



# CASE STUDY { **Montgomery County, MD** Connects Frequent 911 Callers to Comprehensive Support

## RESULTS FOR AMERICA

September 26, 2018

**THE CHALLENGE:** Montgomery County, Maryland has experienced a steady increase in 911 calls for emergency medical services (EMS) in recent years. Among the nearly 84,000 calls to 911 for EMS in Montgomery County in 2013, the 100 most frequent callers were responsible for 3% (over 2,500 calls) of the call load. These residents were usually experiencing non-emergency events that often stemmed from behavioral health issues, substance abuse challenges, chronic illnesses, or a combination of these factors. They also often lacked knowledge of the non-emergency resources available to them.

**THE APPROACH:** Maryland's [Montgomery County Fire and Rescue Service \(MCFRS\)](#) and the County's [Department of Health and Human Services \(DHHS\)](#) improved coordination and data sharing to connect Montgomery County's frequent 911 callers for EMS with the County's services they needed. This partnership allowed the County to better address residents' underlying challenges while reducing the burden on emergency responders. MCFRS and DHHS now 1) pool multiple data sources to identify frequent callers; 2) share relevant information to determine if those residents are eligible for social services; 3) maintain partnerships with local hospitals and transitional care programs; and 4) conduct home visits when necessary.

**THE RESULTS:** MCFRS has been able to refer an increasing number of frequent 911 callers for EMS to DHHS. DHHS then coordinates social services that address callers' underlying and chronic challenges in a proactive and holistic manner. Each year since 2015, the County has seen a 50 to 55% reduction in 911 usage from residents engaged with this initiative.

## INTRODUCTION

Over the past decade, Maryland's [Montgomery County Fire and Rescue Service \(MCFRS\)](#) has experienced a steady increase in 911 calls for emergency medical services (EMS), and the County has struggled to leverage limited resources to meet this growing demand. Between calendar years 2013 and 2017, MCFRS experienced a 15% increase in emergency calls. Like other jurisdictions around the country, Montgomery County, Maryland did not have the resources to keep up with the increase in calls and growing demand on its approximately 40 ambulances, which serve a population of over one million residents.<sup>1</sup>

As a result, MCFRS conducted a data analysis of frequent callers to 911 for EMS and determined that the 100 most frequent callers were responsible for 3% of the average call load. With that analysis, MCFRS approached the County's [Department of Health and Human Services \(DHHS\)](#) and jointly developed a plan to support residents who frequently call 911 by connecting them with social and health services designed to address underlying chronic problems in a proactive and holistic manner. For the purpose of this case study, 911 calls refer to those calls made to the Montgomery County 911 dispatch center for EMS.

Based on MCFRS' experience, they knew that transporting frequent 911 callers to the emergency room was often not the best response for the caller. First responders were coming in contact with the same individuals time and again, and it was becoming increasingly apparent that for individuals who frequently call 911, the calls are often symptomatic of one or more serious underlying issues. MCFRS found

that residents who frequently call 911 are often experiencing behavioral health issues, substance abuse challenges, chronic illness, or some combination of these conditions. MCFRS also found that these individuals often tend to lack knowledge of the non-emergency resources available to them.

[David Gottesman](#), Montgomery County CountyStat Manager and Results for America Local Government Fellow, highlighted this ongoing project within Montgomery County as an exemplar of how the County is using data to improve outcomes for residents. The County plans to use this example of data analysis and cross-departmental coordination to help spread these practices across multiple government agencies and issues.

## THE CHALLENGE

Beginning in the 2012–2013 fiscal year, Montgomery County, Maryland began experiencing a significant 3 to 4% increase in calls to their emergency call system. A recent data analysis of frequent callers to 911 for emergency medical services (EMS) demonstrated that the 100 most frequent callers were responsible for 3% of the average call load.<sup>2</sup> As these trends persisted over time, [Montgomery County Fire and Rescue Service \(MCFRS\)](#) and the County's [Department of Health and Human Services \(DHHS\)](#) began to consider a multidisciplinary approach to assisting those residents who frequently call emergency services in Montgomery County. They began researching best practices around the country, including ongoing efforts in [Minnesota](#), [Las Vegas, NV](#), [Spokane, WA](#), and [Fort Worth, TX](#), in search of a solution. It was clear that with limited resources and increasing demand, the County would not be able to keep up with call demand without changing their approach.

