# AHRQ Publishing and Communications Guidelines

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**Publishing Style** 

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# **Section 1: Publishing Style**

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## Introduction

The Agency for Healthcare Research and Quality (AHRQ) has developed publishing style specifications to provide you a format to follow for preparing reports and other products submitted to the Agency for publication (e.g., conference summaries, scientific and technical reports, flyers, booklets, and multimedia products and tools).

This section provides instructions for most reports and includes general, not exhaustive, specifications for other documents. Please contact your Office of Communications and Knowledge Transfer (OCKT) managing editor for additional guidance pertaining to your program and products.

## Clearances

- All publications require a U.S. Department of Health and Human Services (HHS) clearance at concept stage.
- All products are assigned an OCKT managing editor who will work with you and your project staff to develop clearance paperwork.

# Printing and duplication

Contractors are not permitted to obtain printing services on behalf of the Federal Government. All printing for AHRQ products must be coordinated within OCKT by an OCKT managing editor.

With OCKT approval, contractors are allowed to make a limited number of copies of AHRQ documents. Quantities are not to exceed 25,000 impressions (total number of pages). For example: 5 copies of a 100-page document equals 500 impressions. An OCKT managing editor must review the document before it is copied and will assign a publication number for the document.

# Coordination with AHRQ Web site

All print products that AHRQ publishes are posted on the Agency's Web site and often include associated Web-based tools. It is critical that you review Section 2 of these guidelines to understand AHRQ's Web policies.

# Copyrights

Do not use content, including tables or figures, in total from other publications unless you receive written permission from the originator to use them. A copy of the permission must accompany any document delivered to AHRQ.

Contractors may not copyright products they create on behalf of AHRQ because contract deliverables are the property of the Federal Government.

Contract project officers may, in certain situations, elect to allow contractors to share rights to the materials by negotiating a licensing agreement after AHRQ receives the deliverable. For further information, contact the OCKT managing editor assigned to the project.

A sample copyright notice follows.

"The (description of item), (title of product), is the intellectual property of (name of organization). The Agency for Healthcare Research and Quality (AHRQ) has a nonexclusive, royalty-free, worldwide license to use and disseminate the work and to authorize others to use it in their delivery of health care or for quality improvement and educational purposes. The author/owner hereby assures health care professionals, physicians, nurses, and hospital systems that use of the (description of item), distributed by or through AHRQ, in their practices is permitted. Each user is granted a royalty-free, non-exclusive, non-transferable license to use the product in accordance with the guidance contained in the work.

The product may not be changed in any way by any user. The product and its contents may be used and incorporated into other (training/educational/specify) programs on the condition that no fee is charged by the reproducer of the product or its contents for its use. The product may not be sold for profit or incorporated in any profit-making venture without the expressed written permission of (name of author/owner organization/copyright holder)."

For more information about copyrights and to view a sample of a copyright permission form, see Appendix 1-A.

# Licensing agreements

Grantees may copyright their work, such as tools and products; however, the Federal Government has the right to use the work for its own purposes, as long as it does not distribute the products outside the Agency. In certain circumstances AHRQ may allow contractors to retain the copyright. In these situations, a licensing agreement is required for the Federal Government to disseminate products, and the Federal Government must indicate who holds the copyright for the tools and products. The licensing agreement can be in the form of a letter (see sample on the next page). When the Agency distributes the material, it will include a disclaimer and copyright notice in the packaging. For sample disclaimers, see Disclaimers on page 1-4.

A sample licensing agreement follows.

(Name of organization/individual) holds copyright to the (name of item) and conveys a nonexclusive, irrevocable, (worldwide) royalty-free license to the Agency for Healthcare Research and Quality (AHRQ) to use and reproduce the material (specify form and quantities--print and/or electronic, number of copies or unlimited quantities).

AHRQ agrees to include a notice of copyright on all materials that it provides and distributes. AHRQ may post (name of the item) in its entirety or a summary on its Web site. [Add this sentence if necessary: AHRQ will provide users with information regarding (name of organization/individual) for potential purchase of print copies of (name of item).] (Name of organization/individual) allows AHRQ to distribute the material and to advertise/promote its availability as described in this agreement.

The copyright holder allows AHRQ to grant permission to outside organizations to use this material without a fee, under the condition that the outside organization does not change or sell the material.

[If a third party holds the copyright, the following sentence may be included: AHRQ acknowledges that all copyright terms are in	
accordance with the copyright agreement signed and dated	
between (name of the item) and (name of the thir	d
party).]	
The use of (name of item) under license by AHRQ or its agents or representatives is acceptable to AHRQ and the (name of organization/individual).	
Signatures:	
AHRQ Representative	
Date	
Copyright Holder	
Date	

### Disclaimers and disclosure statements

A disclaimer is used for reports developed under a contract or grant. Disclaimers may be adapted to suit the needs of the individual project. The disclaimer appears on the inside front cover of reports. An example of a disclaimer for a report produced under contract for AHRQ is shown below and on page 1-17.

"The findings and conclusions in this document are those of the author(s), who are responsible for its content, and do not necessarily represent the views of AHRQ. No statement in this report should be construed as an official position of AHRQ or of the U.S. Department of Health and Human Services."

The following are sample disclaimers for multimedia products (e.g., DVDs and CDs) developed under contracts or grants and disseminated by AHRQ.

Sample disclaimer for materials developed solely by contractors or grantees:

"The (name of organization) has developed this product using professional and scientific methods, sources, and up-to-date clinical standards at the time of publication to confirm that the information contained in it is both reliable and valid. However, the (name of organization) and AHRQ caution that the product is to be utilized using the professional judgment of authorized physicians or nurses and staff directed and supervised by them. Each health care professional who decides to use this product or its content should understand that such use would be on the basis of that provider's professional judgment with respect to the needs and characteristics of the particular patients they are caring for. The (name of owner/organization/author) and AHRQ disclaim any and all liability for adverse consequences or for damages that may arise out of or be related to the professional use or application by practitioners of the product or its content, including but not limited to, indirect, special, incidental, exemplary, or consequential damages. Furthermore, practitioners should be cautioned that professional and scientific methods and standards evolve over time. Therefore, attention should be given to possible progress in medical standards, techniques, and technology occurring after the production of this material."

Sample disclaimer for materials developed jointly by AHRQ and partners:

"The (name of organization) and AHRQ have made a good faith effort to take all reasonable measures to ensure that this product is accurate, up to date, and free of error in accord with clinical standards accepted at the time of publication. Any practice described in this product must be applied by health care practitioners in accordance with professional judgment and standards of care in regard to the unique circumstances

that may apply in each situation they encounter. The (name of organization) and AHRQ are not responsible for any adverse consequences arising from independent application by individual professionals of the content of this product to particular patient circumstances encountered in their practices."

Disclosure statements appear in reports developed under a contract or grant and appear on the back of the title page. An example of a disclosure statement for a report produced under contract for AHRQ is shown below and on page 1-19.

"None of the investigators has any affiliations or financial involvement the conflicts with the material presented in this report."

# Use of branding design/logos

AHRQ branding design elements must be included on all AHRQ products and communication materials produced in-house or by a contractor for AHRQ publication. An OCKT managing editor can answer any questions on use of the AHRQ logo and branding design.

- AHRQ design elements/logos are provided in Section 6 of these guidelines.
- Grantees may not include HHS or AHRQ logos on their products.
- Products prepared under **contract** to AHRQ must include the HHS/AHRQ logos and may **not** contain contractor logos.
- The HHS logo is only to be used on official, AHRQ-sponsored products.

### Trademarks and trade names

- Registered trademarks must be reflected in print or Web copy by using the TM or ® symbols. Use the symbols on first mention in each chapter and in major headings.
- Trade or brand names of drugs or products must be avoided. For a trademarked or a brand name of a drug, use the generic name whenever possible. Use the *Physicians' Desk Reference*® to determine the drug's generic name.
- Any constraints on using the materials must be specified.
- For information about trademarks, see Appendix 1-B.

# **Proprietary software**

Files should not be prepared in a manner that requires users to purchase a specific software program to access the information.

## Acknowledgments

Acknowledgments should describe briefly the specific substantive contribution an individual or organization made. Avoid acknowledgments that suggest individuals are being thanked for performing their paid duties. The acknowledgments may recognize contractor affiliation, but no outside logo may be used. For example:

"We thank Jonathan M. Links, Ph.D., Professor of Environmental Health Sciences at the Johns Hopkins University Bloomberg School of Public Health, and Trish M. Perl, M.D., M.Sc., Associate Professor of Medicine at the Johns Hopkins School of Medicine, for their valuable advice on this document."

# **Funding**

For grantee articles, final reports, and contract deliverables that AHRQ publishes, a funding statement must appear on the title page. See the sample on page 1-17. For other materials developed under an AHRQ contract that may or may not be published and for grantee journal articles, the following statement is required:

"This project was funded under contract/grant number XXXX from the Agency for Healthcare Research and Quality (AHRQ), U.S. Department of Health and Human Services. The opinions expressed in this document are those of the authors and do not reflect the official position of AHRQ or the U.S. Department of Health and Human Services."

#### **Public domain notices**

AHRQ publications carry a notice on the back of the title page that tells the reader whether the material is copyrighted or in the public domain. See the sample on page 1-19. When a publication is entirely in the public domain, use the following notice:

"This document is in the public domain and may be used and reprinted without special permission. Citation of the source is appreciated."

When the entire publication is in the public domain, except for short copyrighted quoted passages that do not require permission to reproduce, use the following notice and place it on the back of the title page:

"This document is in the public domain and may be used and reprinted without permission except those copyrighted materials that are clearly noted in the document. Further reproduction of those copyrighted materials is prohibited without the specific permission of copyright holders."

Use a simpler public domain statement on flyers or pamphlets. For example:

"This material may be reprinted without further permission."

# **Quick Reference Guide to Editorial Style**

# Style

The material below provides some general guidance on style. The overriding principle for editorial style is internal consistency. AHRQ follows the *U.S. Government Printing Office (GPO) Style Manual*, available electronically at http://www.gpoaccess.gov/stylemanual/browse.html. You may also refer to the *American Medical Association Manual of Style* for general style guidance and the *Publication Manual of the American Psychological Association* as a social science reference.

The following tips highlight GPO and AHRQ style requirements:

- Use the serial comma before the conjunctions "and," "or," and "nor" (example: dog, cat, and bird).
- Avoid using "the" before the acronym AHRQ.
- Spell out "percent" in text, but use % in tables, figures, charts, and graphs.
- The following appear as one word:

```
decisionmakers
decisionmaking
policymakers
policymaking
database
online
followup (except in the case of "the doctor will follow up with you in a few
days")
words beginning with "anti," "non," or "co."
```

- Use "health care" as two words, except in the Agency's name or if it is used as one word in official titles.
- Use numerals for time and measurement and numbers 10 and over. Write out everything else (7 years old, 3 weeks, 1 hour, 10 cm, but six cats, nine oranges, 10 patients).
- Define all abbreviations and acronyms in the text at first mention in each chapter and in tables. Exception: do not define HIV/AIDS.
- Capitalize the words Federal, State, Nation, and Federal Government. Do not capitalize nationwide, statewide, local, or federally.
- Capitalize prepositions that have four or more letters in a title (With, From, Between).

- Capitalize Web site and Web conference and make them two words. However, Webcast, Weblog, and Webinar appear as one word.
- Use "available at" when introducing a Web site address.
- Avoid long strings of capitalization, bold, and italics in text.
- In headings, capitalize each word in a hyphenated term with initial caps (Off-Label Use of Drugs).
- Use "as likely" instead of "more likely" or "less likely." (Joe is more than three times as likely to be elected president as Jim.)
- Always use a plural verb with the word "data." "Datum" is the singular form of data.
- Use "sex" when referring to male or female. Use "gender" when referring to masculine or feminine.
- Use "people" not persons as the plural of "person." One exception: do not correct this in article or book titles in reference lists.

#### References

- Provide a source or attribution for all statements of fact either with footnotes or endnotes or in-text references. For example, "Only two studies<sup>1,2</sup> showed a positive outcome for this treatment approach." or "Only two studies (Brown, Davis, and Green, 1990; Smith, 1987) showed a positive outcome for this treatment approach."
- Alphabetize works of multiple references by first author when listed in parentheses. For example, "Only two studies (Brown, Davis, and Green, 1990; Smith, 1987) showed a positive outcome for this treatment approach."
- Cite in the reference list every reference used in the text.
- Cite in the text every reference used in the reference list, and list them in the bibliography, if a bibliography is required.

# **Copyright permission**

AHRQ requires authors to provide a copy of the written permission they received to use copyrighted material. Provide credit to the copyrighted source in a footnote. Example: "Source: World Health Organization, 1990. Used with permission."

Include the complete citation for the source of the copyrighted material in the reference list. If a table or figure is compiled from data from a number of sources, list each of the sources in a footnote and provide the complete citation in the reference list. Indicate whether you have adapted a table or figure.

## **Reference Lists**

# Citation style

AHRQ uses Modified Vancouver Style®.

For in-text citations, references may be cited using either a superscript number (preferred) or author, date style. Example: "Only two studies<sup>1,2</sup> showed a positive outcome for this treatment approach." or "Only two studies (Brown, Davis, and Green, 1990; Smith, 1987) showed a positive outcome for this treatment approach."

#### **Journals**

- Author name(s) followed by initials (no periods). List up to three authors and then add "et al."
- Full title of article.
- Title of journal, abbreviated in *Index Medicus* style. Use *List of Journals Indexed in Index Medicus*, 1998 (or most recent issue). Available from the National Library of Medicine. NIH Publication Number 98-267.
- Year (month optional).
- Volume, issue (optional, in parentheses), and page numbers.

#### **Example: Standard journal citation**

Kleinman JC, Kopstein AN. Who is being screened for cervical cancer? Am J Public Health 1981 Nov 7;71(24):73-6.

Alberts ME. Immunization [editorial]. Iowa Med 1989 Oct; 79(10):489-93.

#### **Example: Translation**

Massone L, Borghi S, Pestarinno A. Localizations paimaires purpuriques de las dermatite herpetiforme [Purpuric paimar sites of dermatitis hepetiformis]. Ann Dermatol Venerol 1987;114(12):1545-7. (Fre).

#### **Books**

- Author name(s) followed by initials (no periods). After three authors, use "et al."
- Title.
- City of publication, publisher, and date. For the State, (used only when location of city is not clear), use the two-letter U.S. Postal Service abbreviation.

## **Example: Book with individual or institutional authors**

Perrin PG, Smith GH. The Perrin-Smith handbook of current English. Chicago: Scott, Foresman; 1962.

Beth Israel Hospital. Obstetrical decision making. Philadelphia: B.C. Decker; 1987.

## **Example: Part of book**

Cassidy JT, Pefty RE. Textbook of pediatric rheumatology. 2nd ed. New York: Churchill-Livingston; 1990 Chapter 3, Basic concepts of drug therapy.

Rombeau JL, Caldwell MD, eds. Parenteral nutrition. Vol. 2, Clinical nutrition. Philadelphia: Saunders; 1986.

Merrift CRB. Breast imaging techniques. In: Putnam CE and Ravin CE, eds. Textbook of diagnostic imaging. Vol. 3. Philadelphia: Saunders; 1988. p. 2118-20.

# Scientific and technical reports from Government agency

- Author name(s). Use "et al." after three authors.
- Title of the article and/or individual publication within the series.
- City of publication.
- Agency or organization responsible for the series.
- Date of publication.
- Name of the series.
- Publication or acquisition number.

### **Examples: Reports with individual or institutional authors**

Cohen S. Sample design of the 1997 Medical Expenditure Panel Survey Household Component. Rockville (MD): Agency for Healthcare Research and Quality; 2000. MEPS Methodology Report No. 11. AHRQ Publication No. 01-0001.

National High Blood Pressure Education Program Working Group. Working group report on high blood pressure in pregnancy. Washington, DC: National Heart, Lung, and Blood Institute, 2000. NHBPEP Publication No. 00-3029.

# **Grant or contract reports**

- Author name(s).
- Full title of the report.
- Status of the report, if given (final, draft, preliminary).
- Grantee or contractor.
- Grant or contract number.
- City of publication.
- Agency for which the report was prepared.
- Date (year with the entire name of the month).
- Publication or acquisition number.

### **Example: Grant or contract report**

Schachter H, Resiman J, Tran K, et al., Health Effects of Omega-3 Fatty Acids on Asthma Evidence Report/Technology Assessment No. 91 (Prepared by University of Ottawa Evidence-based Practice Center under Contract No. 290-01-0021). Rockville, MD: Agency for Healthcare Research and Quality, July 2004. AHRQ Publication No. 04-E013-2

### Dissertations and theses

- Author name.
- Full title of the report.
- Publication type.
- Location and name of institution
- Date of publication.

### **Example: Dissertation**

Youssef NM. School adjustment of children with congenital heart disease [dissertation]. Pittsburgh: University of Pittsburgh; 1988.

### **Example: Thesis**

Devins GM. Helplessness, depression, and mood in end-stage renal disease [master's thesis]. Montreal, Quebec: McGill University;1981.

# **Conference proceedings**

- Editor names(s).
- Title of publication.
- Title of conference.
- Dates and place of conference.
- City of publication, publisher, and date of publication.

## **Example: Conference proceedings**

Vivian VL, editor. Child abuse and neglect: a medical community response. First AMA National Conference on Child Abuse and Neglect; 1984 Mar 30-31; Chicago. Chicago: American Medical Association; 1985.

In addition, papers presented at meetings should begin with:

- Author name(s).
- Full title of paper.

## **Example: Conference paper**

Harley NH. Comparing radon daughter dosimetric and risk models. In: Gammage RB, Kaye SV, editors. Indoor air and human health. Proceedings of the 7th Life Sciences Symposium; 1984 Oct 29-31; Knoxville, TN. Chelsea (MN): Lewis Publishers; 1985. p. 69-78.

### **Example: Conference abstract**

Lunin LF. Organizing for information interaction in a radiology department [abstract]. In: Petrarca AE, editor. Information interaction. Proceedings of the 45th ASIS Annual Meeting; 1982 Oct 17-21; Columbus, OH. White Plains (NY): Knowledge Industry Publications, Inc.; 1982. p. 179-80.

# Nonprint data

When nonprint data are used, give the following information as applicable and available:

- Author name(s).
- Title.
- Type of medium.
- Source of data.
- Availability information (for example, Web URL).
- Date accessed, if Web product.

## **Example: Part of database**

Sestini P, Renzoni E, Robinson S, et al. Short-acting beta 2 agonists for stable chronic obstructive pulmonary disease. Cochrane Database of Systematic Reviews. 2002(4):CD001495.

## **Example: Web site**

Available at: Agency for Healthcare Research and Quality. Consumers and Patients. http://www.ahrq.gov/consumers. Accessed January 16, 2009.

### No author listed

When no author is listed for a reference, list the reference alphabetically by title (excluding "A," "An," or "The" if it is the first word). For government documents, the publishing agency often will be listed as the report author.

# **Type Specifications for Camera-Ready or Web Manuscripts**

Periodically contractors are asked to submit material to AHRQ for publication as a final camera-ready manuscript or for publication on the Web. **Type specifications provided here are for word-processed documents only.** Web documents are HTML coded to the level of their headings. More information on this topic is available in Section 2 of these guidelines. Please follow this document's guidelines for how manuscript submissions should be formatted. In addition to the examples provided, AHRQ can provide sample publications for contractors or grantees to use as references.

#### Front matter

Preface heading is 16 point Helvetica or Arial.

Structured abstract heading is 16 point Helvetica or Arial, initial caps. Run-ins are 12 point, bold, Times Roman, initial caps.

Contents heading is 16 point Helvetica or Arial. Use dot leaders before page numbers.

Table of contents lists chapter titles plus two levels of headings. Include a list of all figures, tables, and appendixes in the table of contents.

# Report body

Text is 12 point Times Roman, with a .25 paragraph indent.

Footnotes are 9 point Times Roman, flush left. Use superscript numerals  $(^{1,2})$  or lower-case letters  $(^{a,b})$  for ordered references.

# **Headings**

Chapter headings are 18 point Helvetica or Arial, bold, flush left, initial caps. All chapters begin on a right (odd) page.

Level 1 headings are 16 point Helvetica or Arial, bold, centered, initial caps.

Level 2 headings are 14 point Helvetica or Arial, bold, flush left, initial caps.

Level 3 headings are 12 point Times Roman, bold, run-in with a period, paragraph indent of .25, first word capitalized.

Level 4 headings are 12 point Times Roman, italic, run-in with a period, paragraph indent of .25, first word capitalized.

# **Tables and figures**

Headings for tables and figures are 10 point Helvetica or Arial, bold, flush left, first word capitalized. They are numbered sequentially throughout the document with a period after the number.

Continued headings use the word "continued" in parentheses (continued) at the end of the heading.

Text for tables and figures is 10 point Helvetica or Arial.

Table footnotes are 9 point Times Roman, flush left. Use superscript symbols  $^{(*,\#)}$  or superscript lower-case alpha  $^{(a,b)}$  for ordered references.

## **Back matter**

References and bibliography headings are 18 point Helvetica or Arial, bold, flush left, initial caps.

References and bibliography text are 9 point Times Roman, flush left, 2 columns.

# **Samples**

# Headings

These sample headings are for word-processed documents only. Examples follow each bulleted entry.

• Chapter headings are 18 point Helvetica or Arial, bold, flush left, initial caps.

# **Chapter 1. Introduction**

• Level 1 headings are 16 point Helvetica or Arial, bold, centered, initial caps.

# Origins and Folklore of Garlic

• Level 2 headings are 14 point Helvetica or Arial, bold, flush left, initial caps.

#### **Fresh Garlic and Condiments**

• Level 3 headings are 12 point Times Roman, bold, run-in with a period, paragraph indent of .25, first word capitalized.

**Dehydrated preparations.** One of the most widely used forms of commercial garlic is garlic powder, which may or may not be enterically coated.

• Level 4 headings are 12 point Times Roman, italic, run-in with a period, paragraph indent of .25, first word capitalized.

*Enterically coated preparations*. A number of enterically coated preparations are available today.

# Sample: Inside front cover for a final report

Disclaimer

This report is based on research conducted by the Southern California Evidence-based Practice Center—RAND Corporation under contract to the Agency for Healthcare Research and Quality (AHRQ), Rockville, MD (Contract No. 282-00-0005-21). The findings and conclusions in this document are those of the author(s), who are responsible for its content, and do not necessarily represent the views of AHRQ. No statement in this report should be construed as an official position of AHRQ or of the U.S. Department of Health and Human Services.

The information in this report is intended to help clinicians, employers, policymakers, and others make informed decisions about the provision of health care services. This report is intended as a reference and not as a substitute for clinical judgment.

This report may be used, in whole or in part, as the basis for the development of clinical practice guidelines and other quality enhancement tools, or as a basis for reimbursement and coverage policies. AHRQ or U.S. Department of Health and Human Services endorsement of such derivative products may not be stated or implied.

Note: If the document has been peer reviewed, the following statement must be added:

Peer reviewers' comments on a preliminary draft of this report were considered in preparation of this final report. Synthesis of the scientific literature presented here does not necessarily represent the view of individual reviewers.

Sample: Title page for a fi	nal report	
Final Report		
ldentifying, Categoriz Health Care Efficienc		10-Word Maximum
Prepared for: Agency for Healthcare Research and GU.S. Department of Health and Huma 540 Gaither Road Rockville, MD 20850 www.ahrq.gov	•	
Contract No. 282-00-0005-21		
<b>Prepared by:</b> Southern California Evidence-based F Monica, CA	Practice Center—RAND Corporation, S	Santa Funding Information
<i>Principal Investigator</i> : Elizabeth A. McGlynn, Ph.D.		
Evidence-based Practice Center Dire Paul G. Shekelle, M.D., Ph.D.	ctor:	
Task Order Coordinator: Susan Chen, B.A.	Programmer: Martha Timmer, M.S.	
Economists: Dana Goldman, Ph.D. John Romley, Ph.D.	Database Manager: Jason Carter, B.A.	
Content Experts: Peter Hussey, Ph.D.	Staff Assistant: Carlo Tringale, B.A	
Han de Vries, M.Sc., M.Phil. Margaret Wang, Ph.D.	Librarian: Roberta Shanman, M.S.	
AHRQ Publication No. 08-0030 April 2008	Provided by AHRQ	

# Sample: Back of title page

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Public Domain Notice

## **Suggested Citation:**

McGlynn, EA. Identifying, Categorizing, and Evaluating Health Care Efficiency Measures. Final Report (Prepared by the Southern California Evidence-based Practice Center—RAND Corporation, under Contract No. 282-00-0005-21). AHRQ Publication No. 08-0030. Rockville, MD: Agency for Healthcare Research and Quality. April 2008.

Note: All authors are listed for Evidence-based Practice Reports; however, when citing a list of authors for other documents, list just the first three, followed by et al.

None of the investigators has any affiliations or financial involvement that conflicts with the material presented in this report.

**Sample Disclosure Statement** 

# Sample: Acknowledgments (optional)

Note: Keep acknowledgments to one page or move them to an appendix.

# **Acknowledgments**

We thank Jonathan M. Links, Ph.D., Professor of Environmental Health Sciences at the Johns Hopkins University Bloomberg School of Public Health, and Trish M. Perl, M.D., M.Sc., Associate Professor of Medicine at the Johns Hopkins School of Medicine, for their valuable advice on this document.

