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FAMILY ADVOCACY PROGRAM I: RECOMMENDATIONS FOR THE DEVELOPMENT OF A MANAGEMENT INFORMATION SYSTEM

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ABSTRACT

The Navy's Family Advocacy Program's (FAP) directives, manuals, procedures, and functions were studied in order to gather data to aid in the development of a Management Information System (MIS) for FAP. A review of relevant instructions, documents, and general literature was completed. A survey instrument and a structured interview questionnaire concerning procedures, present use of automation, and specific needs for automation was created, and administered to FAP directors, case workers, and support personnel at seven FAP sites. Relevant available software was acquired and assessed for use by FAP. A detailed recommendation for a FAP MIS was created and an Abbreviated System Development Paper was written. The results indicate that FAP would profit from an integrated system that allowed for the needs of management and the needs of the site worker, in terms of functioning and the range of data acquired. Such a system would be flexible enough to fill the unique and multiple needs of the organizational hierarchy. It was concluded that the development of an MIS for FAP is feasible and its application would yield significant practical results. However, the specific needs and characteristics of the FAP chain-of-command and site staff must be considered and incorporated into the design, development, and testing of the MIS for it to be successful.

TABLE OF CONTENTS

INTRODUCTION

The programs that have been established for the prevention, investigation, assessment, treatment, and follow up of child abuse and neglect and spouse abuse, form the Family Advocacy Program (FAP) (DoD 6400.1-M, 1992). Fluke et al. (1990) completed a study of the Navy, Marine Corps, Army, and Air Force FAPs. Their study contrasted and compared issues related to FAP data collection at various Department of Defense (DoD) installations. The predominant findings were that differences exist between services, and between facilities within services, in data collection methods, coding of data, and reporting of data. The use of required forms and the implementation of DoD instructions also varied among facilities and services. Their recommendations to enhance the accurate and efficient gathering, tracking, and reporting of case management data are numerous and strongly indicate that an automated Management Information System (MIS) enhance the present system.

The problems in FAP administrative functioning found by Fluke et al. (1990), are amenable to the automation suggestions of Nurius and Hudson (1988). Nurius and Hudson suggested that computers could be used to automate certain social worker activities, thereby increasing the efficiency and accuracy of their work. They stated that automation could be used to aid in the assessment, progress monitoring, and outcome evaluation activities of case management. Additional, although peripheral, applications suggested by Nurius and Hudson include the automation of client intake, problem formulation and goal specification, diagnostic and interpretive functions, and service effectiveness evaluation. Their ideas for automation are aimed at reducing the time that social workers spend performing clerical tasks, thereby, allowing them to devote more time to service delivery.

FAP case workers collaborate with local medical treatment facilities and Family Service Center (FSC) personnel to identify abuse and to provide families with interventions and treatment. FAP case workers are responsible for performing numerous administrative, management, prevention, and direct service duties that are integral to the effectiveness of their functioning (NAVMEDCOMINST 6320.22, 1989). Specific examples of FAP case worker duties include: (1) receive all reports of known or suspected abuse, (2) maintain medical and case records, (3) ensure the security of case files, (4) make clinical assessments and treatment recommendations in conjunction with a case review subcommittee, (5) take action to protect abuse victims, (6) ensure that alleged active offenders are apprised of due process rights and the implications of FAP involvement, (7) provide civilian referrals when appropriate, (8) arrange for photographs of victims, and (9) follow special guidelines for intrafamily child sexual abuse cases. In addition to these duties, case workers are subject to internal and external reporting requirements, such as those required by local child protective agencies, the Naval Security Investigative Command, commanding officers, Bureau of Medicine and Surgery (BUMED), and the Bureau of Naval Personnel (BUPERS). One particularly important reporting document is the "Child/Spouse Abuse Incident Report" (Form DD2486); a standard form that must be completed

for every substantiated and unsubstantiated reported abuse incident. The DD2486 is submitted to the Navy Central Registry which, in turn, uses the information to investigate factors related to abuse, respond to inquiries about child and spouse abuse in the Navy, support budget requests, and guide in the development of policy.

The current system of Navy family advocacy case management is complex and time consuming. Case management tasks are often performed manually with varying degrees of data quality control. Furthermore, there are differences across FAP facilities in the implementation of policies and instructions affecting the management of child and spouse abuse cases. This occurs when the written instructions are ambiguous, outdated, or their implementation is not feasible. Time constraints require the case worker to set task priorities. With these constraints tasks such as, service to clients must take precedence over reporting related tasks. Delays in, or noncompliance with, the required reporting procedures have resulted in under-reporting important information. For these reasons, concerns have arisen regarding the demanding nature of duties of the FAP case worker, subsequent impact on service delivery, and the accuracy and completeness of data generated at the various facilities (Fluke et al., 1990).

Many software programs have been developed to assist human services professionals. Psychological tests have been automated and available for a number of years (The Psychological Corporation, 1990). Automated psychological tests are computer administered, scored, analyzed, and recommendations for treatment are generated. A comprehensive computerized assessment of sex offenders has been developed by the North Florida Evaluation and Treatment Center (NFETC) to assess disordered sex offenders (Barnard, Fuller, Robbins, & Shaw, 1989). NFETC administers a battery of computerized tests to offenders. The computer program then creates a synopsis of the results complete with recommendations for treatment. Although the automation of testing and diagnosis within DoD is not the central goal of the present study, the technology is similar and the long-range application is achievable. The use of automated instruments has been shown to improve diagnostic reliability, speed the assessment of clients, and reduce the reliance on referring for testing (Schoech, 1990).

Specialized computer programs have been developed to improve the quality of care and thus the quality of life of human services patients. Some of these programs may be of value to FAP. One such system, a computer-automated telephone outreach system that assesses the basic needs of chemotherapy patients, was created by Christ and Siegel (1990). Their system has been shown to be reliable and valid with broad-based applications that would allow for timely social work interventions and assistance.

A management information system must meet the needs of the users and aid them in decision making. The information collected by the system should supply the data needs of the chain-of-command and enable them to make confident decisions regarding program development, outcomes, and evaluation. Central to the ability to make effective decisions is the availability

of comprehensive, and timely reports containing reliable and valid data. A productive system would have the capability of creating, validating, and maintaining such reports (Caputo, 1986).

The effective implementation of an information system requires that two general, but critical issues be addressed. First, is that meticulous care must be taken during the overall planning of the system to ensure that the system is suitable for its intended application. Second, consideration must be given to the users of the system (people and organization) to allow them time to adjust to the new system. Specific factors that have been shown to be essential to the implementation of a new system are the designation of a senior staff person at each site to ensure that the system is implemented, the assurance of chain-of-command support, and staff involvement and training (Carrilio, Kasser, Moretto, 1985). The involvement and training of staff personnel cannot be over emphasized as the unusually high level of stress felt by social workers may be increased by any change, positive or negative (Kurland & Salmon, 1992).

The purpose of this study is to develop consistent and efficient procedures to manage FAP cases, document quality assurance, maintain local files, extract information, and generate reports. The objective of the current effort is to produce recommendations for a system to reduce the administrative burden of case managers, provide standardized and efficient methods for managing and reporting case data, and allow cases to be tracked. Follow-up work will include software development, documentation, testing, and evaluation of the automated system. This system will be designed to support the local FAP personnel and to supply accurate and timely information to their chain-of-command. Ultimately, effective information management will allow case workers to devote more time to direct service delivery, as it has in other medical and social service areas, when procedures were automated (Adams, 1985).

APPROACH

The analyses conducted followed Thierauf's (1984) outline of areas to be studied during system development. The areas are (1) review of historical facts concerning the organization, (2) analysis of inputs, this includes all documents and sources of originating data, (3) review of methods and procedures to understand the relationship between inputs, files, and outputs, (4) review of files maintained by the organization to understand their number and size, who uses them, and how often they are used, (5) analysis outputs to determine how well present reports are meeting the organization's needs, (6) review of internal controls to indicate control points critical to maintaining efficient MIS operations, (7) analysis of present personnel requirements to determine the number of personnel by type, skill, and pay scale, (8) review of present work volumes to identify average and peak work loads, (9) review of other requirements and considerations to locate items that may be important to the development of an MIS (10), and the use of data flow diagrams to trace the origin of input data through each phase of processing and communication, into files, and out of files for desired outputs, many in the form of reports.

Finally, the advice and help of FAP staff personnel and directors was sought to ensure that the processes of the organization were understood. A primary goal of the MIS development team was to gain an understanding of the problems and frustrations of the users of the existing system in order to gain insight into unmet needs.

The first stage of the development process incorporated survey methods (both survey of literature and, surveys of FAP personnel) with subsequent requirements analysis. The results of the literature review and survey of personnel were evaluated and the requirements of the case workers and the chain-of-command were identified. A review of relevant instructions, documents, and general literature was completed. From this review an outline of the job elements pertaining to the FAP case workers was created. Existing commercial and DoD software programs related to human services were evaluated. Also, a survey instrument and a structured interview questionnaire was created and administered to FAP directors, case workers, and support personnel, at seven FAP sites, concerning their procedures, present use of automation, and specific needs for automation. A definition of the structure and operational context of case workers' tasks that may be amenable to automation were determined. The requirements that were amenable to automation were then incorporated into a final system specification. Finally, a FAP system analysis, recommendations for a FAP MIS, and an Abbreviated System Decision Paper (ASDP) are presented.

Review of Instructions and Directives

This section contains the reviews of Naval and Defense Department instructions, directives, and requirements and reviews of existing software. Department of Defense (DoD), the Secretary of the Navy (SECNAV), the Chief of Naval Operations (OPNAV), the Commander Naval Medical Command (BUMED), local area line commanders, Navy hospital commanding officers, and FAP directors have generated instructions, manuals, and standard operating procedures (SOP) concerning the operation of FAP. Each of the seven sites visited had a printed SOP. Some of them simply contained basic written procedures and copies of forms and questionnaires, and others were very detailed; containing copies of DoD directives, Navy instructions, operating procedures, instructions for the use of forms and questionnaires, and other information and materials relevant to the functioning of the site.

SECNAV Instruction 1752.3 of 27 Jan 84. This instruction from the Secretary of the Navy formally established policy objectives for the Department of the Navy (DoN) Family Advocacy Program, and assigned responsibility for management and implementation of the program to the Chief of Naval Operations. In addition, Naval Medicine was given responsibility for providing the health care aspects of the program including all procedures associated with child/spouse abuse prevention, identification, treatment, follow-up, reporting, and evaluation. Although these program elements were not discussed in detail in this instruction, the Family Advocacy Representative's (FAR) is mentioned as the representative of the military community

responsible for receiving all reports of abuse, reporting incidents of abuse to appropriate civilian and military agencies including the member's commanding officer, and arranging for intervention and treatment.

DoD Directive 6400.1 of 10 Jul 86. This directive established the DoD Family Advocacy Program, the Family Advocacy Committee (FAC), and the Military Family Resource Center (MFRC). Rather than present specific operational guidelines, the all service directive set broad goals for DoD policy: (a) prevent child abuse and neglect as well as spouse abuse, (b) develop programs that contribute to healthy family life, (c) provide a coordinated and comprehensive child/spouse abuse program, (d) promote early identification and intervention in cases of alleged abuse, (e) provide treatment programs for abuse victims, and (f) cooperate with civilian authorities to address problems. The directive served as a statement of policy and DoD commitment to address the issue of child and spouse abuse, and assigned responsibility for the establishment and operation of programs to the Secretaries of each military department. While specifics of FAP operations were not provided, this directive did establish case review committees to make status determinations in abuse cases and defined categories for abuse cases (i.e., "substantiated", "suspected", or "unsubstantiated").

OPNAV Instruction 1752.2 of 6 March 87. This OPNAV instruction provided additional program guidance for the Navy FAP. Medical Treatment Facilities (MTFs) were given responsibility for establishing local programs and appointing a FAR, whose primary duties include implementation and management of the FAP. As indicated in this instruction, the FAR will (a) receive all suspected and established reports of abuse, (b) refer cases to case review subcommittees for status determination and action, (c) make clinical assessments and referrals, (d) provide for victim protection as needed, (e) coordinate all aspects of case management, including reporting requirements, (f) provide treatment as appropriate, (g) inform commanding officer of members' FAP involvement, and (h) follow the special incest guidelines.

DoD Instruction 6400.2 of 10 Jul 87. The purpose of this instruction was to implement Directive 6400.1 by assignment of responsibilities of the FAP, and to prescribe reporting requirements, particularly form DD2486. Instructions and terms to complete the DD2486s were included as enclosures to this instruction. In addition, categories of abuse were more specifically defined and more detail about abuse incident evaluation and status determination was provided.

NAVMEDCOM Instruction 6320.22 of 19 Jan 89. This instruction established guidelines for the operation of FAPs at MTFs. In addition, this instruction appoints the FAR as custodian of all FAP case records retained at the MTF; therefore, case-record maintenance and security tasks fall under the purview of the FAR. For example, all client information must be secured with a double lock system and be accessible only to authorized persons. Computerized case information must be safeguarded by securing removable media or by securing data onto a fixed storage medium. Computer terminals must be under a double lock system as well. Another duty

of the FAR is the responsibility for FAP case record expungement. According to this instruction, Family Advocacy case records must be retired after two years have elapsed without further case activity after case closure. Finally, included in this document is the Navy instructions for completing the DD2486 and more detailed information about the duties of the FAR. Using this instruction, NHRC staff developed a taxonomy of FAR responsibilities consisting of five broad job elements: Intake and Assessment, Intervention and Prevention, Command/Organizational Liaison Responsibilities, Case Reporting, and Follow-up Procedures. Table 1 presents the Family Advocacy Representative's (FAR) Job Elements that were derived from directives and expert opinion. The elements cover general areas of functioning and are not necessarily in the order in which they are performed.

Table 1
Family Advocacy Representative's Job Elements

Intake and Assessment

1. Receive all reports of known or suspected abuse.
2. Interview/apprise suspected offender, including due process provisions.
3. Review and collect pertinent medical information.
4. Make initial clinical assessment.
5. Arrange for photographs of victim when possible.

Intervention and Prevention

1. Present cases to Case Review Subcommittee.
2. Ensure medical information is provided to CRS.
3. Make referrals to civilian agencies when needed.
4. Ensure protection of victim when necessary.
5. Follow special guidelines for incest cases.

Command/Interorganizational Liaison

1. Advice and make recommendations to Commanding Officer.
2. Ensure civilian agency involvement when appropriate.
3. Coordinate case decisions with FAP centers at other services.
4. Screen member/family involved in FAP cases for overseas eligibility.

Case Reporting

1. Complete DD 2486 for each incident of abuse.
2. Report known/suspected child abuse cases to Child Protective Services.
3. Notify Naval Security Investigative Command (NSIC) of felony-level abuse.
4. Report known/suspected incest cases to BUMED.
5. Report known/suspected child abuse cases to sponsor's Command.
6. Report known/suspected spouse abuse cases to Commanding Officer.

Follow-up

1. Track case after referral to treatment facility.
2. Maintain periodic contact with family to insure no recurrence.

DoD Manual 6400.1-M of March 1992. This manual contains standards that apply to the operation of all FAPs. The standards were promulgated in an attempt to ensure that a uniform quality of care, equivalent to that of civilian facilities, was received by military personnel and their families. All of the standards must be implemented before March 1995. Obviously, these standards must be incorporated into an MIS developed for the FAP. Chapter One, Section D titled "Management Information Systems," professional standard 1.30 states that, "A plan shall be developed and implemented for the regular collection, utilization, and dissemination of information to ensure accurate and comparable statistics essential for program planning, administration, determination of FAP policies and budgets, and identification of unmet needs and/or gaps in services." This standard must be implemented before March of 1993. Additionally, under the same chapter and section, the manual states that, "The installation FAP shall establish guidelines to comply with the statistical reporting standards of the DoD Directives and Service and installation directives, including the accurate and timely registering of client data in the service Central Registry for FAP cases." This manual was evaluated to determine whether the standards were amenable to automation. The results of this evaluation are shown in Table 2 along with the date that the standard must be implemented.