## 911 Emergency Medical Services (EMS) Call Volume in Montgomery County, MD Keeps Rising

Year	Total EMS Calls	Total Number of Patients Transported	Rise in Total EMS Calls
2013	83,782	63,743	n/a
2014	86,364	67,369	3%
2015	90,543	68,784	5%
2016	94,661	71,528	4%
2017	96,007	71,500	1%

SOURCE: MONTGOMERY COUNTY FIRE AND RESCUE SERVICE, JULY 2018

“By targeting these individuals with the medical and social services they needed, we were able to reduce EMS calls from these individuals by more than half and – most importantly – made sure these County residents were getting the help they needed on the front end.”

— **IKE LEGGETT**  
Montgomery  
County Executive<sup>3</sup>



Montgomery County Executive Ike Leggett at a 2017 Suicide & Drug Abuse Prevention event.



## THE APPROACH

Maryland's [Montgomery County Fire and Rescue Service \(MCFRS\)](#) analyzed 911 calls and identified a small number of residents who frequently call emergency services. These residents made more than four 911 calls for emergency medical services (EMS) in 30 days, often for non-emergencies. MCFRS approached the County's [Department of Health and Human Services \(DHHS\)](#), who were keenly aware of the scope of need of some of the County's most vulnerable residents and expressed interest in partnering with MCFRS on a solution.

As a first step, in 2015, MCFRS provided DHHS with the names of 14 individuals who made frequent 911 calls for EMS. DHHS went through the necessary privacy clearance process and was able to match nine of the names with residents in their databases who were receiving Montgomery County social services. DHHS then contacted these individuals and conducted a review of additional County social services that could be appropriate for each resident based on their case history and eligibility.

DHHS then provided the relevant services or referred residents to an appropriate provider. This approach both reduces the use of emergency services and connects residents with the services they need. DHHS often connects residents who make frequent 911 calls to Montgomery County's [Behavioral Health](#), [Homeless Outreach](#), [Adult Protective Services](#), and [Wellness and Independence Seniors at Home](#) programs.<sup>4</sup>

As it became increasingly clear that this partnership could benefit some of the most vulnerable residents in Montgomery County and reduce 911 call volume, the two departments continued their collaboration over the subsequent years. Beginning in 2017, Montgomery County's Emergency Medical Services, Behavioral Health, and Crisis Services

teams met weekly to review the cases of residents who frequently use emergency services and determine whether or not the resident is known to another county government system. At this point in the process, the County also partnered with other human services providers and began to coordinate home visits by a paramedic trained to make community follow-up visits. During the first six months of 2017, from a list of 38 frequent 911 callers, 74% of those residents (28 individuals) were connected to the County's behavioral health services and 76% of those residents (29 individuals) either reduced or ceased 911 calls for non-emergency situations.

Now, Montgomery County takes the following steps in an effort to curb the number of residents frequently calling 911:

- MCFRS pools different data sources to identify frequent 911 callers. Data sources include EMS call reports and an internal tracking system that flags any caller with more than four calls in 30 days.
- When MCFRS becomes aware of residents frequently calling 911, they share the relevant information with DHHS who then determines whether individuals are eligible for County services such as Montgomery County's [Behavioral Health](#) resources, [Homeless Outreach](#), [Adult Protective Services](#), [Wellness and Independence Seniors at Home](#), and more.<sup>5</sup>
- The County maintains partnerships with six local hospitals and works with [transitional care](#) programs, which help coordinate continued health services for uninsured patients. Transitional care programs help patients manage ongoing health needs across different healthcare settings and navigate the range of healthcare providers involved in treating chronic conditions.
- In some cases, a Montgomery County paramedic trained to make community

## THE APPROACH (CONTINUED)

follow-up visits may conduct a home visit in an effort to ensure an individual is receiving the best combination of services and reduce the likelihood of unnecessary 911 calls. During these visits, the paramedic works with individuals to determine a care plan, find a primary care provider, conduct home safety checks, and address other needs that arise during the visit.<sup>6</sup>

