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Assessing the Efficacy of a CDSS for Breast Cancer

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The four-year project will develop and test a computer-based decision support system (CDSS) on breast cancer for low-income women who speak English or Spanish. The population that will be included in the study include predominantly African American and Hispanic women. Hispanic women will include a high proportion who speak only Spanish and have only limited English proficiency. Delivery of the educational message will involve use of CD-ROM technology and a personal computer to provide for an interactive learning experience. A unique feature of the project will be the use of decision analysis techniques to assess the effectiveness of the CDSS program in facilitating treatment choices that are most likely to lead to outcomes preferred by patients. The application of decision analysis methods will involve generation of patient-specific utilities that can be plugged into the analytical model for the purpose of comparing descriptive choices--those actually made by women with early stage breast cancer--against prescriptive choices--those that are determined to result in preferred outcomes for an individual patient as determined from application of the modeling program.

Breast Cancer, computer-based decision support, decision-making, breast conserving surgery

Unclassified

Unclassified

Unclassified

Unclassified

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INTRODUCTION

Title Research Study: Assessing the Efficacy of a CDSS for Breast Cancer

The purpose of this project is to develop a computer-based decision support system for breast cancer treatment. This program will enhance understanding among low-income women who are diagnosed with breast cancer about the nature of the disease, the treatment options available to them, and the outcomes that are likely to result from selection of a specific treatment option. The CDSS will be developed in a manner that facilitates understanding by women from a range of educational backgrounds, including women with low literacy levels who may have difficulty with information presented in standard print formats. This will be accomplished by: (1) providing information in a variety of formats, including video clips, photo novellas, and voice-over narration of material included in the program; and (2) engaging women in culturally and linguistically appropriate interactive learning activities. The information will be provided in either English or Spanish formats using everyday, non-technical language. A unique feature of the project will involve generation of patient-specific preferences (utilities), that can be “plugged” into a decision analysis model. A unique feature of the project will involve generation of patient-specific preferences (utilities), which can be used in a decision-analytic model to determine the optimal treatment strategy based on a patient’s personal preferences for the outcomes.
This section describes the research accomplishments associated with each Task as outlined in the approved Statement of Work.

**PRIOR REPORTING PERIOD (YEAR 1)**

During the previous reporting period (Project Year 1), we fully completed Tasks 1, 2, 3 and 5, and we began activities for completing Tasks 4, 6 and 7.

**Task 1. Develop Markov decision analytic model**

An initial step in this study was to develop the decision analytic model for early breast cancer. To accomplish this we reviewed and adapted breast cancer decision analysis trees previously published. With that information, we convened our Expert Advisory Panel and developed breast cancer treatment decision trees by early breast cancer stage (Stage I, IIA, IIB and IIIA). These decision trees were used to develop the final decision analytic model and to aid in structuring the presentation of the CDSS program. All baseline values for the decision-analytic model were obtained from published literature: randomized trials, cohort studies and meta-analyses. We performed a MEDLINE search to include the years 1989 - 1999 with key words “early breast cancer”, “breast conservative surgery (BCS)”, “mastectomy”, “tamoxifen”, “risk”, and “outcome” and carefully selected relevant literature.

A Markov model has been developed to compare five strategies: Breast Conservative Surgery with radiotherapy (BCS), BCS with tamoxifen (TMX), Modified Radical Mastectomy (MRM), MRM with TMX, and TMX only. All probabilities and relative risks were integrated across studies and estimated mean and standard error using inverse variance weighted meta-analysis. All transition probabilities were calculated from the cohort rate according to the DEALE (declining exponential approximation of life expectancy) method. Thus, the decision model (Deliverable 3) was finalized and it was used to pilot test utility assessment data that was collected.

**Task 2: Identify and develop the outcome states for the utility assessment program**

We had proposed to assess breast cancer treatment utilities using two methods: linear scaling and time trade-off. After meeting with our Expert Advisory Panel, it was decided that we would assess utilities using only the linear scaling method. The decision was based on consideration of our target population (i.e. women with a newly diagnosed breast cancer) and the objectives of the study. Six outcome states were identified for assessment: modified radical mastectomy, lumpectomy, no treatment, radiation, chemotherapy, and Tamoxifen. With guidance of our breast cancer content experts, we developed descriptions of the outcome states written at a third-grade reading level. Once developed, the outcome state descriptions were translated from English into Spanish. Once both English and Spanish versions of the outcome states were completed, we pilot tested them with 20 patients (English and Spanish-speaking). All of the testing sessions were tape recorded to aid us in summarizing the information. Based on the pilot test results the descriptions were revised and the final outcome states scripts were completed (Deliverable 1).

**Task 3: Produce and test the computer program for utility assessment**

Once Task 2 above had been completed, the outcome state descriptions were used to develop portions of the program script. For the purpose of measuring utilities using linear scaling, the concept of using a “Health Ruler” was developed by the research team. The health ruler “looks” like a measuring tape with measurement marks that range from 0 to 20 (zero indicates poor health or death; and 20 indicates perfect health). This
approach to utility measurement was chosen in order to provide our target population with a concept with which they were familiar. The patient uses this ruler to rank each of the health states using this ruler. The rank values from the health ruler will then be transformed to utility values (range 0 to 1) for use in the decision-analytic model.

At the start of the assessment program, the patient is asked to respond to some initial patient information (entry parameters). This information is used to tailor the program to the individual patient (e.g. language of preference—English or Spanish; ethnicity). This program utilizes a novel approach for utility assessment by using dramatized scenes (i.e. video segments) to introduce the patient to the topic and provide her with a familiar environment for responding. From the video segments, the patient is introduced to a training section and to the actual measurement of the outcome states. The training section provides the patient an opportunity to practice using the “Health Ruler.” In the next section, the patient ranks the outcome states using the ruler. For presentation purposes, the six outcome states were divided into two sets: 1) Initial surgery decision (mastectomy, lumpectomy, no treatment); and 2) Adjuvant Therapies (radiation, chemotherapy, and tamoxifen). After each set is presented, the patient has the opportunity to change the ranking of her responses using the health ruler.

For producing the computer-based utility assessment program, we developed a frame-by-frame script, designed skeleton screen layouts, developed storyboards for a prototype, and began gathering media assets to conform to the script. With the exception of the some voice over audio files and some video segments, most of the media pieces were already produced for the CDSS program. Then, we developed, tested and refined the prototype in-house. Once the prototype was refined, we integrated other segments of the program and developed the program for beta testing (Deliverable 4).

**Task 4: Pilot test (beta test) the utility assessment and knowledge test**

We pilot tested the utility assessment program, developed in Task 3 above, and the knowledge test at the Breast Pathology Clinic at Ben Taub General Hospital. In preparation for this pilot, and with the assistance from our Expert Advisory Panel, we revised the knowledge test that was originally proposed (Chapman, Elstein, Kostbade, 1995). This revision was necessary since some of the items on breast cancer information were not applicable to the educational intervention we are developing. The revised knowledge test contained 30 items including questions about mastectomy, lumpectomy/breast conserving surgery, no treatment, radiation therapy, chemotherapy, Tamoxifen, and life after treatment. Once the English version of the test was developed, it was translated into Spanish, and both copies were readied for pilot testing.

The procedures for pilot testing the utility program and knowledge test were established and were followed carefully by the Case Manager who enrolled and assisted patients for this pilot test at the clinic. Once a patient was identified as a possible participant, she was provided information about the project, given informed consent forms to sign, and asked to complete the knowledge test. After the patient had completed the knowledge test, she was asked to test the utility assessment program. The pilot test included 60 patients (30 English-and 30 Spanish-speaking patients). No major problems were observed while testing the utility assessment program. Once the pilot was completed, the plan was to refine and finalize the utility assessment program based on pilot results (Deliverable 5). We will also use the results to norm both the utility assessment program and the knowledge test. The completion of Deliverable 5 was accomplished early in the current reporting period (April 13, 1999 – April 12, 2000) described in a section below.

**Task 5: Interview patients to identify pertinent content for the CDSS**

In order to identify pertinent content for the CDSS from the patient’s perspective, we interviewed a total of 50 English- and Spanish-speaking patients from the General Medicine Clinic at Ben Taub General Hospital. This
tāsk was conducted early in the project year in order to include the findings into the content of the CDSS program. The interviewer asked the patients questions about the breast cancer treatment options, which were to be covered in the CDSS program: modified radical mastectomy, lumpectomy, radiation therapy, chemotherapy, Tamoxifen, and receiving no treatment. A Patient Interview Script Form was developed for use during the interview. The interviews were all audio taped to aid in summarizing the patient’s responses. A visual aid with a matrix describing the treatment options was used by the Case Manager to aid her presentation of the material to the patient.

Results from the patient interviews were summarized into areas of concern within each of the treatment options tested (Deliverable 2). We then selected the concerns that occurred most often in each of the treatment options and included them into the descriptions used in the CDSS program. We found some similarities and some differences in concerns according to the age of the woman (younger than 50 years of age, or older than 50). For example, conserving the breast in a lumpectomy was mentioned more frequently by younger women than older women. We observed similar concerns between the English- and Spanish-speaking women.

**Task 6: Produce the CDSS for clinical trials**

We initiated and continued production of the CDSS program. Production of the CDSS for the clinical trials began from the first month of this project. Some of the activities for production included:

1) Structuring the CDSS program using the CDSS decision trees for early stage breast cancer (Stage I, IIA, IIB, and IIIA) developed in Task 1 above, to organize the information, and drawing on cancer related literature and content experts to developed descriptions in the CDSS (See Appendix A - CDSS Program Flowchart).

2) Convening with the Expert Content Panel several times during production to present program structure descriptions, to review program scripts at various stages of development, and to define information parameters for entry into the program.

3) Designing the interactive and skeleton design of the program.

4) Developing the complete frame-by-frame script and storyboards for a prototype.

5) Producing and gathering multimedia assets to incorporate into the program (i.e. video, stills, graphics, audio, music)

6) Developing an in-house prototype.