Table 2
Recommendations for Automating the DoD 6400.1-M Standards

Chapter and Section		Date of Implementation	Automation Recommendation*
Definitions, Cases.		MAR 95	1, 2
1.	A.	MAR 93 & MAR 95	2
	B.	MAR 93 & MAR 95	3, 4
	C.	MAR 93 & MAR 95	2, 5, 6, 7, 8, 9, 10
	D.	MAR 93 & MAR 95	5, 11, 12
2.	A.	MAR 93 & MAR 95	7, 13
	B.	MAR 93 & MAR 95	7, 14
	C.	MAR 95	5, 7, 14
	D.	MAR 95	5, 7, 14
3.	A.	MAR 95	1, 2, 3, 6, 7, 16
	B.	MAR 93 & MAR 95	2, 6, 7, 13, 16
4.	A.	MAR 93 & MAR 95	2, 13, 6, 7
	B.	MAR 93 & MAR 95	2, 6, 7, 13, 14
	C.	MAR 95	7
	D.	MAR 95	2, 13
	E.	MAR 93 & MAR 95	2, 6, 16
	F.	MAR 95	2, 7, 14
	G.	MAR 95	2, 6, 7, 14
	H.	MAR 93	2, 6, 16
5.	A.	MAR 93 & MAR 95	1, 2
	B	MAR 93 & MAR 95	2, 6
	C.	MAR 93 & MAR 95	7, 13
	D.	MAR 95	2, 6, 7, 13

Table 2 (Continued)
Recommendations for Automating the DoD 6400.1-M Standards

Chapter and Section		Date of Implementation	Automation Recommendation*
5.	E.	MAR 95	6
	F.	MAR 95	2, 6, 16
	G.	MAR 93	4, 7, 14
	H.	MAR 93	2, 4, 6, 7, 13, 16
	I.	MAR 95	2, 7, 13, 16
6.	A.	MAR 93 & MAR 95	2, 5, 6, 7, 13, 14, 16,17
	B.	MAR 95	2
	C.	MAR 93 & MAR 95	6, 7, 13, 14, 15, 16, 17
	D.	MAR 95	2, 6, 7, 14
	E.	MAR 93 & MAR 95	2, 7, 8
	F.	MAR 93 & MAR 95	2, 8
7.	A.	MAR 95	2
	B.	MAR 95	2
	C.	MAR 95	1, 2, 7, 9, 13, 14, 17
	D.	MAR 95	2, 7, 14
	E.	MAR 93 & MAR 95	2, 6, 7, 14, 17
8.	A.	MAR 93 & MAR 95	1, 2, 5, 6, 7
	B.	MAR 95	5, 6, 7, 14
	C.	MAR 95	2, 7, 14
	D.	MAR 95	1, 2, 5, 7, 14, 17

* 1 = Relational database
2 = Reference library
3 = MOU generator
4 = Contract generator
5 = Report generator
6 = Forms Generator
7 = Word processing
8 = System security
9 = Spreadsheet
10 = Plant inventory
11 = Data base
12 = DD2486 Generator
13 = Assessment instruments
14 = Tickler file
15 = Intake log
16 = Letter generator
17 = Electronic mail

Local Area Commander Instructions. These instructions focused on the assignment of specific FAP responsibilities and duties. Responsibilities and duties are assigned to installation commanders, security officers, legal services offices, unit commanders, FARs, directors of alcohol related programs, dental offices, chaplains, regional FAP coordinators, and the regional Family Advocacy Committee (FAC). The Naval Security and Investigative Service (NSIS, formerly NIS) is requested to designate agents to serve specific functions associated with FAP, to cooperate with investigations, and to receive regular training relevant to the mission of FAP.

Software Reviews

More than 150 software programs related to the social services and mental health professions have been produced and are commercially available (Hudson, 1992; Stoloff, Brewster, & Couch, 1991; CUSSN, 1992). The majority of these programs were created to aid the independent mental health professional in streamlining office procedures and to increase profits. Most of the commercial programs have integrative functions and can be used for scheduling, insurance billing, client billing, client record keeping, general ledger, accounts payable, payroll, and word processing. Over 75 percent were designed to be used on IBM PC microcomputers or compatibles. The cost of the programs ranges from $5 to more than $20,000, depending on the number of users and work stations. The cost for installation, when required, ranges from $35 to $60 an hour. Direct installation and training are available from the publisher for about 70% of the programs, local installation and training is available for about 33% of the programs, and no training or installation is available for seven percent of the programs.

Table 3 contains a listing of programs that were designed to be used in human services organizations and may be appropriate for use by FAP. The programs are being evaluated at the present time and the results will be published in the future. The first group contains programs that have been developed for use by human services organizations and the second group contains programs that were designed to be used in clinical areas. The programs in Table 3 were selected from among more than 150 programs that were available. The programs were selected because they appeared to be related to the functions performed by FAP.

Table 3
Commercial and Freeware Software

Title	Description
Child Protection System	A UNIX based system which provides assistance in case management, case tracking, risk assessment, case investigation, foster care placement, and office automation.
EVOLV	Designed to be used to manage child welfare cases. It is a menu driven system providing administration, case management, progress notes, adoptions, foster parent management, structured programs, health services, foster parent payments, and Medicaid billing.
R/Client	A client management and reporting system. R/Client is menu driven, designed for use by social services agencies, and provides a variety of reports, statistics, and information useful in the treatment, planning, and quality assurance process.
VIXEN	A system for use by social services agencies that provides for case management.

Demonstration copies of the following software are being reviewed at the present time and the results will be published in the future. They may provide convenient and automated methods for in-house gathering of client data and add to the tools available to social workers.

1. The Automated Social History (ASH). A program that administers 401 forced choice items to clients covering 13 areas including religion, family, education, employment, addictions, family, interests, criminal and medical histories.

2. The At-Risk Evaluation System (ARES). A battery of 20 individual survey consisting of over 700 items designed to identify multiple risk factors, problems, issues or personal concerns.

3. The Social Work Bibliography (SWBIB). This is an annotated bibliography on computers in social work. This is freeware and there are no restrictions on its use.

4. Ten Depression Tests. These are available, on one disk, as freeware and, therefore, may be used without restrictions. Included are data and file creation programs for the Automatic Thoughts Questionnaire, Beck Depression Inventory, Center for Epidemiological Studies-Depression, Dysfunctional Attitude Scale, Frequency of Self-Reinforcement Questionnaire, Generalized Contentment Scale, Life Satisfaction Index, Rational Behavior Inventory, Revised UCLA Loneliness Scale, and the Zung Self-Rating Depression Scale.

5. The Diagnostic Interview Schedule (DIS). A client self-administered program that generates DSM-III information. It is a structured interview used to obtain data required for most adult Axis I psychiatric diagnoses. DIS is reported to be designed so that the client can take the interview with minimal assistance from staff personnel.

6. The Hamilton Depression Assessment. This assessment tool has been automated. The software administers, stores, retrieves, scores, and prints the results of a 19 item modified scale. This is freeware and there are no restrictions on its use.

7. Help-Software. This disk consist of three client administered self-help programs. The developers of Help-Assert state that it increases assertive and communications abilities; Help-Esteem enhances self-esteem; and Help-Stress helps control and manage stress.

8. The Psychiatric Assistant. This program was designed to assist clinicians with writing progress notes and reports, making DSM-III-R diagnoses, storing and tracking literature abstracts, and doing medical evaluations. Although it was designed for psychiatrists, the developers state that it can be customized for other clinicians.

A few programs have been developed with the specific needs of the social work professional in mind. One system such system is Computer Assisted Social Services (CASS) was reviewed in detail.

The Computer Assisted Social Service (CASS) system. This program was created to provide software tools that allow for the management of human services. CASS enables professional and support personnel to perform tasks related to case management, diagnosis, problem assessment and evaluation, service or treatment planning, program description and evaluation, program administration and management, and other functions associated with human services practice. CASS is a flexible system that can be adapted to local needs as concerns case load, forms and questionnaire creation, linkage of records and data, the production of mailings, and the generation of statistical data. This system was designed to meet the needs of human service personnel at all levels within an organization. The four levels can be conveniently

categorized as service delivery, supervision, management and evaluation, and administration. Although CASS has the capability of being used as a multi-user system and is designed to provide data to all levels of an organization, it appears to be primarily suited for use by service delivery personnel. This program is user installed and cost $140 for the first installation and $10 for each additional installation. The following comments resulted from the reviewer's evaluation of the program.

1. Data Entry: CASS uses the Disk Operating System (DOS), therefore, the user must become familiar with the PATH command in the use of path names, line entries, and menus. The forms and questionnaires are created by the user, making the him/her immediately familiar with the expected inputs. Although the forms and questionnaires can be configured to be relational, for the social worker who is unfamiliar with computers, this process is cumbersome since it requires the use of coding and special files.

2. Precision: This program does not automatically calculate data contained in forms and questionnaires, e. g., it does not calculate age after birth date is entered. Since the forms can be defined at the individual sites, consistency with data gathering would be a problem for the Central Registry.

3. Language: A compiled C program that uses the DBase file structure. Interfacing with other programs is difficult at the present time, although the creator of CASS states that a new module is being developed that will automatically down load client records to the database.

4. Error Trapping: Due to the absence of error trapping, nonsensical data may be entered on all of the user created forms and questionnaires.

5. Documentation: A very detailed 138 page user manual is available (Hudson, 1992). The documentation is three section, Using the Basic Tools of CASS, The Advanced Features of CASS, and Appendices which contain (1) Information related to installation and configuration, (2) Instructions for installing personal software, (3) Technical data, (4) information related to the system security, and (5) Psychometric data for the assessment scales.

6. Entry Editing: Editing is simple, but as previously mentioned, making forms relational is tedious and requires the creation of separate files.

7. Output Format: A special feature of CASS is a program that enables the user to summarize a single client's progress or a group of client's progress over time for the purpose of examining performance on a unit, section, regional, or program level of analysis. The results may be based on the scales provided by CASS or any unidimensional scale.

8. Reports: CASS generates numerous reports based on user created forms, questionnaires, and CASS and user added assessment instruments. Printed reports are good quality and graphics can be generated.

Quality of Life Management Information System (QOLMIS). QOLMIS is being developed by the Bureau of Naval Personnel for use by the Navy's Family Service Centers (FSCs). The system is expected to be ready for testing in November of 1992. It was planned and designed in collaboration with the FSC site directors. QOLMIS is a multi-module program that may enable FSCs to automate case management, tracking, the transfer of cases, and financial, logistics, and personnel processes. At present the modules contained in QOLMIS are counseling, education and training, financial, and resources management. QOLMIS appears to meet the requirements of the FSCs, concerning the functions that they perform, but does not include the functions required for FAPs, such as Case Review Subcommittee Findings and the automation of the DD2486. With the possible consolidation of certain FSC and FAP sites, there may be advantages in creating one system for both FSCs and FAPs. Documentation concerning the capabilities and operation of QOLMIS has not been completed by the developers of the system, and no documented details of how the system will be tested or evaluated were available. The developers of QOLMIS stated that it would be placed at certain test sites without an objective means of evaluation. The following comments were derived from a demonstration of the QOLMIS modules and from an examination of database files and generated reports.

1. Language: QOLMIS is a Dbase III/Clipper application that has been designed to operate over a Novel LAN Network.

2. Reports: QOLMIS was designed to address FSC management requirements. Information is entered into forms that are contained within the following sections.

Subject/Title	Information Gathered
1. Personnel Reports:	
a. Manpower Plan	Headings: FSC Position Title, Vacancy Status, Position Date, Assigned to Program area, and Type of Funding.
b. Manpower Summary	Computes Percent of authorized on board.
1. Military:	Designator Grade (authorized or actual), and Position Sequence Code, and PRD (projected rotation date)
2. Civilian:	Plan-Series-Grade/Step, and Position Sequence code.

Subject/Title	Information Gathered
c. Personnel Costs	Computes totals per month and year, and projected FY cost from the; headings of Base Pay, Benefits, COLA (Cost of Living Allowance), and Months Position to be Filled.
d. Credential Status	Contains some of the same headings as (a) and (b) above and allows for the input of information and data concerned with licenses, credentials, and length of supervisory experience.
e. Personnel Listing	Allows for the entry of data and information under the headings of Name, SSN (Social Security Number), Title, Address, and Home Phone.

2. FSC Volunteer Personnel Reports:

a. Volunteer Program	A generated report that computes the number of hours saved by FSC through the use of volunteer workers for "This Reporting Period". The form request data under the headings of Number of Active Volunteers, Number of Inactive Volunteers, Contribution to the FSC (in hours), Contribution to the Local Community or Other Base/ Government Activities and, Total Savings.
b. Assessment	A performance evaluation form for volunteers. The form allows the entry of volunteer and supervisor identifier data. It also allows for the entry of free text under three headings of Most Significant Achievements, Recommendations, and Overall Evaluation.
c. Position Description	A form generating program that allows for the entry of positions descriptive information. The report has four headings under which free text may be entered; Objective, Duties, Qualifications, Policy and Tasks. Spaces are provided on this form for the entry of Time Commitment, Signatures of the volunteer and coordinator, and dates.

Subject/Title	Information Gathered
3. Staff and Volunteer Work Counts Reports:	
a. Individual Reports b. Total Staff	Accountability Reports that allow for the entry of data under various headings; such as, Total Welcome Aboard Packets and Total Flyers, Relocation, General I & R, VA/SSN Benefits, Child Care, and Education. Tallies of the number of clients served in each heading area are reported.
4. Commands Served:	
List of Area Commands Report	The report allows for the entry of information and data under the headings of Unit Identification Code (UIC), Hull Number, Address, and the Rank, Name, and Phone Numbers of key command personnel.
5. OPTAR Logs:	Calculated reports that allow for the entry and manipulation of budgetary data. Budgetary data may be entered in the areas of personnel and materials. Part II of this section allows for the entry of Summary data concerning FAP.
6. ADP Inventory:	This section contains the ADP Inventory List report/form. This report allows for entry of data and information about the FSC's data processing hardware and software under headings, such as, Characteristics, Last Date Inventoried, Description, and Model.
7. Community Liaison:	Information concerning the Community Liaison Activity Report. This report allows data entry under the headings of Date of Activity, Name of Staff Member, Name of Agency, Hours Expended, Location of Agency, and Telephone Number. It also allows free text to be entered under the heading of Nature of Activity.
8. Non-Essential Collateral Duties Report:	No information available.
9. Vehicle Maintenance:	This section contains the Vehicle Maintenance Report. The form allows for the entry of information and data concerning vehicle identification and for data under the following headings, Repair Date, Mileage, and Nature of Maintenance.

After reviewing QOLMIS, it appeared that many of its functions could be accomplished with available spreadsheet and word processing programs. Although the reviewers assume that names and personal identifier information only need be entered once, the redundancy of the information contained in the reports and the relatedness of the information between reports suggests that by adding an ad hoc function, the number of reports could be reduced. Fewer reports would reduce the amount of paperwork generated and the time required to access and maintain the data.

Attix (1990) DD2486 forms generator program. This is a basic program that prompts for individual item responses and produces a completed DD2486 form. There is no error checking, therefore, it accepts whatever data is entered. The reviewers found the program difficult to use and offered little advantage over simply filling in a hard copy of the form. The following findings were derived from the reviewers evaluation of the program.