## TIPS FOR REPLICATION

- **Individualized Support is Necessary:** Even though the County has a list of names of frequent 911 callers, each caller's situation is unique and their needs must be addressed on a case-by-case basis.
- **Continued Engagement is Key:** If care is disrupted at any point, residents who frequently called 911 are likely to revert back to relying on Montgomery County's emergency response system. By continuing to engage with these residents over time, the County reduces the likelihood that these residents will require an emergency response in the days, months, and years to come.
- **Communicating with People on the Ground is Critical:** It has been important for staff from [Montgomery County Fire and Rescue Service \(MCFRS\)](#) and the County's [Department of Health and Human Services \(DHHS\)](#) to engage with practitioners in the field in order to better understand the increase in 911 call demand for emergency medical services (EMS). Talking to frontline responders such as EMS teams and social workers helps identify a pattern of frequent 911 callers for non-emergencies – the first step toward solving this issue.
- **Start Small and Learn as You Go:** In 2015, MCFRS shared the names of 14 high-frequency 911 callers with DHHS and, over

“CountyStat supports and celebrates the smart use of data and the collaboration between departments to identify and address residents' needs. The great work by MCFRS and DHHS has real impact on the well-being of vulnerable residents and offers an ideal partnership example for other County departments and jurisdictions alike.”

— DAVE GOTTESMAN  
Montgomery County, MD  
CountyStat Manager

90 days, found a 55% drop in 911 usage from these residents due to the County's support services. Building individualized service plans is a time-consuming approach, and this initial success in reducing 911 calls has been critical to ensuring continued support for the initiative.

- **Build Cross-Departmental Relationships:** Prior to the start of these efforts, MCFRS and DHHS did not fully understand the range of each other's services or their respective decision-making processes. By holding regular meetings with representatives from MCFRS and DHHS to address the needs of frequent 911 callers, the teams have developed a mutual respect and understanding for each other's services, decision-making processes, and areas of expertise. Now, MCFRS and DHHS work in close partnership to refer clients to the department that can best support their needs. This allows MCFRS to focus on responding to crises while DHHS provides longer-term social services support to residents.





Montgomery County celebrates a new fire truck at the Sandy Spring Volunteer Fire Department in 2017.

## THE RESULTS<sup>6</sup>

The persistence and ongoing efforts of Montgomery County, Maryland's [Montgomery County Fire and Rescue Service \(MCFRS\)](#) and the County's [Department of Health and Human Services \(DHHS\)](#) have led to a reduction in the number of frequent 911 calls for emergency medical services (EMS) for non-emergencies. MCFRS has been able to refer an increasing number of frequent 911 callers to DHHS, who helps coordinate social services that assist with the callers' underlying and chronic challenges using a proactive and holistic approach.

- Each year since 2015, the County has seen a 50 to 55% reduction in 911 usage from residents who received assistance through the partnership between MCFRS and DHHS.

- The average cost of an ambulance ride is \$500, and in 2017 the County was able to avoid approximately 1,300 unnecessary rides – a health care system cost-savings of approximately \$260,000.
- An average visit to the Emergency Department costs around \$1,000. In 2017, the County prevented approximately 300 unnecessary hospital visits – a cost-savings of approximately \$300,000.
- Data from 2017 show a leveling off of all EMS transports, however further research is needed to determine whether the efforts of MCFRS and DHHS were the cause.

In addition to these results, individual anecdotes illustrate the ways in which this initiative is working to better the lives of its residents. A woman experiencing



## THE RESULTS (CONTINUED)

homelessness had a history of calling 911 on particularly cold nights so that she could sleep in a warm emergency room. As a result, Montgomery County transported her to the emergency room approximately 250 times over the last two winter seasons. To address this pattern and better meet her needs, an MCFRS employee began working with DHHS and created a plan to connect her with local service providers. Thanks to these efforts, she no longer frequently calls 911, she now receives health coverage through Medicaid, and she is enrolled in school.

As a result of its success to date, MCFRS has expanded from one full-time employee dedicated to identifying and referring frequent 911 callers in 2016 to two employees in 2017. Currently, those working on this effort have been granted funding for a Masters Level Social Worker and a Registered Nurse within

DHHS, in addition to a civilian data analyst and program manager to be housed within MCFRS.

MCFRS and DHHS have made substantial progress in addressing the needs of some of their most vulnerable residents, while also reducing the inefficiencies created by frequent non-emergency 911 calls. By connecting individuals who frequently call 911 with social services, the two departments are able to address these residents' underlying chronic problems in a more proactive, holistic manner.

As the County looks to continue these efforts, County staff hopes to obtain health care system utilization data, implement customer satisfaction surveys, and evaluate the external validity of their work. Looking ahead, Montgomery County officials hope to apply this cross-departmental model to other County-wide challenges facing residents and are already taking similar steps to address the opioid epidemic.



Montgomery County Executive Ike Leggett at a 2017 celebration of a new fire truck for the Sandy Spring Volunteer Fire Department.

