DISTRICT OF COLUMBIA

Fire and EMS Department

Integrated Healthcare Collaborative

FINAL REPORT

February 22, 2017

Mayor Muriel Bowser

Chief Gregory Dean / DC Fire and EMS

Introduction

The District of Columbia Fire and Emergency Medical Services Department ("the Department or DC FEMS") dispatched over 160,000 responses to 9-1-1 requests for Emergency Medical Services (EMS) in Fiscal Year 2015. In Fiscal Year 2016, DC FEMS responded to more than 170,000 9-1-1 calls, a five percent increase from the previous year. Each year, this call volume puts the District in the top ten cities with the highest call volume in the country, including cities like New York, Chicago and Los Angeles, that have significantly higher populations than the District. Put another way, the District has the eighth highest call volume in the country, but is only the 24th largest city.[1]

Approximately 48 percent of the FY 2015 and FY 2016 responses to EMS calls were categorized by the Office of Unified Communications (OUC) at the time of dispatch to be non-emergency low acuity calls (those requiring the dispatch of Basic Life Support (BLS) resources only). After assessment by DC FEMS providers, an even greater proportion of patients were found to require only BLS care and transport to hospitals - approximately 72 percent of all patients transported.

These types of transports overburden the EMS response network and reduce the availability of resources to respond to true emergencies. They also clog the local hospital Emergency Departments (EDs) with non-emergency patients, which compounds the delivery of emergency care to critical patients with life-threatening emergencies. This cycle also impedes the connection of low acuity patients to the right primary care providers.

In FY 2016, the District entered into an emergency contract with American Medical Response, a private third party provider, to transport BLS patients. This decision was made because the District's EMS system did not have sufficient resources to respond to the number of 9-1-1 calls being made on a daily basis, which put critical patients at risk. With this decision, policy makers made clear their preference for the use of a third party to be a temporary fix to a long-standing problem in the District of overuse of EMS for non-emergency care. The recommendations in this report seek to put the District on the path to solving this long-term problem in a more efficient manner and in ways that will result in better outcomes for patients.

The Integrated Healthcare Collaborative (IHC) was created with the goal of developing recommendations for District agencies to more efficiently target the delivery of emergency medical services and to connect patients to comprehensive health care. The overall goals are to improve the population's health and safety, connect low acuity callers to a more appropriate comprehensive source of care, reduce or eliminate the use of 9-1-1 resources for non-emergent medical issues and ensure rapid response, treatment and transport for high acuity, life-threatening medical calls.

Process

To accomplish these goals, in April 2016, Dr. Robert P. Holman, the Department's Interim Medical Director, recruited members from government and non-governmental organizations to

[1] 2015 National Run Survey (Part II), *Firehouse Magazine*, by Kevin Roche and Peter Matthews, page 2.

collaborate on potential solutions. The IHC includes members representing each of the three Managed Care Organizations (MCO)[2] (Amerihealth Caritas, Medstar Family Choice and Trusted), DC Primary Care Association, DC Hospital Association, Department of Health Care Finance, Department of Health, Executive Office of the Mayor, Office of Unified Communications, Office on Aging and DC FEMS. In June 2016, the DC Council codified the creation of the IHC as the Integrated Health Care Task Force in Subtitle I of the FY 2017 Budget Support Act of 2016, the "Integrated Health Care Task Force Establishment Amendment Act of 2016." ("the FY 2017 Budget Support Act").

IHC members were asked to serve on five subcommittees: Nurse Triage, Alternative Transport, Connection to Care, Policy, and Communication and Marketing. Each committee met independently over four months and engaged in similar systematic processes that included identifying relevant existing governmental policies and resources, researching national and international benchmarks and best practices, interviewing representatives of best practice organizations, and engaging key stakeholders in the establishment of minimum criteria. In addition to the subcommittee meetings, all IHC representatives met once a month to report on each committee's efforts and to align strategies.

Subcommittee Findings and Recommendations

The results of the IHC's subcommittee deliberations and recommendations are summarized in this section. They are followed by discussions on pediatric care and evaluation, as required by the FY 2017 Budget Support Act.

Misuse of 9-1-1 Overtaxes First Responders and Does Not Benefit Patients

The number of patient transports in the District has grown by 24 percent since 2013. While the District has taken measures to increase DC FEMS resources to respond to this growing demand, merely increasing response resources is not the only feasible strategy. Because the vast majority of calls are for low acuity, non-emergency conditions, a more sustainable and fiscally responsible strategy is to invest in paths that will decrease EMS resource demand.

