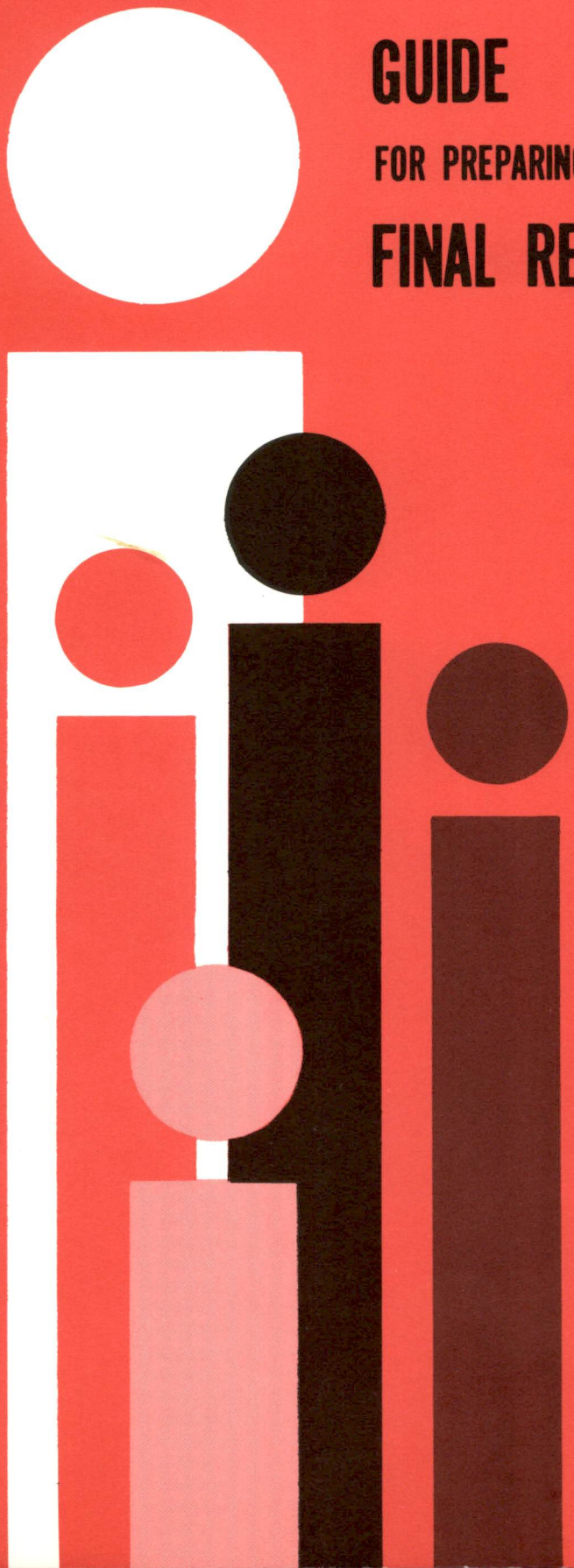
GUIDE

FOR PREPARING

FINAL RESEARCH REPORTS



Department of Health, Education, and Welfare
Office of Human Development
Rehabilitation Services Administration
Washington, D.C. 20201

Division of Program Support
Rehabilitation Services Administration
1976

GUIDE

FOR PREPARING

FINAL RESEARCH REPORTS

Department of Health, Education, and Welfare
Office of Human Development
Rehabilitation Services Administration
Washington, D.C. 20201

Division of Program Support
Rehabilitation Services Administration
1976

"The written word is still unsurpassed for many purposes. Whatever man can think, feel, or imagine, words can express—precisely, beautifully, and creatively. Written material is also easily diffused and privately retrievable, and can be annotated, savored, and absorbed at the reader's own pace. If it is also concise, cogent, eloquent, and 'open'—inviting the reader to participate vicariously in all that the writer reports—it has no peer, except perhaps direct interpersonal contact."

INTRODUCTION

The Rehabilitation Services Administration (RSA) of the Office of Human Development supports research in rehabilitation in accord with provisions of Section 202 of the Rehabilitation Act of 1973, as amended. A major purpose is to obtain information needed to improve services to clients, and thus reduce dependency among disabled persons. The results of RSA R&D are therefore primarily of use to rehabilitation practitioners, although policy implications of findings have also received increased attention recently.

As an **enduring record** of the research done, the R&D final report should present all findings, implications, conclusions, and recommendations derivable from the study, and should do so in a manner that will meet the needs of users, who as noted are mainly practitioners and administrators of all public and private agencies serving the handicapped.

The instructions in this **Guide** apply to the preparation and submission of reports on R&D projects funded by RSA. They become effective when the **Guide** is officially announced and disseminated. Copies are being sent to all active grantees as of that date. Thereafter, a copy will be included in the application kit for prospective grantees, and will also be sent to all active grantees at the start of their final grant year.

Revisions embodied in the new **Guide** have come from users of the earlier edition, RSA Central Office staff, generally accepted format standards for scientific and technical reports, and research on the dissemination and utilization of R&D results.

CHECKLIST FOR WRITERS OF FINAL REPORTS

- ☐ Does the introduction give historical perspective, review the literature well, identify knowledge gaps, and thus convince the reader a significant piece of work is being reported?
- ☐ Is the research design well explained?
- ☐ Have reliability and validity issues been well handled?
- ☐ Have statistics been well interpreted? The data well analyzed?
- ☐ Do the data really support the conclusions? Do the conclusions follow logically from the data?
- ☐ Have possible biases affecting interpretation of findings been dealt with?
- ☐ Have "competing explanations" that might "explain away" obtained results been covered? Examples:
    - ☐ Chance
    - ☐ Biased selection of subjects
    - ☐ Uncontrolled variables
    - ☐ Effects of changing historical events
    - ☐ Differential loss of subjects
    - ☐ Maturation and growth of subjects
    - ☐ Multiple-treatment effects

- ☐ Is the report clear and readable for its intended audience (typically, administrators, middle managers, and practitioners in State agencies and other VR facilities)?
- ☐ Is it as concise as possible? (See **Length of Report,** III, 3)
- ☐ Is the overall format and layout of the report attractive and helpful for the reader?
- ☐ Will users who are "on the firing line" find the report credible and persuasive? (**Note:** Inclusion of comments and evaluations from independent authorities in the field can be a legitimate way to enhance credibility.)
- ☐ Does the report have a utilization flavor? That is, has the author specified its usable product, nature and extent of the market for it, resources needed to use it successfully, likely benefits from using it, limitations of the product, and cautions to be observed in using it? (See **Utilization Plan,** II, 16).
- ☐ Has an executive summary been prepared?
- ☐ An author's abstract?
- ☐ Bibliographic Data Sheet?
- ☐ NTIS Accession Notice Cards?

TABLE OF CONTENTS

REFERENCE MATERIALS

III Other Essential Requirements

IV Appended Materials

FORMAT INSTRUCTIONS

Organization of the Research Report

I. Order of Elements

The required elements of the final report correspond to Items 1 through 22 in Section II of the Table of Contents, and should appear in the same order as given there, and in accord with the descriptions given in Section II of the **Guide.** Requirements in Section III should also be met.

These format requirements meet standards set for scientific and technical reports prepared for the Federal Government. Their purpose is to aid the interchange of scientific information and reduce the cost of preparing, storing, retrieving, reproducing, and distributing such reports. In addition, RSA is interested in such features as a utilization plan designed to facilitate use of the results reported.

Although subject matter, type of project, or other circumstances may require exceptions, grantees are expected as a rule to adhere to the format requirements as given.

II. Description of the Elements

PRELIMINARY MATERIALS

1. The **Front Cover** should be attractively designed and carry the official title of the project, the designation FINAL REPORT, number identifying it in the RSA R&D series, author, name of grantee organization, and date of the report.

2. **Inside Front Cover** should carry "Significant Findings for Rehabilitation" from the project. All findings that provide a sound basis for improved practice should be concisely set forth, and their implications for action by practitioners and administrators clearly brought out. Major recommendations may also be included. This section will ordinarily fit easily on inside of front cover, but in exceptional cases may be continued on inside back cover. RSA realizes this section entails overlap with certain others, but likes the idea of placing "Significant Findings" in this spot.

3. **Bibliographic Data Sheet** and **NTIS Accession Notice Cards.** Prepare the **Bibliographic Data Sheet** (Appendix A) in accord with instructions on its reverse side and bind a copy of it into the final report in the position shown under "Order of Elements." In Item 1, use, e.g., "RSA/22/57643–1, where "RSA" is a constant, "22" is the 2-digit code identifying the area of your research, "57643" the unique number assigned to your grant, and "1" the document number. Be sure to add this "1" in all cases of only one document per grant. If the grant produces additional documents, use "2", "3", etc. In Item 11, use simply the Grant Number (same as in Item 1 except do not add document number) preceded by "RSA", (as "RSA/22–P–57643"). Include the indicative abstract called for by Item 16, and select Descriptors and Identifiers required by Items 17a and 17b from the RSA Research Information System Thesaurus, which has been revised and will soon be published by the U.S. Government Printing Office.

Complete two **NTIS Accession Notice Cards** (NTIS Form 79) as indicated on the sample in Appendix B, and address one to the grantee (yourself), the other

to RSA Office of Research and Demonstrations. After accessioning, NTIS will mail these cards, showing accession number and price assigned to each document, to the grantee and RSA, who will then be able to cite the accession numbers and prices when responding to requests for documents, so that they may be obtained from NTIS.

Copies of the Bibliographic Data Sheet and Form 79 may be obtained from the Input Processing Division of NTIS (address just below) or from Mr. George Engstrom, Chief of the Division of Program Support, RSA. Although the Data Sheet may be reproduced from Appendix A, an actual Form 79 (an orange card franked for mailing) must be used.

When the final report has been reproduced, send at least five copies, along with two copies of NTIS Form 79, to the U.S. Department of Commerce, National Technical Information Service, Input Branch, 5285 Port Royal Road, Springfield, Virginia 22161.

4. **Prepare an Author's Abstract** (limit to one page if possible—see Appendix C) on a separate sheet, with Project Title and Number, Date of Report, Project Director, name and address of grantee or contractor, and sponsoring agency, all given at top. In the abstract, state briefly the problem studied; specify sample group, procedures used, and hypotheses tested; and give results obtained and their implications for practice, programs, policy, and legislation. Make the wording concrete and specific, not abstract and general, and the content informative as opposed to merely "indicative." Such a concise yet substantive abstract may require unusual care but is worth writing, for it will have many more readers than the full report, and there is usually someone on every project able to write it well.

5. **Title Page.** To assure complete and uniform information for users of the reports, the title page (Appendix D) must follow a standard format:

a. **Title** should be the official title of the project, should appear first, and be in appropriately sized type.

b. **Type of report** (final or special) and **RSA Grant or Contract Number** should be given next, preceded by "**Grant**" or "**Contract**" as appropriate.

c. **Author(s) and/or Project Director.** If the latter is the sole author, give name and title. If not, indicate author(s), editor, or other contributors separately, with the role of each designated.

d. **Contractor or Grantee.** Give name, address, city, state, and zip code of the performing organization.

e. **Date of Submission.** Use date submitted to RSA, and in parentheses add, "Covers research performed from ..... (Month, Year) to ..... (Month, Year)."

f. **Identification of Sponsor.** The title page should carry the statement, "This study was supported in part by Research Grant ..... from the Rehabilitation Services Administration, Department of Health, Education, and Welfare, Washington, D.C. 20201."

6. A **Foreword,** usually an introductory note written as an endorsement by a person other than the author, may be included.

7. A **Preface** (by the author) may be used to show how the work relates to previous or concurrent efforts, to give credit for the use of copyrighted material, and to acknowledge significant help received.

8. A **Table of Contents** should list principal headings and appended materials as they appear in the report, and their page numbers. Do not list preliminary items that have been placed before Table of Contents.

9. **List of Tables.** Include if the report contains enough tables to warrant it, giving table number, caption, and page number of each. Abbreviate lengthy captions.

10. **List of Illustrations.** Include if warranted, giving number, title, and page number.

11. **List of Abbreviations and Symbols.** Usually, these are defined in the text when first used, but if numerous and buried in the narrative they may call for a separate list with definitions to aid the reader.

BODY OF REPORT

12. **Introduction, Statement of Problem, and Literature Review.** Although the nature of the study must determine to some extent the organization of an R&D report, an introduction to orient the reader to the research problem is usually needed. Thus, the first section of the body of the report should tell the reader what the report is about. Related purposes may be to review relevant research, identify knowledge gaps, and note the significance and objectives of the study in terms of RSA target groups and priorities. The scope and limits of the report may also be noted. All this should in turn convince the reader that the research is of real significance for RSA and for the handicapped, and thereby arouse his interest. In brief, this section should include background, statement of the problem, review of the literature, and perhaps a short description of the setting in which the research was conducted.

13. **Methods and Procedures.** This section should tell how the research was carried out and give the rationale for the approach or strategy used. It may describe experimental and control groups, specific hypotheses tested, preparation of forms for collecting and recording data, professional staff involved, services rendered to subjects (if any), methods of analyzing data, and the development, validity, and use of special tests or equipment. Any other information needed to help the reader understand the research design or procedures—as for example special problems encountered—should be given. Certain methodological details, such as how equipment, instruments, tests, or inventories were developed, or facsimiles of such materials, may be reserved for an appendix.

14. **Results.** Much of the value of a research report depends on how this section is organized and presented, and how carefully the findings are described. Clarity is a prime consideration. An orderly, logical presentation is also essential. This applies both to narrative and tabular data presented, with the one supporting the other. How the results were obtained or arrived at should be made clear to the reader. Results of complex studies may have to be presented in several sections. Extensive, supplementary data may be placed in an appendix, but should also be clearly summarized in the main text.

15. **Discussion.** Such a section is usually but perhaps not always needed to clarify the meaning of the results. The object is to cover such items as possible reasons for study outcomes, explanations of any unexpected or discrepant findings, limits of the study, problems encountered and how they were solved or why they were not solved, and significance of the results for the hypotheses tested and for rehabilitation. Focus should be on the quality and meaning of the results. Discussion may of course range far beyond what is implied here—the researcher should know what is appropriate.

16. **Conclusions and Recommendations.** In simple terms, conclusions should state what was or was not accomplished by the study, with care exercised to assure that they do in fact follow from the results. In other words, what permissible generalizations or inferences follow from the results? Specific recommendations may be added if warranted.