1. Data Entry: The program contains scrollable screens and windows which are easy to use. After each group of information is entered the prompt "Is the above information correct (Y/N)?" appears on the screen. This prompt appears after several screens of information have been entered, therefore, to correct an error the user must scroll through the screen to find the location of the error. The social security number (SSN) for the victim, offender, or sponsor cannot be changed. All other data can be changed.

2. Precision: The program does not automatically calculate age when the birth date is entered. No error checking is done between birth date and age, consequently, nonsensical data may be entered. The program requests information not germane to the topic. For example, it asks for "Other Parents" which is not applicable to spouse abuse. On page 24, section 3.5.1.1.3 no example of the correct manner for entering pay grade is given. Such an example would aid the user in entering the data in the proper format. Nonsensical data can also be entered on the third screen of page 25 (primary alleged offender), e.g., all of the questions could be answered in the positive.

3. Language: The database was designed using Dbase III. A copy of Dbase III must be resident on each system in which this package is installed.

4. Error Trapping: Due to the absence of error trapping and consistency checking, unintelligible cases may be entered (also see paragraphs 1 and 2 above). For example, ages can be given as any number, they could both be entered as civilians, and any family suffix can be entered. Generally, the program accepts any date or number, no matter what the question. Difficulty was encountered in retrieving cases and in reentering cases that had been deleted.

5. Documentation: Information needed to initialize the program is not in the documentation. The master password is included in the documentation and therefore the security of the program has been compromised. No explanation of how case numbers are assigned is given. The documentation needs to be spell checked, e. g., the words "twelfth" and "maintenance" are misspelled.

6. Entry Editing: On page 20 of "Victim Information" the movement of the window on the form was very confusing. Once an erroneous SSN is entered it cannot be edited, the entire record must be deleted and reentered.

7. Output Format: The printed reports are of acceptable quality.

8. Reports: The program generated documents, and ad hoc reports could not be generated.

Site Questionnaire and Interviews

The Site Information Request (SIR) (see Appendix A) and the Family Advocacy Program Interview (FAPI) (see Appendix B) questionnaires were administered at seven different FAP sites. The SIR was given to the FAPs and if they could not complete it at the time of the site visit they were asked to complete it and return it at a later date. SIR was designed to gain information concerning demographic data, staffing, forms use, automated procedures, and the use of computer hardware and software. A statistical analysis was not done on the data, because the sample size was small and the purpose of the data gathering was to obtain descriptive information that is applicable to the development of an MIS for FAP. Therefore, percentages, ranges, actual counts, and consensus of opinions and processes will be reported. The results of the SIR will be reported first, followed by the results of the FAPI.

Site Information Request (SIR) Findings. In Section I there were some differences in FAP organizational structure with some sites being under the control of line commanders and some sites being in the Bureau of Medicine's chain-of-command. Sites organizational charts reflected the staffing strength of the units (range of three to 29). The larger units divided their workers into divisions while the smaller unit's consisted of an administrative workers and social workers who dealt with all cases. For the case notes, three of the sites completed an SF600 using the SOAP format. All sites maintained intake logs. All sites reported that they needed more personnel and some were as much as 20% (4 positions) under allowed levels. Few sites made complete responses to Item Seven (forms used and their use) of SIR, however, all sites provided copies of the forms, reports, correspondence, phone logs, and paperwork that they use to collect and transmit information (see Table 4).

Table 4
Referrals Received for Abuse and Neglect

Category	Range	Percentage
Child physical abuse	3 - 66	15% - 29%
Child neglect	2 - 13	10% - 30%
Child sexual abuse	5 - 14	25% - 06%
Spouse abuse	7 - 131	40% - 57%
Other	3 - 13	05% - 06%
Total Referrals	20 - 230	

Section II: Item One requested data concerning the number of initial referrals received in an average month for abuse and neglect. Table 4 shows the ranges between the seven sites for the different types of abuse, the percentage of cases that number represents for the reporting site. Most of the sites could not precisely respond to Item One because they did not have enough time to manually access their files to assemble the data. One site had developed a relatively sophisticated automated system and was able to provide precise responses to some of the items. In the "other" category, emotional abuse was the dominant classification.

Miscellaneous variables that appear to affect the type of referrals received by the site are the relationship with civilian organizations (whether local police, CPS, etc. report incidents involving military members) and the type of activities served by the site (fleet, air, and shore), i.e., the stress involved with frequent deployments, for instance, may be related to more reports of certain types of abuse.

The service member was identified as the abuser in over 75% of the reports (Item Two). Very rough estimates, or no answer, was given for Items Three (Of those in treatment, approximately how many are victims, non abusing spouses, abusers, other family members?) and Four (How many families in treatment have both parents as abuser, identify the abuser as non-familial or other), therefore, those data will not be presented. Item Five revealed that the majority of clients, that are in treatment, are treated at civilian treatment facilities and are funded

by CHAMPUS followed by treatment at FAPs, FSCs, supplemental care, and military treatment facilities.

Section III. The sites that used computers reported using personal computers (IBM compatibles). At one site case workers used laptop computers and the administrative staff used personal computers. Most sites used WordPerfect for word processing. Other software packages used were Enable, DBASE, Harvard Graphics, and Wordstar. Of the seven sites surveyed only one reported to having a complete manual system. Production of letters was the common use of automation at the other sites. Other reports and processes that had been automated included monthly caseload reports, tracking of DD2486, tickler files of all cases, intake forms, master client lists, active client lists, Case Review Subcommittee (CRS) minutes, patient log, assessment write-ups, and social histories (ASH, automated social history). In response to Item Four of SIR (What reports should be automated?), most sites stated that they would like to be able to access statistical data for all of their cases, have various tickler file capabilities, produce DD2486s, and produce charge-out reports. Some sites simply stated that they would like to have all forms and reports automated. A dominant comment when asked for additional comments regarding automation of the FAP was the need for a computerized networking capability. Most sites stated they would like to have the ability to send reports to the chain-of-command (modem) and the ability communicate within the site and with other sites via computer (e-mail).

Family Advocacy Program Interview (FAPI). This questionnaire was designed to elicit information concerning computer use (as concerns specific FAP processes) and the opinions of FAP workers concerning the advantages, disadvantages, and the priorities for automating processes. FAPI was also created to gather information that would aid in the optimal planning of and design for an MIS for case management processes and procedures. The basic procedures that the FAPs follow for case management seem to be very similar. Differences that exist are due to such locale-dependent factors as the type of activities served, the relationship with civilian organizations, the ratio of case load to case workers, and the use of automated procedures. All seven sites appeared to have incorporated prescribed guidelines and procedures from official directives in their operation.

Section I. Item One (What computer hardware and software do you use for the Family Advocacy Program?) was adequately addressed by Section III of SIR and, therefore, was not administered. Item Two requested information concerning the general task categories for which the sites used computers. One site used computers daily for all tasks listed, however, most of the sites used computers primarily for word processing tasks. Most sites thought that the computer could be used in some way for all FAP tasks although they were unsure of the practicality of their application. Item Three solicited opinions concerning the advantages and disadvantages of using computers at FAP sites. The respondents stated that, generally, computers would speed administrative functions and save time. More specifically, they thought that computers would enable them to share data with other case workers, allow for the creation of

legible records, make it easier to update records, make case tracking easier, automate tickler files, automate case reports, and link cases. The disadvantages, of automating, listed by the respondents were that many FAP workers do not have typing skills, are computer illiterate, and that FAP workers do not think in a way that is amenable to automation. They were also concerned that no clerical staff would be available to enter data, confidentiality and security would be compromised, technical problems with computers and peripherals would cause frustration and work delays, and that computers would require more time to use than present processes. A major concern voiced by the respondents was that computer and software training would not be provided with the software and hardware. Item Four sought opinions concerning the priorities that should be given to the automation of FAP processes. General suggestions that were received were the need for access to general statistical data (to verify FAP workload), the automation of assessment, case tracking, training, all standard forms, and case transfer. More specific suggestions were for the automation of the case review committee summary sheet, case face sheet, closure letter, intake log, DD2486, and overseas screening. Two sites expressed concerns about the superseding of their present system by a new system. These sites had devoted much time to developing their systems and were hesitant to invest time and effort in a new system.

Section II, A and B, of FAPI is concerned with intake and assessment procedures associated with case management. The results of these sections are reflected in the flow diagrams presented under in the FAPMIS Recommendations section.

The forms, questionnaires, and letters (FQLs) that organizations use are integral to their functioning. Forms are documents that have a fixed format in which the respondent (FAP staff or client) fills in the blanks. Questionnaires are documents that have open-ended response options and the respondent writes responses as simple remarks, sentences or full paragraphs. Sometimes forms and questionnaires are combined and the respondent is requested to answer fixed format and open-ended response items (Hudson, 1991). FAP FQLs were gathered and evaluated as to their suitability for automation (see Table 5).

Tests and examinations are measurement tools that show how much a respondent knows about a specific topic or knowledge area (Hudson, 1991). These do not appear to be used at the FAP sites that were visited. Tests and examinations may save time and funds in two basic ways. Pretest are can be used to gauge the extent of a client's knowledge in a specified area of study. Clients who demonstrate an acceptable level of knowledge in the study area need not attend certain classes or orientations. Also, tests and examinations are, traditionally, the core objective method for determining the effectiveness of didactic instruction.

Table 5
Automation Recommendations for FAP Forms, Questionnaires, and Letters

Document/Type	Where Used in Job Element Category	Recommend Automation?
Questionnaires		
Intake	Intake and Assessment	Yes
Chronological Record of Medical Care (SF600)	Intake and Assessment, Intervention and Prevention	No
CRS Summary Sheet	Intervention and Prevention	Yes
Forms		
Privacy Act Statement	Intake and Assessment	No
DD 2486	Case Reporting	Yes
Fact Sheet	Intake and Assessment	Yes
Phone Log	Intake and Assessment	Yes
Article 31 Rights (Suspect's Rights)	Intake and Assessment	No
Acknowledgement	Intake and Assessment	No
Body Charts	Intake and Assessment	No
Consent for Photographic Services	Intake and Assessment	No
Family Advocacy Report (used by clinics and FAP sites as report documentation)	Intake and Assessment, Other	Yes/No

Table 5 (Continued)
Automation Recommendations for Forms, Questionnairs, and Letters

Document/Type	Where Used in Job Element Category	Recommend Automation?
Forms		
Authorization for the Release of Medical/ Psychological Information	Intake and Assessment	No
Assessment Instruments (all)	Intake and Assessment, Follow-up	Yes
Telephonic or Message Report on Institutional Sexual Abuse	Case Reporting	Yes
Family Advocacy Report of Death	Case Reporting	Yes
Monthly CRS Statistical	Other	Yes
Referral for Civilian Medical Care	Intervention and Prevention	Yes
Memorandum of Understanding	Other	Yes
Letters		
For Commanding Officer's Eyes Only	Case Reporting	Yes**

Note: * Automation is recommended only at FAP sites at the present time.
** Letters have already been automated by many sites that have word processing capabilities.

RESULTS

This section describes the organizational relationship of the FAP; recommends the a Conceptual Schema for the FAP MIS; defines the major functions, software requirements, procedures for each of the modules; and details the Case Management process.

In Figure 1 the relationships between the Command Naval Base and the Naval Medical Facility in association with the FAP are shown. In addition, the major functions of the Family Advocacy Committee (FAC) are identified as formulation of policy, the overseeing of FAP operations, and the coordination of FAP activities.

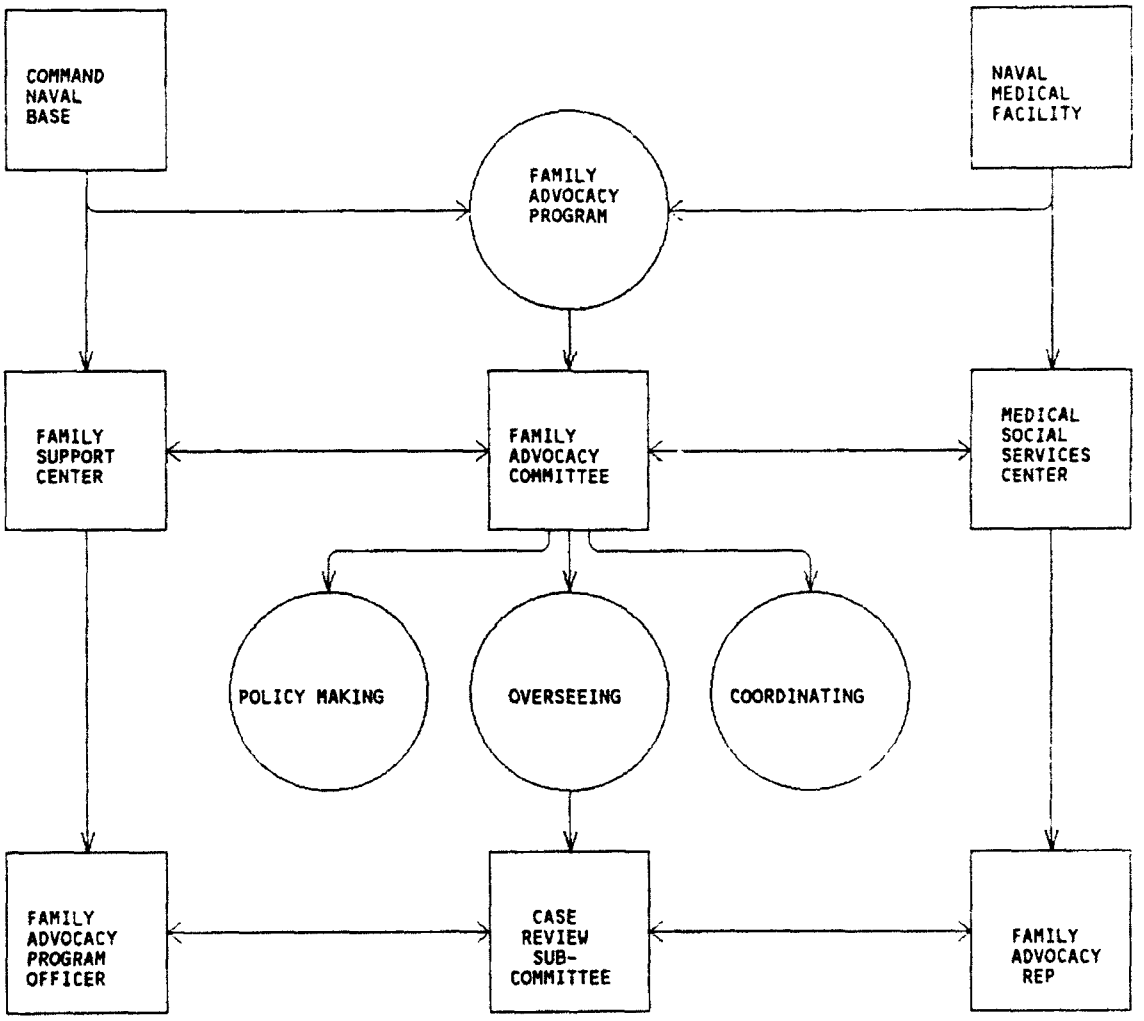

FIGURE 1. FAMILY ADVOCACY PROGRAM ORGANIZATIONAL AND OPERATIONAL ENVIRONMENTS

Conceptual Schema

Figure 2 shows the conceptual schema of the Family Advocacy Program Information System. The eight modules have been defined for this system are (1) Command Support Function, (2) Organization/Management, (3) Prevention Services, (4) Program Planning and Evaluation, (5) Treatment/ Rehabilitation Program Planning, (6) Resource Management, (7) Case Management, and (8) Reporting. Some of the functions of these modules have been included in the QOLMIS system. However, FAP has a need for integrative and relational functions that do not appear to be addressed by QOLMIS. For example, analysis of the data collected suggests that policies, procedures, report formats, letters, memorandums of understanding, service agreements, referral agreements, and contracts shall be profitably standardized. These could be placed in word processing templates that could be modified as needed to adapt to local requirements. FAP operations could also be made more efficient if many of their forms and questionnaires were standardized and automated. The automation of forms and questionnaires would, ideally, be relational to avoid redundant entering of data and information. Further, many of the materials that FAP uses should be integrated to avoid the gathering of extraneous data and information, to present a uniform appearance, and conform to a central policy.