7) Pilot testing the prototype with 10 patients (English and Spanish speakers)

8) Used the refined prototype to create one complete path of the program, integrating multimedia assets.

9) Pilot testing a completed program path with 10 patients (English and Spanish speakers)

10) Using the pilot tested results to refine the program and complete the other program paths in the following reporting year.

**Task 7: Prepare study components to be used in clinical trials**
In preparation for the start of the clinical trials, we:

1) began formalizing the protocol to be followed during the trial at the Breast Pathology Clinic at Ben Taub Hospital;
2) built a kiosk to house the computer that will contain the CDSS and Utility Assessment programs, in addition to other peripherals (i.e., printer);
3) transported and installed the kiosk at the Breast Pathology Clinic at Ben Taub Hospital; and
4) informed the staff at the Breast Pathology Clinic about the activities that will take place during the trial.

**CURRENT REPORTING PERIOD (YEAR 2)—Tasks Fully or Partially Completed**

During the current reporting period (Project Year 2—April 13, 1999 through April 12, 2000), we fully completed Tasks 4, 6 and 7, and we have began activities for completing Task 8 which will be accomplished in the next two reporting periods (Years 3 and 4).

**Task 4: Pilot test (beta test) the utility assessment and knowledge test**

During the current project year we finalize pilot testing the computerized utility assessment program and the knowledge test. Using the pilot test results, we made refinements and finalized both, the knowledge test and the utility assessment program (Deliverable 5).

**Measure of Breast Cancer Knowledge**

We developed a 28-item, fixed response questionnaire to assess patients’ knowledge of breast cancer treatment. Items were identified for each of the following treatment modalities: modified radical mastectomy, lumpectomy, no treatment, radiation therapy, chemotherapy, and tamoxifen. Items were also developed to measure knowledge about quality of life after treatment. Response options were “yes,” “no,” and “not sure.” Two additional questions assessed the patient’s breast cancer history.

Table 1 presents item analyses of the 28-item measure, from a pilot sample of 90 patients—59 from the Breast Pathology Clinic and 31 from the General Medicine Clinic from Ben Taub General Hospital. In general, the measure performed well and should provide a sensitive measure of change in knowledge after the CDSS intervention. The internal consistency reliability of the entire instrument was very good, with a coefficient of .85. The four tamoxifen items were the most difficult, with fewer than 20% of the subjects answering a question correctly. In contrast, the no treatment questions had the lowest item difficulty and item discrimination. These items have been reworded and we have added an additional item to offer better discrimination. (See Appendix B—Breast Cancer Treatment Questionnaire [English and Spanish versions])

**Utility Assessment Program**

A unique aspect of this study is the comparison of women’s choices for breast cancer treatment (“descriptive decisions”) with the optimal treatment strategy suggested by a clinical decision-analytic model (“prescriptive decisions”). The use of decision analysis in this study requires that we have some measure of the patient’s preferences for the possible treatment and outcome states.

Category scaling is a technique whereby a subject’s preferences for a given health state are evaluated relative to perfect health or death. We used the metaphor of a “health ruler,” represented as a cloth ruler used in sewing, to depict the range of evaluations someone might use when considering a treatment state. Descriptions of six
Table 1: Item-Analyses of Breast Cancer Treatment Knowledge Questionnaire: 90 Subjects from Pilot Study

<table>
<thead>
<tr>
<th>Question Number and Name</th>
<th>Item Difficulty* (%)</th>
<th>Item Discrimination**</th>
<th>Item-Total Correlation</th>
<th>Percent “Not Sure”</th>
<th>Percent Missing</th>
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<td>.39</td>
<td>65.6</td>
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<td>Question Number and Name</td>
<td>Item Difficulty* (%)</td>
<td>Item Discrimination**</td>
<td>Item-Total Correlation</td>
<td>Percent “Not Sure”</td>
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<td>28. AFTT3</td>
<td>25.8</td>
<td>.52</td>
<td>.46</td>
<td>62.2</td>
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</tbody>
</table>

Note. Internal consistency reliability = .85
* Item Difficulty is percent of subjects answering question correctly.
** Item Discrimination is difference between proportion of correct responses to item for subjects in the upper quartile of total scale score, and the same proportion in subjects from lower quartile of scale score.
treatment states were developed as part of the CDSS program. A sample of 59 women then completed the utility assessment program and provided their preferences for the health states, including the option of no treatment. Table 2 provides descriptive statistics for the category scaling scores, where 0 is "death" and 20 is "perfect health."

As the table shows, subjects rated the No Treatment state as worst, followed by Modified Radical Mastectomy and Chemotherapy. These rankings suggest that the category scaling approach is providing valid preferences, and that there is some variability in subjects' preferences for these health states.

Based on the pilot test results we also made some program design refinements, primarily to the program interface design, in order to make the program easier to use and navigate. (See Appendix C – Sample Screens—Utility Assessment Program and Utility Program Flowchart)

<table>
<thead>
<tr>
<th>Treatment State</th>
<th>Percentile</th>
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<tr>
<td></td>
<td>25th</td>
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<tr>
<td>1. No Treatment</td>
<td>0.0</td>
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<td>2. Modified Radical</td>
<td>3.0</td>
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<tr>
<td>Mastectomy</td>
<td></td>
</tr>
<tr>
<td>3. Chemotherapy</td>
<td>5.0</td>
</tr>
<tr>
<td>4. Tamoxifen</td>
<td>5.0</td>
</tr>
<tr>
<td>5. Radiation Therapy</td>
<td>9.0</td>
</tr>
<tr>
<td>6. Lumpectomy</td>
<td>10.0</td>
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<tr>
<td>7. All treatments</td>
<td>10.0</td>
</tr>
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</table>

Scores range from 0 "death" to 20 "perfect health."

Task 6: Produce the CDSS for clinical trials

During the current project period we finalized production of the CDSS program (Deliverable 6). We beta tested the complete version of the program with 10 patients (English and Spanish speakers) and made final revisions. We are currently readying the program for clinical trials. Development of this program turned out to be a more complex task than we had anticipated, taking all of project year two to complete the program. The personalized (i.e. ethnicity) and interactive features of the program, as well as the language option for viewing the program (English and Spanish) and personalization by the stage of breast cancer diagnosis (i.e. Stages I, IIA, IIB, or IIIA) introduced great complexity to the design, production of the media assets, and programming.

The CDSS is a very comprehensive decision support and educational program guiding the user through learning paths that give her thorough and important information for making a breast cancer treatment decision. The program guides the user through a series of learning modules (Interactive Learning Modules - ILMs) which eventually lead her to a decision-aid module (Module #5) to help her make an initial treatment decision. Each of the ILMs are linked to soap opera scenes which provide an appropriate context for the material presented in each of the ILMs. (See Appendix A – CDSS Program Flowchart; and Appendix D – Sample Screens – CDSS Program)
The complexity and very large size of the CDSS is highlighted by components of the program containing 174 movies and 294 casts, and by its size consuming over four gigabytes of hard drive space. We will utilize five CD-ROM disks for installing the program into the computer system which will house the CDSS for clinical trials. (See Appendix E – Listing of CDSS Movies, Casts, Members, and Cue Points)

Although production of the CDSS has taken longer than originally proposed, this delay will still allow ample time to collect the data needed during the clinical trials.

**Task 7: Prepare study components to be used in clinical trials**

We expect to begin the clinical trials within the next three to four weeks. In preparation for the start of the clinical trials, we have:

1) formalized the protocol to be followed during the trial at the Breast Pathology Clinic at Ben Taub Hospital (see Appendix F – CDSS Clinical Procedures During Trials). We also developed the following instrumentation schedule to aid us in following the protocol.

<table>
<thead>
<tr>
<th>CDSS Clinical Trials Instrumentation Schedule</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Instrument</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Breast Cancer Knowledge Questionnaire</td>
</tr>
<tr>
<td>Satisfaction with Decision Scale</td>
</tr>
<tr>
<td>Evaluation of CDSS (Intervention group only)</td>
</tr>
</tbody>
</table>

2) ascertained that the computer which contains the CDSS and Utility Assessment programs at the Breast Pathology Clinic at Ben Taub Hospital, and other computer peripherals (i.e. printer) are in working order;
3) supplied the computer kiosk, which houses the CDSS, with additional supplies (i.e. additional ink cartridges and print paper)
4) prepared the informed consent forms, questionnaires and tests to be used in the trial (see Appendix B – Breast Cancer Treatment Questionnaire [English and Spanish versions]). With the assistance of our Expert Content Panel, we revised the Satisfaction with Decision Questionnaire that was originally proposed (Holmes-Rovner M, Kroll J, Schmitt N, Rovner DR, Breer L, Rother ML, Faan GP, Talarczyk G, 1996) (See Appendix G – Satisfaction with Decision Questionnaire [English and Spanish versions]) and developed an evaluation form for rating the CDSS (See Appendix G – CDSS Rating Form);
5) developed data forms which will be used by the Case Manager to recruit and track the patients during the clinical trials; (See Appendix H – CDSS Data Form and CDSS Summary Log)
6) informed the staff at the Breast Pathology Clinic about the activities that will take place during the trial.

**NEXT REPORTING PERIOD (Year 3)—Tasks to be Accomplished**

The following tasks will be accomplished during the next reporting period (Year 3):
Task 8: Conduct clinic trials of the CDSS (months 25-42) and assemble database of results (months 43-44)

We are planning on starting the clinical trials in three to four weeks. Activities that will take place during the trials period will be to:

1) Ascertain and monitor that procedures and elements for conducting the trial are in place (computer kiosk, questionnaires, informed consent forms)
2) Assign women to control or intervention groups using random process
3) Follow trial protocol with each of the 130 identified patients (65 intervention and 65 control groups) that includes:
   • Patient Encounter #1—after scheduled appointment at Breast Pathology Clinic
   • Patient Encounter #2—screening clinic prior to surgery, and
   • Six-month and one year follow-ups
5) Monitor that trial protocol is strictly followed without deviation throughout the period (See Appendix F—Clinical Procedures During Trials)
6) Assemble database of clinical trial results (Deliverable 8, month 44)

Task 9: Develop, produce (months 16-24) and pilot test (months 39-42) additional educational paths for Stages 0, IIB, and IV.

