Award Number: DAMD17-96-C-6091

TITLE: CD-ROM Technology to Increase Appropriate Self-Care and Preventive Behaviors Among Army and Navy Women

PRINCIPAL INVESTIGATOR: Ann M. Taubenheim, Ph.D.

CONTRACTING ORGANIZATION: Macro International, Incorporated
Calverton, Maryland 20705

REPORT DATE: September 2000

TYPE OF REPORT: Annual

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for public release;
distribution unlimited

The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.
CD-ROM Technology to Increase Appropriate Self-Care and Preventive Behaviors Among Army and Navy Women

Ann M. Taubenheim, Ph.D.

Macro International, Incorporated
Calverton, Maryland 20705

E-MAIL:
Na31@umail.umd.edu

U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

The purpose of this report is to report the results of the fourth year of a study to investigate and address enlisted Army and Navy women’s needs for basic gynecological and reproductive health education in order to enhance military readiness and general well-being. In the first phase of the study, a needs assessment was begun in which the methods included: 1) a mail survey of knowledge, attitudes, and practices (KAP) from a random sample of Army and Navy clinicians and chiefs of military medical departments; 2) focus groups with enlisted Army and Navy women and with their health care providers; and 3) a secondary analysis of a national survey of military personnel health related behaviors. Based on the results of these needs assessment data, we have determined implications for enlisted women’s reproductive health. These data were used in the fourth year to design and begin development of a culturally sensitive, multimedia CD-ROM and accompanying materials. This intervention will be tested in military medical clinics in a fifth project year.
# Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table of Contents</td>
<td>3</td>
</tr>
<tr>
<td>I. Introduction</td>
<td>4</td>
</tr>
<tr>
<td>II. Body: Project Progress</td>
<td>4</td>
</tr>
<tr>
<td>A. Experimental Methods and Procedures</td>
<td>4</td>
</tr>
<tr>
<td>B. Relevance to Original Objectives</td>
<td>8</td>
</tr>
<tr>
<td>C. Problems in Accomplishing Tasks</td>
<td>9</td>
</tr>
<tr>
<td>III. Key Research Accomplishments</td>
<td>10</td>
</tr>
<tr>
<td>IV. Reportable Outcomes</td>
<td>11</td>
</tr>
<tr>
<td>V. Conclusions</td>
<td>12</td>
</tr>
</tbody>
</table>

Appendix A  Design Document
Appendix B  Efficacy Test Instrument
Appendix C  Efficacy Test Informed Consent Letter
Appendix D  Information Paper for Potential Co-Investigators
Appendix E  Presentation to Inform Potential Co-Investigators
I. Introduction

The project "CD-ROM Technology to Increase Appropriate Self-Care and Preventive Behaviors Among Army and Navy Women" was initiated as a way to study and address the reproductive health education needs of enlisted Army and Navy women. Not only is the ability of each female soldier to protect and control her reproductive health essential to military readiness, it is important for these women's quality of life. The purpose of the study is to investigate enlisted women's needs for basic gynecological and reproductive health education, from the perspective of military health care providers and enlisted women themselves. Based on the results of the needs assessment, a culturally sensitive, multimedia CD-ROM and accompanying materials will be developed. This intervention will then be tested in military medical clinics.

This report describes the fourth year of operation of the project, which began in October 1999. The project was originally a four-year study with three distinct phases: a needs assessment phase, a design phase, and an efficacy study phase. The first year was to include the needs assessment phase and the beginning of the application design. Due to continued delays in questionnaire design and human subjects approval that continued past the first year, we were only ready to design and develop the application in the fourth year. This report will summarize the design and development process and our future task timeline for testing the intervention in an extension year.

II. Body: Research Accomplishment

The experimental methods and procedures reported here represent a description of the instructional design process we used to develop the tailored interactive intervention. It will also describe a revision in the original scope of work for the efficacy test—which has been approved by the United States Army Medical Research and Materiel Command Science Officer—and the initial activities to plan for the efficacy test.

A. Experimental Methods and Procedures

The purpose of the study was to investigate enlisted women's needs for basic gynecological and reproductive health education, as evidenced by a needs assessment process conducted with military health care providers and enlisted women. Based on the results of the needs assessment, a culturally sensitive, multimedia CD-ROM and accompanying materials is being developed, which will be tested in military medical clinics. The technical objectives were as follows:

1) To assess the most pressing reproductive and gynecological self-care education needs of enlisted women on base and in the field;
2) To assess the range of current health education efforts for enlisted women;
3) To enhance enlisted women's self-care and care-seeking knowledge and practices through development and implementation of a culturally sensitive, multimedia educational intervention and accompanying field pocket guide at medical clinics.
The first two objectives were addressed in the first three years of the study. Needs assessment activities involved 3 data gathering activities:

1) A secondary analysis of the 1995 Department of Defense Survey of Health Related Behaviors Among Military Personnel to determine to the effect of health-related attitudes and behaviors on enlisted women's history of sexually transmitted diseases (STDs), Pap test screening, and pregnancy;
2) Needs assessment focus groups with enlisted women in the Army and Navy (N=40) and military health care providers (N=20); and
3) Needs assessment mail surveys conducted with nationally representative samples of military health care providers (n=260), and chairpersons of military base OB/GYN services (N=160).

The third objective was addressed in the fourth year of the project as we began the development of the multimedia educational intervention. We also began to prepare for the efficacy test. The sections below describe the procedures employed in these activities. The detailed findings can be found in the appendices.

1. Educational Intervention Development

Design Document

Data collected during the needs assessment process were analyzed and synthesized into a design document that outlines the specific content and features to be included in the multimedia program. The design document was created by a design team that included: (1) an expert in health communications technology (R. Gold); (2) an expert in instructional design and women's health (N. Atkinson); (3) expert in military women's issues (E. Lewis); (4) a graphic artist; and (5) a video producer with experience in military training and women's health projects (D. Hopwood).

The process of developing the design document involved a series of meetings of the above design team, with Dr. Atkinson taking the lead role. In addition, Dr. Ann Taubenheim provided substantial instructional design support to Dr. Atkinson in the first half of this project year before leaving the project.

The design document serves as a guide to the programmer, artist, and video producer and specifies the overall sequence and content of the program, including any video, audio, or animation components, as well as sample screen designs and initial flow charts. The process involved the following phases:

a. Development of content outline. This was a draft of the universe of information that might be included in a women's health application focused on enlisted women's health needs as indicated by the Defense Women's Health Initiative and the needs assessment activities.

b. Development of key messages. Key messages were drafted to guide the focus and the development of the activities, feedback to users, and video script. Given that people
tend to remember very little of educational content, a focus on the key messages ensures that the user will get a consistent message and tone throughout the application.

c. Development of goals and objectives. The goals and objectives also focus the content and instruction in the intervention as well as its evaluation.

d. Development of overall flowchart and storyboards. The overall flowchart illustrates the possible paths the user may take in the interactive intervention. It also outlines where the user accesses the different learning activities and how the user enters and exits the program.

e. Development of activity-level storyboards. Once the overall structure is determined, specific learning activities and their content and use are illustrated thoroughly in detailed storyboards. These guide programming and graphic art development.

f. Development of video and audio scripts. Complementary video and audio add interest to an interactive intervention. Using the findings of the needs assessment, the key messages, and the goals and objectives as a guide, the video producer prepared a video script that will guide video production.

See Appendix A for the Design Document that resulted from these deliberations. The design document was submitted to several advisory panel members for approval prior to proceeding with program development.

2. Efficacy Test

Revision in Scope of Work

Early in the project when the needs assessment was taking longer than originally planned, we discussed the need for a modification in the scope of work with the contract officer. At that time, the thought was that a no-cost extension would be the nature of the modification. However, the time frame of the contract cannot be extended beyond August 2001. Therefore, the following change in the efficacy test was proposed and accepted by Kathryn Dunn, Contract Specialist, and Dr. Patricia Modrow, Deputy Director for Grants Management:

Original Plan: The intervention will be tested at the medical facilities of a Navy and an Army installation using a randomized pretest/posttest control group design that will allow us to examine the outcome measures by intervention and by service. The experimental group will use the intervention and the control group will receive usual care. Subjects will complete a knowledge-attitudes-practices (KAP) survey pre-intervention, post-intervention, 6 months post-intervention, and 12 months post-intervention.

<table>
<thead>
<tr>
<th>EXPERIMENTAL</th>
<th>CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARMY</td>
<td></td>
</tr>
<tr>
<td>R Y₀ X Y₁ Y₂ Y₃</td>
<td>R Y₀ ~X Y₁ Y₂ Y₃</td>
</tr>
<tr>
<td>NAVY</td>
<td></td>
</tr>
<tr>
<td>R Y₀ X Y₁ Y₂ Y₃</td>
<td>R Y₀ ~X Y₁ Y₂ Y₃</td>
</tr>
</tbody>
</table>

X = intervention, ~X = no intervention, Y₀ = pre-measure, Y₁,₂,₃ = post-measure
**Alternative Plan:** The intervention will be tested at the medical facilities where military women, regardless of service, are likely to go (Walter Reed, National Naval Hospital, and Malcolm Grow). However, equivalent numbers of women in the Army, Navy, and Air Force will be recruited for participation in the study. Women will be randomized into experimental and control conditions upon arrival at their annual examination, which will allow us to examine the outcome measures by intervention. The experimental group will use the intervention and the control group will receive usual care. Subjects will complete a knowledge-attitudes-practices (KAP) survey pre-intervention and post-intervention, and data collection will take place for approximately 6 months.

<table>
<thead>
<tr>
<th>EXPERIMENTAL</th>
<th>CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>( R Y_0 X Y_1 )</td>
<td>( R Y_0 \sim X Y_1 )</td>
</tr>
</tbody>
</table>

\( X = \) intervention, \( \sim X = \) no intervention, \( Y_0 = \) pre-measure, \( Y_1 = \) post-measure

**Rationale:** The needs assessment phase of the project took an extended amount of time due to human subject clearance procedures, survey clearance procedures, change in work scope, and added time needed to obtain agreements at specific installations for data collection (documented in annual reports 1, 2, and 3). Once the intervention has been developed, the extension in the original time period only allows for an additional 6 months. The revised efficacy test is needed to allow for this shortened time frame. In addition, this strategy avoids problems with subject follow-up due to reassignment, assignment to a temporary duty station, deployment, or separation from the service.

**Clarification of Human Subjects Issues and Procedures**

At the time that the revised scope of work was in review, we began to clarify the need for IRB review of the efficacy test portion of the study. Because a revision in the needs assessment appeared to show that the efficacy test was no longer part of the overall protocol, the human use office seemed to have approved the entire protocol. However, we learned that the efficacy test was considered a new protocol, and it needed IRB review. Given the timeframe issues mentioned above, we will seek direct IRB review through the Human Use and Regulatory Affairs Office at Fort Detrick, Maryland. Once the protocol is approved, we will submit it to the IRBs of the University of Maryland, Macro International Inc., Uniformed Services University of the Health Sciences, and the medical facilities that participate in the efficacy test.

**Instrument Development**

In the original needs assessment, we planned to conduct a cross sectional survey of enlisted women's knowledge, attitudes, and practices pertinent to their reproductive health and health education needs. Health Affairs did not approve the survey and recommended that we do a secondary analysis of an existing national health behavior survey, the *1995 Department of Defense Survey of Health Related Behaviors Among Military Personnel*. Considerable work had been done on the needs assessment
survey including expert panel involvement in the drafting and review of the instrument as well as a pilot test of the instrument with 9 enlisted women. This survey formed the basis of the questionnaire that will be used in the efficacy test to measure pretest and posttest knowledge, attitudes, and practices. See Appendix B for the questionnaire.

Consent Form

In accordance with the guidelines set forth by the Human Use and Regulatory Affairs Office of the USAMRAA, we prepared a consent form for enlisted women to review and sign prior to volunteering to participate in the efficacy test. The consent form is in Appendix C.

Recruitment of Co-Investigators

We are currently recruiting co-investigators at the following military medical facilities in the Washington DC area: Walter Reed Army Medical Center, National Naval Hospital, and Malcolm Grow. To inform potential co-investigators about the intervention, the study, and the role of a co-investigator, we prepared a two-page information paper and a PowerPoint presentation available to download or view on the Internet. The information paper is in Appendix D, and presentation is in Appendix E.

B. Relevance to Original Objectives

The findings from the above activities relate directly to the third technical objective from original proposal related to the needs assessment:

3) To enhance enlisted women’s self-care and care-seeking knowledge and practices through development and implementation of a culturally sensitive, multimedia educational intervention and accompanying field pocket guide at medical clinics.

The intervention development activities and the efficacy test activities directly address the original objective above. During the development, we focused on the guidance from the needs assessment to prepare an intervention that addressed women’s health for enlisted female personnel. This included attention to not only information but to attitudes and capabilities that will support positive health behavior related to preventing vaginal infections, unintended pregnancy, and sexually transmitted diseases. We are taking care to prepare an intervention that is multicultural in terms of race/ethnicity and branch of service so that we take into account those cultural factors that influence our target audience. The addition of Air Force women allows the intervention to be tri-service, which is consistent with other efforts in today’s military and its health care system.

The efficacy test is structured to include women from all three services. The KAP survey directly addresses the objectives that came out of the needs assessment and guided the
intervention development. Further, we have sought the active participation of co-investigators from across the services, just as we had in the needs assessment. The involvement of these individuals as well as their patient populations will support further review, evaluation, revision, and integration of the intervention.

C. Problems in Accomplishing Tasks

The last project year began with certain problems and ended with others that influenced our progress toward some of the tasks. These issues included staffing changes, contract revisions, and contract constraints.

At the beginning of the year, Dr. Atkinson left the employ of Macro International. Macro sought and obtained permission from the contract officer to retain her involvement in the project, but these negotiations took several months. In the meantime, Dr. Ann Taubenheim became the civilian P.I. for a few months. Upon her departure from Macro in May 2000, Macro sought and obtained permission to revert to Dr. Atkinson as the civilian P.I. In addition, the person originally proposed to program the application has since left Macro, and a new programmer had to be identified. These changes and contract revisions had some affect on the project timeline.

At the time the scope of work for the efficacy test was revised, the contract office believed that no further IRB review was needed for the project. As mentioned above, this was clarified with the Human Use and Regulatory Affairs Office. The work on IRB approval was thus delayed a few months while we were operating under the assumption that no IRB approval was necessary. Our point of contact in the Human Use and Regulatory Affairs Office, Cathy Smith, was reassigned but continued to provide assistance and support in moving forward with compliance with human subjects approval procedures. We are now working with COL Julie Zadinsky to expedite IRB review directly through the Human Use and Regulatory Affairs Office.

Early on in the needs assessment, the contract office became aware that the original timeline would need to be revised. They advised us to wait until closer to the end of the contract to address this issue. When we were ready to revise the timeline, they became aware that the nature of the funding source precluded extending the contract beyond August 2001. As a result, we had to reduce the efficacy test by removing the extended posttesting from the plan.
III. Key Research Accomplishments

This section details Year 4 activities and results. It is not yet a final project report with a full listing of project outcomes. Table 1 lists the major activities of the third project year in terms of four tasks outlined in the original proposal.