In the following pages, the modules will be shown and described in detail, with the exception of the Report Module. This module would consist of two type of reporting capabilities, (1) standardized reports used throughout the Navy system and (2) ad hoc reports created at the site, and would use database, statistical, and word processing packages to accomplish these options.

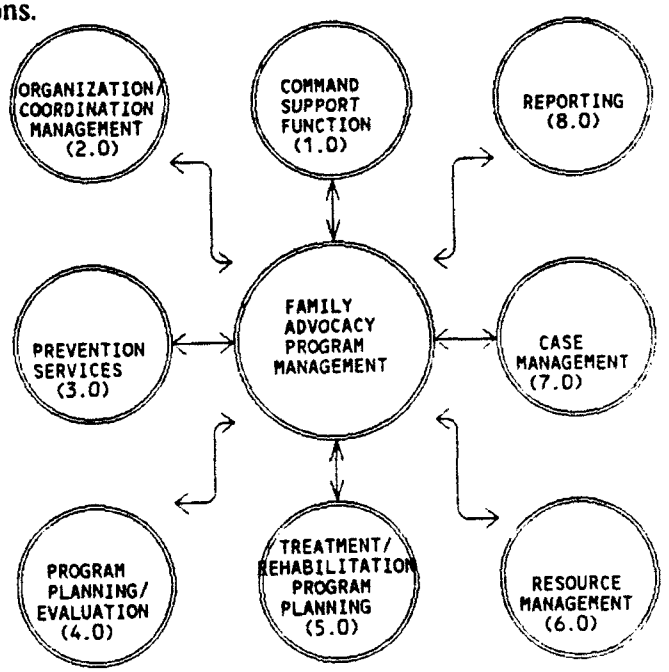

FIGURE 2. FAMILY ADVOCACY PROGRAM MODULES

Command Support Module. The five major processes in this module are shown in Figure 3. For this module a database, word processing, and graphics package would be used to create forms, reports, and a tickler file. Standardized letters, course materials, pamphlets, and handout packages could be stored for the Military Command/Community Liaison, Life Skills Development, Command Awareness Training, Pre/Post Deployment Services, and Newborn Home Care Services functions. Tickler files would be established for the Criminal History Background Checks, Training Courses, and services provided by in this module. Schedules for these services would be created and the tickler would remind the person when, where, and what materials were needed for each of these functions.

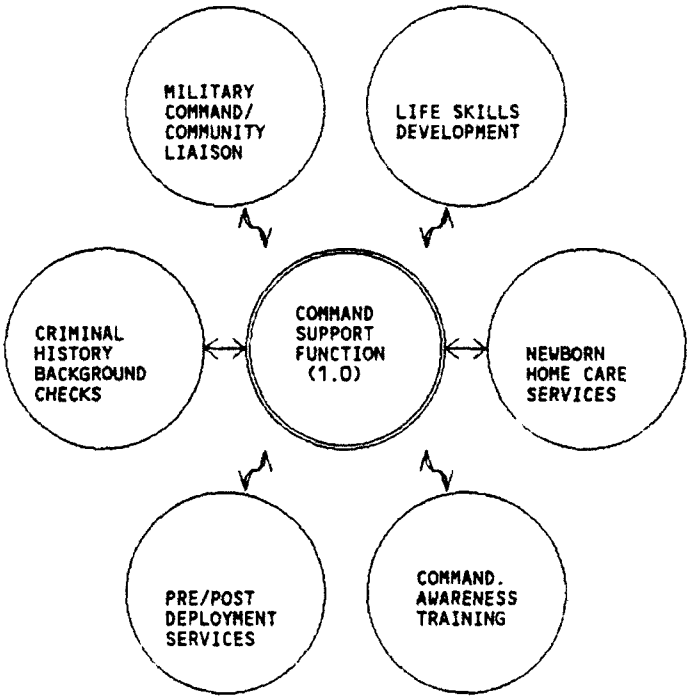

FIGURE 3. COMMAND SUPPORT

Organization/Coordination Management Module. This module (see Figure 4) consists of standardized letters, Memorandums of Understanding, Service Agreements, Referral Agreements and Contracts, in a word processing boiler plate file, that can be modified for site specific needs. This module would also contain a tickler file to remind the coordinator when a letter was sent, the last action that was taken, the expected response, and the next follow-up date.

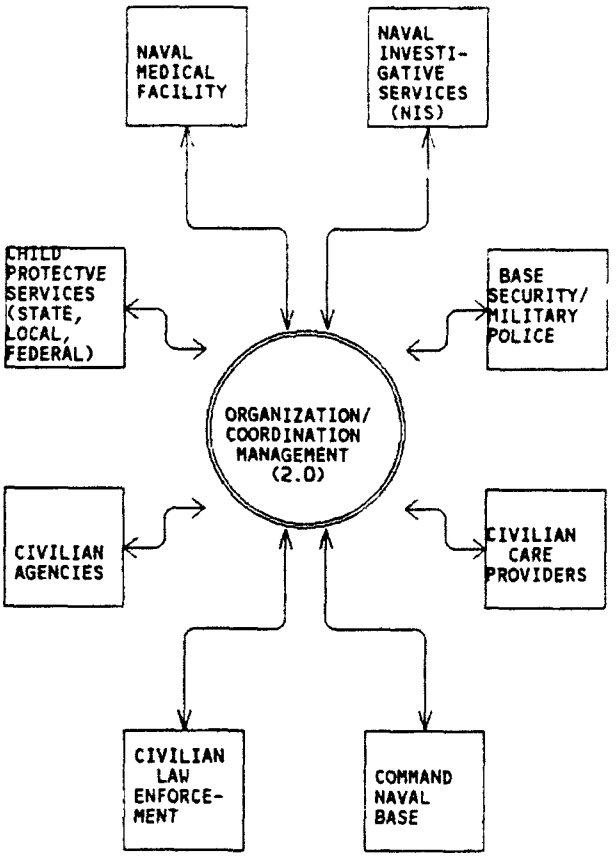

FIGURE 4. COORDINATION AND MANAGEMENT

Prevention Services Module. Prevention Services (see Figure 5) consists of four major functions (1) General Awareness Programs, (2) Family Support Services, (3) Military Awareness Programs, and (4) Family Advocacy Needs Services. The module would also have a database, word processing, and graphics packages that would be used to create forms, reports, and a tickler file. Materials for this module would be stored for ease of access and modification. The database manager would store the linkages between the forms and materials that would be readily accessible using the name of the package. The tickler file would be used to coordinate the programs and services offered by this module.

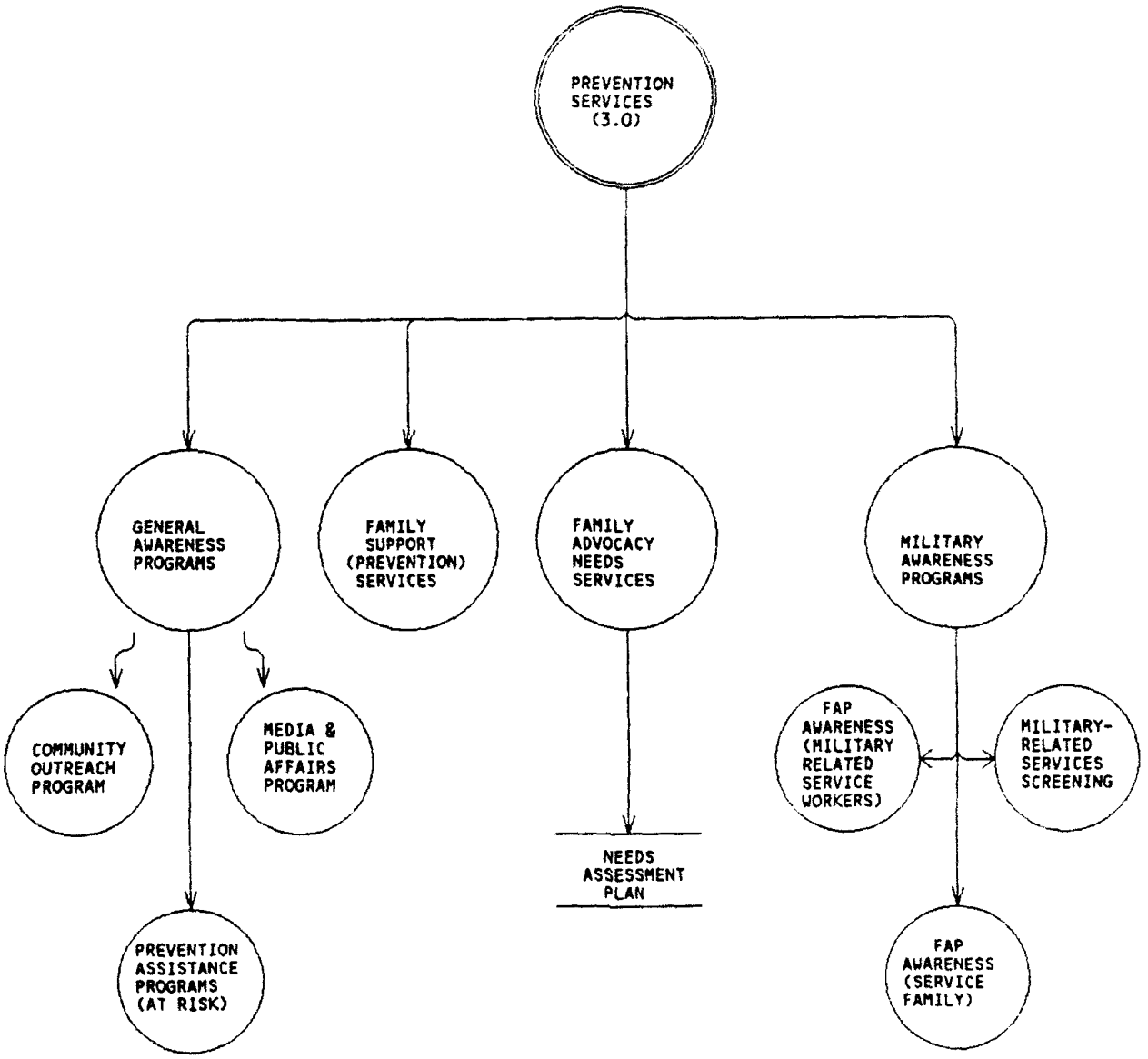

FIGURE 5. PREVENTION SERVICES

Programming Planning/Evaluation Module. This module will use database, word processing, graphics, and statistical packages. The database package will be used to stored data gathered from various sources. After data has been gathered, a statistical package will be needed to accomplish the needs assessment function. The word processing package will be used to design the program materials and forms that are needed. Forms and form letters will also be needed for evaluating and documenting the programs. The tickler system will be used as a scheduler and reminder for the program manager, see Figure 6.

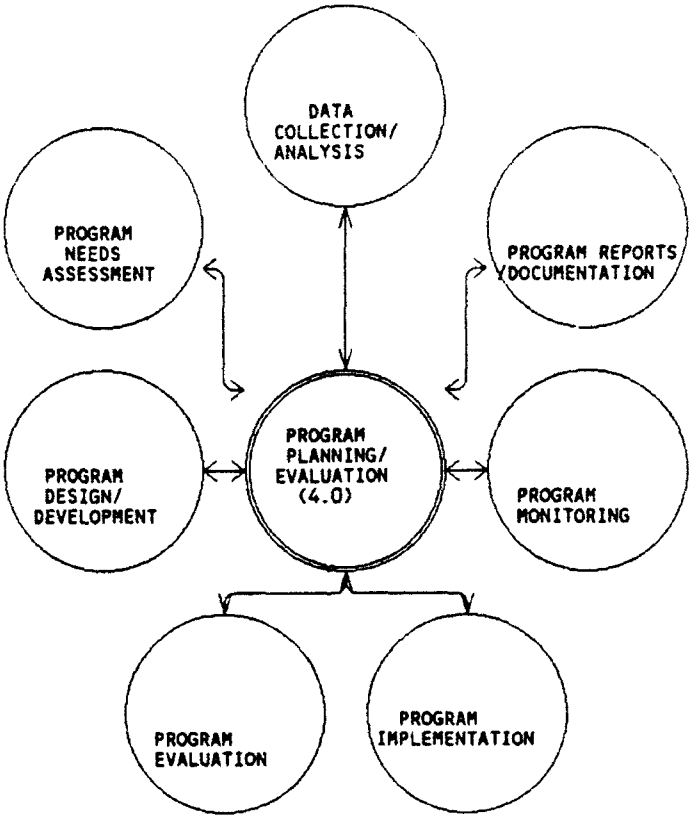

FIGURE 6. PROGRAM PLANNING AND EVALUATION

Treatment/Rehabilitation Program Planning Module. The program planning functions are the same for this module, Figure 7, as they are for the previous module.

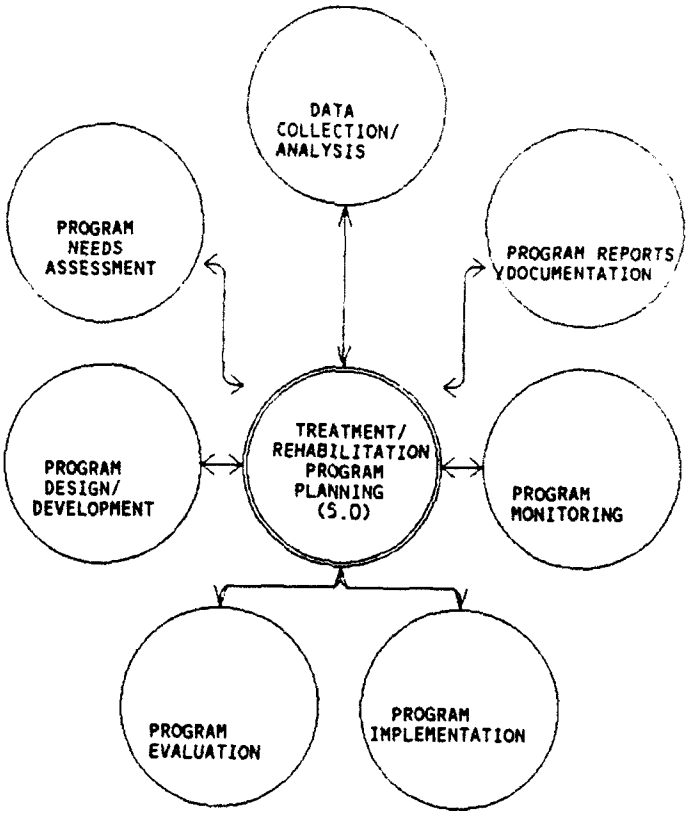

FIGURE 7. TREATMENT AND REHABILITATION PROGRAM PLANNING

Resource Management Module. The Resource Management module depicted in Figure 8 will use database, word processing, graphics, and spread sheet packages. This module is already present in QOLMIS with the exception of the tickler file. The tickler file would remind the user of important dates, e.g., supervision evaluations, training requirements, and resource maintenance dates.