## Sample: Abstract

This abstract was developed as a sample template. See AMA's Manual of Style, pp. 20-24, on specifications for abstracts for various types of reports.

# Structured Abstract

**Objectives:** To assess the efficacy and safety of medications and surgeries used for weight loss.

**Data Sources:** MEDLINE<sup>®</sup> and EMBASE. We also scanned the reference lists of recent extensive reviews and contacted experts.

**Review Methods:** Sibutramine, orlistat, fluoxetine, phentermine, and diethylpropion; bupropion, zonisamide, topiramate, and sertraline; and bariatric surgery were evaluated. Outcomes of interest were weight loss and adverse events. Quality was assessed using the Jadad summary score. Meta-analyses with sensitivity analyses were performed on six month and one year follow up weight loss and adverse event data. Pooled mean weight loss, peri-operative mortality rate, and post-operative mortality rate were calculated for each surgical procedure.

**Results:** Sibutramine produced a weight loss of 3.43 kg at 6 months and 4.45 kg at 12 months. Adverse events included modest increases in heart rate and blood pressure Orlistat produced a weight loss of 2.51 kg at 6 months and 2.75 kg at 12 months. Adverse events include diarrhea, flatulence, and bloating/abdominal pain/dyspepsia compared to placebo, with relative risks (RR) of 3.4, 3.1, and 1.5, respectively. Subjects treated with phentermine lost 3.6 kg at 6 months, while subjects treated with diethylpropion lost 3.0 kg. Side effects or adverse-event data were not reported. Fluoxetine studies showed a weight loss of 4.74 kg at 6 months and 3.05 kg at 12 months. Adverse events include nervousness/sweating/tremors, nausea/vomiting, fatigue/asthenia/hypersomnia/ somnolence, insomnia, and diarrhea compared to placebo, with RR of 6.4, 2.7, 2.4, 2.0, and 1.7, respectively. Buproprion resulted in 2.8 kg at 6 to 12 months, and causes dry mouth (RR = 2.99) and insomnia. At 6 months topiramate resulted in 6.5 percent of pretreatment weight lost. Parasthesias (RR = 4.9) and taste perversion (RR = 9.2) were side effects. We found single studies for zonisamide and sertraline. Surgery in individuals with a BMI of 40 kg/m2 or greater resulted in a 20 to 30 kg weight loss, maintained up to 8 years. For patients with a BMI between 35 and 40 kg/m2, the data are not conclusive. Bariatric surgical procedures have been performed with a postoperative mortality rate of less than 1 percent. Laparoscopic procedures result in fewer wound complications or incisional hernias than open procedures.

**Conclusions:** Sibutramine, orlistat, phentermine, diethylpropion (probably), bupropion, fluoxetine, and topiramate promote weight loss of less than 5 kg at one year, which may be clinically significant. No evidence indicates that any drug promotes more weight loss than another, and all have side effects. Surgical treatment is more effective than nonsurgical treatment for weight loss in patients with a BMI of 40 kg/m2 or greater but is associated with a substantial number of complications and adverse events, although most are minor. Data regarding pharmaceutical or surgical treatment of adolescent and pediatric patients is lacking.

# **Sample: Contents**

# **Contents**

Executive Summary
Chapter 1. Introduction
Risk Factors  Key Questions Uses of This Report
Chapter 2. Methods
Literature Review Methods Inclusion and Exclusion Criteria Literature Search and Retrieval Process Literature Synthesis Development of Evidence Tables and Data Abstraction Process. Quality Rating of Individual Studies Strength of Available Evidence
Chapter 3. Results
Chapter 4. Discussion
References and Included Studies
List of Acronyms/Abbreviations
Figures
Figure 1: Figure Name
Tables
Table 1: Table Name
Appendixes Appendix A: Exact Search Strings Appendix B: Sample Data Abstraction Forms Appendix C: Evidence Tables Appendix D: List of Excluded Studies Appendix E: Peer Reviewers

# **Example: Chapter opening**

# **Chapter 1. Introduction**

The Institute of Medicine (IOM) outlined six aims for the 21st-century health system in Crossing the Quality Chasm: health care should be safe, effective, patient-centered, timely, efficient, and equitable.<sup>3</sup> In a subsequent IOM report providing the basis for the National Healthcare Quality Report,<sup>4</sup> a matrix is provided for categorizing quality measures in five of those domains. Efficiency was not included in the matrix because it was judged to fall outside of the scope of the Quality Report and because of the "considerable methodological and measurement issues involved."

Since the publication of the IOM reports, there has been substantial progress in measuring and reporting progress in health care quality. The National Healthcare Quality Report and the National Healthcare Disparities Report present current performance in the areas of effectiveness, patient centeredness, safety, timeliness, and equity. Many other groups, such as accrediting bodies (NCQA, JCAHO), government agencies (AHRQ, CMS), public-private alliances (Leapfrog, AQA, National Quality Forum, AMA Physician Consortium for Performance Improvement), and various research groups have also made a great deal of progress in defining and measuring various domains of health care quality. The measurement of efficiency has lagged behind. There are a variety of definitions of efficiency currently in use and these different meanings for the same word drive some of the confusion among stakeholders about the adequacy or desirability of alternative measures of efficiency. In the table below, we show some of the definitions that have been used.

Table 1. Definitions of	efficiency
Entity	Definition
IOM (2001a) Palmer & Torgerson, 1999	Avoiding waste, including waste of equipment, supplies, ideas, and energy. Health care resources are being used to get the best value for money.
Economic theory	Technical efficiency means that the same level of the output cannot be produced with fewer of the inputs.
Economic theory	Productive efficiency refers to the maximization of output for a given cost, or minimization of cost for a given output.
Economic theory	Social (or Pareto) efficiency exists when no one can be made better off without making someone else worse off.
AQA	A measure of the relationship of the cost of care associated with a specific level of performance measured with respect to the other five IOM aims of quality.
GAO	Providing and ordering a level of services that is sufficient to meet patients' health care needs, but not excessive, given a patient's health status.
MedPAC	Using fewer inputs to get the same or better outcomes. Efficiency combines concepts of resource use and quality.

# Type Specifications for Desktop Published Products

Periodically contractors are asked to submit materials to AHRQ for publication as final, typeset (desktop published) products. Please ask for samples of AHRQ products (i.e., fact sheets, brochures, DVDs, booklets) to gain a clear understanding of design concepts used at AHRQ.

Font sizes and graphics must be appropriate for the audience and culture. Do not use stylized fonts. Many programs have an established "family of products" design that use colors and design elements that tie them together with a common theme. Please ask if your product is part of a larger program.

If stock photographs are used, they must be purchased for AHRQ use.

Federal regulations recommend limiting ink colors. For reports, use no more than two colors on the cover and black text inside. For consumer, promotional, and other types of products, use no more than two colors. There are exceptions, as some materials may require additional colors. Please discuss your requirements with the OCKT managing editor assigned to the product.

# **File Submission**

# Reports submitted as final camera-ready copy

- 1. If the contract stipulates that you are to deliver your report as final, camera-ready copy, submit the entire report single-spaced in hard copy. The contract will specify the number of copies of the final report that should be delivered. **Do not bind the final report.**
- 2. Submit a disk or CD of the entire final report as it appears in hard copy, saved as a Microsoft Word file. **PDF files are not acceptable submissions.**
- 3. Include the title page, citation, preface, and acknowledgments in one document called "front matter." Name the remaining files separately, indicating what they are (i.e., structured abstract, table of contents, executive summary, chapter number, evidence table number, appendix number, or references).

Text figures and text tables can be either placed in the chapter near their call outs or included at the end of each chapter. If they are placed at the end of the chapter, provide the table or figure number in the title.

OCKT staff will open the electronic files for final, camera-ready submissions to make a cursory check for agreement between the content of the manuscript and the electronic file. Intuitive file names enable staff to ensure the submission is complete.

- 4. AHRQ will add minimal front matter information to the reports, including the Agency logo, publication number, and date.
- 5. Paginate the report consecutively, according to the table of contents, with the exception of the appendixes, which should be numbered independent of the report, such as A-1, A-2
- 6. "Delink" all databases (such as Endnote) from the final electronic files. Ensure that any data that would be pulled from a database is included in the final submission. Endnote can generate a final standalone reference list. In addition, make sure any other internal or external links are deactivated.
- 7. Include with your submission a copy of permissions you received to use copyrighted material. **Be sure that all copyrighted material includes attribution to source** (see Appendix 1-A.)

# Reports submitted as a final manuscript or peer review copy

**Note:** Grant Final Progress Reports must be submitted in accordance with instructions in Appendix 1-C.

1. If your contract stipulates that you are to deliver your report as a final manuscript or peer review copy, submit the entire report double-spaced in hard copy. **Do not bind the** 

**final manuscript.** If binding the deliverable in a certain format is essential to the usefulness of the product, submit one bound sample for AHRQ to use in developing formatted products and submit the remaining copies unbound.

- 2. Submit a disk or CD of the entire final report as it appears in hard copy, saved as a Microsoft Word file. **PDF files are not acceptable submissions.**
- 3. Include the title page, citation, preface, and acknowledgments in one document called "front matter." Name the remaining files separately, indicating what they are (i.e., structured abstract, table of contents, executive summary, chapter number, evidence table number, appendix number, references).

Text figures and text tables can either be placed in the chapter near their call outs or included at the end of each chapter. If they are placed at the end of the chapter, provide the table or figure number in the title.

Save tables in tabbed text format rather than in cells. If the tables have been created in another software package and pasted into a word processing program, save the individual table files separately as tabbed text.

- 4. AHRQ will add minimal front matter information to the reports, including the Agency logo, publication number, and date.
- 5. Paginate the report consecutively, according to the table of contents, with the exception of the appendixes, which should be numbered independent of the report, such as A-1, A-2.
- 6. "Delink" all databases (such as Endnote) from the final electronic files. Ensure that any data that would be pulled from a database is included in the final submission. Endnote can generate a final standalone reference list.
- 7. Check all reports for copyrighted materials. Include with the final report a copy of any permissions you received to use copyrighted material. **Be sure that all copyrighted material includes attribution to source.** (See Appendix 1-A.)

# Print-ready products submitted for offset printing

- 1. If submitting print-ready files, save them in their native page layout formats (i.e., Quark Xpress or Adobe InDesign). Microsoft Word, Excel, and PowerPoint files are not considered print-ready formats and cannot be used for offset printing.
- 2. Submit graphic and font files on a CD, along with a printout. If accompanying graphic files (eps or tif) include text, convert the graphics to outlines prior to saving the files.
- 3. Send a color printout of the document at actual size, including folioed pages, as well as documentation indicating the versions of software used, computer platform (Mac or PC), ink colors (Pantone or CMYK), number of pages, contact person, and other relevant

information. GPO Form 952 provides an easy way to convey this information. It is available for download at http://www.gpo.gov/forms/pdfs/952.pdf.

## **DVD** or **CD** products

If the contract stipulates that your final product will be a DVD or a CD, you must consult with your managing editor to determine the file format for any multimedia product you submit. If your final product will be a DVD or a CD, you must provide system requirements and directions for accessing the product. An example follows:

## **System requirements**

This DVD can be played in stand-alone DVD players and on Mac<sup>®</sup> and personal computers with DVD drives. The minimum hardware and software requirements for viewing the DVD on a PC or a Mac<sup>®</sup> are:

Processor: 667 MHz Intel<sup>®</sup> Pentium<sup>®</sup> III processor or equivalent

Memory: 128 MB RAM Screen Resolution: 800 x 600

Color: 16-bit

Sound card: 16-bit sound card and speakers

Peripherals: DVD drive

#### **Directions for use**

The DVD is designed to start automatically when it is inserted into any stand-alone DVD player or computer with a DVD drive. If it doesn't:

For DVD Player: Press the Play button for the video to begin.

For Windows® PC: Open Internet Explorer, select your DVD drive, and double click Play.

For Mac<sup>®</sup>: Double click on the icon to open the disk in the Finder and then double click on the file.

# **Additional Information**

To discuss specific issues or to obtain additional guidance on publishing style specifications, contact:

Randie Siegel
Associate Director
Office of Communications and

Knowledge Transfer

E-mail: randie.siegel@ahrq.hhs.gov

Phone: 301-427-1852

Sandy Cummings

Deputy Director Operations/Publishing

Office of Communications and

Knowledge Transfer

E-mail: sandra.cummings@ahrq.hhs.gov

Phone: 301-427-1893

# **Appendix 1-A. Copyright and Permissions**

## Introduction

This appendix outlines the key copyright issues that AHRQ staff, grantees, and contractors need to know in developing print and Web-based documents and gives links to sites that provide authoritative information.

Title 17 – Copyrights of the U.S. Code states that articles, books, photographs, and other copyrightable materials (such as software) belong to the authors upon creation or to the persons or institutions to which they have assigned the copyright.

# Signing Copyright Forms—Federal Employees

Employees of the Federal Government who submit articles to journals for publication must not assign copyright to the journal. Work done by Federal employees is not protected by the Copyright Act, and copyright ownership cannot be transferred. The following statement should be used if a Federal employment option is not provided on the journal's copyright form.

"I was an employee of the U.S. Federal Government when this work was completed and prepared for publication. Therefore, it is not protected under the Copyright Act, and copyright ownership cannot be transferred."

# **Reprinting Copyrighted Materials**

#### Fair Use

A common issue for government employees, grantees, and contractors is the use of material from copyrighted publications in reports or documents to be published by AHRQ. The ability to directly quote short passages of text relevant to a particular point is protected under the Fair Use doctrine. Short passages (typically several paragraphs or less) can be quoted without permission, but the copyrighted sources must be indicated in the text or by a footnote or endnote. The ideas from a copyrighted publication can be summarized in your own words, but the author(s) of the original idea should be referenced.

# **Excerpting content**

Copyright must be taken into account when reproducing material written by others, including tables and figures that were first published in copyrighted publications, photographs and illustrations, software applications, and multimedia content. To use any of these materials, the AHRQ-associated author needs written permission from the copyright holder to reproduce the item. For a sample letter for AHRQ employees to use to obtain copyright permission, see the end of this appendix. In some cases, the copyright

holder, often a journal or book publisher, may charge a fee to use the material. At a minimum, copyright holders will require the reprinted item to run with a statement, such as "Reprinted with permission from J Reason. *Human error*. New York: Cambridge University Press, 1990, p.175."

## Tables, graphs, and figures

If you create a diagram, graph, or a new table using only part of the data from a copyrighted source, you may be able to cite the item without asking for permission to reprint. If changes are minor and you are using most of the original content, request permission from the source to adapt the material. The changes have to be significant so that the item is sufficiently different than its source to be considered a distinct product. Once permission to adapt the material is received, the item would appear with a statement along the line of, "Adapted from A Donabedian. *Explorations in quality assessment and monitoring: the definition of quality and approaches to its assessment*, Volume I. Ann Arbor, MI: Health Administration Press, 1980."

# **Photographs**

Permission is needed to reproduce photographs that are under copyright protection. An exception to this is if the photo is in the public domain (for example, it was taken for the Federal Government or it is old enough to be out of copyright). With regard to photographs under copyright protection, you first must determine who owns the rights to the image. Sometimes, the photographer, not the publisher, retains the copyright. The credit line under the picture in a book or journal/magazine/newspaper article should state who the copyright owner is, if it is not held by the publisher. For AHRQ publications, photographs should be accompanied by a notice, "Copyright [or ©] 1956, Time-Life Books." If the photographer's name is known, that should be part of the credit line as well ("Photograph by Ansel Adams, copyright 1967 by *National Geographic.*").

# Digital and electronic content

Digital or electronic content is subject to the same protections as print products with some additional provisions specific to online resources. Consult with AHRQ on licensing and permission considerations for the development of electronic databases or Web-based tools.

# **Reprinting From the Internet**

There are several problems with reprinting materials taken from Web sites (other than a publisher's) or from Internet newsgroups or other discussion forums (such as Weblogs). In the case of discussion groups, current copyright law suggests that posted material is considered as under copyright by the author immediately upon its creation, even if no copyright notice is given. Ask permission to reprint posted messages if an e-mail address is given for the author (even if the author's name is clearly a pseudonym); otherwise, cite the newsgroup and date of posting.

Material posted on a Web site may be under copyright by the author of the site or, as often occurs on Weblogs, it may have been posted in violation of copyright. Do not assume that such material is in the public domain. For text and graphics, the original source should be consulted to ensure the accuracy of quoted or copied material found on a Web site other than that of the original writer or publisher. Text may have been misquoted, and photographs may have been altered using graphics editing software.

## **Additional Information**

Additional information on copyright and the use of copyrighted materials can be obtained from the U.S. Copyright Office (http://www.copyright.gov), which has links to copyright management organizations, such as the Copyright Clearance Center (http://www.copyright.com). The Clearance Center helps businesses and academic institutions pay fees for uses of copyright material that do not fall under the Fair Use protections. The AHRQ Information Resource Center participates in the Copyright Clearance Center.

Additional information on licensing agreements can be found at page 1-2.

AHRQ staff authors, project officers, and contractors should work with managing editors in AHRQ's Office of Communications and Knowledge Transfer to help them decide what permissions are needed for their project.

For further information, contact:
Randie Siegel
Associate Director
Office of Communications and Knowledge Transfer
E-mail: randie.siegel@ahrq.hhs.gov

Phone: 301-427-1852

# Sample Letter for AHRQ Employees to use to Obtain Copyright Permission

(Letterhead)		
Date: To: From:		
1 1	y for Healthcare Research and Quality (AHR) ing article (name of article) in (name of jour	~/ /
I request your permission to us	se the following material:	
(Full reference to pap page number)	er, journal, etc., plus name of chart, table,	etc., and
	uce and, if necessary, to redraw or modify the RQ is a Federal agency, my article is not subj	
1 5 5	nal article can be granted only by AHRQ, which ghted material usable only with the permission	
Full credit will be given to the	publisher and authors. The proposed citation	is:
Used by permission of	copyright holder. (Same citation as above)	
If you would like to modify th on this sheet.	e proposed citation, please indicate your prefe	erred citation
Please sign below to grant per for your prompt attention and	mission and return it to me, preferably by fax. response.	. Thank you
Permission is hereby granted:	Printed name and title	
	Signature	Date
Please fax your reply to: 301-4	127-	
;	Signature of AHRQ Requestor	Date

# **Sample Copyright Permission Form**

The undersigned hereby grant(s) permission to the Agency for Healthcare Research and Quality (AHRQ), hereinafter referred to as the "Publisher," located at 540 Gaither Road, Rockville, MD 20850, to use the material specified below in the publication titled

using this publication or pertinent portion	text, graphics, by me, for use in this publication and in materials ons of it. These copyrighted items may be used in ectronic formats, including future editions thereof
	permission to AHRQ shall in no way restrict to the copyrighted item(s), in other works.
The following credit line should be used (specify copyright year and names of	d by AHRQ for each item that I hold copyright to holders):
Other provisions, if any:	
If specified here, the requested rights ar undersigned, and the written consents o obtained:	e not controlled in their entirety by the f the following individuals are attached or must be
One copy of this permission form shall retained by the Undersigned.	be returned to the Publisher and one copy shall b
Authorized Signatory	Date
Authorized Signatory	 Date

# Appendix 1-B. Trademarks

# Introduction

A trademark is a word, phrase, symbol, or design or a combination of words, phrases, symbols, or designs that identifies and distinguishes the source of goods or services of one party from those of others. Companies, software, and other names can be trademarked.

Trademarks must be aggressively protected by the owner to keep them from falling into the public domain and the owner losing the protection of the mark. This means that if the owner fails to protect the mark and allows it to be used in unauthorized ways or in ways that may cause it to cease being identified in the mind of the public solely with the goods and services of the owner, the protection may be lost. This is because the trademark is based upon identification of the mark with a particular source. When it comes to intellectual property law, in general, and trademark law, in particular, you are advised to observe the trademark protection when using a name or mark that is registered or claimed by another party.

Trademarks registered with the U.S. Patent and Trademark Office are noted with an <sup>®</sup>. Trademarks that haven't been registered are noted with the symbol <sup>TM</sup>. AHRQ publications use the trademark symbols on first mention in each chapter and in major headings.

# **Common Trademarks: Correct Use**

Acrobat <sup>®</sup> Reader <sup>®</sup>	iTunes®
Adobe®	Java TM, JavaScript TM JAWS®
Adobe <sup>®</sup> Acrobat <sup>®</sup>	
ActiveSync®	LISTSERV®
ActiveX®	Macromedia®
Apple®	Macintosh <sup>®</sup> , Mac <sup>®</sup>
CAHPS®	Microsoft®
CERTs (only the logo gets <sup>TM</sup> )	Mozilla®
CHIRI TM	National Guideline Clearinghouse <sup>TM</sup>
Firefox®	National Quality Measures
Flash®	Clearinghouse <sup>TM</sup>
Google <sup>TM</sup>	Netscape <sup>®</sup> , Netscape Navigator <sup>®</sup>
healthfinder ®	$ORYX^{TM}$
HCAHPS <sup>®</sup>	*Palm® PalmPilot <sup>TM</sup> , Treo <sup>TM</sup> ,
HEDIS <sup>®</sup>	Tungsten <sup>TM</sup> , Zire <sup>TM</sup> , HotSync <sup>®</sup>
$IBM^{\scriptscriptstyle{\circledR}}$	Pentium <sup>®</sup>
Intel®	PKZIP <sup>®</sup>
$iPod^{\mathbb{R}}$	PostScript <sup>®</sup>

PowerPoint® T-Mobile<sup>®</sup> OuickTime<sup>®</sup> TrueTvpe<sup>®</sup> Real<sup>®</sup>, RealAudio<sup>®</sup>, RealPlayer<sup>®</sup>, Windows® Windows NT® RealVideo® Safari TM Windows<sup>®</sup> 95, Windows<sup>®</sup> 98 Windows® 2000, Windows® XP  $SAS^{\mathbb{R}}$  $SPSS^{\mathbb{R}}$ Windows Media® Player  $Stata^{\mathbb{R}}$ WinZip® Sun TM WordPerfect<sup>®</sup>

**The National Library of Medicine**<sup>®</sup> has trademarked its databases and terms (such as MEDLINE®, MEDLINEplus®, MEDLARS®, MeSH®, PubMed®). For a complete list, go to: http://www.nlm.nih.gov/pubs/factsheets/trademarks.html.

#### Not trademarked

Access

Excel

HP

Internet Explorer

NGC (the acronym is not trademarked but National Guideline Clearinghouse<sup>TM</sup> is) NQMC (the acronym is not trademarked but National Quality Measures Clearinghouse<sup>TM</sup> is)

PDF (portable document format)

Word

# **HTML Codes for Trademark Symbols**

<sup>®</sup> = Registered trademark or service mark: &reg; TM = Trademark ownership claimed: &#8482;

### **Trademark Information Links**

Patent and Trademark Office: http://www.uspto.gov/main/trademarks.htm Adobe®: http://www.adobe.com/misc/pdfs/USGenExtTMdb110807.pdf Apple®: http://www.apple.com/legal/trademark/appletmlist.html Dell<sup>TM</sup>:

http://www.dell.com/content/topics/global.aspx/policy/en/policy?c=us&cs=04&l=en&s=gen&~section=007

Google<sup>TM</sup>: http://www.google.com/permissions/guidelines.html

HP: http://www.hp.com/hpinfo/abouthp/trademarks/?jumpid=reg R1002 USEN

IBM®: http://www.ibm.com/legal/copytrade.shtml

Intel®: http://www.intel.com/intel/legal/tmnouns2.htm

Microsoft®: http://www.microsoft.com/library/toolbar/3.0/trademarks/en-us.mspx

Mozilla®: http://www.mozilla.org/foundation/trademarks/policy.html

Netscape®: http://wp.netscape.com/legal\_notices/trademarks.html Palm™: http://www.palm.com/us/company/trademark.html Real®: http://www.realnetworks.com/company/logos/policy.html Sun™: http://www.sun.com/suntrademarks/

# Appendix 1-C. AHRQ Grant Final Progress Reports

## Introduction

The following guidance outlines the structure and headings that should be provided in grantee final reports on projects to be submitted to AHRQ as part of the closeout of grant awards.

The final report may be submitted as an electronic file attachment in Word, WordPerfect®, or ASCII by e-mail to grantfpr@ahrq.gov. A PDF file is not acceptable. Electronic versions of the final reports will be made available through the AHRQ Web site and the National Technical Information Service.

This information is also located at http://www.ahrq.gov/fund/reptemp.htm.

# **Length of Report**

4-20 pages maximum, including a title page and abstract.

# **Title Page**

Include the following:

- Title of project.
- Principal investigator(s).
- Inclusive dates of project.
- Federal project officer.
- Acknowledgment of Agency support.
- Grant award number.

# **Report Components**

Include the following components:

- 1. Structured abstract. Structured abstracts can have up to 200 words. The structured abstract must contain five elements:
  - Purpose.
  - Scope.
  - Methods.
  - Results.
  - Key words.