The IHC found that many callers to 9-1-1 may not realize their condition is non-emergent and can be treated at home, in a primary care clinic or in an urgent care center. Even if they do, residents may believe the Emergency Department (ED) is the best and most expedient source of care and/or that arrival via ambulance rather than private vehicle at an ED will result in faster provision of care. Residents may be unaware of other venues at which to seek care besides the ED. Residents also may have limited transportation to these other sites of care such as urgent care centers or primary care physician offices. Reliance on 9-1-1 may also be the result of behavioral health challenges, or longstanding cultural practice norms. Furthermore, DC FEMS

[2] MCO's are health care delivery systems consisting of affiliated and/or owned hospitals, physicians and others that provide a wide range of coordinated health services. District MCOs provide services to eligible patients under District law and are monitored by the Office of Managed Care within the District's Department of Health Care Finance.

policy, which guarantees transport to the ED by ambulance no matter how non-emergent the patient's condition, reinforces patients' understanding, choices and behavior with respect to the use or overuse of 9-1-1.

In fact, an emergent ambulance transport to a hospital's ED is not likely to be beneficial for low acuity patients. Emergency department evaluation rather than evaluation in a primary care setting increases the likelihood of the following risks: an incomplete understanding of the patient's medical history, less comprehensive care, potentially unnecessary testing, unsafe duplication and/or contraindication in prescribed medications, unnecessary admissions and exposure to hospital pathogens. Alternatively, low acuity patients, those with ambulatory care sensitive (ACS) conditions, who instead visit a primary care clinic, may receive care in a more rapid, comprehensive and safe manner. Policy makers have a responsibility to help ensure positive patient outcomes. For this reason, the District needs to change its own policies and practices to redirect patients from the use of 9-1-1 and EDs, and it must explain why doing so is in the best interest of patients' health. To address this challenge, the IHC convened five subcommittees. The work of these subcommittees, as well as other findings, are described below.

Nurse Triage Subcommittee

The first step to educate patients and address their health care needs is to redirect them from 9-1-1 to a more appropriate setting. Other jurisdictions have done this through the use of nurse triage lines within 9-1-1 call centers. The advantage of this approach is that it keeps EMS agencies from ever responding to a patient whose condition is clearly non-emergent.

With this model, which draws on a clinical decision support, 9-1-1 call takers screen calls and redirect lower acuity calls to triage nurses for further assessment. With the guidance of algorithmically driven protocols, a nurse is able to further assess and direct a caller toward non-ED outcomes including self-care advice, non-EMS transport to primary care clinics or even an urgent care center. In some cases, the nurse may recommend a standard EMS transport to an ED. The common practice of the various jurisdictions already employing this model is to categorize 9-1-1 calls from highest acuity to lowest acuity, and to then determine the resource type to be deployed, if at all.

Several jurisdictions utilize the Advanced Medical Priority Dispatch System by Priority Dispatch through the International Associations of Emergency Dispatchers Emergency Communication Nurse System (IAED's ECNS) software, including: Fort Worth, Texas; Louisville, Kentucky; and Reno, Nevada. Mesa, Arizona utilizes the LVM System in conjunction with deployment of resources for an on-scene evaluation for each triaged call. Some of the cities with populations comparable to the Districts', such as Fort Worth and Louisville, have been able to divert 54 percent and 31 percent, respectively, of their calls away from an EMS response without deleterious health outcomes. Below is comparative chart review of the top three (3) cities researched.

9-1-1 Nurse Triage Lines Date

Jurisdiction	Population	Annual EMS Calls	Vendor	Dispatch IT	Coverage	ED Diversion
Fort Worth, TX	810,000	125,000	IAED/ECNS	Priority Solu-	9 a.m. -5 p.m.	54%
Louisville, KY	750,000	100,000	IAED/ECNS	Priority Solutions	8 a.m. -5 p.m.	31%
Mesa AZ	800,000	65,000	LVM SYSTEMS Solutions	N/A	8 a.m. -5 p.m.	N/A

The District should pursue a similar model here.

Nurse Triage Subcommittee Recommendation:

Implement a nurse triage line accessed through the 9-1-1 system. The District should develop the operational infrastructure for, and hire an experienced vendor to launch and manage, a 9-1-1-associated nurse triage line program. DC FEMS should launch the program, but as it becomes institutionalized, consideration should be given to housing it elsewhere in the government, given its mission of diverting non-emergency patients. By including triage nurses in the 9-1-1 screening process, the EMS response system will be able to better match callers' needs with appropriate and available end point resources, thereby reducing the strain of non-emergency calls on DC FEMS. Several cities have reported financial savings after integrating triage nurses into the 9-1-1 call process while still maintaining strong caller outcomes and satisfaction.

Alternative Transportation Subcommittee

Residents may rely on ambulances because they lack, or are unwilling or unable to arrange, their own transportation to an ED. Transportation options, whether by private vehicle, public transportation, or commercial vendor, present an immediate and certain cost to a resident, while that resident's health insurance may pay for most of or the entire ambulance ride no matter the circumstance. Ambulances fees for uninsured, indigent patients who are unable to pay may not be pursued by DCFEMS for valid public policy reasons. As a result, most patients have few disincentives to utilizing 9-1-1 ambulance transport in the District of Columbia. For the insured or indigent patients, an ambulance transport, which is the most expensive option, is literally a free ride. This fact undoubtedly contributes to the District's high EMS call volume.

