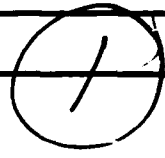


REPORT DOCUMENTATION PAGE

Form Approved OMB No. 0704-0188

AD-A220 214

DTIC
SELECTE
APR 5 1990
S
D



1a. REPORT SECURITY CLASSIFICATION Unclassified		1b. RESTRICTIVE MARKINGS	
2a. SECURITY CLASSIFICATION AUTHORITY ELECTE		3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; Distribution unlimited	
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE APR 5 1990		5. MONITORING ORGANIZATION REPORT NUMBER(S)	
4. PERFORMING ORGANIZATION REPORT NUMBER(S) 19-89		7a. NAME OF MONITORING ORGANIZATION	
6a. NAME OF PERFORMING ORGANIZATION US Army-Baylor University Graduate Program in Health Care		6b. OFFICE SYMBOL (If applicable) Admin/HSHA-IHC	
5c. ADDRESS (City, State, and ZIP Code) Ft. Sam Houston, TX 78234-6100		7b. ADDRESS (City, State, and ZIP Code)	
8a. NAME OF FUNDING / SPONSORING ORGANIZATION		8b. OFFICE SYMBOL (If applicable)	
8c. ADDRESS (City, State, and ZIP Code)		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER	
10. SOURCE OF FUNDING NUMBERS			
PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) A STUDY TO DETERMINE THE APPLICABILITY OF PRE-RECORDED AUDIO HEALTH MEDICAL INFORMATION TO THE AMEDD IN CONUS			
12. PERSONAL AUTHOR(S) CPT Peter A. Basler, Jr.			
13a. TYPE OF REPORT Study	13b. TIME COVERED FROM Jul 84 to Jul 85	14. DATE OF REPORT (Year, Month, Day) Aug 84	15. PAGE COUNT 58
16. SUPPLEMENTARY NOTATION			
17. COSATI CODES		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)	
FIELD	GROUP	SUB-GROUP	Health Care, Medical Information System
19. ABSTRACT (Continue on reverse if necessary and identify by block number)			
<p>This study was conducted to determine if a pre-recorded audio health information system is applicable to the Army Medical Department in the Continental US. The data was collected by telephonic interviews and surveys. This study found that the use of pre-recorded audio health information systems in civilian communities have proven to be frequently and effectively used. The systems have increased public relations between consumers and providers at a relatively inexpensive cost. The consumers of Army Medical Facilities have the same degree of need for health information and turn to the same sources as their civilian counterparts. The author recommended installation of systems wherever possible within the Army Medical Department within cost limitations.</p>			
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS		21. ABSTRACT SECURITY CLASSIFICATION	
22a. NAME OF RESPONSIBLE INDIVIDUAL Lawrence M. Leahy, MAJ, MS		22b. TELEPHONE (Include Area Code) (512) 221-6345/2324	22c. OFFICE SYMBOL HSHA-IHC

A STUDY TO DETERMINE THE APPLICABILITY OF
PRE-RECORDED AUDIO HEALTH MEDICAL INFORMATION
TO THE AMEDD IN CONUS

WILLIAM BEAUMONT ARMY MEDICAL CENTER
EL PASO, TEXAS

A GRADUATE RESEARCH PROJECT
SUBMITTED TO THE FACULTY OF
BAYLOR UNIVERSITY
IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE
OF
MASTER OF HEALTH CARE ADMINISTRATION

BY

Captain Peter A. Basler, Jr., MSC

August 1984

90 04 05 033

TABLE OF CONTENTS

ACKNOWLEDGEMENTS iii

LIST OF FIGURES v

LIST OF TABLES vi

I. INTRODUCTION 1

 Development of the Problem 1

 Review of the Literature 7

 Research Methodology 10

 Footnotes 14

II. DISCUSSION 16

 Present Usage 16

 Consumer Survey 18

 Provider Survey 24

 Cost 28

 Footnotes. 33

III. CONCLUSIONS AND RECOMMENDATIONS 34

 Conclusions 34

 Recommendations 35

APPENDICES 37

 A. Health-Line Brochure 37

 B. Tel-Med Brochure 41

 C. Tape Development Flow Chart 43

 D. Consumer Survey 44

 E. Provider Survey 45

 F. Blanchfield Army Tel-Med Brochure 46

 G. Program Support Fee 54

 H. Script Development Guidelines 55

BIBLIOGRAPHY 56

ACKNOWLEDGEMENTS

I would like to express my sincere appreciation and gratitude to Major Michael Smith, Administrator, Department of Clinical Investigations; Captain Michael Hawkins, PhD, Clinical Research Psychology; and Mrs. Cynthia Stephens, Secretary to the Deputy Commander for Administration, William Beaumont Army Medical Center. In addition, I owe a debt of gratitude to Mrs. Lynn Freeman, Director of Volunteers, Sierra Medical Center, El Paso, Texas.

Major Smith was instrumental in giving the initial impetus to the research project idea and helped to define the problem statement. His assistance provided the foundation for the first draft of both questionnaires. Captain Hawkins' experience in research and numerous publications assisted in developing the final draft of my Graduate Research Project Proposal and in interpreting the data collected from the survey instruments. Captain Hawkins' knowledge and expertise of the hospital's TRS-80 computer system allowed him to guide me through the use of its basic statistical package. The TRS-80 statistical package performed all the computations used for the various statistical analysis. Without Captain Hawkins' guidance, I would have spent weeks computing data and would have surely performed many incorrectly.



By	
Distribution /	
Availability Codes	
Dist	Avail and/or Special
A-1	

Mrs. Stephens has been a valuable aide in performing the word processing tasks to finalize this project and providing constructive criticism to ensure the paper was cohesive and comprehensible. Mrs. Stephens also provided daily motivation for completion of the project by giving me constant reminders of established suspense dates. It should also be known that Mrs. Stephens donated many hours on weekends to ensure this project was professionally typed and formatted. Her loyalty and generosity will never be forgotten.

Sierra Medical Center has an operational Tel-Med system that serves the communities of El Paso, Texas, and Juarez, Mexico. The administrators and in particular, Mrs. Freeman, were very supportive of my project. They often gave of their time to acquaint me with the systems' operation. Mrs. Freeman personally took me under her wing and aided by getting me in contact with Tel-Med, Inc. of Colton California. She also arranged to provide William Beaumont Army Medical Center, through me, 2500 Tel-Med brochures on a quarterly basis for distribution among our consumers. Her candid advice and personal friendship proved to be a most valuable asset.

Again, I thank members of the AMEDD family and staff at Sierra Medical Center for their support and donation of their time and talent.

LIST OF FIGURES

1. Source of medical information (first choice) 20
2. Source of medical information (second choice) 20

11

LIST OF TABLES

1. Consumer Profile	18
2. Consumer Proposed Usage	22
3. Category of Provider Respondents	25
4. Provider Contingency Table (Chi Square Results)	27

I. INTRODUCTION

Development of the Problem

Health has always been a humane concern, but the number of people taking an active role in matters relating to their own health, or that of their families, has been growing in recent years. Historically, there has been an interest in specific health problems, such as birth control, venereal disease, sanitation, and use of drugs. Today, the concerns have expanded to encompass all aspects of health, disease, and access to health care. Recent trends including the consumer movement, self care, wholistic care, cost containment (patient and facility), informed consent, malpractice claims, and the problems of chronic illness have contributed to this expanded interest. All of these social and political concerns have served to amplify the demand for health information.¹

The maintenance of health and prevention of disease lie, for the most part, beyond the control of current medical practice. Economic circumstances, health education, and general attitude have a greater impact on health status and mortality than do the number and kind of medical services used. The major killers in this country today are heart malfunctions, cancer, stroke, and accidents. The primary causative or precipitating factors for each of these are affected by life style, stress, diet, and poor health habits such as smoking or misuse of alcohol or drugs. Social factors also have a profound

effect, not only upon health, but upon access to health care. Thus, it is obvious that when we talk about health information, we are talking not only about disease, but about all these factors which may affect the physical and mental well-being of an individual.²

A 1977 editorial in Science stressed the responsibility each individual has for his own health, but pointed out that lack of knowledge creates a barrier to the assumption of this responsibility.³ The obligation to preserve one's own health implies a right to expect help with information. The present picture of consumer health information is limited and fragmented, at best. Consumers of Army medical services must continually enter our facilities to obtain health information, thereby increasing our waiting lines, at times misusing our providers, and inconveniencing themselves. Worse yet, due to health ignorance, patients often do not present themselves at our doors until the disorder has escalated in severity and is out of control or nearly so. Lack of health information appears to be a prevalent concern of our consumers as shown by their misuse of our emergency and outpatient treatment facilities.

'Consumers must play a more active role in taking care of themselves. In order to do so, medical information which leads to education must be readily available.'⁴ Education implies an effect on the individual; something is learned; and as a result, an action is taken, a behavior changed, or a decision

made. Information dissemination, on the other hand, may be considered a less aggressive role. The individual is directed to or provided with information without interpretation, without opinion, or counseling. Information dissemination facilitates self-education; learning is left to the individual. 'The object (of medical information) is to save lives by educating the public to recognize disease and anticipate its progress, thereby averting the danger that results from neglect. The natural intellectual growth is from ignorance to knowledge. Little by little, information is acquired: it is only thus that education results...'⁵

'You can do more for your health than your doctor can. As an enlightened medical consumer, you can save money and time, and provide for the best possible medical care for yourself and your family... You can learn to recognize when it's important to get to a doctor or hospital. You can learn to cut the high costs of medicine.'⁶ Many visits to providers occur for health information. Demand the worried well has placed upon limited health care resources has been significant.⁷ 'This greater demand contributes to longer waiting lines, less time with the doctor (provider), increased charges (or other costs to the patient) and higher medical-insurance premiums (increased costs to the government). In our national quest for a symptom-free existence, as many as 70 percent (70%) of the visits have been termed unnecessary. The competent physician's response to these visits is either to reassure the patient or to advise measures which are available without prescription.'⁸

'In recent years, the telephone has been used to facilitate access to health information for an information hungry public.'⁹ Numerous medical facilities, private and governmental, have utilized telephonic, layman-oriented, taped messages that can be retrieved by consumers to gather health information. Health-Line and Tel-Med are two examples of civilian systems with Tel-Med being the predominately utilized system (Appendices A & B).

Tel-Med, a nonprofit organization, was created by the San Bernardino County Medical Society in California, and began operation in April 1972. It started as a local experiment to improve access to accurate medical information, and to decrease the overwhelming demand from the worried well. It has now grown to the point that it delivers 1,000,000 health messages each month in over 200 cities in the United States.¹⁰ In El Paso, Texas, it is also utilized by residents of Juarez, Mexico. Call volume varies in different systems depending upon community size, hours of operation, and promotion.

Consumers desiring access to information dial the local Tel-Med telephone number and request the tape by subject title or number. The operator selects the proper cartridge from a bank of tapes and plugs it into a playback device. The tape is in a continuous loop cartridge that automatically shuts off and is ready for play upon the next request.

The tape library now addresses more than 300 subjects in English, with 200 of those also available in Spanish, and 11 other foreign languages. The length of the recordings varies from three to ten minutes. Members of the San Bernardino County Medical Society have written most of the scripts, but many have also come from health care providers in other cities. LTC Collin Smith, from Sheppard AFB, TX, which utilizes the Tel-Med system, says they have expanded their library to include messages on CHAMPUS, hours of operation, eligibility of care, and intend to add other messages on items unique to the military. The scripts are edited and revised by Tel-Med staff into simple language for comprehension at the eighth grade education level. A panel of physicians reviews the revisions for accuracy and quality of presentation. The final script is professionally narrated and recorded (Appendix C).¹¹

'Because Tel-Med programs meet these needs (preventive and health promotion) by emphasizing maintenance of health and preventive or early detection of disease, public response throughout the nation is consistently enthusiastic and supportive. As a bonus, the sponsoring agencies have reaped a harvest of good will and favorable publicity... Tel-Med guides them (consumer) to proper utilization of available facilities. The messages effectively supplement physician and staff counseling for patients and their families. An easily accessible link of communication between providers and consumers has resulted.'¹² Because callers remain anonymous, they can request vital information on sensitive subjects such as venereal diseases or birth control

without fear of identification. Accurate information on drug use and abuse can be presented. A frightened, insecure listener can seek assistance with confidence and without embarrassment.

Tel-Med has proven to be very inexpensive per phone call. A 1979 nation-wide study found the cost to be 23 cents per call. There is probably no less expensive means to provide specific requested health information.¹⁴

The basic objectives for the pre-recorded audio health/medical information system, Tel-Med, are as follows:

1. To increase accessibility to health information by providing standardized, medically certified, easily understood information at no cost to the user; anonymity and confidentiality were to be maintained, parental permission not required.
2. To combat rising health care costs by reducing unnecessary visits to physicians for standardized medical information.
3. To facilitate access to health services for all citizens where there is a definite medical need (includes reduced waiting times).
4. To help people recognize early signs of illness.
5. To help people find appropriate community resources to deal with their medical problems.¹⁴

AMEDD treatment facilities and their consumers may benefit in a number of areas just as our civilian counterparts, through:

1. Increased public relations.
2. Decreased waiting lines.
3. Accurate and better information for lifestyle decisions.
4. Providers can use the system to augment and reenforce medical information given to the patient.
5. Help consumers recognize early signs of illness.
6. Help consumers find appropriate community resources.