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- 2. The body of the report includes these headings:
  - Purpose (objectives of study).
  - Scope. Subordinate heading examples include background, context, settings, participants, incidence, prevalence. These headings are optional; others may be used.
  - Methods. Subordinate heading examples include study design, data sources/collection, interventions, measures, and limitations. These headings are optional; others may be used.
  - Results. Subordinate heading examples include principal findings, outcomes, discussion, conclusions, significance, and implications. These headings are optional; others may be used.
  - List of publications and products. This includes a bibliography of published works and electronic resources from the study.

Appendix 1-C 2

# Section 2: Web Product and Web Site Development

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## Introduction

This section highlights basic issues that need to be addressed when developing Web products or sites under contract that will be publicly available when they are launched. It covers what you need to know to ensure deliverables are on target, comply with legal and policy requirements, and do not require expensive reworking to meet Federal and U.S. Department of Health and Human Services (HHS) requirements for information resources. Detailed application and system developments requirement and documentation are located at Appendix 2-A. Instructions that address grantee Web-based products and Web sites are located at Appendix 2-B.

## **Guidelines for Web-Based Products**

Retrofitting Web-based products is undesirable because it adds time and costs to the process of making products publicly available. All products developed for posting on the AHRQ Web site or other sites sponsored by AHRQ should meet the minimum requirements addressed below. AHRQ has resources to provide limited technical assistance to ensure your deliverables meet the requirements outlined here and in the appendixes. To ensure your deliverables meet requirements, you must work with your project officer to have the Agency for Healthcare Research and Quality's (AHRQ's) Web Site Manager conduct a preliminary review of any Web-based product you develop. Contact information for the AHRQ Web Site Manager is located at the end of this section.

#### **Titles**

Titles must be concise and relevant to the purpose of the project but cannot include the name of the contractor or grantee. Report titles should be no more than 10 words. Titles of Web-based tools should be no more than five words. Make every word count by eliminating initial articles, such as "the" or "a." Titles need to be distinct enough to differentiate among similar-sounding products.

# Quality control/editorial review

AHRQ grantees or contractors should check their products for spelling, grammar, format, consistency, and style before submitting them for posting on the AHRQ Web site. Federal resources follow the *Government Printing Office Style Manual*, available electronically at: http://www.gpoaccess.gov/stylemanual/browse.html.

## **Accessibility**

As an agency of the Federal Government, AHRQ must ensure that everything posted on the Web site or AHRQ-supported sites complies with requirements for information resources under Section 508 of the Rehabilitation Act. For an overview on accessibility, see Appendix 2-C. For standards and guidance, go to the HHS site on Section 508 at: http://www.hhs.gov/web/508/. For external links from a Federal Government Web site to

partner products or files that are not compliant with Section 508 accessibility requirements, a special accessibility notice must be co-located with the link on the Federal site. The accessibility notice link is available at: http://www.ahrq.gov/accessibility.htm and at Appendix 2-D.

An example is provided below:

"These file formats are not resident on a Government Web site and therefore do not comply with the requirements for Federal information resources under Section 508 of the Rehabilitation Act."

Federally funded resources must be available to users in multiple formats to ensure the Agency is not advocating use of a particular platform, operating system, or proprietary software.

## Intellectual property rights

Before a copyrighted product can be posted on the AHRQ Web site, the Agency must have the following information in writing:

- Name(s) of copyright holders.
- Names of licenses and purpose.
- Any constraints on the licenses.
- Information on who grants permission for further use or adoption.

#### **Technical assistance**

AHRQ cannot release a tool without the following information:

- Written instructions on the use of the tool.
- Contact name, telephone number, and e-mail address for technical assistance.
- Mechanism for future updates and revisions, if applicable.

This information must be provided in writing along with the tool or product to be posted. Provision of technical assistance support should be included in the lifecycle costs of the product.

#### Source code

AHRQ's intent is to make tools available to the public; clinicians; health planners and providers; and other Federal, State, and local government agencies. Software and products resulting from these projects should be easily transportable to other users and developers. The best way to ensure adoption and implementation for these audiences is to

have a Web-based final product that is platform independent. Coordinate with AHRQ on infrastructure requirements for housing any robust back-end applications before they are developed.

Developers must deliver source code for any technical application to the Agency with the product. This provides AHRQ with the knowledge of how the application was created and enables the Agency to make corrections, updates, or conversions as necessary to keep pace with technological changes once the product is released.

## **Usability**

Web resources should include usability testing, evaluation, and modification as an integral and recurring part of the development effort to ensure resources are effective for the electronic business processes they are designed to facilitate. A set of Research-Based Web Design and Usability Guidelines is available at: http://www.usability.gov/guidelines/.

Beta testing products prior to release is desirable to evaluate the product against usability heuristics. As feedback is received and products are updated, revisions need to be designated by version number and date of release.

## **Privacy Act protections**

Web-based tools and the users of those tools. Persistent cookies should not be programmed into the functionality of a Web-based tool, although session cookies are allowed. Registration for use cannot be requested if it involves collection of individual identifiers from users. Although exemptions to both rules can be sought, this involves a strong justification and several levels of review for approval through HHS. The HHS policy on persistent cookies is at: http://www.hhs.gov/ocio/policy/2000-0009.html.

# **Guidelines for Web Sites**

Web sites being supported through contracts are considered Federal information resources and must comply with laws, policies, and directives that affect these resources. A checklist that must be completed for each contractor-provided Web sites is located at Appendix 2-E.

AHRQ has resources to provide limited technical assistance to ensure your deliverables meet the requirements outlined in this section and in the appendixes. To ensure your deliverables meet requirements, you must work with your project officer to have the Agency for Healthcare Research and Quality's (AHRQ's) Web Site Manager conduct a preliminary review of any Web-based product you develop. Contact information for the AHRQ Web Site Manager is located at the end of this section.

For recommendations and guidance on requirements and best practices for Web sites, go to: http://www.usa.gov/webcontent/reqs\_bestpractices.shtml. HHS Web Standards, found at http://www.hhs.gov/web/policies/standards/index.html, must also be observed.

#### Clearance

Web resources require clearance by HHS, including justification against a set of criteria. Web resources must comply with numerous laws and directives that affect federally funded electronic information resources. Web content that contractors load on a site on behalf of the Agency must be appropriate and follow all laws and directives. AHRQ Offices and Centers must coordinate initial review through AHRQ's Office of Communications and Knowledge Transfer (OCKT) before launch, and OCKT will coordinate departmental clearance. Publications cleared for printing are cleared for Web uploading at the same time.

**OCKT responsibility:** OCKT must first review the site, which must be password protected. Feedback from OCKT staff members will shorten the time that HHS review and subsequent changes would otherwise take. After the originator makes the required changes, OCKT will initiate the clearance process for Web sites and Web-based resources through HHS. HHS review may take 2 weeks, but more time may be needed if problems must be addressed.

**Initiating Office or Center responsibility:** AHRQ Offices and Centers are responsible for ensuring that subsequent Web site postings on sites that contractors host are regularly reviewed for appropriateness. If there are any questions about whether material is appropriate, contact the OCKT Marketing and Implementation Division for approval.

#### **Domain names**

All domain names for any Web resource paid for in whole or in part by Federal funds must be registered as .gov through HHS with the General Services Administration (GSA) unless a waiver from the HHS Secretary is obtained. Although the Agency may use other domains, such as .org, .net, .edu, and .com, the .gov domain must be registered and be the primary domain. The .gov domain name will need to be indexed by FirstGov, the GSA portal to government-funded resources. The FirstGov link must appear on the home page of the site. Coordinate with OCKT on domain name requests.

The Internet Domain Names Policy regulates the use, approval, acquisition, and registration of HHS Internet domain names. It can be found at: http://www.hhs.gov/policies/webpolicies/200501.html. To obtain a domain name waiver, the HHS Domain Name Waivers Guidance must be followed at: http://www.hhs.gov/web/policies/webpolicies/domainnames.html.

AHRQ (OCKT) and HHS Web Communications Division responsibility: OCKT is responsible for obtaining domain names through the HHS Web Communications Division, which is in turn responsible for approving domain names.

#### **Editorial review**

All content for AHRQ Web sites must undergo editorial reviews at the contractor level and at OCKT. At a minimum, contractors must ensure the copy is free of typographical errors and adheres to the *Government Printing Office Style Manual*, available at: http://www.gpoaccess.gov/stylemanual/browse.html. Nothing marked "draft" should appear on a public site. Placeholders should not be used for content that does not exist. Government-funded sites should not have anything designated "under construction." A process needs to be established for regular review of content and updating. Once materials are uploaded, they are published and considered in the public domain.

**Contractor responsibility:** Contractors must comply with the *Government Printing Office Style Manual* and AHRQ Web site conventions.

## Accessibility

Under the Rehabilitation Act, Federal agencies have an obligation to provide equal access to their information and services to disabled individuals. Requirements are specified in Section 504 for individual accommodation and, more recently, in Section 508 for electronic and information technology, which includes Web sites and multimedia products. Equivalent alternatives are required for auditory and visual information, such as providing alternative descriptive text for images for the blind and providing captions for video files for the deaf. Written transcripts are required for all streaming audio. Inaccessible files can be offered as long as there are also accessible versions (such as HTML). Inaccessible files without accessible alternatives may not be uploaded.

OCKT uses software to evaluate Web site accessibility and can provide a report on any violations of Section 508 that need to be addressed before a site is launched. Specific requirements are available at http://www.access-board.gov/508.htm. Appendix 2-C provides information on creating accessible files and technologies.

**Contractor responsibility:** Contractors must develop Web resources that conform to Section 508 and remediate any violations determined during assessment of the site.

**AHRQ project officer responsibility:** Project officers at AHRQ must ensure Web sites comply with Section 508 and the HHS Policy on Section 508 Implementation.

## **Privacy**

A privacy policy notice must be prominently displayed, and the Web site host must follow the policy. A machine-readable format of the privacy policy notice must also be uploaded to the site. AHRQ conducts a privacy impact assessment to determine what kind of personal information is contained within a system, what is done with that information, and how that information is protected.

AHRQ staff members periodically audit sites to ensure they observe their stated privacy policy. A Privacy Act system notice may need to be prepared and published for users to

register on a site if the registrations represent a group of records, under the control of the Agency (or a contractor), that can be retrieved by personal identifier. This notice must go through several levels of review—including the HHS Office of General Counsel—and be published in the *Federal Register*. Persistent cookies cannot be used on Federal sites unless the Secretary of HHS grants an exemption, and this involves a strong justification and review process.

**Contractor responsibility:** Contractors must work in coordination with AHRQ staff for submission of the Privacy Act system notice, to adopt or modify the general privacy policy of the AHRQ main Web site, and to respond to questions on the worksheet for a privacy impact assessment.

#### Web site mailbox

Each Web site must provide full contact information for the sponsor and have a "Contact Us" link for customers to submit comments or questions. Web site e-mail is subject to the same privacy and records management issues that affect the overall Web site as well as departmental standards for handling inquiries and customer feedback. Each Web site must provide relevant "frequently asked questions" that are included in the customer relationship management system used to handle AHRQ Web site inquiries. Draft guidance for writing frequently asked questions is available at: www.hhs.gov/web/policies/faqstyleguide.html.

Contractor responsibility: Contractors must maintain the Web site mailbox according to HHS requirements for response times and confidentiality, to provide and update related frequently asked questions, to maintain an electronic archive of responses that is reviewed annually to determine if the contents should be retained, and to submit the number of inquiries handled on a fiscal year basis to the AHRQ Webmaster to include as Web metrics for Agency reporting under the Government Performance Reporting Act.

# Records management

All content on the site and e-mail generated by the site must be archived electronically and handled according to records retention schedules and disposition authorities as established by the National Archives and Record Administration. This requirement also affects Web site log files and statistical reporting on Web site usage. For guidance on requirements, go to the HHS Web standard at:

http://www.hhs.gov/web/policies/webpolicies/webrecords.html.

**Contractor responsibility:** Contractors must comply with the records management requirements of the AHRQ main Web site and to submit Web site usage statistics on a fiscal year basis to the AHRQ Webmaster to include as Web metrics for Agency reporting under the Government Performance Reporting Act.

## Information collection budget

If a Web site is used to collect information from users, such as for surveys, evaluations, or beta-testing feedback, then the Office of Management and Budget (OMB) must first approve the burden hours for this collection effort. The Webmaster must post a notice on the Web site at the point of collection with the OMB approval number and a statement on the process of collection.

**AHRQ project officer responsibility:** AHRQ project officers must coordinate with the Information Collection Budget Officer and submit requests for OMB approval.

## Intellectual property

Copyright and trademark protections need to be observed on Web sites. Permissions for use must be granted for any copyrighted information included, and registered trademarks need to be reflected in copy. Any copyright or trademark constraints related to materials uploaded to a site must be specified. Public domain does not extend outside the borders of the United States; therefore, foreign countries must request specific permission for use. Given the global nature of the Internet, citation of sources is a critical issue. Appendix 1-A contains information on copyrights, and Appendix 1-B provides a list of common names that are trademarked.

**Contractor responsibility:** Contractors must coordinate with AHRQ on copyright permission requests and follow trademark guidelines.

## Linking

External links constitute an implied endorsement and create a business advantage for the linked sites. OMB requires agencies to conduct a risk assessment of external links, and potential links need to be assessed against HHS and AHRQ linking policies and criteria. If a site deviates from these policies, then the specific review and selection criteria must be justified and posted on the Web site for full disclosure. Outside Web resources may link to Agency resources if the link is not displayed in a way that would imply an endorsement by the Agency of a specific commercial product or service. AHRQ follows the HHS Web standard for external link icons and disclaimers at: http://www.hhs.gov/web/policies/standardscategory.html#links.

Contractor responsibility: Contractors are responsible for assessing links according to AHRQ linking policy requirements and evaluation checklist provided. Contractors need to comply with the HHS Web standard, External Link Icon and Disclaimer at: http://www.hhs.gov/web/policies/standardscategory.html#links. For the Agency's linking policy, see Appendix 2-F.

### **Electronic Freedom of Information Act**

The Agency is required by law to have an electronic Freedom of Information Act (FOIA) reading room and to provide materials that can be requested under the FOIA in electronic form. HHS requires Agency-funded Web resources to provide a link to the AHRQ FOIA page at: http://www.ahrq.gov/news/foia.htm.

**Contractor responsibility:** Contactors must include a link to AHRQ FOIA page on the main Web site.

## Security

Web sites need to be protected against intrusion and corruption or compromise of content. This is critical if there are business processes or financial transactions conducted on the Web site. Security measures must be specifically delineated for any federally funded Web resources in existence or in development. The GSA periodically audits and evaluates Web resources for security. Attacks on Web resources must be documented and reported to the HHS Inspector General.

**Contractor responsibility:** Contractors must establish and maintain security according to AHRQ and HHS policies and procedures.

## **Usability**

Web resources should include regular usability testing, evaluation, and modification during the development effort to ensure they are effective for the electronic business processes being facilitated. For best practices in initial development or redesign of Web resources, go to: http://www.usability.gov.

**Contractor responsibility:** Contractors must address usability issues and work in coordination with AHRQ staff on usability testing.

# Web sponsor identity

AHRQ has principles to identify the Agency as the primary sponsor of AHRQ-related Web sites. These principles reflect HHS best practices for a consistent look and feel of Web resources, reinforce credibility, and support HHS and Agency branding efforts. The four specific principles that should be consistent across all AHRQ-funded Web sites are:

- Web site URL name: The name of a Web site should contain AHRQ in the URL unless a domain name waiver from the HHS Secretary is obtained. A Web resource should either be a folder on the main AHRQ Web site (www.ahrq.gov/chiri/) or a third-level domain of the Web site (www.meps.ahrq.gov).
- **Title of Web site project:** AHRQ's name should be part of the formal title when referenced in print or promotional materials and appear at the beginning of the Web

site's project name. For example: AHRQ's Web Morbidity and Mortality online journal.

- HHS and AHRQ logos: The HHS and AHRQ logos should be featured prominently on the Web site and in materials that are used to market that Web site. The AHRQ Web site manager will provide a standard Web banner, footer, and subordinate page header.
- Web site home page format: The Web site home page should have common design and navigation elements with the HHS portal and the AHRQ Web site so that all Web sites look as though they belong to the Department and AHRQ Web family. All AHRQ domain sites must include a standard banner, footer, and subordinate page header that are branded for Web resources. The AHRQ Web Manager will provide technical specifications and templates for developers designing Web resources.

**Contractor responsibility:** Contractors must develop Web resources that are consistent with identity principles and design specifications in coordination with AHRQ staff.

## **Additional Information**

To discuss specific issues or to get additional guidance on Web requirements, contact:

Biff LeVee AHRQ Web Site Manager E-mail: biff.levee@ahrq.hhs.gov

Phone: 301-427-1897

Randie Siegel Associate Director Office of Communications and Knowledge Transfer

E-mail: randie.siegel@ahrq.hhs.gov

Phone: 301-427-1852

# Appendix 2-A. Application and System Development Requirements

## Introduction

AHRQ has set up a Distributed Systems Engineering Lab (DSEL) to support all internal development efforts and provide a facility for housing the software and documentation for all AHRQ-sponsored systems and applications, regardless of where the system or application is hosted.

AHRQ uses a System Development Lifecycle (SDLC) framework that is consistent with the HHS Enterprise Lifecycle Framework (EPLC). This framework is the basis for implementation of the DSEL, conduct of development projects, and the Rational Unified Process (RUP)/Capability Maturity Model-based processes that support its implementation. The SDLC framework provides a disciplined approach that employs the following traditional project phases:

- Concept.
- Initiation.
- Planning.
- Requirements analysis.
- Design.
- Development.
- Testing.
- Implementation/deployment.
- Operations and maintenance.
- Retirement.

The AHRQ SDLC framework is closely aligned with the disciplines defined in the RUP. The IBM Rational Suite of tools has been adopted by the Agency to provide a standard information technology (IT) development environment for AHRQ-sponsored systems and application development projects. The AHRQ SDLC framework has been enhanced through the use of tailored processes and artifacts based on the RUP methodology. The documentation deliverables required for all IT projects are based on specific RUP artifacts identified by AHRQ. The Rational ClearCase libraries housed within the DSEL provide the repository for housing software and documentation artifacts related to all AHRQ-sponsored systems and applications, regardless of where the system or application is hosted.

Contractors are not required to follow the RUP development methodology or use the Rational Suite of tools; however, the contractor's SDLC must be capable of producing AHRQ-required system deliverables containing the required content as described further

in the following section. The contractor is required to use the lifecycle phases defined in the AHRQ SDLC framework and obtain Federal project officer approval before moving from one phase to another. This approval process corresponds to the stage gates in the HHS EPLC model. The contractor must also conform to AHRQ Configuration Management (CM) and change control standards, which require appropriate controls for managing software and documentation baselines, changes to software artifacts using an appropriate Integrated Development Environment or version management tool, document change requests, and obtaining approval through a formal change control process that requires Federal project officer and possible AHRQ IT approval prior to implementation.

Table 1 identifies the documentation deliverables required for all IT projects and the content required for each deliverable.

**Table 1** — **Documentation Deliverables** 

Deliverable	AHRQ Life Cycle Phase	Formats		
Project Initiation Document	Project Initiation	Microsoft® Word		
Project Work Plan	Project Planning	Microsoft® Project		
System Requirements Document	Requirements and Analysis	Rational Requisite Pro, Microsoft® Word		
Requirements Traceability Matrix	Requirements and Analysis	Rational Requisite Pro, Microsoft® Word		
System Design Document	Software Design	Rational Software Modeler, Microsoft® Word, Rational Software Architect		
Test Plan	Testing	Microsoft® Word		
Test Scripts	Testing	Microsoft® Word, Rational Test Manager		
User Acceptance Testing	Report Implementation	Microsoft® Word		
User Guide	Deployment	Microsoft® Word		
Operations Manual	Deployment	Microsoft® Word		
Version Description Document	Deployment	Microsoft® Word		

# **System Documentation**

The contractor will provide system documentation to the Agency of all proposed hardware, software, security, backup/recovery, and other IT infrastructure and components and solutions needed to support a project. The documentation is to be delivered to the Federal project officer for review and approval for each release. This documentation will be provided according to the content standards specified by AHRQ and will be maintained in the Agency's Rational ClearCase Repository as a unique project library created and maintained by the AHRQ CM Manager. All documentation will be baselined with each system release. In addition, the source code for each production release will be delivered and stored in the same project library as the documentation artifacts. The contractor will be required to update these baselined artifacts for each production release of the system. Sample documents and templates for the required documentation artifacts are available as guidance to the contractor. The following documents as mentioned in Table 1, "Documentation Deliverables," are required by AHRQ.

# **Project Initiation Document**

The Project Initiation Document (PID) is intended to be a statement of purpose and scope for initiating a given project and a guide to manage expectations in both process and deliverables throughout the SDLC. The PID defines the business case for the project by defining the purpose; milestones; resources; objectives; costs; risks, including mitigation strategies; and the artifacts and IT technologies (architecture) utilized and produced for, and during, the project. The PID serves as the formal funding commitment document approved by the Contracting Officer's Technical Representative (COTR) and stakeholders. Additionally, the PID must be approved by AHRQ IT management, and in some cases, the AHRQ Information Technology Review Board for technical viability; adherence to Agency Enterprise Architecture; technical standards; and formal project management requirements as derived from departmental standards and accepted Project Management Institute Project Management Body of Knowledge standards. In the case of external development contracts, the PID can be satisfied by the formal proposal submitted by the vendor and accepted by AHRQ.

# **Project Work Plan**

The System Project Plan or Project Work Plan (PWP) provides a method to assign and track the project resources, hours, and specific deliverables. This plan provides the detailed Work Breakdown Structure and resource loading that can be used to identify project costs and is intended for the project manager to track the schedule and cost of a project, including development of earned value management measures. The PWP is delineated by the phases of the project that include project initiation, generation of the PWP schedule, requirements gathering, system design, system development, system testing, including user acceptance, system deployment and system support, and

production of project deliverables that require COTR or stakeholder acceptance and signoff to continue project tasks identified in the PWP.

# **System Requirements Document**

The System Requirements Document (SRD) contains the system requirements, use cases, and supplementary specifications that provide the basis for design and development of the system. The following information is provided for each requirement identified in the document:

- Requirement ID, name, and title.
- Requirement description.
- Software release version.
- Use case model.
- Use case specifications.
- Supplementary specifications.

A text-based functional requirements document may be provided instead of a use case model, use case specifications, and supplementary specifications.

# **Requirements Traceability Matrix**

The requirements traceability matrix associates requirements with the work products that satisfy them. This matrix is created at the beginning of a project's lifecycle to trace the requirements from identification through testing. The project elements are traced as they relate to other project elements, especially those related to requirements.

The purpose of establishing traceability is to help understand the sources of requirements, manage the scope of the project, manage changes to requirements, assess the project impact of a change in a requirement, and verify that all requirements of the system are fulfilled by the implementation.

The following values are required for the traceability matrix:

- Requirement ID and title.
- Version of the system in which the requirement will be implemented.
- Use case to which the requirement can be traced.
- Version of the design document in which the requirement is implemented.
- ID of the test script in which the requirement is tested.
- Version number of the source code in which the requirement is implemented.

Figure 1 below shows a sample of the data traced through a project's lifecycle.

Figure 1 — Data Traced Through Project Lifecycle

R	equiements.	Version	Trace To UC	Trace to Design	Trace to Test	Trace to Source	CR	Status
	FEAT8: The system shall display the Principal The system shall capture and display the Principal Investigator's name on the Quarterly Report.	2.00.00	UC7, UC13	UC7, UC13			Prod00000098,Prod00000	[ Incorporated
	FEATS: The system shall display Principal The system shall capture and display the Principal Investigator's Address.	2.00.00	UC7, UC13				Prod00000098,Prod00000	Incorporate
	FEAT10: The system shall display Principal The system shall display and capture the Principal Investigator's telephone number.	2.00.00	UC7, UC13				Prod00000262	Incorporate
	FEAT11: The system shall display Principal The system shall capture and display the E-mail address of the Principal Investigator.	2.00.00	UC7, UC13				Prod00000262	Incorporate
	FEAT12: The system shall display the Principal The system shall capture and display the main fax number for the Principal Investigator.	2.00.00	UC7, UC13				Prod00000262	Incorporate
101	FEAT13: the system shall display and Track The system shall capture and track milestones for a given project/grant. HIT uses the word Milestone while PS uses	2.00.00	UC11, UC13				Prod00000268	Proposed
	FEAT13.1: The system shall display and track The system shall capture and track overall progress of project milestones and shall display these in the report.	2.00.00	UC11				Prod00000268	Proposed
	FEAT13.2: The system shall display and track The system shall capture and display milestone bastiers.	2.00.00	UC11				Prod00000272	Proposed

# **System Design Document**

The system design document (SDD) details the design and implementation of all custom software features of the system. The design descriptions must include use cases that detail the interaction that occurs between a user and the system.

The document describes the general nature of the system and describes the architecturally significant parts of the design model, such as its decomposition into subsystems and packages. For each significant package, a section of the document should detail its decomposition into classes and class utilities. Architecturally significant classes should be introduced and a description of their responsibilities should accompany the introduction. Any significant relationships, operations, and attributes should be detailed in this document.

The document should be organized by use case, so that it provides traceability back to the initial requirements. The document must also contain a description of the database model and data elements used to support the application. These data can be referenced to an appropriately maintained entity relationship diagram and data definitions which conform to CM standards and are appropriately maintained in the Rational CM Libraries.