We had originally proposed to produce additional educational paths for Stages 0, IIB and IV; however, due to the complexities in developing and producing the CDSS program for the clinical trials, which we presented above (Task 6), we dedicated all our efforts and funding resources to the completion of the CDSS program. Not completing this task does not have any adverse effects on accomplishing the specific aims originally proposed for the project. These additional educational paths were going to merely provide a learning tool for women diagnosed at those stages. Our Expert Content Panel recommended that we concentrate on the development of the CDSS since tailoring information for Stages 0, IIB, and IV is a very complex issue, much too complex for a computer-base decision support system since there are too many variables to consider when counseling the patient.

OTHER REPORTING PERIODS—Tasks to be Accomplished

Task 10: Analyze and evaluate results from clinical trials (months 45-48)

We will prepare a final report to the DOD (Deliverable 9, month 48) after we have completed the analyses from the clinical trials and evaluated the results. Annual Technical Reports will be prepared and submitted interim to the final report.

Task 11: Package the refined CDSS for distribution to audiences nationally and disseminate information about its availability (months 45-48)

Once we have analyzed and evaluated the results, we will package the refined CDSS for distribution to audiences nationally and we will disseminate information about its availability (months 43-48). These activities would have begun much earlier in the project, and they will be sustained beyond the funding period. Specific activities to accomplish this task will be to:

1) Prepare the tested and refined CDSS program in a packaged format that includes appropriate
documentation to facilitate use.

2) Announce the availability of the packaged CDSS program through newsletters, journals, presentations at meetings, and posting in appropriate newsgroups on the Internet.

3) Prepare at least one major paper on the results of the project for submission to an appropriate journal (other manuscripts will have been prepared and submitted over the course of the project, reporting on completion of formative tasks).

4) Monitor interest in the program and follow-up with users to determine the value of the CDSS as a tool for facilitating treatment selection by women from diverse backgrounds.
KEY RESEARCH ACCOMPLISHMENTS

- Developed a Markov decision analytic model for early breast cancer.
- Identified and developed the outcome health states for the utility assessment program.
- Produced and pilot tested the computer program for utility assessment. (See Appendix C – Sample Screens—Utility Assessment Program and Utility Program Flowchart)
- Pilot tested the breast cancer knowledge questionnaire. (See Appendix B – Breast Cancer Treatment Questionnaire [English and Spanish versions]
- Identified content for CDSS from the patient’s perspective.
- Finalized production of the CDSS for clinical trials. (See Appendix A – CDSS Program Flowchart; and Appendix D – Sample Screens – CDSS Program)
- Prepared study components for clinical trials. (See Appendix B – Breast Cancer Treatment Questionnaire [English and Spanish versions]; Appendix F – CDSS Clinical Procedures During Trials; Appendix G – Satisfaction with Decision Questionnaire and CDSS Rating Form; and Appendix H – CDSS Data Form and CDSS Summary Log)
REPORTABLE OUTCOMES

• Poster Presentation at the “Era of Hope Department of Defense Breast Cancer Research Program Meeting” to be held in Atlanta, Georgia, June 8-12, 2000

• (Abstract In Preparation) To be presented at the 22nd Annual Meeting of the Society for Medical Decision Making, September 24-27, 2000, Cincinnati, Ohio, USA

CONCLUSIONS

To date, we have developed the decision analytic model for early breast cancer, produced, tested, and validated the utility assessment program, tested and finalized the Breast Cancer Treatment Questionnaire, have completed the CDSS program to be utilized during the clinical trials of this study, and have prepared the study components to be used in the clinical trials. The utility assessment program utilizes a novel approach for the measurement of utilities using the liner scaling method—it uses a “Health Ruler” to rank the patients’ responses to the program. In producing the CDSS program, we have learned that developing computer-based decision support systems that tailor the information to patients, and provide and interactive and friendly environment for a lower literacy user are complex and lengthy to produce—beginning with developing the decision analytic models and defining the content structure, through actually producing the multimedia paths. Similar projects should allow longer developmental time for the production of complex CDSS programs such as the one being developed in this study.

REFERENCES


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Appendix: A COMPUTER-BASED DECISION SUPPORT SYSTEM FOR BREAST CANCER TREATMENT FLOWCHART (Stages I, IIA & B, IIIA)

**START**

Introductory Frames 1

- Language of Preference: English, Spanish
- Name, Medical Record Number
- Age
- Ethnicity

**MC with a friend**

I(v)- At the Dress Shop (1A, 1B)
II(p)- At the Dress Shop
III(v)-Leaving dress shop
IV(p)- Coffee at friend’s (1C)
Scenes I-IV

**MC at home with relatives**

V(v)- In kitchen (2A&B)
VI(p)- Back to kitchen (2C&D)
Scenes V-VI

**Interactive Learning Module #1**

1A) What is cancer?
1B) Understanding breast cancer
   (implications of early detection)
1C) Misconceptions/beliefs about cancer
   (breast cancer)

**Interactive Learning Module #2**

2A) Diagnostic and staging tests - Biopsy and others - BC clinical stage (I, IIA, IIB, IIIA)
   / Size of Mass (assessment)
2B) Types of breast cancer
2C) BC preliminary clinical stage (personalized) is described
2D) Understanding diagnosis: Chance of recovery, risk factors for recurrence, stage-specific survival probabilities—no treatment, and full recommended treatment
2E) Beliefs about cancer treatments

**Interactive Learning Module #3**

3A) Assess Health Status / BCS eligibility:
   a) Anesthetic Risk and IADL
      If surgery is an option:
   b) BCS contraindications (absolute)
3B) Explore stage-appropriate "possible" treatment outcome scenarios
   a) Monopausal status assessed for stages IIA & B, IIIA
   b) Treatment options covered:
      BCS, MRM (Reconstruction), XRT, CTX,
      TMX, NO treatment, (NO surgery)
      Content: Description, risks, advantages/ disadvantages, side-effects, complications, survival probabilities, and physical and social side effects

**Interactive Learning Module #4**

4A) Life after breast cancer
   (post treatment effects)
4B) Alternative treatment methods
   (supplements: i.e. shark cartilage)

**Interactive Learning Module #5**

5A) Decision aid for evaluation / review of options (based on 3B above)
5B) "Initial" treatment decision

IADL = Activity of Daily Living Index
ALT TX = Alternative Treatment
BC = Breast Cancer
BCS = Lumpectomy
CTX = Chemotherapy
MC = Main Character
MRM = Mastectomy
NO TX = No Treatment
POST TX = Post Treatment
RECONS = Reconstruction (p) = photo sequence
RXT = Radiation (v) = video segment

<5 months later>

**MC Reflecting at Home**

VIII(p) - Reflecting and evaluating her options (5A &B)
Scenes VIII

**MC Reflecting at Home**

VIII(p) - Reflecting and evaluating her options (5A &B)
Scenes VIII

**Final Celebration**

IX(v) - Among family and friends celebrating feeling fine and so happy to have made the decisions she made
Scene IX

**END**

Patient/Provider Printouts
# Breast Cancer Treatment Questionnaire

## MASTECTOMY
- **Is mastectomy the removal of only the cancerous part of the breast?**
  - [ ] Yes
  - [ ] No
  - [ ] Unsure
- **After mastectomy, do some women have numbness and tingling of their chest or arm on the operated side?**
  - [ ] Yes
  - [ ] No
  - [ ] Unsure
- **Is the recovery period for mastectomy about 1 week?**
  - [ ] Yes
  - [ ] No
  - [ ] Unsure
- **Is chemotherapy a treatment your doctor may recommend after you have a mastectomy?**
  - [ ] Yes
  - [ ] No
  - [ ] Unsure

## LUMPECTOMY OR BREAST-SPARING SURGERY
- **After lumpectomy, also called breast-sparing surgery, is there a high chance that cancer will recur in the treated breast?**
  - [ ] Yes
  - [ ] No
  - [ ] Unsure
- **Is breast reconstruction strongly recommended after lumpectomy/breast-sparing surgery?**
  - [ ] Yes
  - [ ] No
  - [ ] Unsure
- **Is radiation therapy usually necessary after lumpectomy/breast-sparing surgery?**
  - [ ] Yes
  - [ ] No
  - [ ] Unsure
- **After a lumpectomy, is the treated breast going to feel firm or hard?**
  - [ ] Yes
  - [ ] No
  - [ ] Unsure
- **Are some of the lymph nodes in the armpit removed, regardless of which type of surgery a woman chooses (mastectomy or lumpectomy/breast-sparing surgery)?**
  - [ ] Yes
  - [ ] No
  - [ ] Unsure
<table>
<thead>
<tr>
<th>Treatment</th>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO TREATMENT</td>
<td>If a woman doesn’t get treatment for breast cancer, will the cancer stay only in the breast? Yes No Unsure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Does not getting treatment for breast cancer lead to pain and breakdown of the breast? Yes No Unsure</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>After receiving treatment for breast cancer, are women less likely to be alive after 5 years compared to those that got no treatment? Yes No Unsure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Does not getting treatment for breast cancer eventually lead to death? Yes No Unsure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RADIATION THERAPY</td>
<td>During radiation therapy, a woman gets high energy x-rays on the breast that has the cancer. Is hair loss a frequent side effect of radiation therapy? Yes No Unsure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(X-RAY OF THE BREAST)</td>
<td>During radiation therapy, will the treated area frequently look and feel like it has been sunburned (i.e. red, itchy)? Yes No Unsure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Does the entire course of radiation treatment last between 1 to 2 weeks? Yes No Unsure</td>
<td></td>
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<tr>
<td></td>
<td>Is radiation treatment given 5 times per week during the treatment period? Yes No Unsure</td>
<td></td>
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<tr>
<td></td>
<td>Does the actual radiation treatment last 2 to 3 minutes? Yes No Unsure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHEMOTHERAPY</td>
<td>Is chemotherapy taken in cycles for 4 to 6 months? Yes No Unsure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Is chemotherapy generally given in pill form? Yes No Unsure</td>
<td></td>
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<tr>
<td></td>
<td>Is nausea the most common side effect of chemotherapy? Yes No Unsure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Are the side effects from chemotherapy treated generally with medication? Yes No Unsure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAMOXIFEN</td>
<td>?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------</td>
<td></td>
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</tr>
<tr>
<td>Is hormone treatment with Tamoxifen used before menopause only?</td>
<td>Yes No Unsure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is Tamoxifen generally taken for at least 5 years?</td>
<td>Yes No Unsure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is vomiting a common side effect after taking Tamoxifen?</td>
<td>Yes No Unsure</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does Tamoxifen block the supply of estrogen to cancer cells?</td>
<td>Yes No Unsure</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>AFTER TREATMENT</th>
<th>?</th>
</tr>
</thead>
<tbody>
<tr>
<td>When all the treatment for breast cancer is finished, is it normal for a woman to feel fearful about cancer?</td>
<td>Yes No Unsure</td>
</tr>
<tr>
<td>After a woman recovers from breast cancer surgery, does she need to take special care of her hands and arms?</td>
<td>Yes No Unsure</td>
</tr>
<tr>
<td>Do most women feel weak and sick for months or years after their treatment is all over?</td>
<td>Yes No Unsure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>YOUR MEDICAL HISTORY</th>
<th>?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you had breast cancer before?</td>
<td>Yes No Unsure</td>
</tr>
<tr>
<td>Has any close relative (i.e. mother, sister) had cancer in your family?</td>
<td>Yes No Unsure</td>
</tr>
</tbody>
</table>