The solution to this problem is to provide greater incentives for residents to use alternative transportation to EDs and other health care venues. The Alternative Transport subcommittee found that some District insurance companies and MCOs do currently offer their patients transportation options through a transport broker that subcontracts with various vendors licensed to operate within the District. Unfortunately, despite the more than 500 vehicle fleet available in the network, these options are not well known by beneficiaries and are underutilized. Patients alternatively may not use these options because they believe they are not sufficiently fast to reliable and expeditiously respond to them in every part of the city. Additionally, most of these covered transportation services have limited hours or require prescheduling, which sometimes includes a wait of up to three days if a company determines a patient's condition is non-emergent., They may also require physician or insurance company verification for urgent transports, i.e. those requiring same day transport or transport within a matter of hours. In order to direct the 9-1-1 patient populations away from ambulance transport, there must be low-cost options that provide service with flexible hours and from any part of the city with reliability and consistency.

Nurse Triage Subcommittee Recommendation:

Leverage existing transportation services and consider expansion of those services to transport low acuity callers to the appropriate health care services. Among the barriers faced by individuals who are in need of medical care is use of, and sometimes access to, timely and reliable transportation despite the existence of both medical and non-medical transportations options in the District. The District needs to take immediate steps to encourage MCO patients to use the existing transportation resources available to them, either through education or incentives for participation. The District should also consider strategies to expand the accessibility of such services, either through additional options with expanded hours, or additional networks, if such steps are required to effectively transport patients using non-9-1-1 resources. The Department of Healthcare Finance should take the lead on this effort.

Connection to Care Subcommittee

General Population Low Acuity Callers

Diverting non-emergency patients from 9-1-1 and providing them with alternative transportation are only the first steps in solving the problem of overuse of 9-1-1. Once diverted, patients need to be connected to appropriate, on-going care. Many District residents require additional education in navigating the primary health care system in the District. In addition, despite the District's high rates of health insurance among children and adults, many residents do not have a primary care provider or a primary source of healthcare. In order to address this issue, obstacles related to access to care and health care capacity need to be addressed.

One of these obstacles may be that MCOs require their members to have their medical care provided only by or through an assigned primary care provider (PCP). Many MCO patients may have never seen their designated PCP and so when taken to a clinic other than their PCP's they are met with a payment obstacle.

After consideration of all of these factors, the Connection to Care subcommittee found that the best source of care for these low acuity callers would be those sites that have achieved a Patient Centered Medical Home (PCMH) designation and have extended evening and weekend hours; feature walk-in appointments; provide on-site behavioral health, case management, social services and comprehensive primary care; and accept all insurances. The subcommittee identified eighteen clinical sites in the District, including two urgent care centers, which fit this criteria. All of the clinics are PCMH-designated and are federally qualified health centers that accept patients with all insurances, including Medicaid. Attachment A shows a map of the locations of concentrations of the District's low acuity callers superimposed with the clinic

locations. The locations of both overlap and demonstrate that the District already has 18 clinic sites located right near the callers' locations. While work will need to be done to ensure capacity, these clinics should be able to handle the approximately 200 low acuity callers per day that do not require emergency transport to hospitals.

High Volume Utilizers and Community Paramedicine

While general population low acuity callers are the main focus of the IHC, the group also examined the High Volume Utilizers (HVU's) who comprise approximately 12.6 percent of all EMS transports. These individuals are defined as patients who were transported by DC FEMS ten or more times in a year. In 2015, 709 HVUs were identified and these patients were involved in 13,979 transports.

These HVUs are likely to suffer from multiple chronic illnesses, low socioeconomic status, mental illness and substance and alcohol abuse. In a review of HVUs who have Medicaid insurance, 58 percent suffered from alcoholism and behavioral health issues, 41 percent were homeless, and 76 percent suffer from more than one chronic illness. High volume utilizers identified by DC FEMS often have case/care managers within their PCMH, Health Home,[3] HH1, My Health GPS, or MCO. Despite having this service available, they simply are not connecting with the care they need and are opting to use 9-1-1 instead. These are callers who are particularly well-suited for intervention via community paramedicine.

Community paramedicine is "an emerging field in health care where EMTs and paramedics operate in expanded roles in an effort to connect underutilized resources to underserved populations."[4] Some forms of community paramedicine involve EMS personnel who provide health care services to patients within their homes. DC FEMS was an early innovator in the area of community paramedicine when it launched its Street Calls program in 2008 after extensive best practices research. Street Calls is a specialty unit within DC FEMS that has the mission to reach, assess, teach, refer and monitor individuals who are known HVUs or are referred by field providers who deem them as at-risk or vulnerable. Since 2008, Street Calls has served approximately 2417 patients, connecting the vast majority of them to primary care and/or governmental and community-based agencies.