## **Test Plan**

The purpose of the test plan is to define the approach for testing a particular application or system. The test plan is a high-level description of the testing process that will be performed. The test plan outlines the types of testing to be performed, the requirements to be tested, the test environment, testing tools, pass/fail criteria, and a risk assessment. At a minimum, the document should contain the following:

## **Test description**

- General overview of the plan for testing the entire system.
- Test objectives for all testing levels (e.g., module, unit).
- Scope and guiding principles for the testing effort.
- Policy for resolving conflicts that arise during the testing process.

## **Acceptance criteria**

• Criteria agreed upon with the customer for acceptance of the software.

## **Approach**

- How each major group of software features will be adequately tested.
- Major testing activities, techniques, and testing tools.
- Test environment—hardware, network, software, and test database.

#### **Tasks**

- Individual tasks that must be performed.
- Individual or organization responsible for each task.

## Schedule, resources, and milestones

# **Test Scripts**

The test scripts define testing scenarios completed for an application. Each scenario details the steps to be performed, expected results, and pass/fail criteria. At a minimum, the document should contain the following:

- Test script identifier.
- Test description.
- Test objective.
- Test environment/setup including any required data such as login credentials, etc.
- Mapping to specific requirements and design elements contained in the SRD and SDD.
- Step sequences and actions.

- Expected results.
- Pass/fail criteria.
- Actual results.
- Comments

# **User Acceptance Test Report**

The user acceptance testing (UAT) report should include a summary of the testing environment (hardware, software, tools, participant list, etc.) and procedures used to demonstrate and obtain stakeholder approval of the application or system prior to production deployment. The UAT report should contain a mapping to the SRD and SDD items included in the release as well as an exception list or identified change requests that were generated as the result of testing.

### **User Guide**

The user guide should be completed prior to production. The user guide is a "how to" manual that navigates the user in detail through the use of the application. This document usually contains system screen shots and provides step-by-step instructions for completing tasks and activities. It is written on a business level with the needs of the user in mind. At a minimum, the document should contain the following content:

- Introduction.
- Summary of the application.
- Glossary (definitions/acronyms).
- Procedures (step-by-step instructions on how to use the system).
- Troubleshooting tips.

# **Operations Manual**

The operations manual provides guidance and defines procedures related to the operational implementation of the system. At a minimum, the document should contain the following:

- System overview.
- Statement of acceptable use of the system and information.
- Hardware and software descriptions.
- Interfaces with other systems and databases.

- Access and authentication requirements.
- System configuration and administration procedures.
- Security procedures, including virus protection.
- Incident reporting and handling
- System startup and recovery procedures.
- Change management procedures.

# **Version Description Document**

The version description document identifies and describes the general release information and inventory of software released (bill of materials), for a specific application, including prototype iterations. The document should include the following sections listed below:

- Introduction—Describes the objective of the document, defines the release identification, and provides contact information.
- General release information—Provides information about the specific release, including any interfaces and dependencies.
- Installation instructions—Describes the steps required to install the software.
- Version description—Provides an inventory of List Objects and Module Types such as: class files, SQL Scripts, HTML files, DTD, and XML files.
- Recovery instructions—Describes the steps required to reconstruct the release from the product baselines, established in the configuration management library.

# **Appendix 2-B. Web Instructions for Grantees**

# **Grantee Guidance on Web Development Projects**

## Ownership and marketing

Products that grantees develop are not considered deliverables for the Agency for Healthcare Research and Quality (AHRQ). Grantees are encouraged to register copyright for their products, manage their rights, and seek their own distribution channels and dissemination venues.

However, the Agency retains a royalty-free, non-exclusive, and irrevocable license to reproduce, publish, or otherwise use these products and authorize others to do so for Federal Government purposes. As a result, the Agency might choose to feature selected Web-based resources grantees develop under their projects. A Web content partnership agreement appears at the end of this document.

Grantee Web-based products that could subsequently be posted on AHRQ-funded Web sites or otherwise promoted by the Agency increase their opportunities for adoption by complying with the following guidance.

## **Grant final report**

Submission of a grant final report is a requirement for grant closeout and is needed to describe the results of the research that AHRQ funds. The report will be made available to the public in print and electronic form and should not include any copyrighted, private, or proprietary information. The final report may be submitted as an electronic file attachment in Word, WordPerfect®, or ASCII by e-mail to grantfpr@ahrq.gov. PDF files are not acceptable. A template for the report can be found at Appendix 1-C and http://www.ahrq.gov/fund/reptemp.htm. A list of citations on publications and electronic resources generated by the grant should be included that follows the AHRQ Citation Style Format at: http://www.ahrq.gov/fund/refstyle.htm.

#### Web-Based tools

#### **Titles of products**

It is helpful to coordinate titles of products with the AHRQ project officer early in the development process. Web-based tools do not need to have the same title as the grant. To be effective in an electronic medium, tool titles need to be concise and relevant to the purpose of the project. Web-based tool titles should have no more than five words. Make every word count by eliminating initial articles such as "the" or "a." Titles need to be distinct enough to differentiate among similar-sounding products if more than one product is being generated from a grant. The name of the performing organization should not be part of the title.

#### Quality control/editorial review

Quality assurance standards should be applied to any information system development project or tool resulting from a grant. The product should be tested to ensure it meets requirements, is error-free, and achieves the original objective of the project. Products should be certified as to the quality assurance process undertaken and documented that independent verification and validation occurred, including usability testing.

Editorial review includes checking for spelling, grammar, formatting, general consistency, and style. This should be done by the AHRQ grantee prior to submission of the final product to AHRQ. AHRQ follows the *Government Printing Office Style Manual*, available electronically at http://www.gpoaccess.gov/stylemanual/browse.html.

#### Accessibility

As an agency of the Federal Government, AHRQ must ensure that anything posted on Agency-funded Web sites complies with requirements for information resources under Section 508 of the Rehabilitation Act. The Access Board, which has legislative authority for creating standards that ensure the provisions of Section 508 are met, has numerous online resources to help developers meet technology requirements at http://www.accessboard.gov/508.htm. The Center for Information Technology Accommodation in the U.S. General Services Administration has established a Web site with resources for understanding and implementing requirements under Section 508 at http://www.section508.gov.

In addition, federally funded resources need to be generally available to users in multiple formats or a platform-independent environment to ensure users are not excluded from access because a product is designed for a particular platform, operational system, or software package.

#### **Intellectual property rights**

Include a copyright notice on your product. Although you do not have to register the copyright to assert copyright as the originator, registration provides protection from infringement and simplifies the subsequent granting and transfer of rights. For information on copyrighting online works, go to http://www.copyright.gov/circs/circ66.html.

To register your product with the Copyright Office at the Library of Congress, go to: http://www.copyright.gov/eco. The current cost is \$35 to file online or \$45 to file by mail.

Before a product can be posted on an AHRQ-supported Web site or otherwise promoted, the Agency must have written answers to the following questions:

- Who retains the copyright?
- Who has licenses for what purposes and uses?

- What are the constraints imposed?
- Who grants permission for further use or adoption?

#### **Technical assistance**

AHRQ cannot promote a tool without providing the following:

- Written instructions on the use of that tool and what to do if a user encounters problems in accessing and using it.
- A contact name, telephone number, and e-mail address for technical assistance.
- A feedback mechanism for errors, future updates, and revisions.

This information must be provided in writing along with the tool or product to be posted. Provision of technical assistance support from the performing organization should be included in the information lifecycle management decisions for the product, and this includes assessing the lifespan of value for the product once the grant is completed. This will normally entail finding subsequent support or a commitment for maintenance, either through the originating institution, a partnership or consortia, or a new sponsor.

#### Source code

AHRQ's intent is to make tools available to the public; clinicians; health planners and providers; and other Federal, State, and local government agencies as appropriate for their intended purposes. Any software and products resulting from these projects should be easily transportable to other users and developers. The best way to ensure adoption and implementation for these audiences is to have a Web-based final product that is platform independent. Grantees may coordinate with AHRQ on proposed application development technology for any robust back-end applications before they are developed.

Source code for any technical application should be included when submitting a product to the Agency. This provides AHRQ with the knowledge of how the application was created by the original developers and can facilitate subsequent corrections, updates, or conversions as necessary to keep pace with technological changes once the product is released.

#### Usability and version control

Web resources should include usability testing, evaluation, and modification as an integral and recurring part of the development effort to ensure they are effective for the electronic business processes they are designed to facilitate. A set of Research-Based Web Design and Usability Guidelines are available at: http://www.usability.gov/guidelines/index.html.

Beta testing prior to release is desirable to evaluate the product against usability heuristics. As feedback is received and products are updated, revisions should be designated by version number and date of release.

### **Privacy Act protections**

Web resources of the Federal Government are subject to the Privacy Act, and this can affect both the development of Web-based tools and the users of those tools. Persistent cookies should not be programmed into the functionality of a Web-based tool, although session cookies are allowed. Registration for use is also problematic as this involves collection of individual identifiers from the users and requires a published Privacy Act Notice on the intended collection, safeguards, and distribution of collected information.

### Submitting FAQs for the AHRQ Web site

The AHRQ Web site uses a customer relationship management system (or call center) that generates frequently asked questions (FAQs) with answers in a knowledge base for AHRQ to handle public inquiries. To see the inquiry form, go to http://info.ahrq.gov.

Questions and answers for the FAQ portion of the AHRQ Web site are concise, and external links to resources are placed at the end of the answer. Proposed questions and answers are edited by AHRQ public inquiries agents according to the Department of Health and Human Services FAQ Style Guide, available at: http://www.hhs.gov/web/policies/faqstyleguide.html.

One of the subject categories in the Find Answers section is Partners. Grantees are encouraged to provide information about their tool and its availability in this section. To submit a proposed question and answer about a product, send the following information to Gerri.Michael-Dyer@ahrq.hhs.gov:

Subject: Proposed FAQ Submission—Grantee Product

Project Title:

Point of Contact for Inquiries

Name:

Organization:

E-mail Address:

Phone:

Question:

Answer:

Three related keywords:

#### **Example Submission**

Subject: Proposed FAQ Submission—Portal Partner

Project Title: Public Health Partners

Point of Contact for Inquiries Name: Catherine R. Selden

Organization: National Library of Medicine

E-mail Address: selden@nlm.nih.gov

Phone: 301-435-2240

Question: Where can I find information and training materials to support public health workers in their daily responsibilities?

Answer: Partners in Information Access for the Public Health Workforce is a collaboration of U.S. Government agencies, public health organizations, and health sciences libraries which provides timely, convenient access to selected public health resources on the Internet. Go to: http://phpartners.org.

Three related keywords: public health, libraries, information access

#### Web sites

The following highlights issues to consider when developing Web sites that will be publicly available. They are based on legal and policy requirements for federally funded information resources.

#### **Domain names**

Ideally, grantee Web sites should be registered as .org, .net, or .edu domains.

As a Federal agency, AHRQ is precluded by law from endorsing or appearing to endorse specific commercial services, commodities, or products; thus AHRQ's external linking policy excludes .com domains. If the Agency wants to feature a grantee's Web site in an electronic newsletter or on an AHRQ-supported Web site, the Agency would not be able to establish a link to a .com domain because, in most instances, these sites carry advertisements, and a link from AHRQ would drive traffic to that site, creating an unfair business advantage for the host company.

#### **Editorial review**

Once materials are uploaded to a publicly available site, they are considered published. Before it is uploaded, all Web site content should be reviewed for consistency in style for punctuation, spelling, capitalization, use of numerals, and file format. Acronyms and abbreviations need to be spelled out on first reference. Content should also be reviewed for quality assurance during production to ensure accuracy and completeness. Nothing marked "draft" should be posted on a public site, and Government-funded sites do not have sections designated "under construction."

Grantees should establish a process for regularly reviewing and updating content. Additional materials should undergo an editorial review process before they are uploaded. AHRQ follows the *Government Printing Office Style Manual*, available electronically at http://www.gpoaccess.gov/stylemanual/browse.html.

#### Accessibility

Under Section 508 of the Rehabilitation Act, Federal agencies have an obligation to provide equal access to the disabled through their Web-based resources. For example, equivalent alternatives are required for auditory and visual information, such as providing alternative descriptive text for images for the blind and providing captions for audiovideo files for the deaf. The preferred format for documents is HTML because of its cross-platform accessibility to all users. The Web Accessibility Initiative of the World Wide Web Consortium has guidelines and checklists for creation of accessible Web sites at http://www.w3.org/TR/WAI-WEBCONTENT/.

While Section 508 covers the Federal Government only, grantees are subject to Section 504, which states that any entity that receives Federal funds must provide reasonable accommodations to persons with disabilities. Because grantees might have to make their materials accessible if a person needs it under Section 504, they are strongly encouraged to make products accessible using Section 508 standards.

#### Privacy

A privacy policy notice for the Web site as a whole must be prominently displayed on the Web site home page, and the Web site host has to ensure that information is appropriately used and protected and the privacy of personal information is maintained.

The expectation of the public is that personal information and communications will be kept private unless consent to release the information is specifically granted or when disclosure otherwise is authorized by law. Research organizations and researchers may also be affected by the Health Insurance Portability and Accountability Act Privacy Rule on privacy of personal health information. Information for the research community is available at: http://privacyruleandresearch.nih.gov/.

#### Web site mailbox

Every Web site should provide full contact information for the sponsor and have a "Contact Us" link for users to submit comments or questions. Web site e-mail should be handled in a confidential manner as designated in the site's privacy policy.

### **Records management**

All content on the site and e-mail generated by the site should be archived electronically and/or in print and handled as records associated with your grant. This also affects Web site log files and statistical reporting on Web site use and other evaluation metrics related to the project.

#### **Intellectual property**

Copyright and trademark protections for others need to be observed on Agency-funded Web sites. Permissions for use must be granted for any copyrighted information included, and registered trademarks need to be reflected in copy. Any copyright or trademark constraints related to materials uploaded to a site must be specified for users.

Public domain does not extend outside the borders of the United States. Therefore, foreign countries must request specific permission for use of U.S. Government work that is considered in the public domain as well as any copyrighted materials. Given the global nature of the Internet, citing the source of content is a critical issue and allows others to cite or seek permission for use of the material.

#### Linking

External links imply endorsement and create a business advantage for the linked sites. Grantees should do a risk assessment of proposed external links to ensure links reflect favorably on their institution and project. Post specific review and selection criteria for external links on the Web site in the interests of full disclosure. External links should be clearly delineated as such and a brief description should be provided on the content of each linked resource. As a courtesy, notify Web sites of an intention to establish a link because Web links drive traffic to sites and create demands on servers. Once links are established, they need to be re-assessed periodically to ensure the links are still valid and continue to meet selection criteria.

Grantees may establish links to AHRQ Web resources as long as those links are not displayed in a way that implies Agency endorsement of a specific commercial product or service, advocacy of a particular political position, or an otherwise inappropriate association for a Federal entity.

#### Security

Web sites need to be monitored and protected against intrusion and corruption or compromise of content. This is especially critical if there are any business processes involved or financial transactions conducted on the Web site with users. Incorporate best practices and industry standards for security of Web resources, establish a risk mitigation plan, and document any attacks or compromises of the Web site and how they are addressed.

#### **Usability**

Web resources should include usability testing, evaluation, and modification as an integral and recurring part of the development effort to ensure they are effective for the electronic business processes they are supposed to facilitate. A reference on best practices for development and design of Web resources is available at: http://www.usability.gov.

#### Disclaimer

A disclaimer may not ultimately protect a site owner from liability issues and lawsuits. However, it is a best practice to include a disclaimer that delineates intended audiences and uses, the scope and limitations of the content provided, efforts to ensure the accuracy and completeness of information, and inability to warrant or assume responsibility for loss or damage resulting from use of the information contained within or adaptations of the information by others. For an example, go to http://www.ahrq.gov/news/disclaim.htm.

## **Grant sponsor identity**

Grantees must include an acknowledgment of grant support and a disclaimer, as appropriate, on any tool or Web site developed under the auspices of the project, preferably on the bottom of the opening page.

The following statement can serve as a model:

"This research was supported by grant number \_\_\_\_\_\_ from the Agency for Healthcare Research and Quality (AHRQ). The contents of this product are solely the responsibility of (name of principal investigator and/or affiliated organization) and do not necessarily represent the official views of or imply endorsement by AHRQ or the U.S. Department of Health and Human Services."

Most Federal Government agencies need to track the outputs of their funded research projects, and the best identification for a standing search across resources is the Agency name coupled with the grant number.

The statement of support will suffice for credit and identity. Grantees cannot affix either the AHRQ or Department of Health and Human Services logo or Web banner to their information outputs. The logos and banners are the imprimaturs of the respective Government agencies and can only be used on official Government communication products. Grantee communication products are not construed to be Government communication products.

# **Additional Information**

To discuss specific issues or to get additional guidance on Web projects, contact:

Biff LeVee
AHRQ Web Site Manager

E-mail: biff.levee@ahrq.hhs.gov

Phone: 301-427-1897

Randie Siegel
Associate Director
Office of Communications and
Knowledge Transfer

E-mail: randie.siegel@ahrq.hhs.gov

Phone: 301-427-1852

# **Web Content Partnership Agreement**

The Agency for Healthcare Research and Quality (AHRQ), and (**Organization Name**) enter into the following agreement regarding the use of AHRQ materials on the (**Organization Name**) Web site with the following stipulations:

Use of AHRQ materials will be for lawful purposes only.

An understanding of disclaimer exists that AHRQ assumes no responsibility or liability for loss or damage resulting from either the use of information or an inability to use these materials. Every effort has been made to ensure the accuracy and completeness of electronic versions of AHRQ materials, but the Agency makes no warranties regarding errors or omissions.

AHRQ materials are "current as of" the date specified on each electronic document, and this information must be included on content partner Web sites. Given changes in the state of scientific evidence and technology, these materials may become outdated, and they may be withdrawn or superseded. The Agency will attempt to notify official content partner organizations of deleted or updated materials and changed URL locations. However, it is the responsibility of partner organizations to periodically review the currency of the content resident to their Web servers and assume the obligation to update their holdings accordingly. AHRQ disclaims all express or implied liability for currency of such information.

As a Federal Agency, most information produced by AHRQ is in the public domain and cannot be copyrighted. However, public domain does not extend outside of the United States, so foreign countries and organizations that want to make electronic versions resident to their Web sites with global access need to designate the content is used with permission.

Some AHRQ products and information may contain copyrighted information, and further reproduction, in any form, print or electronic, is prohibited without the specific permission of copyright holders. Copyrighted and trademarked materials are the property of their respective owners. (**Organization Name**) is responsible for obtaining permission directly from copyright holders or owners of trademarked materials, with the understanding that they may charge fees for such use, prior to reproducing materials in any form. AHRQ will provide a list of the products that contain copyrighted information to (**Organization Name**).

All use of AHRQ information requires citation as to source. An Internet citation with the recommended format is provided at the end of each electronic document on the AHRQ Web site at http://www.ahrq.gov. This source note should be followed by the statement, "Used with permission of the U.S. Agency for Healthcare Research and Quality (AHRQ) and provided as a public service by (**Organization Name**)."

Integrity of AHRQ information and publications may not be compromised and content cannot be changed. Should (Organization Name) choose to use a portion or portions of the information in newsletters, hand-outs, e-mail messages, or on its own Web sites, the following language must be used following the citation as to source: "Adapted from information produced by the U.S. Agency for Healthcare Research and Quality (AHRQ) and used with permission."

AHRQ materials (those without copyright) may be imported to content partner sites or linked to for informational and educational purposes only. AHRQ content may not be used to perform commercial solicitations, including the solicitation of users to subscribe to online services of (Organization Name).

(Organization Name) should not use or display AHRQ materials in any way that implies AHRQ's endorsement or promotion of any private company or its commercial products or services and should not be construed or conveyed as such by (Organization Name) in its advertising or in any other manner. Specifically, targeted advertisements for products or services related to the content must not be juxtaposed on the same Web page with AHRQ materials.

(Organization Name) understands that, should AHRQ information be displayed on Web sites of its partner or client organizations, those Web sites must adhere to the provisions of this agreement.

AHRQ has the right to request that (Organization Name) remove AHRQ material from its Web site if use of the material is in violation of these provisions.

(Organization Name) agrees to inform Gerri Michael-Dyer, AHRQ Electronic Dissemination Advisor, about what AHRQ content and materials are identified for use, as well as where and how the materials will be used on the Web site. Please email this information to Gerri.Michael-Dyer@ahrq.hhs.gov

The Agency also appreciates statistics and anecdotal information about impact or use of AHRQ content by constituencies of content partner Web sites. AHRQ would appreciate it if (Organization Name) would submit any feedback to the Agency at http://info.ahrq.gov.

Thank you for your interest and cooperation. Questions regarding this agreement can be directed to:

Gerri Michael-Dyer Electronic Dissemination Advisor Agency for Healthcare Research and Quality 540 Gaither Road Rockville, MD 20850 Phone: 301-427-1898

Fax: 301-427-1873

E-mail: gerri.michael-dyer@ahrq.hhs.gov

Please acknowledge your concurrence wit below.	h the provisions of this agreement	by signing
Authorized Signature:	Date:	
Contact Name:		
Title:		
Organization:		
Mailing Address:		
City, State and Zip:		
Phone:		
Fax:		
E-mail:		
Web Address:		

# Appendix 2-C. Creating Accessible Files and Technologies

# **Complying With Section 508**

On June 21, 2001, a law went into effect to ensure individuals with disabilities have access to electronic and information technology provided by the Federal Government. Section 508 of the Rehabilitation Act of 1973, as amended, requires that when Federal agencies develop, procure, maintain, or use electronic and information technology, they ensure that it is accessible to individuals with disabilities, unless an undue burden would be imposed on the agency. The bar for an "undue burden" is high: If the agency can demonstrate undue burden for particular circumstances and receive an approval for exception from the Department of Health and Human Services (HHS), the information would still need to be provided to individuals with disabilities in an alternate format upon request.

Agency-sponsored Web sites and resources operated either directly or by grant or contract must comply with this law and its implementing regulations and ensure accessibility for users protected by the Americans with Disabilities Act and other applicable Federal laws. The U.S. Access Board (http://www.access-board.gov/508.htm), an independent Federal agency, develops technical standards for Web products.

HHS employees must ensure that all electronic information and technology comply with the accessibility requirements, including new or revised information made available on the Internet and Intranets. Electronic and information technology includes software applications and operating systems, Web resources and applications, telecommunication products, video and multimedia products, self-contained and closed products (such as information kiosks), and desktop and portable computers.

Ensuring access is not optional. AHRQ and HHS take accessibility very seriously. In addition to doing the right thing by ensuring access to Government information for all Americans, AHRQ must comply with Section 508 because it is a legal requirement.

# **Accessibility Guidance**

Specific guidance is available from the sources cited below and:

- Technical guidance by the Section 508 Access Board: http://www.access-board.gov/sec508/guide/1194.22.htm
- HHS 508 Web standards and guidance: http://www.hhs.gov/web/508/
- AHRQ Alternate 508 Coordinator: Biff LeVee, 301-427-1897, biff.levee@ahrq.hhs.gov

# **Accessibility Requirements**

Keep the following accessibility requirements in mind:

## **Vision impairments**

Content must be readable by screen readers (which read text aloud) or Braille readers. That is ensured by following the standards for Section 508. For people with low vision or color blindness, contrast must be sufficient. Ensure that any information conveyed with color is conveyed equally well when color is not available. Asterisks or some other textual cues can be used in addition to the color to convey information.

## **Mobility impairments**

Links and hot spots should be large enough so someone with limited fine muscle control can click the link.

## Hearing impairments

Synchronized captioning or transcripts for multimedia files should be provided. For example, if multimedia objects with sound are embedded in PDF documents, both the deaf and the deaf-blind are excluded if there is no transcript. In addition, synchronized captions for video must be supplied because people who are deaf need synchronized captions if the video does not make sense when the sound is turned off.

# **Web Development Features**

Accessibility needs to be built into the development process for any new or updated Webbased resource. Basic features to be addressed include:

- Providing text equivalents for images, sound, and multimedia features, such as alternate descriptive text for images for the blind and captions for audio-video files for the deaf. All streaming media must have written transcripts or captioning.
- Ensuring that information provided does not depend on color for sense without alternate text and color contrast enhances readability for the sighted and does not create barriers for the color-blind.
- Coding so that tables, content or interface elements provided by scripts, and image maps may be read with assistive technology, such as screen readers.
- Controlling the screen flicker rate, as well as the use of blinking or flashing features.
- Using text-only pages as alternatives if needed for accessibility, while maintaining these pages on the same schedule as primary pages.
- Linking to applets, plug-ins, or other applications that must be downloaded.

- Creating accessible forms for business processes on the Web.
- Allowing users to avoid repetitive navigation links and to request additional time on pages requiring timed responses.

If fully accessible, HTML documents are the gold standard for users with disabilities because assistive technologies make the information accessible across platforms and without proprietary technologies. Offering files that are not accessible means that they do not comply with Section 508 and therefore leave AHRQ open to legal action. A copy of the AHRQ Accessibility Notice posted on the Web site appears as Appendix 2-D.

# **Alternate Text for Accessibility**

For images such as figures and charts, alternate text must be used so disabled users can access the information in the image. Every image must have an alternate text tag, even if it is null (alt="") for decorative images. (From the Section 508 standards: http://www.access-board.gov/sec508/guide/1194.22.htm#(a).)

