and sometimes sudden exertion without warmup, meals, or hydration
- Exposure to significant and ongoing psychosocial stressors in an environment of high expected performance
- Shift work frequently extending beyond 12 hours and,
- Any program to support firefighter health and wellness with telemedicine will need to include consideration of the fourteen essential job tasks and job performance requirements.

Acceptance of Illness and Need for Medical Care

A generally held perception among firefighter health leadership is that firefighters, more than other populations, minimize illness and are reluctant to seek preventive and other care. Whether based on “firefighter culture” or a perception that a diagnosis of illness or injury will lead to an unexpected work restriction, perception certainly seems to be related to reality. Any assessment of telemedicine programs will need to assess the effect of telemedicine on this reality.

Mandated Annual Physicals versus Episodic Care

Firefighters can receive medical care through two pathways. Many, but not all, undergo mandatory annual physicals focused on fitness for duty. These physicals, when done, are performed by physicians directly engaged for the purpose of assessing firefighting capability and not necessarily focused on



primary care. Many firefighters also receive primary and specialty healthcare outside of and separate from this system of occupational health. It would be expected that some of the information gathered in these two pathways is duplicative. Any telemedicine program will need to recognize these patterns of care, support the proper pathway, and coordinate information flow to the extent possible across care pathways.

TELEMEDICINE PROGRAMS SUPPORTING FIRST RESPONDERS

Current Programs

The expert panel was unable to specifically outline any large number of telemedicine programs supporting the firefighter community in detail. The general experience of the firefighter community with telemedicine has been similar to that in other patient groups. Benefits have included:

- Reduction in trips to PCPs
- The ability for employees to stay onsite
- Reduction in appointment no-shows and,
- Ability for clinicians to see the reality of “home life.”

Several programs were discussed preliminarily and are available for further review by workgroups through future work.



FDNY – Fire Department of the City of New York

FDNY noted a local counseling program that converted to telemedicine due to COVID-19. The service saw a 25 percent increase in utilization with a reduction in no-shows. One side effect of this efficiency was potential overwork of providers with fewer breaks available during the workday.



MUSC – Medical University of South Carolina

MUSC hosts a similar program that serves a population of first responders. They also noted a reduction in no-shows and a preference for virtual care, although with some concerns about privacy for patients, with concerns also expressed related to high clinician burdens.

The program noted an improvement in patient outcomes but did note less supervision of providers in a virtual environment.



Arizona

A prominent Arizona group provides care to multiple populations including first responders. This program noted a patient comfort level in their own space and has had good experience with seeing factors in the home.



Philadelphia

The expert panel briefly reviewed publicly available information about a direct-to-consumer program targeted to Philadelphia firefighters and paramedics provided by the company MDLIVE.

Potential Partnerships for Future Action

Fire Related Organizations

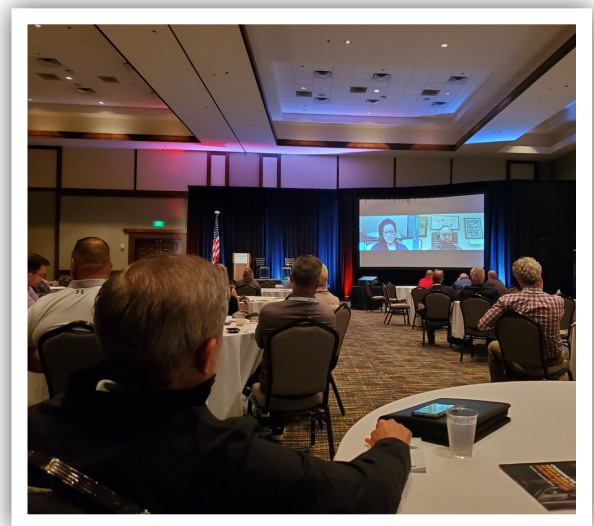
IAFF—The International Association of Fire Fighters is the largest organization representing full-time firefighters and EMS personnel. As an organization, it focuses in areas of responder support, particularly on behavioral health and substance abuse support through its Center of Excellence.

IAFC—The International Association of Fire Chiefs is a large network of fire department leadership and emergency officers.

State Fire Associations—These associations represent an opportunity for targeted programs to build on existing health and telemedicine initiatives already occurring at the state level.

