

**Not Entitled to Their Own Facts:
Data Shows Ambulance Fees Will Deter
Emergency Calls for Help**

Prepared By:

**Montgomery County Volunteer Fire/Rescue Association
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Executive Summary

Ambulance fee supporters, most prominently County Executive Isiah Leggett, repeatedly have said that his proposal to charge \$300 to \$800 or more for emergency transport to the hospital will not discourage people from calling 911 in a medical emergency. They say there's no evidence showing ambulance fees will discourage such calls, and they cite the experience of neighboring jurisdictions with such fees as support.

While fee proponents are entitled to their own opinions, they are not entitled to their own facts. And the fact is: There is abundant evidence – rigorous scientific studies, professionally done population surveys, and data analysis from Fairfax County and elsewhere – that fees *do* create a barrier to activation of the EMS system and pose a serious risk to public health and safety, especially among poor and elderly populations,.

Multiple Data Sources: Ambulance Fees Will Discourage Calls for Help

Scientific Survey Data

- A paper released on **May 6, 2010**, by the Heart Foundation of Australia – whose emergency medical system is similar to that in the United States – reported that almost 7% of people would be "very" or "somewhat" likely to delay calling an ambulance due to the cost involved.
- The Heart Foundation study results are similar to those of a **February 2008** survey of Montgomery County, MD, residents that found 74% of County residents believe that it is very or somewhat convincing that ambulance fees would cause elderly and poorer patients needing transport to a hospital to hesitate or delay calling 911 – only 24% residents believed fees would not deter calls to 911.

Medical Studies

Three studies in peer-reviewed medical journals found that cost considerations may play a factor in delaying activation of the emergency medical system in cardiac emergencies.

- "Economic considerations may affect EMS system utilization among underinsured and low-income patients experiencing a cardiac event," cited in *Association between prepayment systems and emergency medical services use among patients with acute chest discomfort*

syndrome (for the Rapid Early Action for Coronary Treatment (REACT) Study), Ann Emerg Med. 2000 June; 35(6):573-8.

- "The results of this study indicate that indecision, self-treatment, physician contact, and **financial concerns** may undermine a chest pain patient's intention to use EMS," cited in *Demographic, Belief, and Situational Factors Influencing the Decision to Utilize Emergency Medical Services Among Chest Pain Patients*, Circulation (Journal of the American Heart Association), 2000:102; 173-178 (emphasis added).
- "Lack of health insurance and financial concerns about accessing care among those with health insurance were each associated with delays in seeking emergency care for AMI [heart attack]." *Health Care Insurance, Financial Concerns in Accessing Care, and Delays to Hospital Presentation in Acute Myocardial Infarction*, JAMA, 2010; 303(14):1392-1400.

The Experience in Fairfax County and Elsewhere

- An analysis of Fairfax County fire/rescue data shows that EMS calls in Fairfax County (when adjusted for population) dropped the year ambulance fees were imposed and have not returned to their pre-fee levels.
- In New Brunswick, Canada, the number of 911 calls for emergency assistance dropped approximately 13% after ambulance fees were reinstated. Between July 1 and December 31, 2008, the local ambulance service received 53,402 emergency calls – 6,893 more than in the same period in 2009, following the reinstatement of ambulance fees. The CEO of the ambulance service has stated that the fees were a likely factor in the drop in 911 calls.

In the face of these numerous sources of direct and indirect data supporting the common sense notion that if you charge hundreds of dollars for ambulance transport people will be less willing to call 911 and/or be transported to the hospital, fee supporters have offered no studies or analyses to support their position. Not one. They rely almost exclusively on the fact that other jurisdictions claim no problems or drop in calls (which, described in this report, is contradicted by the actual data in Fairfax County). It is not surprising that these jurisdictions claim ambulance fees have no affect on emergency calls – the jurisdictions have become addicted to ambulance-fee revenue and have no interest in determining whether such fees pose a threat to public health and safety. In fact, the four neighboring jurisdictions cited most often by fee supporters – Fairfax, Prince George's, and Frederick counties and Washington, DC – have not published or released a single analysis or study of what impact

their fees have on the willingness of citizens to call 911 when help is needed most. Not one.