## Cuestionario Sobre el Tratamiento del Cáncer del Seno

<table>
<thead>
<tr>
<th>MASTECTOMÍA</th>
<th></th>
<th>?</th>
</tr>
</thead>
<tbody>
<tr>
<td>En la mastectomía, ¿Se quita solamente la parte cancerosa del seno?</td>
<td>Si No No sé</td>
<td></td>
</tr>
<tr>
<td>Después de una mastectomía, ¿Sienten algunas mujeres la sensación de entumecimiento o picazón en el pecho o en el brazo operado?</td>
<td>Si No No sé</td>
<td></td>
</tr>
<tr>
<td>¿Toma la recuperación de una mastectomía casi una semana?</td>
<td>Si No No sé</td>
<td></td>
</tr>
<tr>
<td>¿Puede recomendar su doctor la quimioterapia después de su mastectomía?</td>
<td>Si No No sé</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LUMPECTOMÍA</th>
<th>O</th>
<th>CIRUGÍA PARA CONSERVAR EL SENO</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Después de una lumpectomía, también llamada cirugía para conservar el seno, ¿Existen posibilidades altas de que el cáncer regrese al seno operado?</td>
<td>Si No No sé</td>
<td></td>
<td></td>
</tr>
<tr>
<td>¿Es la reconstrucción del seno muy recomendada después de una lumpectomía o cirugía para conservar el seno?</td>
<td>Si No No sé</td>
<td></td>
<td></td>
</tr>
<tr>
<td>¿Es necesaria la terapia de radiación después de una lumpectomía o cirugía para conservar el seno?</td>
<td>Si No No sé</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Después de una lumpectomía, ¿Se sentirá el seno operado firme o duro?</td>
<td>Si No No sé</td>
<td></td>
<td></td>
</tr>
<tr>
<td>¿Se quitan algunos de los nódulos linfáticos de la axila (debajo del brazo), en cualquier tipo de cirugía que la mujer escogió (mastectomía o cirugía para conservar el seno)?</td>
<td>Si No No sé</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NO TRATAMIENTO</strong></td>
<td><strong>¿Si una mujer no obtiene tratamiento para el cáncer del seno, ¿Se quedará el cáncer solo en su seno?</strong></td>
<td><strong>Sí</strong></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Sí</strong></td>
<td><strong>No</strong></td>
<td><strong>No sé</strong></td>
</tr>
<tr>
<td></td>
<td><strong>¿Si uno no obtiene tratamiento para el cáncer del seno, ¿Podrá esto causar dolor y deterioro en el seno?</strong></td>
<td><strong>Sí</strong></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td></td>
<td><strong>¿Después de tener tratamiento para el cáncer del seno, tienen las mujeres menos posibilidades de estar vivas después de 5 años a comparación a mujeres que no tuvieron tratamiento?</strong></td>
<td><strong>Sí</strong></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Si uno no obtiene tratamiento para el cáncer del seno, ¿Podrá esto llegar a la muerte?</strong></td>
<td><strong>Sí</strong></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td><strong>TERAPIA DE RADIACIÓN</strong></td>
<td><strong>Durante la terapia de radiación, se reciben rayos-x de alta intensidad sobre el seno que tiene cáncer. ¿Es la pérdida del cabello un efecto secundario frecuente de la terapia de radiación?</strong></td>
<td><strong>Sí</strong></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td><strong>(RAYOS-X DEL SENO)</strong></td>
<td><strong>Durante la terapia de radiación, ¿Se sentirá y verá el área tratada frecuentemente, como si estubiese quemada por el sol (rojiza y con picazón)?</strong></td>
<td><strong>Sí</strong></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td></td>
<td><strong>¿Durará el tratamiento completo de radiación entre 1 y 2 semanas?</strong></td>
<td><strong>Sí</strong></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Durante el periodo de tratamiento, ¿Se da la terapia de radiación 5 veces por semana?</strong></td>
<td><strong>Sí</strong></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td></td>
<td><strong>¿Dura el momento de la radiación misma de 2 a 3 minutos?</strong></td>
<td><strong>Sí</strong></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td><strong>QUIMIOTERAPIA</strong></td>
<td><strong>¿Se toma la quimioterapia en ciclos por 4 a 6 meses?</strong></td>
<td><strong>Sí</strong></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td></td>
<td><strong>¿Se toma la quimioterapia generalmente en una pastilla?</strong></td>
<td><strong>Sí</strong></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td></td>
<td><strong>¿Es la náusea el efecto secundario más común de la quimioterapia?</strong></td>
<td><strong>Sí</strong></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td></td>
<td><strong>¿Son generalmente tratados con medicamentos los efectos secundarios de la quimioterapia?</strong></td>
<td><strong>Sí</strong></td>
<td><strong>No</strong></td>
</tr>
<tr>
<td>TAMOXIFEN</td>
<td>¿Se usa el tratamiento hormonal con Tamoxifen solo antes de la menopausia?</td>
<td>Sí</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>¿Se toma Tamoxifen generalmente por lo menos por 5 años?</td>
<td>Sí</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>¿Es el vómito un efecto secundario común después de tomar Tamoxifen?</td>
<td>Sí</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>¿Es el Tamoxifen el que no deja que el estrógeno llegue a las células cancerosas?</td>
<td>Sí</td>
<td>No</td>
</tr>
<tr>
<td>DESPUÉS DEL TRATAMIENTO</td>
<td>Cuando se ha terminado el tratamiento para el cáncer del seno, ¿Es normal que una mujer se sienta con miedo del cáncer?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Después que una mujer se recupera de la cirugía para el cáncer del seno, ¿Debe de mantener un cuidado especial de sus manos y brazos?</td>
<td>Sí</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Cuando ya han terminado todo su tratamiento, ¿Se sienten la mayoría de las mujeres débiles y enfermas por meses y años después?</td>
<td>Sí</td>
<td>No</td>
</tr>
<tr>
<td>SU HISTORIA MÉDICA</td>
<td>¿Ha tenido usted cáncer del seno?</td>
<td>Sí</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>¿Ha tenido cáncer del seno algún familiar cercano (madre, hermana)?</td>
<td>Sí</td>
<td>No</td>
</tr>
</tbody>
</table>

Chemotherapy

Resumen
¿Algún Cambio?
APPENDIX C: UTILITY ASSESSMENT ("Preference Ranking") PROGRAM FLOWCHART

**START**

**Introductory Frames**
- scene 1

**Enter Initial Patient's Parameters**
- Language of Preference: English, Spanish
- Name, Medical Record Number
- Age
- Ethnicity

**MC talks to viewer**
- Describes program
- Introduces training segment (health ruler concept)
- scenes 2A-2B

**Health Ruler - Training**
- Introduction
- Blindness in Two Eyes Example
- Blindness in One Eye Example
- Evaluation of Responses

(GUIDED viewing)
(Personalized area—ethnicity and language)

**MC talks to viewer**
- Introduces measurement segment - BC treatment options
- scene 3

**Ranking of Breast Cancer Treatment Outcomes**

**Outcomes States Measurement**
- Linearly present the six outcome states to be measured in two sequences:
  - MRM, BCS, NO Treatment
  - Radiation, Chemotherapy, Tamoxifen

- Patient ranks each outcome state
- Patient has opportunity to change responses once all outcome states have been completed.

**Overall Health State Measurement**
- Pt measures on the health ruler how she thinks she would feel after completing BC treatment.

(GUIDED viewing)
(Personalized area—ethnicity and language)

**MC talks to viewer**
- Thanks patient for participating.
- scene 4

**END**

---

**Character Scenes**

BC = Breast Cancer
MC = Main Character
BCS = Breast Cancer Segment
MRM = Mastectomy
M = Mastectomy
Scene IV of the main story presented in the African-American, English, older woman path which links to Interactive Learning Module I

Educational frame presented in the Spanish version of Interactive Learning Module I for learning facts about cancer
Making A Diagnosis

Educational frame in Interactive Learning Module 2 for learning about the process of making a breast cancer diagnosis.