FDSOA—Fire Department Safety Officers Association - The FDSOA includes membership with broad and unique perspectives, and frequently direct responsibility for firefighter health and safety.

NFA—The National Fire Academy is operated by the Federal Emergency Management Agency (FEMA) within the National Emergency Training Center (NETC). This serves as the primary federal point of contact for training for the firefighter community.



NFPA—The National Fire Protection Association is a nonprofit organization that serves as a source of codes, standards, resources, training, and advocacy for the firefighter community.

IFSTA—The International Fire Safety Training Association fosters development and validation of training materials for the fire service and related communities.

Training Organizations—Other training organizations, focus and specific groups, national and regional procedures will be the focus of further outreach.

NVFC—The National Volunteer Fire Council focuses on a number of areas for the large fire and EMS volunteer community, including health and safety and related programs.

Firefighter Cancer Support Network—www.firefightercancersupport.org

Companies and Related Organizations

State Bureaus of Workmen’s Compensation—These organizations regulate and oversee a component of funding that is critical, particularly after workplace injuries and illnesses.

State EAP programs—In multiple areas, employee assistance programs whether focused on behavioral health or coaching assistance perform a vital function for the firefighter community.

Private Payers—Private health insurance payers are heavily invested in telemedicine, both related to external and internal programs. Their involvement will be critical to achieving financial viability for ongoing programs.

Insurance providers for Fire Services (disability and other)—Certain insurers focus on disability and related insurance for firefighters and other first responders, a market that can be difficult based on job-related risk. These providers would be expected to have a broad understanding of the benefits of telemedicine to support their insureds.

Medical Organizations

ACOEM—The American College of Occupational and Environmental Medicine is the national medical organization most focused on diagnosis and management of workplace illnesses and injuries, which a subset of providers particularly focused on the first responder community.

ATA—The American Telemedicine Association is an international membership organization focused on policy and promotion of the growth of telemedicine as a healthcare delivery method.

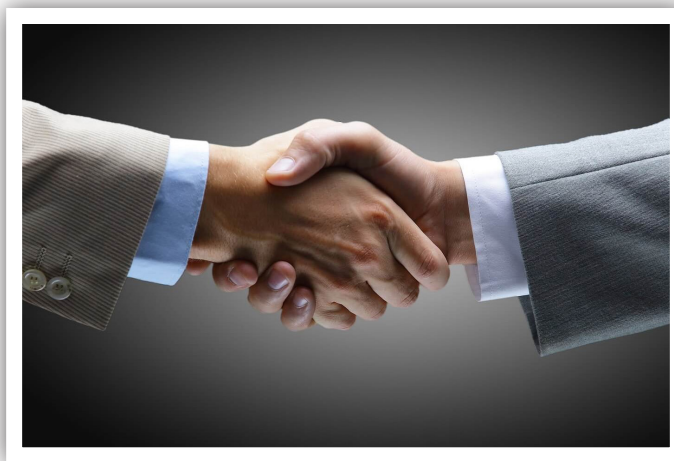
ACC—The American College of Cardiology is the leading national professional organization of cardiologists focused on cardiovascular health.

Behavioral Health Organizations—Various professional organizations, including the American Psychiatric Association, the American Psychological Association, and others represent potential partners in researching improved methods of providing behavioral health care to firefighters and other first responders.

AAFP—The American Academy of Family Physicians is a membership organization of family physicians who have a broad perspective on general health and medical issues for firefighters and their families.

Telemedicine companies—The telemedicine industry is populated with increasing numbers of large and small telemedicine companies providing a collection of services including direct to consumer care, behavioral health at various levels, specialty care for consumers, high level specialty care for hospitals, technology-based care including remote patient monitoring, all delivered in a variety of methods. These companies individually and collectively represent increasing opportunities for partnership for this high-profile community.

Health Systems—Health systems, large and small, sometimes have direct relationships with first responder organizers as organizational leadership, and always require relationships for day to day and emergency operations. In particular, health systems with active telemedicine programs represent an opportunity for cooperation on first responder telemedicine programs.



Foundations

Numerous foundations, nationally, regionally, and locally focus on health and technology. These foundations will require exploration for grant funding for specific support of programs.