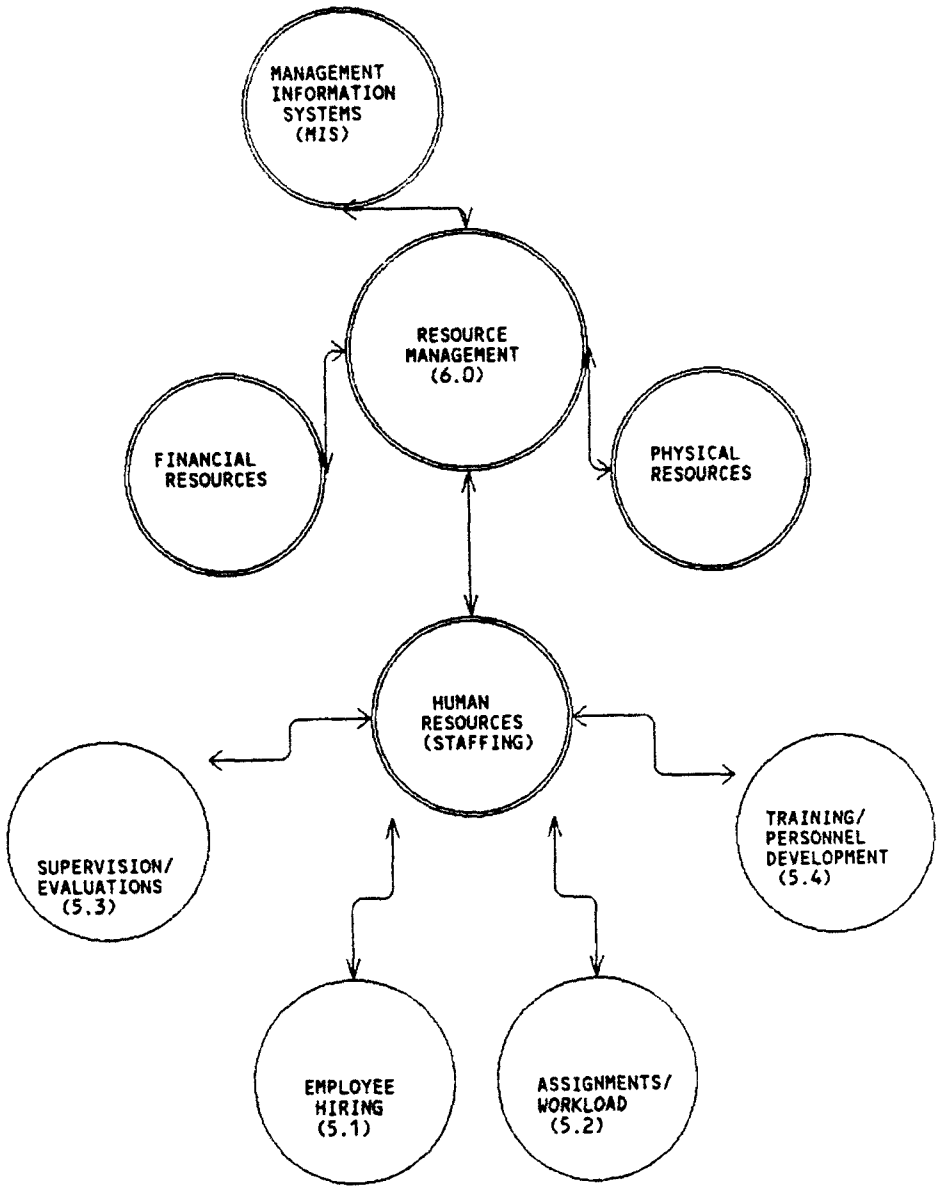

FIGURE 8. RESOURCE MANAGEMENT

Case Management Recommendations

The Case Management module that is central to this system. Figure 9 is a process flow diagram that traces a case from the report of an event to case closure.

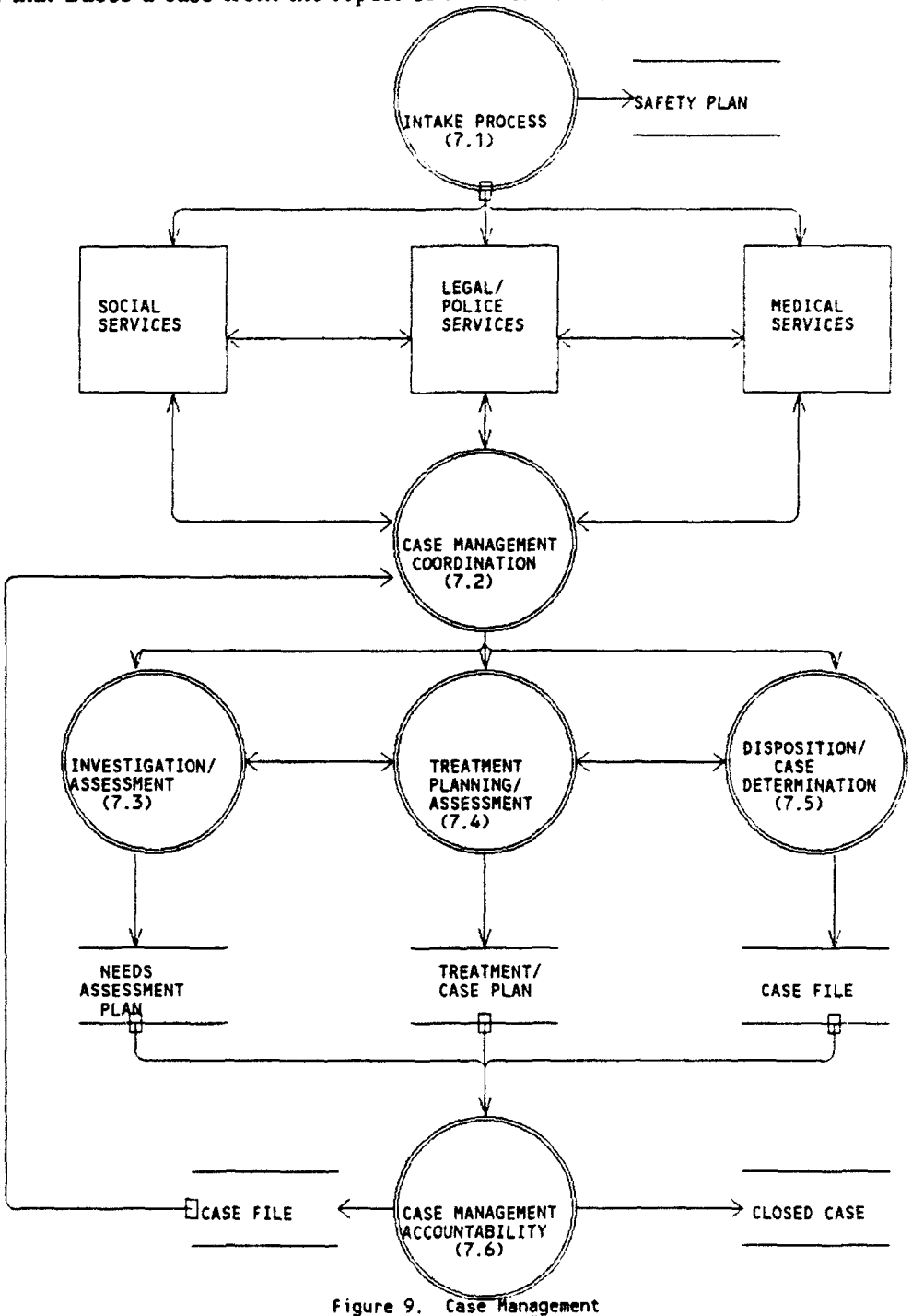

Figure 9. Case Management Module (7.0)

Case Management Major Phases. Figure 10 illustrates the six major phases of Case Management; as (1) Intake, (2) Coordination, (3) Investigation and Assessment, (4) Treatment Planning and Assessment, (5) Disposition and Case Determination, and (6) Accountability. For this module database, graphics, word processing, statistical, spread sheet, and communications package will be used.

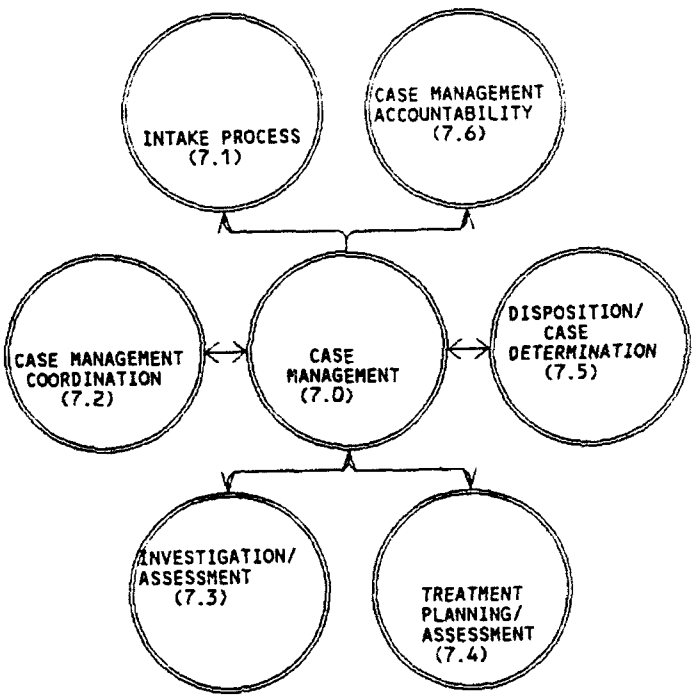

Figure 10. Case Management Functions

Intake Phase (7.1). An incident of abuse is reported during the Intake Phase in Case Management (see Figure 11) an event is reported. The report may be received in several ways (1) walk-in, (2) telephone call, (3) Medical Referral Incident Report, or (4) Military/Civilian Law Enforcement Blotter.

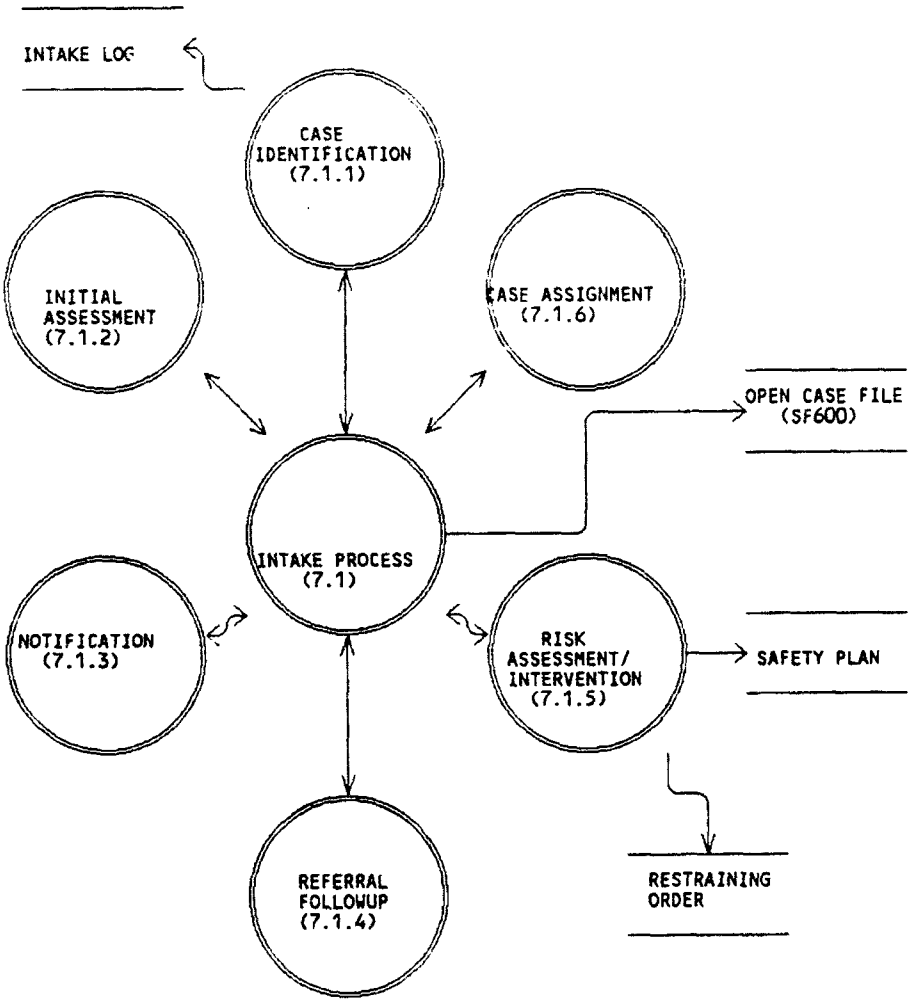

Figure 11. Intake Process

After the report is received (7.1.1) the intake soci l worker enters the referral into the Incident Log. This process may be automated or manually entered into a daily log/register and entered into the computer at a later date. The following is an example of an Incident Log:

Family Advocacy Incident Log

1. Date/Time of call:	
2. Date/Time of incident:	
3. Source of report: (who called, phone number, agency)	
4. Type of report If Non-FAP issue, explain:	Spouse Abuse __ Child Physical Abuse __ Non-Fap Case __ Child Sexual Abuse ___
5. Service member: (Name, SSN, Command, Rate/Rank)	
6. Disposition/Referral.	FAP ___ FSC ___ Command __ Medical ___ Other (Explain) _____
8. Social Worker receiving Call:	
9. Case Worker assigned:	

The report is initially assessed (7.1.2) and identified as a case using the following criteria (DoD 6400.2) in Table 6.

Table 6
Criteria for Determining a Case

Child Abuse (physical, emotional, sexual)/ Neglect

1. Victim is dependent "child" of service member DoD 6400.1-M
2. Event meets the criteria for abuse DoD 6400.1-M

Spouse Abuse (physical, emotional)

1. Victim or perpetrator is a service member
2. The couple have a lawful marriage
   OR a child and live together
   OR cohabitating (site specific)
3. Event meets the criteria for abuse DoD 6400.1-M,
   Program Standards, Chapter 5 5.11-5.14,

Non-FAP Issues (in themselves)

1. Financial non-support
2. psychiatric/emotional problems
3. Suicidal/homicidal ideation
4. Marital problems/family problems
5. Adjustment problems/ behavioral problems, delinquency
6. Discord/violence in non-marital couples
7. Alcohol/drug abuse
8. Divorce/custody disputes
9. Humanitarian transfers/discharges

Initial notifications (7.1.3) are then made using the protocols in Table 7. Each contact should be documented on an SF600 (date contact made, person contacted, and conversation content). Three attempts within 48 hours should be made to reach the spouse.

Table 7
Protocols for Responding (Notifications)

1) SW Supervisor/Division Officer, (if not available Notify Regional Coordinator) for CA/N in Navy-sponsored settings, fatalities, or severe injuries

2) Command Notifications:
   a) Phone contact, Letters only if deployed
   b) Persons: CO, XO, or FAP POC (officer/enlisted)
   c) Request information for case, FAP appointment, service record, medical record, follow-up contact to schedule appointments, actions to secure safety, DAPA/CAAC evaluation for subcommittee (CRS)
   d) Document all disclosed information and date same

3) CPS Notifications:
   a) Provide all information necessary and requested
   b) Request CPS to investigate report, what actions will be taken, information regarding current involvement, outcome of CPS investigation, plan of intervention.

4) Medical Notifications
   a) Child Abuse, Physical: Photographs **mandatory**
   b) Spouse Abuse, Physical: Photographs elective
   c) Emergency Treatment Report

5) NIS Notifications. Request determination whether case will be investigated, summary of report, summary of civilian Police Department investigation

6) BUPERS-661D. Incest Case Manager

7) BUMED-3B433. FAP Program Manager

The Referral Follow-up (7.1.4) process consists of gathering additional information needed to make an accurate risk assessment. After the intake information is gathered the Intake Social worker appraises the situation (7.1.5). Currently the sites use different forms to document "At Risk." A guideline check sheet could created in the form of a template. This template would be stored and modified to meet site specific needs. Table 8 gives the Risk Assessment Criteria.