The "alt" tag in HTML code is read aloud by screen readers or Braille readers. To see it, use Internet Explorer and hold the cursor over the image. Alternate text can also be provided as content in the document.



## **Basic images**

For basic images, alternate text is straightforward and should:

- Be accurate and equivalent in presenting the same content and function as presented by the image.
- Be succinct. The correct content (if there is content) and function (if there is a function) of the image should be presented as succinctly as is appropriate.
- Not use the phrases "image of ..." or "graphic of ..." to describe the image.

# **Complex images**

Alternate text is provided for complex images in other ways. The alt tag must still be used, with a longer description elsewhere. Two methods are recommended:

- Provide the full description in the document itself. For example, alternate text can be under the image or refer to a description elsewhere in the document.
- Provide a link to a full description with a normal text link. For example, under the image of this analytic framework, "Select for Text Description" goes to the alternate text: http://www.ahrq.gov/clinic/uspstf07/chlipid/chliprevfig2.htm.

(Although the "longdesc" attribute can be used, it is not encouraged. Some browsers do not support it, and it cannot be accessed by disabled persons who don't use screen readers.)

Some images are too complex for all of the information to be meaningful as alternate text. In such cases, capture the essence of the image—what it means—without all the detail. For example, giving the 80 data points in a graph might be less informative than describing a trend and what it means. If a graph is meant to present the data, however, the alternate text must reflect that.

The context of the image should determine the content of alternate text. For example, the specific characters in a "screen shot" would not be helpful if the image is only intended to convey what the screen looks like. In that case, describing the interface might be more important.

## **Creating Accessible Files and Formats**

All downloadable files—and Web technologies—either have to be accessible or have accessible alternatives. This appendix addresses:

- Word documents.
- PDF documents.
- PowerPoint® presentations.
- Excel files.
- Flash<sup>®</sup>
- Audiocasts, Webcasts, and video.
- Javascript.

## Word documents

AHRQ strongly recommends that accessible alternatives, such as Web versions, be created rather than making accessible Word files. HTML is the gold standard for accessibility and works dependably regardless of user platform or software version.

However, making Word files accessible does make it easier to develop accessible PDF documents. To create accessible Word files, use the HHS checklist at: http://www.hhs.gov/web/policies/checklistword.html.

## **Key points**

Many features in Word that make it easier to create or use documents also support accessibility:

- The Styles feature in Word should always be used to for formatting (heading subordination, bullet and number lists, table of contents levels). Styles delineate structure and organization for assistive technologies, such as screen readers.
- Tables of contents, bookmarks, indexes, and hyperlinks all aid navigation.
- The Column feature should always be used when making a multicolumn document so assistive technologies will be able to properly read the document. Never use the Tab key to separate columns.

Other Word accessibility features:

- Alternate text for images permits images to be accessible to disabled persons.
- Tables created with the Word Table feature with row and column headings make tables more accessible. Precede tables with a description.
- Form fields should be labeled.

## **Styles**

The Styles feature in Word makes word processing faster, easier to edit, and more consistent. Styles also greatly increase accessibility because they give a document a hierarchical structure that disabled users need to understand document organization. Use styles to indicate:

- Heading subordination or importance (heading 1, 2, 3, etc.).
- Lists of information (bulleted and numbered lists).
- Table of contents levels.

If the Word document is converted into a PDF file, each assigned style can generate a PDF accessibility tag. Styles also generate PDF bookmarks. Styles can be applied to large documents quickly. Select all elements to be formatted and click on the desired style.

#### **Tables**

Tables in Word can pose accessibility challenges, especially complex tables. Use the section on tables in the HHS 508 checklist: http://www.hhs.gov/web/policies/checklistword.html#checklist3.

#### **Forms**

Two steps increase a form's accessibility:

- Use concise descriptions next to the objects that have been inserted into the form.
- Add Help Text to each form item.

## To add Help Text:

- 1. Right click on the object that is in the form (i.e. text box, check box, calendar control, etc).
- 2. Click Properties.
- 3. Click Add Help Text.
- 4. Enter text that describes the field's attributes. For example, if it is a drop-down menu in the field provided, enter text that can help the user with navigation: "This is a drop-down menu to select the class you would like. Use the arrow keys to scroll through the list."
- 5. Click OK twice.

## Images and diagrams

Screen and Braille readers will pass over images unless they are accessible. The key to making images accessible lies in using alternate text to identify image content. Alternate text cannot be seen but is read by assistive technologies. More information on alternate text appears later in this appendix.

Typically, diagrams require lengthy descriptions to ensure accessibility because both the appearance and meaning must be communicated. The way to handle this is to provide a text in the caption or the figure's description that explains what the image represents as a whole and then try to step the reader through what the image is trying to convey.

#### PDF documents

Adobe® PDF (Portable Document Format) documents are widely used because they can be produced quickly while preserving the look and feel of the source document, regardless of the application and the platform used to create them.

If PDF documents are on the Web without accessible equivalents (such as HTML), the PDF documents must be fully accessible. Making PDF documents accessible can be both labor intensive and difficult. Creating an accessible HTML equivalent is usually easier and quicker than making the PDF document fully accessible.

The best way to create accessible PDF documents is to first make the native file (such as Word) accessible. Refer to the previous section for advice on making accessible Word files.

Broad requirements for PDF document accessibility include:

• The PDF document must contain actual text. The PDF document must have characters that can be picked up by screen readers as opposed to scanned pages that

contain only images. Actual text is made from word processing or desktop published files

• The PDF document must have accessibility tags, which are similar to HTML tags. Tagged PDF documents contain information on logical structure about the contents of the file. Examples of accessibility tags include heading subordination and paragraphs. Tagging also should ensure logical reading order.

#### Word files and accessible PDF documents

The best way to create accessible PDF documents is by first making the files accessible in the authoring application, such as Word. Word accessibility tags are converted to PDF accessibility tags by Adobe® Acrobat Professional 8 or later.

Well-tagged Word documents are required to make accessible PDF documents. Word's structural and accessibility features (styles for paragraphs, headings, and lists; alternate text and captions for images; hyperlinks; lists; tables of contents; and accessible forms) will produce special tags when the Word file is converted into PDF. In addition, the resulting PDF document will be automatically bookmarked because of styled headings, aiding navigation.

To create accessible PDF documents, use the HHS checklist at: http://www.hhs.gov/web/policies/checklistpdf.html.

The resulting PDF documents will probably require additional work to be fully accessible. To ensure accessibility of newly created PDF files, refer to the section below on testing PDFs for accessibility.

## PDF tags

Tags define the document's structure and reading order, describe graphics, and improve navigation. PDF tags are embedded in the document and are not visually seen. Tags can only be edited with the Tags Palette in the full version of Acrobat<sup>®</sup>.

Examples of tagging problems include heads not tagged, tags incorrectly subordinated, images without alternate text descriptions, or incorrect tags. Artifacts such as page numbers from the original document should be tagged as artifacts (Tags Palette/Find Artifacts). When tagged, artifacts are invisible to screen readers.

Improperly marked content can create reflow and accessibility problems. If tagged content creates problems for reflow or accessibility, these can be manually corrected by marking content and assigning element types.

## PDF tables

Tables require special treatment so that visually disabled users can understand row and column information for each cell. Problems can be minimized when each column has its

own head. Table formats in the authoring application should be used, such as table column heading, row heading, and table cell data.

Use the HHS 508 Guidelines for PDF tables at: http://www.hhs.gov/web/policies/checklistpdf.html#checklist3.

Tables pose a special challenge for screen readers because they present textual or numerical data to be easily referenced visually. Content within table cells can be complex and might contain lists, paragraphs, form fields, or another table. The TouchUp Reading Order Table Editor automatically analyzes the selected table into cells and applies the appropriate tags.

The table must be tagged as a table before you can use the Table Editor command. For best results when tagging tables, use the application that you created the document with to add tags before you create the PDF. If a PDF isn't tagged, you can add tags by using the Add Tags To Document command. Most tables are properly recognized using this command; however, the command may not recognize a table that lacks clear borders, headings, columns, and rows. Use the TouchUp Reading Order tool to determine if the table has been properly recognized and to correct recognition problems. To add specialized formatting to tables and table cells, use the Tags tab.

*Important:* Operations performed in the Tags tab cannot be undone with the Undo command. Save a backup copy of a document before you begin work on it in the Tags tab.

You can use the Table Editor to automatically analyze a table into its components and apply the appropriate tags, but you may still need to check and correct some of these tags manually. By viewing table tags, you can determine whether columns, rows, and cells have been correctly identified. Tables that lack well-defined borders and rules are often tagged incorrectly or contain adjacent page elements. You can correct poorly tagged tables by selecting and redefining them, and you can split combined cells by creating a tag for each cell. To do this:

- Select the TouchUp Reading Order tool, and then click Show Tables and Figures.
- If the table isn't clearly labeled in the document pane, drag to select the entire table, and then click Table in the dialog box.
- Click Show Table Cells to make sure that all cells in the table are defined as individual elements. If cells don't appear as separate elements, do one of the following:
  - If one or more cells are merged, use the TouchUp Reading Order tool to select the area within a single cell, and then click Cell in the dialog box. Repeat for each merged cell.
  - If cells aren't highlighted, the table might not use standard table formatting. Re-create the table in the authoring application.

For more detail, go to the Adobe® Acrobat® 9 Pro Accessibility Guide: Best Practices for Accessibility: http://www.adobe.com/accessibility/products/acrobat/pdf/A9-access-best-practices.pdf.

## Alternate text for figures and images

Figures and images are ignored by screen readers unless alternate (descriptive) text is used. All information or data in figures and images must be made available. (Imagine you can't see the image: What needs to be described to convey all information in the image?) To identify the document elements that still need tags, open the Tags Palette, right click, and click Turn on Associated Content Highlighting.

If you want screen readers to describe graphical elements that illustrate important concepts in a document, you must provide the description using alternate text. Figures aren't recognized or read by a screen reader unless you add alternate text to the tag properties. If you apply alternate text to text elements, only the description, not the actual text, is read.

To create alternate text descriptions:

- 1. Select the TouchUp Reading Order tool.
- 2. Select Show Tables and Figures in the dialog box. Figures that are missing Alternate Text will have a flag indicating "Figure No alternate text exists"
- 3. Right click the figure and choose Edit Alternate Text from the pop-up menu.
- 4. In the Edit Alternate Text dialog box, type a new (or edit an existing) description for the figure, and then click OK.

## Accessible hyperlinks

Adding alternate text descriptions to links makes the links' purpose or use clearer for readers using screen-reading software. To make links in the text accessible:

- 1. Use the Select Text tool to select the link.
- 2. Right click and select Properties.
- 3. Select Tag tab; enter description in Alternate Text box.
- 4. Select Close.

## PDF document language

The PDF's global language must be established to improve readability and accessibility. This must always be done with PDFs converted from Word files. To set the language:

1. Select File/Document Properties.

2. Select Advanced in the Document Properties dialog box and then choose a language in the Language menu.

#### PDF forms

Forms require special techniques so they are accessible. Use the HHS 508 checklist at: http://www.hhs.gov/web/policies/webstandards/508pdfforms.html.

## Accessibility testing

No software can fully test a PDF file's accessibility. Acrobat's Full Check feature can help find problems but cannot verify full compliance with Section 508. For example, the Full Check feature ignores tables and cannot judge if an alternate description for an image adequately communicates information in it. Screen readers, such as JAWS<sup>®</sup>, should also be used to test PDF files for 508 compliance.

To Use the Accessibility Checker:

- 1. Click Advanced/Accessibility/Full Check.
- 2. Select every option for checking, and then select Start Checking.
- 3. A summary dialog box will appear, along with an Accessibility Report that will include hints for repair. Most problems can be fixed using the Forms Tool or the Tags Palette.
- 4. Correct the issues and save the file as a copy because Acrobat has no Undo feature
- 5. Test again with Full Check.
- 6. Check the file for accessibility using a screen reader.

**Tab order and structure order.** In some cases, even though the tags have been inherited from the source file, the Accessibility Checker will indicate that tab order is inconsistent with structure order. To fix this issue:

- 1. Open the Pages icon or select View > Navigation Panels > Pages.
- 2. Click on any page icon and type Ctrl + A to select all the pages.
- 3. From the Options button on the pages panel, select Page Properties.
- 4. In the Tab Order Panel, check Use Document Structure.

**Table headings.** Table headers are not always properly defined after the conversion from Word to PDF. Use the TouchUp Reading Order Table Editor to change table data cells that should be table headings to table headers or change the table data tags directly into table header tags within the tags panel.

## **Resources on PDF Accessibility**

Detailed information is available at the following Web sites:

- Adobe® Acrobat® 9 Accessibility Training Resources http://www.adobe.com/enterprise/accessibility/training.html
- Adobe® Acrobat® 9 Pro Accessibility Guide: Best Practices for Accessibility http://www.adobe.com/accessibility/products/acrobat/pdf/A9-access-best-practices.pdf
- Adobe® Acrobat® 9 Pro Accessibility Guide: PDF Accessibility Repair Workflow http://www.adobe.com/accessibility/products/acrobat/pdf/A9-pdf-access-repair-workflow.pdf
- Adobe® Acrobat® 9 Pro Accessibility Guide: Creating Accessible Forms http://www.adobe.com/accessibility/products/acrobat/pdf/A9-creating-accessible-pdf-forms.pdf
- Adobe® Acrobat® 9 Pro Accessibility Guide: Using the Accessibility Checker http://www.adobe.com/accessibility/products/acrobat/pdf/A9-using-accesschecker.pdf

## **PowerPoint Presentations**

There are two options for making a PowerPoint presentation accessible:

- 1. Create an accessible Web alternative in addition to the presentation.
- 2. Make the PowerPoint file accessible.

#### Accessible Web Alternative

Creating an accessible Web alternative to the presentation is strongly recommended. Accessible HTML files are the gold standard for accessibility. The techniques for making Web pages accessible are well established, and tools exist for testing accessibility, although the results of such testing must be interpreted.

HTML is accessible regardless of the platform (Windows or Mac) and version, and it does not require proprietary software. For PowerPoint files to be accessible, the user must have the full software program. The free PowerPoint Viewer is not accessible. A blind user relying on the free viewer and a screen reader cannot access the information.

When creating Web alternatives, note that HHS policy states that frames should not be used: http://www.hhs.gov/web/policies/webstandards/frames.html .

## **Creating Accessible PowerPoint Files**

For developing accessible PowerPoint files, use the HHS Guidelines at: http://www.hhs.gov/web/policies/checklistppt.html.

Before making a Powerpoint file accessible, other factors must be considered:

- It can be difficult to make PowerPoint files accessible after the presentation is created. For example, if a text box is used to enter text, that content is usually not accessible to screen readers. To make the text accessible, it will have to be reentered with the Slide Layout feature.
- There are no tools available for testing the accessibility of PowerPoint files.
- Testing PowerPoint files for accessibility is labor intensive, and each slide must be manually reviewed against HHS guidelines.

PowerPoint files purported to comply with Section 508 must be tested comprehensively against the HHS guidelines before AHRQ can accept them or post them on the AHRQ Web site.

## **Excel Files**

Using Excel for interactive tools is not recommended except when Excel-based tools are intended to be used offline. Web-based versions of Excel tools are easier to make accessible and do not require proprietary software. Excel files can be made accessible, though few developers who create Excel files make them accessible.

## Layout and formatting requirements

Merged cells should not be used within the data section of the table. Ideally, merged cells should not be used at all.

All active worksheets in the workbook should have clear and concise file names that allow a user and screen reader to identify the source and contents of the table.

Worksheets should not have flickering or flashing text or animated text. All hyperlinks should display the full URL (i.e., http://www.hhs.gov, not www.hhs.gov). All hyperlinks should be active (i.e., validated to an active and correct Web destination).

Content in text boxes or graphics with embedded text is not accessible. Text boxes are form objects, not text in a cell.

Color should not be used to as the primary means of emphasis. Use an asterisk, border, or other identifier.

Changes must be accepted or rejected. Track Changes must be turned off.

## **Image requirements**

All worksheets with multilayered objects must be flattened into one image and use one alternative text (alt text) description for that image

Charts are a collection of accessible objects and are not grouped All charts should have Title, Legend, and Axis labels associated with them. This will give users a number of reference points to use to correctly interpret the information being presented.

Complex images (e.g., charts, graphs, flowcharts, etc.) must have descriptive text immediately after the image.

## **Table requirements**

Tables should have a logical layout of the information based on rows and columns. Tables should be oriented so that they are read from left to right and top to bottom. Tables should have clear, concise, and readily identifiable row and column headers.

Tables should be prefixed with the table name and table number (if applicable). This information should be separated from the actual data table so that the screen reader can present it prior to reading the data table.

Table header rows are formatted to repeat on the top of the table as it goes from one page to another. This will allow the screen reader to re-state the header information to the user as the table continues from one page to another.

Excel tables should not have merged cells. Merged cells are only acceptable in the header row of the data table. Row and column headers should start in the first left-hand column of the data table, not the worksheet.

#### **Accessibility requirement**

An accessible alternative version of the document should be provided when there is no other way to make the content accessible within Excel.

## **Best practices**

- Indicate, when practical, formula cells that affect cells in other worksheets with a notation in a cell to alert users of the functionality.
- Use only the following fonts: Times New Roman, Verdana, Arial, Tahoma, or Helvetica.
- Create a document file name that is concise and no more than 20-30 characters long to make the content of the file clear within the context in which it is presented. (This is required for Web posting.) The document file name must not contain spaces or special characters.

- Use the Document Properties Summary tab, which lists the document creator and owner. For Author, use the organization name (e.g., HHS), not an individual's name.
- Title all tables to facilitate table identification and help the reader understand the table's purpose.
- Avoid using two or more data tables on the same worksheet when possible.
- Ensure headers are associated with Rows and Columns.

#### Columns and rows labels

Headers provide information about the column or row cells and how they relate to one another. Row headers are defined in the first column. Column headers are defined in the first row.

There are two methods for labeling Row and Column headers.

#### First method:

- 1. Highlight the table. From the Format tab select Auto Format.
- 2. Select a template from those provided.
- 3. Select the OK button.

## Second method:

- 1. Highlight the column or row headers. Select Insert/Name/Label.
- 2. The Label Ranges screen appears with the range that was selected. Select the Add button.
- 3. The label range appears with the Existing label ranges field (note that the Column labels radio button is selected).
- 4. Select the OK button

#### Charts

When creating a chart in Excel, apply a Legend, which acts as a keyed index. To do this,

Select Chart Options from the Chart menu. On the Titles tab:

• Title the chart

• Title the X axis and Y axis

#### Alternative text

Alternative text must be considered for all images other than charts. It provides a text description of an image or graphic. Informative images (e.g., a flowchart or graph) convey information that needs a text equivalent. Descriptive images (e.g., a logo) provide basic information about the image.

To add alternative text with the Format Picture tool:

- 1. Right click on the image and select Format Picture from the drop down menu.
- 2. Select the Web tab and add alternative text in the Alternative Text: box.

## Audiocasts, Webcasts, and video

Follow the HHS Web standard for Accessibility and Video/Multimedia Content at: http://www.hhs.gov/web/policies/webstandards/video508.html.

## **Registration pages**

Registration sites must be 508 compliant and resemble an AHRQ Web page.

#### Captioning

If a product contains speech or other audio necessary for users to comprehend the content, that audio must be provided through synchronized captioning. The captioning may be open (visible all the time) or closed (visible when a user turns it on).

#### Video

Presenters may embed video into a PowerPoint presentation or have the contractor videocast it. Either way, the video must be captioned. HHS guidance on captioning video may be helpful (although it is oriented toward HHS agencies). It is located at: http://www.hhs.gov/web/policies/videocaptionguidance.html.

## **Transcripts**

Transcripts of audio need to be delivered in archive-ready HTML format. If the transcript was created from live captioning, misspellings, missing words, and punctuation errors must be corrected before providing AHRQ with a final version.

## **PowerPoint presentations**

Refer to the section in this appendix on PowerPoint presentations and accessibility.

Documents posted as .PPT or .PPS must include a link to the free Microsoft<sup>®</sup> PowerPoint viewer. File type and size with downloadable files must also be provided. For example: Filename (# MB) (PowerPoint® Viewer).

## Planning tips for hosts

Organizations that plan to host an audiocast or a Webcast should ask for presentations about 2 weeks before the event to ensure sufficient time is available to create a transcript. To facilitate the creation of slide scripts, hosts should ask each presenter to provide the context narrative in the Notes section of PowerPoint slides.

## Planning tips for presenters

Presenters should use complete sentences in the Notes section of the PowerPoint slides so users can understand the main points. If presenters are using visuals to make a point, they should also explain their point verbally. Presenters should avoid using acronyms and abbreviations in slides or when speaking. Further, they should provide a list of medical terms, names, and other unusual terms to the host before the event to increase the accuracy of live captioners and transcribers.

## Flash<sup>®</sup>

Even after all software and hardware requirements are met, the very nature of Flash can make full accessibility difficult. Because Flash content is dynamic and can change in response to user input, a wide range of issues must be addressed.

AHRQ follows the HHS Web draft standard on acceptable uses of Flash at: http://www.hhs.gov/web/policies/webstandards/useflash.html.

**Note:** All proposed use of Flash must be approved by HHS at the concept stage. Contact Biff LeVee (biff.levee@ahrq.hhs.gov) at AHRQ for assistance.

## **JavaScript**

JavaScript can cause a variety of problems related to both accessibility and usability. Some accessibility problems stem from the fact that certain assistive technologies do not support JavaScript. Further, some users choose to disable JavaScript in their browsers.

However, Web pages can use JavaScript if it is used carefully. For specifics, refer to the section on scripting in the U.S. Access Board's Guide to the Section 508 Standards at: http://www.access-board.gov/sec508/guide/1194.22.htm#(l). Note:

"Web page authors have a responsibility to provide script information in a fashion that can be read by assistive technology. When authors do not put functional text with a script, a screen reader will often read the content of the script itself in a meaningless jumble of numbers and letters. Although this jumble is text, it cannot be interpreted or used."

## **Appendix 2-D. Accessibility Notice**

This notice should be linked to by all AHRQ Web sites as part of the standard AHRQ footer at: http://www.ahrq.gov/accessibility.htm.

## **Overview**

In keeping with its mission, AHRQ complies with accessibility requirements by implementing the regulations of Section 508 of the Rehabilitation Act (http://www.access-board.gov/508.htm) and the U.S. Department of Health and Human Services (HHS) Secretary's Section 508 Implementation Policy (http://www.hhs.gov/od/sec508 Implementation.html).

AHRQ would appreciate being notified of accessibility problems so that we can remediate them and better serve you.

Federal agencies are required, upon request, to provide information and data to individuals with disabilities through an alternative means of access that can be used by the individuals.

## **Alternative Access to Web Information**

Information from AHRQ Web sites should be accessible via screen readers and other accessibility tools with the exception of some pre-2001 information or links to content resident on Web sites that are not Federal Government resources. These materials include special accessibility notices to this effect.

If you need an alternative means of access to any information on AHRQ Web sites, please contact us through our public inquiries mailbox at: http://info.ahrq.gov. Let us know the nature of your accessibility problem, the Web address of the requested information, and your contact information.

If you need to convert PDF documents, Adobe® offers conversion tools at its Accessibly Resource Center (http://www.adobe.com/accessibility/index.html).

# Synopsis of Section 508 Accessibility Requirements

Section 508 requires Federal agencies to ensure that individuals with disabilities who are members of the public or Federal employees have access to and use of electronic and information technology (EIT) that is comparable to that provided to individuals without disabilities, unless an

undue burden would be imposed on the agency. The requirements of Section 508 apply to an agency's procurement of EIT, as well as the agency's development, maintenance, or use of EIT.

Although Federal agencies have an explicit statutory obligation to make all EIT that they develop, procure, maintain, or use compliant with Section 508, individuals may only file complaints or lawsuits to enforce Section 508's requirements with respect to EIT systems procured or deployed on or after June 21, 2001. Learn more at FAR Final Rule (http://www.section508.gov/index.cfm?FuseAction=Content&ID=13).

The Section 508 requirements do not apply retroactively to pre-existing EIT. However, as agencies upgrade and change their electronic and information technology, they must comply with the standards. Specifically, the Electronic and Information Technology Accessibility Standards: Economic Assessment (http://www.access-board.gov/sec508/assessment.htm) states that, "The standards are to be applied prospectively and do not require Federal agencies to retrofit existing electronic and information technology. As agencies upgrade and change their electronic and information technology, they must comply with the standards."

Federal agencies have additional responsibilities under Section 501 (http://www.section508.gov/index.cfm?FuseAction=Content&ID=17) and Section 504

(http://www.section508.gov/index.cfm?FuseAction=Content&ID=15) of the Rehabilitation Act. These sections require that agencies provide reasonable accommodation to employees with disabilities and provide program access to members of the public with disabilities and take other actions necessary to prevent discrimination on the basis of disability in their programs.

## **More Information**

- The HHS Office on Disability (http://www.hhs.gov/od/) oversees the implementation of Section 508 at HHS. Visit this site to learn more about the office's activities and leadership.
- The U.S. Access Board's Section 508 Homepage (http://www.accessboard.gov/508.htm) provides information on Section 508 law, frequently asked questions, and standards.
- The Section 508 Homepage (http://www.section508.gov/) provides Section 508 tools, resources, standards, and news.