17. **Utilization Plan.** If the results warrant, this section should (a) bring out the implications of the results for policy and practice, and (b) present a plan or strategy for using them. This will entail describing the usable product or outcome; its significance for policy or practice; nature and extent of the "market" for it; degree of confidence user can repose in it; and likely benefits from using it. This section should also explain how the product or practice can actually be installed or utilized; staff, facilities, know-how, or other resources needed to use it successfully; and adjustments or allowance for side-effects or trade-offs that may have to be made. Include also any instances of actual use in the field already, or plans by grantee or others for such use.

REFERENCE MATERIALS

18. **Appendices.** Appendices can be used to present detailed information that the reader may prefer to study separately, with references to them in the text. If more than one appendix is used, designate them Appendix A, Appendix B, etc., title each, and start each on a right-hand page.

NOTE: **Appendices encumber a report, often impair its usefulness, may not be read, and should be included only when considered essential.** Examples of possible appendix materials:

—Facsimiles of forms, tests, or questionnaires
—Tables or charts too extensive to be given in the text
—Lists of participants in conferences or symposia

19. **Glossary of Terms.** When many unusual technical terms are used, they should be listed alphabetically and defined in a Glossary. When only a few such terms are used, define them in the text the first time used.

20. **References.** Sources cited in the text should be listed at the end, alphabetically by author, under "References." Use "Bibliography" if the list is definitive or close to it. Entries should follow an acceptable, uniform style. Citations in the text should be in the form, "Freud (1914) found . . ." Texts, articles, and other sources not cited in the text should not appear among the references, for if not cited in the report their inclusion is a dubious practice. Such non-cited sources may of course be listed separately "for additional reading."

21. **Index.** If an index seems desirable, it should be placed at the very end of the document.

22. **Back Cover.** A durable back cover, usually blank, should protect the document. Front and back covers should be the same size as that used for the text.

III. Other Essential Requirements

1. Physical Aspects of the Document

a. **Type size** for the main text should be at least 10 point.

b. **Quality of type**—Only reports that can be reproduced legibly by microform methods, and are easily readable, are acceptable. Faint inking, filled-in or broken letters, illegible text or illustrations, or similar imperfections are not acceptable.

c. **Spacing**—Avoid double spacing insofar as possible. Single or at least 1½ spacing of text lines is preferable, for it reduces the cost of reproduction, mailing, and storage.

d. **Page Numbering**—All pages through Index must be numbered consecutively in one series, using Arabic numerals. Use small Roman numerals for preliminary pages before main text.

e. **Placement on Pages**—On 8" x 10" or 8½" x 11" size documents, top and bottom margins should be at least one inch. If text is on one side only, leave 1½ inches at the left margin to allow for binding, and one inch at the right. It is strongly recommended, however, that text be on both sides of each sheet. In such cases, allow 1½ inches at both margins to permit alternate binding left and right. In the case of thin saddle-stitched 6" x 9" monographs, all of these margins may be somewhat narrower, but crowding the page is undesirable.

f. **Binding**—Side- or saddle-stitching, glueback binding, and simple stapling are all acceptable. If a document is 3/16" or more in thickness, a square-back binding is preferred, so that title can appear on the back edge to permit identification on a bookshelf. If simple stapling is used, and document is 3/16" or more thick, tape may be added to permit identification along the spine. **Slide fasteners and similar makeshift bindings are not acceptable,** for they always tend to come apart and may even cut the user. Round plastic binders, although inexpensive, are not really acceptable because documents with such binding cannot be easily identified on bookshelves, may be flimsy and come apart, and are awkward to shelve.

g. **Tables**—All tables should be as simple as possible, so that the reader can easily grasp the meaning of the data. If possible, place all tables so they may be viewed without turning the document sideways. If a table must be placed sideways, be sure that it reads from the right.

h. **Color-coding**—Avoid color-coding of maps and charts, for color cannot be reproduced by NTIS. Use varieties of texture instead (vertical and horizontal lines, dots, cross-hatching, etc.). Use only black ink for all printing and reproduction.

i. **Size of Page**—Do not use pages

larger than 8½" x 11", nor foldouts that have either dimension larger than 11 inches. Avoid all foldouts if possible.

2. **Copyright.** The purpose of R&D grants and contracts under the Rehabilitation Act of 1973 is to develop knowledge that can be used to improve services to handicapped persons. This being so, both the Department and RSA encourage project directors to utilize various means to bring this knowledge to the attention of users. Accordingly, results of any activity supported under the RSA research program may be published without prior review by DHEW/RSA, **provided that** such publication carry a footnote acknowledging RSA support, identifying the project grant, and stating that interpretations made in the publication do not necessarily represent the opinions of DHEW/RSA; **provided also** that six copies of such publications are furnished to RSA.

   When a project produces copyrightable material, such as a book, test, or research instrument, the author is free, and indeed encouraged, to copyright it. However, since the Department reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use, all such copyrighted material resulting from a grant or contract, the following notice of such DHEW license must appear in each copyrighted work:

   "The Rehabilitation Services Administration reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use, and authorize others to use, all copyrighted materials resulting from this grant-supported research. This includes a license to the National Technical Information Service of the Department of Commerce as an agent of RSA to reproduce and sell this document to the public."

   The license to the National Technical Information Service reflects the fact that it acts as a repository and distribution center for RSA R&D final and special reports.

3. **Length of Report.** Brevity is still the soul of wit. It also saves both time and money for all concerned, and probably increases readership. As noted above in Sec. II, Par. 3, RSA enters all R&D final reports into the National Technical Information Service, which then provides storage, retrieval, microfiche, and hardcopy capability for users. The NTIS price schedule for hardcopy is now so high (e.g., $3.50 for 1–25 pages, $4.50 for 51–75 pages, $5.50 for 101–125 pages, $8.00 for 226–250 pages, $9.75 for 301–325 pages), that **for this additional reason reports should be kept as short as possible,** consistent with other requirements.

4. **Submission and Distribution of Reports.** Grantee should submit 35 copies of RSA-supported R&D Final Reports, and 50 copies of the Executive Summary (see 5 below) to:

   Mr. George Engstrom, Chief
   Division of Program Support
   Rehabilitation Services
   Administration
   Room 3429 Switzer Building—
   DHEW
   Washington, D.C. 20201

Instructions for distributing additional copies of the report to some 250 users will then be mailed to the grantee. In addition, the grantee should be prepared to furnish copies of the report to those who request them for a period of one year after submission.

5. **Executive Summary.** A separate Executive Summary should be prepared for busy readers. Use the same cover and title page as for final report, with "Executive Summary" clearly indicated. Essentially this Summary should expand the Author's Abstract described above, and cover the main elements of the project well enough to make the research and its findings meaningful and useful to the busy reader. Although its length may vary, a few pages should suffice in most cases.

6. **Due Date—Delinquent Reports.** The Final Report is due **no later than** 90 days after termination of the project, and is a fundamental obligation of all R&D projects. Delinquency in this regard is a serious matter. The Project Director is responsible for submission of the report. If no report is received, no further RSA grants will be made in which he, or the principal investigator, or other person responsible for the report, is to be involved. In addition the Executive Officer of the agency doing the research will be notified of the delinquency.

7. **Inadequate Reports.** RSA reserves the right to reject final reports that are inadequate because of failure to observe the requirements of this **Guide,** or unacceptable for other reasons, such as lack of substance.

APPENDIX A

BIBLIOGRAPHIC DATA SHEET	1. Report No.	2.	3. Recipient's Accession No.
4. Title and Subtitle			5. Report Date
			6.
7. Author(s)			8. Performing Organization Rept. No.
9. Performing Organization Name and Address			10. Project/Task/Work Unit No.
			11. Contract/Grant No.
12. Sponsoring Organization Name and Address			13. Type of Report & Period Covered
			14.
15. Supplementary Notes			
16. Abstracts			
17. Key Words and Document Analysis. 17a. Descriptors 17b. Identifiers/Open-Ended Terms 17c. COSATI Field/Group			
18. Availability Statement		19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages
		20. Security Class (This Page UNCLASSIFIED	22. Price

FORM NTIS-35 (REV. 3-72) THIS FORM MAY BE REPRODUCED USCOMM-DC 14952-P72

(OVER FOR INSTRUCTIONS)

INSTRUCTIONS FOR COMPLETING FORM NTIS-35 (10-70) (Bibliographic Data Sheet based on COSATI Guidelines to Format Standards for Scientific and Technical Reports Prepared by or for the Federal Government, PB-180 600).

1. **Report Number.** Each individually bound report shall carry a unique alphanumeric designation selected by the performing organization or provided by the sponsoring organization. Use uppercase letters and Arabic numerals only. Examples FASEB-NS-87 and FAA-RD-68-09.

2. Leave blank.

3. **Recipient's Accession Number.** Reserved for use by each report recipient.

4. **Title and Subtitle.** Title should indicate clearly and briefly the subject coverage of the report, and be displayed prominently. Set subtitle, if used, in smaller type or otherwise subordinate it to main title. When a report is prepared in more than one volume, repeat the primary title, add volume number and include subtitle for the specific volume.

5. **Report Date.** Each report shall carry a date indicating at least month and year. Indicate the basis on which it was selected (e.g., date of issue, date of approval, date of preparation.

6. **Performing Organization Code.** Leave blank.

7. **Author(s).** Give name(s) in conventional order (e.g., John R. Doe, or J.Robert Doe). List author's affiliation if it differs from the performing organization.

8. **Performing Organization Report Number.** Insert if performing organization wishes to assign this number.

9. **Performing Organization Name and Address.** Give name, street, city, state, and zip code. List no more than two levels of an organizational hierarchy. Display the name of the organization exactly as it should appear in Government indexes such as **USGRDR-I.**

10. **Project/Task/Work Unit Number.** Use the project, task and work unit numbers under which the report was prepared.

11. **Contract/Grant Number.** Insert contract or grant number under which report was prepared.

12. **Sponsoring Agency Name and Address.** Include zip code.

13. **Type of Report and Period Covered.** Indicate interim, final, etc., and, if applicable, dates covered.

14. **Sponsoring Agency Code.** Leave blank.

15. **Supplementary Notes.** Enter information not included elsewhere but useful, such as: Prepared in cooperation with . . . Translation of . . . Presented at conference of . . . To be published in . . . Supersedes . . . Supplements . . .

16. **Abstract.** Include a brief (200 words or less) factual summary of the most significant information contained in the report. If the report contains a significant bibliography or literature survey, mention it here.

17. **Key Words and Document Analysis. (a). Descriptors.** Select from the Thesaurus of Engineering and Scientific Terms the proper authorized terms that identify the major concept of the research and are sufficiently specific and precise to be used as index entries for cataloging.
(b). Identifiers and Open-Ended Terms. Use identifiers for project names, code names, equipment designators, etc. Use open-ended terms written in descriptor form for those subjects for which no descriptor exists.
(c). COSATI Field/Group. Field and Group assignments are to be taken from the 1965 COSATI Subject Category List. Since the majority of documents are multidisciplinary in nature, the primary Field/Group assignment(s) will be the specific discipline, area of human endeavor, or type of physical object. The application(s) will be cross-referenced with secondary Field/Group assignments that will follow the primary posting(s).

18. **Distribution Statement.** Denote releasability to the public or limitation for reasons other than security for example "Release unlimited". Cite any availability to the public, with address and price.

19 & 20. **Security Classification.** Do not submit classified reports to the National Technical

21. **Number of Pages.** Insert the total number of pages, including this one and unnumbered pages, but excluding distribution list, if any.

22. **Price.** Insert the price set by the National Technical Information Service or the Government Printing Office, if known.

FORM NTIS-35 (REV. 3-72) USCOMM-DC 14952-P72

APPENDIX B

1. NTIS ACCESSION NO. *Allow 3 weeks before ordering*	2. DATE SENT	FORM NTIS-79 (11-74) U.S. DEPT. OF COMM. NAT. TECH. INF. SERV.
Leave Blank *Use when ordering or referring with prices.*	**Date Report Sent to NTIS**	**ACCESSION NOTICE**

3a. REPORT IDENTIFYING INFORMATION *(One title per card)*

Official Title of Report. Include Author and Date If You Wish. Bear in Mind That These Cards Are For the Eventual Use of Grantee and RSA.

3b. REPORT NUMBER	3c. CONTACT REGARDING THIS REPORT
Same No. as in Item 1 of Bibliographic Data Sheet	**Name & Phone of Person Who Sent in Report and Can Answer Questions On It**

4. SOURCE CLIENT CODE *(If known)*	5. PROCEDURE NO.	6. WE PLAN A PRESS RELEASE: CALL
HEWRSA	---------	**If Grantee Plans Such a Release, Give Name and Phone of Contact**

7. NTIS PAPERCOPY PRICE	NTIS MAGNETIC TAPE PRICE	8. MICROFICHE	9. NO. COPIES SENT
$	$	$	

CUT HERE AND FILE BY TITLE

INSTRUCTIONS:

1. Put your mailing address on reverse side.
2. Fill in 2, 3, 4, 5, 6, and 9.
3. Staple card to front cover of top document and mail to Input Branch, NTIS.
4. If possible, send us 25 copies to permit immediate filling of orders and use of prestocking formula.

NTIS will fill in boxes 1, 7, and 8 and mail to addressee.

USCOMM-DC 5869-P75

U.S. DEPARTMENT OF COMMERCE
National Technical Information Service
Springfield, Va. 22161

OFFICIAL BUSINESS

Penalty for Private Use, $300

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
COM-211

U.S.MAIL

APPENDIX C

The Griffis Study—Decision Models in Disability Determination and Rehabilitation Assessment
RD-1955—May 1967
Iver A. Iversen, Project Director
American Rehabilitation Foundation, 800 Chicago Av,
Minneapolis, Minn. 55404

Office of Research and Demonstrations
Rehabilitation Services Administration
Department of Health, Education, and Welfare

AUTHOR'S ABSTRACT

The purpose was to develop predictive tools to improve the quality of decisions on (1) granting Social Security Disability Insurance Benefits (SSDIB) and (2) determining which SSDIB applicants had VR potential. Data used in building the empirically-based predictive equations came from a previous study, **The Project 21,** and included employment and medical history, rating scales developed by a vocational counselor, and results of interest, aptitude, and personality tests. Of 57 variables available, 14 were discarded as unrelated to disability determination, referral for VR, or later employment. An equation for predicting each criterion was then constructed from the remaining variables, using stepwise regression analysis.