The consequences of the ambulance fee debate are profound, particularly the potential threat to public health and safety. There is compelling evidence, from multiple credible sources, that ambulance fees will deter emergency calls for help or discourage patients from being transported to a hospital. Until ambulance fee supporters can marshal sufficient evidence to the contrary, they should stop misleading the public with their sweeping claims and promises and promptly withdraw the ambulance fee proposal.

Scientific and Professional Survey Data

Heart Foundation Survey

On May 6, 2010, the Heart Foundation of Australia¹ – the highly respected Australian counterpart to the American Heart Association – released a paper citing a study of more than 3,000 people. The study’s primary finding:

“6.7% of all respondents stated that they were 'very' or 'somewhat likely' to delay calling an ambulance due to the cost involved, despite respondents recognizing heart attack as a medical emergency.”²

Extrapolated to the total Australian population aged 35-65 years, this suggests that up to 650,000 people would delay calling an ambulance when experiencing heart attack warning signs because of cost considerations. According to the Heart Foundation report:

“There is evidence that some people suffering medical emergencies, including heart attack victims, delay calling an ambulance. Fear of incurring substantial cost is one factor causing such delay. . . . Best practice care for many medical emergencies requires early assessment, stabilisation and rapid transport to an appropriate hospital facility. Worse outcomes, and unnecessary deaths, occur if access to ambulance care is delayed.”

The Heart Foundation study also noted that jurisdictions that already charge for ambulance service are moving away from “soft” billing practices toward more aggressive billing collection policies:

Proposals from within some state governments could have the opposite effect [of decreasing barriers to early EMS access]. A 2008 review of the NSW ambulance service noted that the level of bad debt is increasing. It suggested urgent action:

¹ The Heart Foundation of Australia is the highly respected Australian counterpart to the American Heart Association. The Foundation’s report was prepared by Dr. Bill Coote, who previously served as the head of the Australian Medical Association, which is the Australian equivalent of the American Medical Association.

² Universal Ambulance Cover Consultation Information, Heart Foundation, May 6, 2010, available at www.heartfoundation.org.au/Professional_Information (“Heart Foundation Report”).

“Of the patients who constituted primary transports in 2006/2007, only about 16% were directly chargeable. This takes into account all exemptions and payments by third parties. Of this 16%, less than two-thirds are actually charged by the ambulance service. The ambulance service should assess all available options to recover debt in accordance with a hardship policy to be developed in line with government guidelines.”

The willingness of community members to call an ambulance in an emergency may be reduced if the public became aware that ambulance services were to pursue "all available options to recover debt."

The Foundation's report describes the Australian EMS system in considerable detail, which closely resembles the EMS system in the United States generally and Montgomery County specifically.³

2008 Montgomery County Survey

The Heart Foundation Study results are consistent with the results of a 2008 study commissioned by the Bethesda-Chevy Chase Rescue Squad. The survey found that 74% of County residents believe that it is very or somewhat convincing that ambulance fees would cause patients needing transport to a hospital to hesitate or delay calling 911 – only 24% residents believed fees would not deter calls to 911.⁴

³ See Heart Foundation Study at 16-17.

⁴ The February 2008 survey was conducted by Global Strategy Group, a prominent public opinion research company in Bethesda, Maryland. The survey of 400 residents had a margin of error of +/- 4.9%.

Medical Studies

Three studies in peer-reviewed medical journals found that cost considerations may play a factor in delaying activation of the emergency medical system in cardiac emergencies. These studies are particularly relevant to the ambulance fee debate, as public health authorities know that early activation of the EMS system will have a direct and positive impact on outcomes for patients experiencing heart attacks, strokes, and similar medical emergencies. Barriers to such early activation, including financial barriers, can pose a serious public health and safety risk.