## **Appendix 2-E. Web Site Deployment Checklist**

Please note: This checklist must be submitted with each contract deliverable.

Section I: Web Site/Project	ct Information		
Project Name:			
Project Manager:			
Web Site URL:			
Planned Deployment Date:			
Project Start Date:			
Project End Date:			
	olication/page (select all that apply):		
[ ] Web home page [ ] Information page	[ ] Policy page [ ] Employment listings		
[ ] Online form	[ ] Graphics page (i.e., maps, photographs, etc.)		
[ ] Search page	[ ] Interface page for multimedia		
[ ] Search results page	[ ] Web-based application		
[ ] FAQ page	Data-driven application		
[ ] Other (describe):			
Is this an Internet, Intranet, or  [ ] Internet (Public access)  [ ] Intranet (Internal access, be [ ] Extranet (Deployed over Internal access)			
How many visitors do you plan to have monthly?			
Number of monthly visits (appro	· ————		

**Section II: Deployment Checklist**The following section outlines requirements that must be addressed prior to deploying Agency Web-based IT applications or Web sites.

#	Concept, Project Initiation, and Planning	Yes	No	N/A
1	Has a Project Initiation Document been completed and submitted to AHRQ IT?			
	If yes, provide date of submission:			
2	Has a Project Work Plan or comparable planning document been developed and approved?			
	and approved:			
	If yes, provide date approved.			
3	Is AHRQ the appropriate agency to produce and maintain this content?			
	(Generally, AHRQ does not support or maintain grantee work.)			
4	Who are the intended audiences?			
5	Describe the resources necessary to complete and maintain the application or			
	Web site.			
	Are these resources available through AHRQ?			
	Who will maintain the application?			
#	Requirements and Design	Yes	No	N/A
6	Does the draft content and proposed design address HHS Web standards (http://www.hhs.gov/web/policies/standardscategory.html)?			
7	Does the draft content and proposed design meet legal requirements and			
	incorporate Federal best practices? These include:  OMB Policies for Federal Public Web Sites:			
	http://www.usa.gov/webcontent/reqs_bestpractices/omb_policies.shtml			
	Section 508 Standards for Accessible Design:			
	http://www.hhs.gov/usability/pdfs/guidelines.html.			
	Research-Based Web Design & Usability Guidelines:     http://www.hhs.gov/usability/pdfs/guidelines.html.			
	HHS Web Policies: http://www.hhs.gov/web/policies/webpolicies/.			
	3			
8	Has usability testing been considered and/or scheduled?			
	If yes, provide additional information regarding testing dates, outcomes,			
	modifications, or plans.			
9	Are all requirements adequately defined and documented? (System			
	Requirements Document, Requirements Traceability Matrix)			
	If yes, provide date of documents submission			
10.	If yes, provide date of documents submission.  Has the proposed design and architecturally significant components been			
	adequately defined and documented (System Design Document)?			

#	Testing, Implementation, and Deployment	Yes	No	N/A
11	Is this site fully functional (no broken links, missing content, etc.)?			
12	Is there a defined approach for testing the application or Web site (Test Plan,			
	Test Scripts)?			
13	Has usability testing (including user acceptance testing) been performed and all			
	issues addressed?			
14	Does the final content and design meet all HHS Web standards?			
	· ·			
15	Has AHRQ IT or the Web Communications Division of the Office of the			
	Assistant Secretary for Public Affairs (ASPA) been contacted for clarification, a			
	usability waiver, or exemption?			
16	Has/Have the clarification(s), waiver(s), or exemption(s) been documented?			
10	Has a report showing the results of usability and/or user acceptance been submitted or attached to this checklist? Note: All exceptions/waivers must be			
	documented.			
17	Has 508 testing been performed and all issues addressed?			
	If yes, provide date and outcome.			
16	Has the Office on Disability been contacted for clarification, a waiver, or			
10	exemption? (Exemptions are typically reserved for bioterrorism, disaster			
	recovery, or national defense/security projects.)			
19	Is there a user guide or other help-related documentation available for the intended users/audience?			
	interided dsers/addience?			
20	Is there documentation available that provides guidance and defines			
	procedures related to the operational implementation of the application or Web site (Operations Manual)?			
21	Is there documentation available that identifies and describes general release			
	information and inventory of software to be released (Version Description			
	Document, Bill of Materials)?			
	If yes, give date provided to AHRQ.			
#	Clearances, Security/Privacy Requirements, and Operations and	Yes	No	N/A
	Maintenance			
22	Have all policy or legal clearance issues been addressed? This includes:			
	Secretarial approval.  Office of the Constal Course.			
	<ul> <li>Office of the General Counsel.</li> <li>ASPA communications contract clearance.</li> </ul>			
	<ul> <li>ASPA communications contract clearance.</li> <li>ASPA print publication clearance.</li> </ul>			
23	Depending on proposed content, have all legal issues been addressed? See			
25	http://www.firstgov.gov/webcontent/reqs_bestpractices/laws_regs.shtml.			
24	If personally identifiable information is being collected or displayed, has a			
	Privacy Impact Assessment been created?			
25	If answered "yes" to question #24, has a System of Records Notice been			
	created and submitted to the Federal Register?			
	Provide date of submission.			

(Certification and Accreditation, System Security Plan, National Institute of Standards and Technology (NIST) guidance, common controls, etc.)?			em Security Plan, National Institute of			
	Provide all copies of do					
27	Is the Agency ready to a or Web site?	assur	me maint	enance responsibilities of the application		
			CI	hecklist Comments:		
[Insert	explanations if any ques	tions	above w	ere answered "NO" or "N/A"]	 	
	Review Meeting		Yes	Review Meeting Date:		
	Required?		No			

## Section III: Section 508 Checklist—Accessibility

This checklist can be used to review each Web page on public Web sites, Extranets, or Intranets for compliance with Section 508 of the Rehabilitation Act. A review can be conducted in anywhere from 5 to 20 minutes, depending on the complexity of the page, and the review process will go faster for successive pages. It is designed to help you do a section-by-section analysis and validate the standards for Web-based resources required by the Access Board: http://www.access-board.gov/sec508/standards.htm. Technical guidance by the Access Board is recommended at: http://www.access-board.gov/sec508/guide/1194.22.htm. The Accessibility Checklist at the end of this document provides additional information on requirements. HHS accessibility standards are at: http://www.hhs.gov/web/508/.

Note: Documentation that supports compliance with all Section 508 checkpoints must be provided prior to production deployment (Test Reports, etc.).

#	Web Accessibility - Non-HTML (PDF, PPT, Word) Files	Yes	No	N/A
1.	For each file, is an accessible alternative (HTML) available or is the native file accessible?			
2.	Is a link to the appropriate plug-in/viewer provided?			
#	Web Accessibility – Electronic Forms	Yes	No	N/A
3.	Do all form fields have explicit <label> tags?</label>			
4.	Do all form fields have a tab index attribute?			
5.	Do forms fields allow a person using assistive technology to access information, field elements, and functionality for completion and submission of the form including all directions and cues?			
6.	If form fields are inaccessible to people with disabilities, is there an alternative accessible form or a link to an accessible form?			
#	Web Accessibility – Tables		No	N/A
7.	Have tables used for design layout been checked to see if the tables read in a linear method?			
1				
8.	Do tabular tables use the "summary" attribute and/or tag?			
8. 9.				
	Do tabular tables use the "summary" attribute and/or tag?	Yes	No	N/A
9.	Do tabular tables use the "summary" attribute and/or tag?  Does each table cell provide identification of row and column headers?	Yes	No	N/A
9. # 10.	Do tabular tables use the "summary" attribute and/or tag?  Does each table cell provide identification of row and column headers?  Web Accessibility – Frames  Does the Web page use frames? HHS should not use frames on its Web pages: http://www.hhs.gov/web/policies/webstandards/frames.html  Web Accessibility – Scripts, Plug-ins, Applets	Yes	No No	N/A
9. # 10.	Do tabular tables use the "summary" attribute and/or tag?  Does each table cell provide identification of row and column headers?  Web Accessibility – Frames  Does the Web page use frames? HHS should not use frames on its Web pages: http://www.hhs.gov/web/policies/webstandards/frames.html			

13.	If a plug-in, such as Flash, Windows Media, Real Audio, etc., is used, is a link provided to download the plug-in?			
14.	If a plug-in is required, does the plug-in comply with Section 508, 1194.21 (Software Applications and Operating Systems)? See http://www.access-board.gov/sec508/guide/1194.21.htm.			
15.	If the product is an application or tool, is it accessible or is an alternative provided that contains the same information and functionality in an accessible format?			
#	Web Accessibility – Non-Text Elements	Yes	No	N/A
16.	Do all non-text elements have text equivalent descriptions using the "alt" attribute or an alternative method for equivalent description?			
#	Web Accessibility – Image Maps	Yes No N/A		N/A
17.	Does the page have duplicate text links for all links within the server-side image?			
18.	Is there a timetable to replace server-side images with client-side images (except where the regions cannot be defined with an available geometric shape)?			
19.	Do client-side images use the "alt" attribute to provide text equivalent description and/or an alternative method to provide text equivalent description?			
#	Web Accessibility - Multimedia	Yes	No	N/A
20.	Is text captioning provided for audible output and audible output provided for visual information?			
21.	If multimedia content is used, is the audible and video output synchronized to the dynamic content?			
#	Web Accessibility - Color	Yes	No	N/A
22.	Is the page navigable and understandable without the use of color?			
#	Web Accessibility – Navigation and Design	Yes	No	N/A
23.	Do pages provide a method for assistive technology to skip repetitive links including navigational links?			
24.	Do links to descriptive headings or URLs read "Go to," "Select," or "Visit" (rather than "Click here" or "More")?			
25.	If the page requires a fixed time for response before the page "times out," is the user alerted that he or she will be timed out and given sufficient time to indicate that more time is needed?			
26.	Does the "include content," such as applets, plug-ins, or animation, cause the screen to flicker with a frequency greater than 2 Hz or less than 55 Hz?			
27.	If this page cannot be made accessible, is a "text only" version available that is updated the same time the inaccessible page is updated?			
#	Web Accessibility – Style Sheets	Yes	No	N/A
28.	If the page has style sheets, are they viewable by a user's browser that does not support style sheets?			
29.	Does the style sheet interfere with style sheets set by the user's browser?			

## **Tips for Accessibility Testing**

AHRQ and HHS use automated tools to test accessibility, but they cannot identify all accessibility issues and they also find false positives. Human review is needed to ensure accurate assessment.

After resolving accessibility problems found with automatic testing:

- 1. Use an assistive technology device (such as a screen reader) to determine whether information can be interpreted correctly on the Web page:
  - JAWS for Windows (http://www.freedomscientific.com/)
  - Window-Eyes (http://www.GWmicro.com/)
  - IBM Home Reader 4.0 (http://www.ibm.com)
- 2. Test the Web pages with the keyboard only, rather than an event-driven device (mouse, etc).
- 3. Test the Web pages with sounds, graphics, and style sheets turned off.

#### **Code Validation**

Validate code before deploying it or submitting it as a deliverable. Use:

- W3C validator: http://validator.w3.org/
- WDG validator: http://htmlhelp.com/tools/validator/

Validate against the HTML 4.01 or XHTML 1.1 Transitional DOCTYPE.

## **Section IV: Issues**

[Record all deployment issues in the project's Action Item Log or use the space provided.]

## **Section V: Approval and Verification**

Project Manager:			
	(Signature)	(Title)	(Date)
Director of Applications Development:			
	(Signature)	(Title)	(Date)
Web Communications Division Review Date:			
	(Date)		
Final Deployment Date:			
	(Date)		

## **Accessibility Checklist**

The following checklist has been provided to assist with ensuring site accessibility and successful accessibility testing. The checklist is organized by checkpoints outlined in Section 508 of the Rehabilitation Act.

Paragraph Checkpoints	Meaning	Checklist
(a) A text equivalent for every non-text element shall be provided (e.g., via "alt," "longdesc," or in element content).	Any graphics added to your site will need to have an "alt tag" (alternative text) within your HTML code. This tag describes details of the graphic. If the graphic is decorative only, you need to place an empty "alt tag" in your HTML code (" ").  Example of graphic that adds value: <img at="" conference"="" h="" latest="" news="" s="" secretary="" src="secretary.jpg alt=" the=""/> (Note: acronyms should contain spaces or the screen reader will try to read the acronym as a word.)	□ Every image, video file, audio file, plug-in, etc., has an alt tag. □ Complex graphics (graphs, charts, etc.) are accompanied by detailed text descriptions. □ The alt descriptions describe the purpose of the objects. □ If an image is also used as a link, make sure the alt tag describes the graphic and the link destination. □ Decorative graphics with no other function have empty alt descriptions (alt=" ").
	Example of graphic for decoration:	
	<pre><img alt=" " src="yellowsun.jpg"/>. (Note: Placing this null value will allow the screen reader to skip over the graphic.)</pre>	

(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	Multimedia files include audio and video presentations. Video files should have an alternative that is synchronized to the original presentation. Audio files must have a transcript.	☐ Add synchronized captions to videos. ☐ Add audio descriptions. ☐ Create text transcript for audio. ☐ Create a link to the video rather than embedding it into Web pages. ☐ Link to the media player download. ☐ Link to the text transcript.
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	When colors are used as the sole method for identifying screen elements or controls, persons who are color blind as well as those people who are blind or have low vision may find the web page unusable. This provision requires that some other method of identification, such as text labels, must be combined with the use of color.	☐Two tests:  (1) View the page on a black and white monitor.  (2) Print out the page on a black and white printer.  Both methods will quickly show if the removal of color affects usability.
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	Style sheets can enable users to define specific viewing preferences to accommodate their disability. For instance, users with low vision may create their own style sheet so all text is displayed in an extra large font with white characters on a black background.	☐Ensure that Web pages do not interfere with user-defined style sheets.
(e) Redundant text links shall be provided for each active region of a server-side image map.	When a Web page uses a server- side image map to present the user with a selection of options, browsers cannot indicate to the user the URL that will be followed when a region of the map is activated. Redundant text links are needed to provide access to the page for anyone not able to see or accurately click on the image map.	Provide a redundant text link for each active region of a server-side image map.
(f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	If you are using a graphic that has "hot-spots" for links.  Ex. You may have a graphic of the United States and have area links for each State.	☐Does the page provide alternative links to the Image Map? ☐Do the <area/> tags contain an alt attribute?

(g) Row and column headers shall be identified for data tables.	Tables that contain data in columns and rows need to have the headings for the table. Simple tables (with one column or row of headings) must use scope attributes to associate data cells with column/row headings.  Example: Use  table header tags for your headings and the  table data tags for the data within the tables.	□Data tables have the column and row headers appropriately identified (using the  tag).   □Tables used strictly for layout purposes do NOT have header rows or columns.
(h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	Another way to accomplish identifying data cells uses the headers and ID attributes. This method is NOT recommended for simple tables. The headers and ID method should only be used when there is more than one logical level in a table, and when more than two headers need to be linked with a data cell. Complex tables (where the scope attribute does not accurately link the data cells with correct column/row headings) must have ID and header attributes to associate data cells with column/row headings.	Table cells are associated with the appropriate headers (e.g., with the ID, headers, scope, and/or axis HTML attributes).
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	Because of the potentially serious nature of seizures, developers should be extra careful to avoid any graphics, animations, movies, or other objects which have strobing, flickering, or flashing effects.  Developers should also avoid graphics which may induce nausea or dizziness.	☐ Make sure the page does not contain repeatedly flashing images. ☐ Check to make sure the page does not contain a strobe effect.
(k) A text-only page, with equivalent information or functionality, shall be provided to make a Web site comply with the provisions of these standards, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	Provide an accessible alternative (in HTML) for non-HTML files unless that file is fully accessible.	Every non-HTML file must be accessible, either by having an accessible alternative or be fully accessible itself.

If you are linking to any files that are ☐A link is provided to a disability-(m) When a Web page accessible page where the plug-in not HTML, you need to provide the requires that an applet, plugdownload for the plug-in on the can be downloaded. in, or other application be page. Example: present on the client system All Java applets, scripts, and plugto interpret page content, the File Title (Word File, X MB; Word ins (including Acrobat PDF files and page must provide a link to a PowerPoint files, etc.) and the Viewer) plug-in or applet that content within them are accessible to complies with §1194.21(a) PowerPoint Viewer: assistive technologies, or else an through (I). http://www.microsoft.com/download alternative means of accessing s/details.aspx?FamilyID=428d5727equivalent content is provided. 43ab-4f24-90b7a94784af71a4&DisplayLang=en **Excel Viewer:** http://www.microsoft.com/download s/details.aspx?FamilyID=c8378bf4-996c-4569-b547-75edbd03aaf0&DisplayLang=en Word Viewer: http://www.microsoft.com/download s/details.aspx?FamilyID=95e24c87-8732-48d5-8689ab826e7b8fdf&DisplayLang=en PDF Reader: http://www.adobe.com/products/acr obat/readstep2.html When form controls are text input (n) When electronic forms are When electronic forms are designed fields use explicit LABEL elements. designed to be completed to be completed online, the form online, the form shall allow shall allow people using assistive When text is not available use the people using assistive technology to access the title attribute. information, field elements, and technology to access the information, field elements, functionality required for completion ☐ Include any special instructions and functionality required for and submission of the form, within field labels. completion and submission of including all directions and cues. the form, including all ☐Make sure that form fields are in a directions and cues. logical tab order.

## **Appendix 2-F. AHRQ Linking Policy**

## Introduction

Hyperlinks allow users to move from concept to concept in a nonlinear fashion. Links permit associative references to other sections within Web documents, other documents and files on a Web site, and other Web sites and Web-based resources. Internal links point to materials contained on a single Web server and resident to that Web site. External links point to materials that are resident on other Web servers or applications that are maintained by outside entities.

This AHRQ policy is in addition to that of the Department of Health and Human Services' (HHS) external link icon and disclaimer. The draft standard is at: http://www.hhs.gov/web/policies/standardscategory.html#links.

## Requirements

## Internal links

Internal links do not create any liability issues because the materials are on the same server. However, these links serve as one method of navigation within a site and should facilitate use of a Web site, not confuse or disorient users so they become lost on the site.

As part of creating a navigation architecture that allows the user to maintain orientation, be consistent in the use of hypertext links in lists and the level of the target for these links to subcategories of information.

Hypertext links placed within content should direct users to more detailed information but clearly indicate where the target of the link is located with a brief description of what that link contains. For this reason, it is better to have links to other materials at the end of sections rather than buried in the middle of paragraphs.

#### **External links**

External links to other Web sites constitute an "implied endorsement" and create a business advantage for the linked sites. Therefore, the Office of Management and Budget (OMB) requires Federal agencies to perform risk assessments of external links from their sites.

For AHRQ-funded resources, potential links to external sources need to be assessed against HHS and AHRQ linking policies and criteria. If a site can make a case for deviating from these policies, then the specific review and selection criteria must be justified and posted on the Web site for full disclosure.

Before establishing links to external sites, check on the linking policies of those sites. Even if the sites do not require permission to establish a link, you should notify Web sites

of your intention to establish a link as a courtesy because your links will drive traffic to the sites and create demands on their servers.

Outside Web resources may link to Agency resources, providing the link is not displayed in a way that would imply the Agency's endorsement of a specific commercial product or service. Each AHRQ-funded Web site should have a page that discusses the "Linking In" policy and provides a 25-word descriptor for the site with key words that other sites can use when establishing the link.

## **AHRQ Policies and Criteria**

The Agency takes a conservative approach to external linking because AHRQ cannot appear to recommend sites that are incompatible with its scope and mission. Principal requirements follow.

- Links should be limited to other Federal agencies (particularly other HHS agencies), non-profit organizations that partner with AHRQ for specific projects, and other selected non-commercial Web resources, such as State and local government resources or educational institutions.
- Links to other Web-based resources should be established only if they are specifically referenced in AHRQ Web documents and directly relate to the Agency mission and outputs. Even these need to be evaluated against several quality and risk-assessment criteria.
- Linked sites should not conflict with any Federal policies or regulations.
- Links to commercial sites that market products or services are generally not appropriate, nor are links to sites that charge for information. However, this does not exclude notices of the availability of publications by public agencies or nonprofit organizations that charge for the publications or notices of conferences and meetings that charge a registration fee, providing these are directly related to the Agency mission and initiatives.

The Office of Communications and Knowledge Transfer (OCKT) reviews links for AHRQ Web-based resources maintained internally and housed on AHRQ servers for compliance with the Agency policy and selection criteria. For contractor-maintained servers, the contractor is responsible for assessing links and posting only those links that meet selection and evaluation criteria.

External links must be clearly delineated, and a brief description should be provided about the content of each linked resource. The link URL can be transparent to the user, but keep in mind that providing the specific URL for the linked resource has greater

utility for the user when the Web pages are printed and subsequently referenced. Be consistent in the conventions that you use to designate external links.

An HHS standard for external link icons and disclaimers is being finalized at press time. The standard will be at: http://www.hhs.gov/web/policies/standardscategory.html#links. Draft wording for the disclaimer notice follows:

## **External Link Disclaimer Notice**

- This graphic notice ( means that you are leaving an HHS Web site.
- This external link provides additional information that is consistent with the intended purpose of a Federal site.
- The Department of Health and Human Services cannot attest to the accuracy of information provided by this link.
- Linking to a non-Federal site does not constitute an endorsement by HHS or any of its employees of the sponsors or the information and products presented on the site.
- You will be subject to the destination site's privacy policy when you follow the link.

Return to the previous page to continue.

Once links are established, they need to be re-assessed periodically to ensure they are still valid and the linked resources continue to meet selection criteria.

These principles may not cover all possibilities and circumstances. Specific cases that present new issues must be evaluated on their merits in keeping with the goals and mission of AHRQ.

## Additional portal links

The General Services Administration (GSA) requires that all federally funded sites in the Government domain provide a link to the GSA portal, USA.gov, from the home page of the funded site. These sites are, in turn, indexed through the USA.gov portal.

AHRQ also has reciprocal links established with two health portals funded under HHS auspices: healthfinder<sup>®</sup> and MedlinePlus<sup>®</sup>, both of which provide information on diseases, conditions, wellness issues, and other consumer health information and decision tools.

There may be other E-Government initiatives for portals where incoming or outgoing links will need to be established depending on the purpose and content of the Web-based resource.

## **Tools and Resources**

## AHRQ Web site external linking criteria

The AHRQ Web Site External Linking Criteria policy summarizes selection and review criteria for external links from the AHRQ Web site.

## Selection criteria

Active links to sites external to AHRQ Web resources can only be made to:

- HHS and other Government agency Web sites.
- Nonprofit organization Web resources that reflect the outputs of specific projects or conferences of AHRQ with official partners (specific URL, not home page).
- Noncommercial resources that are specifically referenced in AHRQ-generated Web documents (specific URL, not home page).

## Review criteria

- External links should only be established to sites or Web-based resources that are directly related to AHRQ's mission and outputs.
- External links must not conflict with official Agency, HHS, or other Federal policies or regulations.
- Links to external resources cannot imply endorsement of a specific commercial product or service (Title 44 USC).
- Linked resources must be in compliance with the Section 508 of the Rehabilitation Act of 1998 as amended and other accessibility guidelines as directed by the Department of Justice.
- Linked resources should not contain inappropriate or questionable materials that jeopardize the Agency through associated liability, potential embarrassment, or political ramifications.
- Content is accurate, scientifically sound, balanced, and current (pages show updates).
- Sources of all content are specifically identified, and references are provided for health and scientific claims.
- The sponsoring organization(s), aims, and sources of support are clearly identified.

- Biases or conflicts of interest from advocacy positions, marketing, or sources of financial support are explicitly acknowledged.
- Privacy and confidentiality matters are clearly addressed, and registration is not required.
- Contact information and feedback exist for both content and technical issues.
- The design, reading level, and navigation tools are appropriate for the intended audience and do not present barriers to users.

## **External Link Evaluation Checklist**

The External Link Evaluation Checklist is an evaluation document that is used to assess potential external links. Copies of these assessments should be kept on file for the life of a project to show that you performed due diligence in selecting and evaluating external links and to address any challenges to the linking policy of your Web site by outside entities.

For examples of "Linking In" policy pages that can serve as models, visit the following:

- AHRQ Web site: http://www.ahrq.gov/news/weblink.htm
- TalkingQuality Web site: http://www.talkingquality.gov/general/weblink.htm
- healthfinder® portal: http://www.healthfinder.gov/aboutus/linking.asp

For examples of "Selection Criteria" policy pages on Web portals, visit the following:

- healthfinder® portal: http://www.healthfinder.gov/aboutus/content\_guidelines.aspx
- National Women's Health Information Center: http://www.4woman.gov/about/select-s/
- National Guideline Clearinghouse: http://www.guideline.gov/about/inclusion.aspx

## **External Link Evaluation Checklist**

## Selection categories

Is the Web resource that of a Government or nonprofit sponsoring organization in any of the categories below covered under the External Linking Policy?YesNo
Please select as appropriate:
HHS agency Web site or resource. Other U.S. Government agency Web site or resource. Nonprofit partner of AHRQ. Noncommercial Web resource specifically cited. State or local government agency with information useful beyond its borders. University or other educational institution. Public, medical, or special library. National voluntary, nonprofit, or professional organization.
If yes, skip to Nominating Criteria. If no, proceed to next selection category.
Is the Web resource that of an other than nonprofit sponsoring organization in any of the categories below covered under the External Linking Policy, which warrants consideration assuming evaluation criteria are met?YesNo
Please select as appropriate:
Foundation with a corporate sponsor. For-profit organization involved in a public-private partnership, CRADA, other grant, or contract with AHRQ. Patient support or advocacy group. Commercial organization offering free Web resources as a public service.
If yes, skip to Nominating Criteria. If no, proceed to next selection category.
Is the Web resource that of a sponsoring organization that falls into any of the automatic exclusion categories listed below?YesNo
Please select as appropriate:
Partisan political orientation.  Marketing or advertising site of a company, product, or service.  Commercial search engine site.  Bias, agenda, or purpose contrary to the public good.  Undetermined sponsorship or affiliation.
If yes, stop here. This resource cannot be considered for an external link.