<table>
<thead>
<tr>
<th>Task</th>
<th>Description</th>
<th>Months of Performance In Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Held preliminary design team meetings.</td>
<td>1-3</td>
</tr>
<tr>
<td>5</td>
<td>Developed content outline, key messages</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Developed goals and objectives</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>Developed basic program structure, flowchart, and storyboard</td>
<td>6-7</td>
</tr>
<tr>
<td>5</td>
<td>Developed video script</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>Finalized basic design document and submitted to advisors for review</td>
<td>9-10</td>
</tr>
<tr>
<td>5</td>
<td>Developed storyboards for learning activities</td>
<td>9-11</td>
</tr>
<tr>
<td>6</td>
<td>Develop multimedia CD-ROM</td>
<td>11-12</td>
</tr>
<tr>
<td>9</td>
<td>Conduct in-house and expert review of multimedia program</td>
<td>10-12</td>
</tr>
<tr>
<td>11</td>
<td>Revised scope of work for efficacy study.</td>
<td>8</td>
</tr>
<tr>
<td>11</td>
<td>Began recruiting Co-Investigators at Washington DC area military medical facilities.</td>
<td>9-12</td>
</tr>
<tr>
<td>11</td>
<td>Developed knowledge, attitudes, practices survey.</td>
<td>10-11</td>
</tr>
<tr>
<td>11</td>
<td>Developed consent form</td>
<td>11</td>
</tr>
<tr>
<td>11</td>
<td>Worked with funding agency, Uniformed Services University of the Health Sciences, and the University of Maryland to finalize IRB requirements.</td>
<td>8-12</td>
</tr>
</tbody>
</table>
IV. Reportable Outcomes

In terms of reportable outcomes, one paper presentation and one abstract submission were the only items that apply for the third project year. No patents, licenses, informatics, funding, or other research opportunities resulted from this research.

Presentation at 1999 APHA Annual Meeting: November 1999

A presentation of the preliminary findings from the secondary analysis was given at the annual meeting of the American Public Health Association in Chicago, Illinois, in November 1998. The presentation is in Appendix F, and the citation is as follows:


The following abstract was submitted for consideration for the Fifth Biennial Conference on Women in Uniform held by the Women’s Research and Education Institute in Arlington, Virginia, at the Women in Military Service to American Memorial. It was accepted for presentation at a session on December 1, 2000.


The purpose of this paper is to describe a needs assessment to determine the knowledge, attitudes and practices related to reproductive health behavior for enlisted women in the Army and Navy. A combination of qualitative and quantitative methods were used, including: 1) expert panel meeting; secondary analysis of the 1995 Department of Defense Survey of Health Related Behaviors Among Military Personnel; 2) focus groups with single and married enlisted women in the Army and Navy; 3) focus groups with military clinicians in the Army and Navy serving enlisted women; and 4) surveys conducted with clinicians (physicians and nurse practitioners) and with commanding officers of military medical services providing reproductive health care to enlisted women. The findings from this study were used to develop recommendations for health education interventions that will reduce the incidence of unintentional pregnancies, sexually transmitted diseases, and urinary tract and vaginal infections among enlisted women. The methods, findings, and recommendations will be discussed as well as their implications for military health education and health policy.
V. Conclusions

The work of the past year focused on intervention development. Taking the results of the qualitative and quantitative needs assessment studies, we used a design team approach to preparing a tailored, culturally-sensitive that would meet the needs of enlisted female personnel. The conclusions outline how the findings of the needs assessment have been operationalized in the development of the intervention.

A. Intervention Development Conclusions

Our needs assessment revealed that women’s health education efforts in the military are numerous but diffuse, and they have little standardization. While several military clinicians and active duty females voiced support for the development of educational materials, these materials are being developed as an isolated component rather than part of a mandatory health education program. As a result, these materials must be regarded as a resource that may be implemented in a variety of situations. We believe the intervention could present greater gains if it were made available to enlisted women in a systematic way.

The primary type of implementation—as envisioned from the beginning—is as a clinic-based intervention. Given the time constraints that may present in a clinical setting, the intervention was designed to provide a user with key messages and targeted information even if they had a half an hour or less to use it. Therefore, the intervention is designed to provide tailored information that is available quickly based on whether and why a user is receiving health care.

We heard that much of military health education is text based or lecture based. Some materials that are used repeatedly hold little interest for the target population. Interactive, multimedia CD-ROMs provide a delivery mechanism that can engage the audience in new ways and may compel users to look for more information or to return to use it again. The current design tries to incorporate activities that invite the user to explore different scenarios. It also provides background information that they may access if they choose. Users can choose to use recommended learning activities or to explore any that pique their interest.

From the very beginning of this project, we have been asked why the intervention was focused on only enlisted women in the Army and Navy. Since then, the military has made great strides in integrating medical care in TRICARE and in other tri-service efforts. To be consistent with this trend, we have decided to include information that will be tailored to the needs of enlisted women in the Air Force.

Several events pointed to the need to provide information to males and others who might use or view the intervention. In the case of males, we became familiar with a pocket health guide that deploying women in the Army could take with them (we originally proposed a similar tool to accompany the CD-ROM). Unfortunately, we also learned that this pocket guide was no longer being printed, because there were complaints that no similar tool was provided to deploying males. To avoid a similar fate for the CD-ROM, we provide several paths for male-specific input and feedback. This
strategy also allows us to give males information about women’s health that may increase their understanding of the situation that women face (as was recommended by the enlisted women in our focus groups). We also provide information to other active duty personnel, such as male and female officers, who could also benefit from a greater understanding of reproductive health.

Another key component of the design is the use of experienced peers as a unifying theme, based on several recommendations we heard in the focus groups. We based our “briefing” video on this idea; we plan to have testimonials from experienced enlisted women and female officers who talk about the issues related to reproductive health and readiness.

B. Efficacy Test Preparation Conclusions

Because the efficacy test has not yet begun, conclusions based on this task are somewhat premature. We can conclude that, despite being unable to test the intervention in deployment centers as previously planned, the current plan to use military medical facilities in the Washington DC area affords us the possibility to reach women in all three services with greater ease. In addition, the facilities in this area are likely to have clinicians who are interested in the intervention and participating in the efficacy test as co-investigators. We can also conclude that the limited time frame for the efficacy test will reduce the burden on research volunteers as well as the possibility of subject attrition.

C. Implications of the Completed Research

Despite the delays in the development, quite a bit of work is completed, and we are optimistic that we will be able to move into the efficacy test soon. As the design and development have proceeded, our military advisors have seemed to approach the intervention with a growing sense of optimism and positive regard. A consistent message we get is that this intervention is an improvement over the training and education programs that our military advisors are used to seeing. They are excited to see the final product so they, too, can use it.

The extensive needs assessment and positive development process suggest that the completed research will be successful in delivering a useful reproductive health education intervention. Should this implication bear out, it leads to other implications related to successful dissemination of the intervention.

One implication is that the intervention will be more accessible if it is also available on the Internet. A web-based version would also allow more people to use the application in a private setting where they might have more time and more privacy and thus explore and learn more. To prepare for such a possibility, the authoring software allows us to easily port the application to the Internet.

Another implication is that the intervention will be better used if instructors charged with conducting reproductive health training and education were given an instructor’s guide to help them use the intervention. The guide could show instructors how to best use the intervention with individuals or
groups or at specific training events: at basic training, during in processing, or at booster sessions such as during the annual exam. Clinicians could also get guidance on how to integrate the intervention into office visits for the annual exam, exams for acute conditions, and for pre-deployment exams. Our experience on other projects has shown that giving this sort of support to intermediaries promotes use of the materials as well as increasing the effectiveness of the intervention. We plan to explore other means of support to allow us to increase the dissemination of these materials following the project’s completion.

Over the next year of the project, we plan to conduct the following activities:

• Finalize the design and development of the multimedia application;

• Finalize agreements with military co-investigators who will participate in the efficacy test of the application;

• Conduct the efficacy test;

• Analyze efficacy test data and report the findings; and

• Revise the intervention based on the efficacy test findings, and submit it to the USAMRMC.
APPENDIX A

CD-ROM Technology to Promote Self Care and Preventive Behaviors Among Enlisted Women

Design Document

August 2000
## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Background</td>
<td>3</td>
</tr>
<tr>
<td>II. Suggested Title for the System</td>
<td>3</td>
</tr>
<tr>
<td>III. Target Audience and Settings for Use</td>
<td>3</td>
</tr>
<tr>
<td>IV. Instructional Goals and Objectives</td>
<td>4</td>
</tr>
<tr>
<td>V. Key Messages</td>
<td>5</td>
</tr>
<tr>
<td>VI. Program Structure</td>
<td>6</td>
</tr>
<tr>
<td>A. Title Screen</td>
<td>6</td>
</tr>
<tr>
<td>B. Sign In</td>
<td>6</td>
</tr>
<tr>
<td>1. Gender</td>
<td>7</td>
</tr>
<tr>
<td>2. Race</td>
<td>7</td>
</tr>
<tr>
<td>3. Branch of Service</td>
<td>7</td>
</tr>
<tr>
<td>4. Medical Examination Status</td>
<td>7</td>
</tr>
<tr>
<td>5. New or Returning User</td>
<td>8</td>
</tr>
<tr>
<td>C. Briefing Video</td>
<td>8</td>
</tr>
<tr>
<td>D. Tailored Feedback and Personalized Lesson Plan</td>
<td>8</td>
</tr>
<tr>
<td>E. Main Menu</td>
<td>10</td>
</tr>
<tr>
<td>1. Briefing</td>
<td>11</td>
</tr>
<tr>
<td>2. Health Profile</td>
<td>11</td>
</tr>
<tr>
<td>3. Basic Training</td>
<td>11</td>
</tr>
<tr>
<td>a. Female Body</td>
<td>11</td>
</tr>
<tr>
<td>b. Contraception</td>
<td>12</td>
</tr>
<tr>
<td>c. Baby Budget</td>
<td>13</td>
</tr>
<tr>
<td>d. Deployment Packing</td>
<td>13</td>
</tr>
<tr>
<td>e. Signs and Symptoms</td>
<td>13</td>
</tr>
<tr>
<td>4. Field Exercises</td>
<td>13</td>
</tr>
<tr>
<td>a. Virtual Examinations</td>
<td>14</td>
</tr>
<tr>
<td>b. Virtual Relationship</td>
<td>15</td>
</tr>
<tr>
<td>c. Virtual Self-Care</td>
<td>16</td>
</tr>
<tr>
<td>5. Reference Manual</td>
<td>18</td>
</tr>
<tr>
<td>F. Exit</td>
<td>18</td>
</tr>
<tr>
<td>VII. Screen Design</td>
<td>19</td>
</tr>
<tr>
<td>A. Menu Bar</td>
<td>19</td>
</tr>
<tr>
<td>B. Program Control Strip: Tool Bar</td>
<td>20</td>
</tr>
</tbody>
</table>

Appendix A: System Conceptual Flowchart

Appendix B: Screen Design and Functionality
Appendix C:   Script for Briefing Video
Appendix D:   Basic Training Exercise Storyboards
Appendix E:   Field Exercise Flowchart and Storyboards
I. Background

As the result of a formative evaluation of the needs of enlisted women regarding reproductive health education, a multimedia intervention was proposed for use in clinical and other settings with enlisted women in the U.S. Armed Forces. This application is intended to be an interactive program delivered on CD-ROM that integrates video, audio, computer graphics, photographic stills, and text. Users will be able to access information about reproductive anatomy, contraception, sexually transmitted disease prevention, proper hygiene, common reproductive health problems, and health care recommendations. Users will be given access to educational, counseling, and treatment resources. In addition, users will be given the opportunity to learn strategies for communicating with partners (past, current, and future) and health care providers. This information will be tailored based upon the user's branch of service, gender, and—if part of a medical office visit—the reason for receiving clinical care.

II. Suggested Title for the System

The working title for this application is “Preventive Maintenance: An Interactive Manual for Active Duty Females.” For descriptive purposes in this document, we will call the application DOD-CD.

III. Target Audience and Setting for Use

This system is designed for use by enlisted women in the Army, Navy, and Air Force. The initial proposal targeted only enlisted women in the Army and Navy, but integration of the three branches of service in TRICARE and other efforts led us to conclude that all 3 services needed representation. Because active duty women who are officers may have similar concerns, they are considered a secondary audience. Enlisted males in the Armed Services may also have access to the information in the application, and benefit from it; however, they are also a secondary audience rather than a primary one.

The target audience is multicultural, so we will use a multicultural approach in preparing the program. A vary of ethnicities will be represented in videos and photographs. We will prepare text at the 8th grade reading level, and we will analyze it for readability using a computerized reading level analysis tool. Although the reading level will be in this range, the instructional design will appropriate to the actual age range of the intended audience.

The DOD-CD will be designed for initial use in military medical clinics that provide annual examinations to enlisted women. We envision that the DOD-CD should also be made available in other settings where enlisted women could access a computer. During the needs assessment, focus group participants suggested that women access such materials in settings such as: installation resource libraries and computer laboratories, shipboard computer rooms, training situations during basic training, in-processing upon arrival at a new installation, and pre-deployment.
Focus group participants also suggested making the application available on the Internet so military personnel stationed throughout the world would have access to it. As part of the efficacy study, participants will also be asked their opinion of having the application on the Internet.

IV. Instructional Goals and Objectives

The goals and objectives for the DOD-CD are based on findings from the literature review of the science base, the expert panel, the focus groups, the secondary analysis, and the surveys with military clinicians and chiefs of service. They address a comprehensive spectrum of general women’s health issues as well as women’s health issues that are relevant to military needs such as readiness. Data collected in the original needs assessment allow us to make these parallel judgments.

The overall goal of the intervention is to promote military readiness by enhancing enlisted women’s self-care and care-seeking behavior for their reproductive health.

The key goals of the intervention are to:

- Increase enlisted women’s understanding of reproductive health,
- Increase their ability to be assertive and responsible for their health and well-being,
- Increase their communication skills, and
- Increase appropriate reproductive care seeking.

Specifically, the enlisted female user of the system will:

- Increase knowledge and awareness about STD infection, unintentional pregnancy, and vaginal infection.
  - Increase knowledge (i.e., the female reproductive system, symptoms of reproductive health problems, contraceptive methods, sexually transmitted diseases, proper hygiene practices)
  - Increase perceptions of susceptibility (i.e., unintentional pregnancy, STD infection)
  - Increase awareness of resources: educational, support, and treatment
  - Increase awareness of help-seeking opportunities

- Increase readiness to take appropriate action.
  - Increase intentions to practice preventive behaviors (i.e., safe sex practices, contraception, proper hygiene) in general and in the field
  - Increase intentions to practice appropriate health care behaviors (e.g., seeking medical consultation for routine and acute care, following treatment recommendations)
  - Increase capacity to communicate effectively with past, current, and future sexual partners
  - Increase capacity to communicate effectively with health care providers.
V. Key Messages

<table>
<thead>
<tr>
<th>Key Messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Taking responsibility for maintaining your health and physical fitness is an important key to being an effective, productive member of your unit and to serving your country.</td>
</tr>
<tr>
<td>- Paying attention to your health needs does not prevent you from being an effective member of the military.</td>
</tr>
<tr>
<td>- As a woman in the military, you face unique circumstances that can place you at increased risk for reproductive health problems compared to civilian women.</td>
</tr>
<tr>
<td>- The high male to female ratio and tense training situations in the military can place you at increased risk of getting involved in sexual situations where risk behavior can occur.</td>
</tr>
<tr>
<td>- Take action now to protect and maintain your reproductive health so that you will enjoy a healthy reproductive lifecycle.</td>
</tr>
<tr>
<td>- Practice safe sex and use contraception so you have choices about when and how you have children and so you protect your reproductive health.</td>
</tr>
<tr>
<td>- You can learn skills that will help you protect your health and communicate your needs to a partner in an intimate relationship.</td>
</tr>
<tr>
<td>- You can learn skills that will help you feel confident in communicating your needs and concerns to your health care providers.</td>
</tr>
<tr>
<td>- Be honest with your health care provider about your health and health history so you will get the care you need.</td>
</tr>
<tr>
<td>- You may not be able to tell if you have some reproductive health problems because they often have no symptoms.</td>
</tr>
<tr>
<td>- Use the pre-deployment physical exam to find out how to protect your health in the field.</td>
</tr>
<tr>
<td>- You must request some medical services—STD screening at routine health exams and pregnancy testing at pre-deployment exams—because medical providers may not provide them routinely.</td>
</tr>
</tbody>
</table>
VI. Program Structure

The system begins with an overview of the topical issues on military women’s health presented through testimonials by enlisted women and experienced peers. Following this “Briefing,” the user will be presented a menu of activities. They can explore the activities at will, or they can follow a path of activities recommended to them based on their medical care status (reason they are receiving medical care).