The research question is to determine if a pre-recorded audio health information system, which has been successful in the civilian arena, is applicable to the AMEDD in the Continental United States.

Review of the Literature

Studies in the late 60's and early 70's convinced the American Medical Association, the California Medical Association, and the United States Department of Health, Education and Welfare to provide funding for the development of an audio health/medical information system. The system and organization, Tel-Med, was created in 1972 by the San Bernardino County Medical Society as a nonprofit public assistance entity.

Two research efforts published in March and October 1980 provided additional data on use and effectiveness of a telephone health information system, and the need for consumer health information. These two studies and their survey questions serve as the foundation for this research project.

The use and effectiveness study was conducted in Winston Salem by Robert A. Diseker, DrPh; Robert Michielutte, PhD; and Virginia Morrison, MED. The study was performed by conducting random telephonic interviews three years after a telephonic information system (Tel-Med) was implemented. The intent was to determine and gather user characteristics, user motivation, action taken by consumers, knowledge and information gained, and suggested system improvements.

Results of the Winston Salem study indicated (user characteristics) a higher percentage of middle-aged adults and a larger proportion of females had prior knowledge of the system. The results for education and income indicated socio-economic status was positively related to prior knowledge of the system's existence. However, once a consumer knew of the system, usage could be predicted upon sex alone. Women were more likely than men to say they used the system. User motivation questions revealed persons over the age of 50 were more likely to have used the system for their own health problems than were adults age 21-49.

Action taken or behavior modification questions showed 25 percent of the system users had been encouraged to seek medical or dental care initially or sooner than they otherwise would have. Thirty percent reported the system made it unnecessary for them to see a doctor and 42 percent followed a suggestion made on the tape(s). Knowledge gained was demonstrated by the behavior modification that occurred.

Suggestions for improvements included expansion of the number of subject tapes, and to increase advertising/promotion of the service. Less than one percent found the service embarrassing or offensive. Most users (82.7 percent) gave the service an overall "very useful" rating.¹⁵

The study of need for consumer health information conducted by Kathleen A. Moeller and Kathleen E. Deeney, both librarians from Overlook Hospital, Summit, New Jersey, was performed in October 1980. The primary intent was to gather information relevant to the development of a new library. This study, through a written survey, determined information needs, information sources, and the scope of information required by medical consumers.

The conclusions as revealed by the authors showed 72 percent of the consumers needed health information within the past year, with four out of ten unable to find it, indicating a large information gap. Primary sources of information were: physician with 55.5 percent of the responses. The public library capturing 18 percent of the choices and the remainder were spread across parents, friends, newspapers, Tel-Med, magazines, televisions, and other sources. The scope of information requirements, or topics for which they would like access included staying well, illness, sexual, allergies, self-help, stress, dental health, and first aid. Each of the topics included numerous subsets. Continuously stressed was the need for subjects to be addressed in lay terminology.¹⁶

Other studies and numerous articles address the consumers' (patients) need for accurate laymen-oriented health information. This information is not intended to replace the provider but rather to augment their services and aide the consumer in making health and life style decisions.

Research Methodology

Upon completion of an exhaustive literature review concerning the need for and use of medical information by inpatients and outpatients, the research focuses on existing civilian systems and search for military usage. This research includes interviews, both telephonic and in person, and use of survey

instruments. Simultaneously, the surveys collect data to determine the need of health/medical information as felt by Army medical treatment facility consumers and to determine if there exists a difference in usage based on demographic variables: age, education, sex, race, and military status. In addition, data collection is designed to determine the need for health/medical information as felt by providers of Army medical care and to determine if a difference exists between providers who would support a pre-recorded audio health system.

Two different survey instruments obtained responses from providers of care and consumers of health care in AMEDD treatment facilities. The instruments development came from a number of sources.. Initially, questions were obtained from the literature references previously discussed under 'Literature Review.' Questions were added to and deleted from in order to answer basic objectives. The instruments were first discussed with Major Michael Smith, the Administrative Officer for the Department of Clinical Investigation at WBAMC, and LTC Arthur Badget, Associate Professor, US Army-Baylor. Both greatly assisted in formulating the first draft. The second and final draft of the two instruments (Appendix D and E) came about with the aid of Captain Michael Hawkins, PhD, a clinical research psychologist. He assisted in testing the instruments for validity and reliability.

Both surveys were sent to sixteen AMEDD medical treatment facilities (MTFs):

MEDCENS

MEDACs

DDEAMC

Fort Benning

Fort Knox

FAMC

Fort Bragg

Fort Lee

MAMC

Fort Campbell

Fort Meade

WBAMC

Fort Carson

Fort Riley

WRAMC

Fort Hood

Fort Sill

Fort Stewart

These institutions were chosen being they all have Administrative Residents who will assist in coordinating the survey effort thereby increasing the probability of returned forms. In addition, all sized MTFs are represented as is a geographical cross-section. Twenty copies of the consumer survey and ten copies of the provider survey were sent to each institution for a total of 320 and 160 respectively.

Methods of evaluating the surveys include use of frequency distribution, chi square testing correlation matrix, analysis of variance, and regression analysis. Level of confidence for use with chi square and analysis of variance is 95 percent.

Lastly, literature research, telephonic interviews, and site visits are employed to collect cost data to determine the cost of purchasing a commercial system versus the cost of producing an 'in-house' system.

Criteria to determine the applicability of a pre-recorded audio health/medical information system to the AMEDD in CONUS is based on the responses of consumer proposed usage and providers' support through referral. Each must produce a frequency distribution with at least 75 percent affirmative responses.

FOOTNOTES

¹Dottie Eakin, "Consumer Health Information," Bulletin of the Medical Library Association, 68(2) (April 1980): 220.

²Ibid.

³Ibid.

⁴Donald M. Vickery, Take Care of Yourself. (Massachusetts: Addison-Wesley Publishing Company, 1976). p6.

⁵Philip Skrainka, M.D., Medical Information In Sickness and Health, (New York: Coward-McCann Inc. 1980) p 10.

⁶Ibid., p3.

⁷Robert A. Diseker, Dr., P.H., Robert Michielutte, PhD, and Virginia Morrison, Med, "Use and Reported Effectiveness of Tel-Med: A Telephone Health Information System," American Journal of Public Health, 70(3) (March 1980): p229.

⁸Donald M. Vickery, Take Care of Yourself. (Massachusetts: Addison-Wesley Publishing Company, 1976). pl.

⁹Robert A. Diseker, Dr., P.H., Robert Michielutte, PhD, and Virginia Morrison, Med, "Use and Reported Effectiveness of Tel-Med: A Telephone Health Information System," American Journal of Public Health, 70(3) (March 1980): p229.

¹⁰Interview with Mark Provost Manager of Operations Teletronix, Colton, California, 27 December 1983.

¹¹Ibid.

¹²Benson W. Harper, M.D., "Tel-Med - A Success Story," Western Journal of Medicine, 131(2) (August 1979): 163.

¹³Ibid.

¹⁴Robert A. Diseker, Dr., P.H., Robert Michielutte, PhD, and Virginia Morrison, Med, "Use and Reported Effectiveness of Tel-Med: A Telephone Health Information System," American Journal of Public Health, 70(3) (March 1980): p230.

¹⁵Ibid.

¹⁶Deeney, Kathleen E. and Moeller, Kathleen A. "Documenting the Need for Consumer Health Information: Results of a Community Survey." Bulletin of the Medical Library Association (70)2 (April 1982): 236-239.

II. DISCUSSION

Present Usage

Search for a pre-recorded audio health information system in the AMEDD began with interviews among senior AMEDD officers (grades 05 and 06) at WBAMC. The interviews did not produce the discovery of any operational systems. A telephonic interview with the manager of operations Teletronix, a division of Tel-Med, Inc., produced the same results. However, an operational system was discovered in use by Sheppard Air Force Base, Texas.

Provider surveys sent to Blanchfield Army Community Hospital, Fort Campbell, Kentucky, reveal the use of Tel-med at the facility. Telephonic inquiries have produced historical and organizational data. The system has been operational since May 1980. Average usage is 360 calls per month with slight increases during promotional periods.¹

The system is operational 24 hours per day and may be utilized by civilians and military in either community. It is operated out of the communication section by the hospital telephone operators. Staffing of telephone operators for the hospital is at the same level prior to system implementation. The tape library consists of 305 messages (Appendix F). The Community Health Nurse

(CHN), Department of Preventative Medicine, has operational control of the system. The CHN is responsible for keeping the system current and for promotion among the civilian and military community.

The systems' goals are to assist the community in remaining healthy, to recognize early signs of illness, to adjust to an illness or surgery, to prevent some health problems, and to promote public relations in and among the civilian and military communities. The CHN feels all goals have been realized, but not to the extent possible. Call volume must be increased to significantly realize the stated goals. Usage is directly related to promotion and promotion is a time-consuming effort. In order to reap the full benefits of the system, an intense promotion/advertising campaign must be initiated.²

In contrast to the Blanchfield Army Community Hospital, Sierra Medical Center, El Paso, Texas, utilizes the Tel-Med system to a greater degree. Their system receives approximately 1100 calls per month and is operated by two full-time employees per eight-hour shift. The key to their success lies in promotion. Their brochures are readily available throughout El Paso at 7-Eleven Stores. In addition, two billboards and frequent ads in local papers provide the telephone access number. Currently, brochures can also be found in clinics throughout William Beaumont Army Medical Center for use by the military community.

In summation, usage in the AMEDD facility is low; however, it is meeting established goals although minimally. The system can be fully successful if properly promoted among consumers and providers.

Consumer Survey

A set of twenty consumer surveys sent to sixteen AMEDD treatment facilities netted 248 usable surveys for a 77.5 percent return rate. Demographic analysis include use of frequency distribution for sex, race, and military status plus descriptive statistics for education level and age. The demographic data was completed by 243 respondents. The composition (profile) of the respondents are:

TABLE 1
CONSUMER PROFILE

<u>Sex</u>			<u>Military Status</u>		
Males	109	44.8%	Active Duty	99	39.92%
Females	134	55.2%	Dependent, AD	85	34.27%
			Retired, AD	28	11.29%
			Dependent, Ret	33	13.31%
			Other	3	1.21%
<u>Race</u>					
Caucasian	159	65.4%			
Negro	66	27.2%			
Other	18	7.4%			

The mean level of education is 13.23 years with a range of 7 to 23 years. Average age is 33.3 years and a range of 12 to 75 years.

When asked if within the past year have they (consumers) had a need for information on health or disease, 159 or 64.11 percent, responded yes and 89, or 35.81 percent, responded no. The next question asked if they had difficulty obtaining information; 43 or 17.34 percent said yes; and 205, or 82.66 percent, said no. Comparing the number of respondents (159) who said they needed information against the question of difficulty in obtaining information, the result shows a slightly higher percentage, 27.04 percent, responding yes. Therefore, 64 percent of the respondents have needed health/disease related information within the last year, and 27 percent of the group have had difficulty obtaining it.

Consumers were asked to rank the most frequent sources of health information for them. They were given eight sources and asked to rank them on a scale from one to eight, with one being the most frequent source and eight the most seldom. Respondents number 248; however, only 34 complete rankings are given. Figure #1 shows the sources chosen as first (248 respondents) and figure #2 (139 respondents), the second choice.

