CHAPTER

1

BACKGROUND OF THE CCMS/EMS PILOT STUDY

In September 1978, officials of the North Atlantic Treaty Organization (NATO) approved a proposal to accord pilot study status to a project on emergency medical services that had formerly been a part of two other pilot studies sponsored by NATO's Committee on the Challenges of Modern Society. This chapter discusses the Committee's role in the evolution of the Pilot Study on Improving Emergency Medical Services and the two projects from which it emanated, the Road Safety Pilot Study and the Advanced Health Care Pilot Study.

COMMITTEE ON THE CHALLENGES OF MODERN SOCIETY

The Committee on the Challenges of Modern Society (CCMS) was created in April 1969 as the North Atlantic Treaty Organization (NATO) celebrated its twentieth anniversary.

Meeting in Washington in commemorative session on April 10, 1969, the NATO Foreign Ministers heard President Nixon describe the Alliance as it entered its third decade. It was, he said "by its nature ... more than a military alliance; and the time has come to turn a part of our attention to those non-military areas in which we could benefit from increased collaboration."

These remarks introduced a United States proposal to create a committee on the challenges of modern society. This committee would explore ways in which the experience and resources of the Western nations could most effectively be used to improve the quality of life. This would be NATO's third dimension -- a social dimension that would join a strong military dimension and a profound political dimension.

From its beginning, the Committee on the Challenges of Modern Society (CCMS) has operated differently from other international organizations. Its work is characterized by four policies that have been essential to CCMS from its outset.

- First, CCMS does not work through an international staff and with a fixed budget; its work is undertaken by member countries acting as pilot countries for particular projects. Working with other interested member countries (and, over the years, with many countries not members of the North Atlantic Treaty Organization), each pilot country is responsible for developing, conducting, and disseminating the results of a pilot study. Co-pilot countries and other participants share the work load according to their interest. No member is required to participate in any study; on the contrary, each country is free to choose where to best apply its resources and expertise. Results, on the other hand, are available to all.

- Second, CCMS has always emphasized projects that would guide policy formulation and stimulate domestic and international action. While often identifying new areas for research in its "action orientation," CCMS has sought to make the results of research accessible to policy makers.

- Third, CCMS is an outward-looking and open organization. Through this policy of open participation, non-NATO countries have been able to participate directly in its work or, through ad hoc or other organizational arrangements with individual NATO countries, to share information and benefit from material generated by CCMS. For example, faced with many more urgent global health issues, the World Health Organization (WHO) has never been able to devote a major portion of its resources to emergency medical services (EMS). CCMS work in this area may today apply only to a few countries, but in the future, as EMS programs develop in the Third World, many more countries will benefit from these efforts.

- Finally, CCMS has developed a follow-up procedure, indicative of the Allies' concern for the role CCMS should play in national and international environmental activities. Each pilot country assumes the responsibility of ensuring that its study play the most important role in stimulating national and/or international action. Formal follow-up procedures require the pilot country to report to the CCMS Fall Plenary for two years following submission of the final pilot study report on how the results and recommendations are being implemented.

These four concepts -- the pilot country leadership, stimulation of national and international action, open participation and results, and follow-up -- are the essential components of CCMS. Together, they make a unique forum for international cooperation.

ROAD SAFETY PILOT STUDY

At the first meeting of the CCMS, the United States proposed that the problem of road safety be studied by the Committee. This proposal was accepted by NATO. The National Highway Traffic Safety Administration of the U.S. Department of Transportation took lead responsibility for the study.

The Road Safety Pilot Study was divided into seven independent projects, each led by a NATO ally:

- Pedestrian Safety -- Belgium
- Alcohol and Highway Safety -- Canada
- Motor Vehicle Inspection -- Federal Republic of Germany
- Identification and Correction of Road Hazards -- France
- Accident Investigation -- The Netherlands
- Experimental Safety Vehicle -- The United States
- Emergency Medical Services -- Italy.