Aprendiendo Acerca de Sus Opciones Para Tratamiento

Educational frame presented in the Spanish version of Interactive Learning Module 3 for learning about her breast cancer treatment options.
<table>
<thead>
<tr>
<th>Page 3 of 14</th>
<th>CDSS Movies, Casts, Members, and Cue Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>23: Type and Stage (richText)</td>
<td>2: 7327 Cue 2</td>
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<td>24: Growth of Cancer (richText)</td>
<td>3: 11716 Cue 3</td>
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<td>1: Question (richText)</td>
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<td>3: (richText)</td>
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<tr>
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<td>4: M2 E, L037 NO (sound)</td>
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<tr>
<td>21: (richText)</td>
<td>5: (richText)</td>
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<tr>
<td>22: RecoveryHeading (richText)</td>
<td>6: M2 E, L037 YES (sound)</td>
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Appendix: E

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CDSS Movies, Casts, Members, and Cue Points
### CDSS Movies, Casts, Members, and Cue Points

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<td>M3A E. L046</td>
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</table>

Page 6 of 14
1) m3b23AC cst (3 members)
   1. (richText)
2) M3B E, L067A, I, BCS (sound)
   3. P022 (sound)
2) m3b23AD cst (3 members)
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1) m3b24IE cst (9 members)
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   12. M3B E, L070 I BCS (sound)
   13. M3B E, L071 I BCS (sound)
   14. M3B E, L072 I BCS (sound)
   15. M3B E, L073 I BCS (sound)
   16. M3B E, L074 I BCS (sound)
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2) M3B S, L068 STG I BCS (sound)
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   12. M3B S, L070 STG I BCS (sound)
   13. M3B S, L071 STG I BCS (sound)
   14. M3B S, L072 STG I BCS (sound)
   15. M3B S, L073 STG I BCS (sound)
   16. M3B S, L074 STG I BCS (sound)
46. m3b24a.dm
47. m3b25.body.dir
48. m3b25dryskin.dir
49. m3b25filmr.dir
50. m3b25offrirs.dir
51. m3b25xskinrms.dir
52. m3b26.dm
1) m3b26IT cst (5 members)
   1. (richText)
2) M3B E, L064 I BCS (sound)
   3. P022 (sound)
   4. (richText)
5) M3B E, L085 I BCS (sound)
2) m3b26ID cst (5 members)
   1. (richText)
2) M3B S, L084 STG I BCS (sound)
   3. P022 (sound)
   4. (richText)
5) M3B S, L095 STG I BCS (sound)
53. m3b26L.dm
1) m3b26LIE cst (7 members)
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2) (richText)
3) (richText)
6) M3B E, L085L, I, BCS (sound)
7) M3B E, L096R, I, BCS (sound)
8) M3B E, L084 I BCS (sound)
9) M3B E, P022 NEW (sound)
2) m3b26IS cst (7 members)
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2) (richText)
3) (richText)
6) M3B E, L085L, I, BCS (sound)
7) M3B S, L096L, I, BCS (sound)
8) M3B S, L084 STG I BCS (sound)
9) M3S S, P022 (sound)
54. m3b26m.dm
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2) (richText)
3) (richText)
6) M3B E, L085M, I, MRM (sound)
7) M3B E, L096M, I, BCS (sound)
8) M3B E, L084 I BCS (sound)
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2) (richText)
3) (richText)
6) M3B S, L085M, I, MRM (sound)
7) M3B S, L096R, I, BCS (sound)
8) M3B S, L084 STG I BCS (sound)
55. m3b27.dm
56. m3b31.dm
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   1. 6221 Cue 1
2) m3b31E cst (7 members)
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60. m3b34a.dm
61. m3b36.dm
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   11. M3B E, L115 I BCS (sound)
   12. M3B E, L116 I BCS (sound)
   13. M3B E, L117 I BCS (sound)
   14. M3B E, L118 I BCS (sound)
   15. M3B E, L119 I BCS (sound)
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   12. M3B S, L116 STG I BCS (sound)
   13. M3B S, L117 STG I BCS (sound)
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62. m3b36A.dm
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   3. P022 (sound)
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   2) M3B S, L112A (sound)
   3. P022 (sound)
   4. P031 (sound)
   5) M3B S, L146, I, BCS (sound)
63. m3b36B.dm
64. m3b38.dm
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   12. M3B E, L143 I BCS (sound)
   13. M3B E, L144 I BCS (sound)
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   11. M3B S, L142 STG I BCS (sound)
   12. M3B S, L143 STG I BCS (sound)
   13. M3B S, L144 STG I BCS (sound)
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   3. (richText)
   4. (richText)
   5. (richText)
   6. (richText)
   7. (richText)
   8. (richText)
   9. BCSTest (bitmap)
   10. MRUList (bitmap)
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3) m3b40IS cst (5 members)
   1. M3B S, L147 I BCS (sound)
   2. M3B S, L147A, I, MRM (sound)
3: M33 S, P021 (sound)
  23: M33 E, L147 I BCS (sound)
  24: M33 E, L147A, I, MRM (sound)
4) m3b041.cst (9 members)
  3: (richText)
  4: (richText)
  5: (richText)
  6: (richText)
  7: (richText)
  8: (richText)
  9: BCMText (bitmap)
  10: MRMText (bitmap)
  17: (richText)
66. m3b41.dir
1) m3b41.cst (4 members)
   1: (richText)
   2: M33 E, L149 I BCS (sound)
   3: P022 (sound)
   4: M33 E, L148 I MRM (sound)
2) m3b41s.cst (4 members)
   1: (richText)
   2: M33 S, L149 STG I MRM (sound)
   3: M33 S, P022 (sound)
   4: M33 S, L148 I MRM (sound)
67. m3b42.dir
1) m3b42IE.cst (10 members)
   1: (richText)
   2: M33 E, L149 I BCS (sound)
   10: IssueList (field)
11: M33 E, L150 I BCS (sound)
12: M33 E, L151 I BCS (sound)
13: M33 E, L152 I BCS (sound)
14: M33 E, L153 I BCS (sound)
15: M33 E, L154 I BCS (sound)
16: M33 E, L155 I BCS (sound)
17: M33 E, L156 I BCS (sound)
2) m3b42S.cst (10 members)
   1: (richText)
   2: M33 S, L149 STG I MRM (sound)
   10: IssueList (field)
11: M33 S, L150 STG I BCS (sound)
12: M33 S, L151 I MRM (sound)
13: M33 S, L152 I MRM (sound)
14: M33 S, L153 I MRM (sound)
15: M33 S, L154 I MRM (sound)
16: M33 S, L155 I MRM (sound)
17: M33 S, L156 I MRM (sound)
68. m3b43.s.
1) m3b43IE.cst (9 members)
   1: (richText)
   2: M33 E, L165 I BCS (sound)
   4: M33 E, L171 I BCS (sound)
10: IssueList (field)
11: M33 E, L166 I BCS (sound)
12: M33 E, L167 I BCS (sound)
13: M33 E, L168 I BCS (sound)
14: M33 E, L169 I BCS (sound)
15: M33 E, L170 I BCS (sound)
2) m3b43IS.cst (9 members)
   1: (richText)
   2: M33 S, L165 I MRM (sound)
   4: M33 S, L171 I MRM (sound)
10: IssueList (field)
11: M33 S, L166 I MRM (sound)
12: M33 S, L167 I MRM (sound)
13: M33 S, L168 I MRM (sound)
14: M33 S, L169 I MRM (sound)
15: M33 S, L170 I MRM (sound)
69. m3b45a.dir
1) m3b45aIE. (3 members)
   1: M33 E, E171 I BCS (sound)
   2: M33 E, P022 NEW (sound)
   3: (richText)
2) m3b45ais. (3 members)
   1: M33 S, L172 I BCS (sound)
   2: M33 E, P022 (sound)
   3: (richText)
70. m3b45b/dir
1) m3b45bIE. (17 members)
   1: M33 E, L173 I BCS (sound)
   2: M33 E, L174 I BCS (sound)
   3: M33 E, L175 T BCS (sound)
   4: M33 E, L176 I BCS (sound)
   5: M33 E, L177 I BCS (sound)
   6: M33 E, L178 I BCS (sound)
   7: M33 E, L179 I BCS (sound)
   10: saves most (richText)
   11: radio treatment (richText)
   12: entire removed (richText)
   13: make new breast (richText)
   14: risk of returning (richText)
   15: Length of life (richText)
   16: M33 E, P025 (sound)
   17: M33 E, P027 (sound)
   18: M33 E, P028 (sound)
   19: M33 E, L171 I BCS (sound)
2) m3b45bIS. (17 members)
   1: M33 S, L173 I BCS (sound)
   2: M33 S, L174 I BCS (sound)
   3: M33 S, L175 T BCS (sound)
   4: M33 S, L176 I BCS (sound)
   5: M33 S, L177 I BCS (sound)
   6: M33 S, L178 I BCS (sound)
   7: M33 S, L179 I BCS (sound)
   10: saves most (richText)
   11: radio treatment (richText)
   12: entire removed (richText)
   13: make new breast (richText)
   14: risk of returning (richText)
   15: Length of life (richText)
   16: M33 S, P025 (sound)
   17: M33 S, P027 (sound)
   18: M33 S, P028 (sound)
   19: M33 S, L171 I MRM (sound)
71. m3b45c.dir
1) m3b45cIE.cst (3 members)
   1: (richText)
   2: M33 E, P031 (sound)
   3: M33 E, P032 (sound)
2) m3b45cis. (3 members)
   1: (richText)
   2: M33 S, P031 (sound)
   3: (richText)
72. m3b46.dir
1) m3b46IE.cst (7 members)
   1: prothesis (richText)
   2: M33 E, L182 I MRM (sound)
   3: Breast reconstruction (richText)
   4: M33 E, L189 I MRM (sound)
   5: M33 E, L181 I MRM (sound)
1: 3095 Cue 1
2: 3095 Cue 2
3: 5174 Cue 3
4: 6467 Cue 4
10: Breast reconstruction r (richText)
11: Breast reconstruction r (field)
12: Breast reconstruction r (field)
13: Breast reconstruction r (field)
73. m3b47.dir
1) m3b47IE.cst (8 members)
   1: (richText)
   2: M33 E, L182 I MRM (sound)
   10: IssueList (field)
   11: M33 E, L183 I MRM (sound)
   12: M33 E, L184 I MRM (sound)
   13: M33 E, L185 I MRM (sound)
   14: M33 E, L186 I MRM (sound)
   15: M33 E, L187 I MRM (sound)
2) m3b47IS. (8 members)
   1: (richText)
   2: M33 E, P032 (sound)
   10: IssueList (field)
   11: M33 S, L183 I MRM (sound)
   12: M33 S, L184 I MRM (sound)
   13: M33 S, L185 I MRM (sound)
   14: M33 S, L186 I MRM (sound)
   15: M33 S, L187 I MRM (sound)
74. m3b48.dir
1) m3b48IE.cst (8 members)
   1: (richText)
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5: M3B S, L213B I MRM (sound)
9: M3B S, L214 I NTX (sound)
10: M3B S, L215 I NTX (sound)
11: M3B S, L216 I NTX (sound)
12: M3B S, L217 I NTX (sound)
13: M3B S, L218 I NTX (sound)
16: M3B S, P025 (sound)
17: M3B S, P027 (sound)
18: M3B S, P035 (sound)