INFORMATION SOURCE

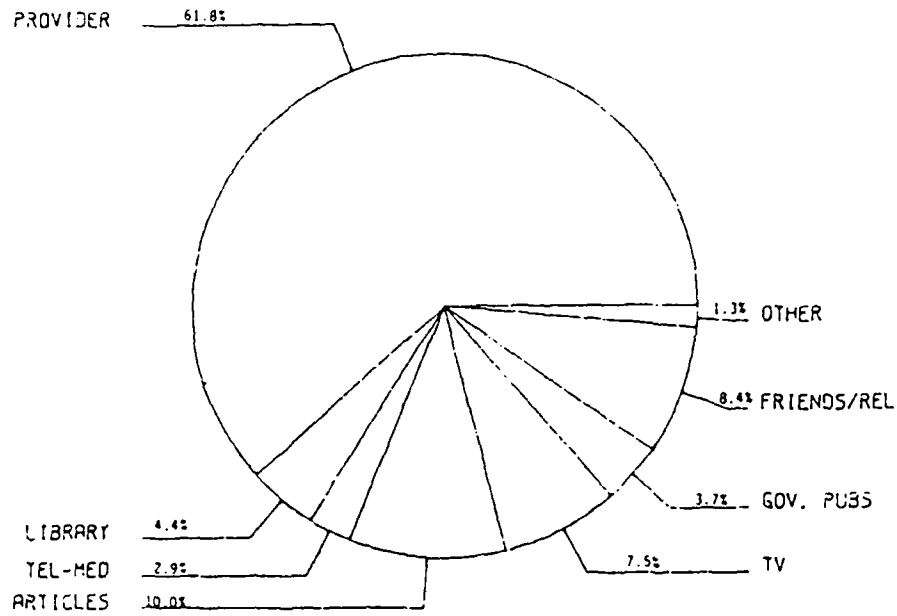


Figure 1. Source of Medical Information (First Choice)

INFORMATION SOURCE

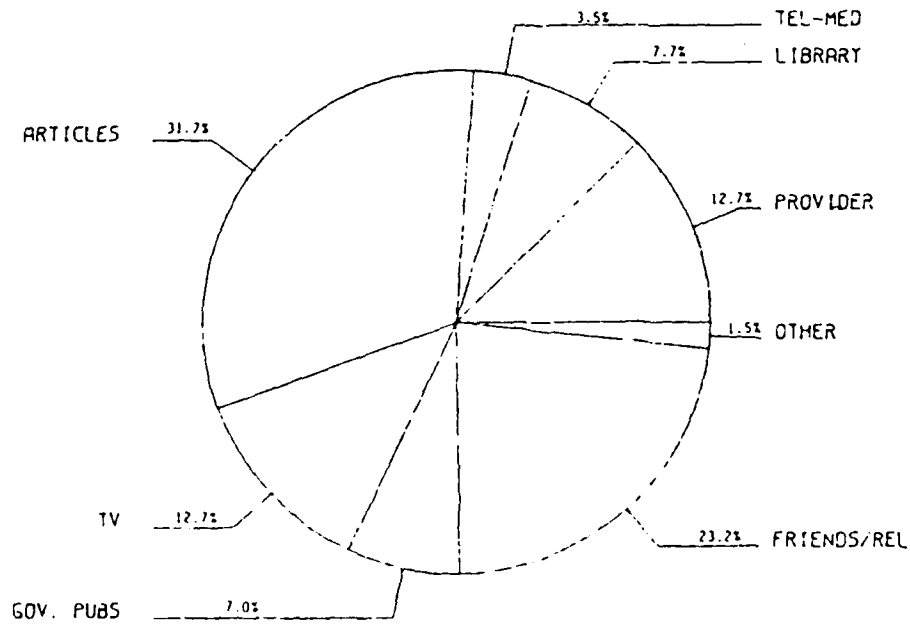


Figure 2. Source of Medical Information (Second Choice)

As might be expected, the provider (Physician, Physician Assistant, Nurse, or Allied Health Scientist) is the first choice for the majority of patients receiving 61.8 percent of the responses. Articles from various journals, magazines, and newspapers with 25 percent are the second most popular source. These results mirror results from the literature review (Moeller and Deeney) in position/ranking. However, this study shows a higher percentile of responses for providers. This may be due to access and availability to the AMEDD health system or to this research question's referral to providers vs physician as in the literature. However, Moeller and Deeney did not give a choice for any other category of provider; therefore, access and availability of AMEDD consumers appear to be the cause for the slight variance.

Question #4 of the consumer survey asks if they would use an audio (taped message) medical information system if it were available. A frequency distribution (Table 2) shows a majority of yes respondents. If all respondents act as they indicate, then the AMEDD consumer would use the system slightly more (81 percent vs 70 percent) than the general population. It must be remembered, in order to use the system, adequate advertising/promotion must reach the consumer. Low usage levels are universally attributed to poor promotion.

TABLE 2
CONSUMER PROPOSED USAGE

	# of Choice Respondents	# of Responses
Yes	201	81.05%
No	46	18.54%
Possible	1	.40%

Comparison to determine if indicated future use differs among groups based on demographic data, sex, race, age, education level, and military status provides data that reinforces the Diseker and Michielutte study. Analysis of variance (ANOVA) use for sex, race, and military status provides statistical significance of correlation for sex only. The results with an F-ratio of 12.6007 and probability value of .0008 indicate that the null hypothesis (Ho), there is no difference between desired use and sex of the respondent, is false. Therefore, there is a statistical difference. Upon evaluating the mean score, 1.29 for males and 1.11 for females (given that yes is scored 1 and no is scored 2), it is obvious females are more likely to use the system. The null hypothesis, based on proposed usage and race, Caucasian, Negro, or other was not rejected at the 95 percent level. Therefore, statistically there is no difference based upon race. Military status also subject to ANOVA resulted in an F-ratio of 2.23 and a probability value of .0655. Although this is very close to rejecting the null hypothesis, it did not; therefore, military status is not an indicator of usage. Should the level of significance have been chosen to be 90 percent, the null hypothesis would have been rejected.

Multiple regression and correlation matrix tests both resulted in disproving any statistical relationship between projected usage, and age or education level. Multiple regression provides a slope in such a small quantity (1/100ths) as to make forecasting based upon age and education levels useless.

The Diseker and Michielutte study on use and effectiveness also showed that sex was a factor in usage with females utilizing the system more than males. Although knowledge of the system was a factor of age, education level, and monetary status (direct relationship) usage after knowledge did not show a direct or indirect relationship.

Questions 5 through 7 address: trust of the system, proposed behavior modifications based upon advice given and increased peace of mind after listening to a tape. The patterns of response follow the results of proposed usage with the exception of peace of mind. Negative responses amounted to 21 percent for trust and 20 percent for behavior modification which indicate the intended usage response of 81 percent was valid. The question concerning peace of mind shows a 31 percent negative response. Most of these responses contained a comment indicating they still would want the provider to reassure them.

Lastly, question #8 of the consumer survey asks if the service would be used: for the entire family, only for the respondent, only for other members of the family, or not at all. A frequency distribution produces 69.35 percent for the entire family, 10.89 percent for the respondent only, no response for other members, and 19.76 percent for not at all. The responses validate question #4 regarding projected usage. Negative responses total 19.76 percent and affirmative responses comprise 80.24 percent which mirror the negative and affirmative responses previously given. The consumer survey produces a respondent profile (Table 1), the current sources of health/medical information (Figures 1 and 2), and proposed usage. Currently providers are the single largest source of information and consumers predict 81 percent would use a pre-recorded information system if it were available to them.

Provider Survey

Providers, Physicians, Physician Assistants, Nurses, and Allied Health Scientists received an eight-question survey at sixteen separate AMEDD MTFs throughout the Continental United States. Each MTF received ten surveys; a total of 160 surveys. The return rate of 82.5 percent represents 132 responses. The survey instrument is designed to measure the feeling providers have towards health/medical information and their projected support of a pre-recorded audio system. A breakdown of the numbers of respondents by category is reproduced in Table 3.

TABLE 3
CATEGORY OF PROVIDER RESPONDENTS

Category	#	% of Responses	Cumulative
Physicians	59	44.7 %	44.7 %
Phys Asst	10	7.58%	52.27%
Nurses	32	24.24%	76.52%
Allied Health Sci	31	23.48%	100.00%

The first question asks providers their opinion regarding the importance of access to information 71.21 percent find access to be extremely important, 25 percent moderately important and 3.79 percent of little importance. Undesirable and extremely unimportant are not response selections. Comparing categories of providers to the responses in question #1 through the use of ANOVA, the null hypothesis, there are no differences between providers' responses, is rejected. The F-ration is 3.32 with a probability value of .0214. The analysis shows physician assistants to value the importance of health/medical information for consumers a little less than either physicians, nurses and allied health scientists. The closer a group's mean value is to one (1), the more they regard the importance of access to health/medical information. Nurse responses have a mean value of 1.125, the closest to one of all four groups. Physicians, Physician Assistants, and Allied Health Scientists have mean scores of 1.37, 1.7, and 1.32 respectively.

Question #2 asks providers if information on health and disease is equally important for all or some patients. 'All' was chosen 75 percent of the time and 'some' 25 percent of the time. This further shows a strong trend for the support of health/medical information availability.

The survey utilized questions 3 and 4 to determine locations and types of pre-recorded systems in and outside the AMEDD. All ten providers at Blanchfield Army Hospital, Fort Campbell, KY, responded 'yes' to knowledge of a system in the AMEDD specifically at their facility. Surprisingly, none of the ten agree on who has operational control or where the system is located. Only one response is correct by saying it is located with communications; however, most are aware of brochures (Appendix E), which contain telephone access number. Question four, awareness of systems outside the AMEDD, is of little to no value. The question is often misinterpreted indicated by the listing of television channels, names of drug companies, books, articles, and other unrelated answers.

An affirmative answer to the referral of patients to a professionally made taped message occurs 107 times for 81.06 percent of the responses and negative responses number 25 for a share of 18.94 percent. Some responses also include comments indicating they, the provider, would first listen to the tape prior to referral. To determine if a difference exists among groups of providers who

would refer patients the statistical test of chi square provides data to reject the null hypothesis. (There is a difference.) The probability value is .1671. Contingency tables of observed frequencies and expected frequencies are in Table 4.

TABLE 4
PROVIDER CONTINGENCY TABLES (CHI SQUARE RESULTS)

	<u>Observed</u>			
	Physician	PA	Nurse	AHS
Yes	43	9	27	28
No	16	1	5	3

	<u>Expected</u>			
	Physician	PA	Nurse	AHS
Yes	47.85	8.11	25.94	25.13
No	11.17	1.89	6.06	5.83

The next two questions (6 and 7) referencing trust in a pre-recorded tape and future time savings are tested among the four groups of providers using ANOVA. In both cases, there is no significant difference among the groups. Scoring ranges from 1 to 5. A score of 2 is used assigned to trusting very much and 3 to trusting tapes a little. The mean score for trusts is 2.4 indicating the groups fell between trusting the tapes very much and trusting

the tapes a little. Again, unsolicited comments make reference to listening to the tapes prior to referring patients.

Time that would be freed up averages 2.96 hours per week with a range of 0 to 10 hours. This may be skewed to the right for the question did not allow for a negative response. Eight responses said a pre-recorded system may generate more patient questions which, in turn, would take more time. These eight responses are coded as the savings of 0 hours; unfortunately, potential time consumption due to additional consumer questioning is never indicated.

Therefore, referral to a system would be performed by more than 80 percent of the providers, physician assistants value medical/health information for patients a little less than the other providers and providers believe such a system would save 2.96 hours per week.

Cost

Although cost is not used as a criteria in this paper for accepting or rejecting the system concept cost is ultimately a factor for a decision by a medical treatment facility. Two alternatives exist in the acquisition of an information system. The first is to purchase a system off the shelf. The second is to produce pre-recorded tapes in-house.

The most widespread system that can be bought off the shelf is Tel-Med. This system has proven successful throughout the country and is in place in more than 200 cities. Tel-Med is also regarded as being highly reliable; it is backed by a nonprofit corporation that has been producing a quality product for 14 years. It satisfies the needs of its health care sponsors and as of this date, has not been subject to litigation.³ Teletronix information systems of Colton, California will provide all the necessary Tel-Med equipment and training to become functional. They will also assist the facility in determining equipment requirements. An initial set up cost, plus one year support fee, is as follows:

I. Equipment Cost		
A. Teletronix Model 1510 (5-unit playback)	\$12,455.00	
B. Phone installation (5 lines)	500.00	
C. Accessory equipment (cartridge holders)	<u>450.00</u>	
		\$13,405.00
II. Tape Cost		
300 Tapes @ \$25.00 each	\$ 7,500.00	
		\$ 7,500.00
III. Program Support Fee (Appendix G)		
\$30.00 per month	\$ 360.00	
		<u>\$ 360.00</u>
TOTAL		\$21,265.00

The Teletronix Model 1510 is capable of playing five separate tapes at one time to as many consumers. The equipment features a 14-month warranty. The total tape cost is dependent upon two variables: quantity and standardization. Quantity speaks for itself; total cost is reduced or increased depending upon the size of the library. A tape taken directly from the master library (standard tapes) costs \$25; re-narrated tapes are \$40 each; and in between is a modified master library tape; one selected by the licensee from the master library that requires the addition of any information, which costs \$35 a piece. Tapes which originate from the licensee or from a script from another licensee are \$40. The total cost estimate is based on a standard tape and a typical library of 300 tapes.⁴

Cost of running an answering service is not included in the estimate. Some facilities such as Blanchfield Army Hospital and Sheppard AFB Hospital incorporate the mission into an existing department without providing additional staffing. In addition, costs may occur for advertising and/or brochures listing available messages. This printing and reproduction may be accomplished by the individual facility or through a commercial firm. Sierra Medical Center uses a local advertising firm who produces brochures at a cost of \$1.50 per 2500 brochures.⁵

In-house costs are the same for the capital equipment, assuming it is purchased from the same vendor, and for the telephone lines. Tapes and program support fees are the only variables in this comparison. Tapes can be produced in the Television Branch, Health Services Media Division, Academy of Health Sciences, Fort Sam Houston, Texas. The actual taping cost of a five and one-half minute tape, the length of an average Tel-Med tape, is \$16. This cost includes \$7 for the cartridge and \$9 for 30 minutes' salary. Two individuals, GS-7, are required: one to read the script and the other to operate the recording equipment. Additional tapes can be reproduced at the rate of six per hour; thereby reducing the \$16 cost to approximately \$10 each.⁶

In addition to \$16 for an original, the cost of script production must be included. Teletronix, Inc. estimates each tape requires a professional writer 20 hours to write. The 20 hours include research, original script documentation, and eventual rewrites as necessary. Plus a panel of six experts, typically five physicians and one lawyer, review the script prior to its taping. Total cost is estimated to be \$750 per original tape for

Tel-Med.⁷ The military may be able to accomplish the script writing at no extra cost by tasking organizations and personnel based upon existing assets; or costs may be higher if resources are added to develop scripts.