The first study appeared in the June 2000 edition of the *Annals of Emergency Medicine*. The study, which looked at the impact of financial considerations on whether low-income and under-insured patients call 911 for emergency medical assistance when experiencing a heart attack or other cardiac-related emergency. A key finding of the study:

"Economic considerations may affect EMS system utilization among underinsured and low-income patients experiencing a cardiac event."⁵

A second study around the same time looked at what factors may impede a chest pain patient's decision to seek emergency medical treatment. The study concluded:

"The results of this study indicate that indecision, self-treatment, physician contact, and financial concerns may undermine a chest pain patient's intention to use EMS."⁶

Most recently, a study in the April 2010 Journal of the American Medical Association (JAMA) examined whether financial concerns from the patient's perspective about accessing medical care in those with health care insurance is associated with prehospital delays. The study noted that "acute myocardial infarction [heart attack] is a clinical condition for which delays in seeking care can have significant, adverse consequences on patients' outcomes." Almost one million individuals in the United States each year suffer an AMI, "and the benefits of early treatment are clear and substantial," the study noted. Because prehospital delays are associated with higher AMI deaths and serious adverse

⁵ *Association between prepayment systems and emergency medical services use among patients with acute chest discomfort syndrome (for the Rapid Early Action for Coronary Treatment (REACT) Study)*, Ann Emerg Med, 2000 June; 35(6):573-8.

⁶ *Demographic, Belief, and Situational Factors Influencing the Decision to Utilize Emergency Medical Services Among Chest Pain Patients*, Circulation (Journal of the American Heart Association), 2000:102; 173-178.

outcomes in patients with "no insurance or those with insurance but reporting financial concerns about accessing care are at higher risk for prehospital delays is important because it would suggest that reducing financial barriers to care . . . could reduce delays and improve outcomes," according to the authors. Key provisions of the study are excerpted below.⁷

Results Of 3721 patients, 2294 were insured without financial concerns (61.7%), 689 were insured but had financial concerns about accessing care (18.5%), and 738 were uninsured (19.8%). Uninsured and insured patients with financial concerns were more likely to delay seeking care during AMI and had prehospital delays of greater than 6 hours among 48.6% of uninsured patients and 44.6% of insured patients with financial concerns compared with only 39.3% of insured patients without financial concerns. Prehospital delays of less than 2 hours during AMI occurred among 36.6% of those insured without financial concerns compared with 33.5% of insured patients with financial concerns and 27.5% of uninsured patients ($P<.001$). After adjusting for potential confounders, prehospital delays were associated with insured patients with financial concerns (adjusted odds ratio, 1.21 [95% confidence interval, 1.05-1.41]; $P=.01$) and with uninsured patients (adjusted odds ratio, 1.38 [95% confidence interval, 1.17-1.63]; $P<.001$).

Conclusion Lack of health insurance and financial concerns about accessing care among those with health insurance were each associated with delays in seeking emergency care for AMI. (Emphasis added)

⁷ *Health Care Insurance, Financial Concerns in Accessing Care, and Delays to Hospital Presentation in Acute Myocardial Infarction, JAMA, 2010; 303(14):1392-1400.*

