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AWARD NUMBER: W81XWH-06-1-0254

TITLE: Inclusion of Minority Patients in Breast Cancer Clinical Trials: The Role of the Clinical Trial Environment

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REPORT DATE: May 2009

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

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. REPORT DATE	2. REPORT TYPE	3. DATES COVERED
1 May 2009	Annual	1 May 2008 – 30 Apr 2009

4. TITLE AND SUBTITLE

Inclusion of Minority Patients in Breast Cancer Clinical Trials: The Role of the Clinical Trial Environment

5a. CONTRACT NUMBER

5b. GRANT NUMBER
W81XWH-06-1-0254

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)

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5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

University of California, San Francisco
San Francisco, CA 94118

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT
Approved for Public Release; Distribution Unlimited

13. SUPPLEMENTARY NOTES

14. ABSTRACT
Clinical trials are the primary vehicle for transforming laboratory discoveries in breast cancer care into clinical practice. Enhanced participation by minorities in these trials is necessary to assess the effectiveness of advances in breast cancer care among major subpopulations and to ensure equity in the distribution of research benefits. However, minority participation in clinical trials will likely remain low without research designed to understand the reasons for limited participation. To address persistent ethnic and socioeconomic disparities in cancer care, including participation in research, interventions need to assess the broader context of clinical trials and include the larger community where these trials take place. Our study examines the combined effect of these factors on minority referral. The research team has completed all key research activities: identifying all active breast cancer clinical trials in the four states (CA, FL, IL and NY), identifying clinical trial research team members, obtaining datasets for key community indicators, identifying all breast cancer physicians, refining the data for preliminary analysis, finalizing all survey instruments, and completing physician surveys for all four states and the RTM surveys for California.

15. SUBJECT TERMS
Clinical trials, minorities, health care settings, communities

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			USAMRMC
U	U	U	UU		19b. TELEPHONE NUMBER *(include area code)*

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std. Z39.18

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Inclusion of Minority Patients in Breast Cancer Clinical Trials:

The Role of the Clinical Trial Environment

Celia P. Kaplan, DrPH, MA, Principal Investigator

Annual Report 2009

Introduction

Clinical trials are the primary vehicle for transforming laboratory discoveries in breast cancer care into clinical practice. Enhanced participation by minorities in these trials is necessary to assess the effectiveness of advances in breast cancer care among major subpopulations and to ensure equity in the distribution of new treatment benefits. While inroads to increasing minority inclusion in breast cancer clinical trials have been made,[1-4] recent reports continue to demonstrate lower enrollment among African Americans, Asian Americans, and Latinos when compared to Whites.[5] Within the last decade, the average rate of increase in breast cancer incidence among Latinos and Asian Americans has risen,[6] underscoring the need for minority inclusion in cancer clinical trials. Minority participation will likely remain low without research designed to understand the reasons for limited participation and subsequent policy changes based on those findings. Therefore, to address persistent ethnic and socioeconomic disparities in cancer care, including participation in research, interventions need to assess the broader context or culture of clinical trials and include the larger community where these trials take place. Our study aims to examine the combined effect of these factors on minority referral. To achieve this, we will measure clinical trial characteristics that may impact minority recruitment, such as accessibility and availability of trials, site cultural competence, and outreach efforts. We will also examine the social and physical characteristics of the community surrounding the trials. Key indicators associated with clinical trial referral will be identified in order to establish the basis for a standardized methodology to assess the overall capability of clinical trial sites to include minorities. The proposed study will extend our current state of knowledge about factors affecting referral and participation of minorities in clinical trials. Results will contribute to the development of interventions aimed at clinical trial sites and those that address specific barriers associated with the social or physical environment.

Body

The tasks described below represent the modified timeline and the progress made by the research team.

Task 1: Identify Breast Cancer Clinical Trials (Months 1-24). **Completed.**

Through the Physicians Data Query (PDQ®), the National Cancer Institute's comprehensive clinical trial cancer database, we identified 225 active breast cancer clinical trials and 457 clinical trial sites in California, Florida, Illinois, and New York. All identified breast cancer clinical trials and their respective clinical trial sites were entered into an ACCESS database.

Task 2: Identify Clinical Trial Research Team Members (RTMs) (Months 12-36). **Completed.**

Using information gleaned from our online research, we identified key personnel and their contact information. Based on this information, we will contact each of the sites for a telephone interview.