Fire Trade Journals—Major trade journals such as Firehouse and FireRescue1 are well-known in the fire and first responder communities, frequently sponsor conferences, and represent opportunities for publication of news, case studies, and calls for action publications.



Men's Health—This particular publication may provide outreach opportunities in particular areas of health and wellness, particularly for male firefighters. Others may also serve as targets for subsets of the firefighter community.

Potential Areas for Future Analysis and Support

The expert panel proposed a series of potential programs that could be implemented based on available resources either over the short- or long-term. Key issues for consideration were that programs be potentially amenable to telemedicine, that achievable goals be developed, and that results be measurable. These programs represent a broad range of ideas which will require more specific program planning and development in order to fully succeed.

SHORT-TERM PROJECT OBJECTIVES (2-3 YEARS)

Objective 1: Identify and define the current landscape of telemedicine relevant to the firefighting community

Develop analysis of which types of programs are eligible for funding or are currently funded related to telemedicine services for firefighters. This would include, but not be limited to, surveys of firefighter health and wellness leadership, direct inquiry of payers and not-for-profit organizations, and engagement of industry trade groups.

Tasks

- Develop survey of firefighter health and wellness

Players

- FRCE staff and advisory group
- Major telemedicine trade organizations
- Partners
- Telemedicine trade organizations
- Third-party payers
- Fire industry trade groups

Funding

- Potential FEMA or other federal funding
- Grant funding from health or technology focused organizations

Develop a comprehensive guide to telemedicine for first responders with the goal of providing fire, EMS, and law enforcement leadership with a broad resource from which to derive ideas for future programs and identify already available resources.

Tasks

- Gather existing guide materials related to telemedicine
- Survey first responder organizations regarding unique needs
- Adapt new guide to first responder needs

Players

- FRCE staff
- Partners
- Academic institutions with focus on telemedicine
- AMA, ATA, CTA, other general organizations

Funding

- Potential FEMA or other federal funding
- Grant funding from health or technology focused organizations in collaboration with academic institutions
- Organizations focused on law enforcement support

Objective 2: Identify and define current health care access and utilization among the firefighter community

Assess and define broad access to care issues for the career and volunteer firefighter community. This assessment will also serve to benefit the overall health and wellness analysis currently ongoing.

Tasks

- Survey firefighter community health leadership regarding key questions
- Survey or perform focus groups with firefighters on needs

Players

- FRCE staff
- Firefighter health leadership

Partners

- Academic health institutions
- Medical organizations such as AAFP

Funding

- Potential FEMA or other federal funding
- Grant funding from health or technology focused organizations

Quantify how the firefighter community currently accesses primary care, and how amenable they may be to utilizing telemedicine as appropriate. This may also be expected to lead to a program to coordinate follow up of findings from annual physicals, perhaps initially through a regional approach.

Tasks

- Survey firefighter community health leadership regarding key questions
- Survey or perform focus groups with firefighters on needs

Players

- FRCE
- Firefighter health leadership

Partners

- Academic institutions with first responder community interest

Funding

- Potential FEMA or other federal funding
- Grant funding from health or technology focused organizations in collaboration with academic institution

Objective 3: Focus initial telemedicine pilot projects on high-priority health areas with prior demonstrated success in other telemedicine applications

Approach and engage three to four behavioral health providers to undertake a pilot program assessing telemedicine approaches to anxiety and PTSD in the firefighter community.

Tasks

- Define key tele-behavioral health providers with interest in firefighter community
- Identify key program elements
- Assess ongoing related programs
- Engage in pilot testing with providers

Players

- FRCE staff
- Firefighter health leadership

Partners

- Tele-behavioral health providers

Funding

- Tele-behavioral health providers
- FEMA, SAMSHA or other government agencies

Initiate a pilot program to replace some duty-related occupational health assessments with initial telemedicine visits, with follow-up surveys on effectiveness.

Tasks

- Identify current use of telemedicine to support telemedicine occupational health
- Define health system or other partners to develop pilot program

Players

- FRCE staff
- Firefighter health leadership

Partners

- Health systems with existing telemedicine and occupational health programs

Funding

- Potential FEMA or other federal funding
- Grant funding from health or technology focused organizations
- Grants focused on occupational health issues

Objective 4: Seek success in outreach to key partners and stakeholders

Develop either a national conference or a set of regional conferences on health and wellness with an active track related to technology and telemedicine.