Each of these projects was a self-contained project in its own right and, apart from overall coordination by the U.S. as Pilot Country, was directed by the NATO country indicated.

The reason for including EMS in a road safety program is readily explained. In NATO as well as non-NATO countries, a vast amount of effort was, and is, being expended toward reducing the numbers of vehicular accidents and the resultant injuries and deaths. Many efforts were directed toward preventing accidents through improved driver education and promoting the use of seat belts and better vehicle structure to protect vehicle occupants.

Notwithstanding these efforts, vehicular accidents continue to occur in great numbers, and deaths and injuries are not being reduced to the extent that experts believe possible. Many victims of traffic accidents die on the scene or shortly thereafter, or suffer severe and possibly permanent disabilities because they do not receive adequate emergency medical care in a prompt and effective manner. They die or are maimed despite the fact that within the medical community of almost all nations, the state-of-the-art of emergency medical care is well developed. The challenge of the EMS Project, then, was to discover how emergency medical expertise could be more fully applied to aid victims at road accident sites and thereafter until they reach definitive medical care in a hospital.

- The First EMS Project

  The stated goal of the Emergency Medical Services Project was to examine the emergency medical services systems of the participating countries to determine their effectiveness in providing medical treatment to persons injured in vehicle accidents. Procedures and practices found to be working effectively in one country were to be studied and communicated to other countries where they might be implemented with similar results.

  The first phase of the project, which started in August 1971, was a preliminary screening to ascertain the scope and nature of the EMS practices in different countries. Toward this end, the project staff developed a preliminary EMS questionnaire and distributed it to eight countries: Belgium, Canada, Denmark, the Federal Republic of Germany, France, Italy, the Netherlands, and the United States.

  The questionnaire asked for information on the following seven broad areas of emergency medical services, all of which deal with the external response system and its connection with medical facilities.

  1. General Organization
  2. Regulations
  3. Personnel
  4. Ambulance Services
  5. Hospital Emergency Departments
  6. Detection and Reporting
  7. Operative Evaluation

In February 1972, a working session of the project was held in Brussels. After reviewing the results of the first questionnaire, the group formulated a small supplementary questionnaire consisting of 19 elements. Results of this latter effort led to the idea that a vastly expanded evaluation methodology might be developed for application at the national level.

- Early Project Results

  In May 1972, the leaders of the various projects comprising the Road Safety Pilot Study addressed a public meeting in Washington, D.C. Dr. Guiseppe Spalatin, the EMS Project leader from the Italian Ministry of Health, reported the results of an analysis of the questionnaire.

  The report showed that, among other deficiencies, in almost all the responding nations there was neither an established, centrally-directed national policy, nor a pre-arranged program for the development of emergency medical services. Moreover, operative responsibilities were not integrated. Rather, they were generally shared among several agencies -- state and local authorities, voluntary non-profit organizations -- all active in the field and without any apparent overall coordination. Other deficiencies noted were: EMS funds were not nationally adopted according to real needs; EMS vehicles and equipment and training for EMS personnel were at best only partially standardized; communication between hospitals and ambulances was practically non-existent; and very little research in first-aid services was being done. (For a complete account of Dr. Spalatin's findings, see the final report of the EMS Project, CCMS Report No. 22, published in March 1974.)

  During the first few years of the project, Dr. Spalatin did the bulk of the work. He travelled extensively in search of data and other information. Other people in the participating nations who contributed to the study were Mr. Rene Coirier of the Government of France, who was especially helpful in his willingness to provide information and to read and comment on much of the material which the project workers developed. Others who made valuable contributions include Dr. Eduardo do Amaral of Portugal and Dr. Jurgen Killian and Mr. Walter Teuber, both of the Federal Republic of Germany. Dr. William R. Gemma, Chairman of the current EMS Pilot Study, also rendered invaluable time and effort to the project.