The conceptual flowchart is below. A more detailed flowchart showing the learning activities accessed through the choices off the main menu is in Appendix A. Appendix B illustrates the screen design.

A. Title Screen

The introduction will be a short welcome to the program, inviting the user to the system. The program will next introduce its purpose: “This program is designed to help you learn more about your body and your health as a woman as an a member of United States military.”

B. Sign In

After the introduction, a short section of select demographic and medical history questions will be asked. This will enable the program to tailor the information on
gender and reason for having the medical consultation. Before answering these questions, users will be informed that the information will be kept confidential and will only be used within the program itself to refer them to information that will be relevant to them.

1. Gender

The program will seek gender identification, because the information will be tailored according to gender. For men, a message will come up alerting them that the information will help them understand women's reproductive health and that it may help them in their personal and professional relationships with women.

2. Race

The program will ask the user's racial background in the initial testing of the multimedia product. Although the application will be designed with images of people of many cultures, assessing its use by people of different groups will help direct the future development of similar multicultural computer interventions.

3. Branch of service

Although the military is moving toward integrated health services, women in different services are likely to experience different field conditions and different regulations. This question will help tailor the type of images and scenarios that the user will later see.

4. Medical examination status

This question will ascertain whether the user is: a) seeing a clinician for a routine annual examination; b) having an acute care visit (medical complaint); c) having a pre-deployment physical, or d) viewing the application independent of medical care. Messages and recommended activities will be tailored based on the response to this question. For example, users having a routine examination will be directed to scenarios reinforcing open communication with medical care providers during medical examinations and basic information on anatomy and physiology. Those with symptoms or positive test results will receive more specific information about reproductive health problems. Women preparing to deploy will be reminded to have a pregnancy test prior to deployment. This question will also help tailor the type of communication scenarios that the user will later see.
5. New or returning user

This question will ascertain whether the user has used the application before. All new users will view the briefing video so that they are exposed to the key messages. Returning users can bypass the video if they choose.

C. Briefing Video

The purpose of the briefing video is to quickly cover important key messages and to introduce the application. A first time user must see the briefing video. Because the user may only see the briefing video, covering key messages in a short introduction will ensure that all new users will leave with them in mind. The briefing will be available from the main menu of the application, so users will have the opportunity to view the briefing again if they want to see it. The script for the briefing is in Appendix C.

Returning users will not be shown the briefing video automatically but will instead be taken to the main menu. They may, however, choose to view it again when they reach the main menu.

D. Tailored Feedback/Personalized Lesson Plan

Based on the input on the sign in screen, this section of the program will provide a brief tailored message and a personalized plan for viewing the learning activities. These messages and plans will be tailored based on the user’s gender and medical examination status (see Tables 1 and 2). Users can decide whether to view the suggested material or to explore the main menu at will. Users can also decide to exit the program at this point.

For users who view the application outside of a clinical visit, the personalized lesson plan will emphasize general reproductive health promotion concerns. However, those attending a clinical visit will also receive a recommendation to review the general health promotion materials in addition to the materials and activities relevant to their medical examination status.

The activities are described in detail within section E, “Main Menu.” Description of the “Exit” is in section F.
<table>
<thead>
<tr>
<th>Segment</th>
<th>General Message</th>
<th>Learning Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual Exam</td>
<td>You are about to receive your annual pelvic examination. Congratulations on taking this important step in taking care of your health. If you have noticed any physical changes since your last exam, let your health care provider know about them. If you haven’t noticed any changes, this is a good time to learn more about your body, your contraception, what happens in the exam, and how to stay healthy.</td>
<td>Virtual check-up Review the steps in the exam and learn how you can get the most of talking to your doctor or nurse.Virtual Sick Call If you have noticed changes you want your doctor to examine.Signs &amp; Symptoms Learn about common reproductive health problems and which can have no symptoms.Contraception Exploration If you are here to begin using a new method of birth control or renew a prescription.</td>
</tr>
<tr>
<td>Medical Complaint</td>
<td>You have noticed some symptoms or are concerned that you have a reproductive health problem. It is good that you have taken the time to have an examination. Share all you know about your condition with your health care provider so you make sure you get the care you need.</td>
<td>Virtual Sick Call Review the steps in the exam and learn how you can get the most of talking to your doctor or nurse.Signs &amp; Symptoms Learn about common reproductive health problems and which can have no symptoms:Virtual Relationship Find out how to talk to your partner about a vaginal infection.</td>
</tr>
<tr>
<td>Pre-Deployment Exam</td>
<td>You are about to receive a pre-deployment examination. It is good that you have taken the time to have an examination to prepare for deployment. This is a good time to learn more about staying healthy in the field, about your contraception, and how to pack to prepare for your women's health needs. If you think you may be pregnant or you aren't sure, ask your health care provider for a pregnancy test during the examination.</td>
<td>Virtual Pre-deployment Exam Review the steps in the exam and learn how you can get the most of talking to your doctor or nurse.Virtual Self-Care Learn about how to stay clean in the field or on shipboard:Deployment Supplies Exploration Practice making choices on what to take with you for your women's health needs.Contraception Exploration If you need to do a prescription review, consider the method of birth control you will take.</td>
</tr>
<tr>
<td>Not Receiving Medical Care</td>
<td>This program will help you learn about your body and how to stay healthy. Check out the activities that let you explore how to prevent sexually transmitted diseases and other infections. Other activities let you explore the costs of having a baby and ways to delay having a baby. You can also explore what can happen in a first date or when you have to give a date some bad news.</td>
<td>Health Profile Get a review of your health history.Female Body Exploration Learn more about your body and how it works.Baby Budget Exploration Calculate how much it costs to have a baby in the military.Contraception Exploration Explore which type of birth control is best for you.Virtual Relationship Explore ways to talk about sex with a new or current partner.Virtual Self-Care Learn ways to stay clean in the field, on shipboard, or anywhere.Reference Manual Browse the library of health materials to learn more.</td>
</tr>
</tbody>
</table>

* All female users will be given links to general activities in the "Not Receiving Medical Care" condition.
<table>
<thead>
<tr>
<th>Segment</th>
<th>General Message</th>
<th>Learning Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Complaint</td>
<td>You have noticed some symptoms or are concerned that you have a reproductive health problem. It is good that you have taken the time to have an examination. Share all you know about your condition with your health care provider so you make sure you get the care you need.</td>
<td><strong>Virtual Sick Call</strong> Review the steps in the exam and to learn how you can get the most of talking to your doctor or nurse. <strong>Signs &amp; Symptoms</strong> Learn about common reproductive health problems, their signs and symptoms, and which can have no symptoms. <strong>Virtual relationship/bad news</strong> Find out how to talk to your partner about a vaginal infection.</td>
</tr>
<tr>
<td>Pre-Deployment Exam</td>
<td>You are about to receive a pre-deployment examination. It is good that you have taken the time to have an examination to prepare for deployment. This is a good time to learn more about staying healthy in the field, and how to pack to prepare for all of your needs.</td>
<td><strong>Virtual Pre-deployment Exam</strong> Review the steps in the exam and to learn how you can get the most of talking to your doctor or nurse. <strong>Virtual self-care</strong> Learn about how to stay clean in the field or on shipboard. <strong>Deployment Packing</strong> Practice making choices on what to take with you. <strong>Contraception Exploration</strong> Consider the method of birth control you will take.</td>
</tr>
<tr>
<td>Not Receiving Medical Care</td>
<td>This program will help you learn about your body and how to stay healthy. Check out the activities that let you explore how to prevent sexually transmitted diseases and other infections. Other activities let you explore the costs of having a baby and ways to delay having a baby. You can also explore what can happen in a first date or when you have to give bad news to someone you've been involved with.</td>
<td><strong>Health Profile</strong> Get a review of your health history <strong>Female Body Exploration</strong> Learn more about the female body and how it works. <strong>Baby Budget Exploration</strong> Calculate how much it costs to have a baby in the military. <strong>Contraception Exploration</strong> Explore which type of birth control is best for you. <strong>Virtual Relationship</strong> Explore ways to talk about sex with a new or current partner. <strong>Virtual Self-Care</strong> Learn ways to stay clean in the field, on shipboard, or anywhere.</td>
</tr>
</tbody>
</table>

* All male users will be given links to general activities in the "Not Receiving Medical Care" condition.

E. Main Menu

If they choose to explore the activities without use of the personalized feedback, users will be able to access them by topic area from a "main menu." The main menu will have seven choices:

- Briefing
- Health Profile
- Basic Training
- Field Exercises
- Reference Manual
- Exit
1. Briefing

Users will be able to review the briefing video in case they want to see the messages highlighted again. Returning users who are not made to review the briefing may choose to do so from the main menu.

2. Health Profile

The health profile is a self-assessment of the users’ health and sexual history. Users will receive tailored feedback in terms of recommended

- Learning activities
- Briefing documents in the library
- Screening tests for her age group
- Questions to ask her health care provider.

3. Basic Training

The Basic Training section provides interactive tools that allow users to explore various aspects of reproductive health issues in terms of background information, the factors that affect them, and what choices they have. The storyboards for these activities are in Appendix D. Each "Exploration" will be comprised of 3 parts:

1) An introduction to give an overview of the activity and its purpose.
2) A briefing to provide factual information and links to relevant library materials.
3) An exploration activity where the user can modify various factors to see how they affect the reproductive health issue. Tailored feedback gives users an analysis of their choices.

a. Female Body Exploration

**Introduction:** The purpose of this activity is to familiarize users with the female reproductive system and how it operates normally during menstruation, ovulation, fertilization, and cleansing. Users will also explore the factors that impact reproductive health: amenorrhea, vaginal infection, urinary tract infection, sexually transmitted disease infection, and ectopic pregnancy.

**Briefing:** The briefing covers the parts of the female reproductive system, normal functions, and signs of disease. Factors that influence the health of the female reproductive system will be explained. Both normal and
abnormal functioning will be further explained through animations.

**Exploration:** Users can change different factors related to hygiene, sexual behavior, and demographic risk factors as well as protective factors. Graphic feedback will demonstrate the possible impact of those choices on the female body. Written feedback will explain the affect of the choices. They can toggle their answers and see how different answers influence health. The user can link to the library materials to learn more about the female body and hygiene and wellness practices.

b. Contraception Exploration

**Introduction:** The purpose of this activity is to allow users to explore the factors that impact satisfaction with a contraceptive method.

**Briefing:** The briefing covers the factors that influence the type of birth control that one uses: age, gender, health history, sexual practices history, and attitudes and preferences.

**Exploration:** Users input answers to various health history and attitude questions and receive targeted feedback concerning which method(s) of birth control fit best with the situation, health history, and attitudes indicated in the exploration. They can toggle their answers to see how the recommended birth control method might change. Users who are having a predeployment physical and who use prescription contraceptives will be reminded to get a prescription filled. The user can link to the library materials to learn more about the contraceptive methods that are recommended.

c. Baby Budget Exploration

**Introduction:** The purpose of this activity is to allow users to explore the economic impact of parenthood.

**Briefing:** The briefing covers information about the responsibilities of being a parent and how being in the military affects parenthood.

**Exploration:** Users explore the cost of the first year of raising a child, from birth to 12 months, in terms of their pay grade. Users can choose where they may save on different costs (e.g., borrowed rather than new nursery furniture). The user can link to the library materials to learn more about pregnancy and parenthood related issues, including current medical profiles for active duty females who are pregnant.
d. Deployment Packing Exploration

**Introduction:** The purpose of this activity is to allow users to explore the health considerations to keep in mind while preparing for deployment while also learning what supplies are not recommended.

**Briefing:** The briefing covers how reproductive health is affected when a woman is deployed.

**Exploration:** Users input how long a deployment might be and to what type of climate. Branch of service will default depending upon the user's profile, but the user can change the default if she wants to see if there are different issues for women in other services. Tailored feedback will give user positive feedback if she packed appropriate supplies and negative feedback for packing supplies that are not recommended. The user can link to the library materials to learn more about ...

e. Signs and Symptoms Exploration

**Introduction:** The purpose of this activity is to allow users to explore the possible signs and symptoms of common female reproductive health problems.

**Briefing:** The briefing reviews basic steps in monitoring one’s own health and when it is important to seek medical attention. The briefing reinforces the asymptomatic nature of some reproductive health problems as well as the importance of having annual gynecologic examinations and requesting screening to identify asymptomatic disease.

**Exploration:** Users select a vaginal health problem and try to match the signs and symptoms, risk rate, and consequences of untreated disease. Tailored feedback will show which of the elements were correctly matched and which were incorrectly matched. Feedback will always emphasize that diseases may be asymptomatic. Women will be encouraged to seek medical screening if they think they have a reproductive health problem, and they should adhere to treatment recommendations if they find they have developed a condition. Users can resubmit their answers to try to improve their score. They can also link to materials in the reference manual (library) to learn more about the reproductive health problems common among women.

4. Field Exercises

The communication scenarios in the “Field Exercises” will provide skills training in discussing reproductive health, sexual risk behavior, STD
infection, and safe sex with sexual partners and health care providers as well as demonstrating proper hygiene practices.

The scenarios will allow the user to make behavioral choices for a character on the screen that will approximate the types of choices in a particular communication task. If the choices are less than optimal, they will experience a negative outcome, such as rejection by a sexual partner. Positive choices will result in a more calm and positive experience between partners or between clinician and patient. Users will be able to restart the scenario, giving them an opportunity to improve their reactions to the situation.

Because individual sexual partners or clinicians vary in how they may react in a given scenario, feedback at the end of the scenario will explain that individuals vary in their reactions but that the skills illustrated will give users some support in handling situations they may experience. Their partner (or health care provider) may not behave like the one portrayed in the scenario, but the information presented will still help them in their personal interaction. Appendix E contains flowcharts and screen design for the interactive scenarios.

a. Virtual Examinations

In these field exercises, female users will be able to step through different physical examination visits they may encounter, learning communication skills, patient rights and responsibilities, and what they might expect in the clinical encounter. The choices will represent a range of consumer health choices, from passive to active, so users will see how they might improve the education and care they receive in these exams. Users can consult an experienced peer/first sergeant about their options.

1) Virtual Check-Up

Users who are having an annual exam will receive a recommendation to view this scenario in the tailored feedback following the briefing. The user will make decisions on the following areas:

- Making an appointment
- Preparing for the examination
- Answering medical and sexual history questions
- Asking questions about health and treatment options
- Seeking education and advice
- Speaking up about concerns (e.g., confidentiality) or problems

14
(e.g., rudeness)

2) Virtual Sick Call

Many of the same concerns from the annual examination will be explored in the scenario for a medical complaint. Additional emphasis will be placed on displaying proactive health consumer behavior regarding:

- Answering medical and sexual history questions honestly
- Requesting screening tests for infections, including STDs
- Seeking information about benefits and risks associated with recommended medical treatment and medication.
- Seeking information about proper hygiene practices and safe sex practices

3) Virtual Pre-Deployment Exam

Similar concerns from the annual examination will be explored in this scenario. Additional emphasis will be placed on displaying proactive health consumer behavior regarding:

- Answering questions about contraception and other prescriptions honestly
- Requesting a pregnancy test prior to deployment
- Seeking information about proper hygiene practices in the field or shipboard settings.

b. Virtual Relationship

Although clinicians and health educators recommend talking to sexual partners about sex and infections, little guidance is offered about communication on these sensitive subjects. These situations can be awkward and can become explosive if the person is unable to communicate adequately. Whether in a new or existing relationship, people have difficulty finding the words to talk about sensitive issues such as contraception, pregnancy, safe sex, and STDs.