Table 8
Risk Assessment Criteria

1) Emergency: Imminent danger of harm

2) High Risk: a) Child Sexual Abuse, b) Abuse/neglect of child 18 or younger, c) Serious injuries (current or historical), d) Suicidal/homicidal ideation or attempts (current), e) Use of weapon, f) Fatalities, g) Abuse/ neglect in Navy-sponsored programs/activities, h) Felony-level allegations.

3) Child Abuse (Child Welfare League of America, SECNAVINST 1752.3A):
a) Age of child, physical and/or mental ability, b) Child's ability to protect self from abuse, c) Severity and/or frequency of abuse/neglect, d) Location of injury, e) Previous history or abuse/neglect, f) Caretaker's physical, intellectual, and emotional abilities/self control, g) Caretaker's level of parenting skill/knowledge, h) Offender's access to children, i) Presence of boyfriend /girlfriend or parent substitute in home, j) Environmental condition of home, k) Presence and/or strength of family support systems, and l) Stresses impacting the family (divorce, illness, deployment, isolation).

4) Spouse Abuse (CHBUMED ltr 1752 Ser 3B43/0195 of 27 Aug 91):
a) Threats/ fantasies of homicide or suicide, b) Depression and hopelessness, c) Availability of weapons, d) Past use of weapons, e) Obsession with partner or family, f) Degree of importance of partner in perpetrator's life, g) Presence of rage (especially over victim's departure), h) Drug or alcohol abuse, i) Pet abuse, j) Access to victim and family members, and k) Victim's own assessment of potential for serious injury or death.

The output from the risk assessment process is the Safety Plan, see Table 9. This plan should be a standardized document with areas that can be modified for the situation. The safety plan could be stored in a word processing template file.

Table 9
Safety Plan Criteria

Develop a safety plan when:

1) Possible for every abuse incident
2) Intake contact is with the victim
3) Spouse abuse case is reported by other than victim
   a) Plan should be communicated to victim
   b) Prior to Command/NIS notifications

A safety plan should contain:

1) Referral resources
2) Medical Evaluation/Treatment for all
   a) cases where injuries are reported or suspected
   b) cases involving the abuse\neglect of children 18 months or younger
   c) child sexual abuse cases
   d) all children in the household of perpetrator.
3) Photographs must be recommended when visible injuries
4) Provisions for a safe residence (child sexual abuse cases)
5) Provisions for CPS intervention to:
   a) Remove perpetrator from home
   b) Provide emergency foster care
   c) Investigate
6) Provisions for police and/or legal intervention
7) Personal Resources (support systems)
8) Counseling/Support Groups
   a) Service member, Command Approval
   b) Supplemental Care Approved
9. Command Resources
   a) Military Protection Order (Restraining)
   b) Direct Service member to obtain examination for child abuse
   c) Provide an escort
   d) Other administrative or disciplinary action

The final step in the Intake Process is Case Assignment (7.1.6). The case file should consist of the materials listed in Table 10.

Table 10
Intake Process Duties and Responsibilities

Intake Social Worker Completes:

1. Intake Log entry.
2. Index card (manual) or Registered Case (automated)
3. A complete Family Advocacy Incident Report (DD2486)
4. All notes SF600 from inception of notification.
5. Completed Intake Check Sheet
6. Tickler file card (5" X 7") for notes and follow-up (manual), Tickler/Transaction Log (automated).
7. Risk Assessment per SECNAVINST 1752.3A
8. Safety Plan to Victim

Medical Completes:

1. Chronological Record of Medical Care (SF 600), Medical Records
2. Incident Report

Victim Receives:

1. Safety Plan and Referrals
2. NAVMED 5211/1 Privacy Act Statement - Family Advocacy Program Records
3. Family Advocacy Program Patient Information Sheet

Perpetrator (if military) Receives:

1. OPNAV 5527/3 Military Suspect's Acknowledgement and Waiver of Rights
2. Authorization for Release of Privileged Information
3. DD Form 2161 Referral for Civilian Medical Care
4. SF 513 Consultation Sheet

Command Provides:

1. Military Protection Order (SECNAVINST 1752.3)

After a case is assigned, the case notes may be automated using a database word processing or a word processing package, such as WordPerfect. The information contained on the DD2486 form would be automated and stored on the main system at the site. The case would be registered and assigned a number. When the case is registered, and the type of case is entered into the central computer, a list of tickler events would be associated with the case. Until each event is satisfied, the system will prompt the user periodically.

Coordination Phase (7.2). The next process is the Coordination Phase (7.2). In this phase the case has been assigned to a case worker. Figure 12 shows the relationships and the information that is expected from each facility. The tickler process would prompt the case worker for the date the task was completed or to print out a list of events that should be accomplished within a reasonable time period. An example of this would be "Obtain the sponsor's service record from Command" or "Date obtained the sponsor's service record from Command." The expected entry could be a yes/no or date prompt. After the task was satisfied, the user would not be asked for the information again. The events and dates expected for them to be accomplished would be site specific parameters.

Investigation and Assessment Phase (7.3). Both the Investigation and Assessment Phase and the Treatment Planning (7.4) phases are completed by the case manager/social worker, Figure 13. During the Investigation and Assessment Phase the family and others pertinent to the case would be interviewed, and a Psychosocial Assessment may be completed, (7.3.1). The CASS System contains several assessment tools that could be used by the case manager. At this point the system could be linked to CASS or alternative assessment tools could be installed. In this process the tickler file would be created to prompt for events that should occur, e.g., "Date of psychosocial Assessment."

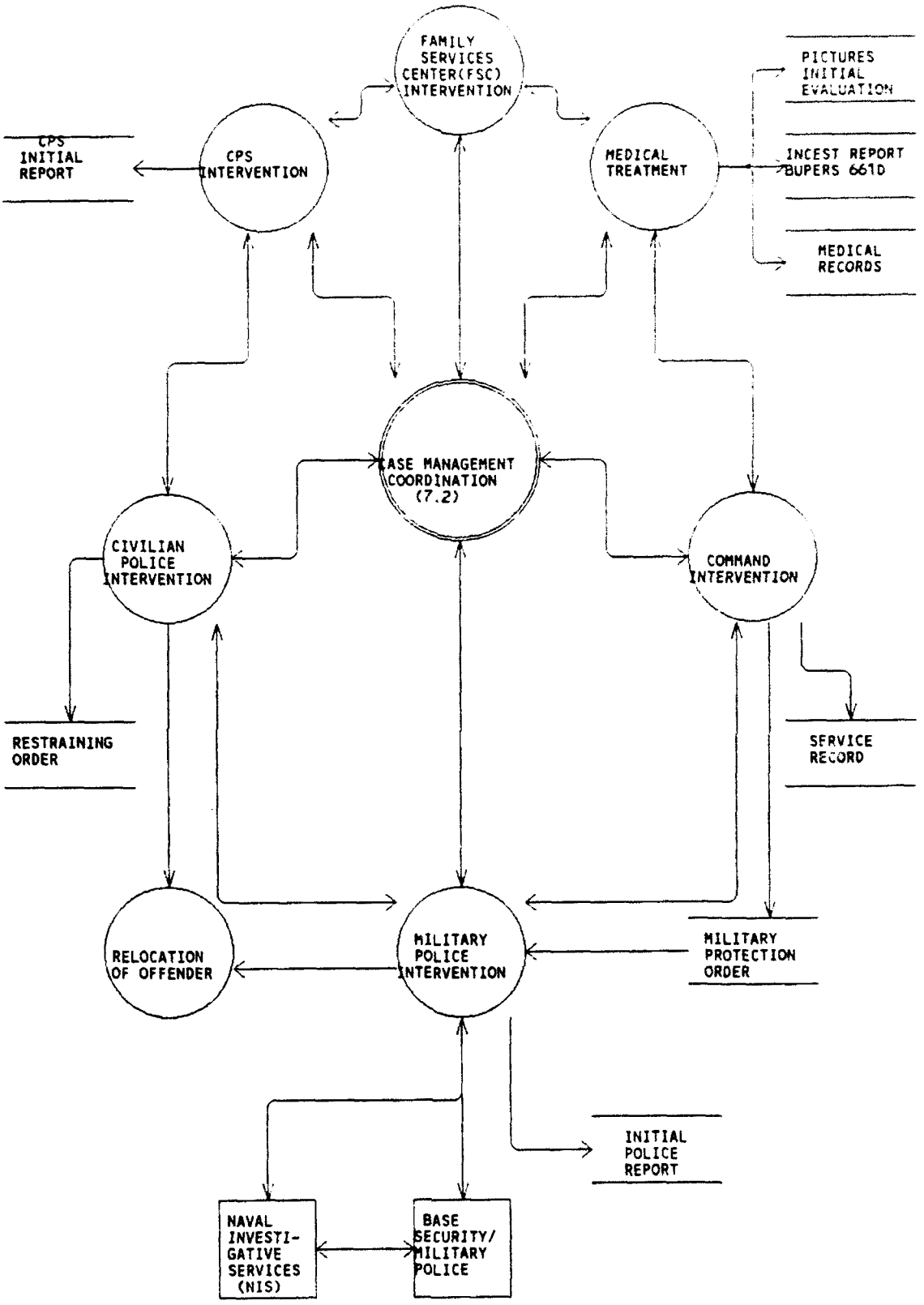

Figure 12. Case Management Coordination

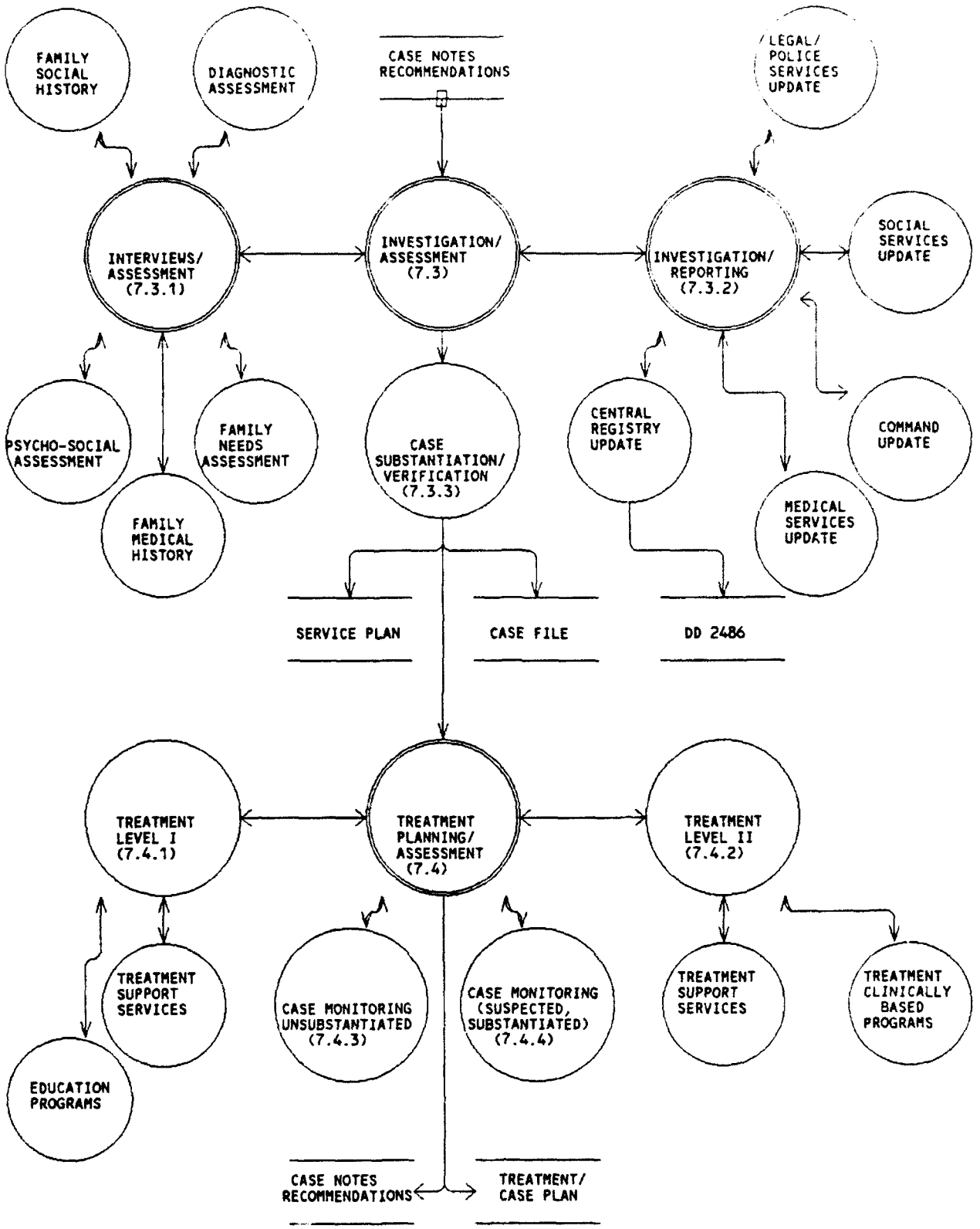

Figure 13. Investigation, Assessment, and Treatment Planning Phases

Criteria for scheduling the Psychosocial Assessment in the table below.

Table 11
Criteria for Psychosocial Assessment

1)	Scheduled via the command
2)	Separate interviews for Victim and Perpetrator
3)	Imminent danger, emergency cases within 24 hrs, referred for emergency interviews (psychiatric evaluation)
4)	NIS investigations need NIS approval
5)	Child abuse cases need CPS approval

All of the initial reports and evidence listed in 7.2 must be collected. Additionally, the Central Registry notified and information obtained pertaining to previous incidents reports on the victim or offender. At this step (7.3.2) the tickler file created for this case is updated with each contact, date of contact, results of contact, and a hold date for pending issues. After the case manager has gathered the evidence, completed the interviews, and documented the information in the case file, the information is examined and analyzed (7.3.3). Finally, a Service Plan is drafted for the case, Table 12, written within 30 days of opening the case.

Table 12
Criteria for Service Plan

1.	Family needs and alternative to family separation
2.	Assessment of need for out-of-home protection for child victim and siblings.
3.	Identification of each member's strengths and use of these strengths in treatment process
4.	Service intervention and / or treatment goals for each family member
5.	Remedial measures and resources available
6.	Referral plans for families needs
7.	Preparation of family for treatment/ rehabilitation
8.	Plans for monitoring the case and follow-up

The Treatment Planning Phase (7.4). This phase of the process is completed after the Service Plan is drafted. The level of treatment is dependent upon the substantiation of the case. The type of treatment is dependent upon resources available and willingness of clients to participate. References would be stored in the system data base where the case worker could look-up those available. Treatment plans would also be in the system in the Treatment Module 4.0. The family could be assigned and scheduled for a treatment plan by selecting it from this module. The final process in this phase, Table 13, is the development of the Treatment/Case plan within 30 days of opening the case.

Table 13
Criteria for Treatment Plan

1. Family needs and alternative to family separation
2. Assessment of need for out-of-home protection for child victim and siblings.
3. Identification of each member's strengths and use of these strengths in treatment process
4. Service intervention and / or treatment goals for each family member
5. Remedial measures and resources available
6. Referral plans for families needs
7. Preparation of family for treatment/ rehabilitation
8. Plans for monitoring the case and follow-up
9. Case substantiation
   a) Level of treatment recommended
   b) Type of treatment recommended
   c) Treatment schedule/Command agreement

The Disposition and Case Determination Phase (7.5). In Figure 14 the four functions, (1) Case Review 7.5.1, (2) Adjudication and Decision 7.5.2, (3) Treatment Implementation 7.5.3 and, (4) Case Determination 7.5.4 are shown. The Case Review procedure would prompt the case worker for all information collected to this point and would prepare a case summary to be submitted to the Case Review Subcommittee. After the information is submitted to the Case Review Subcommittee and the DD2486 is completed, the status is retrieved from this form. The status can also be changed by updating the case. The result or report from this section would be the Case Action Plan which would consist of all treatment plans and the recommendations from the Case Review Subcommittee. Table 14 shows the tasks to be completed for each process in this phase. This section would be tracked through the tickler file and data for each task would be prompted for by the event driver.