- Second EMS Project Activated

  In early 1972, a second Emergency Medical Services Project was activated under the CCMS Advanced Health Care Pilot Study. Very close liaison was maintained between the two to prevent duplication or competitive efforts. The goals and accomplishments of the second EMS project will be discussed later in this Chapter. In October of 1972, the project leaders agreed that the EMS Project under the Road Safety Pilot Study should continue to develop the evaluation methodology until the Spring of 1973. At that time and with the final Project Report, all EMS activity would be phased into the Advanced Health Care Pilot Study.

- U.S. Develops EMS Evaluation Methodology

Subsequent to the various project activities reported by Dr. Spalatin, the U.S., as Pilot Country, developed a methodology with which a national, state, or local government might evaluate its EMS programs.

One reason for a deficiency in emergency medical services, in fact, is the difficulty in developing an acceptable method for evaluating established EMS systems. This difficulty stems from problems encountered in assessing the quality of medical care in any aspect of a health care delivery system, including, but not limited to: (1) accessibility to the system; (2) availability of quality health services; (3) adequacy of care rendered; (4) comprehensiveness of the system; and (5) finances to ensure continuity and improvements in the delivery of urgent medical care.

Traditionally, EMS systems have been evaluated by measuring such resources as ambulances, personnel, equipment, training courses and communications against government published and recommended EMS standards. However, this tells little of total system effectiveness; that is, how many fatalities have been prevented and how many serious injuries are mitigated.

An analysis of the answers received in the initial EMS questionnaire sent by Dr. Spalatin pinpointed certain obstacles to a successful EMS evaluation methodology. It became evident that the objectives for which the evaluation methodology is designed, as well as the techniques and guidelines relating to how and where to use the methodology, needed to be clearly spelled out.

With this in mind, the original questionnaire developed by the Italian government was reorganized by arranging the questions into categories representing system elements and sub-elements. This reorganization allowed each element in the EMS system to be evaluated separately. Additional items were included to give a more comprehensive description of the EMS organization, the resources, and the procedures utilized. This methodology was then field tested in several locations in Europe and in the United States.

The evaluation methodology ultimately developed under the CCMS Road Safety Pilot Study by the U.S. represented an effort to define a comprehensive framework for EMS systems analysis, evaluation and decision-making. Within this framework, the impact of the EMS system was identified, quantified, and evaluated.

The results of the evaluation were designed to be used by local administrators and health officials in determining the effect and capability of their existing services and the cost of existing or planned changes. (For a complete presentation of the evaluation methodology, see Section II of the above cited CCMS Report No. 22.)

As previously noted, the methodology was tested in a preliminary way through field visits. Discussions with health and transportation officials in several nations, notably the Federal Republic of Germany and Belgium,

further refined the procedures. Despite the fact a complete application of the methodology was not made, the Pilot Study team concluded that the technique could be helpful in planning and implementing EMS systems and improving these systems at the national, regional, or local levels.

This team effort was the first attempt ever made to collect and evaluate all aspects of an EMS system and make the data available to appropriate officials in a single, comprehensive report. Although the evaluation methodology was developed to aid victims of traffic accidents, it also focused on the emergency medical services provided in other medical crises, such as heart attacks, acute illnesses, and trauma. Obviously, a community EMS system must respond to all urgent medical situations whether located on the highway or elsewhere. Moreover, any comprehensive EMS system must extend beyond the threshold of the hospital emergency room to aspects of subsequent definitive treatment.

The Pilot Study team pointed out that the need to upgrade EMS was apparent throughout the United States and other countries. Applications of the evaluation methodology, even in its preliminary form, they concluded, was a necessary first step for communities, states, and nations in identifying the most cost-beneficial ways of increasing the efficiency and effectiveness of their systems. Knowledge of outstanding techniques, equipment, facilities, and procedures gained through the results of applying the methodology, they pointed out, should be made available to officials planning or contemplating changes to their existing EMS systems.