In Fiscal Year 2014, Street Calls reoriented its focus from sporadic and partial engagement with repeat 9-1-1 users on their short term needs, to focusing on sustainable integration and utilization of existing and available resources. The newly named Street Calls Mobile Integrated Healthcare Team (SC-MIHC), comprised of three Paramedics and one EMT, now focuses on 590 patients or

[3] Health Home I and Health Homes II, (now known as My Health GPS), are programs designed to enhance primary care services to both fee for service (FFS) and MCO beneficiaries who have significant chronic illness and would benefit from a multi-disciplinary approach to care with increased care coordination and care management. A health home provider must be able to exchange health information electronically. HH1 Is targeting to people with serious mental illness. My Health GPS is targeted to individuals with three or more chronic conditions. There is significant overlap between FEMS HVUs and the those targeted for intervention under health homes.

[4] Community Paramedicine Evaluation Tool, US Department of Health and Human Services Health Resource and Services Administration Office of Rural Health Policy (March 2012). Available at www.hrsa.gov/ruralhealth/pdf/paramedicinevaltool.pdf

HVUs. In FY14, the Street Calls team made 1363 contacts with 360 individuals, an average of three visits per individual. The comprehensive assessments conducted by the Street Calls team have revealed the social determinants (food, transportation, isolation, mental illness, etc.) that impact health and wellness (the reason for the call to EMS) and have guided the provision of care, patient education and the connection to community resources.

The FY 2017 Budget Support Act requires the IHC to examine the need for a pilot community paramedicine program, as well as which District agency should manage such a program, whether the program should be a self-sustaining independent entity, whether the program should employ case managers, and whether the program should be staffed with Department civilian EMS employees.

The IHC concluded that, in light of the Department's Street Calls experience, an additional pilot program for community paramedicine would be duplicative. The benefits of community paramedicine are most obvious for patients like the HVUs, who continue to call 9-1-1 despite the availability of case management resources. This is because they continue to be EMS patients, and so the ongoing reinforcement and services from the Street Calls team continues to be necessary. Even so, the ultimate goal remains for them to stop calling 9-1-1 for non-emergent health care needs and to connect them to services that will treat and resolve their health challenges.

For the general low acuity caller patient population, however, the most effective strategy is to connect those callers to comprehensive health care outside of their home and in Patient Centered Medical Homes as described earlier. These callers need more comprehensive services than EMS providers or EDs are able to offer them. In addition, one of the obstacles that the Street Calls team has faced over the years has been a lack of coordination and duplication between the many service providers – including multiple case managers – who have received referrals from DC FEMS for Street Calls patients. Creating another self-sustaining independent entity or employing more case managers, will not solve this problem. In 2016, as part of the IHC process, the Street Calls team referred all of the 709 HVU's who have a Medicaid MCO to the appropriate MCO for Case Management. This type of coordination between the IHC partners should continue.

Moreover, investing EMS employees with additional health care responsibilities may require the practice of medicine outside of their current licensing authority. The Department is very focused on improving the training and skills of those EMS providers it currently employs in order to fulfill its existing mission to rapidly respond to, treat and transport critical patients with emergent needs. The IHC respectfully recommends that this remain the focus of the Department over the next several years before an expansion of its mission is contemplated.

Again, the answer to the issues that the community paramedicine concept seeks to address is to move those patients to the PCMH arena. The IHC has convened all of the stakeholders required to achieve this outcome and their buy-in and the momentum of this process should be capitalized on in the coming years. The Street Calls team should continue to work with the District's HVUs. Rather than invest resources in additional community paramedics, however, the IHC recommends investing resources in those services described in this report that will eliminate the obstacles to comprehensive care, result in better overall health outcomes for patients and, ultimately, fewer calls to 9-1-1 for basic health care needs.

Connection to Care Subcommittee Recommendations:

Utilize existing grant funding opportunities for onboarding to a Health Information Exchange organization, a web based care planning platform and/or a specialized registry. In order to appropriately connect and divert individuals to ongoing comprehensive healthcare services and resources, a robust, bi- directional health information exchange system that can leverage, integrate, and align existing resources such as Health Homes I, Health Homes II, MCO case management, and EPD/ DD Waiver,[5] is critical. Such an exchange would include information about PCMH locations and other destinations for low acuity 9-1-1 callers. The triage nurse envisioned in this report will need access to information like this in a healthcare profile to direct patients to the appropriate source of care, to prevent duplication of services, maximize local resources and most importantly, wholly and safely address the needs of a 9-1-1 caller.

Continue to leverage the DC FEMS Street Calls program to connect High Volume Utilizers with comprehensive preventive and primary care services. The Street Calls program is well suited to continue to work with HVUs and to connect these patients with highly complex health needs to preventive and primary care services. Once the IHC recommendations are underway, the Street Calls team also could contact samples of patients diverted from 9-1-1 to help evaluate the impact of the new programs.

Policy Subcommittee

Understanding the existing policies relevant to the work of the IHC and determining areas of modification or improvement is key to its success. The Policy subcommittee reviewed current policies to identify areas that will enable or inhibit the vision and goals of the IHC.

District of Columbia residents have developed an expectation of transportation to a healthcare facility by DC FEMS when they call 9-1-1 regardless of the acuity of their healthcare need. This expectation is codified by the DC FEMS "Patient Bill of Rights, which includes the following language:

"…[We] will never refuse to transport you and we will never use any method to discourage you from receiving medical treatment or transportation."