## ABOUT RESULTS FOR AMERICA'S LOCAL GOVERNMENT FELLOWSHIP PROGRAM

Results for America's Local Government Fellows program was founded in September 2014 to provide an advanced group of local government leaders in diverse and influential cities and counties across the country the knowledge and support to implement strategies that consistently use data and evidence to drive policy and budget decisions on major policy challenges. With the support and guidance of Results for America, the Local Government Fellows lead their governments toward advanced stages of data-driven and evidence-based policymaking in order to address major policy challenges in their communities. The **16 cities and counties** represented in the Fellowship collectively represent more than **28 million** people and **\$148 billion** in local government spending.

### RFA engages its local government Fellows in:

- Defining short- and long-term policy goals;
- Developing research partnerships with academics;
- Sharing best practices and demonstration projects;
- Problem solving among peers;
- Receiving individual feedback and coaching; and
- Participating in a national network and peer cohort.

## ACKNOWLEDGEMENTS

Results for America would like to thank County Executive Ike Leggett for investing in the use of data and evidence to improve government services, as well as the [Montgomery County Fire and Rescue Service \(MCFRS\)](#) and [Department of Health and Human Services \(DHHS\)](#) teams for their assistance in developing this case study:

- Alan Butsch, Battalion Chief, MCFRS, Emergency Medical Services Section
- Ashley Robinson, Captain, MCFRS, Emergency Medical Services Section
- Denise Bruskin-Gambrell, LCSW-C, Adult Protective Services Investigations Supervisor, DHHS

- David Gottesman, CountyStat Manager
- Jamie Baltrosky, Captain, MCFRS, Emergency Medical Services Section
- John Kenney, Chief, Aging & Disability Services, DHHS
- Mario Wawrzusin, Administrator, Adult Protective Services, DHHS
- Richard Schiffauer, Adult Services Program Manager, DHHS

## ADDITIONAL RESOURCES

- Read more about the national trend of increasing 911 medical calls in, "[No one quite sure why 911 medical calls are surging](#)", by Matt Rocheleau in the Boston Globe (November 29, 2015)



## ADDITIONAL RESOURCES (CONTINUED)

- Learn how Las Cruces, New Mexico is approaching this challenge in, "[New Project Aims to Reduce 911 Calls](#)", by Diana Alba Soular in the Las Cruces Sun-News (March 13, 2017)
- Learn more about Results for America's **Local Government Fellowship** at <http://results4america.org>

## AUTHORS

**Maia Jachimowicz**, Results for America Vice President of Evidence-Based Policy Implementation, [maia@results4america.org](mailto:maia@results4america.org)

**Sophie Bergmann**, Results for America Program Associate, [sophie@results4america.org](mailto:sophie@results4america.org)

**Jennifer LaMotte**, Results for America Program Intern (former), [info@results4america.org](mailto:info@results4america.org)

## REFERENCES

1. Alan Butsch, Email Consultation, provided to RFA September 21, 2018.
2. Ibid.

3. "Leggett Announces Innovative Program to Serve Frequent Users of Ambulance Services More Efficiently & Effectively." Montgomery County. Press Release. November 15, 2017. [https://www2.montgomerycountymd.gov/mcgportalapps/Press\\_Detail.aspx?Item\\_ID=21588](https://www2.montgomerycountymd.gov/mcgportalapps/Press_Detail.aspx?Item_ID=21588).
4. Alan Butsch, Montgomery County MCFRS MIH Experience 2015–2017, Microsoft PowerPoint, provided to RFA July 10, 2018.
5. Ibid.
6. Ibid.
7. Ibid.

## PHOTOS

**Cover Photo:** Maryland–National Capital Park and Planning Commission

**Page 3:** Montgomery County, MD Flickr

**Page 6:** Montgomery County, MD Flickr

**Page 7:** Montgomery County, MD Flickr

## ABOUT THE INVEST IN WHAT WORKS POLICY SERIES

This report is part of Results for America's Invest in What Works Policy Series, which provides ideas and supporting research to policymakers to drive public funds toward evidence-based, results-driven solutions. Results for America is committed to improving outcomes for young people, their families, and communities by shifting public resources toward programs and practices that use evidence and data to improve quality and get better results.



This case study has been produced with the generous support of the Laura and John Arnold Foundation. The case study is an independent work product of Results for America, and the views expressed are those of the authors and do not necessarily represent those of the funder.