Table 14
Disposition and Case Status Determination

1. Case Review Process (7.5.1)
   a. Preparation for presentation
   b. Prepare treatment Plan
   c. Presentation to subcommittee
   d. Implementation of committee(s) suggestions
   e. Notification to Central Registry (DD 2486)
2. Adjudication/Decision (7.5.2)
3. Treatment plan implementation and referrals (7.5.3)
4. Case Determination (7.5.4). The three states of a case are (1) Case closure, (2) Case transfer, and (3) Pending or Open.

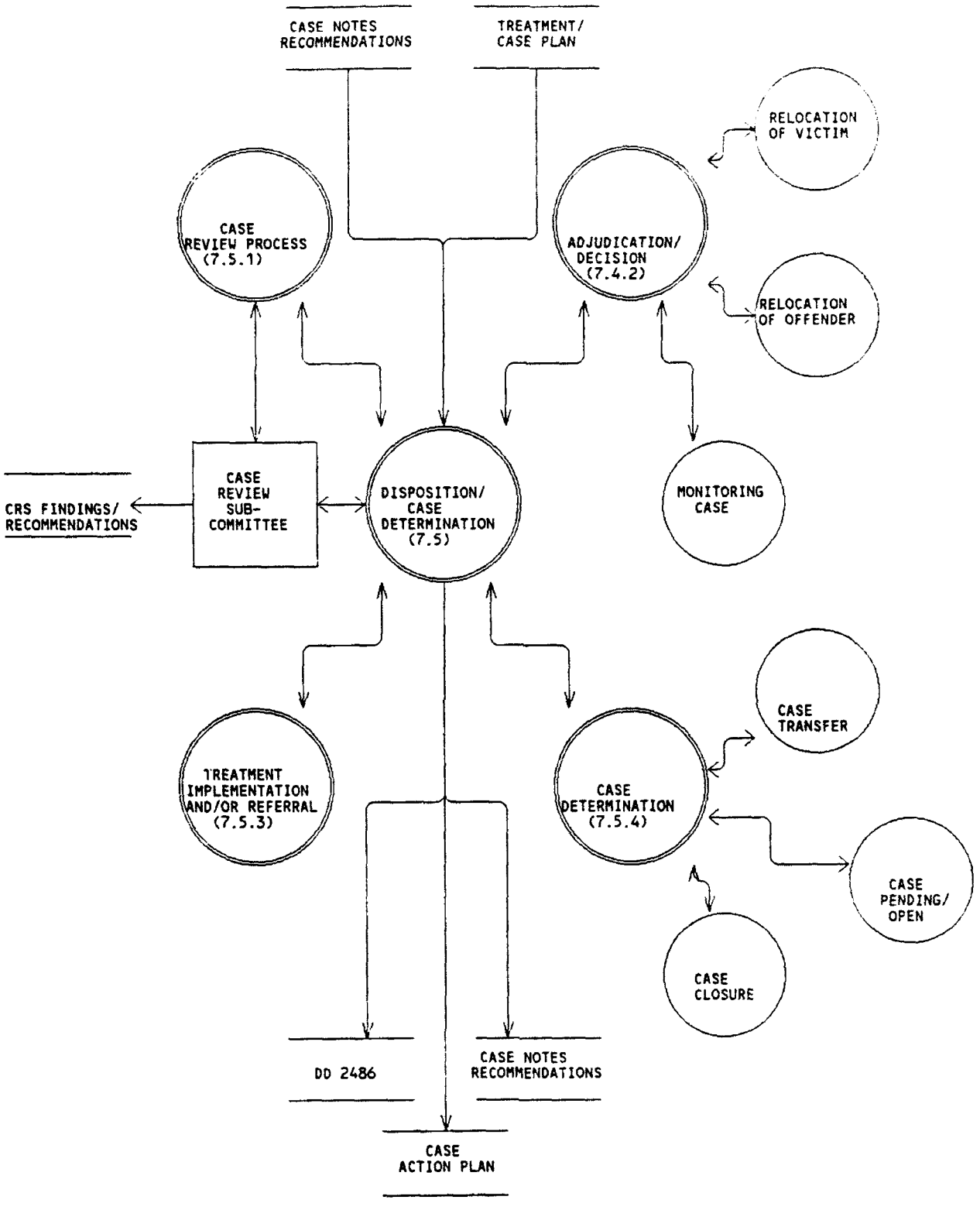

Figure 14. Case Disposition and Status Determination

The Case Management and Accountability Function (7.6). The Case Management and Accountability (7.6) function is shown in Figure 15 and consists of six processes (1) Case follow-up, (2) Report Generation, (3) Case Monitoring and Reviews, (4) Case Progress and Determination, (5) Case File Update, and (6) Case Review Subcommittee Monitoring. For this function a tickler sequence would be entered for each of the six processes. The system would store the events, dates to be accomplished, and results of each event. The report generator would have standardized reports and ad hoc reporting capabilities.

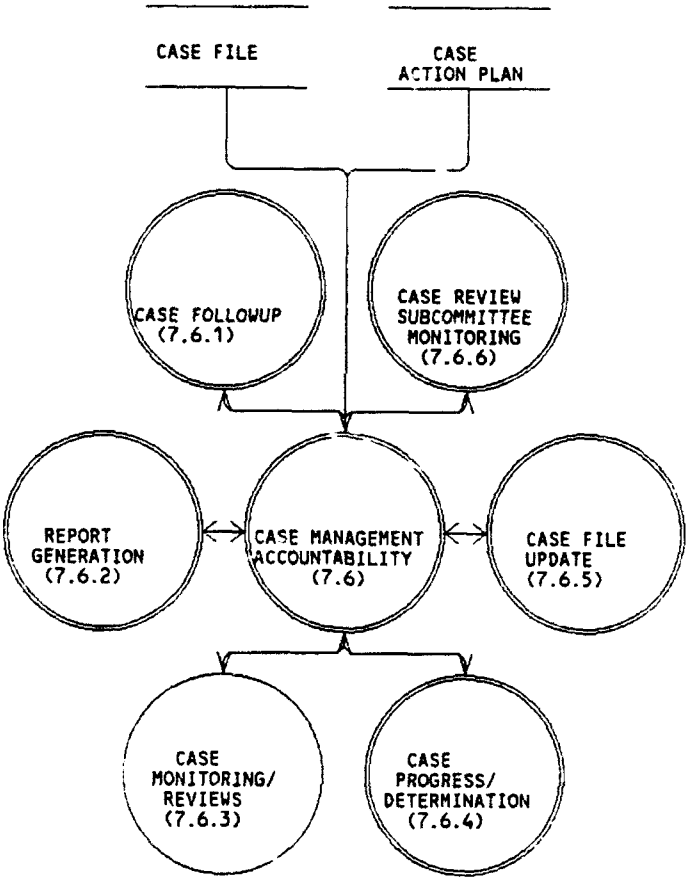

Figure 15. Case Management Accountability Functions

DISCUSSION

The development of an MIS for FAP is feasible and its application would yield significant practical results, however, the specific needs and characteristics of the FAP chain-of-command and site staff must be considered and incorporated into the design, development, and testing of the MIS for it to be successful. Traditionally, systems have been created from the "top down", i. e., dictated by management's needs for functions and data. FAP would profit more from an integrated system that would allow for the needs of management and the needs of the site worker, in terms of functioning and the range of data acquired. Such a system would be flexible enough to fill the unique and multiple needs of the organizational hierarchy (Glastonbury, 1990). There are numerous benefits that may be gained with the adoption of such a hypothetical hierarchical-flexible MIS. For example, it would gain greater acceptance and use by all FAP staff, it would improve efficiency and accuracy, it would allow for standardization while permitting adaptation to local needs, and it would be sensitive to FAP guidelines and requirements (e.g., DoD 6400.1-M of MAR 92, see Table 2).

A few studies have detailed the reasons why the application of automation to human services organizations has failed (cf., Gandy & Tepperman, 1990 for review). Generally, the failure of systems have been directly attributed to inadequate attention given to factors related to one or more of the five stages of MIS development by Taylor (1992): (1) requirement analysis, (2) system design, (3) implementation, (4) testing, and (5) maintenance (Stoloff, Brewster, & Couch, 1991).

Few articles or books have been published that specifically relate to the development of an MIS for human services organizations (see Appendix C), however, Taylor (1992) has outlined four general factors that affect the development of all management information systems. Following a review the pertinent literature and after conducting interviews with FAP personnel it was concluded that FAP MIS issues may be conveniently conceptualized using Taylor's four factors. The factors and their relevance to FAP are: (1) *Globalization*, FAPs or Family Advocacy Representatives (FARs) are located worldwide. The worldwide locations of FAPs and FARs indicates that many sites must consider variables that are unique to their location. Some of the variables that may be location dependent are law, language, culture, availability of training, and communication. (2) *Decentralization*, appears to use a network-based management system. The number of FAP sites and FARs and their complexities exclude the possibility of direct management from a central location. FAP sites must make many decisions based on local conditions and the understanding of these local conditions by a headquarters group would be extremely difficult, and, therefore, managing them effectively is probably not possible. The recent realignment program wherein selected FAP sites are merged with Family Services Centers (FSCs) will also affect local management and may alter the design of an MIS. (3) *Customization*, FAP sites offer some similar services and some unique services, and some have unique capabilities. (4) *Acceleration*, although FAPs appear to have adapted well to change in

the past, recent changes seem to be accelerating and may overcome their adaptive mechanisms. Many of the changes are brought about by the increasing rate of change in society, technology, science, politics, and culture. Increasing rates of change have been associated with paralleled disorganization or as Peters (1987) terms it "chaos."

All four factors exert stress upon the individual units and the organization in general, and have implications for the development of an MIS for FAP. Present FAP MISs are lagging far behind the increasing demand for accurate information and services. Future FAP MISs must be designed with flexible structures and be capable of being altered in response to changing needs. Such a system should also allow for the input and manipulation of complex data but be responsive to users and management. Another requirement is that a FAP MIS must be of quality construction. Defects in the system could go undetected for long periods of time and cause serious problems with reporting and the subsequent allocation of funding. Testing and evaluation of the system must include close interaction with the actual users of the system. Users will often find numerous flaws that have been undetected in the laboratory. For instance, when Lotus released the first version of their spreadsheet program, users reported more than 10,000 flaws (Stoloff, Brewster, & Couch, 1992). Quality also means that the system should fulfill the needs of the FAP organization and be easily integrated into the work of the organization. A FAP MIS that contains defects, is not appropriate for its intended purpose, or cannot be easily used by workers in the organization, may add to the burden of the FAP organization instead of reducing it (Taylor, 1992).

With regard to testing the MIS, specific and quantifiable measures need to be agreed upon prior to testing in order to ensure an objective evaluation of the system's effectiveness. Training in the use of an MIS is essential and should occur prior to testing of an MIS and not in conjunction with testing. Quantifiable measures will allow for a scientific validation of the system. Often when systems are installed without training first being given to the users, and without a quantifiable method for evaluating the system, the systems fail, but the failure is only recognized after extensive labor hours and monies have been spent (Stoloff, Brewster, & Couch, 1991).

The consolidation of FAP related directives, instructions, and manuals may allow for the reduction of redundant information and, therefore, the time spent reading and interpreting written documents. Area commander's instructions may not need to incorporate information from higher echelons, a reference to the higher echelon instruction, directive, or manual would appear to be more efficient. Additionally, the production of a Navy-wide FAP manual, that would include consolidated instructions, requirements, quality controls, and even a template for a standardized SOP may also reduce redundant information, reduce the amount of time required to read and interpret written materials, and improve the clarity of communication between FAP sites and higher echelons.

Consideration was given to the incorporation of existing software into the design of an MIS for FAP (see Table 3). Software now exist that is compatible, well tested, and provides for many of the requirements of FAP. For example, WordPerfect is presently being used throughout the Navy and by many FAP sites, is well supported, and can be integrated with other existing software. Also, assessment instruments are available that appear to be compatible and appropriate for use by FAP (see Table 3 and Hudson, 1992).

The reliability and standardization of data and information gathered at FAP sites would be improved if standard forms such as Intake Logs, Summary or Face Sheets, Treatment Evaluations, DD2486s, and assessments instruments (see Table 5) were adopted. Much of the data and information supplied by these forms are needed by management at the site and headquarters levels, however, staff workers often require different kinds of data and information. Therefore, the sites should be provided with capability to generate forms that only have in-house value. This is not to say that only forms, questionnaires, and letters used by management should be automated, many FAP forms appear to be amenable to automation (see Table 5).

Assessment instruments are measurement tools that give an indication of the frequency, degree, magnitude, or severity of a specific personal or social problem or dysfunction. The adoption of standard automated assessment instruments may be advantageous for many reasons. It would allow for continuity in practice, ensure compliance with psychometric principles, and allow for the creation of research projects, within and among sites, that would provide valid data for FAP sites and management. Additionally, training in use of test instruments would be more efficient, a standard battery could be implemented which may reduce time and monies spent on referrals for testing and interpretation of results, and when a member was transferred the receiving FAP site would be familiar with the interpretation of her/his test results. Finally, computerized assessment testing would yield practical advantages in the areas of proctoring testing, recording data, scoring responses, and preparing interpretative reports (Embretson, 1992).

Broadly speaking, data could be gathered by FAP sites and used to aid in the management of people and resources externally and internally. For example, data could be gathered to monitor referrals and cases by command and type abuse (i.e., spouse abuse, child abuse, sexual aggression). When a disproportionate number of referrals are received from a source that are found to be unsubstantiated the source could be given training in basic assessment guidelines. Increasing the expertise of the referral source may save staff time that was being used to process unfounded cases and also save the commands lost productivity due to time spent interviewing and processing paperwork. Monitoring of case data by command and type of abuse may reveal a need for a particular type of preventive program, e.g., parent effectiveness training or anger management training.

Data could also be used to aid in the management of internal resources. Many FAP sites may profit by automating some or all of the following, work schedules, leave schedules, collateral

assignments, case loads by type, case outcomes, processing times, and many other factors that influence the use of people and resources. Case workers, for example, who require an inordinate amount of time to process a particular type of case may need to be counseled or given further training. Caution, however, should be used when applying computerized methods to the monitoring of staff performance or for ensuring accountability. Some human services organizations that have used automated methodology to monitor staff performance and ensure accountability have encountered serious covert resistance to computerization (Gandy & Tepperman, 1990). Monitoring of staff performance may be advantageous for less controversial reasons. For example, computerized monitoring of case workers' performance may show that certain staff are exceptionally adept at processing cases. These staff may be a valuable training resource and may be using methods that the entire site should adopt. Many uses could be found for FAP data and each site should be free to be as creative a possible when manipulating their data to generate reports that they can use to reduce the incident of abusive behavior and thereby the case load. Appendix D describes the work necessary to complete the above recommendations.

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Appendix A: Site Information Request (SIR)

The purpose of this form is to collect organizational and administrative case load information. Do not provide any information that would identify an individual.

SECTION I. REQUIREMENTS. Please provide the following materials:

1. Copy of Organization Chart: [ ]

2. Copies of site specific instructions and policy statements: [ ]

3. Copies of client packages and handouts: [ ]

4. Does your site use the SF600 SOAP format (Subjective, Objective, Assessment, Plan) for case notes? Yes ___ No ___. If no, include a facsimile of the format used. [ ]

5. Are intake logs maintained? Yes ___ No ___. If yes, please include a copy. [ ]

6. FAP Positions. List all positions at your facility by civil service series or military ranks (as applicable). In addition, describe the position, specify whether the position is reserved for military or civilian personnel, the number of positions vacant (available), and number currently filled.