While intended to ensure that no patient who requires treatment or transportation would be turned away by the Department, this policy has been interpreted as guaranteeing all patients the right to transport, even when transport is not medically necessary or when treatment is administered in the field and the patient improves. In some cases, the system has been misused to the point of 9-1-1 callers repeatedly using 9-1-1 for transportation or assistance with non-medical needs. While the District remains committed to providing fast, compassionate and competent care to 9-1-1 callers who need emergency medical treatment, its historic policy to not refuse transport in any case has contributed to the creation of a system that is overburdened with low acuity callers. This is not a sustainable system and the Patient Bill of Rights should be amended to address this problem.

The Policy subcommittee also found that only two healthcare facilities in the District have acquired a Certificate of Need (CON) as an urgent care facility. This limits patients' alternatives to emergency care at hospitals. The State Health Planning and Development Agency (SHPDA) within the Department of Health (DOH), the District entity with statutory authority to approve the opening of health care facilities within the District, is scheduled to publish the State Health Plan at the end of calendar year 2016. This new plan will include a category for urgent care and will require healthcare facilities who apply for a CON to market their facility as such. It will also clearly define how an urgent care facility differs from a primary care facility, what acuity levels should be treated at an urgent care facility, the level and scope of services to be provided, and qualification, training and staffing requirements. This work is consistent with and should support the goals of the IHC.

Furthermore, the Policy subcommittee found that various restrictions currently exist where a healthcare facility is available but patients are unable to access it because of insurance type, which again leads them to opt for the 9-1-1 system. For example, some patients are unable to receive same day services by a health care provider who is not their assigned primary care provider. The barrier to eliminating this requirement altogether and allowing temporary PCP assignments is an NCQA requirement (a quality rating system for health insurance companies) that requires MCOs to track the frequency of PCP changes. Frequent PCP changes are viewed negatively and could indicate an inadequate provider network or limited access for members. The District should work with MCOs to eliminate barriers like these that may be driving low acuity patients to 9-1-1 and hospital EDs.

[5] This is a program that provides services to elderly patients who are physically and/or developmentally disabled.

Policy Subcommittee Recommendations:

Revised the District of Columbia Fire and EMS Patient Bill of Rights. The language should be revised to be consistent with the goals and objectives of the IHC and should guarantee that patients "receive a medical evaluation and a determination of appropriate medical care," and "if transported, to be transported in a clean and properly maintained vehicle to an appropriate medical facility."

The State Health Planning and Development Agency should clarify the definition of urgent care in the Certificate of Need process. Doing so will create more alternatives to EDs for low acuity patients. The Department of Health, which houses the State Health Planning and Development Agency, should take the lead on this effort.

Ensure that managed care organizations accommodate requests for members to access same day care from providers who are not their primary care provider of record for acute illness and injury.

Communication and Marketing Subcommittee

The Communications and Marketing subcommittee examined how to develop an actionable and measurable marketing strategy to accompany implementation of IHC recommendations. The goals of such a strategy would be to develop customized outreach designed to follow District policy changes with changes in public perception, attitude, and behavior towards the use of 9-1-1 in the District. For any form of marketing to be most effective, the District should engage a professional communications team to create educational content and deliver messaging that will ultimately change patient behavior. Additionally, the messaging must target all areas of the District and be consistent from all relevant government and non-government partners. The message should also convey to EMS patients that the changes envisioned by the IHC are not intended to reduce their access to health care by reducing their use of 9-1-1 and ambulances. Rather, they are intended to increase their access to better, more timely care and ultimately improved health outcomes.

Consistent with this goal, prior to the implementation of any of the IHC's recommendations, there should be an education campaign that involves all advertising mediums, including, as examples, radio, television, newspaper, print product, digital advertising, text messaging, mobile banner ads, social media, metro busses, metro bus shelters, and billboards. The range and extent of such a campaign will depend on the availability of resources.

Communications and Marketing Subcommittee Recommendation:

Develop a customized outreach strategy to educate District residents about IHC recommendations and changes, and to change behavior about using primary care, where to go for healthcare and how to access it. Each of the recommendations of this report represents a departure from ingrained practice and policy in the District, on the part of both 9-1-1 callers and the health care services that they use. As the recommendations are implemented, the District needs to accompany implementation with a strong, coordinated, and effective marketing campaign that will educate patients and result in changes in behavior.

Pediatric Care

The FY 2017 Budget Support Act requires the IHC to "make recommendations that will enable the District to train and equip members of the Department to provide pediatric care." In fact, the Department already trains and equips its members to provide pediatric care. All of the Department's BLS providers are trained in pediatric Basic Life Support as part of their National Registry Emergency Medical Technician (NREMT) certification and biennial recertification. This training has been offered in lecture, case scenario, and online format. All Department ALS providers are required, as part of their NREMT certification requirements, to be certified Pediatric Advanced Life Support (PALS) providers. DC FEMS offers this course to its providers in partnership with the Children's National Medical Center (CNMC). The goal of this course is for providers to keep current on the latest techniques for providing emergency treatment to pediatric patients. All DC FEMS ALS providers receive training in Prehospital Education for Pediatric Providers (PEPP), and also are offered participation in the annual Pediatric Disaster Management course that DC FEMS hosts with CNMC at its Training Academy. All Department EMS units also are required to be stocked with special equipment use with pediatric patients.