Therefore, the exact cost of each tape produced in-house cannot be accurately determined until the parameters of such a mission are defined. Cost per tape must be based upon resources, mission allocation, and quantity of each tape produced. To produce a tape for a few facilities would be far greater than the average cost for many facilities. However, for comparison, one can assume in-house script production cost to be the same, \$750. If each tape costs approximately \$10 versus \$25 from Tel-med, a \$15 differential exists. A break-even point would occur after the 50th tape is produced (750 divided by 15). Any production of less than 50 tapes would cost more than commercial purchasing.

FOOTNOTES

¹Interview with Karen Pugsley, Captain, ANC, Community Health Nurse, Blanchfield Army Community Hospital, Fort Campbell, Kentucky, 27 March 1984.

²Ibid.

³Interview with Mr. Mark Provost, Manager of Operations, Teletronix, Colton, California, 27 December 1983.

⁴Fee Schedule, Tel-Med, Inc., Colton, California, 1 February 1984.

⁵Interview with Mrs. Lynn Freeman, Director of Volunteers, Sierra Medical Center, El Paso, Texas, 20 December 1983.

⁶Interview with Mr. Coleman Barber, Health Science Media Division, Academy of Health Sciences, Fort Sam Houston, Texas, 13 January and 27 March 1984.

⁷Ibid. Mr. Mark Provost.

III. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The use of a pre-recorded audio health/medical information system in civilian communities has proven to be frequently and effectively utilized. The systems have increased accessibility to health/medical information, assisted in combatting rising costs by reducing unnecessary visits and aiding consumers in recognizing early signs of illness, and helped access to healthy services by helping patients find appropriate community resources. Furthermore, these systems have increased public relations between consumers and providers at a relatively inexpensive cost. Accurate and comprehensible messages have assisted in changing lifestyle decisions in the general population by promotion preventive medicine, the key ingredient to better health.

The AMEDD consumer in CONUS has shown through the survey instrument they mirror the needs and wants of civilian health care consumers. Consumers in the AMEDD health care system have the same degree of need for health/medical information and turn to the same sources as their civilian counterparts to satisfy that need. Projected AMEDD consumer usage of an information system is in excess of the actual usage of civilian systems and nearly 6 percentage points higher than this project's established criteria.

Providers of care in the AMEDD have uniformly agreed health/medical information is a necessary adjunct to patient care. All four primary groups have indicated, through 81 percent affirmative responses, they would refer patients to a professional made information tape. In addition, most feel such a system would free up two to three hours per week to spend providing better care.

Given the responses of the AMEDD consumers and providers, plus the pre-established criteria, it is concluded that a pre-recorded audio health/medical information system is applicable to the AMEDD in CONUS. Cost determinations must be evaluated on a case-by-case basis at the particular medical treatment facility.

Recommendations

It is recommended that Health Services Command determine which medical treatment facilities in CONUS do and do not have access to a health/medical information system. Those facilities with an available system should be directed to coordinate with the appropriate local health agency to ensure the AMEDD consumers are aware of the service. Dissemination of brochures/ advertising can be accomplished through the local Community Health and Education Program (CHEP) committee and the Community Health Nurse. Other avenues of promotion exist and should be pursued such as military newspapers, daily bulletins, command briefings, and community awareness councils.

Medical treatment facilities which are remote or do not have access to an existing health/medical information system should be considered as a potential site for a system. The determination to purchase a commercial system or to produce tapes at the Academy of Health Sciences must be made by the HSC Commander. Cost determinations, system reliability, and proven efficacy should sway the decision towards a commercial product.

Health-Line
370-8282

Now Available 24 Hours A Day

Your Personal
Link To
Health

Expanded
Edition
1984

RESIDENT
8323 BROOKVALE CT
SPRINGFIELD VA 22153

Non-Profit Org
U.S. Postage
PAID
Alexandria, VA
Permit No. 192



Alexandria Hospital
4320 Seminary Road
Alexandria, Virginia
22304

"It's a great thing for the community."

J. L. Alexandria

"I think Health-Line is a great idea."

S. L. Springfield

"I've listened to the tapes and found them very good."

L. S., Falls Church

"Health-Line is a wonderful service, and I do appreciate it. I'm an elderly gentleman — and Health-Line is a source of information I use often."

A. M., Alexandria

"I think there is a good range of subjects covered, and they give an amazing amount of information in a short time. It's a very helpful service."

R. R., Washington, DC

"I've always found Health-Line to be very informative and helpful — I turn to Health-Line before anything else."

B. H., Annandale

Health-Line provides the important information you need for yourself and your family.

- It helps keep you healthy with messages on diet, exercise and stress management.
- It helps alleviate unnecessary worry about minor symptoms.
- It deals with children's illnesses and behavior problems.
- It offers advice on common complaints like colds, hay fever and warts.
- It helps you recognize early signs of illness, and aids in adjusting to serious illness or the possibility of an operation.

Health-Line is as easy to use as your telephone.

Simply review the list of topics to make your selection. Then call 370-8282, tell the Health-Line Librarian the number of your selection, and you will be connected to that message at once.

If you're not sure which number to request, the Health-Line Librarian will personally assist you in choosing the right topic.

Health-Line never sleeps. Health-Line is on call all day, every day.

Unlike other phone services, if you call during our regular hours — between 9:30 a.m. and 8:30 p.m. — a Health-Line Librarian will be at hand to talk with you personally.

Since you and your family may need health care information *after* hours, we've developed an automated system that can serve you after 8:30 p.m. and before 9:30 a.m.

How to call after hours:

You need a push-button telephone with Touch-Tone features.

1. Look through our list of topics and find the message you want to hear.
 2. Note the three digit number of that selection.
 3. Call 370-8282, and follow the instructions.
- The Health-Line Library is updated constantly. You can call any evening for a current listing of after-hour messages available.

Health-Line is an invaluable information system. It is *not*:

- An emergency service — *If you have an emergency, the Alexandria Hospital Emergency Department is open 24 hours a day to serve you.*
- A diagnostic service
- A replacement for your doctor

If you need a doctor, we can help.

Health-Line messages do not tell you why you are sick, only your doctor can do that. If you do not have a personal doctor, call the Alexandria Hospital Physician Referral Service at 379-3424.

Alexandria Hospital can put you on course for health.

Alexandria Hospital offers community health education programs, activities and lectures on health topics and preventive medicine.

We're a private, non-profit *community* hospital. Our central location, easy access to major highways, as well as the quality and extent of our services make Alexandria Hospital a facility which attracts residents from the entire metropolitan area. We are owned and operated by a non-stock corporation made up of residents in the community we serve. We are not affiliated with local, state or federal governments.

Since Health-Line is a free community service, donations to offset the costs of operation are appreciated.

It's a question of health, the answer is personal, confidential, and free...on Health-Line.

If *however* your health care question — whether it's on first aid, natural childbirth, diet, drugs, depression, infectious disease — all you have to do is pick up the phone and call Health-Line. You'll get the information you need immediately, in clear, easy-to-understand terms. It's an Alexandria Hospital service that allows you to learn in the privacy of your own home *whenever* you wish. You don't have to give your name or any explanation, and best of all, it's *absolutely free*.

It's the most comprehensive program of its kind in Northern Virginia.

We've put the most extensive collection of health topics right at your fingertips. Our Health-Line Librarian can connect you with any one of nearly 300 messages. Each four to six-minute message has been prepared by experts in the field, then carefully reviewed by members of the medical staff at Alexandria Hospital. But our health service doesn't stop when the health message does. A unique feature is that, should you need further information, we'll give you a number to call for additional resources or a physician referral.

Health-Line

370-8282

© 1984 Alexandria Hospital

- 107 How to use Health-Line
- 108 How to become a Professional Nurse
- 109 Employee Assistance Program (EAP)

COMMON HEALTH CONCERNS

- 416 Having headaches?
- 125 The common cold
- 263 The flu
- 118 Sinusitis
- 408 Lice are not nice!
- 160 I think I have athlete's foot
- 223 Calluses and corns
- 104 Warts
- 117 Constipation a problem?
- 413 Let's talk about hemorrhoids
- 234 Living with hayfever
- 205 Insect stings
- 270 Dietary treatment of an ulcer
- 169 Have you a chronic cough?
- 105 Varicose veins
- 215 Genital herpes and cold sore virus
- 417 Herpes management
- 405 What causes asthma?
- 233 The treatment of asthma
- 321 Peptic ulcers
- 311 Shingles
- 418 Sore throat
- 104 Wondering about ear-piercing?
- 336 Hearing loss from otosclerosis
- 363 Plantar warts
- 436 Anemia
- 261 What kidneys do for you
- 159 Secret cure for cancer
- 271 The colposcopic examination
- 342 Facing an operation
- 138 Biopsy—what and why?
- 456 Hiatal hernias
- 457 Inguinal hernia in adults
- 455 Thyroid studies

Emergency Care and Safety

- 250 First aid for burns
- 251 About head injuries
- 332 First at an auto accident
- 345 Understanding shock
- 254 Carbon monoxide—the silent killer
- 275 Rabies and animal bites
- 259 Medic alert could save your life
- 241 Common injuries in children
- 365 Tap water scald injuries
- 422 Do I have appendicitis?

Contraception

- 269 Contraception—it's your choice
- 133 The pill in perspective
- 106 The pill—questions and answers
- 136 The pill—more questions
- 170 The diaphragm as a contraceptive
- 206 The condom as a contraceptive
- 124 IUD facts
- 320 Laparoscopy and tubal ligation
- 139 Thinking about vasectomy?
- 111 Natural birth control

Drugs and Alcohol

- 355 How to use prescription products
- 354 Over-the-counter medications
- 134 Re-using medicines
- 132 Medicine—more is not better
- 296 Aspirin
- 434 Water pills or diuretics
- 298 Sleeplessness and sleep inducers
- 294 Cortisone
- 289 Drugs—generic or brand name
- 337 Drugs during pregnancy
- 353 Drugs, pregnancy, and the unborn
- 372 The pros and cons of Laetrile
- 145 What is a drug?
- 219 Drug freak-outs and bad trips
- 217 Marijuana
- 143 Depressant drugs and combinations
- 165 Speeds, amphetamines and substitutes
- 318 Cocaine
- 248 LSD, MDA, peyote and psilocybin
- 243 Quaaludes or sopors
- 349 PCP (Phencyclidine)
- 164 Alcohol is a drug
- 403 Overuse of alcohol hurts your health
- 352 Reaps what he drinks
- 273 Problem drinking
- 305 Spitting problem drinking
- 119 Living with an alcoholic?

- 292 The hyperactive child
- 232 Your child and sleep problems
- 260 Earache in children
- 172 My child has a fever
- 240 Vomiting in children
- 239 Diarrhea in children
- 336 Croup
- 335 Measles
- 348 Mumps
- 340 Meningitis
- 266 Pinworms
- 350 Ringworms
- 367 Phenylenolamine or PKU
- 341 Sickle cell anemia
- 146 Your child has diabetes?
- 244 Sudden infant death syndrome
- 142 Impetigo trouble?
- 257 Rose's syndrome
- 235 What to do about eczema
- 173 My child has a bad cold
- 112 Where babies come from (for 6-9 year old children)
- 212 Where do babies come from? (for 10-year old children)
- 423 You've got chickenpox
- 425 Are you afraid? I'm afraid
- 259 Chris Curious and home safety

- 253 Chris Curious gets poisoned
- 249 Who needs acne?