Task 3: Develop RTM Survey Instruments (Months 5-9). **Completed.**

The research team used multiple modes of survey data collection including a telephone survey, a self-administered paper survey, and an online survey. The existing RTM survey instrument was reviewed and refined to meet the current study goals. Language and presentation of the instrument were amended to reflect the multimodal approach to data collection. Key informants pretested the survey and provided feedback.

Task 4: Conduct RTM Surveys (Months 24-42). **Partially completed.**

In the last progress report, we reported that we would conduct surveys with a total of 100 RTMs (25 selected from each state). This was due to initial challenges in contacting and recruiting RTMs for participation in the study. However, based on the success of completing all 25 RTM surveys in California, the research team decided to expand the total selection to include a total of 200 RTMs (50 selected from each state). Consequently, an additional 25 RTM surveys were completed for California during the first no-cost extension period. Currently, 150 RTM surveys remain to be completed for IL, NY, and FL. These will be conducted in the remaining months of the first no-cost extension period and the first six months of the second no-cost extension.

An Access database has been created to store RTM contact information and to track progress of the data collection. All RTM survey data will be entered into a web-based survey data collection survey.

Task 5: Identify Community Indicators (Months 12-23). **Completed.**

We have completed a review of the literature to identify appropriate geographic measurement units and relevant community indicators. Data was collected to characterize both the physical environment and the social environment surrounding clinical trials.

Task 6: Identify Breast Cancer Physicians in California, Florida, Illinois, and New York (Months 8-24). **Completed.**

We received the AMA Physicians MasterFile and identified all physicians practicing surgery, oncology, or radiation oncology in the four states. Based on the data, we selected a random sample of 200 physicians of each specialty from each state. We also set up an internal physician database for tracking and following up of physician contact information using MS Access.

Task 7: Develop and Refine Instrument for Physician Survey (Months 10-24). **Completed.**

The physician survey has been developed and implemented. Concurrent with this, we developed an online version using DatStat Illume, a data collection software program. The paper version of the survey was professionally printed and the online version has been uploaded to the server.

Task 8: Recruit Physicians and Collect Data (Months 18-28). **Completed.**

Paper versions of the physician surveys were mailed to approximately 2400 physicians. In the initial first mailing, we observed that response rates were uncharacteristically low for all four states. This was partly due to a large number of physicians being ineligible for the study because they were either: a) no longer practicing, b) had moved out-of-state, and/or c) did not treat breast cancer patients. Another reason for the low response rate was due to a large number of addresses in the AMA Physicians MasterFile being out-of-date. Many surveys were returned due to wrong addresses or physicians who had moved and were no longer working at the address obtained from the MasterFile. Consequently, we initiated an extensive search protocol to update the address information and to verify whether they treated breast cancer patients. A total of approximately 2100 physician addresses were searched and confirmed using the AMA physician directory and state licensing websites, followed by confirmatory phone calls. The search ensured that all physicians had updated mailing addresses and contact information. Subsequently, two additional mailings to physicians and two reminder postcard mailings were completed.

To date, approximately 700 completed surveys were obtained, yielding an overall response rate of 48% across all four states. We obtained the highest response rate from CA at 52%. All completed physician surveys have been entered into an Access database.

Task 9: Data analysis (Months 21-48). **To be completed.**

Due to the rehiring of a new principal data manager, our data analysis efforts were delayed and will be completed during the second no-cost extension period. The data analysis planned for this project includes:

a) Descriptive analyses of the physician sample: Statistics will be calculated within, and compared across gender, racial/ethnic group, geographic location and specialty. In addition, analysis will focus on physician characteristics across the four states including clinical trial referral practices
b) Analysis of clinical trial site characteristics such as accessibility/availability, cultural competence, trial benefit/burden and outreach efforts
c) Further analysis of community indicators and refinement of population/clinical trial site maps
d) Plotting clinical trial sites and examining the referral patterns of physicians based on distance to clinical trial sites

Key research accomplishments during months 24-36

- Further improved the integrity of our database of active breast cancer clinical trials taking place in California, Florida, Illinois, and New York by further researching missing information, including investigating CCOP clinical trial site locations, eligibility criteria, and pharmaceutical clinical trials.
- Continued refining preliminary maps of clinical trial sites in the four states.
- Presented preliminary data at the Department of Defense Breast Cancer Research Program Era of Hope Symposium and the Latino Cancer Summit at the University of California, San Francisco.
- Identified 200 research team members for all four states. Completed all 50 RTM surveys for the state of California.
- Mailed approximately 2400 paper physician surveys across four states, completing an extensive update of the AMA Physicians MasterFile.
- Completed 700 physician interviews in four states.
- Entered interview data for 700 physicians into an Access database .