Best predictors of later return to employment were (1) client efforts to return to work, (2) client's own opinion of his ability to work, (3) interest in VR, (4) vocational assets around which to plan VR, and (5) absence of "decisively negative factors." This decision model successfully predicted 121 of 167 cases—better than the research team in conference. Factors related to referral to DVR were similar, "interest in DVR" and "client's own opinion of ability to work" showing up in both instances.

Best predictors of granting of disability benefits were (1) poor medical prognosis, (2) low physical mobility, (3) lack of efforts to resume work, (4) inability to return to prior work, and (5) presence of psychiatric disorder or stroke. The full equation predicted "grant" vs. "non-grant" of benefits 82% of the time.

In general, it was shown that such usable equations can be empirically derived and used to aid clinical judgment and improve the accuracy of decisions made. Such tools also throw light on the critical factors involved in the decisions. They reinforce human judgment when there is agreement; and even when clinical judgment and the equation differ, the latter can still help by alerting the clinician to a potentially difficult case. The main drawbacks are that evidence used to build the tools must be carefully gathered and the resulting ratings made with equal care. Given such empirically sound tools, complex decisions can in principle be made less expensively and more accurately than by the case-conference method.

SAMPLE TITLE PAGE

A RESEARCH UTILIZATION PROGRAM TO SERVE REGION VIII

Final Report

Grant No. 22-P-57643/8-03

Prepared by:
Henry H. Welch, Ph.D.
Assistant Director for Research Utilization
Center for Social Research and Development
Denver Research Institute/University of Denver
2142 South High Street
Denver, Colorado 80210
303-753-3464

July 31, 1975

(Covers research performed from September 1972 to May 1975)

This study was supported in part by Demonstration Grant 22-P-57643 from the Office of Research and Demonstrations, Rehabilitation Services Administration, Office of Human Development, Department of Health, Education, and Welfare, Washington, D.C. 20201

NOTES

DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
WASHINGTON, D.C. 20201

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF H.E.W.

HEW–391

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF HUMAN DEVELOPMENT
WASHINGTON, D. C. 20201

PROGRAM REGULATION GUIDE
RSA-PRG-76-24
February 10, 1976

TO : STATE REHABILITATION AGENCIES (GENERAL)
STATE REHABILITATION AGENCIES (BLIND)

SUBJECT: Rehabilitation Services Manual Transmittal #7 Dated April 1975 on Research and Demonstration (Domestic, Extramural)

PURPOSE: This Memorandum transmits the complete Chapter 4010, Research and Demonstration (Domestic, Extramural) which was previously transmitted as Manual Transmittal #7, PRG 75-6 of April 21, 1975 and Manual Transmittal #23, PRG 76-10 of October 21, 1975. This issuance does not replace the two earlier transmittals but does provide additional copies of the combined Manual Chapter under the original Manual Transmittal number. Page 1 of the Chapter has been corrected to reflect pen and ink corrections promulgated in Transmittal #23 dated October 1975. Pages 2, 3 and 11 have been corrected to reflect the new numerical designations of the VR Regulations, occasioned by the transfer of RSA to the Office of Human Development.

EFFECTIVE DATE : Upon Receipt

INQUIRIES TO : Executive Director of Research, RSA

Andrew S. Adams
Commissioner of Rehabilitation Services

FEDERAL DOMESTIC ASSISTANCE CATALOG NUMBER 13.627

TABLE OF CONTENTS

4010.01 Legal Basis

Rehabilitation Act of 1973 (Public Law 93-112) as amended by P.L. 93-516, Sections 200 and 202. Code of Federal Regulations, Chapter XIII of Title 45, Part 1362, Sections 1362.1 - 1362.25, 1302.60 - 1302.65.

4010.02 Purpose and Scope of this Chapter

The basic authority for research under this Act is contained in Section 200 which states "The purpose of this Title is to authorize Federal assistance to State and public or non-profit agencies and organizations to--

(a) plan and conduct research, demonstrations, and related activities in the rehabilitation of handicapped individuals, and
(b) ....

This Chapter of the Rehabilitation Services Manual sets forth basic requirements and guidelines for domestic research and demonstration projects conducted under authority of Section 202(a), 202(b)(1)(2)(3)(4) of the Rehabilitation Act of 1973, as amended by P.L. 93-516. A separate chapter deals with the international program authorized by Section 202(b)(5).

4010.03 Background

The Rehabilitation Act of 1973 as amended and implementing regulations make reference to "projects for the purpose of planning and conducting research, demonstrations, and related activities which bear directly on the development of methods, procedures, and devices to assist in the provision of vocational rehabilitation services to handicapped individuals, especially those with the most severe handicaps, under this Act."

Legislative history and words of the Act itself make clear that research funded under the authority of the Act is meant to improve the delivery of rehabilitation services to handicapped individuals. It should be practical, its end result should be usable. It should "...hold promise of increasing knowledge and improving methods in rehabilitation of handicapped individuals..."

Further indication of the purpose of projects under the new Act is contained in the regulations on Standards for Evaluating Programs and Projects, 45 CFR Chapter XIII, Part 1370, Section 1370.3.

> "Projects are to be judged by the extent to which the normal /usual/ program performance, as measured by the evaluation standards, would be improved as a result of the project. Projects are to be evaluated by the following criteria: (1) specificity of goals (before the project is approved); (2) the extent to which they /the goals/ benefit the program; and (3) feasibility of transferring knowledge acquired from project to program." (See appendix B).

4010.04 Definitions

(a) Assistance--Any function of a federal agency which provides assistance or benefits that can be requested or applied for by a State or States, territorial possession, county, city, other political subdivision, grouping, or instrumentality thereof or by any domestic profit or non-profit corporation, institution, or individual, other than an agency of the Federal Government . . . includes but is not limited to grants, loans, loan guarantees, scholarships, mortgage loans, insurance, cash benefit payments, and other types of financial assistance; . . .'requested or applied for' means the potential applicant or beneficiary must initiate the administrative process which will eventually result in the provision of assistance or benefits. The term excludes solicited contracts, shared revenues, automatic payments, and indirect assistance or benefits resulting from Federal operations. (Excerpted from OMB memo of August 30, 1974, Instructions for Updating the Catalog of Federal Domestic Assistance Programs.)

(b) At Risk--An individual is considered to be "at risk" if he may be exposed to the possibility of harm--physical, psychological, sociological, or other--as a consequence of any activity which goes beyond the application of community established and accepted methods necessary to meet his needs. The determination of when an individual is at risk requires the application of common sense and sound professional judgment to the circumstances of the activity in question and the capacity to distinguish normal settings to which the individual will return if

vocational rehabilitation is successful from those which may involve risk. Responsibility for this determination resides at all levels of institutional and departmental review. Definitive determination will be made by the operating agency. (See 4010.19).

(c) Budget Period--means a period of time (usually 12 months) within an approved project period covered by a specific budget for which an award of a grant is made and for which a Financial Status Report is required. The award of a grant for the initial budget period is considered a notification of RSA's intent to support the project for the duration of the approved project period, subject to satisfactory progress.

(d) Competing extension (renewal)--means approval of a project for another project period beyond the originally approved project period, on the basis of the same type of review accorded to a new application and where the application competes for funds against other new applications in its category or class or funds allocation category.

(e) Continuation request--a non-competing application for the second (or 3rd, or 4th, etc.) budget period of an approved project period, containing a report of progress from date of award of grant (or last progress report) to date of preparation of report with specific plans, time-tables, and milestones for the budget period being requested. Detailed instructions and application forms for this request and report are routinely forwarded to the grantee by the Division of Project Grants Administration (DPGA).

(f) Demonstration--in the R&D program, means the application in new settings of results derived from previous research, development, testing, or practice for the purpose of establishing the reliability, or further validation, or for determining the cost-effectiveness of new rehabilitation procedures.

(g) Development--the use of available knowledge and technology to achieve a workable prototype of a system, process, device, etc., the logic and use of which is defined.

(h) Discontinuation--action taken to withdraw support of a project at the end of any budget period prior to project period termination date. Ordinarily such action is only taken on the basis of unsatisfactory performance (progress). Reasonable advance notice will be given of intention to discontinue the project assistance (support).

(i) Early Termination of grants--a grant may be revoked or terminated at any time in whole, or in part, within the project period whenever it is determined by RSA that the grantee has failed to comply with the terms of the grant. The grantee will be promptly informed in writing, stating reasons and effective date. Except as provided above R&D grants may be terminated only as follows:

1. By RSA with the consent of the grantee, in which case both parties will agree on the terminating conditions.

2. By the grantee, upon written notification to RSA setting forth the reasons and effective date.

When early termination occurs, a final narrative report, a Financial Status Report and a final inventions report must be submitted.

(j) Feasibility project--trial, experimentation, or operational testing of a process or system, an instrument, technique, or method, the feasibility of which must be determined in order to conduct a needed project.

(k) Field Studies--Usually is a project where the major element is systematic observation of behavior within actual ongoing human systems. The researcher's interest is to disturb the system being studied as little as possible so that behavior observed is true or natural and is not behavior influenced by the research procedures themselves. Much research in the fields of anthropology and sociology has utilized this approach. However, in Rehabilitation it has seldom been used.

(1) Grant--money paid by the Federal government to eligible organizations to carry out or assist in meeting the cost of conducting a discrete activity or program, authorized by a Federal law, with a finite termination date and an approved budget.

(m) Project--means a discrete activity with a finite termination date.

(n) Project Director/Principal Investigator--a qualified individual designated by the grantee or contracting organization and approved by the grant or contract-awarding organization to conduct the study, project, or demonstration.

(o) Project Objectives--Significant observable, measurable results to be achieved during the project period.

(p) Project Officer--the RSA Central Office research staff person responsible for soliciting proposals, evaluating applications, and monitoring grants and contracts awarded for research projects. Handles research administrative matters, monitors project progress in reaching milestones, and in order to enhance the research utilization potential of a project assists project director with specific recommendations in involving potential consumers in considering utilization of project potential. Does not directly handle fiscal matters related to the project operation but consults with counterpart in the Division of Project Grants Administration (DPGA) on fiscal matters that affect the scientific conduct of the project. May provide technical assistance to potential grantees although much of this should come from Regional Office staff.

(q) Project Period--means the total period of time for which a project is approved for support with Federal funds. Initially it may not be more than for five years in the R&D activities authorized under 202(a). Such period may be extended beyond the project period solely to permit continuation or completion of the same approved project by use of funds previously awarded. Support of a project beyond the initially approved project period may be authorized if such support is requested, evaluated, and approved on the same basis as an initial application (competing

extension). The initial date of a project period is the earliest date that projects funds may be obligated or expended.

(r) Research--is scientific inquiry, investigation, examination, or experimentation aimed at the discovery and formulation of new principles or uniformities describing replicable facts, testing of specific hypotheses, revision of accepted theories or understandings in light of new facts, or practical application of such new or revised theories or understandings to test their general validity.

(s) Research Issue--a problem, the solution of which can be achieved, or partially achieved through the development of new knowledge, validation of existing information, or other research approaches. These are each described in separate papers available from RSA showing: the relationship of the issue to service program goals and objectives, other research issues, a summary of completed research, projection of ongoing research, listing of information needs, research objectives, research topics to achieve research objectives. Detailed research issues are written to give a prospective applicant the necessary background to write a proposal that is relevant to RSA. A list of current issues is prepared each year for distribution. Interested applicants should write to the Office of Rehabilitation Research and Demonstrations in RSA (ORRD-RSA) for a copy of the specific research issue of interest. Since the compilation of all issues represents a sizable document (over 400 pages) the entire set is not widely distributed. The entire set of issues is updated each year and submitted by RSA to all State VR agencies and to selected others for comment and revision based on those comments before release to the general public.

(t) Research Utilization--developmental activities seeking to link research findings to planning, policy making, program administration, and service practice. Such projects, or activities focus not only on the R&D process itself, but also on the characteristics and needs of a multi-level user populations, the maintenance of a data base, communication channels, linking agents and institutions and other aspects of the

change process. Since one of the major problems in research utilization is the resistance, inertia and lack of awareness of the implications in slightly different contexts, research utilization plans should spell out the steps by which these barriers can be overcome.

(u) Suspension--action taken which temporarily suspends federal assistance under the grant pending corrective action by the grantee or pending a decision to terminate the grant.

(v) Target Population--The group of individuals, organization, or other entities which would be affected by the results of research and to whom results would ordinarily be communicated. More than one target group may be involved since research results may affect those who receive service, provide service, administer services, etc.

4010.05 Scope of Research and Demonstration Projects

Projects funded under authority of Section 202(a) of the Act may include:

(a) medical and other scientific, technical, methodological and other investigations into the nature of disability, methods of analyzing it, and restorative techniques;

(b) studies and analyses of industrial, vocational, social, psychological, economic, and other factors affecting rehabilitation of handicapped individuals;

(c) studies and analyses of the special problems of the homebound and institutionalized individuals;

(d) studies, analyses and demonstrations of architectural and engineering design adapted to meet the special needs of handicapped individuals;

(e) feasibility studies, demonstrations, and developmental projects in any of the above areas;

(f) and related activities which hold promise of increasing knowledge and improving methods in the

rehabilitation of handicapped individuals and individuals with the most severe handicaps.

4010.06 Scope of Research and Training Centers

Section 202(b)(1) of the Act authorizes the establishment of Research and Training Centers as a distinct organizational and physical entity in conjunction with an appropriate institution of higher education which has the expertise and well-developed resources for conducting multidisciplinary research and training. The Centers must also operate in association with clinical services considered essential for carrying out a comprehensive program of patient/client care and rehabilitation.

The Centers have the unique synergistic mission of:

(a) conducting programs of rehabilitation research aimed toward the discovery of new knowledge which will improve rehabilitation methods, management and service delivery systems, alleviate or stabilize handicapping conditions, and promote maximum physical, social and economic independence:

(b) conducting a program of teaching and training to;

- assist in preparing and increasing the number of research and other rehabilitation related professional and non-professional personnel where manpower shortages exist;

- widely disseminate and promote the application of the new knowledge resulting from research findings;

- incorporate rehabilitation education into all rehabilitation related university undergraduate and graduate curricula and;

- improve the skills of existing rehabilitation personnel and the effectiveness of rehabilitation services through the media of seminars, workshops, study groups, short and long term in-service and continuing education programs.