- Recommendations

The first EMS project officially ended when it was merged into the CCMS Advanced Health Care Pilot Study. It concluded with fifteen recommendations for continuing international efforts to improve the state-of-the-art of emergency health care delivery under the ongoing EMS Project of the Advanced Health Care Pilot Study.

The recommendations were as follows:

1. The evaluation methodology be accepted as the international standard.
2. The Allies conduct a definitive analysis of their EMS systems using the evaluation methodology developed under this project.
3. Once these analyses are complete, an international exchange of the results of the application of the methodology be made.
4. The evaluation methodology be expanded to include the hospital elements of the system since the earlier efforts concentrated solely on the external (to the hospital) response system. As a model may be improved by advanced versions, including more detailed analysis of the hospital role in emergency care, expanded tests be conducted.
5. Each nation assess its training efforts for both professionals and paraprofessionals, noting proficiency requirements rather than curricula alone.

It was further recommended that the Advanced Health Care Pilot Study consider:

1. A program of interchange of personnel with expertise in EMS in order to gain better insight into world happenings in the field.
2. The desirability and feasibility of a universal EMS language. If found feasible, plans for its development should be formulated and implemented.
3. A continuing effort among nations to develop and standardize both the basic and the advanced levels of training for paramedical personnel.
4. An international effort to standardize design, configuration, and medical equipment of ambulances. Included should be a study of mobile intensive care units.
5. A program to study, describe, and if possible, unify the various radio frequencies being utilized to voice and telemetric communications within the emergency medical services function.
6. A program of appropriate research and development on the worldwide problem of early detection of accidents and sudden illness.
7. The monitoring of national EMS projects with a view toward worldwide implementation where advances occur.
8. A joint comparative study between a nation which routinely dispatches a physician to a crash-site (e.g., France) and a nation which routinely dispatches only paramedical personnel (e.g., U.S.) in order to resolve the basic question of need.
9. A cost benefit study for an operational central dispatch system.
10. A cost benefit study for the use of helicopters on a national basis.

CCMS ADVANCED HEALTH CARE PILOT STUDY

The CCMS Advanced Health Care Pilot Study began in 1971. Its four projects, one of which was a second EMS Project, investigated issues of modern health management in which little international work had been done.

- The Second EMS Project

The second EMS Project was activated as part of the CCMS Advanced Health Care Pilot Study early in 1972. Italy, Portugal, and the United States served as the lead countries. Belgium, Canada, Denmark, France, the Federal Republic of Germany, Greece, Iceland, Luxembourg, the Netherlands, Norway, the United Kingdom, Spain, and the International Red Cross participated. Dr. Rosa D'Andrea of Italy, Dr. Eduardo do Amaral of Portugal, and Dr. William Gemma of the United States were the project leaders.

This second EMS project within NATO dealt with efforts to aid victims who need urgent medical treatment for such conditions as heart attacks, burns, industrial and home accidents, and all types of sudden illnesses. Close liaison was established between the two projects to prevent duplication of effort and to ensure a smooth transition of the EMS activity upon completion of the Road Safety Pilot Study into the more general EMS effort under the Advanced Health Care Pilot Study.

The scope of the second EMS project necessarily evolved from one with a narrow focus on a highly developed and unique program to one with a broader view of the roles various institutions and organizations play in the delivery of urgent medical care, and other aspects of pre-system and system activity. It basically focused on developing and promoting an EMS system that would cut across all segments of society and societal institutions, and cover all kinds of emergency situations.

The overall guidelines for the second EMS project were developed at an international EMS meeting, held in San Francisco in October of 1972. Subsequent meetings were held in Lisbon in 1973 and in Rome in 1974, where work groups planned and designed the basic components of a feasible and workable EMS system.