The user will be asked if they would like to review scenarios for people who are single and dating or who are in an ongoing relationship. The single/dating relationship scenarios will concentrate on first date, talking about sex, and condom negotiation. The ongoing relationship scenarios will concentrate on bringing up using condoms in an ongoing relationship.
and on giving bad news in the form of a pregnancy scare or a possible STD infection.

1) Going on a Date

This scenario will allow the user to plan a date with a new or current partner and decide whether or not to engage in behavior that is related to avoiding STDs and unintentional pregnancy. Planning the date will include where the couple decides to go and what birth control methods are used, if any. Behaviors that increase the risk of STDs and problem pregnancy include: alcohol consumption, lack of communication on sexual matters, and unprotected intercourse and/or ineffective birth control. The user will be able to practice communication skills in the following areas:

- Using effective communication strategies
- Asking sensitive questions about partner’s sexual history
- Being assertive about delaying sexual activity if she doesn’t want to have sex
- Being assertive about using condoms if she agrees to have sex.

2) Giving Bad News

The user is placed in a situation of having to tell a current or future sexual partner about an STD infection or an unintentional pregnancy. The partner will respond positively or negatively based on the user’s decisions about:

- When and where they talk to the partner
- How they bring up the topic
- Who they involve in their support network
- What they say when bringing up the topic
- Where they choose to get help
- How to discuss disease severity, transmission, and prevention
- How to recommend to a current partner they he or she receive medical care.

c. Virtual Self-Care

These scenarios are different from the others in the field exercises because they serve to model appropriate behaviors related to hygiene in different settings. The user will be able to practice reviewing the steps to
the hygiene-related skills, such as creating a bird bath or shower to bathe in field settings.

1) General Hygiene

This field exercise provides basic information about normal vaginal discharge and how to prevent vaginal infections and urinary tract infections through hygiene and wellness practices:

- Keep the vaginal opening dry
- Wear cotton underwear
- Wash underwear in mild soap
- Avoid using scented products--tampons, sanitary napkins, wipes, soaps, sprays, and toilet paper--which can irritate the vagina
- Do not wear tight fitting pants or pantyhose
- Wipe from front to back to avoid bringing bacteria into the vagina (will include animation showing proper wiping technique)
- Urinate after intercourse
- Drink at least 8 glasses of water a day
- Avoid douching, which can destroy the good bacteria in the vagina. If you douche, do so only twice a week and use a vinegar and water solution
- If you use tampons, change them every 6 to 8 hours and avoid wearing them when your menstrual flow is light.
- Cut down on refined sugars.

3) Hygiene on Shipboard

Emphasis is on conditions that make practicing proper hygiene difficult and how to cope with them:

- Lack of time: Suggest ways to streamline hygiene practices (e.g., if you only have a short time to bathe, focus on cleaning the genitals, armpits, teeth, and face). Show video of male and female sailors rushing around inside a ship.
- Lack of supplies and/or clean clothes: Suggest ways to prepare for hygiene needs on shipboard (e.g., how to calculate how many tampons and sanitary napkins to bring, bringing panty liners to extend use of underwear). Model how to request supplies when needed through video of female sailor requesting hygiene supplies from supply room.
- Problems drinking enough water: Dispel myths about avoiding water. Suggest ways to drink more water.
- Problems keeping dry: Suggest ways to stay dry, such as bringing additional underwear or panty liners.

4) Hygiene in the Field/Tent Camp

Similar advice as given in Hygiene on Shipboard will be provided. However, additional information will be presented:

- Video will show soldiers and sailors in camp settings.
- Animations and/or video will model how to bathe using a bird bath or creating a shower out of common camp materials.
- An additional caution will be given about using baby wipes in the field. These may increase moisture if the vagina is not allowed to dry. Also, any baby wipes that are used should be unscented.

5. Reference Manual (Library)

The user can access concise documents on a variety of health issues in the Reference Manual, which will be a library of brochure type materials and links to relevant Internet sites for computers that are able to connect to the World Wide Web.

a. Anatomy/Physiology
b. Hygiene and Wellness
c. Contraception/Pregnancy
d. Safe Sex Practice/Sexually Transmitted Diseases
e. Reproductive Health Problems
f. Health Care/Health Information Sources
g. Glossary

F. Exit

Users who choose to exit the program may do so from the personalized lesson plan or from the main menu. The program will thank them for using the program: “Thank you for using Preventive Maintenance: A Manual for Active Duty Females. We hope it has helped you take action now to protect and maintain your health as a woman and as a member of the United States military.”

A brief tailored message will then appear to reinforce key messages relevant to their situation and based on the characteristics they indicated when they began the
program:

Annual Exam: “Take the opportunity to learn about your body and your health during your visit today. Remember to request screening if there is any chance you may have been exposed to a disease.”

Medical Complaint: “Make sure you get all of your questions answered during your visit today. Remember to be up front about all of your concerns with your medical provider so you get the proper care.”

Predeployment Exam: “Make sure to get all your questions answered about how to stay healthy in the field. Remember to request pregnancy testing if you think you may be pregnant.”

VII. Screen Design

A. Menu Bar: Windows application Menu Bar

The menu bar will be available at all times during the application. It will allow the user to perform functions such as saving their file and changing coaches. It will also enable them to access information, such as answers to HPV questions, more quickly.

- File
  - File drop down menu
- Sound
  - Allows user to use a toggle to turn the sound on or off
- Open
  - Open an existing file
- Print
  - Allows the user to print the whole screen, feedback from an activity, or library material. (This function is only available for computers that have print capability.)
- Training Plan
  - Takes user to personalized lesson plan
- Change Profile
  - Update user profile (e.g., user can change the type of exam)
- Exit
  - User exits program

Contents

- Navigation drop down menu
- Takes user to the view the briefing
- Health Profile
  - Takes user to the introduction of the health assessment
- Basic Training
  - Takes user to the menu for the interactive activities
    - Female Body
      - Takes user to the introductory screen
    - Contraception
      - Takes user to the introductory screen
    - Baby Budget
      - Takes user to the introductory screen
    - Deployment Packing
      - Takes user to the introductory screen
- **Signs and Symptoms**
  Takes user to the introductory screen

- **Field Exercises**
  Takes user to the main menu for the Field Exercises

- **Virtual Examinations**
  Takes user to menu for Virtual Check-up, Virtual Sick Call, and Virtual Pre-Deployment Exam

- **Virtual Relationship**
  Takes user to menu for Going on a Date and Giving Bad News

- **Virtual Self Care**
  Takes user to menu for General Hygiene, Hygiene on Shipboard, and Hygiene in the Field

**Reference Manual**
Takes user to the menu for the reference manual (library).

**Anatomy/Physiology**
Listing of documents related to pelvic and breast anatomy and female reproductive functions.

**Hygiene and Wellness**
Listing of documents related to hygiene practices, general health behaviors (nutrition, fitness, stress management), and screening recommendations.

**Contraception/Pregnancy**
Listing of documents related to contraceptive options, normal pregnancy conditions, problem pregnancy conditions, and military service-related regulations.

**Safe Sex/STDs**
Listing of documents describing different sexually transmitted diseases, safe sex practices, and communication strategies.

**Reproductive Health Problems**
Listing of documents related to common reproductive health problems among women with special attention to common problems that occur during deployment.

**Health Care/Information**
Listing of military and other support groups, hot-lines, and medical services as well as issues related to communicating with health care providers.

**Glossary**
Listing of terms and definitions.

**Help**
Help drop down menu

**Search for Help...**
Search function

**How do I...**
Help on functions of the program

**What's This**
Help on page-specific functions of the program

**Current Activity**
Help on how to use the activity currently being used.

**About Preventive Maintenance**
Link to brief description of development effort and credits
B. Program Control Strip: Toolbar

A control strip will be available at all times. It will allow the user to control program functions. When the user has the mouse over these buttons, the description of the choice will appear in a comment window on the title bar of the page. The graphic and the functionality of each button will be similar to those found in an Internet browser and CD-ROM and video players:

1. Back: This button will allow the user to go back to the last choice made.
2. Forward: The user will be able to use this button to move on to the next section of the program.
3. Pause/Play: This button will allow the user to stop and start a video or animation clip or audio segment.
4. Repeat: To hear or see the last video, animation, or audio again, the user can press this button.
5. Menu: Takes user to the main menu. If the user is in an activity and presses this button, the user will be asked to confirm that she wants to exit the activity.
6. Plan: Takes user to personalized lesson plan. If the user is in an activity and presses this button, the user will be asked to confirm that she wants to exit the activity.
7. Print: Depending upon the user’s location in the program, the print button allows the user to print the whole screen, feedback from an activity, or library material. This function is only available for computers that have print capability.
8. Search: Depending upon the user’s location in the program, the user can search within the current activity, glossary, or entire program by keyword.
Appendix A: System Conceptual Flowchart of Learning Activities

Main Menu

Health Profile
- Virtual Check-Up
- Virtual Sick
- Virtual Predeployment Exam
- Virtual Relationship
- Virtual Self-Care

Field Exercises

Basic Training
- Female Body Exploration
- Signs & Symptoms Exploration
- Baby Budget Exploration
- Contraception Exploration
- Deployment Packing Exploration

Reference Manual
- Anatomy/Physiology
- Hygiene and Wellness
- Contraception/Pregnancy
- Safe Sex/STD Information
- Reproductive Health Problems
- Health Care/Health Information Sources

Exit
- Sign-Off Message

Glossary
Preventive Maintenance

A Manual for Active Duty Females

Welcome to the CD-ROM Program “Preventive Maintenance” for active duty females.
Which of the choices describe you best?
Check off choices in each column.

<table>
<thead>
<tr>
<th>Have you used this program before?</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why are you receiving medical care today?</td>
<td>Annual Exam</td>
<td>Predeployment Exam</td>
</tr>
<tr>
<td></td>
<td>Medical Complaint</td>
<td>Not seeking care</td>
</tr>
<tr>
<td>What is your gender?</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>What is your branch of service?</td>
<td>Army</td>
<td>Navy</td>
</tr>
<tr>
<td></td>
<td>Air Force</td>
<td>Marine</td>
</tr>
<tr>
<td>What best describes your race/ethnicity?</td>
<td>African American</td>
<td>Asian/Pacific Islander</td>
</tr>
<tr>
<td></td>
<td>Caucasian/White</td>
<td>American Indian/Alaska Native</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>Other</td>
</tr>
</tbody>
</table>
SCENE 1

High energy montage of male and female soldiers, sailors, and airmen in rigorous physical training exercises
(High energy MUSIC)

NARRATOR V.O.
Being in the military requires a special commitment to health and fitness. It’s a responsibility you not only owe to yourself, but those serving beside you.

V.O. FEMALE SOLDIER/SAILOR #1
“The training’s been hard but we’re prepared for whatever comes.”

V.O. FEMALE SOLDIER/SAILOR #2
“We’re fit and ready-to-go!”

NARRATOR V.O.
Today’s active duty women are as fit as their male counterparts, and, not surprisingly, more fit than women in the general population. But unlike men or women civilians, women in the military face unique circumstances that can threaten their health as women - their reproductive health.
SCENE 2

Medical Provider On-camera.

HEALTH PROVIDER #1

"When you enter the military, life becomes a lot more complex. You find yourself out in the field or aboard ship where you can't keep clean like you usually do. Many females in the military are at an age and place where they have more intimate relationships that are also more intense. Some of the recent military conflicts have taught us a lot about what this means for readiness."
SCENE 3

Desert Storm & Bosnia footage.

NARRATOR V.O.
During Desert Storm, a high percentage of sick calls for women were due to reproductive health problems such as infections and sexually transmitted diseases. (25.6% of diagnoses recorded). In Bosnia, 70% of the women found to be pregnant in country were pregnant before they arrived. While the military is committed to improving sanitary conditions and supplies to enhance readiness, the military woman must do her part, and ultimately, be responsible for her own reproductive health.
SCENE 4:

B-roll of field activities. It is clear that the activities are taking place away from normal facilities.

V.O. FEMALE SOLDIER/SAILOR #3

“My first field exercise shocked me. I didn’t bring anything to clean myself with, and there was little water or privacy.”

V.O. FEMALE SOLDIER/SAILOR #4

“I remember having to hold it in because there wasn’t a time or place where I could go to the bathroom. Now I hear you can get sick just by not going often enough.”
SCENE 5

Senior Enlisted Woman #1 On-camera.

SENIOR ENLISTED WOMAN #1

"It’s true. You want to be able to relieve yourself to keep the bacteria from building up and causing an infection. And it’s not an option to stop drinking water! You also need to learn how to wash up and what to pack. This is the kind of information you need to know to reduce your health risk."
SCENE 6

Related video of information resources (brochures, etc.), and woman talking to medical professional.

NARRATOR V.O.

The potential for hygiene-related problems can be reduced through preventive maintenance. A pre-deployment exam is a good opportunity to communicate your concerns and ask specific questions. At this exam, you also need to get adequate contraceptive supplies and have a pregnancy test if you have been sexually active. Learn how to help the professionals help you!
SCENE 7

B-roll of men/women working together, social life, bar scenes, and family scenes.

V.O. FEMALE SOLDIER/SAILOR #5
"When I first got out of basic, I couldn’t believe the buzz between the males and females. And the pressure! -- especially because there were so many more men than women. Even the ‘plain Janes’ were really getting involved."

V.O. FEMALE SOLDIER/SAILOR #6
"Your social life goes from zero to 100 mph. It’s like you’re away from home and anything goes! Some don’t handle it very well. They get involved with anyone and everyone, and it doesn’t stop when they’re in the field (on the ship)! I know some people think that since the military screens for AIDS you’re OK if you sleep with someone on base."
SCENE 8

Senior Enlisted Woman #2 On-camera.

SENIOR ENLISTED WOMAN #2

"AIDS is just one of many things you can get through sexual contact. I saw a survey that said that one in four military women has had a sexually transmitted disease. Some STDs can give you cervical cancer, and some can damage your organs so you can’t ever get pregnant. A lot of single females having sex get pregnant, too. They don’t realize how hard it is to raise a child, especially alone. The more sexually active you are and the less you know, the greater the chance. You can’t just let things ‘happen.’"
SCENE 9

Anatomical graphics, contraceptives, and couple talking while alone.

NARRATOR V.O.
Taking control of your relationships begins with learning the basics about disease and how it's transmitted through sex, about contraception for preventing disease and pregnancy. Learning how to talk with your partner about these issues is critical.
SCENE 10

Senior Enlisted Woman #3 On-camera.

SENIOR ENLISTED WOMAN #3

“The answer is taking control, in your relationships *and* your health care. In the military you need to be an assertive health care consumer. Find the resources and make the best use of them. Talk to your health care provider *honestly* so you will get the care you need and deserve. Taking charge of your health *lets you choose* when you want to take on the responsibilities of family life. The military has many great opportunities. Take advantage of them.”
SCENE 11

CD-ROM Menu screen. Various areas highlighted

NARRATOR V.O.
This CD is a resource designed to help you take control of your reproductive health.