About Your Eyes

- 236 Something in your eye?
- 345 What about cataracts?
- 342 Do you know if you have glaucoma?
- 323 Size in your eyelid
- 442 Eye donation
- 443 Corneal transplantation
- 255 Do you have double vision?
- 440 Lazy eye or amblyopia

Special Subjects

- 315 Depression
- 211 Thinking of suicide?
- 119 Living with an alcoholic?
- 274 Facing loneliness when you're older
- 450 Battered women
- 451 Child sexual abuse
- 454 Alzheimer's and senility

HEALTH PROMOTION AND WELLNESS

- 370 What's wellness?
- 356 Summer safety for kids over 60
- 362 Winter wisdom for kids over 60
- 412 Stress management
- 120 Saving your back
- 153 Breast self-examination

Exercise

- 141 Physical fitness through exercise
- 204 No time for exercise?
- 150 Exercise

Food and Diet

- 161 Food for health
- 216 Have a weight problem?
- 313 The magic formula for weight loss
- 162 Health foods and fad diets
- 319 Are vitamin supplements necessary?
- 149 Obesity
- 458 Anorexia nervosa
- 404 Special dietetic foods
- 122 The bulimism story
- 163 Will the food I serve cause illness?
- 168 Tips on keeping food safe
- 224 Are you a vegetarian?
- 357 Planning economic nutritious meals
- 358 Meal planning and marketing tips
- 359 Eat well for less
- 270 Dietary treatment of an ulcer
- 317 Nutrition during pregnancy

Smoking

- 407 Today's smokers
- 421 Quit cigarettes—live longer!
- 225 Is smoking really dangerous?

Immunization

- 371 Why immunize for tetanus?
- 247 Are you protected against polio?
- 171 Immunizations for travel
- 366 Immunize—end childhood diseases
- 166 What shots should my child have?

For Parents

- 304 Keeping children healthy in winter
- 276 Keeping children healthy in spring
- 277 Keeping children healthy in summer
- 147 Keeping children healthy in fall
- 369 Hello grandparents
- 287 Nourishing snacks for little people
- 366 Immunize—end childhood diseases
- 166 What shots should my child have?
- 258 Will your child be poisoned today?
- 364 Keep your child from choking
- 339 Pets in the home
- 333 Sibling relationships
- 447 Sibling relationship questions
- 361 Responsibilities: Child to Parent
- 360 Responsibilities: Parent to Child
- 252 Play—why and with what
- 267 The infant ICU (Intensive Care Unit)
- 437 Preventing developmental disabilities
- 241 Common injuries in children
- 365 Tap water scald injuries
- 292 The hyperactive child
- 232 Your child and sleep problems

DISEASES

- 422 Do I have appendicitis?
 - 317 Diabetes? What does it mean?
 - 237 Epilepsy—control and treatment
 - 175 Living and working with an epileptic person
 - 200 What is cerebral palsy?
 - 175 Parkinsonism
 - 424 What is multiple sclerosis?
 - 262 Emphysema
 - 344 Lung disease caused by dust
 - 220 Infectious mononucleosis
 - 110 Viral hepatitis
 - 347 Pneumonia
 - 432 Legionnaires' disease
 - 441 Gallstones
 - 121 Infection and kidney disease
 - 121 Kidney stones
 - 245 What about cataracts?
 - 242 Do you know if you have glaucoma?
 - 454 Alzheimer's and senility
 - 452 A.I.D.S.—What is it?
 - 453 A.I.D.S.—Symptoms and diagnosis
- Heart and Blood Vessels**
- 420 Understanding a heart attack
 - 149 Obesity
 - 150 Exercise
 - 391 Atherosclerosis
 - 312 High blood pressure

- 144 What is hardening of the arteries?
- 146 Prevent hardening of your arteries?
- 152 Prevention of a heart attack
- 135 Foot care if you have diabetes or poor circulation

Heart pacemakers

- 291 Heart pacemakers
- 303 What are the dangers of hypertension?

Arthritis

- 210 What you should know about arthritis
- 278 Living a full life with arthritis
- 280 Osteoarthritis: a conversation
- 281 Rheumatoid arthritis
- 282 Aspirin and arthritis
- 246 Arthritis and children
- 103 What do you know about gout?
- 279 What is ankylosing spondylitis?
- 218 Systemic lupus erythematosus

Cancer

- 107 What is cancer?
- 138 Biopsy—what and why?
- 155 Protect yourself against cancer
- 368 Cancer is being cured!
- 154 Cancer of the larynx
- 156 Cancer of the lung
- 225 Is smoking really dangerous?
- 203 Cancer of the breast
- 322 Cancer of the skin
- 209 Cancer of the colon and rectum
- 331 Testicular cancer
- 157 Cancer of the uterus
- 264 What is Hodgkin's disease?
- 265 Treatment of Hodgkin's disease
- 272 Selection of cancer treatment
- 372 The pros and cons of Laetrile
- 159 Secret cure for cancer
- 271 The colposcopic examination
- 158 What is leukemia?

Venereal Disease

- 410 Sexually transmitted disease
- 309 Venereal disease
- 445 Syphilis
- 108 Gonorrhea and syphilis
- 140 Gonorrhea and women
- 215 Genital herpes and cold sore virus
- 417 Herpes management
- 452 A.I.D.S.—What is it?
- 453 A.I.D.S.—Symptoms and diagnosis

OF INTEREST TO WOMEN

- 153 Breast self-examination
 - 137 Rehabilitation after mastectomy
 - 285 Mammography and roentgenology
 - 268 Mothers, daughters, and D.E.S.
 - 324 Your hysterectomy
 - 306 Having a D & C
 - 450 Battered women
 - 203 Cancer of the breast
 - 458 Anorexia nervosa
- Pregnancy and Childbirth**
- 308 Before you begin your pregnancy
 - 116 Can't become pregnant?
 - 167 What is the Rh factor?
 - 444 Rh negative management
 - 283 Amniocentesis
 - 343 Fetal monitoring
 - 337 Drugs during pregnancy
 - 353 Drugs, pregnancy, and the unborn
 - 207 Nutrition during pregnancy
 - 435 The pregnancy at risk
 - 446 Danger signals in pregnancy
 - 448 Breast feeding—Part I
 - 449 How to breast feed—Part II

Contraception and Unwanted Pregnancy

- 415 Could I be pregnant?
- 269 Contraception—it's your choice
- 133 The pill in perspective
- 106 The pill—questions and answers
- 136 The pill—more questions
- 170 The diaphragm as a contraceptive
- 206 The condom as a contraceptive
- 124 IUD facts
- 320 Laparoscopy and tubal ligation
- 139 Thinking about vasectomy?
- 123 An unwanted pregnancy?
- 310 Facts about abortion
- 111 Natural birth control

Menstruation

- 317 Menstruation
- 346 Living with your menstrual cycle
- 406 Pain during menstruation
- 232 Menopause problems?
- 221 Menopause—questions and answers

Infection and Disease

- 316 Vaginal discharge
- 419 Vaginal infections
- 409 Vaginal infections—yeast
- 439 Vaginal infections—trichomonas
- 351 Vaginal discharge treatment
- 318 Women and urinary tract infections
- 433 Women and high blood pressure
- 438 Tonic shock syndrome
- 140 Gonorrhea and women

Health-Line is always available, 24 hours a day, 7 days a week, 52 weeks a year.
 9:30am-8:30pm Personalized Service. A Health-Line Librarian will be there to help you personally.
 8:30pm-9:30am and Holidays Automated Service. Our fully computerized service will be available.



is on call 24 hours a day.

Health-Line Library

Phone 370-8282 for nearly 300 listings



REPLY FORM

Alexandria Hospital is your community resource. Use it!

Please tear off at perforation and mail to:
Public Relations Dept., Alexandria Hospital
1320 Seminary Road, Alexandria, VA 22304

- Please send future editions of the Health-Line brochure.
- I'd like to become a Health-Line volunteer.
- Enclosed is a donation to Health-Line.
- I think you should add Health-Line messages on the following topics:

- I'd like to receive information on your other Health Education programs.

Name _____

Address _____

City _____ State _____ Zip _____

Phone: Day _____ Evening _____

If you have friends or relatives who would be interested in hearing about Health-Line and Alexandria Hospital, please put their names below:

Name _____

Address _____

City _____ State _____ Zip _____

Name _____

Address _____

City _____ State _____ Zip _____

TEL-MED/COUNSELING

APPENDIX B

**Your One
Phone Call To
Better Health
24 Hours
A Day**

**Sponsored by
Sierra Medical
Center
Auxiliary**

(915) 778-6688

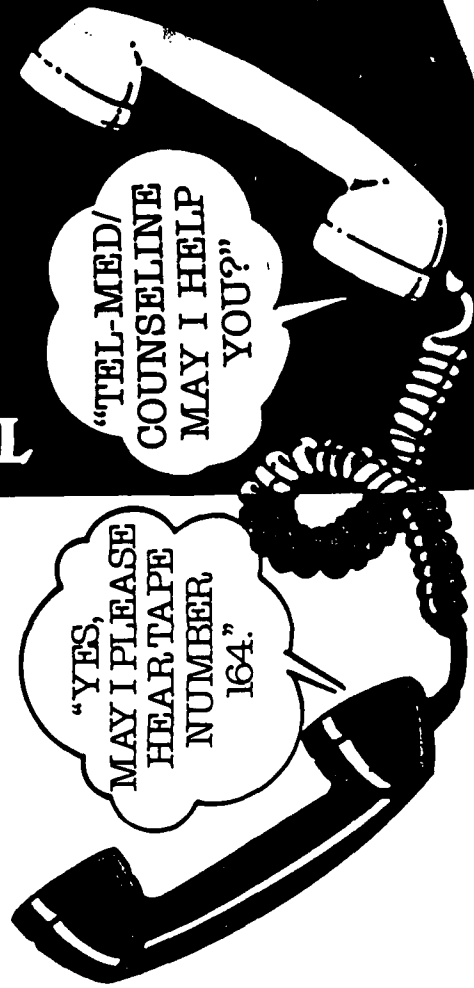
Who Promotes Tel-Med/Counseling?

Helping to promote Tel-Med/Counseling and its full library of tapes are participating physicians and local health care agencies, 7-11 Stores throughout El Paso, and the Sierra Medical Center Auxiliary.

Important:

Tel-Med/Counseling is not an emergency number. If you have a medical emergency, please dial 911.

If you need more information about a particular subject, or need help for other than emergency situations, you can call the El Paso information and Referral Helpline at 779-1800.



What is Tel-Med/Counseling?

Tel-Med/Counseling, sponsored by the Sierra Medical Center Auxiliary, is a free health information listening library that operates 24 hours a day, seven days a week. One phone call to Tel-Med/Counseling can provide information about a common illness or injury, or day-to-day living problem. It is not, however, an emergency number — it is simply a health information service.

There are more than 300 Tel-Med systems in the United States, all originating from Tel-Med, Inc., the national group based in San Bernardino County in California. Tel-Med, Inc. has over 300 health tapes to choose from.

The Counseling Program was developed by Counseling-Psychological Services Center of the Hogg Foundation. There are approximately 40 Counseling systems in the United States, with 70 tapes to choose from.

The El Paso Tel-Med/Counseling Library, currently numbering over 250 tapes, is supported by the Sierra Medical Center Auxiliary and the community. The most commonly requested tapes are also available in Spanish, through funding provided by the Gannett Foundation. The Spanish tape listing is available upon request.

How Does Tel-Med/Counseling Work?

Simply call 778-6688 and give the operator the number of the tape you wish to hear. A complete list of available tapes is listed inside this brochure.

For example: If you would like to know more about caring for your newborn baby, just dial 778-6688 and ask for Tape #261: Care of the Newborn. The operator will then play the tape for you. If you wish to hear the same tape over again, or any other tape, just call back and the operator will be happy to play it for you.

You can listen to Tel-Med/Counseling taped messages over the phone in the privacy of your home. Each tape is three to five minutes long, and is presented in easy-to-understand language.