The Department's efforts to improve its pediatric training are ongoing. In October 2016, the Department launched training of its providers on the Handtevy Pediatric System, which is a simple system that helps both basic and advanced EMS providers determine the appropriate dosage of medication for a child based on that child's age and weight. The mobile application is designed to eliminate mistakes in the field and helps providers determine this information quickly during an emergency.

Another of the challenges with training providers in pediatrics is that they are not exposed to critical pediatric patients on a regular basis. For this reason, the Department is partnering with CNMC to give its providers access to its ED, so that providers can obtain greater exposure to pediatric patients and treatment methods, particularly in the area of asthma, which is a common condition among the District's pediatric population. The Department looks forward to this partnership getting underway during the second quarter of FY 2017.

Evaluation of IHC Implementation

Members of the IHC are cognizant of the fact that the investment of time and resources in the ambitious undertakings outlined in this report will only be of benefit to the District if they have the desired impact on patient outcomes and on the EMS system. For this reason, the IHC is committed to effectively evaluating implementation of each of its recommendations. The IHC is very fortunate that it will have the support in this endeavor of The Lab @ DC, which is a new unit in the Office of the City Administrator that is focused on rigorous evaluations and applying behavioral science to the evaluation of new programs. This will ensure that the impact of implementation will be measured in transparent and meaningful ways.

Recommendations Summary

The following recommendations are based on research conducted and feedback received both from IHC and subcommittee members, as well as best practice organization representatives. Some of the recommendations require funding and will be contingent on additional resources.

Revise the District of Columbia Fire and EMS Patient Bill of Rights. Language in the DC FEMS Patient Bill of Rights currently states "That we will never refuse to transport you and we will never use any method to discourage you from receiving medical treatment or transportation." The language should be revised to be consistent with the goals and objectives of the IHC and to guarantee that patients "receive a medical evaluation and a determination of appropriate medical care," and "if transported, to be transported in a clean and properly maintained vehicle to an appropriate medical facility."

Implementation of a nurse triage line accessed through the 9-1-1 system. the District should develop the operational infrastructure for, and hire an experienced vendor to launch and manage, a 9-1-1-associated nurse triage line program. DC FEMS should launch the program, but as it becomes institutionalized, consideration should be given to housing it elsewhere in the government, given its mission of diverting non-emergency patients. By including triage nurses in the 9-1-1 screening process, the EMS response system will be able to better match callers' needs with appropriate and available end point resources, thereby reducing the strain of non-emergency calls on DC FEMS. Several cities have reported financial savings after integrating triage nurses into the 9-1-1 call process while still maintaining strong caller outcomes and satisfaction.

Leverage existing transportation services and consider expansion of those services to transport low acuity callers to the appropriate health care services. Among the barriers faced by individuals who are in need of medical care is use of, and sometimes access to, timely and reliable transportation despite the existence of both medical and non-medical transportations options in the District. The District needs to take immediate steps to encourage MCO patients to use the existing transportation resources available to them, either through education or incentives for participation. The District should also consider strategies to expand the accessibility of such services, either through additional options with expanded hours, or additional networks, if such steps are required to effectively transport patients using non-9-1-1 resources. The Department of Healthcare Finance should take the lead on this effort.

Utilize existing grant funding opportunities for onboarding to a Health Information Exchange organization, a web based care planning platform and/or a specialized registry. In order to appropriately connect and divert individuals to ongoing comprehensive healthcare services and resources, a robust, bi-directional health information exchange system that can leverage, integrate, and align existing resources such as Health Homes I, Health Homes II,[6] MCO case management, and EPD/DD Waiver,[7] is critical. Such an exchange would include information about PCMH locations and other destinations for low acuity 9-1-1 callers. The triage nurse envisioned in this report will need access to information like this in a healthcare profile to direct patients to the appropriate source of care, to prevent duplication of services, maximize local resources and most importantly, wholly and safely address the needs of a 9-1-1 caller.

[6] Health Homes I and Health Homes II are case management services for MCO patients.

[7] This is a program that provides services to elderly patients who are physically and/or developmentally disabled.