All this activity was brought together in May of 1975 at the International EMS Conference in Munich, Germany, where a consensus of the participating countries formed the basis for the final report on the EMS project. This conference was the largest of all the meetings of the Committee on the Challenges of Modern Society. Delegates from 15 countries and members of the International Red Cross attended.

- Conclusions and Recommendations

The delegates attending the Munich meeting unanimously agreed upon a set of definitions for the four essential elements of sub-systems required in a viable emergency medical system. It is believed that such a system can be adapted to any level of governmental organization--local, regional, or national. These four sub-systems are:

- Detection--recognition and assessment of an unforeseen event
- Notification and Coordination--this entails the call for help and communication with an ambulance service and hospital
- Organization of the EMS system--this includes the participation, performance, and training of all key organizations and people involved in the system
- Emergency Medical Treatment--the provision of emergency medical treatment that will increase the chance of survival and minimize the effects of injury or illness

A deep concern expressed by the delegations at Munich was the need for improving existing systems, especially the need to help fragmented and uncoordinated systems develop into a comprehensive and unified emergency medical services program. The major objectives for achieving these improvements were set forth as follows:

- Training of all medical personnel
- Upgrading of transportation vehicles and emergency equipment
- Communications
- Training of the general public on how to use the EMS system

The Conference agreed that while any one of the four defined sub-systems could assume the highest priority for improvement at any one time, no sub-system should be addressed in isolation, ignoring mutual impacts and interactions with other sub-systems. Assessment of the EMS system, they concluded, was required to discover these interrelationships and to recognize specific problem areas. Again, then, the participating nations stressed the importance of the assessment methodology that had been developed over the previous three years.

To effectively share and transfer EMS knowledge and expertise requires a continuing international mechanism. Therefore, the conferees recommended that appropriate officials be brought together periodically to exchange information, perhaps in the context of an EMS forum. At such a forum participants would exchange ideas, share experiences, and make further recommendations for upgrading EMS systems throughout the world.

The Munich delegates specifically recommended that follow-up conferences be held in Baltimore, Maryland in 1976 and in Montpellier, France in 1977 to ensure that international cooperation continued and that the participating nations established a continuing mechanism to foster the sharing of knowledge and experiences in the field of emergency medicine.

As part of this thrust toward improved international communication and cooperation, the Munich delegates made several other recommendations.

At the national level, these included the collection and dissemination of data, the utilization of the assessment methodology, the expansion of training programs, and also, the development and implementation of national standards of performance.

On an international scale, the recommendations called for: (1) standardization of EMS terms and procedures; (2) development of common performance standards; and (3) cooperative investigative activities on priority EMS issues.

Selected topics such as disaster planning for harbor and airport medical emergencies, and EMS communication for basic and advanced life support systems, were recommended for further consideration by the delegates.

- Follow-Up Activities

At the 1976 meeting in Baltimore, the project participants had the opportunity to participate in the USA Bicentennial Emergency Medical and Traumatology Conference and witness an exhibition which attracted almost 3,000 participants. One of the conference highlights was the test of the Baltimore City and Port Authority Disaster Plan and processing of 350 disaster casualties from a simulated explosion on a ship in Baltimore Harbor. The knowledge gained from this simulation undoubtedly helped the delegates to update their disaster plans.

At the September 1977 Montpellier meeting, the last of the follow-up meetings of the EMS Project under the Advanced Health Care Pilot Study, the delegates addressed three items:

1. Reports from national delegates on EMS progress in their home countries and on the status of the implementation of recommendations in the Munich report.

2. Discussion of special agenda items on the cost of EMS systems, the effectiveness of EMS systems, the EMS symbol for emergency vehicles (the "Star of Life"), pediatric emergencies, and qualifications and training for EMS technicians.

3. Consideration of the future of EMS project activities, including the possible involvement of the World Health Organization's Regional Office for Europe (Copenhagen).

The delegates at the Montpellier Conference concluded that there was a continued need for exchange of ideas and information on a recurring basis to improve accessibility and availability of emergency medical services throughout the world.