If you’re about to have an annual exam, review these areas to help you communicate with your health care providers about your specific condition. (Menu areas highlighted)

If you think something’s wrong, check out these areas to help you finding out the best way of solving your problem. (Menu areas highlighted)

You’ll want to check out these areas if you’re going to be deployed soon. (Menu areas highlighted)

To get a broad introduction to the issues important to your health as a woman, explore these areas. (Menu areas highlighted)

(Continues to a 2-minute segment on the disk and it’s navigation.)
Training Plan

You are about to receive your annual pelvic examination. Congratulations on taking this important step in taking care of your health. If you have noticed any physical changes since your last exam, let your health care provider know about them. If you haven't noticed any changes, this is a good time to learn more about your body, your contraception, what happens in the exam, and how to stay healthy.

You can also use this program to learn about your body and how to stay healthy. Check out the activities that let you explore how to prevent sexually transmitted diseases and other infections. Other activities let you explore the costs of having a baby and ways to delay having a baby. You can also explore what can happen in a new or ongoing relationship.

- **Virtual Check-Up**: Learn how you can get the most of talking to your doctor during an annual exam.
- **Virtual Sick Call**: Go here if you have noticed charges you want your doctor to examine.
- **Signs & Symptoms**: Learn about common reproductive health problems.
- **Contraception Exploration**: Go here if you are here to begin using a new type of birth control or renew a prescription.

- **Health Profile**: Get a review of your health history.
- **Anatomy Exploration**: Learn more about your body.
- **Baby Budget Exploration**: Calculate how much it costs to have a baby in the military.
- **Virtual Relationship**: Explore ways to talk about sex with a new or current partner.
- **Virtual Self-Care**: Learn ways to stay clean in the field, on shipboard, or anywhere.

Training plan for woman coming to her annual examination
Preventive Maintenance

☐ Briefing
☐ Health Profile
☐ Field Exercises
☐ Interactive Tools
☐ Library
☐ Exit
Health Profile

Overview
Gives the purpose of the assessment and instructions on how to do it.

Assess Yourself
Click here to begin the assessment.

Results
Once you have completed the assessment, you can use this button to go to your results.
Basic Training

Female Body
Teaches the parts of the female reproductive system, how they operate, and how to keep them healthy.

Contraception
Lets you explore which types of birth control are best for you and why.

Baby Budget
Lets you look at the costs of having a baby while one is in the military.

Deployment Packing
Helps you think about how to prepare for your health needs when preparing to deploy.

Signs & Symptoms
Teaches signs and symptoms of common female health problems.
Basic Training: Female Body

Introduction  Gives the purpose of the activity and instructions on how to do it.

Briefing  Click here to review background on this topic.

Training Exercise  Click here to begin the activity.
Field Exercises

Virtual Check-Up
Steps you through what happens at an annual check-up.

Virtual Sick Call
Takes you through what can happen at an exam when you think you have a health problem.

Virtual Pre-Deployment
Shows what can happen in an exam you can get before deploying.

Virtual Relationship
Lets you practice talking to a date or a steady partner about sensitive issues.

Virtual Self-Care
Lets you see ways to stay clean whether you are in the field, on the ship, or just at home.
Reference Manual

Anatomy & Physiology
Information on the female reproductive system.

Hygiene & Wellness
Information on staying clean and protecting your health.

Birth Control & Pregnancy
Information on how to keep from getting pregnant.

Safe Sex/STDs
Information on infections you can get when having sex and how to avoid them.

Female Health Problems
Information on common health problems women get in their reproductive system.

Health Care Information
Where to get information on health care services and health information.

Glossary
Definitions of words in this program and how to say them.
Appendix C: *DOD Women’s Reproductive Health CD-ROM*

**Briefing Video**
(5/17/00 Draft)

1. High energy montage of male and female soldiers, sailors, and airmen in rigorous physical training exercises

   (High energy MUSIC)

   **NARRATOR V.O.**
   Being in the military requires a special commitment to health and fitness. It’s a responsibility you not only owe to yourself, but those serving beside you.

   **V.O. FEMALE SOLDIER #1**
   “The training’s been hard but we’re prepared for whatever comes.”

   **V.O. FEMALE SOLDIER #2**
   “We’re fit and ready-to-go!”

   **NARRATOR V.O.**
   Today’s active duty women are as fit as their male counterparts, and, not surprisingly, more fit than women in the general population. But unlike men or women civilians, women in the military face unique circumstances that can threaten their health as women - their reproductive health.


   **HEALTH PROVIDER #1**
   “When you enter the military, life becomes a lot more complex. You find yourself out in the field or aboard ship where you can’t keep clean like you usually do. Many females in the military are at an age and place where they have more intimate relationships that are also more intense. Some of the recent military conflicts have taught us a lot about what this means for readiness.”
3. Desert Storm & Bosnia footage.

NARRATOR V.O.
During Desert Storm, a high percentage of sick calls for women were due to reproductive health problems such as infections and sexually transmitted diseases. (25.6% of diagnoses recorded). In Bosnia, 70% of the women found to be pregnant in country were pregnant before they arrived. While the military is committed to improving sanitary conditions and supplies to enhance readiness, the military woman must do her part, and ultimately, be responsible for her own reproductive health.

4. B-roll of field activities. It is clear that the activities are taking place away from normal facilities.

V.O. FEMALE SOLDIER #3
“My first field exercise shocked me. I didn’t bring anything to clean myself with, and there was little water or privacy.”

V.O. FEMALE SOLDIER #4
“I remember having to hold it in because there wasn’t a time or place where I could go to the bathroom. Now I hear you can get sick just by not going often enough.”

5. Senior Enlisted Woman #1 On-camera.

SENIOR ENLISTED WOMAN #1
“It’s true. You want to be able to relieve yourself to keep the bacteria from building up and causing an infection. And it’s not an option to stop drinking water! You also need to learn how to wash up and what to pack. This is the kind of information you need to know to reduce your health risk.”

6. Related video of information resources (brochures, etc.), and woman talking to medical professional.
NARRATOR V.O.
The potential for hygiene-related problems can be reduced through preventive maintenance. A pre-deployment exam is a good opportunity to communicate your concerns and ask specific questions. At this exam, you also need to get adequate contraceptive supplies and have a pregnancy test if you have been sexually active. Learn how to help the professionals help you!


V.O. FEMALE SOLDIER #5
"When I first got out of basic, I couldn’t believe the buzz between the males and females. And the pressure! -- especially because there were so many more men than women. Even the ‘plain Janes’ were really getting involved."

V.O. FEMALE SOLDIER #6
"Your social life goes from zero to 100 mph. It’s like you're away from home and anything goes! Some don't handle it very well. They get involved with anyone and everyone, and it doesn’t stop when they’re in the field! I know some people think that since the military screens for AIDS you're OK if you sleep with someone on base."

8. Senior Enlisted Woman #2 On-camera.

SENIOR ENLISTED WOMAN #2
"AIDS is just one of many things you can get through sexual contact. I saw a survey that said that one in four military women gets a sexually transmitted disease. Some STDs can give you cervical cancer, and some can damage your organs so you can’t ever get pregnant. A lot of single females having sex get pregnant, too. They don’t realize how hard it is to raise a child, especially alone. The more sexually active you are and the less you know, the greater the chance. You can’t just let things ‘happen.’"
9. Anatomical graphics, contraceptives, and couple talking while alone.

NARRATOR V.O.
Taking control of your relationships begins with learning the basics – about disease and how it’s transmitted through sex, about contraception for preventing disease and pregnancy. Learning how to talk with your partner about these issues is critical.

10. Senior Enlisted Woman #3 On-camera.

SENIOR ENLISTED WOMAN #3
“The answer is taking control, in your relationships and your health care. In the military you need to be an assertive health care consumer. Find the resources and make the best use of them. Talk to your health care provider honestly so you will get the care you need and deserve. Taking charge of your health lets you choose when you want to take on the responsibilities of family life. The military can be a great opportunity. Take advantage of it.”

11. CD-ROM Menu screen. Various areas highlighted

NARRATOR V.O.
This CD is a resource designed to help you take control of your reproductive health. If you’re about to have an annual exam, look at these areas to help you communicate with your health care providers about your specific condition. (Menu areas highlighted)

If you think something’s wrong, check out these areas to help you finding out the best way of solving your problem. (Menu areas highlighted)

You’ll want to check out these areas if you’re going to be deployed soon. (Menu areas highlighted)

To get a broad introduction to the important issues, explore these areas. (Menu areas highlighted)

(Continues to a 2-minute segment on the disc and its navigation)
**Preventive Maintenance**

**Health Problems**
Women face certain health problems that affect their reproductive system. Two of the most common reproductive health problems for all women are yeast infections and urinary tract infections (UTI). They are some of the reasons why military women in the field get sick.

Infections that are passed during sex can be silent, without symptoms, for women. Unlike men, women cannot see much of their reproductive health system. If the infection happens inside the vagina where she cannot see it, she also may not have any pain. When some of these infections are not treated, they can lead to infertility and cancer. This shows why it is important to get regular exams to screen for problems.

**Preventive Maintenance**

**Anatomy**
- View
  - Outside
  - Inside

Click on "Outside" or "Inside" to change the view.

**Preventive Maintenance**

**Menstrual Cycle**
- Fertilization
- Health Problems

Click here to view the parts of the female body.

Click here to see how the female body changes over the menstrual cycle.

Click here to see what happens when an egg is fertilized during ovulation.

Click here to see how different health problems affect the female body.
**PREVENTIVE MAINTENANCE**

**FERTILIZATION**

What's happening in the ovary?

About halfway through the cycle, the ovary releases the matured egg (ovule). The exact time this happens varies from woman to woman.

What's happening in the uterus?

The environment of the cervix becomes more alkaline, which helps conception to happen.

Chances of fertilization if NOT using birth control:

Chances are good if the sperm is less than 48 hours old.

---

**PREVENTIVE MAINTENANCE**

Health Problems

- Ectopic pregnancy
- Endometriosis
- Uterine Fibroids
- Ovarian Cyst
- Yeast infection (Candidiasis)
- Pelvic Inflammatory Disease (PID)
- Herpes
- Genital Warts
- Urinary Tract Infection
- Cervical Dysplasia
- Cervical Cancer

Click on a health problem to see a picture and description of how it affects the female body.
Appendix D: Basic Training Exercise

Storyboards

PREVENTIVE MAINTENANCE

OVERVIEW

Give the names of the exercises and procedures on how to do it.

BRIEFING

Click here to move to the next page.

TRAINING EXERCISE

Click here to begin the activity.

MENU PLAN

1 of 6

PREVENTIVE MAINTENANCE

This briefing talks about some things to think about when you decide on a method of birth control. It also gives general information on different groups of methods and detailed information on several specific methods.

1. Contraception
   - Many types of birth control methods are available. To find one that fits your needs, you must think about many different issues.
   - First, you must consider your age and health history. Some contraceptive methods are not recommended if you have certain health conditions. For example, women who are older than 34 or have certain health problems

MENU PLAN

1 of 6

PREVENTIVE MAINTENANCE

Barrier Methods
   - Some people prefer barrier methods because they are not as invasive. These methods include condoms, diaphragms, cervical caps, and spermicides.

MENU PLAN

1 of 6

PREVENTIVE MAINTENANCE

Hormonal Methods
   - Birth control pills, vaginal rings, and Depo-Provera are all hormonal methods that work by stopping the production of ovulation. This helps keep the egg in the same place, which stops ovulation. This prevents the lining of the uterus from developing, which means an egg cannot become implanted in the uterus. Some of the side effects of these methods include irregular menstrual periods, nausea, breast tenderness, and headaches.

MENU PLAN

1 of 6

PREVENTIVE MAINTENANCE

For women, sterilization is done through a tubal ligation, whereas the male equivalent is a vasectomy. Sterilization is very effective in preventing pregnancy and can be done quickly and easily. However, patients should be considered by people who do not want any more children because it is difficult and expensive to reverse through surgery.
Appendix D: Basic Training Exercise
Storyboards

**Preventive Maintenance**

Listed below are reasons that some people pick one contraceptive over another.

- Easy to use.
- Cheap cost.
- Don’t have to touch myself.
- Don’t have to get from the doctor.
- Ability to prevent pregnancy.
- Ability to prevent STDs.
- Next.
- Partner can’t see it.
- Does not interrupt love making.
- Easy to use during deployments.
- Natural method.
- No side effects.

Drag and drop the 6 most important to you and the 6 least important to you to the blanks below.

Most Important:

Least Important:

Since you have gone through menopause, you no longer have to worry about getting pregnant. You also said that you have been in a committed relationship. As long as you and your partner are both faithful, you have no need for any of the contraceptive methods listed. However, women who are in a relationship where they or their partners are not faithful should consider using condoms to prevent sexually transmitted diseases.

To learn more about contraceptive methods, go to the Reference Manual.

**Preventive Maintenance**

Since you have been sterilized, there is very little risk that you could become pregnant. Because you also said that you have not been in a steady relationship, you may want to consider using condoms to protect against sexually transmitted diseases.

Click on the buttons below to learn more about male and female condoms, or go to the Reference Manual.

---

**Preventive Maintenance**

Based on your responses, these birth control methods may best fit your needs:

- Female Condom
- Male Condom
- Diaphragm
- Birth Control Pills
- Intrauterine Device
- Depo Provera

These birth control methods do not fit your needs as well, but you may want to consider them:

- Vasectomy
- Sterilization
- Partner's Sterilization
- IUD

You should not use the following birth control methods because of some of the answers you gave:

- Contraceptive Injection
- Hormonal Contraception
- Contraceptive Ring

Click on the icons to learn more about these contraceptives, or go to the Reference Manual.
Appendix D: Basic Training Exercise

**Overview**

The purpose of this exercise is teach you about the economic realities of raising a child. The activity will show you how a child costs in the first year in terms of your monthly and annual pay.

Having children is a special and demanding part of life, emotionally and financially. Women who are prepared for the medical costs of caring for children will be better able to give them a good environment and keep their own lives in balance.

The Briefing will give you information on the different types of costs to consider. The Training Exercise will not allow you to fill out some information about your grade and other allowances. As well as the amount of time you can contribute to a family with a young child needs. You can change the pay grade for what you would spend to see how it affects the cost of raising a child.

**Briefing**

This briefing talks about some things to think about when deciding to start a family. When most people think of being a good parent they think of giving their children love and attention. While giving a child time, patience, and love is very important, children also need money and other things to live a happy and healthy life.

This is one of the main things that people forget to consider in the economic aspect that a child will have on their lives. Having a baby brings a lot of new costs, not just for the things the baby needs but also for the things that come with raising a family. Before one is a baby, it is important to think about how one will afford to pay for all of these costs.

**Training Exercise**

1. **Baby Gear**
   - Parents must get new baby items when they have their first child. A new baby needs furniture, such as a crib and high chair. The baby also needs a car seat and smaller so the parent can take the baby with them when they go places. Finally, there are ongoing costs such as food, diapers, clothes, and toys. These are all things that children and get more expensive as children age.
   - Most new parents will need to decide what the best way to get all of the things they need. Some might want to wait until they are ready to buy new things for the new addition to the family. Because these things can be expensive, parents may need to save costs. They can save money by getting used clothing and toys or borrowing them from friends or family members.

2. **Healthcare and Childcare**
   - Healthcare and childcare are two important issues for parents, and expensive areas of that. Both before and during pregnancy, women need to have good prenatal healthcare. There are costs associated with pregnancy, and the costs of healthcare associated. Once born, the child will need to have ongoing healthcare needs. This will cost a lot for the baby’s well-being check-ups.
   - Going to prenatal healthcare check-ups and well baby check-ups will cost a lot more than money. They also mean a lot in terms of time away from work. Many babies also lead to costs of colds and minor infections when they are young, especially when they exposed to other children in daycare. This can mean even more time away from work.