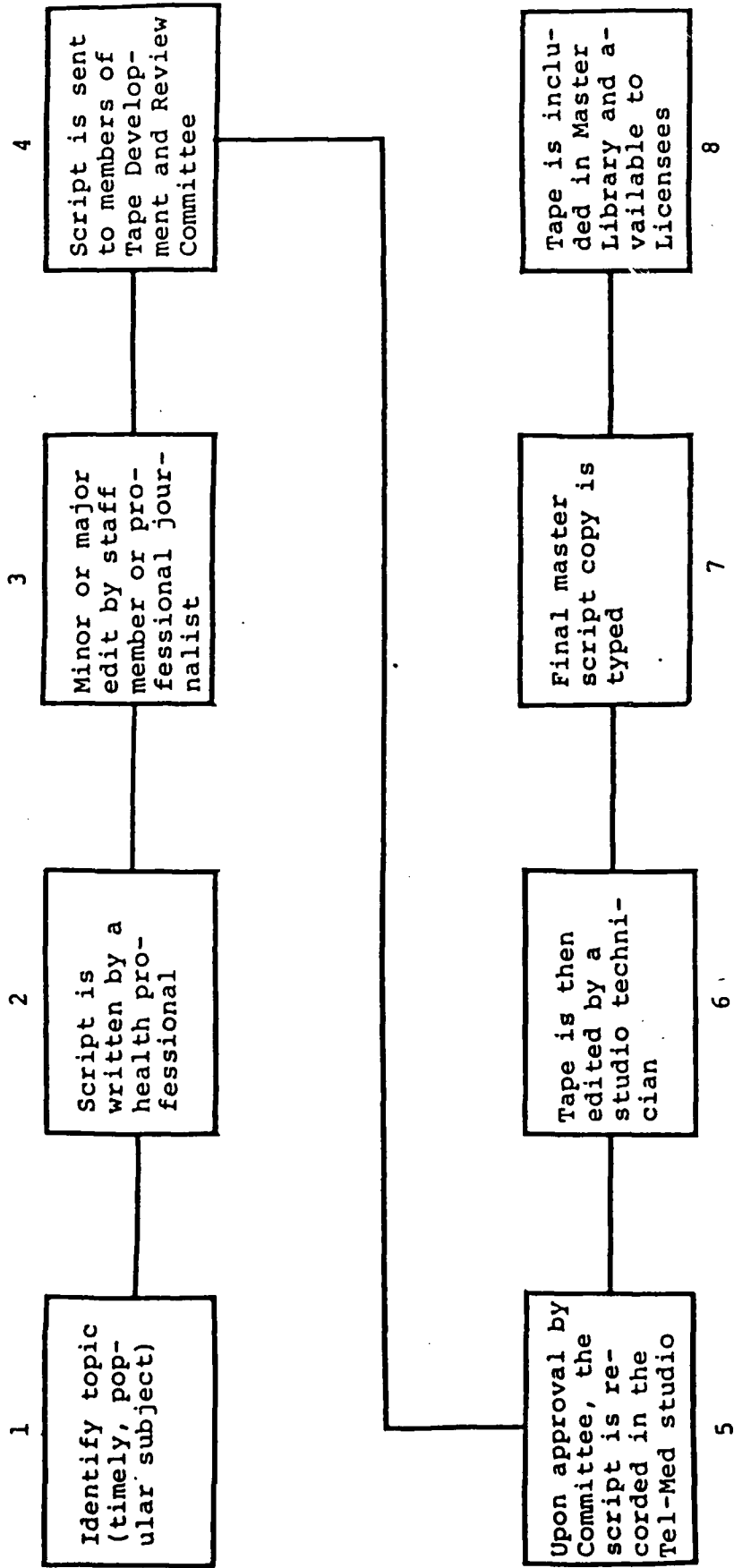
Tel-Med/Counseling is approved by the El Paso Medical Society. A project of Listen America, Tel-Med/Counseling is supported by the community.

160	ALLERGENS AND DRUGS	
161	Early Signs of an Alcohol Problem	
	Responsible Decisions About Drinking	
	ASSERTIVENESS AND SELF-CONFIDENCE	
10	How to Say "No"	
12	Re-asserting My Values	
25	Coping With Shyness	
31	Self-Assertion	
35	Increasing Self-Awareness	
34	Building Self-Esteem and Confidence	
44	Learning to Accept Yourself	
	COMMON EMOTIONAL PROBLEMS	
5	Fighting Conscientiously	
6	Expressing Negative Thoughts and Feelings	
7	Dealing With Constructive Criticism	
8	Dealing With Anger	
9	Understanding Jealousy and How to Deal With It	
11	When Should I Seek Outside Help for Personal Problems?	
32	How to Deal With Loneliness	
33	How to Handle Fears	
431	What is Depression?	When asking for any of the tapes on this page, please refer to them as "Counseling Tape Number...."
432	How to Deal With Depression	
433	Depression as a Lifestyle	
	DEATH AND DYING	
64	Death and Dying	
65	Understanding Grief	
	INTERPERSONAL RELATIONSHIPS	
90	Helping a Friend	
411	Conflicts in Intimate Relationships	
412	Examples of Conflict Building	
	MARRIAGE, FAMILY AND PARENTS	
29	Intimacy in Marriage	
71	Things to Consider in Looking for a Mate	
73	Positive Communication and Sexual Fulfillment in Marriage	
74	Fall Fighting in Marriage	
75	Common Marital Problems and How to Handle Them	
76	Preparation for Children	
77	Parenting Skills	
478	Reuniting Independent from Parents	
479	Dealing With Alcoholic Parents	
	SEXUALITY AND SEX ROLES	
4	Delayed Intimacy	
18	Dating Skills	
20	Female Homosexuality	
21	Male Homosexuality	
22	Dealing With Fidelity	
23	Dealing With Impotency	
24	Trading Problems in Male Sexuality	
29	Female Sex Role — Changes and Stresses	
40	Male Sex Role — Changes and Stresses	
70	Intimacy or Love?	
	SIERRA	
491	Sierra Code	
492	Remembering Suicidal Potential in Others	
	TERRITORY	
30	Feeling and Possible Ways to Cope With It	
36	Coping with Stress	
	CONTENTS	

TEL-MED/COUNSELING (915) 778-6688
 El Paso's only 24-hour health information service.

942 Alcoholism - The Scope of the Problem	301 Dental Health	565 Hypoglycemia	1030 Plastic Surgery
943 Is Drinking A Problem?	305 Malocclusion - Crooked Teeth	567 Allergies	1040 Cosmetic Surgery of the Breasts
945 So You Love An Alcoholic	307 Warning Signs of Gum Disease	625 Multiple Sclerosis	1041 Rhinoplasty - Plastic Surgery of the Nose
ACTIVITIES-RECREATION	309 Caries, Sores and Fever Blisters	1140 Blood in the Urine	
126 Golf	310 How Important are Baby Teeth?	1141 Kidney and Urinary Tract Infections	
127 Anti-Rheumatism	314 We Know What Causes Bad Breath. Do You?		
128 Rheumatoid Arthritis			
129 Burns			
1 Vasoconstriction			
53 Tidal Ligament			
55 The Pill			
56 Intrauterine Devices			
58 Dephlegm, Foam and Condom			
CANCER			
6 Breast Cancer			
176 Cancer of the Prostate Gland			
178 Rehabilitation of the Breast Cancer Patient			
179 Lung Cancer			
180 Cancer of the Colon and Rectum			
181 Cancer - The Curable Disease			
183 Cancer - Seven Warning Signals			
184 Hodgkin's Disease			
185 Cancer of the Stomach			
186 Gastric Cancer			
188 Radiation Therapy for Cancer			
190 Thyroid Cancer			
521 Cancer of the Bladder			
523 Cancer of the Larynx			
524 Cancer of the Mouth			
525 Cancer of the Stomach			
CASE OF THE PATIENT IN THE HOME			
164 Your Family Health			
165 Heart Care for the Bedridden Patient			
167 Exercise for the Bedridden Patient			
168 How to Take Temperature, Pulse and Respiration			
169 Hospital Care for the Terminally II			
CHILDREN			
3 Can Mothers in the Home Poison the Child?			
16 Poison in the Home			
18 Tetanus			
20 Rheumatic Fever			
28 Thumb Sucking			
49 No No - What Does it Mean to the Toddler?			
73 Enuresis in Children			
85 Potty Phobia			
228 Lumping in Children			
228 Call Up and Pulse			
232 Speech Problems in Children			
238 Penicillin			
238 Necessary Inoculations for Your Children			
263 Care of the Newborn			
368 Neonatal Dyspnea in Children			
468 Tummy Cuts His Torso's Out			
488 Neonatal Hygiene for a Child			
498 Child Protective Services			
498 Child Abuse			
301 Flaming Your Teeth			
305 Malocclusion - Crooked Teeth			
307 Warning Signs of Gum Disease			
309 Caries, Sores and Fever Blisters			
310 How Important are Baby Teeth?			
314 We Know What Causes Bad Breath. Do You?			
DIABETES			
11 You May Have Diabetes and Not Know It			
22 Foot Care for Diabetics and Others With Poor Circulation			
609 Answers to Questions Often Asked About Diabetic Diets			
DIGESTIVE SYSTEM			
2 What is a Normal Bowel?			
4 Hemorrhoids			
44 Pyloric Ulcers, What I Should Know			
45 Indigestion			
196 Peptic Ulcers			
198 Hedral Hernia			
199 Colic & Bowel Disorders			
630 Diarrhea			
631 Gall Bladder Trouble			
DRUGS			
132 Cocaine			
136 Amphetamines & Barbiturates			
137 Marijuana			
138 Narcotics			
5001 Drug Abuse Resources in El Paso			
5002 Hallucinogens			
EYE CARE & HEARING			
9 Glaucoma			
76 Obstructive One Cause of Hearing Loss			
450 From Hearing Loss to Hearing Aid			
471 Children's Vision			
472 Cataracts			
473 Facts & Fallacies About Contact Lenses			
FIRST AID			
93 Electrical Shock			
94 Shock			
96 Poisoning by Mouth			
98 Head Injuries			
99 Sprains			
101 Thermal Burns			
107 First Aid for a Person Suspected of Having a Heart Attack			
109 Epileptic Convulsions			
110 When You Find Someone Unconscious			
111 Choking			
118 Animal Bites			
569 Nosebleed			
5005 Emergency Aid			
GENERAL			
34 Anemia			
35 Understanding Headaches			
37 Bedsores			
61 Fainting of Fever			
70 Sore Throat			
77 Kidney Stones			
84 Diarrhea			
124 Shingles			
125 Epilepsy			
191 Venous Varicose Veins			
194 What Happens When a Dec. Slip?			
425 What is Tet-Net?			
519 Lupus Erythematosus			
565 Hypoglycemia			
567 Allergies			
625 Multiple Sclerosis			
1140 Blood in the Urine			
1141 Kidney and Urinary Tract Infections			
1168 Scabies			
HEART			
21 Cigarettes & Heart Disease			
23 Diet & Heart Disease			
25 Hypertension & Blood Pressure			
26 Stroke & Atherosclerosis			
27 Health & Heart Checkups			
28 How to Decrease Risk of Heart Attack			
29 Abnormalities & High Blood Pressure			
30 Angina Pectoris			
63 Early Warning of Heart Attack			
65 Chest Pains			
72 Heart Failure			
1111 Exercise and Your Heart			
5008 Don't Be Struck Out by Stroke. Strike Back!			
5010 Cardiac Rehabilitation, After Heart Attack and/or Heart Surgery			
MEN			
1 Vasectomy			
175 Fears of the After-Forgo Men			
MENTAL HEALTH			
33 Tension			
144 Emotional Experiences of the Dying			
159 Hypnosis			
432 Upset Emotionally? Help is Available			
726 Psychosomatic Illness - It's Not All in Your Head			
729 What Marriage Counseling Can Do For You			
5003 What is Mental Retardation?			
NUTRITION			
23 Diet & Heart Disease			
601 Low Salt Diet			
600 Alcohol in Your Diet			
604 A Guide to Good Eating			
606 Nutrition in Pregnancy			
609 Answers to Questions Often Asked About Diabetic Diets			
PARENTS			
50 Teen Years - Age of Rebellion			
51 When New Baby Creates Jealousy			
133 Advice for Parents of Teenagers			
402 Where Did I Come From, Mama?			
4004 The Single Parent Family			
4009 The Young Hyperactive Child			
4011 What Kind of Parent am I?			
4021 Discipline & Punishment - Where Do You Stand?			
4022 Helping Your Child Get Ready to Read			
PHYSICAL FITNESS			
1062 Sports Tips for Youngsters			
1083 Little League Elbow			
1101 Exercising - Warm Up Slowly			
PREGNANCY			
5 Early Prenatal Care			
24 Abortion			
32 Unwanted Pregnancy			
66 What Causes Miscarriages			
67 Warning Signs of Pregnancy			
606 Nutrition in Pregnancy			
5006 Lennax			
5007 Having Late Birth			
7 What a Case of Pneumonia Means			
13 Pulmonary Emphysema			
90 Hay Fever			
576 Bronchial Asthma			
580 Dust Diseases			
581 Chronic Cough			
582 Shortness of Breath			
5009 Breathe Better Through Pulmonary Rehabilitation			
SAFETY			
3 Can Mothers in the Home Poison a Child?			
147 The Lady Using Alcohol			
405 Rape - A Crime of Violence Against Women			
406 Accidents, Safety, and Young Children			
SNRN DISORDERS			
82 Why the Mystery About Prionitis			
114 Parvovirus and Measles			
172 Acne			
SMOKING			
21 Cigarettes & Heart Disease			
696 How Smoking Affects Your Health			
699 Cigarettes to Help You Quit Smoking			
700 Effects of Cigarette Smoke on Non-Smokers			
VENEREAL DISEASE			
8 Venereal Disease			
15 Syphilis			
16 Gonorrhea			
970 Herpes			
WOMEN			
31 Vaginitis			
42 I'm Just Tired, Doctor			
173 Menopause			
182 What is a Pap Test?			
526 Hysterothorography			
862 Emotional Feeling After Childbirth			
883 Caring For Yourself After a Baby			
884 Menstruation			
885 Toxic Shock Syndrome			
889 Hysterectomy			

APPENDIX C
TAPE DEVELOPMENT
FLOWCHART



APPENDIX D
Survey Questions To Consumers

Please answer all the following questions to the best of your knowledge. Your answers will be kept confidential. There is no need to sign or in anyway disclose your identity on this survey.