Reportable Outcomes

Preliminary outcomes for the study include the following:

- Based on preliminary data, the research team has found that cancer patients who live in urban areas in California have easy access to clinical trials.

- Among minorities, counties with a high number of Latinos have poorer access and longer distances to travel to clinical trials.

Additional outcomes will be reported with more extensive data analysis.

Conclusion

In Years 01-02 and the first no-cost extension period, the research team completed all key research activities that would lay the groundwork for data collection. These activities included: identifying all active breast cancer clinical trials in the four states (CA, FL, IL and NY), identifying clinical trial research team members, obtaining datasets for key community indicators, identifying all breast cancer physicians, refining the data for preliminary analysis, and finalizing all survey instruments. During the no-cost extension period, the research team completed physician surveys for all four states and the RTM surveys for California.

Paper versions of the physician surveys were mailed to approximately 2400 physicians in CA, FL, IL and NY. In order to maximize responses we conducted an intensive protocol to locate physicians and identify retired and ineligible physicians. To date, approximately 700 surveys have been completed with a participation rate of approximately 48%.

In addition, based on the success of completing the initial 25 RTM interviews in California, we expanded the total number of RTM surveys to be completed to 50 surveys for each state (a total of 200 RTM surveys). Consequently, a total of 50 RTM surveys were completed for California. The remaining 150 surveys for the states of FL, IL and NY will be completed in the remaining months of the first no-cost extension period and the first six months of the second no-cost extension period.

With the bulk of the data collection completed for the study, we look forward to finishing the remaining RTM surveys and focusing on the data analysis and writing of manuscripts during months 36-48. Appendix 1 presents an updated scope of work for the entire study.

REFERENCES

1. Tejeda HA, Green SB, Trimble EL, Ford L, High JL, Ungerleider RS, Friedman MA, Brawley OW. Representation of African-Americans, Hispanics, and Whites in National Cancer Institute cancer treatment trials. Journal of the National Cancer Institute 1996;88(12):812-6.
2. Alexander GA, Chu KC, Ho RC. Representation of Asian Americans in clinical cancer trials. Annals of Epidemiology 2000;10(8 Suppl):S61-67.
3. Ness RB, Nelson DB, Kumanyika SK, Grisso JA. Evaluating minority recruitment into clinical studies: How good are the data? Annals of Epidemiology 1997;7(7):472-478.
4. Corbie-Smith G, St George DM, Moody-Ayers S, Ransohoff DF. Adequacy of reporting race/ethnicity in clinical trials in areas of health disparities. Journal of Clinical Epidemiology 2003;56(5):416-420.
5. Murthy VH, Krumholz HM, Gross CP. Participation in cancer clinical trials- Race-,sex-, and age-based disparities. Journal of the American Medical Association 2004;291:2720-2726.
6. Reis L, Eisner M, Kosary C, Hankey B, Miller B, Clegg L, Marriotto A, Feuer E, Edwards B. SEER Cancer Statistics Review, 1975-2002. National Cancer Institute, Bethesda, MD, 2005.

Appendix 1.

Statement of Work (revised as of May 2009)

Inclusion of Minority Patients in Breast Cancer Clinical Trials: The Role of the Clinical Trial Environment

Task 1. Identify Breast Cancer Clinical Trials (Completed in Months 1-24):

- All active breast cancer treatment clinical trials being conducted in California, Florida, Illinois, and New York will be identified through the PDQ from the NCI website.
- A clinical trials ACCESS database will be set up to enter and track information about clinical trials.
- Clinical trial information will be entered into the clinical trials ACCESS database.