It was unanimously recommended that the work of the CCMS/EMS activities continue and that the current project be jointly sponsored by NATO/CCMS and the WHO. Additionally, because of the many new ideas and problem areas that were of interest to the participating nations in this area, it was suggested that the project be elevated to pilot study status under the chairmanship of the United States.

One year later, in September 1978, NATO approved the Pilot Study on Improving Emergency Medical Care.

On the next four pages is a chronological account of the milestones of the EMS activities sponsored by the Committee on the Challenges of Modern Society that ultimately led to the present EMS Pilot Study. (See Exhibit 1-A).

MILESTONES IN THE CCMS/NATO STUDIES

TO IMPROVE EMERGENCY MEDICAL CARE WORLDWIDE

DATE	PLACE	MILESTONES	COMMENTS
August 1971	Brussels, BELGIUM	The CCMS/NATO Road Safety Pilot Study activates a project focused on improving emergency aid to traffic victims. This EMS project, one of seven initiated by the Pilot Study, was the forerunner of the 1978-80 EMS Pilot Study, the subject of this report.	The EMS Project, with Italy as the lead nation, begins developing a comprehensive questionnaire to solicit information on national policies and programs to aid accident victims. The purpose of the project was to exchange information on certain medical practices and procedures that respondents considered to be effective in caring for accident victims.
February 1972	Brussels, BELGIUM	At a joint working session of two CCMS Pilot Studies (Road Safety and Advanced Health Care), participating nations decide to activate a second EMS project to explore all aspects of emergency medical services not specifically related to road safety. Italy and Portugal agree to serve as lead nations.	Members of the first EMS Project review questionnaire responses from Canada, Denmark, Germany, France, the Netherlands and the USA. An expanded questionnaire is prepared, which leads to the idea that a vastly expanded questionnaire could be the basis for a method of evaluating an EMS system.
May 1972	Washington,D.C., USA	EMS Project Leader gives a progress report on Emergency Medical Care Project at a public meeting of the CCMS Road Safety Pilot Study. (See CCMS Report No. 22 for text of presentation.)	Model EMS system defined in five phases. Twelve special areas of interest for further research and practical testing are identified. Results of questionnaires from eight countries (Belgium, Canada, Denmark, France, Federal Republic of Germany, Italy, the Netherlands, and the USA) are presented.
September 1972	USA and several locations in Europe	EMS Project Team develops and makes preliminary field tests of a methodology for evaluating the effectiveness of an ongoing EMS system at the national, state, regional, or local level.	An evaluation methodology developed by the U.S. government is refined and tested in Europe and in the USA.
October 1972	San Francisco, CA, USA	Members of both EMS Projects attend the meeting of the CCMS Advanced Health Care Pilot Study.	Advanced Health Care Pilot Study members develop overall guidelines for the second EMS Project, and recommend refinements and further testing of the evaluation methodology, which was pretested by the Road Safety Pilot Study project team. The recommendation is approved by Belgium, Canada, Denmark, France, Germany, Greece, Italy, the Netherlands, Portugal, the United Kingdom, and USA.
December 1972 - January 1973	USA	Final field tests of EMS evaluation methodology in Pennsylvania, New York and Georgia.	State Health Departments in these states test the validity of the evaluation methodology.
March 1973	Lisbon, PORTUGAL	Work conference of EMS Project in Advanced Health Care Pilot Study.	Representatives of the Federal Republic of Germany, Italy, Portugal, the United Kingdom and the USA develop plans for an international work conference of experts on various aspects of emergency medical care.
April 1973	Brussels, BELGIUM	Final report of EMS Project under the Road Safety Pilot Study drafted. EMS Project continues under the Advanced Health Care Pilot Program.	Report discusses a technique for measuring the effectiveness of EMS systems in member countries using five criteria: organization, personnel, equipment, operational procedures, and records and statistics.
February-March 1974	EUROPE	EMS Project Chairman visits EMS experts in nine European countries.	The Chairman gives a progress report to members of the project team from Belgium, France, Germany, Italy, Hungary, Norway, Portugal, Switzerland and the United Kingdom.