1. Within the past year, have you had a need for information on health or disease? Yes ____ No ____

2. Within the past year, have you had difficulty obtaining health or disease information? Yes ____ No ____

3. Where have you sought medical information within the past year? Please rank on a scale of one to eight with one being the most frequent and eight being the most seldom. If you have not used all eight sources, rank only those you have used.

- ____ Provider (Physician, Physician Assistant, Nurse, Allied Health Scientist)
- ____ Public Library
- ____ Tel-Med
- ____ Articles (Journals, Magazines, Books, Newspapers)
- ____ Television
- ____ Federal and State Agencies (Other Than Your Local Military Treatment Facility)
- ____ Friends/Relatives
- ____ Other

4. Would you use an audio (taped message) medical information system if it were available by telephone? Yes ____ No ____

5. Would you trust the medical information provided by a taped message? Yes ____ No ____

6. Would you follow the advice given on a taped message? Yes ____ No ____

7. Would a taped message on medical information make you feel more at ease with your, or your family's, medical problem? Yes ____ No ____

8. Would you use the service:

- ____ For your entire family.
- ____ Only for yourself.
- ____ Only for other members of your family.
- ____ Not at all.

Survey Questions To Consumers
(Continued)

9. I am a ___ Male ___ Female.

10. My race is _____.

11. My education level is ___ years.

12. My age is _____.

13. My present status is:

- ___ Active Duty
- ___ Dependent of Active Duty
- ___ Retired Active Duty
- ___ Retired Dependent

11

APPENDIX E
Survey Questions for Providers

Please answer all the following questions to the best of your knowledge. Your answers will be kept confidential. There is no need to sign or in anyway disclose your identity on this survey.

1. How important a component of patient care is patient access to information on health and disease?

- Extremely Important
- Moderately Important
- Of Little Importance
- Undesirable
- Extremely Unimportant

2. Do you believe information on health and disease is equally important for all or just some patients?

- All
- Some

3. Are you aware of a pre-recorded audio medical information system in the AMEDD?

- Yes Location: _____
- No

4. Are you aware of any pre-recorded audio medical information system outside the AMEDD?

- Yes Type or Title: _____ (Tel-Med/Health-Line)
- No

5. Would you refer your patients to a professionally made taped message concerning their health problem? Yes No

6. How much would you trust a professionally produced pre-recorded message on your patient's medical problem?

- Without Question.
- Very Much
- A Little
- Very Little
- Not at All

7. Estimate how much of your time would be freed up if your patients had access to audio health information systems. _____ hours

8. I am a:

- Physician _____ (Specialty)
- Physician Assistant _____ (Specialty)
- Nurse _____ (Specialty)
- Allied Health Scientist _____ (Type)

TEL-MED



U.S. ARMY
COMMUNITY
HOSPITAL

FOREWORD

TO THE TEL-MED HEALTH CARE INFORMATION SYSTEM

TEL-MED is a telephonic health care information system that is available to you through the COL FLORENCE A. BLANCHFIELD ARMY COMMUNITY HOSPITAL at Fort Campbell, Kentucky. The TEL-MED Library is designed to give you information on how to:

- Remain Healthy
- Recognize Early Signs of Illness
- Adjust to an Illness or Surgery
- Prevent Some Health Problems.

It is NOT to be used:

- In an Emergency
 - To Find Out What Your Illness Is
 - To Replace Your Doctor
- To use the system call 798-7305 and request the name or number of the tape you wish to hear. The TEL-MED System is open for calls 24 hours a day. A complete listing of the tapes, by category, are on the following pages.

TEL-MED is not designed to tell you why you are sick - only a doctor can tell you that. If you need a medical appointment, call the Center Appointment Desk at 431-3404, or if you are in the hospital area call extension 7201. For emergencies call the Emergency Room at 798-8000. For emergency ambulance, call 798-8100.

REMEMBER - THE TEL-MED HEALTH CARE INFORMATION SYSTEM IS HERE TO HELP YOU REMAIN HEALTHY AND TO PREVENT ILLNESS.

LIST OF TEL-MED TAPES BY CATEGORY

TAPE NUMBER

TITLE

ALCOHOLISM

942 Alcoholism: The Scope of the Problem
 946 How AA Can Help the Problem Drinker
 943 Is Drinking a Problem?
 945 So You Love an Alcoholic
 944 To Drink or Not to Drink

BIRTH CONTROL

54 Birth Control
 58 Diaphragm, Foam and Condom
 68 Infertility
 56 Intrauterine Devices
 55 The Pill
 57 The Rhythm Method
 1 Vasectomy

CANCER

6 Breast Cancer
 521 Cancer of the Bladder
 520 Cancer of the Bone
 522 Cancer of the Brain
 180 Cancer of the Colon
 181 Cancer, The Curable Disease
 523 Cancer of the Larynx
 524 Cancer of the Mouth

LIST OF TEL-MED TAPES BY CATEGORY (Continued)

TAPE NUMBER

TITLE

CANCER (Continued)

176 Cancer of the Prostate Gland
 177 Cancer - Patient Services and Rehabilitation Information
 185 Cancer of the Skin
 525 Cancer of the Stomach
 183 Cancer, Seven (7) Warning Signals
 189 Childhood Cancers
 187 Drugs that Treat Cancer
 184 Hodgkins Disease
 192 Leukemia
 179 Lung Cancer
 188 Radiation Therapy for Cancer
 178 Rehabilitation of Breast Cancer Patients
 190 Thyroid Cancer
 186 Uterine Cancer
 182 What is a Pap Test?

CHEST, STOMACH AND BACK

78 Appendicitis
 199 Colitis and Bowel Disorders
 631 Gall Bladder Trouble
 198 Hiatal Hernia
 1141 Kidney and Urinary Tract Infections
 77 Kidney Stones
 219 Laxatives

LIST OF TEL-MED TAPES BY CATEGORY (Continued)

<u>TAPE NUMBER</u>	<u>TITLE</u>
<u>CHEST, STOMACH AND BACK (Continued)</u>	
196	Peptic Ulcers
44	Ulcers
194	What Happens When a Disc Slips?
2	What is a Normal Bowel

CHILDHOOD DISEASES

229	Chickie, Fox
225	Croup
223	Diabetes in Children
227	Measles
224	Mumps
381	Muscular Dystrophy in Children
20	Rheumatic Fever
239	Whooping Cough

CHILD MEDICAL PROBLEMS

71	Aspirin for Children
3	Can Medicines in the Home Poison Your Child?
73	Ear Aches in Children
220	Limping in Children
226	Should I Keep My Child Home?
262	Sudden Infant Death Syndrome (SIDS)
263	Teething
400	Tommy Gets His Tonsils Out

LIST OF TEL-MED TAPES BY CATEGORY (Continued)

<u>TAPE NUMBER</u>	<u>TITLE</u>
<u>CHILDREN AND RECREATION</u>	
406	Accidents, Safety and Young Children
1082	Sports Tips for Youngsters
<u>COMMON PROBLEMS</u>	
172	Acne
37	Backaches
193	Baldness and Falling Hair
79	Dandruff
630	Diarrhea
90	Hay Fever
4	Hemorrhoids
36	Hiccups
45	Indigestion
201	Neck Pains
75	Pinworms
70	Sore Throat
33	Tension
61	The Meaning of Fever
35	Understanding Headaches
<u>DENTAL</u>	
312	Assessed Teeth: Can Be Saved
323	Are You Afraid of the Dentist?
309	Canker Sores and Fever Blisters

LIST OF TEL-MED TAPES BY CATEGORY (Continued)

<u>TAPE NUMBER</u>	<u>TITLE</u>
<u>DENTAL (Continued)</u>	
303	Dental Plaque
315	Dental X-Rays - Really Necessary
304	Diet Tips for Dental Health
302	Effective Toothbrushing
301	Flossing Your Teeth
310	How Important are Baby Teeth
305	Malocclusion - Crooked Teeth
307	Seven (?) Warning Signs of Gum Disease
306	What About Wisdom Teeth?
311	What Not To Do For a Toothache
313	What You Don't Know About Dentures Can Hurt You
314	We Know What Causes Bad Breath, Do You?
321	Which Toothpaste?
308	Why and When Some Teeth Have To Be Replaced
<u>DIET</u>	
604	A Guide to Good Eating
609	Answers to Questions About Diabetic Diets
603	Breakfast, Why Is It Important?
600	Cholesterol in Your Diet
605	Food Stamps and Good Nutrition
602	How Important are Trace Minerals in Your Diet
601	Low Salt Diet
608	Snacks

LIST OF TEL-MED TAPES BY CATEGORY (Continued)

<u>TAPE NUMBER</u>	<u>TITLE</u>
<u>DISEASES AND MOOILY DISORDERS</u>	
131	Arthritis and Quackery
127	Arthritis Rheumatism
1140	Blood In The Urine
129	Bursitis
236	Cystic Fibrosis
662	Diverticulosis - Diverticulitis
580	Dust Diseases
125	Epilepsy
126	Gout
162	Hepatitis
577	Histoplasmosis
565	Hypoglycemia
969	Infectious Mononucleosis
38	Influenza
238	Meningitis
825	Multiple Sclerosis
128	Rheumatoid Arthritis
124	Shingles
566	Sickle Cell Anemia
11	You May Have Diabetes and Not Know It
<u>DISEASES THAT AFFECT BREATHING</u>	
576	Bronchial Asthma
581	Chronic Cough

LIST OF TEL-MED TAPES BY CATEGORY (Continued)

TAPE NUMBER TITLE
DISEASES THAT AFFECT BREATHING (Continued)

90 Hay Fever
 13 Pulmonary Emphysema
 582 Shortness of Breath
 7 What a Case of Pneumonia Means

DRUG ABUSE AND USE

136 Amphetamines and Barbiturates (Up & Down Drugs)
 139 Help Yourself Get Well
 141 How New Medicines are Tested
 140 How Safe are Drugs
 134 LSD
 137 Marijuana
 138 Narcotics
 171 Prescription Medicine

EXTREMITIES

22 Foot Care for Diabetics & Others with Poor Circulation
 47 Leg Cramps and Aches
 191 Varicose Veins

EYES

472 Cataracts
 9 Glaucoma
 85 Pesky Pinkeye
 474 Presbyopia -- Do You Need Reading Glasses?
 470 Seeing Spots and Floaters

GENERAL

118 Animal Bites
 1165 Bite Injuries to Your Dog or Cat
 59 Blood Transfusion/Blood Bank

LIST OF TEL-MED TAPES BY CATEGORY (Continued)

TAPE NUMBER TITLE
GENERAL (Continued)

160 Cockroaches
 167 Exercise for the Bedridden Patient
 1101 Exercising: Warming Up Slowly
 175 Fears of the After Forty Man
 64 Flies: Dirty and Dangerous
 1081 Health Hints for Campers
 165 Home Care for the Bedridden Patient
 1180 Homosexuality
 168 How to Take Temperature, Pulse & Respiration
 1050 Male Sexual Response
 174 Masturbation
 166 Medical Supplies for the Home
 122 Sleep is Kind
 152 Social Security and SSI
 89 Treatment Using Cold
 429 What is Tul-Med?
 164 Your Family Health
 1166 Your New Puppy

READ AND THROAT

725 Brain Damage Recovery
 473 Facts and Fallacies about Contact Lenses
 450 From Hearing Loss to Hearing Aid
 451 Hearing Loss from Noise
 235 Large and Protruding Ears

LIST OF TEL-MED TAPES BY CATEGORY (Continued)

<u>TAPE NUMBER</u>	<u>TITLE</u>
<u>HEAD AND THROAT (Continued)</u>	
52	Lice: Public, Head and Body
17	Lockjaw
76	Otosclerosis: One Cause of Hearing Loss
80	Ringworm
18	Tonsillectomy
<u>HEART</u>	
30	Angina Pectoris
29	Atherosclerosis and High Blood Pressure
65	Chest Pains
21	Cigarettes and Heart Disease
23	Diet and Heart Disease
63	Early Warnings of Heart Attack
107	First Aid for Persons Suspected of Having a Heart Attack
27	Health and Heart Checkups
72	Heart Failure
28	How to Decrease the Risk of Heart Attack
25	Hypertension and High Blood Pressure
26	Stroke and Aplexy
<u>MENTAL HYGIENE</u>	
144	Emotional Experiences of the Dying
159	Hypnosis
726	Psychosomatic Illness
727	Schizophrenia
432	Upset Emotionally? Help is Available.
728	When Should I See a Psychiatrist?

LIST OF TEL-MED TAPES BY CATEGORY (Continued)

<u>TAPE NUMBER</u>	<u>TITLE</u>
<u>OTHER CHILD PROBLEMS</u>	
471	Childrens' Vision
230	Cleft Lip and Palate
231	Hearing Loss in Children
239	Necessary Inoculations for Your Children
200	Normal Feet in Children
401	Personal Hygiene
232	Speech Problems in Children
403	The Young Child's Eating and Meals
48	Thumb Sucking
81	Tics: A Child's Outlet for Anxiety
<u>PARENTS AND CHILDREN</u>	
133	Advice for Parents of Teenagers
404	Brothers and Sisters Getting Along
408	Discipline and Punishment, Where do You Stand?
433	Full Time Foster Care of Children
49	No-No: What Does it Mean to the Toddler?
50	Teen Years - Age of Rebellion
407	The Man in Your Young Child's Life
405	The Single Parent Family
51	When a New Baby Creates Jealousy
402	Where Did I Come From, Momma?

