



Standard Guide for Financing and Financial Accountability of Medical Transportation Systems¹

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1. Scope

1.1 This guide establishes guidelines for understanding the financing of medical transportation systems. It identifies factors affecting financing, system design and performance requirements, revenue sources, financial accountability and management, and requirements for financially efficient systems.

2. Referenced Documents

2.1 ASTM Standards:

F 1177 Terminology Relating to Emergency Medical Services²

3. Terminology

3.1 Definitions of Terms Specific to This Standard:

3.1.1 *patient transport price*—determined by summing all costs related to patient transports, to include all non allowed charges and contractual allowance and adjusted by any revenue generated by any subsidies, contributions and subscription fees. The resulting amount is divided by the total number of patient transports to determine the patient transport price.

3.1.2 *medical transportation system*—(see Terminology F 1177 for the definition of this term.)

3.1.3 *medical transportation services*—(see Terminology F 1177 for the definition of this term.)

4. Significance and Use

4.1 *Management*—Sound fiscal management is essential for all medical transportation systems. Without sufficient financial resources, a system will fail to consistently achieve its objectives. Therefore, finance is a primary responsibility in all systems; be they hospital owned/operated, private, public or volunteer organizations, or any combination thereof.

4.2 *Cost Determination*—This guide is designed to accurately determine actual and imputed costs of providing ambulance service. It provides methodology for understanding the value of services rendered and a basis for realistic industry-wide comparisons.

4.3 *Cost Accounting*—It is recognized that medical transportation services frequently are a part of a larger organization. However, the proper use of this guide mandates that all costs, real and imputed, directly or indirectly related to providing ambulance service, regardless of organizational structure, be totally and accurately accounted for through the use of generally accepted accounting principles.

4.4 *Application*—This guide, as part of the ASTM Standards and Practices, shall apply in its entirety whenever the entire document, or any part thereof, is used by any governmental authority to establish, operate, manage or regulate the delivery or payment for medical transportation services.

5. Environmental Factors

5.1 Several significant factors of a given service area affect its system's resources and related costs. They require careful examination and analysis. Understanding these factors will enhance the ability of those who direct, administer, manage and/or regulate medical transportation systems to more accurately determine anticipated needs and evaluate actual costs.

5.2 *Terrain*—Areas with mountains, valleys, waterways and bridges, and so forth, will usually be less accessible and require more resources resulting in reduced efficiency and a higher patient transport price.

5.3 *Roads and Highways*—Outdated and dangerous design of roads create hazards. These hazards create more demand for service and thus require a greater concentration of resources. The extra resources increase system costs.

5.4 *Weather*—Systems subject to extreme weather conditions (that is, cold and snow, heavy rain and rock/mud slides, hurricanes, heat and dry conditions, wild/forest fires, and the like) will need seasonal or periodic plans to meet area needs during such extremes. Maintenance of proper response plans and participation therein is a cost factor to the system. During such times maximum resources are required and system efficiency is reduced resulting in higher overall patient transport costs.

5.5 *Population Density*—Areas of high population density generate higher call volume and allow greater flexibility in utilization of resources resulting in lower overall patient transport costs.

5.5.1 *Demographics*—Areas with population characteristics with high concentrations of the elderly and economically

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² *Annual Book of ASTM Standards*, Vol 13.02.