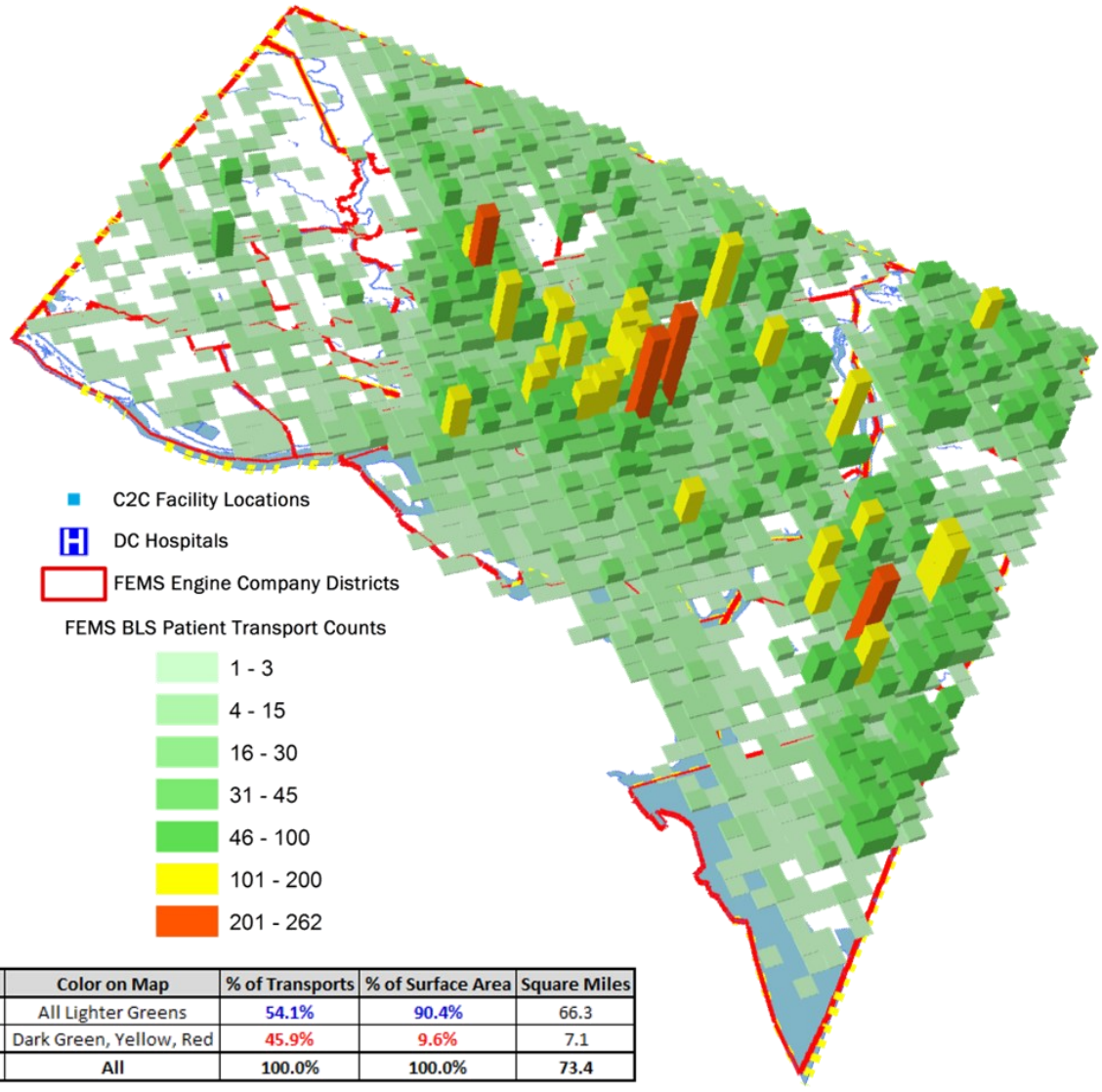
The State Health Planning and Development Agency should clarify the definition of urgent care in the Certificate of Need process. Only two healthcare facilities in the District have acquired a Certificate of Need (CON) as an urgent care facility while several others market/brand themselves as such. The new State Health Plan should clarify the definition of urgent care on the Certificate of Need process so as to support the goals of the IHC. Doing so will create more alternatives to EDs for low acuity patients. The Department of Health, which houses the State Health Planning and Development Agency, should take the lead on this effort.

Continue to leverage the DC FEMS Street Calls program to connect High Volume Utilizers with comprehensive preventive and primary care services. The Street Calls program is well suited to continue to work with HVUs and to connect these patients with highly complex health needs to preventive and primary care services. Once the IHC recommendations are underway, the Street Calls team also could contact samples of patients diverted from 9-1-1 to help evaluate the impact of the new programs.