Experience of Fairfax and Elsewhere

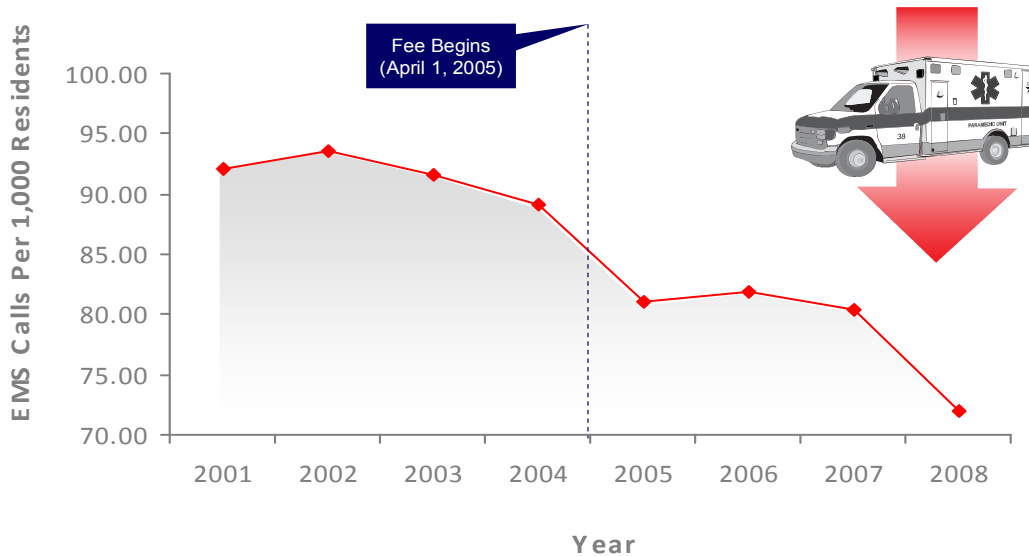
Analysis of Fairfax County Data⁸

Ambulance fee supporters point to Fairfax County as a jurisdiction that has implemented EMS fees with no ill effects. But an analysis of data from the Fairfax County Fire and Rescue Department shows that EMS calls decreased (when adjusted for population) in the year an ambulance fee was introduced and remain below the pre-fee level. In the year immediately after the imposition, EMS calls dropped 9% (as opposed to an average decrease of 2.4% over the two years before (2002 to 2003 and 2003 to 2004). Also, the decrease from 2005-2008 has been 11% compared to a modest 3% decline from 2001 to 2004. The chart (below) describes this precipitous drop.

Year (Fiscal)	EMS Calls	Population	EMS Calls/1,000 Residents
2001 (7/1/2000-6/30/2001)	88,913	964,712	92.17
2002	90,287	964,712	93.59
2003	90,175	984,366	91.61
2004	89,785	1,007,800	89.09
Ambulance Fee Starts April 1, 2005			
2005	84,331	1,041,200	80.99
2006	85,929	1,049,333	81.89
2007	86,499	1,077,000	80.31
2008	76,696	1,065,178	72.00

⁸ Source: www.fairfaxcounty.gov/fr/stats

Fairfax County EMS Calls: Before & After EMS Transport Fee



Experience of New Brunswick, Canada⁹

A drop in call volume immediately after imposition of ambulance fees also occurred in New Brunswick, Canada, which saw the number of 911 calls for emergency assistance drop by approximately 13% after ambulance fees were reinstated recently. Between July 1, 2008, and December 31, 2008, Ambulance NB (the local ambulance service) received 53,402 emergency calls. During the same period in 2009 – *i.e.*, after an ambulance fee was reestablished -- the service received 46,509 calls - a decrease of 6,893 (13 percent).

Alan Stephen, CEO of Ambulance NB, said since it's only been seven months since the fees were introduced, he's hesitant to link them to the decrease. But he said he knows it's a likely factor. "We could not categorically say it's not as a result of (the fees)," according to a local press report.

⁹ "Fewer 9-1-1 calls made since fees introduced," The Daily Gleaner (New Brunswick), February 6, 2010.

Conclusion

In the face of numerous studies, surveys, and analysis of actual EMS call data that charging hundreds of dollars for ambulance transport people will deter people from calling 911 and/or being transported to the hospital, fee supporters have offered no studies or analyses to support their position. They rely on the fact that other jurisdictions claim no problems or drop in calls – which the data contradicts.

It is not surprising that these jurisdictions claim ambulance fees have no affect on emergency calls – the jurisdictions have become addicted to ambulance-fee revenue and have no interest in determining whether such fees pose a threat to public health and safety. In fact, the four neighboring jurisdictions cited most often by fee supporters – Fairfax, Prince George's, and Frederick counties and Washington, DC – have not published or released a single analysis or study of what impact their fees have on the willingness of citizens to call 911 when help is needed most.

The consequences of the ambulance fee debate are profound, particularly the potential threat to public health and safety. There is compelling evidence, from multiple credible sources, that ambulance fees will deter emergency calls for help or discourage patients from being transported to a hospital. Until ambulance fee supporters can marshal sufficient evidence to the contrary, they should stop misleading the public with their sweeping claims and promises and promptly withdraw the ambulance fee proposal.