Rate/Series	Title of Position	Military/Civilian	Number Vacant	Number Filled
GS-0334-11	Programmer	Civilian	5	1

7. On a separate piece of paper list all of the forms, reports, correspondence, phone logs, and paperwork used to collect and transmit FAP information. Give the form number, title, whether it is an Internal (site specific) or External (standard) form, and how often it is used (1 = frequently, 2 = Often, 3 = sometimes, 4 = rarely, 5 = never).

Form Number	Title of Form	Source of Form	How Often Used

SECTION II. CASE LOAD INFORMATION. Please complete the following information. Use estimated monthly averages over the past year.

1. In an average month, how many initial referrals are received? ___ How many of these reports are for child physical abuse ___, child neglect ___, child sexual abuse ___, spouse abuse ____, other (specify) _____.

2. How many reports identified the service member as the abuser _____, victim _____, other (specify) ___.

3. Of those in treatment, approximately how many are victims ___, non-abusing spouses ___, abusers ____, other family members ____, other (Specify) _____.

4. How many families in treatment have both parents as abuses ___, identify the abuser as non-familial ___, other (specify) _____.

5. Of those in treatment approximately, how many were referred to civilian treatment facilities ____, military treatment facilities _____, FSC ____, treated at FAP site ___, funded by CHAMPUS _____, supplemental military care ____, other (specify) _____.

SECTION III. AUTOMATED PROCEDURES. Please complete the following questions.

1. What hardware does your site use for the Family Advocacy Program?

2. What software does your site use for the Family Advocacy Program?

3. What reports are currently automated?

4. What reports should be automated?

5. Additional comments regarding automation of FAP?

Appendix B: Family Advocacy Program Interview (FAPI)

Family Advocacy Program Interview (FAPI)

Job Rate/Series: _____ Title: _____ Experience: Years at site _____, in current position ____, in this field ____, Degrees(s) and license(s): _____.

SECTION I. AUTOMATED DATA SYSTEM.

1. What computer hardware and software do you use for the Family Advocacy Program?

2. Do you currently use a computer for any of the job tasks listed below? If yes, how often (daily, weekly, monthly, etc.) in Column A. In column B, state how often a computer **should** be used.

		A How Often Used now	B How Often Should be used
a.	Intake and Assessment		
b.	Investigation and Intervention		
c.	Case Status Determination		
d.	Treatment and Prevention		
e.	Case Management (Follow-up)		
f.	Disposition		
g.	Other (Specify) _____		

3. In your opinion what are the advantages/disadvantages of using computers at your FAP site?

4. What process or task do you think should be given priority for automating?

SECTION II. CASE MANAGEMENT. Select a scenario (circle one) child physical abuse, child abuse sexual, child neglect, spouse abuse, death, or other (please, specify) _____.
Give a brief description of the case.

A. INITIAL INTAKE AND ASSESSMENT PROCEDURES.

1. From whom do you receive reports and by which medium? Select how frequently you receive reports from the sources listed by using the following scale: 1 = never, 2 = rarely, 3 = sometimes, 4 = often, 5 = very frequently. Rank order the medium on a scale from 1 - 5.

		Methods				
Source	Frequency	Phone	Mail	Walk-in	Fax	Other
a. Naval Investigation						
b. Child Protection						
c. Civil Law Enformt						
d. Self-Referred Victim						
e. Self-Referred Offender						
f. Member's Command						
g. Family Services Cntr						
h. Medical						
i. Other (specify) _____						

2. What are the protocol for responding to each of the referral sources from each of the above?

a. _____
b. _____
c. _____
d. _____
e. _____
f. _____
g. _____
h. _____
i. _____

3. Please describe your risk assessment criteria for this scenario, i.e., "at risk", timeliness, age of victim(s), when occurred, location of offender, and extent of injury.

4. Describe actions taken for safety planning with victim, i.e., shelter, command intervention, hospitalization, and resources available.

5. How and when do you determine when an intake or report becomes a case?

6. What information is critical to this phase of the process?

7. What reports or forms are generated during this phase?

Reference #	How is it used?	How long is it kept?	Where stored?	How often is it used?	Is it required?

B. INVESTIGATION, OBSERVATION, EVIDENCE GATHERING (PRE-DETERMINATION).

1. What are the jurisdictional issues that impact the case management at this phase? i.e., reporting requirements, federal property, concurrent jurisdiction?

2. How do confidentiality issues impact the case, i.e., command liaison, medical record entries, case flagging?

3. What are the local protocol/instructions (documentation requirements) defining roles and responsibilities between agencies. Are the relationships formal (MOU) or informal?

a. Civilian Law Enforcement:
b. Civilian Medical Providers:
c. Naval Medical Providers:
d. Naval Investigative Service:
e. Child Protective Services:
f. Family Services Center:
g. Command:
h. Other (Specify):

4. What reports or forms are generated during this phase?

Reference #	How is it used?	How long is it kept?	Where stored?	How often is it used?	Is it required?

5. What information is critical at this phase in the process?

C. CASE STATUS DETERMINATION AND TREATMENT PLANING.

1. What information is required by the case review subcommittee to make a case determination?

2. What are your criteria for making case determination? Is it written?

3. What is your role in treatment planning?

a. Diagnostic (Mental Health):
b. Legal:
c. Treatment Provider:
d. Other, Specify:

4. What reports or forms are generated during this phase?

Reference #	How is it used?	How long is it kept?	Where stored?	How often is it used?	Is it required?

5. What information is critical to this phase of the process?

D. TREATMENT PROCEDURES.

1. What documentation is required for each treatment modality, e.g., SF600? What information is required, maintained, generated for each of the following:

a. Group:
b. Individual:
c. Marital:
d. Family:
e. Other, Specify:

2. What reports or forms are generated during this phase?

Reference #	How is it used?	How long is it kept?	Where stored?	How often is it used?	Is it required?

3. What information is critical to this phase of the process?

E. CASE MANAGEMENT (FOLLOW-UP AND MONITORING):

1. What protocols exist for continuing monitoring case progress from:

a. Legal:
b. Medical:
c. Child Protective Services:
d. Naval Investigative Service:
e. Family Service Center:
f. Command:
g. Treatment Providers:
h. Other (Specify):

2. What reports or forms are generated during this phase?

Reference #	How is it used?	How long is it kept?	Where stored?	How often is it used?	Is it required?

3. What information is critical to this phase of the process?

F. DISPOSITION.

1. What factors determine when a case should be closed? (time, treatment completed, no longer a service member) What is the written protocol?

2. What are the procedures for transferring a case to another FAP, e.g., screening for overseas duty?

3. What reports or forms are generated during this phase?

Reference #	How is it used?	How long is it kept?	Where stored?	How often is it used?	Is it required?

4. What information is critical to this phase of the process?

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Appendix D: Abbreviated System Decision Paper (ASDP)

Abbreviated System Decision Paper (ASDP)

Mission Element Need.

FAP sites use manual data recording and ad hoc microcomputer programs to manage their data. Data is compiled manually and mailed to the Naval Medical Information Management Center (NMIMC) for processing and analysis. NMIMC manually enters the data into the Central Registry database.

Many FAP sites cannot efficiently and accurately access or analyzing their data. Some sites must contact NAVMEDATASERVCEN to request information regarding their own workload which is a time consuming process. Although a standardized automated information system does not exist some FAP sites have developed microcomputer database programs that are not compatible with one another and that may not be capable of interfacing with the Central Registry.

Caseworkers and FAP management rely on manual or inefficient and inadequate electronic databases for information regarding their current clients, personnel, and materials. Caseworkers and management need current and accurate data which is not always readily available using the present systems and methods. The present method of retrieving and maintaining data is labor intensive. Unfortunately, clerical and case workers are over burdened and may not always have the time to maintain data and information. As a result, reports may be outdated and inaccurate. Ad hoc requests from FAP sites may require an inordinate amount of time to produce due to the present method of data storage and retrieval. A need exists for a comprehensive and standardized Family Advocacy Program Management Information System (FAPMIS). This system would be used by individual FAP sites and would aid in the standardization of data collection procedures, speed the processing of cases, and facilitate accurate and efficient data reporting.

Proposed Solution.

Create a Navy standard Family Advocacy Program Management Information System (FAPMIS). The software should allow for the following functions:

1. Entering data.
2. Editing existing data.
3. Deleting erroneous records.
4. Reviewing existing records.
5. Creating standard and ad hoc reports.
6. Sorting and displaying existing cases
7. Displaying tickler file by dates and worker
8. Summarizing reports for case review committee.
9. Creating standardized letters.
10. Formatting and encrypting standard forms.

The proposed software system would operate on a peer to peer network which would integrate the work stations of the coordinator, case workers, and clerical staff. Because of the estimated small number of users of the system (estimated no more than 35), this type of network would be the most cost efficient. Cost efficiency has been calculated in terms of the initial cost of the system and also in terms of reduced network administration costs. There is no requirement for a dedicated network administrator. The network throughput would be adequate with minimal interruptions if it is configured as described below. Network security is also a prime consideration and the system

must be adequate to allow for the installation of security measures mandated by instructions and directives. The network would also provide electronic mail service which may aid in the facilitation of communications at the FAP sites. Using a peer to peer network, printing reports, and other documents can be shared at one or several nodes. Additional printers could be added. However, each personal computer would not be required to have its own printer.

Although peer to peer network software is proposed, there should be a dedicated database or file server which would be used as a node. This would maximize the throughput of the network. It may be possible to utilize this file server as a print server and as a communication server. Since printing and communication operations require minimal computing resources, these services should be the maximum allocated to this node. One possible use of existing 286 computers would be as print or communication servers. The use of a single file server would alleviate the burden placed on the file server and would facilitate regular backups. The file server would also contain the master database against which all FAP site reports would be run. Each case worker would have her/his own personal computer (PC). He/she would process all transactions on her/his local PC and at the end of the day, all daily transactions would update the master database. Therefore, each case worker would have access to her/his own data and would be able to create reports as necessary. The local databases would contain only the open, assigned cases. The master database on the file server would contain all cases, open and closed, assigned and unassigned. In addition to the master database and the FAPMIS, the file server would contain all common files, i.e., network and DOS utilities, word processing programs and data, other database programs and data, all graphics programs and data, spreadsheets and other budgetary data, and any other files. The hard disk size for the file server should be a minimum of 300 megabytes. This figure is based on the receipt of 250 new cases each month, a record size of 512 bytes, an average one page memo size of 2048 bytes and, a single data file size of about 7.7 megabytes after one year of use. Assuming that cases are kept for five years about 40 megabytes of storage space would be required.

The network topography should be designed in a bus or a star configuration depending on the number of users. The use of a bus topography would require the use of Thinnet Cable to connect the nodes and the server. The use of a star configuration would require the use of unshielded twisted pairs and therefore wire centers would be necessary. The star configuration would allow work to continue if a cabling problem occurred between nodes. A cabling problem in the bus topography would cause the network to be unusable until the problem is solved. The major factors that need to be considered between these two options are cost and the number of nodes.

Communications would be required to send data to the Central Registry. Privacy Act considerations require that FAPMIS software encrypt the data files to be sent to the Central Registry. If requested, the data files on the file server could also be placed in a virtual disk which would encrypt the entire file. Performance tradeoff would be minimal. Communications could also be used for troubleshooting and providing software updates from off site locations as necessary.

Other Alternatives Considered.

1. Maintaining the status quo is unacceptable. Current procedures are very labor intensive and do not allow efficient and accurate access to data at FAP sites.

2. Direct Dial In Access to the FAP Central Registry:
Unacceptable due to AIS security regulations for Level II data.

Hardware

1. Computer (user)

   a. One 386-20 MHZ computer.
   b. Four megabytes of ram.
   c. One 100 megabyte hard drive.

2. Computer (server)

   a. One 486-33 Mhz computer.
   b. Two-hundred fifty megabyte hard drive (SCSI) to store FAPMIS program, data, and archives; word processing program and documents; graphics programs and data; other database programs and data; LAN and DOS programs and utilities and; spreadsheet and/or budgetary data.
   c. Two floppy drives (5.25" and 3.5").
   d. Eight megabytes of RAM.
   e. Two serial ports.
   f. Tape backup (250 meg).

3. Miscellaneous

   a. One laser printer (HP or compatible).
   b. One 9600 Baud modem - transmission of data and troubleshooting network.

4. LAN Hardware

   a. Network cards (eight bit for nodes and 16 bit for server is the minimum, preferable 16 bit/32 bit for nodes and server respectively).
   b. Unshielded twisted pairs or thinnet.
   c. Wire hubs depending on topology (star) and number of users.

Software

1. LAN Software.

   a. Peer to peer is most cost efficient for up to 20 or so nodes. Can go up to a hundred but then better if get dedicated-server network like Novell's Netware or Banyan's Vines
   b. Mail service.
   c. Security system, virtual disk which is encrypted for main database on the server. Individual cases would be on the local hard disk. The hard disk would be updated daily to main database which would serve as a backup, an archiving db, and for report generation.
   d. Print services.
   e. LAN diagnostic software.
   f. Disk caching software for the server.

2. Case Management Software

a. Input new data.
b. Edit existing data as required.
c. Delete erroneous record.
d. Review existing records.
e. Reports to include standard reports, ad hoc reports, and standard letters to CO's.
f. Create form DD2486 data for transfer to Data Services Center (DSC).
g. Encrypt above data before sending to DSC.
h. Tickler / reminder feature for various due dates - by individual case worker.
i. Case status tracking.

3. Communication software to transfer 2486 encrypted data to DSC via secured phone lines.

Other Considerations.

1. The issue of whether to use a bus topology or a star topology needs to be resolved. The use of bus topology negates the need for wire centers but machine may be unavailable along with other networks if there is a problem with the cable. The use of a star configuration would not be as extensive a problem.

2. The hard disk size for the file server should be a minimum of 300 megabytes. This figure is based on the receipt of 250 new cases each month, a record size of 512 bytes, an average one page memo size of 2048 bytes and, a single data file size of about 7.7 megabytes after one year of use. Assuming that cases are kept for five years about 40 megabytes of storage space would be required. Any archives kept longer than five years would increase the amount of space required. This does not include FAPMIS program files or any other common files.

3. The use of a peer to peer network would be less costly, easier to maintain, and easier to troubleshoot. Performance of the system would be near optimal, with groups of less than 35 users, compared to server based networks.

4. Dedicate server is for database only it would not to be used as a node. This would substantially speed up network operations. The only time it would be used as a node would be to backup to tape and as a print server. Printers could also be configured to the nodes.

5. The updating of the server can be done automatically on a daily basis after all transactions are processed by keeping the current cases on the local drive.

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The Navy's Family Advocacy Program's (FAP) directives, manuals, procedures, and functions were studied in order to gather data to aid in the development of a Management Information System (MIS) for FAP. A review of relevant instructions, documents, and general literature was completed. A survey instrument and a structured interview questionnaire concerning procedures, present use of automation, and specific needs for automation was created, and administered to FAP directors, case workers, and support personnel at seven FAP sites. Relevant available software was acquired and assessed for use by FAP. A detailed recommendation for a FAP MIS was created and an Abbreviated System Development Paper was written. The results indicate that FAP would profit from an integrated system that allowed for the needs of management and the needs of the site worker, in terms of functioning and the range of data acquired. Such a system would be flexible enough to fill the unique and multiple needs of the organizational hierarchy. It was concluded that the development of an MIS for FAP is feasible and its application would yield significant practical results, however, the specific needs and characteristics of the FAP chain-of-command and site staff must be considered and incorporated into the design, development, and testing of the MIS for it to be successful.

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