79. m3b54s4.dir
1) m3b54s4S.cst (12 members)
   1: (richText)
2: (richText)
3: (richText)
4: (richText)
5: (richText)
6: (richText)
7: (richText)
8: (richText)
9: BCSText (bitmap)
10: WMRTText (bitmap)
11: M3B E, L219 I (sound)
17: (richText)

2) M3b54s4S.cst (12 members)
   1: (richText)
2: (richText)
3: (richText)
4: (richText)
5: (richText)
6: (richText)
7: (richText)
8: (richText)
9: BCSText (bitmap)
10: WMRTText (bitmap)
11: M3B S, L219 I (sound)
17: (richText)

80. m3b54a.dir
1) m3b54a.le.cst (12 members)
   1: (richText)
2: (richText)
3: (richText)
4: (richText)
5: (richText)
6: (richText)
7: (richText)
8: (richText)
9: BCSText (bitmap)
10: WMRTText (bitmap)
11: M3B E, L220 I NSO (sound)
17: (richText)

2) M3b54aLs.cst (12 members)
   1: (richText)
2: (richText)
3: (richText)
4: (richText)
5: (richText)
6: (richText)
7: (richText)
8: (richText)
9: BCSText (bitmap)
10: WMRTText (bitmap)
11: M3B S, L220 I NSO (sound)
17: (richText)

81. M3b54b.dir
82. m3b55.dir
1) m3b55Tm.cst (12 members)
   1: (richText)
2: M3B E, L219A I NSO (sound)
3: P022 (sound)
4: (richText)
5: M3B E, L220B I NSO (sound)
6: (richText)
7: M3B E, L219C I NSO (sound)
9: M3B E, L220 I NSO (sound)
10: M3B E, L221 I NSO (sound)
11: M3B E, L222 I NSO (sound)
12: M3B E, L223 I NSO (sound)
13: M3B E, L224 I NSO (sound)
2) M3b55Tm.cst (12 members)
   1: (richText)
2: M3B S, L219A I (sound)
3: P022 (sound)
4: (richText)
5: M3B S, L219B I (sound)
6: (richText)
7: M3B S, L219C I (sound)
9: M3B S, L220 I NSO (sound)
10: M3B S, L221 I NSO (sound)
11: M3B S, L222 I NSO (sound)
12: M3B S, L223 I NSO (sound)
13: M3B S, L224 I NSO (sound)
15. M4a.dir
1) M4AE.cst (12 members)
   1: M4A E, P041 (sound)
2: M4A E, P042 (sound)
3: M4A E, L001 (sound)
4: M4A E, L002 (sound)
5: M4A E, L003 (sound)
6: M4A E, L004 (sound)
7: Life After (richText)
8: Life After Shadow (richText)
30: M4A E, P040 (sound)
31: Title (richText)
32: QuestionCount (field)
33: TitleCenter (richText)

2) M4ASq1.cst (8 members)
   1: (richText)
2: M4A E, L010 (sound)
3: (richText)
4: (field)
5: M4A E, L011 (sound)
6: M4A E, L012 (sound)
7: M4A E, L013 (sound)
8: M4A E, L014 (sound)
9: M4A E, L015 (sound)

3) m4Asq2.cst (9 members)
   1: (richText)
2: M4A E, L016 (sound)
3: (richText)
4: (field)
5: M4A E, L017 (sound)
6: M4A E, L018 (sound)
7: M4A E, L019 (sound)
8: M4A E, L020 (sound)

4) m4Asq3.cst (8 members)
   1: (richText)
2: M4A E, L016 (sound)
3: (richText)
4: (field)
5: M4A E, L017 (sound)
6: M4A E, L018 (sound)
7: M4A E, L019 (sound)
8: M4A E, L020 (sound)

5) m4Asq4.cst (6 members)
   1: (richText)
2: M4A E, L021 (sound)
3: (richText)
4: (field)
5: M4A E, L022 (sound)
6: M4A E, L023 (sound)

6) m4Asq5.cst (4 members)
   1: (richText)
2: M4A E, L024 (sound)
3: (richText)
4: (field)
5: M4A E, L025 (sound)

7) m4Asq6.cst (5 members)
   1: (richText)
2: M4A E, L026 (sound)
3: HealthInsurance (bitmap)
4: (field)
5: M4A E, L027 (sound)

8) M4AS.cst (11 members)
   1: M4A S, P041 (sound)
2: M4A E, P042 (sound)
3: M4A S, L001A (sound)
4: M4A S, L002 (sound)
5: M4A S, L003 (sound)
6: M4A E, L004 (sound)
7: Life After (richText)
8: Life After (richText)
31: Title (richText)
32: QuestionCount (field)
33: TitleCenter (richText)

9) M4ASq1.cst (8 members)
   1: (richText)
2: M4A S, L005 (sound)
3: (richText)
4: (field)
5: M4A S, L006 (sound)
6: M4A S, L007 (sound)
7: M4A S, L008 (sound)
8: M4A S, L009 (sound)

10) M4ASq2.cst (9 members)
    1: (richText)
2: M4A S, L010 (sound)
3: (richText)
4: (field)
5: M4A S, L011 (sound)
6: M4A S, L012 (sound)
7: M4A S, L013 (sound)
8: M4A S, L014 (sound)
9: M4A S, L015 (sound)

11) M4ASq3.cst (8 members)
    1: (richText)
2: M4A S, L016 (sound)
3: (richText)
4: (field)
5: M4A S, L017 (sound)
6: M4A S, L018 (sound)
7: M4A S, L019 (sound)
8: M4A S, L020 (sound)

12) M4ASq4.cst (6 members)
    1: (richText)
2: M4A S, L021 (sound)
3: (richText)
4: (field)
5: M4A S, L022 (sound)
6: M4A S, L023 (sound)

13) m4ASq5.cst (5 members)
    1: (richText)
2: M4A S, L024 (sound)
3: (richText)
4: (field)
5: M4A S, L025 (sound)

84. M4as.dir

85. M4b.dir
1) M4Bq1.cst (7 members)
   1: (richText)
2: M4B E, L001A (sound)
3: (field)
4: (field)
5: M4B E, L002 (sound)
6: M4B E, L003 (sound)
7: M4B E, L004 (sound)
8: M4B E, L005 (sound)

14) M4ASq6.cst (4 members)
    1: (richText)
3: HealthInsurance (bitmap)
4: (field)
5: M4A S, L027 (sound)

86. M4c.dir
1) M4Ce.cst (5 members)
   1: (richText)
2: M4B E, L001A (sound)
3: (field)
4: (field)
5: M4B E, L002 (sound)
6: M4B E, L003 (sound)
7: M4B E, L004 (sound)

4) M4Bq2.cst (5 members)
   1: (richText)
2: M4A E, L003A (sound)
3: (richText)
4: (field)
5: M4B E, L004 (sound)

3) M4Bq1.cst (7 members)
   1: (richText)
2: M4B S, L001A (sound)
3: (field)
4: (field)
5: M4B S, L002 (sound)
6: M4B S, L003 (sound)
7: M4B S, L004 (sound)

4) M4Bq2.cst (5 members)
   1: (richText)
2: M4A E, L003A (sound)
3: (richText)
4: (field)
5: M4B S, L004 (sound)
Appendix: E