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DATE	PLACE	MILESTONES	COMMENTS
March 1974	Brussels, BELGIUM	Final Report of EMS Project under Road Safety Pilot Study published (CCMS Report No. 22).	Report makes 15 recommendations, including 10 suggesting follow-up tasks for continuing EMS Project under Advanced Health Care Pilot Study.
April 1974	Rome, ITALY	Thirty delegates from ten countries define four essential elements for an effective EMS system.	Delegates define the four essential system components as detection, notification and coordination, organization of the system, and treatment. This methodology is the first ever for evaluating all aspects of an EMS system so that government officials can examine total system in a comprehensive report. Delegates stress the importance of applying assessment methodology for the evaluation of EMS systems to improve or expand capabilities.
May 1974	Ottowa, CANADA	EMS Project Chairman speaks at the Scientific Conference on Traffic Safety.	Chairman presents "An Evaluation Methodology for EMS" to an international audience.
October 1974	Brussels, BELGIUM	At Fall Plenary of CCMS, a draft of the Advanced Health Care Pilot Study final report is issued for review by participating nations.	Report makes eight recommendations for national action, stressing use of assessment methodology at local, regional and national level, and five recommendations for continuing international information exchange on EMS techniques and procedures.
May 1975	Munich, GERMANY	Delegates from 15 countries and the International Red Cross attend the final (and largest) meeting of EMS Project under the Advanced Health Care Pilot Study. Denmark, Greece, Iceland, Luxembourg and the Netherlands participate for the first time.	Conference participants identify four major objectives to achieve comprehensive and unified EMS systems: (1) training of all medical personnel, (2) upgrading of transportation vehicles and emergency equipment, (3) strengthening of communications, and (4) public education. To make information on exemplary EMS systems available to other nations, delegates agreed to schedule an International EMS Forum.
October 1975	Brussels, BELGIUM	Fall Plenary of CCMS.	EMS Project Chairman present program report. Use of blue "Star of Life" symbol is proposed. Symbol will be used for civilian emergencies.
October 1975	Fagernes, NORWAY	Scandanavian Conference on EMS.	Norwegian Society of Chartered Engineers convenes EMS Conference to apply and implement the conclusions and recommendations of 1975 Munich meeting.
March 1976	Los Angeles, CA, USA	EMS Project Chairman speaks at meeting of Urban/Metropolitan Emergency Medical Services.	Chairman recaps progress of both CCMS Projects.
April 1976	Brussels, BELGIUM	Final Report of CCMS Advanced Health Care Pilot Study (CCMS Report No. 43) is published.	Recommendations for national action and international cooperation to improve EMS systems are reported.
May 1976	Baltimore, MD. USA	International EMS Conference, the first follow-up meeting of EMS Project is hosted by USA as part of the official observance of the Bicentennial Anniversary.	Participants discuss recommendations of 1975 Munich Plenary, which included: (1) standardization of EMS terms and procedures, (2) development of common performance standards, and (3) cooperative investigative activities in priority EMS issues.
December 1976	Rome, ITALY	First National Congress on Emergency Medical Care.	EMS Project Chairman and Director of EMS Services in the USA make presentations. Delegates recommend greater cooperation in information exchanges and stress need for an international forum to assess EMS recommendations.