The Centers should conduct or be affiliated with an exemplary program of services to disabled persons as support to the research and training activities of the Center and as concrete evidence of the utilization of new knowledge generated out of the research program. Therefore, the Center operates as a mutually reinforcing system.

The Centers' research should be programmatic, focusing on a limited number of high priority core area problems requiring in-depth study which will be sequentially pursued, and whose findings will have near-term relevance and application to the rehabilitation of severely handicapped persons. Research activities in these Centers should consist of a number of related projects which are reported annually and reviewed for scientific merit, for relevance to RSA program goals, for responsiveness to research issues, and for applicability. Similarly, the training program should be responsive to the state, regional and national rehabilitation agency needs. The state VR agencies in the region should be utilized for the identification of relevant research and training issues and needs but, in prioritizing the research issues, those having national significance should be given preference.

Each Center should have a viable Regional Advisory Council to assure maximum regional and state vocational rehabilitation agency participation in the Center's program development and implementation strategy.

4010.07 Scope of Rehabilitation Engineering Research

Research grants made under authority of Section 202(b)(2) of the Act are to develop innovative methods of applying advanced medical technology, scientific achievement and psychological and social knowledge to solve rehabilitation problems through planning and conducting research, including cooperative research with public or private agencies and organizations designed to produce new scientific knowledge, equipment, and devices suitable for solving problems in the rehabilitation of handicapped individuals and for reducing environmental barriers.

Each rehabilitation engineering research program must be developed around a core research area which will be explored in depth to solve the problems in the

rehabilitation of handicapped individuals through the combined efforts of medical, engineering, and related sciences. Each project or center must be located in a clinical rehabilitation setting which provides an environment for cooperative research and the transfer of research findings to rehabilitation practice at a reasonable cost. Centers and projects should emphasize the medical-technological management of disabling conditions, the adjustment to limitations of functions of the individual and the environment, service delivery systems, or other core areas, utilizing the application of new or innovative technology, and other areas as approved by the Secretary. Centers and projects must cooperate with State and other appropriate agencies in developing systems of information exchange and coordination to ensure the prompt utilization of research findings.

4010.08 Scope of Spinal Cord Injury Research

Research grants made under authority of Section 202(b)(3) of the Act are for specialized spinal cord injury research to be coordinated with special service projects and demonstrations for the spinal cord injured authorized under Section 304(b) of the Act. The administration of such a research program will be planned by the Rehabilitation Services Administration to:

(1) Ensure dissemination of research findings among all projects supported under this Section and under Chapter XIII, Title 45, Part 1362, Section 1362.40 of the Code of Federal Regulations.

(2) Provide encouragement and support for initiatives and new approaches by individual and institutional investigators; and

(3) Establish and maintain close working relationships with the Veterans Administration, National Institutes of Health, other governmental and voluntary institutions and organizations engaged in similar efforts in order to unify and coordinate scientific efforts, encourage joint planning and promote the interchange of data and reports among spinal cord injury investigators.

Activities under this Section must be specifically directed to the achievement of new knowledge for improving

rehabilitation services for the spinal cord injured, and techniques and methods connected therewith. Research and demonstration activities must focus upon the medical, psychological, vocational, or social aspects of spinal cord injury rehabilitation. Areas of research emphasis may include, but are not limited to, the development of new rehabilitation techniques and methods, the prevention and treatment of complications; and adjustment of the spinal cord injured to catastrophic disability; innovative vocational, educational and community placement services; methods of follow-up care; and the benefits of various alternative service models. Data collection and analysis components must be included within each project since research results dissemination and utilization will be an essential part of project activities.

4010.09 Scope of End-Stage Renal Disease Research

Research grants made under authority of Section 202(b)(4) of the Act may include projects and demonstrations for providing special services (including transplantation and dialysis), artificial kidneys, and supplies necessary for the rehabilitation of persons suffering from such disease. Such research will be administered by RSA to:

(1) Ensure dissemination of research findings;

(2) Provide encouragement and support for initiatives and new approaches by individual and institutional investigators; and

(3) Establish and maintain close working relationships with other governmental and voluntary institutions and organizations engaged in similar efforts, in order to unify and coordinate scientific efforts, encourage joint planning, and promote the interchange of data and reports among investigators in the field of end-stage renal disease.

Activities and projects under this Section of the Act will be planned by the Rehabilitation Services Administration as part of a continuum of projects, each of which will focus on specific problem aspects of end-stage renal disease. Primary emphasis will be directed to the psychosocial and vocational aspects of end-stage renal disease

and the development of experimental techniques and methods for achieving employment. Emphasis will also be directed towards:

(1) Collecting and disseminating information on end-stage renal disease derived under this program and related programs;

(2) Initiating information-sharing activities and interchange of experts in cooperation with public or other non-profit agencies and organizations; and

(3) Producing and distributing materials necessary to enable the utilization of research findings.

4010.10 Eligibility for Support

Section 202(a) of the Act provides that

> "...States and public or non-profit agencies and organizations, including institutions of higher education, to pay part of the cost of projects..."

are eligible for project support under this authority. Profit-making organizations are not included under this authority (although they are included in other parts of of this Act).

Section 202(b)(1) research and training center grants may be made to States and public or non-profit agencies and organizations, including institutions of higher education or rehabilitation facilities having well-recognized programs of research and associated with institutions of higher education.

Section 202(b)(2) rehabilitation engineering research grants may be made to State, private, and public non-profit agencies and organizations, including institutions of higher education. Eligible applicants are universities with recognized, well-developed clinical rehabilitation programs and cooperating medical and engineering schools, and State rehabilitation agencies or public or non-profit rehabilitation facilities, organizations, or institutions associated with such universities, provided that the center has a separate organizational identity.

Section 202(b)(3) spinal cord injury research grants may be made to State agencies, and other public or non-profit agencies and organizations, including institutions of higher education, hospitals, clinics, and rehabilitation facilities.

Section 202(b)(4) end-stage renal disease research grants may be made to State agencies and other public or non-profit agencies and organizations, including institutions of higher education.

4010.11 Relationship to Program

As noted above under Background, the Rehabilitation research program is predicated on the expectation that projects supported have the potential of improving services to handicapped individuals. It is therefore important for a potential RSA grantee to understand and reflect in the application how the project relates to ultimate improvement in service delivery. One must understand that the vocational rehabilitation agency pays the cost of vocational rehabilitation services through direct provision, such as vocational counseling or services at a State operated facility, or through purchase from "individual providers of services" such as physicians, dentists, psychiatrists, attendants, or from other public or privately operated facilities, etc. The State VR agency receives a large part of its support from the Rehabilitation Services Administration under authority of the Rehabilitation Act of 1973 and related regulations. The Act mandates certain activities on the part of RSA. RSA's broad mission might be paraphrased as: "In conjunction with the public and voluntary agencies, to stimulate, develop, improve and implement programs which provide services for the disabled and particularly the severely disabled in maximizing their potential for a full, and to the extent possible, a productive life."

RSA has certain program objectives, the attainment of which would assist the States and public and private agencies to carry out their missions to the extent that their missions relate to the VR objectives. RSA has a long range planning process which is participated in by RSA research staff. As constraints to achievement of program goals are identified, and where lack of knowledge is a significant factor, ORRD (RSA) staff establish a Research Issue. (See definitions above - 4010.04.) Sufficient background

information should be found in each research issue to enable a potential grantee to make the transition in his thinking from program problem to research proposal. The relationship must be clear. (See Standards for Evaluation of Research and Demonstration Projects, Appendix B.) It would be well for a potential researcher planning to submit a research proposal to RSA to contact a staff member of the Regional Office that has responsibility for the State in which the project is to be conducted. See application kit for address list. This can help ensure the proposal is relevant and may enable the writer to avoid unanticipated problems.

4010.12 State Rehabilitation Agency Consultation and Approval

Subsection 202(c) of the Act states that the provisions of Section 306 of the Act shall apply to assistance provided under Section 202 unless the context indicates to the contrary.

The mandate to secure State agency approval in certain situations and comments in other situations are outlined in subsections 306(h) and 306(i) of the Act.

Subsection 306(h) reads as follows:

> "(h) When in any State, funds provided under this title will be used for providing direct services to handicapped individuals or for establishing facilities which will provide such services, such services must be carried out in a manner not inconsistent with the State plan approved pursuant to Section 101."

Subsection 306(i) reads as follows:

> "(i) Prior to making a grant or entering into any contract under this title, the Secretary shall afford reasonable opportunity to the appropriate State agency or agencies designated pursuant to Section 101 to comment on such grant or contract."

It has been determined that these two subsections of 306 apply to domestic grants (and contracts) under Subsection 202--Research and Demonstrations. While there is a legal need to involve the State VR Agency in the development of

a project, there is a more compelling need to be sure that the State Agency is aware as early as possible of a potential grantee's intent to submit a research proposal, since the State VR Agency is the ultimate consumer of most research findings developed under R&D, or at least is impacted by the findings. From the standpoint of readiness to consider research findings, the most positive approach that can be taken by a potential grantee is to discuss his or her plans and intentions with the appropriate staff person in the State VR Agency and secure suggestions as to the appropriateness, soundness, and transferability of the idea. (See Appendix B.) All suggestions made at this point do not have to be accepted without question since the responsibility for the design of the proposal falls ultimately on the project director or principal investigator. However, one should be aware of the fact that RSA will request the State VR Agency to (1) comment on the completed proposal and (2) indicate any prior involvement in the proposal development. Back of the overriding principle that all R&D research should "...bear directly on the development of methods, procedures, and devices to assist in the provision of vocational rehabilitation services to handicapped individuals..." is the fact that research authority is in the Act in order to develop knowledge that can help the State and private agencies do a better job of serving handicapped individuals. State VR Agencies must be a partner with RSA in considering all domestic research under 202.

Because of the significance of the above quotation from Section 306(h) of the Act the approval of the appropriate State Vocational Rehabilitation Agency must be secured by the applicant, if other than the agency, for any R&D project which either involves direct services to handicapped individuals or the establishment of facilities which will render direct services to handicapped individuals of that State.

One very important consideration in securing State VR Agency approval is that if the proposed research involves cooperation by the VR Agency in securing access to clients or follow-up of former clients, or direct time of VR staff in interviews, filling out questionnaires, attending meetings, there may be serious questions of

the feasibility of the VR agency committing this much of its staff and other resources. This must be seriously explored by the applicant with the agency. Of course the applicant may be the State VR Agency. A very important point is that if the research is to involve staff or clients of more than one State VR agency, the proposal should be discussed with the Research Committee of the Council of State Administrators of Vocational Rehabilitation (CSAVR). Contact can be made with the current chairman through the CSAVR Washington office at 1522 K Street, N. W., Washington, D. C. 20005. Since the Research Committee has no staff support of its own and could be overwhelmed by many such requests, RSA suggests that multi-state research first be approached through a preapplication and RSA will only forward on to CSAVR those proposals it considers serious contenders for support.

4010.13 Deadlines for Submission

There are two review cycles per year. Formal applications should be received by RSA Central Office (see next Section of this chapter). Applications should be received 50 days prior to Peer Review Group meeting. Information on dates of meetings is contained in the application kit secured from DGCM. Approved grants are normally funded within 30 days after meeting, usually at the beginning of a month.

4010.14 Forwarding of Applications

Application kits may be secured by writing to the address listed below in this Section.

Applications are essentially of two kinds, preapplications and formal applications. A considerable amount of effort can go into the full development of a formal application. Much of that effort may be saved in many instances through the use of a pre-application. Unless the application is submitted in response to a notice that requests fully developed applications without the intermediate step of a pre-application, the initial application proposal must be in the form of a pre-application. Use form HEW-606T "Preapplication For Federal Assistance," Part I and Parts II, III and IV which may be secured with an application kit from the address below. In general, the questions contained in Part II are not applicable to Rehabilitation

R&D projects as this program is not one of the programs in attachment D, OMB Circular A-95.

The instructions for the narrative (Part IV) say it should be prepared on "a separate sheet of paper..." RSA feels that one page may not be sufficient for the applicant to give a brief description of the need, objectives, methods, and location of the proposed project, and encourages the applicant to use 2, 3, or 4 pages if necessary. It is assumed at this point that contacts spelled out in 4010.11 and 4010.12 have been made. The pre-application should be submitted with an original and two copies directly to:

Director, Division of Grants and Contract Management (DGCM)
Office of Human Development
Room 1427 Mary E. Switzer Building
Washington, D. C. 20201

An information copy will be sent by RSA to the State Director of the Vocational Rehabilitation Agency in the State where the project is located, and an information copy will also be sent to the RSA Regional Office (see enclosed list of Regional Office addresses - showing what offices are responsible for relations with what States).

When an applicant has received a reply to a pre-application that encourages or requests the full development of a proposal or application, much more effort and work will be involved. At this point the applicant will need to start working with form HEW-608T, Parts I, III, IV and V. It should be noted that, in general, the questions of Part II are not applicable to Rehabilitation R&D applications and projects as this program is not one of those programs listed in Attachment D to OMB Circular A-95. The instructions for completing HEW 608T as well as the narrative portion of the proposal are contained in the application kit. A copy of the narrative instructions is also contained in this chapter as Appendix A. The application (HEW-608T) and its attached narrative should be submitted with an original and two copies to:

Director, Division of Grants and Contract Management (DGCM)
Office of Human Development
Room 1427 Mary E. Switzer Building
Washington, D. C. 20201

4010.15 The Review Process

When applications are received in Division of Grants and Contract Management (DGCM) an official file is prepared, if one has not already been prepared on the basis of a pre-application. One copy of the application is sent to the Office of Rehabilitation Research and Demonstrations (ORRD) in RSA for initial program review. If it is determined that the application is relevant to RSA the assigned project officer sends back a request to DPGA to have more copies prepared and one each is sent for comments (with a request for comments within 30 days) to the following:

(a) The appropriate Regional Office or offices.

(b) The appropriate State Director of Vocational Rehabilitation.

(c) The appropriate program persons in RSA Central Office who have expertise in, or responsibility for, the topic to be researched.

(d) Other Federal employees, as appropriate, in other agencies who could assist in evaluating the project.

(e) If necessary non-government experts who could add coverage to the review process in specialized topic areas.

When these individual reviews are received, the project officer prepares a staff summary giving a consensus of the recommendations, caveats, and suggestions for improvement.