3. **Other Costs**
   - The parents will also have more costs as they pay for such things as rent for a bigger place, car payments, and clothes. These costs can be very difficult to pay for women who are single mothers and have to move out of the shelters and set up a household.

4. **Issues for Military Parents**
   - Being in the military presents special considerations when it comes to becoming a parent. Those who are on active duty must also think about what they will do if unexpected situations come up, such as deployment, travel, or the need to move.

**Sample Letter of Instruction**

I have made the following arrangements for the care of my dependent family members in the event that I am not available to provide the proper care due to absence from your service or for reasons not to our control, which would require me to be away from them for an extended period of time.

- **My Childcare Provider** has been given legal authority to care for my children while I am deployed. These instructions about what should happen if I am unable to provide proper care if my child is not supervised or if I must leave them while they are deployed. This plan should be considered before or becomes necessary. See the sample "Letter of Instruction" on the next page of the briefing.

- **My Dependent Family Members** have been given legal authority to care for my children while I am deployed. These instructions about what should happen if I am unable to provide proper care if my child is not supervised or if I must leave them while they are deployed. This plan should be considered before or becomes necessary. See the sample "Letter of Instruction" on the next page of the briefing.

**Should be necessary to visit any of the persons involved in the transportation, support or care for my child, the following information is provided:**
- **Name, address, phone number**
- **Email address, phone number, relationship to parent of children of long-term guardian**
- **Name, address, phone number, relationship to parent of children of short-term child care provider**

**Should it be necessary to visit any of the persons involved in the transportation, support or care for my child, the following information is provided:**
- **Name, address, phone number**
- **Email address, phone number, relationship to parent of children of long-term guardian**
- **Name, address, phone number, relationship to parent of children of short-term child care provider**

**Should it be necessary to visit any of the persons involved in the transportation, support or care for my child, the following information is provided:**
- **Name, address, phone number**
- **Email address, phone number, relationship to parent of children of long-term guardian**
- **Name, address, phone number, relationship to parent of children of short-term child care provider**
Appendix D: Basic Training Exercise

Storyboards

Below the financial costs of having a child, there are also unsought consequences costs. Parents must constantly adjust to new routines and bring up children. Because of this, parents may have to make a lifestyle change, such as putting off seeking a promotion because it takes too much time away from the family. Parents also have to give up personal pursuits and entertainment if they cannot afford to afford a babysitter.

Finally, some day parents must consider how they will deal with the way other people might feel about their having a baby. For example, some co-workers and communities might feel hurt and believe that having a child is a step to avoid doing certain assignments and duties.
Appendix D: Basic Training Exercise

Overview

Give some overview of the exercise and instructions on how to use it.

Briefing

Click here to review background on the issue and learn what you are preparing for.

Training Exercise

Click here to begin the activity.

Menu Plan

1 of 6

Taking responsibility for maintaining your health and physical fitness is important. Here are some tips to keep in mind when planning for deployment:

1. Hygiene

   - Personal hygiene practices are important. Ensure that you wash your hands frequently and dispose of用于正确和卫生的清洁习惯。确保经常洗手并正确处理废物。
   - Use soap and water to clean your hands.
   - Use disposable towels if available.
   - Use hand sanitizers when soap and water are not available.
   - Use personal hygiene products such as deodorant and mouthwash.

2. Diet

   - Ensure you eat a balanced diet rich in fruits, vegetables, and lean proteins.
   - Avoid eating too much processed food.
   - Stay hydrated by drinking plenty of water.

3. Sleep

   - Ensure you get adequate sleep each night.
   - Maintain a regular sleep schedule.
   - Use earplugs or a white noise machine if needed.

4. Exercise

   - Incorporate regular physical activity into your routine.
   - Use equipment such as dumbbells and resistance bands for strength training.
   - Use personal fitness equipment such as yoga mats and stretching bands.

5. Relaxation

   - Use techniques such as deep breathing and meditation to help reduce stress.
   - Use personal relaxation equipment such as portable meditation mats.

Menu Plan

2 of 6

Hygiene during Deployment

Women in the military are deployed to remote and potentially dangerous areas. Personal hygiene practices are crucial to maintaining health and preventing infections. Here are some tips to keep in mind:

1. Personal hygiene

   - Wash your hands frequently and use hand sanitizer when soap and water are not available.
   - Use personal hygiene products such as mouthwash and deodorant.
   - Use tampons and sanitary pads as needed.

2. Diet

   - Eat a balanced diet rich in fruits, vegetables, and lean proteins.
   - Avoid eating too much processed food.
   - Stay hydrated by drinking plenty of water.

3. Sleep

   - Ensure you get adequate sleep each night.
   - Maintain a regular sleep schedule.
   - Use earplugs or a white noise machine if needed.

4. Exercise

   - Incorporate regular physical activity into your routine.
   - Use equipment such as dumbbells and resistance bands for strength training.
   - Use personal fitness equipment such as yoga mats and stretching bands.

5. Relaxation

   - Use techniques such as deep breathing and meditation to help reduce stress.
   - Use personal relaxation equipment such as portable meditation mats.

Menu Plan

3 of 6

Type of Supplies

As detailed before, women deploy

Type of Supplies

As detailed before, women deploy

Type of Supplies

As detailed before, women deploy

Type of Supplies

As detailed before, women deploy

Type of Supplies

As detailed before, women deploy
• Appendix D: Basic Training Exercise

Storyboards

Handling the menstrual period. Depending upon the length of deployment, women may need supplies such as sanitary napkins, panty liners, and tampons.agan, external products are not recommended. Women who have pain may also need to pack pain medicine that works best for them.

Preventing pregnancy. Sex is not allowed among military personnel who are deployed. Although most providers may doubt that they will find the opportunity or the desire to have sex in the field or on board ship, sex among deployed personnel does happen. Sex in the field has lead to pregnancy as well as sexually transmitted diseases. Those situations affect health as well as readiness.

Women should prepare for the possibility that they may be faced with a sexual encounter while deployed. Those who are using birth control pills for pregnancy prevention should make arrangements to fill their prescriptions before they deploy. Unfortunately, some military pharmacies only give 3 months of birth control pills at a time. Women who are deployments may need to arrange to get their medication while deployed. Since sex during deployments is likely to take place between untrained people, women should also consider taking male condoms or female condoms to prevent sexually transmitted diseases if they have sex.

Pre-deployment Examinations

Depending upon the length and destination of a woman's deployment, she may have a pre-deployment exam. Here, she can review her medications with her health care provider and get any needed immunizations. She can also discuss how to stay healthy in the field and the supplies she needs to take. Women who have had sex recently should also have a pregnancy test at this exam.

**You are well prepared to protect your women’s health needs while you are on your deployment. You packed the right kind of supplies to prevent infections, take care of the menstrual period, and prevent pregnancy.

You were also wise to bring a female urinal director to help you urinate when you cannot find a private place to do so.

You may have too many supplies. This can weigh you down. Pack supplies for the first couple of months and for any special needs. Use fewer supplies that will be provided by your unit for longer deployments.

You could pack better for your general needs. Although you packed some of the things you will need, you also need bug spray and socks.

You did not choose to pack prescription drugs. If you take medicines or could need them for any reason, make sure to pack them.
Appendix D: Basic Training Exercise

**Overview**

The purpose of this exercise is to allow you to learn more about some of the reproductive health problems that women and men may face.

**Briefing**

This program will allow you to look at some of the signs and symptoms associated with these problems, and how you will be able to recognize these signs and symptoms. After reading these signs and symptoms, you will have an opportunity to get feedback on how well you did in connecting signs and symptoms to specific reproductive health problems.

**Training Exercise**

Women can get many types of vaginal infections. Some happen when bacteria, viruses, or other things enter the vagina. Others can be caused by a disease that is passed from one person to another during sex. A person who has a vaginal infection can pass it on to another. Each vaginal infection has a specific cause—each one causes a specific type of vaginal infection.

**Diagnosis and Treatment**

When a problem is not spread and treated, it can grow and cause more damage. For example, women with no symptoms need to ask for screening tests. If they have been exposed to an infection, they may need to take medication or treatment. In the case of sexually transmitted diseases, women should make sure their sexual partners have screening tests and treatment. If a partner is not treated, the woman could get the infection again. If the infection goes untreated, it can cause pain, swelling, and other symptoms. Women who have had an infection should follow the first treatment recommended, or the infection may not go away. If a woman needs to stop taking a medicine, she should follow up with her doctor. She should talk to her health care provider about her symptoms and treatments.

**Recognizing Signs and Symptoms**

The best way to stop the disease cycle is to recognize the signs and symptoms of common reproductive health problems. A woman should understand when to get medical care.

Two ways to detect vaginal infections are to watch for changes in vaginal discharge and in the body. Vaginal discharge changes in color, odor, and texture. Different signs and symptoms show other changes in the body. Some examples of changes include: thick, itchy, or pruritic; thin, watery, or green; or yellow. Other changes include: bleeding, discharge, or pain around the vagina and cervix.

**Menu Plan 1 of 4**

Women can get many types of vaginal infections. Some happen when bacteria, viruses, or other things enter the vagina. Others can be caused by a disease that is passed from one person to another during sex. This briefs women how infections happen and how they can be prevented.

**Menu Plan 2 of 4**

Recognizing Signs and Symptoms

- The best way to stop the disease cycle is to recognize signs and symptoms of common reproductive health problems. A woman should understand when to get medical care.
- Two ways to detect vaginal infections are to watch for changes in vaginal discharge and in the body. Vaginal discharge changes in color, odor, and texture. Different signs and symptoms show other changes in the body. Some examples of changes include: thick, itchy, or pruritic; thin, watery, or green; or yellow. Other changes include: bleeding, discharge, or pain around the vagina and cervix.

**Menu Plan 3 of 4**

Diagnosis and Treatment

- When an infection is not spread and treated, it can grow and cause more damage. For example, women with no symptoms need to ask for screening tests. If they have been exposed to an infection, they may need to take medication or treatment.
- In the case of sexually transmitted diseases, women should make sure their sexual partners have screening tests and treatment. If a partner is not treated, the woman could get the infection again. If the infection goes untreated, it can cause pain, swelling, and other symptoms.

**Menu Plan 4 of 4**

Recognizing Signs and Symptoms

- The best way to stop the disease cycle is to recognize signs and symptoms of common reproductive health problems. A woman should understand when to get medical care.
- Two ways to detect vaginal infections are to watch for changes in vaginal discharge and in the body. Vaginal discharge changes in color, odor, and texture. Different signs and symptoms show other changes in the body. Some examples of changes include: thick, itchy, or pruritic; thin, watery, or green; or yellow. Other changes include: bleeding, discharge, or pain around the vagina and cervix.

**Good hygiene means washing hands before and after touching any part of the body, including the vulva. Women can also avoid infections if they do not do things that can irritate and dry out the vagina.**
### Appendix D: Basic Training Exercise

#### Storyboards

**Signs & Symptoms**
- Burning on urination (Cystitis)
- Genital Warts
- Chlamydia
- Urinary Tract Infection
- Trichomoniasis
- Candida

**Risk Factors**
- Wearing tight clothing, pantyhose, or nylon underwear
- Bacterial Vaginosis
- Herpes
- Cervical Dysplasia
- Trichomoniasis

---

**Risk Factor Number 1:**
- Looking at the risk factors below and choose all of the infections that relate to it. When you are done, click on "Show My Score" for an evaluation.

**Risk Factor:** Wearing tight clothing, pantyhose, or nylon underwear.

- **Candida**
- **Bacterial Vaginosis**
- **Herpes**
- **Cervical Dysplasia**
- **Trichomoniasis**

---
Appendix E: Field Exercise Storyboards

Check-up
Click here to explore what happens during the annual exam.

Sick Call
Click here to explore what happens during a medical exam when a patient has a health problem.

Pre-deployment
Click here to explore the care women may have before extended deployment.

Virtual Check-up
Click on the picture of the person you will follow.

Mary
First, type in the name of the woman you will follow through the medical exam.

Mary is due for her annual exam.
When will she go?
- She's not sure. It's never a good time. She'll wait.
- She'll go sometime. She's in no hurry.
- Whenever she can get an appointment.
- When she can get on appointment, and she's not on her period.

Suggested graphic
- Person holding
  - calendar,
  - appointment book, or
  - appointment card.

GET ADVICE

How will Mary get ready for her exam?
Check all that apply:
- She'll just show up.
- Get together information on her health history.
- Make a list of questions and things to tell the doctor.
- Read about her rights and responsibilities.
- Take a shower and wash well.
- Douche before she goes.

Suggested graphic
- Collage or series of pix fading into each other
  - Nurse & keys
  - Shower
  - Douche
  - List of questions
  - Rights/responsibilities

GET ADVICE

Mary has arrived for her exam and is filling out forms in the waiting room. What will she do?
- Answer each question fully.
- Fill out most of the information,
  at least what she can remember.
- Fill out most of the information
  but not all. It's too personal.
- Fill out very little. She's worried
  about how the information will
  be used.

Suggested graphic
- Person holding a clipboard and filling in medical forms.

GET ADVICE

After Mary fills out her forms, she waits to be called in for her visit. What will she do while she waits?
- Watch television.
- Read a magazine.
- Read some health pamphlets.

Suggested graphic
- Photo of a waiting room, showing TV, magazines, and pamphlets.

GET ADVICE
After Mary fills out her form, she waits to be called in for her visit. What will she do while she waits?
- Watch television.
- Read a magazine.
- Read some health pamphlets.

**Which pamphlets does she pick up?**
- Pregnancy
- Birth control
- Sexually transmitted diseases
- Vaginal infections
- How to use a condom
- Pap test
- Breast cancer
- Cervical cancer
- Endometriosis

**GET ADVICE**

Mary is called in to see the doctor. The doctor asks Mary about her health history. What does she do?
- Answers all the questions.
- Answers most of the questions but not all. Some are too personal.
- She says very little. She does not know how much information will be used.
- She tells the doctor that she is uncomfortable talking about these things.

**Suggested graphic:**
- Photo of clinician looking as if he/she is talking to the camera.

**RIGHTS +0**
**RESPONSIBILITIES +0**
**INFORMATION +0**

Mary is called in to see the doctor. The doctor asks Mary about her health history. What does she do?
- Answers all the questions.
- Answers most of the questions but not all. Some are too personal.
- She says very little. She does not know how much information will be used.
- She tells the doctor that she is uncomfortable talking about these things.

**GET ADVICE**

**Suggested graphic:**
- New photo of clinician talking to the camera.

**RIGHTS +0**
**RESPONSIBILITIES +0**
**INFORMATION +0**

The doctor asks Mary about her sexual history, including how many people she has had sex with in the past.

**What does she do?**
- Answers all the questions.
- Answers most of the questions but not all. Some are too personal.
- She says very little. She does not know how much information will be used.
- She tells the doctor that she is uncomfortable talking about these things.

**Suggested graphic:**
- New photo of clinician talking to the camera.

**RIGHTS +0**
**RESPONSIBILITIES +0**
**INFORMATION +0**

The doctor asks Mary if she would like information about the exam before it begins. What does she do?
- Says, "Yes." She wants to learn more about her body.
- Says, "No." She does not want to take the extra time.

**Suggested graphic:**
- Photo of clinician looking as if he/she is talking to the camera.

**RIGHTS +0**
**RESPONSIBILITIES +0**
**INFORMATION +0**
The doctor asks Mary if she would like information about the exam before it begins.

What does she say?
- Says, "no thanks." She knows what to expect.
- Says, "no thanks." She does not want to take the extra time.
- Says, "yes." She wants to learn more about her body.
- Says, "yes." She thinks it will make her more comfortable to learn more about the exam.