MILESTONES IN THE CCMS/NATO STUDIES TO IMPROVE EMERGENCY MEDICAL CARE WORLDWIDE

DATE	PLACE	MILESTONES	COMMENTS
April 1977	Copenhagen, DENMARK	Representatives of the World Health Organization's Regional Office for Europe and CCMS/EMS Project officials meet.	Officials explore possibility of future cooperation between EMS Project and WHO.
September 1977	Montpellier, FRANCE	Final follow-up meeting of the Advanced Health Care EMS Project. EMS Project elevated to Pilot Study status, with USA serving as lead nation.	Forty-five delegates from 14 countries and the WHO attend. Countries participating are· Belgium, Canada, Denmark, England, Germany, France, Italy, Luxemborg, New Zealand, Norway, Portugal, Spain, Switzerland, USA and WHO Regional Office for Europe.
March 1978	Brussels, BELGIUM	CCMS/EMS Pilot Study Chairman submits progress report at CCMS Spring Plenary Session.	Delegates recommend the following eight sub-project activities: pathophysiology effects of EMS transportation, poison control and intervention, disaster planning, organization and management of EMS systems, utilization of air transportation and EMS communications, survey of emergency medical services, EMS training at the university level, and function of the medical doctor in different patterns of emergency medical help (organization-financial and economic aspects).
April 1978	Wiesbaden GERMANY	CCMS/EMS Pilot Study Planning Meeting, attended by Canada, France, FR of Germany, Italy, The Netherlands, Portugal and the USA.	Fourteen experts from these seven nations develop proposal for Pilot Study for submittal to CCMS in collaboration with WHO.
September 1978	Brussels BELGIUM	NATO Council approves EMS Pilot Study under leadership of USA.	Five sub-projects are approved for investigation, with the following countries acting as lead nation: (1) EMS Survey-Canada, (2) Organization and Management of EMS Systems-USA, (3) EMS Training-Italy and Portugal. (4) EMS Transportation and Communications-France and (5) Poison Control-Italy.
October 1978	Rio de Janeiro, BRAZIL	EMS Pilot Study Chairman makes presentation before the Seventh International Symposium on Acute Care.	Paper entitled "International Activities for the EMS Pilot Study" is delivered.
January 1979	Bethesda, MD, USA	First meeting of the Executive Committee of NATO/WHO/CCMS Pilot Study on Improving Emergency Medical Services.	Twenty-eight delegates from seven countries (Brazil Canada, Columbia, France, Italy, Portugal, the USA) the Pan American Health Organization and the World Health Organization's Regional Office for Europe meet to plan activities for next two years. They develop specific work plans in five sub-project areas and draft survey questionnaire.
February 1979	Toulouse, FRANCE	EMS experts from sixteen countries attend a technical group meeting sponsored by WHO.	The discussion centers on the planning and implementation of emergency medical services and accident prevention programs throughout the world. The forum provides an opportunity for some of the EMS Pilot Study participants to collaborate with experts from countries throughout the world and discuss the five EMS project study areas (see September 1978 comment). Methods of coordinating project activities with WHO are also explored.
April 1979	Monte Carlo, MONACO	EMS Pilot Study experts attend CCMS Spring Plenary Session, held in conjunction with Third International Conference on Disaster Medicine.	Delegates discuss five EMS sub-projects of Pilot Study and make plans for dispatching the EMS survey questionnaire.

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DATE	PLACE	MILESTONES	COMMENTS
October 1979	Washington, D.C., USA	CCMS Tenth Anniversary Plenary, held at the U.S. Department of State.	Results of the Toulouse and Monte Carlo meetings are presented. Endorsement of EMS Pilot Study's work by WHO and the U.S. National Academy of Sciences is reported.
March 1980	Rockville, MD, USA	Chairman hosts Second Annual Meeting of EMS Pilot Study Executive Committee.	Executive Committee lays out plans for its five sub-projects and establishes preliminary agenda for Pilot Study Working Session in Munich.
September 1980	Munich, GERMANY	Final Working Session of CMS/EMS Pilot Study, attended by 40 delegates from 16 countries.	Delegates recommend follow-up action at national and international level. WHO makes provisional commitment to sponsor follow-up work, and delegates plan World Assembly on Emergency Medical Services for USA in Fall 1981.