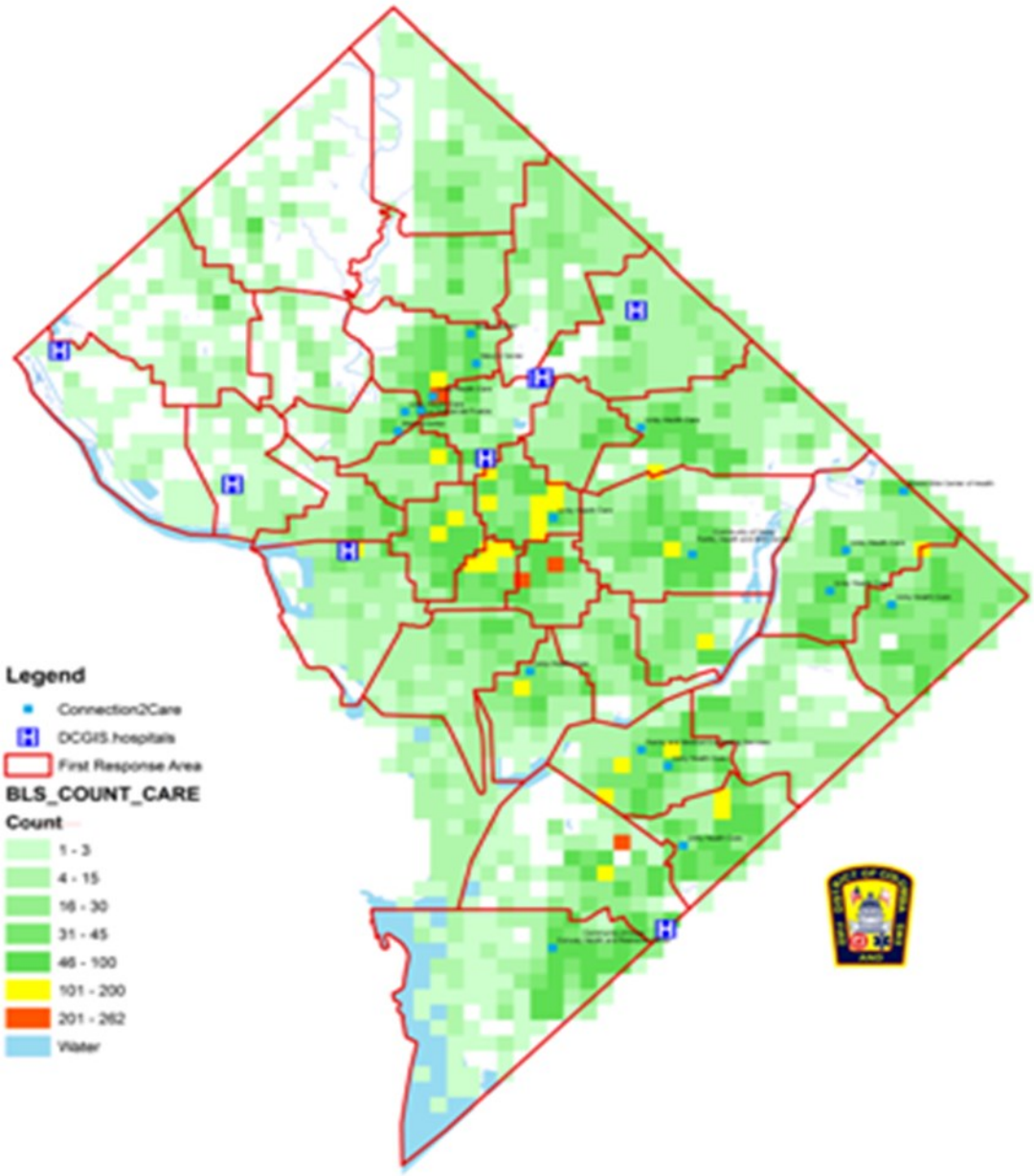
Ensure that managed care organizations accommodate requests for members to access same day care from providers who are not their primary care provider of record for acute illness and injury. A significant barrier to connection to care is the inability of residents covered by managed care organizations to receive same day services by a healthcare provider who is not their assigned primary care provider. The IHC was only able to ascertain from one MCO that their policy is to accommodate visits by a "covered physician" who is associated with the member's primary care provider. In the majority of cases, this allows the member to receive the same day/next day healthcare services they are seeking. The barrier to eliminating this requirement altogether and allowing temporary PCP assignments is an NCQA requirement (a quality rating system for health insurance companies) that requires MCOs to track the frequency of PCP changes. Frequent PCP changes are viewed negatively and could indicate an inadequate provider network or limited access for members. This barrier should be removed.

Develop a customized outreach strategy to educate and change behavior of District residents about using primary care, where to go for healthcare and how to access it. Each of the recommendations of this report represents a departure from ingrained practice and policy in the District, on the part of both 9-1-1 callers and the health care services that they use. As the recommendations are implemented, the District needs to accompany implementation with a strong, coordinated, and effective marketing campaign that will educate patients and result in changes in behavior.

FEMS Low Acuity (BLS) Patient Transports: 3/1/2016 to 8/31/2016



Number of Transports	Color on Map	% of Transports	% of Surface Area	Square Miles
None to 45	All Lighter Greens	54.1%	90.4%	66.3
46 or more	Dark Green, Yellow, Red	45.9%	9.6%	7.1
All	All	100.0%	100.0%	73.4


Legend
Connection2Care
DCGIS.hospitals
First Response Area
BLS_COUNT_CARE
Count
1 - 3
4 - 15
16 - 30
31 - 45
46 - 100
101 - 200
201 - 262
Water