Tasks

- Identify likely partner conferences for collaboration
- Define track agenda
- Acquire expert participants

Players

- FRCE staff

Partners

- Organizations in leadership of major conferences

Funding

- Grant funding from health or technology focused organizations
- Conference sponsors

Actively engage disability and liability insurers to develop pilot programs related to post-incident and disability evaluations by telemedicine.

Tasks

- Identify key insurers
- Adapt existing local programs to telemedicine

Players

- FRCE staff
- Evaluation experts from insurers

Partners

- Academic and health system participants

Funding

- Disability and liability insurers

Engage third-party payers in order to broaden the focus of existing training programs to include firefighter issues.

Tasks

- Identify third party payers as key partners
- Identify existing provider training programs
- Design provider training programs related to firefighter assessment and workplace issues

Players

- FRCE staff
- Firefighter health staff

Partners

- Third party payers
- Academic institutions with training and firefighter expertise

Funding

- Third-party payers

LONG-TERM PROJECT OBJECTIVES (4+ YEARS)

Objective 5: Focus long-term programs on high-priority health issues across the entire firefighter community

Develop targeted medical/behavioral health programs for Fire and Police considering their unique populations, stressors, and job requirements.

Tasks

- Perform assessment necessary to grow existing programs

Players

- FRCE staff
- Firefighter health staff

Partners

- Academic partners with expertise in behavioral health

Funding

- Potential FEMA or other federal funding
- Grant funding from health or technology focused organizations in collaboration with academic institution

Extensively analyze and define health issues that could be effectively managed by telehealth for both career and volunteer populations.

Tasks

- Assess existing and new programs

Players

- FRCE staff
- Partners
- Academic institutions with focus on telemedicine

Partners

- Academic institutions with specific expertise

Funding

- Potential FEMA or other federal funding
- Grant funding from health or technology focused organizations in collaboration with academic institution

Objective 6: Expand programs utilizing unique solutions and focused on new populations

Specifically design and develop telemedicine programs to support wildland fire operations.

Tasks

- Identify primary sources of information regarding health in wildland fire operations

Players

- FRCE staff
- Wildland Firefighter health staff

Partners

- FEMA, US Forest Service

Funding

- Potential FEMA or other federal funding
- Grant funding from health or technology focused organizations

Develop standards for firefighter RPM to assess physiologic stressors.

Tasks

- Perform initial information gathering regarding physiologic stressors among firefighters
- Perform initial information gathering among technology providers

Players

- FRCE staff
- Wildland Firefighter health staff

Partners

- ATA, telemedicine industry

Funding

- Potential FEMA or other federal funding
- Grant funding from health or technology focused organizations

Develop telemedicine-based peer support programs through facilitated round table discussions with fire departments and leadership.

Tasks

- Assess existing and developing programs

Players

- FRCE staff
- Partners
- Academic institutions with focus on telemedicine

Partners

- Telemedicine providers

Funding

- Potential FEMA or other federal funding
- Grant funding from health or technology focused organizations

KEY RECOMMENDATIONS

1. Focus early efforts on assessment of existing programs along with definition of high priority areas for firefighter health and safety with an emphasis on areas appropriate for telemedicine programs.
 - Partner with existing organizations to host regional or national meetings to address the field of telemedicine to support firefighter health and wellness
 - Engage academic and commercial tele-behavioral health providers in exploratory efforts focused on tele-behavioral health support to the firefighter community
 - Survey relevant firefighter groups and stakeholders to create comprehensive picture of existing programs and potential funding sources for telemedicine research and programs

2. Establish working group to support FRCE in ongoing strategic planning and guidance. Relevant stakeholders include:
 - Firefighter health and wellness leadership
 - Academic and health system partners
 - Relevant insurers, including disability, liability, and health
 - Telemedicine industry experts
 - Firefighter community leadership

3. Develop a long-range strategic plan that addresses priorities, barriers, and funding sources
 - By end of FY 2022 develop long-range funding and support plan
 - Establish ongoing mechanism for exchange of information and thought leadership

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