CDSS Movies, Casts, Members, and Cue Points

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10. WMText (bitmap)
   11: MS A, L001 (sound)
   12: MS A, L002 (sound)
   1: 6222 Cue 1
   2: 9306 Cue 2
   3: 14416 Cue 3
   13: MS A, L002A (sound)
   14: MS A, L003 (sound)
   15: MS A, L004 (sound)
   16: MS A, P050 (sound)
   17: (richText)
   19: MS A, L001 MRM (sound)
   20: MS A, L002 MRM (sound)
13. MSiS.cst (19 members)
   1: (richText)
   2: (richText)
   3: (richText)
   4: (richText)
   5: (richText)
   6: (richText)
   7: (richText)
   8: (richText)
   9: BCSText (bitmap)
   10: MR1Text (bitmap)
   11: MS A, L001 (sound)
   12: MS A, L002 (sound)
   1: 7753 Cue 1
   2: 10969 Cue 2
   3: 17023 Cue 3
   13: MS A, L002A (sound)
   14: MS A, L003 (sound)
   15: MS A, L004 (sound)
   16: MS A, P050 (sound)
   17: (richText)
   19: MS A, L001 MRM (sound)
   20: MS A, L002 MRM (sound)
14. Music.cst (3 members)
   1: nj15cu (sound)
   2: nj12cu (sound)
   3: nj16cu (sound)
15. SIET.cst (2 members)
   1: SIETitle (richText)
   2: SIETitleShadow (richText)
16. SIT.cst (3 members)
   1: SITitle (richText)
   2: SITitleShadow (richText)
17. S2E2AoA.cst (1 members)
   1: Scene2 (sound)
   1: 17423 Cue 1
   2: 31716 Cue 2
   3: 46386 Cue 3
   4: 56724 Cue 4
   5: 75060 Cue 5
   6: IMG00017 (bitmap)
   7: IMG00019 (bitmap)
   8: IMG00024 (bitmap)
   9: IMG00025 (bitmap)
   10: IMG00061 (bitmap)
   11: IMG00062 (bitmap)
   12: IMG00063 (bitmap)
   13: IMG00025 (bitmap)
18. S2E2AoA.cst (8 members)
   1: IMG00017 (bitmap)
   2: IMG00019 (bitmap)
   3: IMG00024 (bitmap)
   4: IMG00025 (bitmap)
   5: IMG00061 (bitmap)
   6: IMG00062 (bitmap)
   7: IMG00063 (bitmap)
   8: IMG00025 (bitmap)
20. S2E2Aya.cst (10 members)
   1: IMG00044 (bitmap)
   2: IMG00047 (bitmap)
   3: IMG00048 (bitmap)
   4: IMG00057 (bitmap)
   5: IMG00116 (bitmap)
   6: IMG00006 (bitmap)
   7: IMG00012 (bitmap)
   8: IMG00043 (bitmap)
   9: IMG00044 (bitmap)
   10: IMG00046 (bitmap)
21. S2E2AoA.cst (11 members)
   1: Scene1 (sound)
   1: 15903 Cue 1
   2: 30407 Cue 2
   3: 38900 Cue 3
   4: 48099 Cue 4
   5: 53438 Cue 5
   22: S2E2AoA.cst (8 members)
   1: IMG0026 (bitmap)
   2: IMG0027 (bitmap)
   3: IMG0028 (bitmap)
   4: IMG0022 (bitmap)
   5: IMG0029 (bitmap)
   6: IMG0020 (bitmap)
   7: IMG0032 (bitmap)
   8: IMG0033 (bitmap)
23. S2E2Aya.cst (1 members)
   1: Scene4 (sound)
   1: 14269 Cue 1
   2: 15754 Cue 2
   3: 15836 Cue 2
   4: 24625 Cue 4
   5: 27652 Cue 5
24. S2E2Aya1.cst (12 members)
   25. S2Et.cst (2 members)
   26. S2EShoa1t.cst (1 members)
   27. S2ESho1t.cst (11 members)
   28. S2ESho1t.cst (1 members)
   29. S2ESho1t.cst (14 members)
   30. S2Et.cst (12 members)
   31. S2Et.cst (2 members)
   32. S2E2AoA.cst (1 members)
   33. S4E2AoA1.cst (5 members)
   34. S4E2Aya1.cst (1 members)
   35. S4E2Aya1.cst (6 members)
   36. S4E2AoA.cst (1 members)
   37. S4E2AoA1.cst (7 members)
   38. S4E2Aya1.cst (1 members)
   39. S4E2Aya1.cst (5 members)
   40. S4Et.cst (2 members)
   41. S4EShoa1t.cst (1 members)
   42. S4EShoa1t.cst (5 members)
   43. S4EShoa1t.cst (1 members)
   44. S4EShoa1t.cst (5 members)
   45. S4Et.cst (2 members)
   46. S4Et.cst (2 members)
   47. S4Et.cst (2 members)
   48. S4E2AoA1t.cst (1 members)
Appendix: E

7) S8St.cst (2 members)
   1:  SceneTitle (richText)
   2:  SceneTitleShadow (richText)
78) S8E.tst (2 members)
   1:  SceneTitle (richText)
   2:  SceneTitleShadow (richText)
79) S8St.cst (2 members)
   1:  SceneTitle (richText)
   2:  SceneTitleShadow (richText)
80) SceneTilesE.cst (1 member)
   1:  Scene Title (English) (Field)
81) SceneTilesE.cst (1 member)
   1:  Scene Title (Spanish) (Field)
82) Sfx.cst (20 members)
   2:  Buzzer 01 (sound)
   3:  Click 1 (sound)
   4:  Click 2 (sound)
   5:  Click 3 (sound)
   6:  Click 4 (sound)
   7:  Click 5 (sound)
   8:  Click 6 (sound)
   9:  Click 7 (sound)
  10:  Click 8 (sound)
  11:  Correct (sound)
  12:  Ding 01 (sound)
  20:  Xylophone 01 (sound)
  21:  Xylophone 02 (sound)
  22:  Xylophone 03 (sound)
  23:  Xylophone 04 (sound)
  24:  Xylophone 06 (sound)
  25:  Xylophone 06 (sound)
  26:  Xylophone 07 (sound)
  27:  Xylophone 08 (sound)
83) TVAudio03E.cst (10 members)
   1:  M3B E, L086 I BCS (sound)
   1:  3070 Cue 1
   2:  4112 Cue 2
   3:  M3B E, P059 (sound)
   3:  M3B E, P030 (sound)
   4:  What if you were (richText)
   5:  Negative (richText)
   6:  Positive (richText)
   7:  Low Button text (richText)
   8:  High Button Text (richText)
   9:  M3B E, L095 I BCS (sound)
   1:  14506 Cue 2
   2:  16092 Cue 1
   3:  16782 Cue 3
   12:  M3B E, P028 (sound)
84) TVAudio03S.cst (10 members)
   1:  M3B S, L086 STG I BCS (sound)
   1:  3750 Cue 1
   2:  5149 Cue 2
   3:  M3B S, P029 (sound)
   3:  M3B S, P030 (sound)
   4:  What if you were (richText)
   5:  Negative (richText)
   6:  Positive (richText)
   7:  Low Button Text (richText)
   8:  High Button Text (richText)
   9:  M3B S, L095 STG I BCS (sound)
   1:  16980 Cue 1
   2:  18200 Cue 2
   12:  M3B S, P029 (sound)
85) TVAudio0.cst (8 members)
   1:  M3B E, L086 BCS (sound)
   1:  3070 Cue 1
   2:  4112 Cue 2
   3:  M3B E, P029 (sound)
   3:  M3B E, P030 (sound)
   4:  What if you were (richText)
   5:  High Risk (richText)
   6:  Low Risk (richText)
   7:  Low Button text (richText)
   8:  High Button Text (richText)
86) TVAudio0S.cst (8 members)
   1:  M3B S, L086 STG I BCS (sound)
   1:  3565 Cue 1
   2:  4988 Cue 2
   3:  M3B S, P029 (sound)
   3:  M3B S, P030 (sound)
   4:  What if you were (richText)
   5:  High Risk (richText)
   6:  Low Risk (richText)
   7:  Low Button text (richText)
   8:  High Button Text (richText)
87) Vanity.cst (57 members)
   1:  new jbox wide (bitmap)
   2:  jbox (bitmap)
   3:  jbox hind (bitmap)
   4:  big painting (bitmap)
   5:  small painting (bitmap)
   6:  tv (bitmap)
   7:  tv hind (bitmap)
   8:  flowers (bitmap)
   9:  flowers hind (bitmap)
  10:  (richText)
  11:  L0mp1.p (bitmap)
  12:  Closeup Mirror BCS (bitmap)
  13:  Painting close up (bitmap)
  14:  FlashBox (script)
  15:  JboxBottom (bitmap)
  16:  JboxBottom hind (bitmap)
  17:  JboxClosed (bitmap)
  18:  JboxOpen1 (bitmap)
  19:  JboxOpen2 (bitmap)
  20:  JboxOpen3 (bitmap)
  21:  NOT IN VANITY CAST? (script)
  22:  insideJbox (bitmap)
  23:  Perfume (bitmap)
  24:  Perfume hind (bitmap)
  25:  Scissors (bitmap)
  26:  ScissorsMono (bitmap)
  27:  reflection (bitmap)
  28:  tv close up (bitmap)
  29:  green button (bitmap)
  30:  yellow button (bitmap)
  31:  green button hind (bitmap)
  32:  yellow button hind (bitmap)
  33:  (richText)
  34:  (richText)
  35:  (richText)
  36:  Vanity Object Behav... (script)
  37:  Hold on Frame (script)
  39:  JboxTopClosed (bitmap)
  40:  JboxTopOpen1 (bitmap)
  41:  JboxTopOpen2 (bitmap)
  42:  JboxTopOpen3 (bitmap)
  43:  (bitmap)
  44:  (bitmap)
  45:  (bitmap)
  46:  (bitmap)
  47:  (bitmap)
  48:  Vanity Object B. NEW (script)
  49:  Save Clicked Issue (script)
  50:  JboxObject Behavior (script)
  51:  FlashVanityObject (script)
  52:  JboxFlash1 (bitmap)
  53:  JboxFlash2 (bitmap)
  60:  Jbox Object B. NEW (script)
  61:  Ding 01 (sound)
  63:  JboxTopClosed (bitmap)
  64:  JboxTopOpen1 (bitmap)
  65:  JboxTopOpen2 (bitmap)
  66:  (script)
  67:  (script)
  68:  (shape)
  71:  SMI1LC09 (sound)
  72:  EM1LC09 (sound)
  89) video.cst (1 member)
  1:  Video (ActiveX)
  90) videoBox.cst (1 member)
  1:  VideoBox (bitmap)
APPENDIX F

CDSS CLINICAL PROCEDURES DURING TRIALS

INCLUSION CRITERIA
Women:
1. With Diagnosis of breast cancer in stages I, IIA, IIB, or IIIA.
2. Who are candidates for surgery.
3. Speak English or Spanish.
4. Don’t have other severe medical illness (e.g., heart or lung disease).
5. Indicate willingness to participate in the study (by signing Informed Consent Form).
Women who are pregnant may be included if they meet the above criteria.

EXCLUSION CRITERIA
Women:
1. With diagnosis of breast cancer in stages 0, IIIB, or IV.
2. With recurrent breast cancer or inflammatory breast carcinoma.
3. Who don’t speak English or Spanish.
4. Who have a severe medical illness in addition to breast cancer in stages I, IIA, IIB, IIIA.
5. Who refuse to sign the Informed Consent Form.