## **Nominating criteria**

Enter the name of the sponsoring organization:

Provide a brief description of the nature of the organization, its stated purpose, and sources of support:

Enter the URL (and title) of the Web site or specific Web resource being considered:

Describe the nature of the information and services offered by the organization at this URL:

Describe its relevancy to an AHRQ Web resource, project, information collection, or constituency group:

Does the site or information resource provide a contact for Web site management and electronic policies? Please list name, title, and contact information (e-mail, phone, fax, and/or mailing address).

## **Evaluation criteria**

Is the organization and its sources of information and funding clearly identified on the Web site or information resource?YesNoUndecided
Does the Web site clearly distinguish between information and services offered free and products and services marketed at a commercial rate?YesNoUndecided
Would the presentation or content of the Web site lead a reasonable user to infer endorsement of products or services by AHRQ?YesNoUndecided
Can you determine any originator qualifications or quality assurance mechanisms for the site?YesNoUndecided
Can you determine the following based on the material presented in the Web resource?
<ul> <li>Authority (author/publisher/credentials)?YesNoUndecided</li> <li>Accuracy (verifiable source/reviewed)?YesNoUndecided</li> <li>Objectivity (balanced/biases)?YesNoUndecided</li> <li>Currency (release date/update)?YesNoUndecided</li> </ul>
Is there potential for political sensitivity or embarrassment to the Agency as listed below
<ul> <li>Political point of view? Yes No Undecided</li> <li>Political commentary or satire? Yes No Undecided</li> <li>Advertising or fundraising? Yes No Undecided</li> </ul>

<ul> <li>Controversial information</li> </ul>	on?Y e	esN	loUndecided	
<ul> <li>Unsubstantiated claims?</li> </ul>	?Yes _	No	Undecided	
<ul> <li>Profanity or sexual cont</li> </ul>	ent?Y	es1	NoUndecided	
Are there any potential legal co	mplications a	as listed b	elow?	
<ul> <li>Copyright protection? _</li> </ul>	Yes	No	Undecided	
• Licensing agreements?	Yes	No	Undecided	
<ul><li>Licensing agreements?</li><li>Registration for access?</li></ul>	Yes	No	Undecided	
• Tracking/user profiles?	Yes	No	Undecided	
• Privacy concerns?	Yes 1	No I	Undecided	
Is the material presented technowith older Web browsers and to				
				Juaic
disabled users)?Yes		Undecided	u	
Are additional links I ISTSER	V® or chat o	ontions di	vactly accessible from the pro	nosed
Are additional links, LISTSERV®, or chat options <i>directly accessible</i> from the proposed Web resource URL being linked to the AHRQ site? If so, please briefly describe below:				
web resource ORL being linke	a to the Min	iQ 51tC: 11	iso, please offerry describe be	710 W .
Would any of these accessible l	inks present	nrohlems	if evaluated in the same cont.	evt as
the direct link?Yes				OAt us
1 cs	_1100	naceraca		
If yes, please explain below:				
ii yes, pieuse expium seisw.				
General comments				
<b>Recommendation:</b> Inclu	de link	_Exclude	linkFurther evaluate	
Reviewer: Name			Date	

## **References and Authorities**

## AHRQ Web site external linking policy

The AHRQ Web Site External Linking Policy summarizes the issues, principles, and selection criteria that apply to the AHRQ Web site. Under its current policy, AHRQ links only to:

- Other HHS agencies.
- Other Federal agencies.
- Nonprofit organizations that are official partners on specific projects or conferences.
- Noncommercial Web resources that are specifically referenced in AHRQ-generated Web documents.

## Issues

The following issues affect the external linking policy:

- Under basic guidance from OMB, Federal agencies are expected to conduct a risk assessment before providing external links from their Web sites.
- Links to other sites are viewed as both an implied endorsement and a conduit to traffic, providing a business advantage for selected sites.
- Given the ephemeral nature of the Web, content can frequently change on linked resources.
- Web sites with external links must be regularly monitored for dead links or changed links.
- Resources are required to determine potential links, review and evaluate them, establish agreements between sites, and maintain and update links.

## **Principles**

The following principles apply to the external linking policy:

- Selection criteria as established are to be followed for recommending links.
- Review criteria as established are to be followed for evaluating links.

• Disclosure language that addresses the policy, selection, and review criteria must be posted on any Web site that has external links.

OCKT reviews recommendations and makes final determinations on appropriate links.

- OCKT negotiates linking arrangements, addresses requests from external sources, and responds to challenges on linking decisions.
- OCKT provides oversight and periodic re-evaluation of linked resources (at least on a quarterly basis).

### Selection criteria

A number of general guidelines for evaluating the quality of health Web sites have been published, and AHRQ has been involved in several public-private collaborations that have addressed this issue.

Existing criteria that are broadly accepted include:

- Content is accurate, scientifically sound, balanced, and current (pages show updates).
- Sources of all content are specifically identified and references are provided for health and scientific claims.
- The sponsoring organization(s), aims, and sources of support are clearly identified.
- Biases or conflicts of interest from advocacy positions, marketing, or sources of financial support are explicitly acknowledged.
- Privacy and confidentiality matters are clearly addressed.
- Contact information and feedback exist for both content and technical issues.
- The design, reading level, and navigation tools are appropriate for the intended audience and do not present barriers to users.

Additional criteria that affect AHRQ as a Federal Web site and agency of HHS:

- External links should only be established to sites or Web-based resources that are related to AHRQ's mission.
- External links must not present conflicts with official Agency, HHS, or other Federal policies or regulations.

- Links to external resources cannot imply endorsement of a specific commercial product or service (Title 44 USC).
- Linked resources must be in compliance with the Americans With Disabilities Act and other accessibility guidelines as directed by the Department of Justice.
- Linked resources should not contain inappropriate or questionable materials that jeopardize the Agency through associated liability, potential embarrassment, or political ramifications.

### Criteria for HHS External Web Site Selection

This section provides guidelines for policy development and practical application of best practices for linking HHS-sponsored Web sites to external Web sites and resources. A number of general guidelines to evaluate the quality and reliability of health information Web sites have been published. These criteria can also be used to narrow the field of candidate sites for links to avoid information overload for users and reduce link maintenance.

Agencies should build upon these guidelines with examples specific to their own sites to develop operating procedures. Those procedures should recognize that no Web site is likely to meet all criteria. However, criteria provide appropriate guidance for staff to use in assessing the communication needs and the relative risks and benefits of linkages for their specific Web sites.

- A. Online health information providers or sources should meet the following core criteria to be included in or linked to from an HHS Web site.
  - 1. Content is accurate, scientifically sound, balanced, and current.
  - 2. Sources of all content are specifically identified.
  - 3. References are provided for health and scientific claims.
  - 4. Site indicates that content is updated regularly (pages show dates).
  - 5. Qualifications of persons or organizations providing any medical or health advice are clearly presented; trained professionals or an advisory board oversees such activities.
  - 6. Information provided is designed to support, not replace, the patient/provider relationship and appropriate disclaimers are present.
  - 7. A privacy policy statement is prominently displayed. Minimum elements of a privacy policy are discussed below.

- 8. Sponsoring organization(s), aims, and sources of support are clearly identified
- 9. Biases or conflicts of interest resulting from strong advocacy positions, marketing or advertising, or sources of support are explicitly acknowledged.
- 10. Marketing information and advertising are presented in a manner that would allow an average user to clearly distinguish between commercial content and other information presented.
- 11. Contact information and a feedback mechanism for both content and technical issues are available.
- 12. Design, reading level, search tools, site navigation, and interactive components are appropriate for the intended audience and do not present barriers to users.
- B. Privacy protections for personal information. A Web site's privacy policy should:
  - 1. Notify users of which information is collected about them while they are on the site.
  - 2. Explain how the information will be used, shared and protected.
  - 3. Include a requirement to ask users for explicit permission to collect, track, aggregate, or share personally identifiable information.
- C. Beyond core selection criteria, HHS-specific considerations include the following. HHS Web sites should link to or recommend only those information sources that:
  - 1. Are directly relevant to HHS programs, activities, communication goals, or target populations.
  - 2. Comply with Section 508 of the Rehabilitation Act, and World Wide Web Consortium and other accessibility guidelines, as directed by the Department of Justice.
  - 3. Provide balanced treatment of topics addressed on the Web site.
- D. HHS sites should be clear on the relationship between the HHS site and any linked sites. There are currently multiple means to indicate to users that they are accessing content on a non-HHS site, including disclaimers, exit notices and popup boxes. Technology is constantly changing, however, and mandating a specific technical solution does not always provide the highest standard of user protection. The technical solution to clarify the relationship between HHS and non-HHS content, therefore, will be left to individual HHS agencies and Web sites.

- E. In the case of online discussion forums, HHS Web sites should link to or recommend only those forums that use qualified people to moderate or regularly review the discussion for inaccurate content.
- F. HHS Web sites should not link to or recommend information sources that:
  - 1. Conflict with official agency, HHS, or other Federal policies or regulations.
  - 2. Include invalid or unsupported health claims or invalid or unsupported science.
  - 3. Violate Federal or State laws and regulations governing the practice of medicine or the dispensing of pharmaceuticals across State lines or national borders.
  - 4. Imply endorsement of products or services by the Department.
  - 5. Allow targeted advertising by topic (for example, search on diabetes and get a specific drug ad).
  - 6. Imply endorsement of advocacy efforts targeting Federal laws, regulations, or policies.
  - 7. Do not disclose the nature of the partnerships and affiliations of contributors to the Web site and related projects.
  - 8. Provide secondary linkages that lead to inappropriate content.
  - 9. Require registration (anonymous use should be possible) or charge fees for basic information.

# External guidelines used as sources for core criteria

- Health on the Net Code of Conduct: http://www.hon.ch/HONcode/Conduct.html
- healthfinder® Selection Guidelines: http://www.healthfinder.gov/aboutus/content\_guidelines.aspx
- Evaluating Health-Related Web Sites, Emory University: http://www.sph.emory.edu/WELLNESS/instrument.html
- IHC Application Checklist, Science Panel on Interactive Communication and Health (SciPICH): http://www.health.gov/scipich/IHC/checklist.htm

# Existing guidelines used as sources for HHS-specific considerations

• Office of Management and Budget, Policies for Federal Government Public Web Sites:

 $http://www.usa.gov/webcontent/reqs\_bestpractices/omb\_policies/linking.shtml\\$ 

• U.S. General Services Administration, USA.gov: http://www.usa.gov/About/Linking\_Policy.shtml

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### **Promoting Agency Research**

The Office of Communications and Knowledge Transfer (OCKT) of the Agency for Healthcare Research and Quality (AHRQ) can help grantees and contractors promote the findings of their AHRQ-funded research through many channels, all of which are discussed below. AHRQ has been successful in working with grantees and contractors to promote findings to the media and to transfer knowledge based on the research to appropriate audiences in the health care community.

To promote their research findings, grantees and contractors should notify OCKT when they have an article accepted for publication. They should send a copy of the manuscript, the anticipated publication date, and contact information for the journal and their institution's public relations office to their AHRQ project officer and to OCKT at journalpublishing@ahrq.hhs.gov. The manuscript will be reviewed to determine what level of marketing to pursue. **AHRQ always honors the journal embargo.** 

Additionally, OCKT is always looking for ways in which AHRQ-funded research, products, and tools have changed people's lives, influenced clinical practice, improved policies, and affected patient outcomes. AHRQ Impact Case Studies describe AHRQ research findings in action and are used in testimony, budget documents, and speeches. Grantees or contractors whose AHRQ-funded research has had an impact on health care policy, clinical practice, or patient outcomes, should contact Jane Steele with AHRQ's Impact Case Studies Program by e-mail at jane.steele@ahrq.gov or by phone at 301-427-1243.

### **Overview**

This section provides an overview of the activities that OCKT uses to promote the Agency and its mission. The tactics OCKT uses are designed to promote the Agency's strategic goals to the public and to AHRQ stakeholders, including clinicians, policymakers, health systems, and State and local governments. We use a wide range of targeted techniques to reach the appropriate audience.

Social marketing research clearly indicates that messages need to be delivered multiple times using different vehicles for audiences to focus on and understand them. For example, commercial product campaigns usually involve print and broadcast advertising as well as product placement and other techniques.

Another key to effective dissemination and awareness building is sustainability. It isn't sufficient to promote a message or product one time and assume that it has struck a chord with an audience. OCKT takes every opportunity and venue to promote messages and products to the appropriate audience, and we try to integrate messages so that they build on each other and are used over time.

Our most basic message is the Agency's mission: Improving the quality, safety, efficiency, and effectiveness of health care for all Americans. OCKT reinforces the mission in every tactic and activity that we pursue, and we work with the Agency's

offices and centers and their respective external coordinating centers to ensure that the Agency and our mission are reflected appropriately in the materials, articles, and products that are developed on behalf of AHRQ.

OCKT also works to promote the Agency as a resource for reporters, the public, and health care decisionmakers. To that end, we promote the expertise of AHRQ staff and the knowledge and evidence that we develop. Our goal is to create "repeat customers" who seek us out for their health care information needs in addition to introducing AHRQ to new audiences.

# **Media and Marketing Strategies**

OCKT's tactics can be divided into five categories: media outreach, print and electronic outreach, audio/video tactics, direct-to-consumer outreach tactics, and marketing. These categories are not exclusive, but they do provide a good structure for connecting the dots among all the activities OCKT pursues to promote AHRQ's mission and messages. These categories are intended to overlap so that we reach our audiences with multiple vehicles.

### **Media Outreach Tactics**

OCKT invests a great deal of time and effort on media outreach. The media are an important audience and a critical conduit to the public, policymakers, and health professionals. As part of this effort, we work to build relationships with reporters so they know to come to AHRQ as an important resource for information.

#### Press Releases

OCKT sends out press releases and pitches to reporters announcing AHRQ products and research findings. We try to "tell a story" in our press releases by linking the news hook of the release to other Agency activities and messages. For example, press releases on health IT fundings link back to our full portfolio of health IT and safety research.

Press releases require clearance from the U.S. Department of Health and Human Services. See Appendix 3-A for the steps in the clearance process.

#### Media Interviews

OCKT sets up interviews for AHRQ staff, grantees, and contractors in response to requests from reporters. We also proactively seek out interviews in publications that are appropriate to a specific message. OCKT provides background information, talking points, and sample questions and answers for media interviews upon request.

Major media interviews require clearance from the U.S. Department of Health and Human Services. See Appendix 3-B for details on the clearance process.

### **News & Numbers**

Every week, OCKT sends out an e-mail to reporters with "News and Numbers" featuring data from AHRQ's Healthcare Cost and Utilization Project or Medical Expenditure Panel Survey on topical, timely issues. It has proven to be an excellent and consistently successful vehicle to promote AHRQ data. News and Numbers are available online at: http://www.ahrq.gov/news/newsnumix.htm.

### **Editorial Boards**

OCKT sets up visits with the editorial staffs of newspapers when senior AHRQ staff travel. Reaching out to the editorial staff of newspapers is critically important to building relationships with editors who determine what reporters on staff should cover.

### **Media Tours**

To target the outreach to appropriate audiences, we often need to set up audience-specific outreach activities. One such activity is a media tour that reaches a specific type of media, such as women's magazines, or all media in a geographic location.

# **Print/Electronic Outreach Tactics**

AHRQ uses a variety of publications—both print and Web-based—to convey messages to the public, policymakers, and professional audiences. Unlike the tactics in the media category, these go directly to the audiences and not through a media intermediary.

#### E-Newsletters

OCKT has created two electronic newsletters to promote Agency activities. The AHRQ Electronic Newsletter distributes news about important Agency activities once a week to nearly 35,000 subscribers. The electronic newsletter, available at: http://www.ahrq.gov/news/enewsix.htm, is an important complement to AHRQ's long-standing print publication *Research Activities*, which reaches some 27,000 subscribers. The Patient Safety/Health IT Electronic Newsletter distributes important patient safety and health IT news to more than 20,000 subscribers once a month. It is available at: http://www.ahrq.gov/news/ptsnews.htm.

### Journal Commentaries

For the last several years, OCKT has arranged for the AHRQ Director to author bylined commentaries in a number of patient safety and other medical journals. OCKT works with AHRQ staff to write draft commentaries and then submit them to the journal.

### **Columns**

OCKT has launched a regular biweekly Web column from the AHRQ Director. The brief, easy-to-understand advice columns help consumers navigate the health care system by addressing issues such as how to recognize high-quality health care; how to be an informed health care consumer; and how to choose a hospital, doctor, and health plan. The columns are available at: http://www.ahrq.gov/consumer/cc.htm.

### Op-eds

OCKT is developing a series of op-eds to have on file to respond to news stories and breaking issues. If an op-ed is in response to a news story, it has to be written and cleared quickly and submitted within 48 hours. The goal is to have cleared op-ed language on priority topics that can be quickly adapted to a particular newspaper or story. The language also could be used to place op-eds in cities where the AHRQ Director or other AHRQ staff are delivering major speeches.

# **Audio/Video Tactics**

OCKT also uses audio/video to augment information delivered to audiences through other means. The tactics listed below are targeted to all audiences.

### **Newscasts**

OCKT produces a series of biweekly newscasts (formerly referred to as podcasts) on AHRQ research findings and news. The newscasts, which are available for download from iTunes and a number of other Web sites, feature interviews with the AHRQ Director or AHRQ researchers and staff. Currently, more than 470 Web sites link to AHRQ's Newscasts, including the National Quality Forum, the American College of Preventive Medicine, and the National Business Coalition on Health. In addition, more than 230 radio stations receive our weekly 1-minute radiocast. Content from AHRQ's newscasts can be found online at: http://healthcare411.ahrq.gov.

### **Public Service Announcements**

AHRQ has produced a number of audio and video public service announcements (PSAs) on important issues and messages derived from AHRQ research. We have produced audio PSAs in both English and Spanish. We distribute all our PSAs nationally to at least 150 radio stations each month. Content can be found at: http://www.ahrq.gov/news/psas.htm.

### In-store audio

OCKT has worked with large retailers to produce PSAs on important health care messages that are broadcast to shoppers while they are in the store. Some messages direct consumers to visit the pharmacy to pick up a copy of an AHRQ brochure on medication safety, for example.

### **Direct-to-Consumer Outreach Tactics**

In addition to media and print outreach, OCKT also is pursing activities that are specifically targeted to consumers. For example, OCKT is working with the Ad Council to develop two, 3-year campaigns on priority AHRQ consumer messages on communicating with health care providers and getting the right preventive care tests.

# **Marketing**

Building on the tactics listed above to build awareness, OCKT undertakes long-term marketing of AHRQ research and products. We develop marketing plans that encompass different levels of effort and outreach to a range of audiences. We work with partners and stakeholders to maximize our marketing outreach and potential. We use a number of marketing techniques, including those listed below.

### Web Marketing

Although direct mail is used as part of the Agency's marketing, increasingly we are using e-mail and outreach through the Internet to reach audiences. It saves money and can be more immediate. Our goal is to encourage our partners and other organizations to link to products on the AHRQ Web site or to post notices of AHRQ products and findings on their Web sites.

### **Partnerships**

Over the years, OCKT has been very successful at leveraging our resources through partnerships. OCKT has developed hundreds of partnerships with groups such as AARP and United Healthcare on significant topics and products that have helped promote the Agency very widely.

### **Direct Mail**

Although newer dissemination techniques are taking hold, there is still a place for "snail mail" in marketing. There are audiences who still like to receive a hard copy of a document, and it is effective for larger publications. OCKT mails products or marketing fliers to appropriate organizations and audiences.

# **Additional Information**

To discuss specific issues or obtain additional guidance on media and marketing outreach, contact:

Karen Migdail Director of Media Relations Office of Communications and Knowledge Transfer E-mail: Karen.migdail@ahrq.hhs.gov

Phone: 301-427-1855

# **Appendix 3-A. Clearance Process for Press Releases**

Press releases about research from the Agency for Healthcare Research and Quality (AHRQ) require clearance from the U.S. Department of Health and Human Services (HHS). The clearance process begins with AHRQ's Office of Communications and Knowledge Transfer (OCKT) and proceeds as follows:

- 1. AHRQ's Director of Media Relations and the OCKT Strategic Planner review an early draft of the release. Edits are incorporated.
- 2. The AHRQ Task Order Officer reviews the next draft. Edits are incorporated
- 3. The draft then goes to the grantee, contractor, or partner for review. A quote from a grantee, contractor, or partner representative can be incorporated, if appropriate.
- 4. Edits from the grantee, contractor, or partner are reviewed and incorporated as appropriate. The AHRQ Task Order Officer will arbitrate any questions about edits.
- 5. The press release then undergoes AHRQ clearance.
- 6. When AHRQ clearance is completed, the release is sent to the Office of the Assistant Secretary for Public Affairs at HHS for review and approval.
- 7. If the grantee, contractor, or partner wants to create its own local press release, the Task Order Officer, OCKT Strategic Planner, AHRQ Director of Media Relations, and the OCKT staffer assigned to the release establish the terms under which this can occur. At a minimum:
  - The press release must be directed to local media only.
  - The press release must acknowledge AHRQ sponsorship.
  - AHRQ must approve the press release.
  - The press release should include a quote from the lead Federal spokesperson.
  - The press release must not precede AHRQ's release.

# **Appendix 3-B. Clearance Process for Media Interviews**

Interview requests from major media outlets (*New York Times, Wall Street Journal*, ABC News, CNN, etc.) about research from the Agency for Healthcare Research and Quality (AHRQ) must be submitted to AHRQ's Office of Communications and Knowledge Transfer (OCKT). OCKT is required to clear interviews with the U.S. Department of Health and Human Services' Office of Communications before the interview occurs.

Please contact Karen Midgail, AHRQ Director of Media Relations, at 301-427-1855 or karen.migdail@ahrq.hhs.gov to request clearance. Arranging interviews before receiving approval is not permitted.

Interview requests should be submitted promptly. Using the Media Interview Request Template below, requestors should provide as much information as possible on who will be conducting the interview, who will be interviewed, what the topic is, why the request was made, where the interview will take place, and when the interview may occur. The requestor should also provide a brief summary of proposed responses to questions and key messages.

# **Media Interview Request Template**

Reporter:
Organization:
Phone no. (nos.):
Subject:
Deadline:
Spokesperson:
Additional information: (This can include special instructions or questions from AHRQ staff, a list of specific questions raised by the reporter, etc.)

# Section 4: Audio and Video Products Contents

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4 4

### Introduction

The Agency for Healthcare Research and Quality (AHRQ) produces numerous video and audio products every year. Staff in the Office of Communications and Knowledge Transfer (OCKT) have experience producing these products and will assist AHRQ project or task order officers or other AHRQ staff who are considering developing a video or audio product to convey an Agency message. AHRQ staff must consult with the appropriate member of OCKT staff to discuss whether a video or audio product is an appropriate medium for delivering a message.

Before beginning any work on a video or audio product, you should be able to answer basic questions about your proposed product, such as its purpose, audience, and funding. The checklists at Appendix 4-A (Video Consideration Checklist) and Appendix 4-B (Audio Consideration Checklist) can assist you in creating your product. The information below covers details that must be addressed.

# First Steps

You must be able to:

- Define what you intend to accomplish by creating the product, including the message you hope to send.
- Articulate what will be gained if the product is created, such as saving lives, reducing the incidence of a common medical error, or training on a technique.
- Identify the problem or issue being addressed if the product is to be used for training.
- Demonstrate how the message aligns with AHRQ priorities.
- Provide a rationale for why video or audio is the best way to convey the message.
- Provide a means of evaluating the effectiveness of the product.
- Show that there is funding to produce your product.
- Show that there is no existing video or audio product about your message or topic that is in use.
- Identify a receptive target audience, and identify how you believe they will use your product.

You also should have some idea how long the product will be valuable, or its "shelf life." For a product to be cost effective, the information it conveys should be useful for at least 1 year.

# **Budget and Timeline**

Video and audio projects are expensive and time consuming and should not be initiated without a clear budget and timeline. You should ensure that you have a funding source that includes money for pre-production, including scripting; post-production, including captioning and transcripts; and duplication, including packaging. For example, all video products must be closed captioned (or subtitled), transcripts must be provided for all audio (regardless of the format), and any slides used in an Internet product must contain alternate text descriptors in HTML.