Parallel to staff review is a process of evaluation conducted by an Initial Peer Review Group (IPRG) of outside consultants. This group ordinarily meets twice a year (see 4010.13 above). There are three IPRG's in RSA's program: (1) Rehabilitation Engineering; (2) Medical Rehabilitation; and (3) Psycho-social and Vocational. The Standards for Evaluating Research Projects (Appendix B to this chapter) are guides to reviewers as to the (a) relevance; (b) soundness; and (c) transferability of the project. A prospective proposal writer should review the Standards for Evaluating Research Projects (Appendix B) as well as the Instructions for Writing of Proposal Narrative (Appendix A) carefully before starting to write.

This same review process is followed (Region, State, Central Office, Peer Review Group) in consideration of the annual progress reports and continuation request each project must submit before funds are released for each succeeding budget period. Letters are sent to reviewers along with a copy of the report and specific questions are posed to permit concensus decisions.

4010.16 Applicant Share of Cost

For years RSA has generally required 10% matching for research projects and from 10% to 30% for demonstration projects with a heavy service component and there were expectations the service would be continued if the demonstration was successful. In some few unusual instances, as little as 5% has been accepted as matching in research projects. The new Act states that for projects funded under Section 202(a) through grants and contracts federal funds may pay part of the costs. Projects supported under 202(b) may pay all or part of the costs; each project budget is negotiated but generally the applicant pays part of the costs. It should be noted that Department instructions require that for, Research grant requests, the applicant's share not be shown in the application budget form but must be shown on a separate HEW Form 490, except for those applicants having an institutional cost sharing agreement with HEW. More detailed discussion on fiscal policies is available in another chapter of this Manual being developed by RSA.* This may be obtained from DGCM. Recipients of research grants may select one of two alternative approaches to cost sharing: (1) the project by project method in which the amount and kind is specified in each new application; or (2) an Institutional Cost Sharing Agreement. Institutional Agreements cover the aggregate of all research grants awarded by the various agencies of DHEW. The grantee agrees to maintain a stipulated average level of cost sharing for all covered grants each fiscal year. There may be no contribution on some grants provided the overall average is maintained through higher contribution on other grants.

However, in order to comply with the requirement of Section 202(a) that the grantee must pay some of the cost, there must be at least some cost sharing during the project period. The percentage of cost for the total life of the

*Chapter 4001 Grants Administration Policies.

grant should be shown on HEW Form 490. Grantees desiring further information on institutional cost sharing should write to:

Office of Assistant Secretary for Health
Cost and Audit Management Branch
Division of Grants and Contracts
5600 Fishers Lane
Rockville, Maryland 20852
Phone: (301) 443-3080

4010.17 Duration of Federal Support

Projects may be approved initially for a project period not to exceed five years. Most projects have been approved for not more than 3 years. The grants are always awarded for a budget period of 12 months and each succeeding budget period must be reapproved, on the basis of a review of activities for the prior budget period and proposed plans for the budget period immediately following the review point in time and availability of funds. Additional years of support beyond the initial approval (but not more than five years total) may be granted if sufficient justification is furnished at the time the regular continuation is considered and if additional funds are or can be made available. Approval of support beyond five years can only be granted through a competing renewal request in which the application goes through the same review process as a new application and competes with other new applications for funds. Support beyond five years is rare except for the Regional Rehabilitation Research Institutes, Programmatic Research projects, Research and Training Centers, and Rehabilitation Engineering Research Centers in which case new project proposals and new project grant periods are required.

4010.18 Appeals Procedure

Grantees may formally appeal certain post-award administrative decisions made by RSA officials. There are two levels of appeal: an informal procedure at the RSA level and a formal procedure involving a Grant Appeals Board at the Department level. If an appeal is pursued, the grantee must exhaust the informal procedure before appealing to the Grant Appeals Board, Office of the Secretary.

The following decisions may be appealed:

(1) Termination, in whole or in part, of a grant for failure of the grantee to conform with the grant terms and conditions;

(2) A determination that an expenditure not allowable under the grant has been charged to the grant, or that the grantee has otherwise failed to discharge its obligation to account for grant funds;

(3) The disapproval of a grantee's written request for permission to incur an expenditure during the term of a grant;

(4) A determination that a grant is void;

(5) Establishment of indirect cost or research patient hospital care rates (except where the grantee has appealed to the Armed Service Board of Contract Appeals with respect to such a determination under a contract with the Department).

Additional details regarding appeals procedures may be found in DHEW Grant Appeals Procedure--45 CFR 16.

4010.19 Protection of Human Subjects at Risk (see definitions)

Safeguarding the rights and welfare of human subjects involved in activities supported by grants or contract from the Department of Health, Education, and Welfare is the responsibility of the institution which receives or is accountable to the DHEW for the funds awarded for the support of the activity.

In order to provide for the adequate discharge of this institutional responsibility, it is the policy of the Department that no grant or contract for an activity involving human subjects may be made unless the application for such support has been reviewed by an appropriate institutional committee.

This review must determine that the rights and welfare of the subjects involved are adequately protected, that the risks to an individual are outweighed by the potential benefits to him or by the importance of the

knowledge to be gained, and that informed consent is to be obtained by methods that are adequate and appropriate.

In addition the committee must establish a basis for continuing review of the activity in keeping with these determinations.

The institution must submit to the DHEW, for its review, approval, and official acceptance, an assurance of its compliance with this policy. The institution must also provide with each proposal involving human subjects a certification that it has been or will be reviewed in accordance with the institution's assurance.

No grant or contract involving human subjects at risk will be made to an individual unless he is affiliated with or sponsored by an institution which can and does assume responsibility for the protection of the subjects involved.

Since the welfare of subjects is a matter of concern to the Department of Health, Education, and Welfare as well as to the institution, no grant or contract involving human subjects will be made unless the proposal for such support has been reviewed and approved by an appropriate professional committee within the responsible component of the Department. As a result of this review, the committee may recommend to the operating agency, and the operating agency may require, the imposition of specific grant or contract terms providing for the protection of human subjects, including requirements for informed consent. To negotiate the required assurance, applicants must contact the Institutional Relations Branch, Division of Research Grants, National Institutes of Health, Bethesda, Maryland 20014.

4010.20 Copyright Policy

The purpose of research grants and contracts under the Rehabilitation Research program, broadly speaking, is the development of knowledge that will improve the effectiveness and delivery of rehabilitation services to handicapped persons. Because of this, the Department, and RSA encourage the project director to utilize a wide array of avenues to bring this knowledge to the attention of

appropriate agencies, individuals, and groups. Accordingly, results of any activity supported under this research program may be published without prior review by DHEW/RSA: provided that such publication carry a footnote acknowledging RSA support, identifying the project grant and stating that interpretations shown in the publication do not necessarily represent the interpretations or opinions of DHEW/RSA, and provided that six copies of such publications are furnished to RSA. (See Chapter 4001 Grants Administration Policies for RSA policy on royalties. Where a project activity leads to the development of copyrightable material, such as a book, or a test, or a research instrument, the author is free, and in fact encouraged, to copyright the work. However, the Department reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use, and to authorize others to use all copyrightable or copyrighted material resulting from a grant or contract supported activity. In such instance of a copyrighted work it must carry a notice of such DHEW license.

> "The Rehabilitation Services Administration reserves a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use, and authorize others to use, all copyrighted materials resulting from this grant-supported research. This includes a license to the National Technical Information Service of the Department of Commerce as an agent of RSA to reproduce and sell this document to the public."

The National Technical Information Service (NTIS) acts as a repository and distribution center for RSA R&D final and special reports. It is expected that ordinarily NTIS will be the only other organization that RSA will authorize to utilize RSA's license on copyrighted material.

4010.21 Patent Policy

In accordance with Department regulations (45 CFR Subtitle A, Parts 6 and 8) all inventions made in the course of or under any grant or contract under the rehabilitation research program must be promptly and fully reported to:

Assistant Secretary for Health
Department of Health, Education, and Welfare
Washington, D. C. 20201

The initial report of invention need only be in general details and should request an outline and instructions for submission of the detailed report.

More information concerning general patent matters and policy may be secured by writing to the Patent Branch in the Office of the General Counsel, NIH, Room 5A03, Westwood Building, Bethesda, Md. 20014. The project director and other project staff must neither have nor make any commitments or obligations with respect to inventions coming out of such grants or contract which conflict with the HEW policy on patents. Determination as to ownership and disposition of rights to such inventions will be made in accordance with the regulation, Title 45 Public Welfare, Subtitle A, Part 74, Administration of Grants, Section 74.139, Patents and Inventions. (Also see RSA Manual Chapter 4001 Grants Administration Policies for RSA option on royalties.)

4010.22 Project Reports

Two kinds of reports on R&D projects are required by RSA - financial and performance. Reports on both topics are required for each budget period, and in addition a final report is due 90 days after completion or termination of the project giving the results and findings of the activities of the project.

Necessary forms and instructions are automatically forwarded to the project director at a set time far enough in advance of the completion of the particular grant period to allow for preparation of the report, its receipt and review by RSA and timely notification to the grantee organization of the action taken by the Commissioner of RSA on the continuation request. Normally, this might require at least 90 calendar days and may vary from review cycle to review cycle. Continuation application kits and instructions are forwarded by the Division of Grants and Contract Management (DGCM) of OHD Central Office. The original and two copies of the completed applications and performance reports, each copy of which

contains the project grant number assigned when the grant was approved should be forwarded directly to the following address:

Director, Division of Grants and Contract Management (DGCM)
Office of Human Development
Room 1427 Mary E. Switzer Building
Washington, D. C. 20201

In some instances where the nature of the project requires very close monitoring by the project officer, he or she may require quarterly or other periodic progress reports during budget periods.

Special performance reports may be required at any time if the situation warrants. In such case, the first indication of this may be either a telephone call or letter from the RSA project officer, or secondly a formal request for more frequent reports may be made by the Commissioner or his designee.

The financial reports are submitted in accordance with HEW regulations governing the administration of grants which were published in the Federal Register, Volume 38, Number 181, Part II, on September 19, 1973, and are referred to as Title 45, Public Welfare, Part 74, Administration. All persons of the grantee organization responsible for administration of grants from HEW should be familiar with these regulations. If a set should not be in the application kit, you may request a copy from the DPGA at the address noted above.

In addition to the set of regulations on grants administration published by HEW each project fiscal officer should have a copy of the RSA publication Grants Administration Policies - RSA, currently being revised. This further elaborates on HEW regulations and grants administration. Organizations having a number of grants from HEW should also have a copy of HEW Department Staff Manual; Grants Administration available from the Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

The final report of project activities is the principal medium for transmission of project findings and is due 90 days after the project terminates. From the day the project application is written to the day the project is

completed, the project director should be concerned not only about what his findings may be and how they are presented but also about how his actions can enhance the acceptance of project findings by potential consumers.

If the project director is thoroughly prepared for writing the utilization plan, he will have reviewed the recent literature on research utilization. He will realize that a printed final report alone is not the most effective media for translating the findings into practice. However, it is a legal and scientific necessity to have the final report as a minimum accounting for stewardship of public funds. A guide for the writing of a final report may be secured by writing the Executive Director of Research, Rehabilitation Services Administration, DHEW, Washington, D. C. 20201.

As a responsible scientist, and administrator, the project director will not be satisfied to discharge his responsibility by the publication of a final report. Continual interaction with the RSA project officer, interested colleagues, potential consumers and staff of the RSA Research Utilization Division will in many cases result in conferences, special reports, research briefs, special audio/video reports, etc., to further the diffusion of project results among consumers. In promising situations RSA would be receptive to requests for support of such activities. Advance plans for such activities should have been somewhat spelled out in the original application under the Research Utilization part of the narrative and budget projections for the last year should have included some estimate of costs related to this section of the narrative.

4010.23 Project Objectives

(Significant, observable, measurable results to be achieved during the project period.)

Project objectives should be distinguished from agency or program objectives. They should be so stated that their achievement or degree of achievement can be determined or measured. Keep in mind that the agreed on objectives resulting from the approval process will constitute a large part of the description of the project that goes into RSA's project information system and will be used to retrieve information about the project at a later date.

The writer of a proposal should first decide on the objectives he or she wishes to achieve in the project and examine each objective to see which of the paragraphs below appears to apply in writing the description of that objective:

(a) If an objective is of an empirical or descriptive nature (hypothesis development) then a statement of such an objective should include brief descriptions of how the data to be developed can be used to resolve the research issue or question to which the project is directed. Such objective might be utilized in laboratory experiments, field experiments, field studies, survey research, etc.

(b) If an objective is developmental in nature (including design and development of hardware and software), then a statement of such an objective should include brief justification of why the development is needed and should, if possible, cite other authorities or sources for confirmation. Developmental objectives would be found in research that expected to produce hardware such as devices to aid the blind, other assistive devices, braces, prosthetic devices; software such as information systems, manuals, handbooks, summaries of the literature on a particular topic, etc.

(c) If an objective is policy (or systems) oriented (such as policy analysis, cost effectiveness studies, etc.) then a statement of that objective should identify the policy or program concept and briefly explain the need for such development. Such projects may be attempting to establish a framework within which various policy decisions or program plans can be judged or compared as to their potential benefits and costs.

(d) If a project objective is demonstrative in nature (for example, to demonstrate the feasibility, impact, public acceptance of a new concept in service delivery, management, or administration), then care must be taken in writing the objective to be specific concerning the particular barriers which new, unproved or as yet unaccepted processes encounter however feasible or efficient they are.

Because of the ambiguous role that demonstrations play in R&D and the potential significance in the continuum from conception of an idea to incorporation into practice that demonstrations occupy, it is important to specify in the project statement what aspect(s) of the demonstration is (or are) being (1) organizational design or structure or (2) techniques, or (3) end result. (See next Section, 4010.24.)

Many projects will have objectives that fall into one or more of the above categories. Yet these categories have been listed in order to prevent confusion over when one objective ends and another begins and to differentiate and clarify the nature of each effort. The emphasis on selecting particular objectives as primary ones should be made in light of the end-product that will result from accomplishing the objective.

In any event, common sense in writing the application is essential in making the distinction needed in the wording of project objectives. These clear statements will also insure that the R&D design is better understood. It is important that each objective be stated in such a way that its achievement or degree of achievement can be observed and measured, that the methodology for measuring its achievement is clearly described under the methodology section of the application (be sure all objectives are covered).