**Suggested graphic:**
- Clinician holding up a photo of a breast exam.

**Words under graphic:**
- The annual exam has 5 parts.
- 1. I will begin with a breast exam. I see if I notice any lumps, dimples, or other changes that could be a sign of breast cancer.

**GET ADVICE**

---

The doctor asks Mary if she would like information about the exam before it begins.

What does she say?
- Says, "no thanks." She knows what to expect.
- Says, "no thanks." She does not want to take the extra time.
- Says, "yes." She wants to learn more about her body.
- Says, "yes." She thinks it will make her more comfortable to learn more about the exam.

**Suggested graphic:**
- Clinician holding up a photo of a speculum.

**Words under graphic:**
- The third part is the speculum exam. I use the speculum to hold the walls of the vagina apart so I can look at the inside.

**GET ADVICE**

---

The doctor asks Mary if she would like information about the exam before it begins.

What does she say?
- Says, "no thanks." She knows what to expect.
- Says, "no thanks." She does not want to take the extra time.
- Says, "yes." She wants to learn more about her body.
- Says, "yes." She thinks it will make her more comfortable to learn more about the exam.

**Suggested graphic:**
- Clinician holding up a photo of a breast exam.

**Words under graphic:**
- The last part of the exam is called a bimanual exam. I examine your uterus and ovaries by putting some fingers inside the vagina and pressing with my other hand on the stomach.

**GET ADVICE**

---

The doctor asks Mary if she has any questions about the exam.

What does she say?
- Says, "no." She understands.
- Says, "no." She does not want to look stupid by asking questions.
- Says, "yes." She wants to learn more about one part of the exam.
- Says, "yes." She wants to go over the exam again. She's not sure she understood.

**Suggested graphic:**
- Photo of clinician looking as if he/she is talking to the camera.

**RIGHTS** +0
**RESPONSIBILITIES** +0
**INFORMATION** +0

**GET ADVICE**

---
Appendix E: Field Exercise Storyboards

The doctor asks Mary if she has any questions about the exam.

What does she do?
- Says, "no." She understands.
- Says, "yes." She wants to learn more about one part of the exam.
- Says, "yes." She wants to go over the exam again. She's not sure she understands.

What does she want to know more about? (Check all that apply.)
- Breast exam
- External exam
- Speculum exam
- Pap test
- Bimanual exam

RIGHTS  +0
RESPONSIBILITIES  +0
INFORMATION  +0

The doctor asks Mary if she has any questions about the exam.

What does she do?
- Says, "no." She understands.
- Says, "no." She does not want to look stupid by asking questions.
- Says, "yes." She wants to learn more about one part of the exam.
- Says, "yes." She wants to go over the exam again. She's not sure she understands.

GET ADVICE

Breast exam:
During the breast exam, the doctor both looks at the breasts and examines them to check for changes. Women should examine their breasts every month in the same way, so they can tell if they see a doctor. They should tell a doctor if they notice any changes in how their breasts look.

CLOSE

RIGHTS  +0
RESPONSIBILITIES  +0
INFORMATION  +0

The doctor asks Mary if she has any questions about the exam.

What does she do?
- Says, "no." She understands.
- Says, "no." She does not want to look stupid by asking questions.
- Says, "yes." She wants to learn more about one part of the exam.
- Says, "yes." She wants to go over the exam again. She's not sure she understands.

Suggested graphic:
- Clinician holding up a photo of a breast exam.

Words under graphic:
The annual exam has 5 parts.
1. I will begin with a breast exam. I see if I notice any lumps, dimples, or other changes that could be a sign of breast cancer.

GET ADVICE

RIGHTS  +0
RESPONSIBILITIES  +0
INFORMATION  +0

Mary goes to the examining room. The doctor begins the exam but does not have an assistant.

What does she do?
- Says nothing. She does not care if the doctor has no assistant.
- Says nothing. She does not want to make the doctor upset by complaining.
- Asks the doctor to tell her what will happen.
- Asks the doctor to be more comfortable.

Suggested graphic:
- Photo of woman on an examining table with clinician clinician next to it.

No assistant.

RIGHTS  +0
RESPONSIBILITIES  +0
INFORMATION  +0

The doctor is examining Mary, and something really hurts her.

What does she do?
- Says nothing. She thinks the exam is supposed to hurt.
- Says nothing. She does not want to make the doctor upset by complaining.
- Asks the doctor to hurry the exam because she is not comfortable.
- Tells the doctor that she feels pain and then describes the pain when it begins during the exam.

Suggested graphic:
- Photo of woman's face as she lays back on an examining table. The face in the photo goes from calm to troubled as if she is in pain.

RIGHTS  +0
RESPONSIBILITIES  +0
INFORMATION  +0

The doctor says something that Mary thinks is rude in the middle of the exam.

What does she do?
- Says nothing. She doesn't let it bother her.
- Says nothing. She does not want to make the doctor upset by complaining.
- Asks the doctor to explain what he means by his remark.
- Tells the doctor that she did not like what he said.

Suggested graphic:
- Photo of woman's face as she lays back on an examining table. The face in the photo goes from calm to troubled as if she is shocked or upset.

RIGHTS  +0
RESPONSIBILITIES  +0
INFORMATION  +0

GET ADVICE.
After the exam, Mary meets with the doctor to go over the exam.
What does she do? (Check all that apply)
☐ Says nothing. She has no questions.
☐ Says nothing. She does not want to spend the extra time.
☐ Ask the doctor about the tests that were taken and when she will get the results.
☐ Ask for some written information about the exam and the tests she had.

**Suggested graphic**
- Photo of woman and clinician talking in an office setting.

**GET ADVICE**

**RIGHTS** +0
**RESPONSIBILITIES** +0
**INFORMATION** +0
APPENDIX B: Efficacy Test Instrument

Health Needs of Enlisted Women in the Military

The purpose of this survey is to collect information about health knowledge, attitudes, and behavior of enlisted women in the Army, Navy, and Air Force. We are interested in understanding what enlisted women in the military know, think, and do regarding their reproductive health.

Your participation in answering these questions is voluntary, and may help other enlisted women receive improved health care and educational services. This is the first of two surveys you will be asked to complete. The second one will be given to you after your medical exam. The purpose of this study is to evaluate a computer program designed to help women in the military learn about reproductive health, and better care for themselves at home and in the field.

These surveys contain several questions about sensitive issues such as sexual behavior and feminine hygiene practices. We realize it may make some people uncomfortable to answer these types of questions. Some people may feel that they should answer a certain way, even if it is not what they actually think or do. Please be honest, because your thoughts, feelings, and actions are very important for the results of the study. There is no penalty for leaving a question blank, but we encourage your full participation so that the data will be complete and representative.

Some people feel uncomfortable answering sensitive questions on a survey because it is written. Your answers will not be linked to any personal information about you. This survey will have a unique numerical identifier that will be linked to the second survey you complete, so we can make comparisons. Your answers will be combined with the answers of hundreds of other enlisted women in the military who complete this survey. No individual enlisted women will be identified when we present the results of the survey, so please answer every question honestly.

Please, do not write your name on the survey.

Many thanks for your cooperation and help with this study.
I. Demographics

Mark only one answer to each question.

1. How old are you? _______

2. In what branch of the armed services do you serve?
   a. Army
   b. Navy
   c. Air Force
   d. Marine Corps
   e. Other

3. What is your grade?
   a. E1-E2
   b. E3-E4
   c. E5-E6
   d. E7-E9
   e. I am an officer

4. How do you describe yourself?
   a. White, not Hispanic
   b. Black, not Hispanic
   c. Hispanic or Latino
   d. Asian or Pacific Islander
   e. American Indian or Alaskan Native
   f. Other (specify)

5. What is your marital status?
   a. Single, never married
   b. Living with significant other
   c. Married
   d. Legally separated
   e. Divorced
   f. Widowed

6. What is the **highest** education level you have **completed** and received credit for?
   a. Highschool diploma
   b. GED
   c. Associate’s degree
   d. Vocational degree
   e. Some college
   f. Bachelor’s degree
   g. Graduate degree

II. Knowledge

Read each of the following questions and select the answers you think are correct. You are NOT expected to know all the correct answers. Mark only one answer.

7. At what point in the monthly reproductive cycle is a woman most likely to become pregnant?
   a. Right before her period
   b. During her period
   c. Right after her period
   d. Mid-cycle
   e. I don’t know

8. Who is more likely to get an STD infection because of how their bodies are structured?
   a. Men
   b. Women
   c. They are equally likely
   d. I don’t know
9. What is the BEST way to clean the vagina?
   a. Using a vinegar and water douche
   b. Using vaginal deodorants
   c. Letting normal secretions cleanse the vagina
   d. Using deodorant soap
   e. I don't know

10. What is the BEST way to clean the vagina in the FIELD?
    a. With scented deodorant sprays
    b. With disposable wipes
    c. With water
    d. There is no way to clean in the field.
    e. I don't know

11. When you are in the field and need to urinate (pee), what should you do?
    a. Go immediately, or as soon as possible
    b. Hold it until you really have to go
    c. Hold it until you come to a clean bathroom
    d. Stop drinking water so you do not have to go as much
    e. I don't know

12. Which of the following is the BEST way to prevent pregnancy?
    a. Use condoms
    b. Withdrawal (pull out)
    c. Birth control pills
    d. Douching
    e. I don't know

13. What is the most common reason that birth control fails?
    a. It is used incorrectly
    b. A method does not work
    c. The directions are bad
    d. Women pick a type that they don't like
    e. I don't know

14. How can a woman be sure she has NO sexually transmitted diseases (STDs)?
    a. When she has no symptoms of itching or burning
    b. When she has a normal Pap test
    c. When her doctor does not notice any problems
    d. When screening tests show no infection
    e. I don't know

15. What type of condom is best at reducing the risk of getting an STD?
    a. Lambskin
    b. Polyurethane
    c. Latex
    d. Condoms do not reduce the risk.
    e. I don't know

16. The risk of an STD infection is increased by
    a. Having one steady relationship
    b. Having sex when intoxicated
    c. Having sex when dirty
    d. Using birth control
    e. I don't know
17. What medical service DO women get when they have an annual pelvic exam at a military facility?
   a. Pregnancy test
   b. Screening for STDs
   c. Urine test
   d. Pap test
   e. I don’t know

18. What medical service SHOULD military women get when they have a pre-deployment exam?
   a. Pregnancy test
   b. Screening for STDs
   c. Urine test
   d. Pap test
   e. I don’t know

III. Attitudes

We are interested in how you feel about specific health concerns and behaviors that are important for enlisted women in the military. Please answer these questions as you really feel. There are no right or wrong answers.

Please mark on a scale of 1 to 9 how much you agree or disagree with the following statements. 9 = "strongly agree", 5="neutral", and 1="strongly disagree".

19. Active duty females are MORE likely to have an unplanned pregnancy than civilian females.
   
<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>neutral</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

20. When active duty females get pregnant, it's MORE likely to get out of duty rather than an "unplanned" pregnancy.

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>neutral</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>neutral</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

22. Birth control is easy to get in the field.

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>neutral</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

23. Birth control is easy to use EVEN IF one is drinking or using drugs.

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>neutral</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

24. Birth control is easy to use EVERY TIMES one has sex.

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>neutral</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

25. Men think using birth control is important.

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>neutral</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

26. Women think using birth control is important.

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>neutral</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

27. My health care provider thinks using birth control is important.

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>neutral</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

28. My friends think using birth control is important.

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>neutral</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

29. My commander thinks using birth control is important.

<table>
<thead>
<tr>
<th>strongly disagree</th>
<th>neutral</th>
<th>strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>
30. Active duty FEMALES are MORE likely to get an STD than civilian females.  

31. Active duty MALES are MORE likely to get an STD than civilian males.  

32. **Condoms** make love making better.  

33. **Condoms** are easy to get.  

34. **Condoms** are easy to get in the field.  

36. **Condoms** are easy to use EVERY TIME one has sex.  

37. Women think using **condoms** to prevent STDs is important.  

38. Men think using **condoms** to prevent STDs is important.  

39. My health care provider thinks using **condoms** to prevent STDs is important.  

40. My friends think using **condoms** to prevent STDs is important.  

41. My commander thinks using **condoms** to prevent STDs is important.  

42. Talking to **health care providers** about birth control and condoms is easy  

43. Talking to **sexual partners** about birth control and condoms is easy.  

44. Talking to sexual partners about **STDs** is easy.  

45. Talking to sexual partners about the **pregnancy concerns** is easy.
IV. Health Status and Practices

The first set of questions ask about your health and visits to the women's health clinic. The next set of questions asks about your sexual behavior and birth control preferences. These types of questions sometimes make people feel uncomfortable. Some people feel the need to answer differently from what they actually do. Please answer the questions as honestly as you can. This may help other enlisted women with their health care needs and concerns.

46. How would you rate your overall health?
   a. Excellent
   b. Good
   c. Fair
   d. Poor

47. Do you have any of the following problems?
   a. Poor diet
   b. Trouble sleeping
   c. Job stress
   d. Family stress
   e. General stress

48. Have you EVER had any of the following conditions?
   a. Irregular periods
   b. Painful periods
   c. Heavy periods
   d. Unexplained vaginal bleeding
   e. Menopause
   f. Diabetes
   g. Breast cancer
   h. Cervical cancer
   i. Abnormal Pap test
   j. Urinary tract infection
   k. Yeast infection
   l. Unplanned pregnancy
   m. Sexually transmitted disease
   n. None
   o. I don't know

49. Has your mother or a sister ever had breast cancer?
   a. Yes
   b. No
   c. I don't know

50. Are you currently pregnant?
   a. Yes, and it is a planned pregnancy.
   b. Yes, and it is not a planned pregnancy.
   c. No, I'm not pregnant.
   d. I don't know

51. When did you have your last pelvic exam that included a Pap test?
   a. Never
   b. In the last year
   c. In the last 2 years
   d. In the last 3 years
   e. More than 3 years ago
   f. I don't know
52. When did you last have your breasts examined by a doctor or nurse?
   a. Never
   b. In the last year
   c. In the last 2 years
   d. In the last 3 years
   e. More than 3 years ago
   f. I don’t know

53. When did you have your last mammogram?
   a. Never
   b. In the last year
   c. In the last 2 years
   d. In the last 5 years
   e. More than 5 years ago
   f. I don’t know

54. How often do you examine your breasts?
   a. Never
   b. Monthly
   c. A few times a year
   d. Yearly
   e. Less often than once a year
   f. No set time
   g. I don’t know

55. How often do you have a pelvic exam before you go on a deployment?
   a. I have never been deployed.
   b. Always or nearly always
   c. Most of the time
   d. Half the time
   e. Some of the time
   f. Rarely
   g. Never

56. Which of the following supplies do you pack to take on deployments to prepare for your health needs?
   a. Cotton underwear
   b. Birth control pills
   c. Condoms
   d. Unscented tampons
   e. Scented tampons
   f. Unscented pads/panty liners
   g. Scented pads/panty liners
   h. Unscented wet-wipes
   i. Scented wet-wipes
   j. Yeast infection medication
   k. Female urinary director
   l. None of these
   m. I have never been deployed

57. Do you wipe from FRONT to BACK after using the bathroom?
   a. Yes, always
   b. Yes, sometimes
   c. No, never
   d. No response

58. Do you ever stop drinking water in the field so you won’t have to go to the bathroom?
   a. Yes
   b. No
59. How often do you douche?
   a. Never
   b. Rarely (a few times)
   c. Occasionally (every few months)
   d. Regularly (once a month)
   e. Often (more than once a month)

60. Which of the following products do you use?
   a. Scented tampons
   b. Scented sanitary pads
   c. Scented wipes
   d. None of these

61. Have you ever had sex (penis-vagina intercourse)?
   a. Yes
   b. No

62. Have you ever had oral sex?
   a. Yes
   b. No

63. Have you ever had anal sex?
   a. Yes
   b. No

*If you have had any type of sex, skip ahead to number 67*

64. If you begin to have sex, what type of birth control will you use? (Check all that apply.)
   a. No method
   b. Withdrawal
   c. Birth control pills
   d. NorPlant
   e. DepoProvera (the shot)
   f. Diaphragm with spermicide
   g. Male condom
   h. Female Condom
   i. Intrauterine Device (IUD)
   j. Tubal ligation (tubes tied)
   k. Vasectomy
   l. I don’t know.