LIST OF TEL-MED TAPES BY CATEGORY (Continued)

<u>TAPE NUMBER</u>	<u>TITLE</u>
<u>PREGNANCY</u>	
12	Am I Really Pregnant
69	Artificial Insemination
881	Breast Feeding Your Baby
261	Care of the Newborn
883	Caring for Yourself After a Baby
5	Early Prenatal Care
882	Emotional Feelings After a Childbirth
606	Nutrition in Pregnancy
260	Supplies for the Newborn
62	The Premature Baby
32	Unwanted Pregnancy
67	Warning Signs of Pregnancy
66	What Causes Miscarriage
<u>SAFETY</u>	
41	Are You Ready for the Skiing Season
60	Power Lawn Mower - Dangerous Tool
150	Seat Belts for Safety
151	The Dangerous Driver

SKIN DISEASES AND DISORDERS

86	Are Old Age Freckles Dangerous
83	Impetigo

LIST OF TEL-MED TAPES BY CATEGORY (Continued)

<u>TAPE NUMBER</u>	<u>TITLE</u>
<u>SKIN DISEASES AND DISORDERS (Continued)</u>	
519	Itching Skin
82	Why the Mystery About Psoriasis?
<u>SMOKING</u>	
697	Do You Want to Quit Smoking?
700	Effects of Cigarette Smoke on Non-Smokers
699	Gimmicks to Help You Quit Smoking
696	How Smoking Affects Your Health
695	Reducing the Risks of Smoking
693	Weight Control While Quitting Smoking
698	What Do You Get Out of Smoking?

VENEREAL DISEASE

16	Gonorrhea
970	Herpes
15	Syphilis
8	Veneral Disease

WOMEN

24	Abortion
34	Anemia
39	Feminine Hygiene
898	Female Sexual Response
889	Hysterectomy

LIST OF TEL-MED TAPES BY CATEGORY (Continued)

<u>TAPE NUMBER</u>	<u>TITLE</u>
<u>WOMEN (Continued)</u>	
42	I'm Just Tired, Doctor
46	Lumps and Bumps of Arms and Legs
526	Hemorrhage
173	Menopause
884	Menstruation
148	Hugging and Purse Snatching
147	The Lady Living Alone
53	Tubal Ligation
31	Vaginitis
74	Why a "D and C"
694	Why a Woman Should Quit Smoking

WHAT YOU SHOULD KNOW IN CASE OF

121	Bee Sting
195	Bee Sting - It Can Cause Death
111	Choking
84	Dizziness
93	Electrical Shock
109	Epileptic Convulsions
108	Fainting
123	First Aid for Chemical Burns
98	Head Injuries
102	Mouth to Mouth Resuscitation (Small Children and Babies)

LIST OF TEL-MED TAPES BY CATEGORY (Continued)

<u>TAPE NUMBER</u>	<u>TITLE</u>
<u>WHAT YOU SHOULD KNOW IN CASE OF (Continued)</u>	
103	Mouth to Mouth Resuscitation (Adults)
96	Poisoning By Mouth
10	Poisons in the Home
91	Severe Bleeding
94	Shock
99	Sprains
101	Thermal Burns
110	When You Find Someone Unconscious

ADDED:

THIS IS A LIST OF TAPES THAT HAVE BEEN ADDED SINCE PUBLICATION OF THIS BOOKLET

<u>Tape Number</u>	<u>Title</u>
40	VARSINO
43	Stuttering
87	Scleroderma
88	Frostbite
113	Tenonitis
119	Pharyngitis
135	ICP - Intra-cranial Pressure
149	Fake
156	CHAMPUS
191	Varicose Veins
322	Fibrillation
323	Afraid of the Dark?
563	Food Poisoning
567	Allergens
570	Cardiacs of the Liver
612	Don't Be Misled by Fat Drugs
613	Arterial Narrowing
632	Oxalate
694	Why a Woman Should Get a Scleritis
729	Marriage Counseling
970	Heaps
1029	Broadband Communication After Surgery
1083	Little League Block

APPENDIX G

TEL-MED, INC. PROGRAM SUPPORT FEE

The following services provided by Tel-Med, Inc. to all licensees are sustained by a monthly program support fee of \$30.00, as documented in the Tel-Med, Inc. Current Fee Schedule.

- I. CONTINUAL REVIEW OF TAPE CONTENT - Each tape in the Tel-Med, Inc. Master Library is under continual review by the physicians of the San Bernardino County Medical Society, selected health care specialists throughout the country, the Tel-Med, Inc. Medical Director and staff. In addition, comments from medical authorities in the United States where scripts are under review for new Tel-Med programs, are incorporated with the latest available health and medical information, to ensure the content of each tape is pertinent and accurate. When revisions due to medical update are made necessary, all licensees are notified immediately, and the updated tapes are provided at cost.
- II. RESEARCH AND DEVELOPMENT OF NEW TAPES - We continually explore new areas and respond to consistent inquiries for new topics to be added to the current Tel-Med, Inc. Master Library of over 300 tapes. Our many sources, including health care experts from operating Tel-Med programs, have provided material on a multitude of topics not presently available in the Tel-Med, Inc. Master Library.
- III. NATIONAL CLEARINGHOUSE FOR HEALTH CARE INFORMATION - As an extension of our research and development program, we can provide all Tel-Med, Inc. licensees with any material we have compiled for development as an addition to their library. Through this practice of collecting and disseminating data, Tel-Med, Inc. acts as a national clearinghouse for health care information.
- IV. TEL-MED, INC. NEWSLETTER - The Tel-Med, Inc. Newsletter is published monthly and circulated among Tel-Med licensees to help us all benefit from each others' experience. We receive input from each licensee and publish information that can benefit everyone. In addition, the Newsletter is our medium for notifying licensees of available new and revised tapes, and all other services provided by Tel-Med, Inc.

APPENDIX H
SCRIPT DEVELOPMENT GUIDELINES

1. Before writing your own script, check with the Tel-Med, Inc. office. It is possible that another Tel-Med licensee has already developed a script on the subject. If so, it is available for your use. Please keep in mind, however, this source material is not part of the Master Library, and Tel-Med, Inc. does not assume responsibility for its accuracy.
2. Scripts should be no longer than five minutes in length (about two and a half double-spaced, typed pages).
3. Write your script for the eighth grade listening level. Anything more complicated will not be as effective or reach as many people.
4. Make certain all script changes are legible. For minor changes, a simple "line out" of the material with a clearly printed word above that line is suitable. For major revisions, please retype the script; double-spaced.
5. Clearly note difficult pronunciations. More specifically, give phonetic guides for names, organizations, streets and medications to assist the narrator.
6. Keep your trailer message short and to the point. We suggest that you do not refer to names or telephone numbers since they can and do change. Such changes will outdate your tape.
7. Send the final script to us, and we will assign it a 5000 Series number prior to recording. This is done to circumvent any conflicts in the Master Library numbering system.
8. The general rule of thumb is: submit your script exactly as you want it recorded.

BIBLIOGRAPHY

Articles

- Bartlett, Marjorie H. and Meyer, Thomas C. Patients Receive Current, Concise Health Information by Telephone. Hospitals 50 (February 16, 1976): 79-80.
- Caffarella, Rosemary S., PhD. "Hospital-Based Education Programs for Patients: Views of Health Care Professionals in Maine." Public Health Reports (96)5 (December 1981): 560-567.
- Deeney, Kathleen E. and Moeller, Kathleen A. "Documenting the Need for Consumer Health Information: Results of a Community Survey." Bulletin of the Medical Library Association (70)2 (April 1982): 236-239.
- Diseker, Robert A. Dr. PH., Michielutte, Robert, PhD., Morrison, Virginia, MED. "Use and Reported Effectiveness of Tel-Med: A Telephone Health Information System." American Journal of Public Health 70(3) (March 1980): 229-234.
- Eakin, Dottie. "Consumer Health Information." Bulletin of the Medical Library Association (68)2 (April 1980): 220-229.
- Elsner, Robert H. "Tel-Med." The Bulletin, August 3, 1978, p3.
- Goodwin, Norma T., and Goldstein, Marjorie F. "A Practical Approach to Assessing Patient Learning Needs." Journal of the National Medical Association (73)6 (1981): 533-537.
- Hansen, Marian and Lavandero, Ramon. "A Multidisciplinary Education Program for Patients Undergoing Cardiovascular Surgery." Quality Review Bulletin May 1981: 20.
- Henry, Sarah. "Doctors on the Air: The Successful Trial of Dial-a-Doctor." CMA Journal 121 (September 8, 1979): 653-4.
- Hospitals "Hospital's Library Serves as Focal Point for Community's Quest for Facts on Health." October 16, 1982: 36-36.
- Hospitals "13 Virginia Start Support Group to Keep Abreast of Patient Education Trends." April 16, 1982: 18.
- Klimecki, Camille C. "A Multiphasic Patient Education Program." Quality Review Bulletin May 1981: 21-28.

- Lyons, Chalmers. "Interactive Computerized Patient Education." Heart and Lung (11)4 (July - August 1982): 340-341.
- Mazucca, Steven A. "Does Patient Education in Chronic Disease Have Therapeutic Value?" Journal of Chronic Disease 35 (1982): 521-529.
- Rayburn, William M.D., et. al., "Prenatal Counseling: A Statewide Telephone Service." Obstetrics & Gynecology 60(2) (August 1982): 243-246.
- Redman, Barbara K. "Patient Education in Hospitals: Developmental Issues." The Journal of Nursing Administration September 1981: 28-30.
- Roth, Britain G. "Health Information for Patients: The Hospital Library's Role." Bulletin of the Medical Library Association (66)1 (January 1978): 14-17.
- Tel-Med News "Marketing Tel-Med." November, 1983: 3-4.

Books

- Skrainka, Philip M.D. Medical Information In Sickness and Health. New York: Coward-McCann Inc., 1980.
- Tubesing, Donald A., PhD. Wholistic Health. New York: Human Sciences Press, 1979.
- Vickery, Donald M., M.D. Take Care of Yourself. Massachusetts: Addison-Wesley Publishing Company, 1976.

Interviews

- Barber, Coleman. Health Sciences Media Division, Academy of Health Sciences, Fort Sam Houston, Texas. Interview: 13 January 1984; 27 March 1984.
- Bresnan, Maria. Comptroller, William Beaumont Army Medical Center, El Paso, Texas. Interview: 12 January 1984.
- Freeman, Lynn. Director of Volunteers, Sierra Medical Center, El Paso, Texas. Interviews: 20 December 1983; 30 January 1984; and 20 March 1984.
- Hammel, George, CPT. Administrative Resident, Dwight D. Eisenhower Army Medical Center, Fort Gordon, Georgia. Interview: 9 January 1984.

- Harper, Benson W., M.D. "Tel-Med - A Success Story." Western Journal of Medicine 131(2) (August 1979): 162-164.
- Hawkins, Michael, CPT. Researcher, Army Residential Treatment Facility, William Beaumont Army Medical Center, El Paso, Texas. Interviews: 17 January 1984; 26 & 27 March 1984.
- Kahn, Jean. Sierra Medical Center, El Paso, Texas. Interview: 20 December 1983.
- Kohler, James C. Administrative Resident, Womack Army Community Hospital, Fort Bragg, North Carolina. Interview: 13 January 1984.
- Magness, Dorris. Chairman of Tel-Med, Sierra Medical Center, El Paso, Texas,. Interviews: 20 December 1983; 30 January 1984; and 20 March 1984.
- Metz, Martha L., Colonel, ANC, Community Health Nurse, William Beaumont Army Medical Center, William Beaumont Army Medical Center, El Paso, Texas. Interview: 9 October 1983.
- Mouritsen, Paul B., CPT. Administrative Resident, Walter Reed Army Medical Center, Washington, D.C. Interview: 11 and 12 January 1984.
- Provost, Mark. Manager of Operations, Teletronix, Colton, California. Interview: 27 December 1983.
- Pugsley, Karen, Captain, ANC. Community Health Nurse, Blanchfield Army Community Hospital, Fort Campbell, Kentucky. Interviews: 27 & 30 March 1984.
- Smith, Collins E., LTC. Assistant Administrator, Sheppard AFB, Texas. Interview: 3 January 1984.
- Smith, Marsha. Medical Librarian, Walter Reed Army Medical Center, Washington, D.C. Interview: 12 January 1984.

Newspapers

- "Good Service." El Paso Harold-Post, 30 April 1979, sec. B, p.2.
- "Tel-Med Offers Phone Medical Advice." The El Paso Times, 15 April 1979, sec. D, p. 1-D.