4010.24 Project Evaluation

All project proposals should include plans for evaluation of achievement of project objectives (as noted above). The evaluation tasks should be described in part IV, the Work Plan section of the narrative, along with other project tasks. The explicit methodology with which these evaluation tasks will be carried out should be discussed in section V, the Methodology part of the narrative.

This may simply be the application of sound scientific principles such as using samples of adequate sizes, and appropriate statistical tests (carefully described) to ensure that the sample selected is representative of the population from which selected.

The important point is to be able to show that the findings are valid, can be generalized to the populations of concern in rehabilitation, that the samples, and populations are carefully described and that the proposed design and resulting final report are clear enough for another investigation to replicate the project and reasonably expect to achieve the same result.

With respect to demonstrations it should be noted that such projects may be evaluated with respect to one or more of the following dimensions (depending on which one or more aspect is being tested):

Organizational Design or Structure: If the structural aspect of the project is being demonstrated, the evaluation design should focus on clarity, relevance, and attainability of objective; resource allocation patterns, proposed costs and benefits, staff qualifications, adequacy of facilities and support resources, etc.

Techniques or Process: If process is the aspect under study the evaluation design should focus on acquisition of clients, delivery of services, staff training, coordination with other agencies; collection, storage, and retrieval of data and achievement of project milestones.

End Results: Topics on which the design should focus: impact on subjects, potential impact on target group if implemented, service delivered compared with service intended, effect on the community, etc.

4010.25 Cost Benefit Measures

During FY 75 and 76 RSA will be utilizing review of new applications submitted for R&D grants to study on an experimental basis the value of cost benefit measures in the initial evaluation of new applications for R&D grants. Accordingly the information asked for in Section VII of the narrative of the application will be closely examined during these two fiscal years. Near the end of that period a decision will be made as to whether to continue on a permanent basis the requirement of such information as a part of an application narrative. In order to

determine relative cost-benefits of various project proposals it is necessary to obtain estimates of the benefits to be obtained and the target populations impacted. (See definitions.) Assuming that the objectives of a proposed R&D project are totally fulfilled and the resulting knowledge is fully utilized, it is important to identify expected benefits that will result. Two classes of benefits are relevant.

(a) Benefits that accrue to individual and family units which relate to personal functioning of the handicapped: personal well-being and self-identity; individual vocational sufficiency; personal economic improvement; containment of personal illness and disability; family functioning and stability; access to material components of the quality of life; child welfare; quality of service delivery; reduction of institutionalization; coping behavior; counselling, education and training; personal-social fulfillment; social involvement; containment of personal cost; better physical environment; adaptive behavior; client-initiative; expanded potential for benefit from services; client awareness and expectation of service; consumer participation; understanding rights and obligations; service containment.

(b) Non-personal benefits, i.e. general benefits that cannot be expressed directly in terms of impact on people relating to: legislative impact; program improvement strategies; program improvement tactics; improved evaluation of programs; policy refinement; service process refinement; improved providers' efficiency and effectiveness; amelioration of societal disturbances; cost effectiveness and benefit/cost; improved information systems; improved productivity of tax expenditures; validation of benefits; more effective planning processes; expanded R&D potential; improved data quality; improved and more flexible administration; program containment; administrative information dissemination; coordination of Federal linkages with other political entities; public acceptance of programs; mediation of social change; improved staff training; generalizability of services.

In developing information on the cost benefit potential of a new proposal it is necessary as noted above to identify the target population(s), group(s) or organizations that would be expected to benefit from results of the project. (See item 11 on Page 1 of HEW 608T, the application cover sheet.) Such groups might include policy makers, legislators, clients/patients, service providers (vendors), general public, managers, researchers, educators; service professions such as physicians, counselors, work-evaluators, social workers, occupational therapists, physical therapists, etc.

Once a suitable list of target populations has been selected it is necessary to estimate the numerical size and proportion of the selected target populations expected to benefit by the successful achievement of a project's objectives. For each population on which an estimate is made, an indication is needed as to whether the benefit is individual and/or non-personal. Then select from the appropriate classification the necessary descriptive terms listed in "a" and/or "b" above in order of priority. To give some measure of the validity of these estimates of size and proportion it is necessary to know the basis or source of these estimates, and whether there may later be increases or decreases in the size of the population and proportion benefiting from the results of the project.

4010.26 Research Utilization

In RSA, the object of research utilization is to link research to planning, program development, service practice, policy-making, and legislation by applying utilization and communication theory. An important goal of all R&D projects is to link research to practice by focusing on the needs of users and by trying to develop findings and methods of communicating them which are responsive to their needs. If these conditions are met, service agencies, practitioners, and policymakers are much more likely to use research results. Grantees and contractors should bear in mind, in relation to the last point, that certain characteristics of research findings greatly affect their chances of being used and may need to be taken into account in planning research. For example, if the researcher begins with a real operating problem of a

service agency, the chances of his results being used are greatly increased. Also, as agency needs and the outcomes of trying to use R&D results are fed back to researchers, the quality and relevance of research will be much improved; and as this 2-way process continues over time, R&D and service will move closer together, each will become more relevant to the other, and both will improve beyond expectation.

OMB Approval No. 85-R0275
through September 1978

APPENDIX A

4010.31 Instructions for Completing Form HEW-608T Application for Federal Assistance (Non-Construction Program)
for
Rehabilitation Services Administration
Research and Demonstration Grants

The instructions shown below should be followed by all applicants in completing applications for all RSA research and demonstration grants. Part I of HEW Form 608T has been replaced by Standard Form 424.

These forms shall be used by all applicants for RSA Research and Demonstration grants. They shall be used also to request supplemental assistance, and to propose changes or amendments, and to request continuation or refunding, for approved grants originally submitted on these forms. In those instances where only supplemental funds are being requested submit the SF 424 and only those applicable budget pages of HEW 608T and a narrative justifying the extra funds as to reasons and amount. In those instances where adjustment in budget items only are involved submit the cover sheet and applicable budget pages showing desired changes along with a justification for the changes, especially the amounts. SF 424 and Parts II, III, IV, and V of HEW 608T are to be used for new and competing extension applications. SF 424 and Parts II, III, V, and VI of HEW 608T are to be used for the usual non-competing continuation requests.

Submit the original and two copies of the form. If an item cannot be answered or does not appear to be related or relevant to the assistance required, write "NA" for not applicable.

Instructions for Completion of Standard Form 424

Item 1 - Mark "Application" when used as a grant application. (The applicant, unless otherwise advised by the State and areawide clearinghouse shall use the SF 424 as a notification of intent to apply for Federal assistance in accordance with procedures

established by these clearinghouses and OMB Circular A-95. When used for this purpose, mark "Notification of Intent.")

Item 2a. Applicant's own control number, if desired.

Item 2b. Date Section I is prepared.

Item 3a. For program covered by OMB Circular A-95, enter the number assigned by State clearinhouses or, if delegated by State, by areawide clearinghouse. Applications submitted to RSA must contain this identifier if provided by the applicable State/areawide clearinghouse. If in doubt, consult your clearinghouse. See instructions for item 3 of Part II of HEW 608T concerning applicability of Circular A-95 to RSA research and demonstration grants.

Item 3b. Date applicant notified of clearinghouse identifier.

Item 4a-4h. Legal name of applicant/recipient, name of primary organizational unit which will undertake the assistance activity, complete address of applicant, and name and telephone number of person who can provide further information about this request.

If the payee will be other than the applicant, enter in the remarks section "Payee," the payee's name, department or division, complete address and employer identification number or DHEW entity number.

If an individual's name and/or title is desired on the payment instrument, the name and/or title of the designated individual must be specified.

Item 5. Employer identification number of applicant is assigned by Internal Revenue Service. If the applicant organization has been assigned a DHEW entity number consisting of the IRS employer identification number prefixed "I" and suffixed by a two-digit number, enter the full DHEW entity number.

Item 6a. Use 13.627 which has been assigned to RSA Research and Demonstration program. If more than one program (e.g., joint funding) enter "multiple" and explain in remarks. If unknown, cite Public Law or U.S. Code.

Item 6b. Enter "Rehabilitation Research and Demonstrations."

Item 7. Brief title and appropriate description of project. For notification of intent, continue in Remarks section if necessary to convey proper description. If possible use key words in title that would be helpful in indexing (see RSA Research Information Thesaurus available from the U.S. Government Printing Office, Washington, D.C. for $1.40 - stock number 017-060-00127-5). In short description mention RSA Research Issue to which the project is addressed.

Item 8. Enter appropriate letter to designate grantee type - "City" includes town, township, or other municipality. If the grantee is other than that listed, specify type on "Other" line e.g., Council of Government. Note: Nonprofit organizations which have not previously received RSA program support must submit proof of nonprofit status.

Item 9. All applicants for RSA discretionary grant funds should enter the letter "A."

Item 10. Enter Governmental unit where significant and meaningful impact could be observed. List only largest unit or units affected, such as State, county, or city. If entire unit affected, list it rather than subunits.

Item 11. Estimated number of persons directly benefiting from project, as described in the program narrative.

Item 12. Enter appropriate letter. Definitions are:

a. New. A submittal for the first time for a new project or project period (includes competing extension).

b. Renewal. Not applicable to RSA grant programs.

c. Revision. A modification to project nature or scope.

d. Continuation. Additional support for a project after the initial funding/budget period and within the approved project period.

e. Augmentation. (Referred to elsewhere in these instructions and in other RSA publications as a "supplement.") An application for additional funds for a project previously awarded funds in the same funding/budget period. Project nature and scope unchanged.

Item 13. Amount requested or to be contributed during the initial funding/budget period by each contributor. If the action is a change in dollar amount of an existing grant (or revision or augmentation), indicate only the amount of change. For decreases, enclose the amount in parentheses. For multiple program funding use totals and show program breakouts in remarks, Item definitions: 13a, amount requested from Federal government; 13b, amount applicant will contribute; 13c, amount from State, if applicant is not a State; 13d, amount from local government, if applicant is not a local government; 13e, amount from any other sources, explain in remarks. Note: Applicants for research grants should complete 13a only.

Item 14a. Self explanatory.

Item 14b. The district(s) where most of actual work will be accomplished. If city-wide or State-wide covering several districts, write "City-wide" or "State-wide."

Item 15. Complete only for revisions (Item 12c), or augmentations (Supplements)(Item 12e).

Item 16. Approximate date project expected to begin. If initial budget period is other than 12 months, explain in Item 21 (Section IV).

Item 17. Estimated number of months to complete project after Federal funds are available.

Item 18. Estimated date application will be submitted to Federal agency (RSA) if this project requires clearinghouse review. If review not required, this date would usually be same as date in Item 2b.

Item 19. Existing Federal identification number if this is not a new request and directly relates to a previous Federal action. Otherwise write "NA."

Item 20. Enter Rehabilitation Services Administration, 330 C Street, S. W., Washington, D. C. 20201.

Item 21. Check appropriate box as to whether Section IV of form contains remakrs and/or additional remarks are attached.

Item 22b. List clearinghouses to which submitted and show in appropriate blocks the status of their responses. For more than three clearinghouses, continue in remarks section. All written comments submitted by or through clearinghouses must be attached. See instructions for item 3 of Part II of form 608T concerning applicability of Circular A-95 to RSA Research and Demonstration.

Item 23a. Name and title of authorized representative of legal applicant.

Item 23b. Self explanatory.

Item 23c. Self explanatory.

Note: Applicant completes only Sections I and II. Section III is completed by Federal agencies.

PART II

For Items 1 through 10, check either "Yes" or "No." In general, Items 1 through 9 will not be applicable to Rehabilitation R&D proposals and negative answers will be recorded. Negative answers will not require an explanation unless the Federal agency requests more information at a later date. Provide supplementary data for all "Yes" answers in the space provided in accordance with the following instructions:

Item 1 - Provide the name of the governing body establishing the priority system and the priority rating assigned to this project.

Item 2 - Provide the name of the agency or board which issued the clearance and attach the documentation of status or approval.

Item 3 - Clearinghouse review in accordance with Office of Management and Budget Circular A-95 is not a standard requirement for applications for Rehabilitation R&D grants. However, States are authorized to extend the project notification and review procedures of Circular A-95 to programs other than those listed in the Circular. If your State has extended the coverage of A-95 to this program, attach the clearinghouse comments for the application in accordance with the instructions contained in OMB Circular A-95.

Item 4 - Furnish the name of the approving agency and the approval date.

Item 5 - Show whether the approved comprehensive plan is State, local or regional, or if none of these, explain the scope of the plan. Give the location where the approved plan is available for examination and state whether this project is in conformance with the plan.

Item 6 - Show the population residing or working on the Federal installation who will benefit from this project.

Item 7 - Show the percentage of the project work that will be conducted on federally-owned or leased land. Give the name of the Federal installation and its location.

Item 8 - Describe briefly the possible beneficial and harmful impact on the environment of the proposed project. If an adverse environmental impact is anticipated, explain what action will be taken to minimize the impact.

Item 9 - State the number of individuals, families, businesses, or farms this project will displace.

Item 10 - Show the Federal Domestic Assistance Catalog number, the program name, the type of assistance, the status and the amount of each project where there is related previous, pending or anticipated assistance. Use additional sheets, if needed.

PART III

RSA Research and Demonstration grants do not require a breakdown by function or activity. Sections A, B, C, and D should provide the budget for the first budget period (usually a year) and Section E should present the need for Federal assistance in the subsequent budget years. All applications should contain a breakdown by the object class categories shown in Lines a-k of Section B.

Section A. Budget Summary--Use only Lines 1 and 5. Leave Lines 2, 3, and 4 blank.

Line 1, Columns (a) and (b) - Enter on Line 1 under Column (a) "Rehabilitation R&D" and in Column (b) the catalog number 13.627

Line 1, Columns (c) through (g) - Applicants for research grants and demonstration grants should follow the instructions below EXCEPT that applicants for research grants should make no entries in Columns (f) and (g). If the applicant has no institutional cost sharing agreement with HEW, then research cost sharing information should be submitted on HEW Form 490.

For new applications leave Columns (c) and (d) blank. Enter in Columns (e), (f), and (g) the appropriate amounts of funds needed to support the project for the first funding period (usually a year).

For continuing grant program applications, submit these forms before the end of each funding period as required by RSA. Enter in Columns (c) and (d) the estimated amount of funds which will remain unobligated at the end of the grant funding period. Enter in Columns (e) and (f) the amounts of funds needed for the upcoming period. The amount(s) in Column (g) should be the sum of amounts in Columns (e) and (f).