RECRUITMENT OF PATIENTS

• Look for possible recruits in:
  1. X-Ray Department (Appointment Book).
  2. Breast Pathology Clinic (Black Notebook, on Wednesdays).
• Physicians’ referrals.
• Look for biopsy results in computer (Pathology report).
• Look up patient appointments (positive results) in the computer. Case Manager will go to all Surgery Clinics (BPC, green, red, and/or blue surgery clinics) where potential recruits are present.

DAY ONE ACTIVITIES (SCHEDULED CLINIC VISIT)

• On the day of the scheduled Clinic visit, the Case Manager will review the Patient’s chart. If the Patient meets the Inclusion Criteria, the Patient’s chart will be tagged (to let the Physician know that the Patient is eligible for the study).

• After the Physician has informed the eligible Patient of the results of her biopsy and referred her to the Case Manager, the Case Manager will inform the Patient about the study and ask whether she is willing to participate in it. If the Patient is willing to participate, she will be asked to read carefully (and ask any clarifications she may need) and sign the Informed Consent form. The Patient will also complete the required paperwork for reimbursement (i.e., cash receipt documentation).
• Randomization will occur at this point with Patients being assigned to either the Intervention Group or the Control Group. Randomization will be accomplished through use of permuted blocks to ensure equal numbers of intervention and control subjects. Four blocks will be used to determine the allocation sequence. The sequence in each block is given in the following table.

“1” is the CDSS intervention arm, and “C” is the control arm. Blocks will be drawn at random (using a table of random numbers), and subject assignment will be based on the block sequence. For example, if Block 3 is drawn, the first eligible patient will be assigned to the control group, the second patient assigned to the control group, and the third and fourth patients assigned to the CDSS intervention group. After a block is completed, another random drawing will be done and the process continued until the cells of the design are full (a block may be drawn more than once).

<table>
<thead>
<tr>
<th>Block Number</th>
<th>Sequence</th>
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<tbody>
<tr>
<td>1</td>
<td>I, C, I, C</td>
</tr>
<tr>
<td>2</td>
<td>I, I, C, C</td>
</tr>
<tr>
<td>3</td>
<td>C, C, I, I</td>
</tr>
<tr>
<td>4</td>
<td>C, I, C, I</td>
</tr>
</tbody>
</table>

• Activities for each study group are as follows:

**Intervention Group:**
1. Patient completes the CDSS program (indicating initial treatment decision at the end of the program) and receives the Patient Reminder Printout.
2. Patient completes the BC Knowledge Test and the CDSS Evaluation Questionnaire. If Patient has difficulty reading, the questionnaires will be read for her.
3. Patient receives $10 and a receipt for 1st raffle entry (out of 4 possible) to participate in the (Fiesta) Gift Certificates Drawing [4 Gift Certificates will be raffled off at the end of the study-December 2001].
4. Patient is asked to arrive 45 minutes earlier to her pre-op screening Clinic appointment (her next visit).
5. Case Manager puts Provider Log in Patient’s chart.
6. Case Manager contacts Patient by phone prior to the pre-op screening Clinic appointment, to remind her to arrive 45 minutes earlier.

**Control Group:**
2. Patient completes the BC Knowledge Test.
3. Patient indicates initial treatment decision.
4. Patient receives $10 and a receipt for 1st raffle entry (out of 4) to participate in the (Fiesta) Gift Certificates Drawing [4 Gift Certificates will be raffled off at the end of the study-December 2001].
5. Patient is asked to arrive 45 minutes earlier to her pre-op screening Clinic appointment.
appointment (her next visit).
6. Case Manager contacts Patient by phone prior to the pre-op screening Clinic appointment, to remind her to arrive 45 minutes earlier.

DAY TWO ACTIVITIES (PRE-OPERATION SCREENING VISIT)

Intervention and Control Groups:
1. Patient to arrive 45 minutes prior to the scheduled pre-op screening Clinic appointment.
3. Patient completes the Utility Assessment Computerized Program.
4. Patient receives $10 and a receipt for 2nd raffle entry (out of 4 possible) to participate in the (Fiesta) Gift Certificates Drawing.

6-MONTH FOLLOW-UP

1. Case Manager telephones patients (Intervention and Control Groups) and administers both the Breast Cancer Knowledge Questionnaire and the Satisfaction with Decision Instrument.
2. Patient is advised about her 3rd entry into the raffle.

1-YEAR FOLLOW-UP

1. Case Manager telephones patients (Intervention and Control Groups) and administers both the Breast Cancer Knowledge Questionnaire and the Satisfaction with Decision Instrument.
2. Patient is advised about her 4th entry into the raffle.
Satisfaction with Decision Scale (Pre-U)

You have been considering treatment options for your breast cancer.

Please answer the following questions about your decision.

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are you satisfied with the information you received to make your decision for breast cancer treatment?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
<tr>
<td>2. Was your treatment decision the best decision possible for you?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
<tr>
<td>3. Are you satisfied that your treatment decision was consistent with how you feel?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
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<tr>
<td>4. Do you expect to stick to the treatment decision you made?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
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<tr>
<td>5. Are you satisfied because you were the one making the treatment decision?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
<tr>
<td>6. Are you satisfied with your treatment decision?</td>
<td>Yes</td>
<td>No</td>
<td>Unsure</td>
</tr>
</tbody>
</table>

Adapted from:

Satisfaction with Decision Scale (Pre-U)-Spanish

Usted ha podido refleccionar sobre los tratamientos para tratar su cáncer del seno.
Por favor responda a las siguientes preguntas:

<table>
<thead>
<tr>
<th></th>
<th>¿Esta usted satisfecha con la información que recibió para tomar su decisión de tratamiento para el cáncer del seno?</th>
<th>Si</th>
<th>No</th>
<th>No sé</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<tr>
<td>2</td>
<td>¿Fue esa la mejor decisión de tratamiento para usted?</td>
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<tr>
<td>3</td>
<td>¿Cree que su decisión de tratamiento refleja como se siente usted?</td>
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<tr>
<td>4</td>
<td>¿Va usted a mantener la decisión de tratamiento que ha tomado?</td>
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<td>5</td>
<td>¿Se siente satisfecha porque fué usted la que eligió su tratamiento?</td>
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<td></td>
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<tr>
<td>6</td>
<td>¿Se siente satisfecha con su decisión de tratamiento?</td>
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</tbody>
</table>

Adapted and translated from:

APPENDIX G - CDSS Program Rating Form

1. How would you rate the amount of information given in the program?
   ○ Less than wanted
   ○ About right
   ○ More than wanted

2. How would you rate the length of the program?
   ○ Too long
   ○ About right
   ○ Should have been longer

3. How clearly were the issues presented in the program?
   ○ Most things clear
   ○ Some things unclear
   ○ Most things unclear

4. How would you rate the presentation?
   ○ Clearly favors lumpectomy (breast sparing surgery)
   ○ Completely balanced
   ○ Clearly favors mastectomy

5. Would you recommend the program to other people facing this decision?
   ○ Yes
   ○ No
   ○ Unsure
CDSS DATA FORM I (DAY ONE)     DATE: ___________     GROUP: I     C

NAME: ________________________________     AGE: ____

Last     First     M.I.

MEDICAL RECORD No.: ___________     LANGUAGE: English: ____ Spanish: ____


BREAST CANCER STAGE: STG I ____ STG IIA ____ STG IIB ____ STG IIIA ____

SIZE OF TUMOR: Less than 1 inch: ____ 1 to 2 inches: ____ Larger than 2 inches: ____

MENOPAUSAL STATUS (check one):
Are you still having regular menstrual periods?    Yes ____ No ____
If you answered NO to the previous question, have you had a hysterectomy?    Yes ____ No ____

OTHER SERIOUS MEDICAL CONDITIONS (check all that applies):
Heart disease ____ Hypertension ____ Diabetes ____ Chronic lung disease ____ Arthritis ____ Low back pain ____

How much do these diseases affect your life?(check one): Not at all ____ A little ____ Some ____ A lot ____

Are you able to use a telephone by yourself? (check one):    Yes ____ No ____

Are you able to leave your house without the assistance from another person?    Yes ____ No ____

Are you able to take your own medications by yourself?    Yes ____ No ____

Do you have someone to help you with everyday activities like bathing, getting out of bed, and shopping?    Yes ____ No ____

Are you pregnant?    Yes ____ No ____

If you answered YES to the previous question, how long have you been pregnant? (circle one)

1 2 3 4 5 6 7 8 9 months
APPENDIX H

Do you have cancer in several areas of your breast?  Yes ___  No ___

Have you had X-Ray treatment or Radiotherapy to your chest area before?  Yes ___  No ___

Do you have Lupus or Scleroderma?  Yes ___  No ___

WHEN HANDING PATIENT REMINDER PRINTOUT (Decision Assurance Q2):

How sure are you that this is the treatment you want to have?  Very Sure ___  Somewhat Sure ___  Not Sure ___

REMARKS:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

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CDSS DATA FORM II (DAY TWO)

DATE: ________________

NAME: __________________________________________

Last       First       M.I.

MEDICAL RECORD No.: ________________

DECISIONAL PROCESS:
How did you come to your treatment decision?

________________________________________

________________________________________

________________________________________

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REMARKS:

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52
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<th>A</th>
<th>Medical</th>
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Appendix: H
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<td>2. A.Code Number</td>
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<td>3. A.Code Number</td>
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<td>4. Add'l Contact Number</td>
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<td>5. A.Code Number</td>
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<td>6. Language</td>
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<td>7. Contact Language</td>
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<td>8. Ethnicity</td>
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<td>9. Hispanic Asian</td>
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<td>10. Black Hispanic</td>
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<td>11. White Asian</td>
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<td>12. White Black</td>
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<td>13. Race</td>
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<td>14. Breast Cancer Group</td>
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<td>15. IIB</td>
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<td>16. IIA</td>
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<td>17. IIIA</td>
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<td>24. IIIB</td>
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Appendix: H
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CDSS SUMMARY LOG

Appendix: H