65. Will you use birth control EVERY TIME you have sex?
   a. No.
   b. Yes, I always will.
   c. I don’t know

66. Will you use a condom EVERY TIME you have sex?
   a. No.
   b. Yes, I always will.
   c. I don’t know

*Please skip ahead to Section V, number 71.*
67. What type of birth control do you usually use? (Check all that apply.)
   a. No method
   b. Withdrawal
   c. Birth control pills
   d. Norplant
   e. Depo-Provera (the shot)
   f. Diaphragm with spermicide
   g. Male condom
   h. Female Condom
   i. Intrauterine Device (IUD)
   j. Tubal ligation (tubes tied)
   k. Vasectomy
   l. I don't know.

68. Do you use birth control EVERY TIME you have sex?
   a. No, and I don't plan to in the future.
   b. No, but I want to.
   c. No, but I plan to start to soon.
   d. Yes, I do now.
   e. Yes, I always have.
   f. No response

69. What best describes your sexual activity in the past year?
   a. Abstinent
   b. One steady relationship
   c. More than one steady relationship
   d. One casual relationship
   e. More than one casual relationship
   f. A mix of steady and casual relationships
   g. No response

70. Do you use a condom EVERY TIME you have sex?
   a. No, and I don't plan to in the future.
   b. No, but I want to.
   c. No, but I plan to start to soon.
   d. Yes, I do now.
   e. Yes, I always have.
   f. No response

V. Health Education & Resources
   We are interested in how you feel about the health information and resources that are available to you in the military. Please answer honestly.

71. Which health topics do you want to know more about? (check all that apply.)
   a. I know all I need to know
   b. Pelvic exams
   c. Pregnancy prevention
   d. Birth control
   e. STD/HIV prevention
   f. Prevention of vaginal infections
   g. Personal hygiene
   h. Menstrual cycle
   i. Other _______________________
   j. None
72. Where do you go when you want information about your sexual health? *(check all that apply.)*
   a. Health clinic
   b. Pharmacy
   c. Telephone hotline
   d. Library
   e. Internet
   f. Newspapers/magazines
   g. Television
   h. Other__________________
   i. None

73. How easy is it to talk to your health care provider(s) when you want information about your sexual health?

<table>
<thead>
<tr>
<th>very easy</th>
<th>somewhat easy</th>
<th>neutral</th>
<th>somewhat difficult</th>
<th>very difficult</th>
</tr>
</thead>
</table>

74. Who would you go to for help if you had a sexual health concern (suspected pregnancy, STD, etc.)? *(check all that apply.)*
   a. Friend
   b. Parent
   c. Sibling
   d. Spouse/significant other
   e. Your commanding officer
   f. Health care provider (nurse, doctor)
   g. Health educator/instructor
   h. Other__________________

75. How easy is it to talk to your health care provider(s) about your sexual health concerns?

<table>
<thead>
<tr>
<th>very easy</th>
<th>somewhat easy</th>
<th>neutral</th>
<th>somewhat difficult</th>
<th>very difficult</th>
</tr>
</thead>
</table>

How important is it to take time out of your daily work duties to do the following:

*(please circle only one response)*

76. Get an annual women's health exam.
   1  2  3  4  5

77. Get medical care when you notice a symptom that may be a health problem.
   1  2  3  4  5

78. Go to follow-up appointments to get treatment for a health problem.
   1  2  3  4  5

79. Get medicine and take it as prescribed by a health care provider.
   1  2  3  4  5

Many thanks for your time completing this survey. You have been very helpful!
APPENDIX C: INFORMED CONSENT LETTER

Project Title: CD-ROM Technology to Increase Appropriate Self-Care and Preventive Behaviors Among Enlisted Women

You are asked to participate in a research study conducted at the (insert Uniform Services University of the Health Sciences, Walter Reed Medical Center, Malcolm Grow Medical Center, or National Naval Medical Center) by Dr. Nancy Atkinson, Ph.D. (Civilian Principal Investigator) at the Department of Health Education, University of Maryland and by Dr. Evelyn Lewis, M.D. (Military Principal Investigator) at the Uniformed Services University of the Health Sciences (USUHS).

Purpose:

The purpose of this research is to test the effectiveness of an interactive computer-based educational program for enlisted Army, Navy, and Air Force women. The results of the study will be used to assess the usefulness of these materials in educating enlisted women about their health. This study is funded by the Department of Defense, U.S. Army Medical Research and Materiel Command (USAMRMC). The University of Maryland, College Park, is conducting the research study in conjunction with the Uniformed Services University of the Health Sciences.

This study is important because the number of women in the U.S. Armed Forces is increasing and the Department of Defense is concerned about their health needs. Many studies are being done about the unique health concerns of women in the military. Statistics show that unintended pregnancies, sexually transmitted diseases (STDs), and common preventable gynecological conditions (such as vaginitis) warrant immediate attention by both enlisted women and health care providers.

Procedure:

Enlisted women using the gynecological clinics at Walter Reed Army Medical Center, National Naval Medical Center, Malcolm Grow Medical Center, and USUHS are invited to volunteer for this study. We expect to enroll 528 enlisted women who equally represent the Airforce, Army, and Navy. The whole study has taken 5 years, but your participation will be limited to reviewing the educational materials and/or completing a series of questionnaires during just one medical visit.

During your medical visit, we will assign you to one of two study groups. If you get assigned to one of the groups, you will fill out a questionnaire, take part in educational activities using a computer, and fill out another questionnaire after your exam. If you get assigned to the other group, you will fill out a questionnaire right before your exam and one right afterwards. Your assignment to either of these two groups will be decided completely by chance.

All of these activities will take place in the same clinic where you get your exam. Each questionnaire should take about 15 minutes to fill out. Completing the educational activities on the computer will take 30 to 45 minutes. Altogether, the most time you would spend volunteering is 1 1/2 to 2 hours. Besides your time, there are no costs to you for participating in the study.

- 1 -

Initials       Date
The two questionnaires will ask about your knowledge of basic female body functions, what you think women need to know about their health, what you would like to learn about health, and your experiences with military health care. Finally, the questionnaire asks for your opinion about using a computer program to educate military women and whether you think it is a good idea.

This research is not designed to help you personally. The researchers hope to learn more about women’s health, particularly the unique issues faced by women in the military. By volunteering for this study, you will receive information about your health, and you may learn ways to help protect your health.

**Potential Risks and Confidentiality**

There are no foreseeable risks to you for participating in this study. Your name will not be associated with any other personal information on the questionnaire. A unique identification number will be used for each woman enrolled in the study, so information you provide on the questionnaire is anonymous. Only the principal investigators will be able to see the information that links your responses to personal information. At the completion of this survey, the record linking your name with your identification number will be destroyed.

All data and medical information obtained about you, as an individual, will be considered privileged and held in confidence; you will not be identified in any presentation of the results. Complete confidentiality cannot be promised to subjects, particularly to subjects who are military personnel, because information bearing on your health may be required to be reported to appropriate medical or command authorities. It should be noted that representatives of the U.S. Army Medical Research and Materiel Command are eligible to review research records as a part of their responsibility to protect human subjects.

**Medical Care for Research Related Injury**

You are authorized all necessary medical care for injury or disease which is the proximate result of your participation in this research. Other than medical care that may be provided there is no other compensation available for participation in this research study; however, this is not a waiver or release of your legal rights.

In the event of a research related injury, please immediately contact one of the investigators listed below. If you have any questions about the research, please feel free to contact the investigators as well.

**Rights of Research Subjects**

Your participation in this research is entirely voluntary. If you choose not to participate, that will not affect your relationship with <enter appropriate study site>, your right to health care or other services to which you are otherwise entitled. You are free to ask questions and/or to withdraw from the study at any time without penalty, and without any questions asked of you. You are not waiving any legal claims, rights, or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, you may contact one of the investigators listed below.

- 2 -

Initials_____ Date_____
Contact Information for Principal Investigators

Nancy L. Atkinson, Ph.D. (civilian investigator)
Department of Health Education
Suite 2387 Valley Drive
University of Maryland
College Park, Maryland 20742-2611
301.405.2522 na31@umail.umd.edu

Evelyn L. Lewis, M.D., M.A., CAPT, MC, USN (military investigator)
Department of Family Practice
Uniformed Services University of the Health Sciences
4301 Jones Bridge Road
Bethesda, MD 20814-4799
301.295.9465 elewis@usuhs.mil

Signature of Research Subject

I have read all the information provided above. I have been given an opportunity to ask questions, and all of my questions have been answered to my satisfaction. I state that I am at least 18 years of age and I wish to participate in the program of research described above. I have been given a copy of this form.

Printed Name of Study Participant: __________________________________________

Signature of Study Participant: __________________________________________

Date: ___________________________________________________________________

Signature of Witness
My signature as witness certifies that the subject signed this form in my presence as her voluntary act and deed.

Name of Witness: __________________________________________

Signature of Witness: __________________________________________

Date: __________________________________________________________________
(same as subject’s)
APPENDIX D: Information Paper for Potential Co-Investigators

Study: CD-ROM Technology to Increase Appropriate Self-Care and Preventive Behaviors Among Enlisted Army and Navy Women

Background

The project “CD-ROM Technology to Increase Appropriate Self-Care and Preventive Behaviors Among Army and Navy Women” was funded as part of the Defense Women’s Health Initiative. The purpose of the study is to study and address the reproductive health education needs of enlisted women. Not only is the ability of each female soldier to protect and control her reproductive health essential to military readiness, it is important for these women’s quality of life.

We are currently developing the intervention as well as preparing for the efficacy study. Preparations for the efficacy study include 1) identifying co-investigators at Washington DC area installations to help coordinate field testing of the application, and 2) developing evaluation instruments.

Intervention Design and Development

The overall goal of the intervention is to promote military readiness by enhancing enlisted women’s self-care and care-seeking behavior for their reproductive health.

The key goals of the intervention are:

- to increase understanding of reproductive health,
- to increase their ability to be assertive and responsible for their health and well-being
- to increase communication skills, and
- to increase appropriate reproductive health care seeking.

Flowchart of Program Structure
Preventive Maintenance: An Interactive Manual for Active Duty Females
Efficacy Study

The intervention will be tested at the medical facilities in the Washington DC metropolitan area where military women, regardless of service, are likely to go (Walter Reed, Naval Hospital, and Malcolm Gro). However, equivalent numbers of women in the Army, Navy, and Air Force will be recruited for participation in the study. Women will be randomized into experimental and control conditions upon arrival at their annual examination that will allow us to examine the outcome measures by intervention. The experimental group will use the intervention and the control group will receive usual care. Subjects will complete a knowledge-attitudes-practices (KAP) survey pre-intervention and post-intervention, and data collection will take place for approximately 6 months.

<table>
<thead>
<tr>
<th>EXPERIMENTAL</th>
<th>CONTROL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Army/</td>
<td>R Y₀ X Y₁</td>
</tr>
<tr>
<td>Navy/</td>
<td>R Y₀ ~X Y₁</td>
</tr>
<tr>
<td>Air Force</td>
<td></td>
</tr>
</tbody>
</table>

X=intervention, ~X=no intervention, Y₀=pre-measure, Y₁=post-measure

Role of Co-Investigators

In order to conduct the efficacy test, we need the assistance of military medical care providers working in the facilities where we will recruit enlisted women. As a Co-Investigator, the clinician will be asked to assist us in the following activities:

- Facilitating IRB clearance at the medical facility.
- Retaining a private/semi-private area in which to set up computer equipment at the medical facility.
- Helping to recruit enlisted women into the study, either women attending medical visits or volunteers.
- Facilitating access to the military medical facility for research assistants.

We can make a member of the research team available to manage data collection from subjects prior to and following the intervention via a paper and pencil questionnaire, or the Co-Investigator can assign staff to assist in this process. Whoever manages data collection will also have to randomize the research participants to experimental or control conditions and introduce experimental participants to the computer application.

No personal information will be gathered on the computer. However, user profiles and how they used the system will be gathered in a download file to be collected at the end of the day on a computer disk. The Co-Investigator may be asked to collect the download file occasionally.

Co-Investigators will be acknowledged on any publications or presentations resulting from the efficacy test. They will also be invited to review publications, and they will be included as a co-author on those publications they review.
Appendix E: Presentation to Inform Potential Co-Investigators

ROM Technology to Increase Appropriate Self-Care Behaviors Among Enlisted Women

Information for Potential Co-Investigators

Evelyn L. Lewis, USUHS, Military PI
Nancy L. Atkinson, U-Maryland, Civilian PI

Background

Defense Women's Health Initiative project

Reproductive health priority areas:
- Sexually transmitted diseases (STDs)
- Unintentional pregnancy
- Vaginal infections and urinary tract infections

Objectives
- To assess the most pressing reproductive and gynecological self-care education needs of enlisted women on base and in the field.
- To assess the current health education efforts for enlisted women.
- To address the reproductive health education needs of enlisted females.

Overview

Primary study population:
- Enlisted women in the Army, Navy, and Air Force

Needs Assessment

Secondary Analysis
- 1995 DoD Survey of Health Related Behaviors among Military Personnel
- Examined STDs, pregnancy, Pap test screening, helpfulness of military health education

Focus Groups
- Navy and 2 Army Medical Centers
- Married and single enlisted women, military physicians, military nurse practitioners, and physician assistants.

Surveys
- Military clinicians & chiefs of service

Intervention Design & Development

Overall goal:
- To promote military readiness by enhancing enlisted women's self-care and care-seeking behavior for their reproductive health.

Key goals:
- Increase understanding of reproductive health,
- Increase enlisted women's ability to be assertive and responsible for their health and well-being,
- Increase communication skills, and
- Increase appropriate reproductive health care seeking.

Individualized, context-sensitive health education program for enlisted women that:
- Provides assessment, diagnostic information, and education,
- Targets environmental situations and conditions affecting behaviors, related attitudes, and knowledge,
- Facilitates access and utilization of necessary resources, and
- Preventive care.

Uses experienced peers as role models,
- Models positive health behavior and skills.
Appendix E: Presentation to Inform Potential Co-Investigators

Intervention Design & Development

- Multimedia CD-ROM
- Key messages:
  - Taking responsibility for maintaining your health and physical fitness is an important key to being an effective, productive member of your unit and serving your country.
  - Take action now to protect and maintain your reproductive health.

Efficacy Study

- How:
  - Randomized into experimental and control conditions.
  - Individuals in both groups will fill out pre-intervention questionnaires.
  - Experimental participants will use the intervention for about 30 min.
  - Individuals in both groups will complete post-intervention questionnaires.

Role of Co-investigators

- Assistance from research team
  - CD-ROM capable computer
  - Data collectors
- Benefits
  - Acknowledgement on publications
  - Co-author on publications to which they contribute

For further information

Joselyn L. Lewis, MPH
Military PI
Uniformed Services University of the Health Sciences
Bethesda, Maryland
410-285-9465
joselyn.lewis@usuhs.mil