For supplemental grants and changes to existing grants, do not use Columns (c) and (d). Enter in Column (e) the amount of the increase or decrease of Federal funds and enter in Column (f) the amount of the increase or decrease of non-Federal funds. In Column (g) enter

the new total budgeted amount (Federal and non-Federal) which includes the total previous authorized budgeted amounts plus or minus, as appropriate, the amounts shown in Columns (e) and (f). The amounts in Column (g) should not equal the sum of amounts in Columns (e) and (f).

Line 5 - Enter the same amounts as shown on Line 1.

Section B. Budget Categories

Using only Column (1), fill in the total requirements for Federal funds by object class categories. Do not include non-Federal funds.

Lines 6a-h - Show the estimated amount for each direct cost budget (object class) category.

Line (a) "Personnel" must show salaries and wages only. Fees and expenses for consultants must be included on Line (h).

Line (b) leave blank if fringe benefits applicable to direct salaries and wages are treated as part of the indirect cost rate.

Line (c) is only for travel (foreign and domestic) of employees. Travel of consultants, trainees, etc., should not go on this line, nor should local transportation (i.e., where no out-of-town trip is involved).

Line (d) is to be used only for non-expendable personal property, that is tangible personal property having a useful life of more than one year and an acquisition cost of $300 or more per unit.

Line (e) is to show all tangible personal property except that which is on Line (d).

Line (f) is to be used for (1) procurement contracts (except those which belong on other lines such as equipment, supplies), (2) in-patient and outpatient care costs, and (3) subgrants or other assistance-like payments to secondary recipient organizations such as affiliates, cooperating institutions, delegate agencies, political subdivisions, etc. Do not include on this line payments to individuals such as stipends and allowances for trainees, consulting fees, benefits, etc.

Line (g) must be used for alteration and renovation. New construction is not allowable.

Line (h) must be used for all direct costs not clearly covered by Lines (a) through (g). Examples are computer use charges, tuition, space or equipment rental, local transporation and non-salary and wage payments to individuals, such as consultant fees and travel expense, trainee stipends or payments to clients.

Line 6i - Show the totals of Lines 6a to 6h.

Line 6j - Show the amount of indirect cost. Refer to DHEW Regulations, 45 CFR, Part 74, Subpart Q.

Line 6k - Enter the total of amounts on Lines 6i and 6j. For all applications the total amount should be the same as the total amount shown in Section A, Column (e), Line 5.

Line 7 - Enter the estimated amount of income, if any, expected to be generated from this project. Do not add or subtract this amount from the total project amount. Show under the program narrative statement the nature and source of income. The estimated amount of program income may be considered by RSA in determining the total amount of the grant.

Section C. Source of Non-Federal Resources - To be Completed by Applicants for Demonstration Grants Only. Use only lines 8 and 12. Leave lines 9, 10 and 11 blank.

Line 8 - Enter amounts of non-Federal resources that will be used on the grant. If in-kind contributions are included, provide a brief explanation on a separate sheet. (See DHEW Regulations 45 CFR, Part 74, Subpart G and 45 CFR, Part 402, Subpart A, Section 402.8.)

Column (a) - Enter "Rehabilitation R&D."

Column (b) - Enter the amount of cash and in-kind contributions to be made by the applicant as shown in Section A. (See also DHEW Regulations 45 CFR, Part 74, Subpart G and 45 CFR, Part 402, Subpart A, Section 402.8.)

Column (c) - Enter the State contribution if the applicant is not a State or State Agency. Applicants which are a State or State agencies should leave this column blank.

Column (d) - Enter the amount of cash and in-kind contributions to be made from all other sources.

Column (e) - Enter totals of Columns (b), (c), and (d).

Line 12 - Enter the same amounts as shown on Line 8. The amount in Column (e) should be equal to the amount on Line 5, Column (f), Section A.

Section D. Forecasted Cash Needs

Line 13 - Enter the amount of cash needed by quarter from RSA during the first year.

Line 14 - Applicants for Demonstration Grants Only: Enter the amount of cash from all other sources needed by quarter during the first year.

Line 15 - Enter the totals of amounts on Lines 13 and 14.

Section E. Budget Estimates of Federal Funds Needed for Balance of the Project.

Line 16 (leave lines 17-19 blank) - Enter in Column (a) Rehabilitation R&D. Enter in the proper columns amounts of Federal funds for direct costs which will be needed to complete the program or project over the succeeding funding periods (usually in years). This section need not be completed for amendments, changes or supplements to funds for the current year of existing grants. However, if supplements requested for current year will increase future year commitment, indicate in the proper columns the amounts of such increase.

Line 20 - Enter the same amounts as in Line 16.

Section F. Other Budget Information

Line 21 - Fully explain and justify the major items contained in the project budget. Include sufficient detail to facilitate determination as to allowability, amount, relevance to the project, and cost/benefit. Particular attention must be given to the explanation of any requested direct charge budget item which requires explicit RSA approval under the terms of DHEW Regulations 45 CFR, Part 74, Subpart Q, and 45 CFR, Part 402, Section 402.8. Other budget items requiring identification and justification include the following:

1. Salary amounts and percent of time of those key individuals who are identified in the program narrative.

2. Travel

3. Equipment--each item or group of similar items.

4. Contractual

5. Other--group the major categories.

Line 22 - Enter the type of indirect rate (provisional, predetermined, final or fixed) that will be in effect during the funding period, the estimated amount of the base to which the rate is applied, and the total indirect expense.

Line 23 - Provide any other explanations required herein or any other comments deemed necessary.

PART IV

PROJECT NARRATIVE
for
New Applications and Competing Extensions (Renewals)

The project narrative should provide the basic information provided to determine: (1) relevance of the proposed project to RSA R&D issues; (2) methodological adequacy of the proposed activity, (3) potential for implementation of the results: (4) potential impact of the project on the resolution of the R&D issue to which it is addressed. Review of the proposal will concentrate on these questions and on the manageability of the design. Should the proposed project be funded, the information provided in the "project narrative" will also form the background against which to evaluate progress for future funding decisions as well as aiding RSA in planning for required technical assistance and for the implementation and dissemination of project findings. Note that in addition to the completeness of the narrative description, those who review proposals are often influenced by the clarity and conciseness of material presented.

The narrative for new and competing extension applications should be organized under the following major headings:

1. PROJECT TITLE
2. R&D ISSUE
3. PROJECT OBJECTIVES
4. WORK PLAN — TASK DESCRIPTIONS
5. METHODOLOGY
6. UTILIZATION PLAN
7. COST BENEFIT MEASURES
8. BACKGROUND
9. REVIEW OF APPROPRIATE LITERATURE
10. PROGRESS REPORT (for Competing Extension Applications only)

Subheadings should be organized so that it is clear that the specific information requested under each major heading has been provided.

Discussion of Major Headings

1. TITLE

See Part I, Item 5 of Instructions for completing HEW 608-T.

2. R&D ISSUE

Identify the RSA R&D Issue* to which the application is addressed. Further identify the research objective chosen from those listed in the research issue. Clearly distinguish between the research objective described in this section which is taken from the RSA R&D Issue and the project objective(s) discussed in Section 3. Section 2 of the narrative is the place to tie in the proposal to RSA's needs. It is important to know precisely what aspect of the research issue (such as which research question) the proposal is addressing as well as its focus.

3. PROJECT OBJECTIVES

Project objectives are defined as significant observable, measurable results expected to be achieved during the life of a project. They may be descriptive, developmental, and/or policy oriented in nature. Each objective of a significant nature should be numbered, stated, and should be described in sufficient detail to permit a clear understanding. Each objective so listed will require, later in the narrative, information explaining how the degree of its achievement can be measured.

4. WORK PLAN — TASK DESCRIPTIONS

Tasks are statements of work to be performed to accomplish the project's objectives. Each task statement and milestone should identify physical products which will be available to RSA upon request as proof that the task was completed. (Details describing the methodology to be used in completing the tasks should be provided in the next section on Methodology.)

A. Number and list the tasks to be undertaken, noting the objective(s) to which each task relates (in noting the objectives use title and numbers from Section 3 of the Outline). To the degree possible, each task should be followed by a paragraph or two, labeled "Comment," in which you describe the task, and the level of effort in man-months (by project personnel, if possible) required to complete the task. In effect, you will be providing the reviewers, and RSA, with the components of the time schedule you propose to follow. You should summarize, what you expect to accomplish by each step within the project period requested.

*Copies of R&D Issues may be secured from the Executive Director of Research, Rehabilitation Services Administration, Department of Health, Education, and Welfare, Washington, D. C. 20201.

B. On a GANTT chart or other flow-chart time schedule show starting and completion dates for the tasks listed above, and in addition other milestones, as applicable, not directly related to on-going tasks such as:

- on-site acquisition of staff,
- physical acquisition of facilities and equipment,
- pretest of measurement devices,
- establishment of linkages with on-going programs,
- acquisition of subjects for testing,
- signing of agreements and contracts,
- arrangements with public and private agencies to provide services, data or other support,
- steps to involve potential users, and
- completion and dissemination of final report.

By describing the steps or tasks that have to be accomplished in chronological order and, where necessary, by indicating which portions of the work can be carried on simultaneously, you will be able to evaluate for yourself the time elements, the costs, and staff required. You should also pinpoint possible sources of delay as realistically as possible as well as the sub-studies, e.g., pretesting forms, devices, tests, you propose to use as to their reliability and validity (or citing equivalent studies by others) or estimating the time needed for acquisition of staff, facilities, cooperative relationships with other agencies, procurement of subjects, and the like.

5. METHODOLOGY

This section provides instructions for describing the methodology to be used in completing the tasks outlined in the previous section. Accordingly, the writer should be guided by the appropriate subsection below that relates to the type(s) of objectives that have been developed for the project. Disregard those subsections of this part of the outline that relate to objective types not used in the application.

A. Research Methodology: If the project will involve the collection of data to test certain hypotheses or quantify hypothesized relationships, the following problems should be addressed:

(1) Variables:

a. Specify the dependent and independent variables noting how they will be measured and controlled.

b. Discuss the techniques that will be used to quantify the relationships between dependent and independent variables.

c. Specify other data to be collected and analyzed concerning the dependent variables, e.g., client or staff interviews, existing case records, etc.

d. Discuss the degree to which the dependent variable(s) is (are) influenced by the testing environment.

(2) Sample Size:

a. Specify how the sample size will be determined.

b. Explain the use of probability concepts in determining the sample size.

(3) Hypotheses to be Tested and Statistical Methods to be Employed.

a. List in operational terms the hypotheses to be tested.

b. Discuss how experiment and control or comparison groups will be formed. Specify how subjects will be selected (and who will do the selecting) for both control and test populations.

c. Describe the statistical procedures that will be used to test the hypotheses or validate effectiveness.

d. Discuss how the degree of comparability between the sample group and larger at risk or target populations will be determined, i.e., to what degree will results be generalizable to more general target populations?

(or if)

B. Developmental Methodology

(1) Describe any special techniques or resources which will be used in the developmental effort.

(2) Describe the design, test, redesign cycle to be used in the developmental effort answering those questions under Research Methodology (Part A, above) that are relevant.

(or if)

C. Policy Oriented Methodology

(1) Describe the particular techniques which will be used to model the process or decision in question.

(2) Answer those questions under Research Methodology (Part A, above) that are relevant.

(or if)

D. Demonstration Methodology

(1) Describe the concept to be tested and how it differs from service delivery, management, or other concepts currently in practice.

(2) Define the impact measures to be used in determining the effectiveness and/or efficiency of the demonstrated concepts on subjects, providers, administrators, etc.

(3) Discuss the variability associated with these impact measures under normal operating conditions.

(4) Indicate the intended number of subjects to be served (treated, surveyed, etc.).

(5) Explain the process of identifying and acquiring "eligible" subjects.

(6) Describe any incentives to encourage subjects to participate.

(7) Explain how dropouts will be handled, procedurally, treatment wise, and statistically.

(8) Describe the involvement of existing State, local government, or private agency personnel including effect on workload and willingness to participate.

(9) Discuss those applicable questions in Section A above that apply to the project's demonstration methodology. For example, if project is to demonstrate a service delivery concept the questions under "Sample Size" (5.A.2.a.) should be answered to describe how the size of the group to be served is to be determined.

If the project is a demonstration, Section 5 of the narrative should describe the project methodology as called for in Parts A. and D. above and in addition there should be a subpart to the methodology that describes the evaluative component of the demonstration as called for below:

(10) Evaluative Component

Evaluative methodology must be specified for all projects with demonstration objectives. Evaluative tasks must be defined prior to the project's initiation so requisite data collection procedures can be established. These tasks should be phased in with other project tasks to insure that interim products can be reviewed by RSA and comments fed back to project staff in time to influence the conduct of the project.

RSA views the evaluative component of demonstrations as being equally important to itself and the grantee. The primary purpose of the evaluation is to facilitate judgments by RSA and the grantee concerning the merit of the project with respect to replication or implementation on a Statewide or national basis with or without continued RSA monetary support.

a. Evaluative Design - The following questions concerning the evaluation must be addressed in this part of the narrative.

(1) Who is to do the evaluation?

(2) Answer the questions in Part D (above) as they pertain to the following tasks:

- comparison of services delivered to subjects with control or comparison groups in terms of quantity, quality, and cost;

- comparison on subjects with control or comparison group(s);

(3) What mechanisms will be used to obtain and summarize comments by sponsoring agency personnel, project staff, participating subjects, and community representatives, as appropriate, concerning social, political and/or economic feasibility and acceptability of the project?

(4) Briefly discuss the evaluation criteria that have already been determined.

(5) What data will be collected; how will they be collected, verified, and stored for ready accessibility?

NOTE: If the evaluation is to subcontracted, the above items should be covered in an outline of the scope-of-work to be used in writing the subcontract and included as part of the narrative. If the evaluation is to be done by project staff, the above questions must be answered in detail as part of the narrative.

6. UTILIZATION PLAN

The following topics should be covered in this section of the application describing the utilization activities that are expected to follow from the project results, assuming valid, usable results are produced. Include:

A. A careful description of the expected usable R&D product.

B. Nature and extent of the "market" for it, in terms of a full list of target groups, their disabilities, and service needs; also in terms of practitioners, policymakers, program developers, and legislators, etc., and their needs. Give some estimate of the extent of this total market.