Task 2. Identify Clinical Trial Research Team Members - RTMs (Completed in Months 12-36):

- All RTMs affiliated with an active breast cancer clinical trial will be identified from the NCI website and information will be supplemented by institutional websites.
- RTM names and contact information will be entered into the clinical trial ACCESS database for tracking.

Task 3. Develop RTM Telephone Survey Instruments (Completed in Months 5-9):

- The existing survey instruments for RTMs will be reviewed and refined to meet the current study goals (Months 5-6).
- Key informant interviews will be conducted with 5 RTMs (Months 7-8).
- The RTM survey will be refined based on feedback from key informant interviews and pretested with 5 additional RTMs (Months 8-9).

Task 4. Conduct RTM Telephone Interviews (Months 24-42):

- An RTM ACCESS database will be designed to record and track RTM survey responses (Completed during the first no-cost extension period, Months 24-36).
- RTMs will be contacted by the Project Director to participate in the telephone survey. We estimate completing interviews with 200 RTMs (Months 36-42).

Task 5. Identify Community Indicators (Completed in Months 12-23):

- Relevant community indicators will be identified based on the literature, and sources of publicly available geographic and demographic data will be secured (Months 21-23).

Task 6. Identify Breast Cancer Physicians in California, Florida, Illinois and New York (Completed in Months 8-24):

- All physicians practicing surgery, oncology, or radiation oncology in the four states will be identified through the AMA Masterfile.
- A physician ACCESS database will be developed for tracking and cataloguing of physician contact information.
- Physician data will be downloaded into the physician ACCESS database.

Task 7. Develop and Refine Survey Instrument for Physician Survey (Completed in Months 10-24):

- The physician survey will be developed based on existing surveys and literature, through discussions with the research team, and will be refined to meet the current study goals.

- The physician survey will be pilot tested through cognitive interviews with 5 physicians to test for clarity, consistency, and reliability. Revisions will be made accordingly.
- Following cognitive testing, the survey will be pretested with another 5 physicians.
- Survey will be finalized and sent to printer.

Task 8. Physician Recruitment and Data Collection (Completed in Months 18-28):

- A physician questionnaire ACCESS database will be designed to record and track physician survey responses.
- Physician surveys will be mailed to 2400 physicians (approximately 200 from each specialty, in each state) to obtain our recruitment goal of 1560 completed surveys or a 65% response rate.
- Physician responses will be entered into the physician questionnaire ACCESS database.

Task 9. Data Analysis and Preparation of Reports (Months 21-48):

- Merging of clinical trial, community, and physician data sets.
- Final analyses of data from surveys will be performed.
- A final report and initial manuscript will be prepared.

COMMITTEE ON HUMAN RESEARCH
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CHR APPROVAL LETTER

TO: Celia Patricia Kaplan, Dr.P.H., M.A.
Box 0856

RE: Inclusion of Minority Patients in Breast Cancer Clinical Trials: The Role of the Clinical Trial Environment

The Committee on Human Research (CHR) has reviewed and approved this application to involve humans as research subjects. This included a review of all documents attached to the original copy of this letter.

Specifically, the review included but was not limited to the following documents:
Verbal Consent Form, Dated 11/30/06
RTM Consent Form, Dated 11/30/06
Physician Consent Form, Dated 11/30/06

The CHR is the Institutional Review Board (IRB) for UCSF and its affiliates. UCSF holds Office of Human Research Protections Federalwide Assurance number FWA00000068. See the CHR website for a list of other applicable FWA's.

APPROVAL NUMBER: H9066-27862-04. This number is a UCSF CHR number and should be used on all correspondence, consent forms and patient charts as appropriate.

APPROVAL DATE: December 10, 2008 **EXPIRATION DATE:** December 21, 2009 **Expedited Review**

GENERAL CONDITIONS OF APPROVAL: Please refer to www.research.ucsf.edu/chr/Apply/chrApprovalCond.asp for a description of the general conditions of CHR approval. In particular, the study must be renewed by the expiration date if work is to continue. Also, prior CHR approval is required before implementing any changes in the consent documents or any changes in the protocol unless those changes are required urgently for the safety of the subjects.

HIPAA "Privacy Rule" (45CFR164): This study does not involve access to, or creation or disclosure of Protected Health Information (PHI).

Sincerely,

Carol S. Viele, R.N., M.S.
Vice Chair, Committee on Human Research

cc: Patrice Esser, Box 0856