C. Dissemination (diffusion) plan and how it is expected to stimulate use. What media will be used and what is the

rationale for that use? How will results be "packaged" to facilitate use? To whom will they be disseminated, and why?

D. Utilization Plan. How is utilization expected to follow from dissemination? Ideally, this should be a point-by-point guide for using the results or product, detailed enough in the following respects to permit installation of the innovation:

(1) Potential problems in using the results, including a discussion of the major resistances expected, and how they will be overcome.

(2) Principal modification (adaptations) of the results (product) that may be needed before they can be widely and effectively used. In relation to this, will the original project setting facilitate wide use or does it (the facility) have special features that will require adaptations of the product, and if so, what are these adaptations?

(3) What will be required to use the product well in terms of staff, equipment, facilities or other resources? If possible, estimate the total extra costs that may be involved here in relation to varying scopes of use (Statewide, National, etc.).

(4) Expected impact of use of the results or product in terms of helping clients, practitioners, policymakers, program developers, and/or legislators. If possible, estimate the value of this expected beneficial impact.

(5) Will successful utilization require post-research activities by the grantee agency or project director? If so, describe these activities and provide for them in the budget. (Care should be taken to insure that the project budget both during and following the research makes sufficient allowance for research utilization activities.)

E. Describe general plans (if any) for implementation by States, grantee agency, or other person or organization, referencing the implementation and RU tasks as formulated in Section 4 above.

F. Discuss any commitments made by States and/or local government agencies to continue the project or implement its findings after completion.

G. Indexed Abstract of Proposal. As an aid to our Management Information System, all proposals should include an abstract of 100 to 200 words as required by the Science Information Exchange, and the abstract should be revised if pre-funding negotiations cause significant changes. The abstract should also be indexed using terms from the RSA R&D Thesaurus, soon to be available from Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402.

7. COST BENEFIT MEASURES

After reviewing Section 4010.24 of the Research and Demonstration Guideline, list under this heading of the application narrative:

A. Target populations to which the results of this project might be addressed, and for each target population identified estimate:

(1) The numerical size and proportion of that population that might reasonably be expected to benefit from the successful achievement of the project's objectives.

(2) Give the basis or source of each estimate of size and proportion called for in No. 1 just above. If the size or proportion is expected to increase or decrease at a later time, discuss this.

(3) Indicate whether the benefit expected is individual and/or non-personal and list the appropriate descriptive term(s) in priority order. (See the Guideline for a suggested list of individual and non-personal benefit terms.)

8. BACKGROUND

A. Include a project staff organization chart, and, if applicable, show the linkages with State/county organization charts.

B. Staff Qualifications - Include a biographical sketch of the proposed project director and other key project staff, highlighting special qualifications that relate to the accomplishment of project objectives such as research competence, management experience, and experience with this issue or particular methods to be employed.

C. Other qualifications of staff or of organizations affiliated with the project that enhance its potential for success such as community support, access to users, and technical support.

D. If a new staff classification is required for project staff from the State Merit System, a description should be included.

E. Related ongoing and completed efforts and status of project staff.

(1) Specify nature of staff commitments, i.e., to be hired upon receipt of grant, current employee, consultant, etc.

a. For each of the key staff not identified at the time of application, provide (in lieu of a biographical sketch, job descriptions, qualifications sought, and a projection of how long after Notification of Grant Award the recruitment of these staff will take.

(2) Discuss other approaches that have been made to resolving the issues to which this project is directed, noting:

a. what involvement has project staff had in any of these other approaches;

b. what has been learned from these other approaches that has influenced the design of this proposed approach;

c. whether any of these other approaches resulted in implementable solutions to the Issue(s); and

d. what shortcomings these other approaches have experienced.

F. Include copies of endorsements from State administrators, private service providers, and other potential users and describe plans to involve these potential users in different phases of the project.

G. Discuss applicable implications that project results may have to new or pending legislation (State or Federal), if any.

9. REVIEW OF APPROPRIATE LITERATURE

Present a review of the literature pertaining to the subject area of the proposed project, including bibliographic references, as appropriate. Attention should be given to previous RSA research (SRS Research annotated listing of completed projects is available upon request.) A four-volume publication containing abstracts of all available final reports of RSA R&D projects entitled Rehabilitation Research and Demonstration is available from the GPO. Its order number is 1760-00122 and its cost is _____. Identify the knowledge gaps revealed in the review of the literature or exposed by previous work and explain how they are addressed in this proposal. Any relevant data based upon planning or pilot studies or previous work should be included or summarized. Assumptions and philosophical approaches underlying the proposed project should be described in this section of the narrative as seen necessary.

10. PROGRESS REPORT

For competing extension applications, provide a narrative progress report in accordance with the outline set forth in Part VI, Section B.

PART V

ASSURANCE STATEMENT

Attach page from application form.

PART VI

PROJECT NARRATIVE
Only for Non-Competing Continuations

In general, the narrative of the continuation request will have two major headings--Progress Report, and Proposed Activities. The Progress Report should provide RSA the basic information to determine (1) if the project is following the approved research plan; (2) if the Work Plan is on schedule; (3) if unanticipated problems have been encountered, and if so, what adjustments were necessary; (4) tentative findings or trends which may indicate either a

possible change in the project plan and design or an alert to RSA Program and State VR leadership to some policy implication.

The Proposed Activities section should provide RSA (1) a reaffirmation of the Work Plan for the grant year just ahead; (2) or request for approval of necessary changes; (3) a more detailed specification of the activities of the grant year just ahead than was possible or feasible in the original application. Particularly important in the future planning is the need to continuously work toward the enhancement of the utilization of whatever findings may come out of the project.

The narrative should be organized under the following major headings:

A. Title

B. Progress Report

1. Changes in plan (if applicable)
2. Progress during current grant period (or since last report)
3. Staff changes (if applicable)
4. Inventions and copyrights
5. Cost benefit findings

C. Proposed Activities

1. Work Plan for next grant period
2. Proposed changes in project (if applicable)
3. Research Utilization Plan

A. Title (Use title shown on latest notice of grant award - NGA).

B. Progress Report

1. Changes in Plan (if applicable). If changes in the plan have been made since the original plan, or since the last progress report, give sufficient details to make the records an up-to-date representation of the project. It is assumed that any significant or major change in the project would have first been reported to RSA Project Officer and approval secured at the time it became necessary. Include change or modifications in project objectives and task descriptions

in the Work Plan as well as changes in the evaluation and/or research utilization plans. Proposed changes should be reported under the heading of Proposed Activities.

2. Progress During Current Grant Period. Discuss progress towards meeting the project's objectives covering the following points:

   a. Accomplishments, findings, and products to date and list in chronological order the sequence of events and accomplishments. Explain any time lags in completing tasks and adhering to work plan set out in the original proposal, as per the project's GANNT chart or other time schedule as presently approved.

   b. Problems encountered, particularly with respect to methodology, sampling, and control group identification.

3. Staff changes (if applicable)

   Discuss changes in project personnel and provide biographic (vita) information for new key personnel. Assess possible impact on outcome of project.

4. Inventions and copyrights

   Include (1) a report of inventions conceived or reduced to practice as required by the Department of Health, Education, and Welfare, or (2) a list of inventions, already reported, or (3) a negative certification. Likewise report publications on which copyright has been secured or will be sought.

5. Cost Benefit Findings

   Discuss any additional information on benefits that the project operation has produced.

C. Proposed Activities

1. Work Plan for Next Grant Period

   Elaborate on this part of the plan beyond what may have been described in the approved plan. Indicate details

of data gathering, reduction, analysis, or service aspects for this time period of the project that may have only been projected in general terms in the original proposal. (Flesh out time table more completely.)

2. Proposed changes in project (if applicable)

State specifically each change in objective, work plan, task or element of methodology that needs implementation in the next grant period. Give sufficient detail that project officer and peer review group can adequately judge the necessity and appropriateness of each.

3. Research Utilization Plan

Discuss plans for insuring maximum utilization of project results, including current involvement of potential users.

Appendix B

4010.32 Standards for Evaluation of Research and Demonstration Projects

I. Relationship to State-Federal VR Program Goals and Policies

Each application must show:

A. Clear relationship to one or more RSA "Research Issues"and issue-related "research goals."

Examples of some items that should be considered under this standard are:

1. Does the application identify a specific RSA research issue, and from the issue or issues does the application select a specific "research goal" (stream of research), the attainment of which would be greatly enhanced by successful outcomes of the project?

2. Does the application show a logical relationship between successful attainment of the project objective(s) and attainment of a significant portion of the relevant research goal?

3. Is there a clear awareness reflected in the application that the purpose of the project is improved VR services to handicapped persons and attainment of a relevant RSA program goal?

B. A clear relationship to one or more RSA program goals.

Examples of some items that should be considered under this standard are:

1. Is there a specific RSA program goal cited?

2. Does the application show an awareness of how the knowledge generated by the project will contribute to achievement of the RSA goal, in an operational sense?

C. A clear identification of the decision-making potential of the project for policy-making in management, professional practice, or program evaluation.

Examples of some items that should be considered under this standard are:

1. Does the application identify some decision-making point(s) in the rehabilitation system and give a clear and reasonably exposition of how the project results will improve VR services to individuals by providing information that will improve policy decision-making?

2. Does the application identify other knowledge gaps that need filling in order to maximize results of this project? If so, are there already research efforts underway to fill the gap or would it be feasible to undertake the other research?

II. Methodology

Each application must show:

A. A sound conceptualization of the problem to be investigated.

Examples of some items that should be considered under this standard are:

1. Definition of population being considered.

2. Discussion and citation of germane literature.

3. Definition of main concepts.

4. Discussion of assumptions.

5. Specification of dimensions or variables of the problem (dependent variables, independent variables, intervening variables).

6. Statement of hypothesis.

7. Specification of units of analysis.

8. Etc.

B. A clear description of project objectives.

Projects supported under Section 202 of the Rehabilitation Act of 1973 must have some knowledge building function. The following might be considered broad categories of knowledge building functions:

1. Description of characteristics of clients, population served, program, etc.;

2. Development of new knowledge of needed service;

3. Development of new administrative knowledge (staffing needs), new patterns of service, costs, etc.;

4. Assessment of effectiveness, efficiency and/or impact of a program;

5. Development of new methodological knowledge;

6. Tests of specific hypothesis or ideas;

7. Exploring the relationship between measurable variables;

8. Development of new substantive knowledge;

9. Development of a new device;

10. Testing the usefulness of a new device, etc.

In stating the project objective(s) care should be taken not to confuse the project objective(s) with goals and objectives of the Rehabilitation Services Administration (RSA) or of the applicant agency. The objective(s) should be stated in such a way that the degree of its achievement may be determined (measured) and the relationship of its achievement to the furtherance of RSA program goals understood.

C. An adequate project design.

The adequacy of a project's design depends greatly on the category of knowledge building activity to be undertaken. Examples of items to be considered under this standard include:

1. Degree of generalizability of results to other individuals, projects or institutions as shown by (a) a clear definition of the target population to be studied for the dimension under consideration; (b) suitable procedures to insure that the sample selected is representative of the target population.

2. Suitability of sampling design as shown by: (a) selection of a range of contrasting situations, conditions, cases, etc. to study, i.e., control groups, use of outside standards; (b) appropriateness of sampling unit, i.e., client, organization, etc.; (c) appropriateness of sample size, including allowance for loss of subjects; (d) use of probability sampling procedures, or other appropriate methods.

3. Applicability of design to project objective(s).

4. Adequacy of operationalizing project concepts such as: (a) quantification of variables or dimensions with provision for variance; (b) use of scaling procedures; (c) handling of validity and reliability issues; (d) appropriate selection or development of data gathering instruments; (e) pretest of procedures/instruments.

D. Appropriate methods of data collection.

Examples of items to be considered under this standard include:

1. Appropriateness of data sources.

2. Efficiency, orderliness and objectivity of data collection procedures.

3. Reliability of procedures.

E. Suitable procedures for data analysis.

Examples of items to be considered under this standard include:

1. Accuracy, orderliness, care of analysis.
2. Computerization (or other optimal form) of data processing.
3. Appropriate statistical techniques, i.e., measures of association, analysis of variance, tables, cross tabulations, confidence limits, qualitative analysis, content analysis, etc.
4. Use of statistical controls.
5. Examination for possible biases.
6. Completeness of analysis of available data.
7. Logic of data/statistics/conclusions linkage.

F. A method for clear presentation of findings.

Examples of items to be considered under this standard include:

1. Completeness of report.
2. Readability, clarity of report.
3. Presentation of relevant data, pro and con.
4. Explanation of outcomes in terms of research evidence.
5. Statement of possible sources of bias/error affecting the interpretation of findings.
6. Statement of conditions under which findings are expected to hold.

G. A clear exposition of the project plan.

Examples of items to be considered under this standard include:

1. A specification of the operational phases of the project.

2. A specification of project milestones, i.e., completion of literature search, pretest of new instrumentation, full staffing, etc.

3. Provision for adequate research resources.

   a. Sufficient and appropriate staff.

   b. Budgeting appropriately for the project, i.e., travel, supplies, equipment, data analysis, research utilization function, etc.

4. Adherence to RSA instruction for R&D project narrative.

III. Research Utilization

Each application must show:

A. Relevance to some significant group(s) in rehabilitation.

Examples of items to be considered under this standard include:

1. Types of expected product or outcomes in terms of their potential for acceptance and implementation.

2. Types of potential consumers of products or outcomes, i.e., service providers, State VR directors, counselors, clients, legislators, educators, general public, etc.

3. Plan for participation of some potential users in the R&D process.

B. A clear plan to overcome resistance or make change (if necessary) to enhance use of R&D product or outcome.

Examples of items to be considered under this standard include:

1. Possible modifications of the R&D product to make it maximally useful for particular groups.

2. Possible changes in policy, professional practice, or organizational structure required to implement the potential findings.

C. A workable dissemination and diffusion plan.

Examples of items to be considered under this standard include:

1. Specific actions to be taken to disseminate and implement the research results, both during and after the project.

2. Tasks within the project which were selected specifically to test, review and modify the solution's relevance to user's needs.

3. A cost projection of R&D funds placed in the project budget, necessary to develop the R.U. techniques for enhancing the utilization of project findings.

4. Methods of packaging results, kind of media to be used in transmitting results to users.

5. Method of maximizing project setting to facilitate utilization.

6. What post-research R.U. activities are expected.

7. A project summary as required by the Science Information Exchange.