You will need to determine the number of your final products needed as well as the distribution plan. If the product is tied to an event, the production timeline needs to reflect the date the product must be in hand. OCKT can assist with this planning.

# Format and Contracting Considerations

You will also need to consider format and contracting issues before embarking on video or audio production, including product length, features such as interactivity or animation, availability and cost of background (b-roll) video or music, and hiring actors. OCKT staff can recommend video production vendors that have created successful products for the Agency.

Video and audio products require reviews at both AHRQ and the Department of Health and Human Services (HHS). If approvals are required from multiple sources, you should determine at the outset who the reviewers will be and how they will review the product (for example, as a group or individually). OCKT, working with you or a designee, will obtain clearance from HHS. Departmental requirements state that the clearance forms must be submitted by OCKT through specific channels. All of these reviews and clearances should be reflected in the project's timeline.

Because spoken messages are very different than written messages, you should work with OCKT staff members with specific experience in the spoken word to author the product's script. This will save time and money and ultimately will produce a more satisfactory product. If you choose to have a contractor create the script, OCKT staff members must review the script and rough cuts to be sure they meet Agency standards and requirements.

Every person who appears in the video or audio product must sign a talent release form that permits the product to be distributed. The type of release used is determined by the person's role in your product. OCKT staff can assist you with releases. Samples appear in Appendix 4-C and 4-D.

Specific disclaimer language and the AHRQ-branded logo (which OCKT will supply) must appear on all video products and packaging that AHRQ distributes. If the product is being produced and distributed through a grantee, the grantee information also must be included. Any material that carries the AHRQ logo or is identified as a product of the U.S. Government must comply with the requirements of Section 508 of the Rehabilitation

Act. Contractors, acting as agents of AHRQ, also are required to comply with Section 508 requirements, and specific language about compliance should be written into contracts or task orders. For example, all video products must be closed captioned (or subtitled), transcripts must be provided for all audio (regardless of the format), and any slides used in an Internet product must contain alternate text descriptors in HTML.

*Note*: Although some video, audio, or Web products initially may not have been intended for U.S. Government use, once it is given to the U.S. Government for further distribution or official approval, it must comply with the requirements of Section 508 of the Rehabilitation Act. OCKT can help you comply with these Government requirements. Appendix 4-E provides the latest format requirements for video products. Contractors are urged to consult with OCKT on format requirements before beginning a video product.

### **Additional Information**

To discuss specific projects or to obtain additional guidance on audio or video products, contact:

Karen Carp Office of Communications and Knowledge Transfer

E-mail: Karen.carp@ahrq.hhs.gov

Phone: 301-427-1858

# **Appendix 4-A. Video Consideration Checklist**

This checklist contains questions to assist AHRQ project officers and contractors who are considering the creation of a video product.

What do you intend to accomplish with this video (e.g. does the video's message relate to saving money, reducing a common medical error, etc.)?  What specific message are you trying to send?  How does your message align with AHRQ priorities?  Why is video the best way to convey your message?  If the video is intended to be used for training, what particular problem or issue are you addressing?  Audience  Have you had specific requests for videos or DVDs regarding this information?  Who is your target audience?  Who is your target audience?  How many people do you believe will watch your video?  How and when do you envision people viewing the video?  How will the audience use the information presented?	Purpose	
How does your message align with AHRQ priorities?  Why is video the best way to convey your message?  If the video is intended to be used for training, what particular problem or issue are you addressing?  Audience  Have you had specific requests for videos or DVDs regarding this information?  Who is your target audience?  Who is your target audience?  How many people do you believe will watch your video?  How and when do you envision people viewing the video?  DVD	does the video's message relate to saving money,	
Why is video the best way to convey your message?  If the video is intended to be used for training, what particular problem or issue are you addressing?  Audience  Have you had specific requests for videos or DVDs regarding this information?  YesNo If yes, from which individuals or groups?  Who is your target audience?  How many people do you believe will watch your video?  How and when do you envision people viewing the video?  DVDOver the InternetAt a conferenceOther:	What specific message are you trying to send?	
If the video is intended to be used for training, what particular problem or issue are you addressing?  Audience Have you had specific requests for videos or DVDs regarding this information?  Who is your target audience?  How many people do you believe will watch your video?  Number  Number  Number  Number  Video?  Number  Over the Internet  At a conference  Other:	How does your message align with AHRQ priorities?	
Audience  Have you had specific requests for videos or DVDs regarding this information?  Who is your target audience?  How many people do you believe will watch your video?  How and when do you envision people viewing the video?  Who is your target audience?  DVD  Over the Internet  At a conference  Other:	Why is video the best way to convey your message?	
Have you had specific requests for videos or DVDs regarding this information?  Who is your target audience?  How many people do you believe will watch your video?  How and when do you envision people viewing the video?  Who is your target audience?  Number  Number  Over the Internet  At a conference  Other:		
regarding this information?  If yes, from which individuals or groups?  Who is your target audience?  How many people do you believe will watch your video?  Number  Number  DVD  DVD  Over the Internet  At a conference  Other:	Audience	
How many people do you believe will watch your video?  How and when do you envision people viewing the video?  DVD  Over the Internet  At a conference Other:		If yes, from which individuals or
How and when do you envision people viewing the video?  — DVD — Over the Internet — At a conference — Other:	Who is your target audience?	
video?  Over the Internet  At a conference  Other:	video?	Number
How will the audience use the information presented?		Over the Internet At a conference
	How will the audience use the information presented?	

How long will the information on the video be useful? What will determine when it is out of date?	< 6 months 1 year > 1 year
Do similar videos already exist?	YesNo If yes, how will your video be different?
Funding	
What is the budget for the video?	\$
Does the budget include funds for	
Pre-production (including scripting)?	YesNo No
Post-production (including captioning/subtitles and transcripts)?	YesNo
Duplication (including packaging)?	
What is the funding source?	
Scheduling	
When do you need to have a finished video in hand?	Date:
Is the video project tied to any event?	YesNo If yes, name and date of the event:
How many copies of the video will you require?	Quantity:
In what format will you need the video?	DVD Web Inserted into PowerPoint Other?
How will the videos be distributed?	Mail Conference Internet Other:
Does the video need to be packaged in a particular way?	
If yes, have you contacted someone from OCKT's publishing staff to review the packaging? (See Section 1 of the AHRQ Publishing and Communications Guidelines for information on style and submitting art files.)	

Production		
How long will the video be?	Minutes:	
If the video will be distributed on DVD, will it be interactive?	YesNo If yes, how will it be interactive?	
Who will be featured in the video?		
How were these people chosen for the video? Will b-roll (background video) be used?	Rationale:YesNo	
If yes, how will it be obtained? And if there is a separate cost, how much will that be?	\$	
Will music be added?	YesNo	
If yes, what is the cost of the music, and what rights does purchase convey to AHRQ?		
Will the video have animation?	YesNo	
If yes, how will it be obtained, and what is the cost of the animation?	\$	
Who is drafting the script? (OCKT must review all scripts.)	Name	
What vendor will produce the video?	Company Name Main Contact with Phone Number:	
Why was this vendor chosen?	Rationale:	
Through what mechanism will the vendor be paid (e.g., contract, task order, other)?		

Clearance and Contracting	
Who on the project will work with OCKT on getting AHRQ and HHS clearance for the video?	Name
In addition to OCKT staff, who will need to approve the script and/or final video?	Name: Contact information:
(a) Has the vendor been informed he is required to provide transcripts of all audio files, and (b) is this written into the contract or task order?	(a) YesNo If no, why not?  (b) YesNo If no, why not?
(a) Has the vendor been informed that every person whose face is seen on the video must sign a talent release, and (b) is this written into the contract or task order? See Appendix 4-C for a sample.	(a) YesNo If no, why not?  (b) YesNo If no, why not?
(a) Has the vendor been informed that the final version of the video must comply with all relevant requirements of Section 508 of the Rehabilitation Act (including providing captioning or subtitles), and (b) is this written into the contract or task order?	(a)YesNo If no, why not?  (b)YesNo If no, why not?
Evaluation	
How will you measure the video's impact or success?	

# **Appendix 4-B. Audio Consideration Checklist**

This checklist contains questions to assist AHRQ project officers and contractors who are considering the creation of an audio product.

Purpose	
What do you intend to accomplish with this audio recording (e.g. does the message relate to saving money, reaching a particular audience, etc.)?	
What specific message are you trying to send?	
How does your message align with AHRQ priorities?	
Why is an audio product the best way to convey your message?	
If the recording is intended to be used for training, what particular problem or issue are you addressing?	
Audience	
Have you had specific requests for audio recordings	YesNo If yes, from what individuals or
regarding this information?	groups?
Who is your target audience? How will the audience use the information presented?	
Who is your target audience? How will the audience	

How long with the information be useful? What will determine when it is out of date?	< 6 months 1 year > 1 year
Do similar recordings already exist?	YesNo If yes, how will your recording be different?
Funding	
What is the budget for the project?	\$
Does the budget include funds for  ◆ Pre-production (including scripting)?  ◆ Post-production (including transcripts)?  ◆ Duplication (including packaging)?	YesNo YesNo YesNo
What is the funding source?	
Scheduling	
When do you need to have a finished product in hand?	Date:
Is the product tied to an event?	YesNo If yes, name and date of the event:
How many copies of the recording will you require?	Quantity:
How will the recording or file be distributed?	Mail Conference Internet Other:
Does it need to be packaged in a particular way?	
If yes, have you contacted someone from OCKT's publishing staff to review the packaging? (See Section 1 of the AHRQ Publishing and Communications Guidelines for information on style and submitting art files.)	

Production		
How long will the recording be?	Minutes:	
Who will be featured on the recording?		
How were these people chosen for the product? Will stock music be used?	Rationale: YesNo If yes, (a) how will it be obtained (b) what is the cost of the music, and (c) what rights does purchase convey to AHRQ?	
Who is drafting the script? (OCKT must review all scripts.)	Name	
What vendor will produce the recording?	Company name:	
	Main contact with phone number:	
Why was this vendor chosen?	Rationale	
Through what mechanism will the vendor be paid (e.g., contract; task order; other)?		
Clearance and Contracting		
Who on the project will work with OCKT on getting clearance for the recording?	Name	
In addition to OCKT staff, who will need to approve the script and/or final recording?	Name: Contact information:	
(a) Has the vendor been informed he is required to provide transcripts of all audio files, and (b) is this written into the contract or task order?	(a) YesNo If no, why not?  (b) YesNo If no, why not?	
(a) Has the vendor been informed that every person whose voice is heard in the recording must sign a talent release and (b) is this written into the contract or task order? See Appendix 4-C for a sample.	(a) YesNo If no, why not?  (b) YesNo If no, why not?	

(a) Has the vendor been informed that the final version of the recording must comply with all relevant requirements of Section 508 of the Rehabilitation Act, and (b) is this written into the contract or task order?	(a) Yes If no, why not?  (b) Yes If no, why not?	No
Evaluation		
How will you measure the product's impact?		

# Appendix 4-C. AHRQ Public Service **Announcement Release Form**

This form is used when specific people are brought in for specific roles in a production

#### TALENT RELEASE FORM

Agency for Healthcare Research Quality (AHRQ) U.S. Department of Health & Human Services Public Service Announcement about

Production Date:
PLEASE PRINT
NAME:
ADDRESS:
PHONE NUMBER:
E-MAIL ADDRESS:
I hereby grant to the Agency for Healthcare Research Quality ("AHRQ") and [list any other offices or partners] their assignees, successors, and those acting in pursuant to their authority:
(1) The right and permission to use, copyright, and publish photographs, or videos of me,

- 0 r
- whether alone or with any other material, for informational or promotional purposes; (2) The right and permission to use, copyright, and publish recordings of my voice,

whether alone or with any other material, for informational or promotional purposes; and

(3) The right and permission to use and publish my name, biographical information, and/or other identifying material in conjunction with photographs or videos of me, or recordings of my voice.

This release covers use of the above-mentioned material by AHRQ and [list any other offices or partners] in any broadcast, cable, Web sites, other private audio or video networks, or within other informational or promotional materials prepared by AHRQ and

<sup>&</sup>lt;sup>1</sup> This text serves as an example of a production partnership.

[list any other offices or partners] for distribution, without profit to the AHRQ or [list any other offices or partners]. It is understood no compensation, 2 royalties or residuals will be paid.

I warrant that I am over the age of 18 years<sup>3</sup> and that I am free to enter into this Agreement.

SIGNATURE: DATE:

<sup>&</sup>lt;sup>2</sup> The word "compensation" should be struck if compensation is being paid for a person's participation in the production. AHRQ never pays royalties or residuals.

<sup>&</sup>lt;sup>3</sup> If a minor is being used, this statement should be amended and additional signature line(s) should be added for a parent or guardian to sign. The participant must also sign the release form.

# Appendix 4-D. AHRQ Talent Release Form

This form is used when recording large meetings for rebroadcast later and certain people will be speaking and identified, including audience members who ask questions on camera.

# TALENT RELEASE FORM Agency for Healthcare Research Quality (AHRQ) U.S. Department of Health & Human Services

I do hereby authorize AHRQ, assignees, successors, and those acting pursuant to its authority to:

- (1) Record my participation and appearance at this meeting on videotape, audiotape, file, photograph, or other medium.
- (2) Use my name, likeness, voice, CV, and biographical material in connection with or promotion of these recordings.
- (3) Exhibit, broadcast, Webcast, store and forward, copy, edit, and/or distribute such recording in whole or in part without restriction or limitation for any educational, commercial, or promotional purpose which AHRQ, assignees, successors, and those acting pursuant to its authority, deem appropriate.
- (4) No royalties, compensation, or residuals will be paid.
- (5) I hereby waive any right to inspect and approve the rough cut, promotional, or finished product.

NAME:	
ADDRESS:	
PHONE NUMBER:	E-MAIL:
SIGNATURE:	

# Appendix 4-E. Best Formats for AHRQ Video Products

(As of May 26, 2009)

For video projects, AHRQ requires the following file formats:

- (1) An uncompressed .avi file at a resolution of 720x480 (NTSC). These files will be large and may require one or more data DVDs to deliver the final product to AHRQ. These .avi files are for mastering purposes only and should not contain the embedded captioning.
- (2) An MPEG-2 file at 720x480 resolution and a Windows Media file at a 640x480 resolution for the Web. Neither should contain embedded captioning.
- (3) A Windows Media 640x480 file version with captions/subtitles embedded in the video file for the CD. Contractors must provide Windows video with the captions/subtitles on the video. This enables users to view the video and see the captions/subtitles within the PowerPoint presentation.

See example below:



The captions should be embedded in the video file and should not be linked to text somewhere on the page.

### See example below:



### (4) A transcript of the captions in a Word file.

Contractors must not send Windows Media files for which a proprietary (downloadable only) plug-in for Windows Media is required. Many users do not have Administrator rights to their machines, and asking them to install an additional file to view the videos is unreasonable.

Please note: These requirements are subject to change. Before embarking on a video project for AHRQ, contractors should contact Karen Carp at 301-427-1858.

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Tool Checklist	

### What is a Toolkit?

To translate research findings into policy and practice, the Agency for Healthcare Research and Quality (AHRQ) and its grantees or contractors occasionally decide to create toolkits based on their work. An AHRQ workgroup developed the following definitions:

- A "toolkit" is an action-oriented compilation of related information, resources, or tools that together can guide users to develop a plan or organize efforts to conform to evidence-based recommendations or meet evidence-based specific practice standards.
- A "tool" is an instrument (e.g., survey, guidelines, or checklist) that helps users
  accomplish a specific task that contributes to meeting a specific evidence-based
  recommendation or practice standard.

Toolkits provide action-oriented guidance for practitioners or policymakers to apply the research to their work. This document outlines considerations for developing effective toolkits, and includes a series of checklists described below.

### Checklists

The checklists provided should help the toolkit developer(s) and AHRQ reviewers in designing and checking the final product under a grant or contract with AHRQ. Three checklists will help you with the overall toolkit:

- The first checklist is used to determine if a toolkit is the right method to disseminate your research. Throughout your project, revisit this checklist to see if the results of the research continue to fit the toolkit frame.
- The second checklist will help you develop the toolkit's contents once you decide on the toolkit format. This list looks at the type of information you should present in a toolkit and how to highlight critical versus supplementary information.
- The third checklist will assist your team in thinking about the framework for your research-based tools—target users, toolkit style, and the function of each tool. The checklist also prompts your team to consider validating the toolkit with its intended audience, steering users to additional information, and measuring the impact of the toolkit.

- The fourth checklist is useful for the entire toolkit but is intended for individual tools. This checklist addresses:
  - ♦ Organization
  - ♦ Design
  - **♦** Language

This checklist provides more detail and will aid your team in creating a set of tools that is consistent, making them easier to navigate and use.

In the planning stages and during the production process, review each of the four checklists with your team to ensure that you provide users with a product that includes all critical information. Fill out the four checklists for the entire toolkit, and for each individual tool contained in the checklist, complete checklist four (see Table 1). To proceed, make sure you have answered "yes" to each item in the checklists. If you answer "somewhat" or "no" to any of the items, brainstorm with your team about how to resolve any concerns.

Table 1. Checklists to use with your toolkit and tools

	Toolkit	Tool
1. "Is This a Toolkit?" Checklist	✓	
2. Toolkit Content Checklist	✓	
3. Toolkit Usability Checklist	✓	
4. Tool Checklist	✓	✓

# **How Do The Checklists Help Me?**

### 1. "Is This a Toolkit?" checklist

Toolkits are effective for presenting action-oriented recommendations, but they are not appropriate for all research. At the beginning of your project, and throughout the process, answer the checklist questions to determine if a toolkit is the proper way to circulate your research findings.

### 2. Toolkit content checklist

Toolkits should have a standard format and look as well as similar types of information to easily guide users through a process of change. Answer the content checklist questions for your toolkit and tools to determine whether you have provided users with sufficient information to implement the changes in behavior that your research recommends.

### 3. Toolkit usability checklist

Think deliberately about the toolkit and its components: the potential users, the users' goals, the toolkit's look, expert validation, and measures of success. This checklist will help you and your team to plan a well-designed, usable toolkit.

### 4. Tool checklist

This checklist addresses three areas: organization, design, and language.

Cohesive and logical organization helps users navigate the tool, improves comprehension, and encourages use. Answer the questions in the Organization Considerations section to determine how successfully your toolkit aids users in finding and using the information presented.

Each tool should conform to *AHRQ Publishing and Communications Guidelines*. The guidelines ensure a consistent look and feel across materials. You may want to consider consulting with a graphic designer who can assist with layout and incorporating graphic elements into the toolkit. Examine the questions in the Design Considerations section to determine if you can improve the tool's look and usability.

Clear and concise language aids in communicating your message. Use the Language Considerations section to ensure your grammar and word choice are appropriate for the tool. You may also consider having an editor review the product to ensure these considerations are addressed.

1. "Is This a Toolkit?" Checklist	
A "toolkit" is an action-oriented compilation of related information, resources, or tool together can guide users to develop a plan or organize efforts to conform to evidence recommendations or meet evidence-based specific practice standards.	
Toolkits are effective for presenting action-oriented recommendations, but they are appropriate for all research. At the beginning of your project, and throughout the proper address these checklist questions to determine if a toolkit is the proper way to share research findings.	ocess,
To proceed with a toolkit format, make sure you have answered "yes" to each item in checklist. If you answer "no" to any of the items, brainstorm with your team about he any concerns. You may also want to consider pursuing another stand-alone productive research paper or a fact sheet.	ow to resolve
What behavior or action are you trying to promote?	
Why is a package of tools the best way to attain your goal (as opposed to a research sheet, or other stand-alone product?	arch paper,
3. Have you verified that a product like this does not already exist?	□ Yes □ No
4. Did your research generate multiple action-oriented tools (such as specific procedures, protocols, or other structured activities) that, working together, can help users develop a plan or organize efforts to conform to evidence-based practice?	□ Yes □ No
5. Have you spoken to potential users to determine the demand for a product like this one? How do you know there's a demand? What research or data supports this demand?	□ Yes □ No
	_

#### 2. Toolkit Content Checklist

Toolkits should have a standard format and look as well as similar types of information to easily guide users through a process of change. Answer the content checklist questions for your toolkit and tools to determine if you have provided users with sufficient information to implement the changes in behavior that your research recommends.

To proceed, make sure you have answered "yes" to each item in the checklist. If you answer "no" to any of the items, brainstorm with your team about how to resolve any concerns.

1.	Are the toolkit and tools based on tasks?	☐ Yes	□ No
•	Does the toolkit provide sequential steps users should follow?	☐ Yes	□ No
•	Does the toolkit provide examples of how others have used the toolkit or tools successfully?	□ Yes	□ No
2.	Does the first page of the toolkit state its purpose?	☐ Yes	□ No
3.	Does the first page of the toolkit explain how to use the toolkit?	□ Yes	□ No
4.	Does the first page of the toolkit list each tool and its purpose?	☐ Yes	□ No
5.	Does the first page of the toolkit describe target users and address their differing goals in using the toolkit (see Toolkit Overview Checklist)?	□ Yes	□ No
6.	Do the tools provide necessary information regarding what users need to complete tasks, such as:	□ Yes	□ No
	<ul> <li>Staff time.</li> </ul>		
	<ul> <li>Staff skills.</li> </ul>		
	- Materials.		
	<ul> <li>Equipment.</li> </ul>		
	<ul> <li>Administrative clearances and approvals.</li> </ul>		
7.	Does the toolkit organize resources to achieve a goal through specific actions (assign responsibilities, create a schedule, document progress, and ensure accountability)?	☐ Yes	□ No
8.	Does each tool give adequate instruction on how to use it (e.g., collect and analyze data, interpret results, implement suggestions, and assess impact)?	☐ Yes	□ No
9.	Does the toolkit provide users with additional resources for more information?	□ Yes	□ No

3.	Toolkit Usability Checklist			
too	nk deliberately about the toolkit and its components: the potential users, the likit's look, expert validation, and measures of success. This checklist will he measures of success. This checklist will he measures of success.			
"nc	To proceed, make sure you have answered "yes" to each item in the checklist. If you answer "no" to any of the items, brainstorm with your team about how to resolve any concerns or consider pursuing an alternative method for disseminating your research results. <sup>1</sup>			
Us	ers			
1.	Have you identified your target group of users and taken them into account when designing the toolkit? How?			
		_ □ Yes □ No - -		
2.	Is there more than one target group of users?	☐ Yes ☐ No		
•	Will they have different goals?	☐ Yes ☐ No		
•	What are some of those goals?	-		
3.	Have you explained how different users can adapt the toolkit to suit their needs?	☐ Yes ☐ No		
4.	What tasks do you want users to accomplish with each tool?			
A B C D E				
5.	Are target users familiar with the toolkit's concepts and terminology?	☐ Yes ☐ No		

 $<sup>^{1}</sup>$  For question 2, if there is only one target group, the answer will be "no" and the subsequent two questions are not applicable.

3. Toolkit Usability Checklist (continued)					
Sty	Style				
1.	How is this toolkit presented?  Ubeb site Video (CD/DVD) Other:	☐ Printed Document☐ Audio (Digital, Web-based)			
•	AHRQ has style guides for many different kinds of presentations that include information elements, such as font size, typeface, and color.  Does the toolkit comply with AHRQ Publishing and Communications  Guidelines for that presentation style?				
2.	Layering, or page sequence, in a Web-based environment reflects the hierarchy of organization in a document. Primary information is on the first level, and secondary information is on the second level of the Web site.				
•	If your toolkit is Web-based, does your critical information appear on the primary level?		☐ Yes ☐ No ☐ Not Applicable		
•	Is your secondary information lin level of information?	ked so it is supplementary to the first	☐ Yes ☐ No ☐ Not Applicable		
3.	Does the toolkit as a whole have a cohesive, AHRQ-branded look and follow the design specifications laid out in the AHRQ Publishing and Communications Guidelines?				
Tes	sting and Evaluation				
1.	Will the toolkit be tested before it	t is published?	☐ Yes ☐ No		
•	How will the toolkit be tested?				
	<ul><li>□ Expert review</li><li>□ Usability testing</li></ul>	☐ Focus groups with users☐ Other:			
2. H	How can users measure the impact of the toolkit within their organization? What are the measures of success? (Suggest 3-5 methods of impact measurement.)				

3.	3. Toolkit Usability Checklist (continued)				
lm	Implementation				
1.	If the toolkit requires updates, will you, the developers, perform those updates?	☐ Yes ☐ No ☐ Not Applicable			
2. If the toolkit is a Web site and has the capacity to serve as a "live" resource for users (e.g communities of practice for those with shared interests, bulletin boards, networking sites) which organization will provide ongoing quality oversight and technical support?		networking sites),			

_				
4.	1. Tool Checklist			
This checklist addresses three areas: organization, design, and language.				
'sc	To proceed, make sure you have answered "yes" to each item in the checklist. If you answer "somewhat" or "no" to any of the items, brainstorm with your team about how to resolve any concerns.			
Organization Considerations  Cohesive and logical organization helps users navigate the tool, improves comprehension, and encourages use. Answer the questions in this section to determine how successfully your toolkit aids users in finding and using the information presented.				
1.	Does the tool have an advance organizer, such as a table of contents or site map?	☐ Yes	□ No	
•	Does the advance organizer provide a coherent, complete "big picture" view of the tool?	☐ Yes ☐ Some	□ No what	
2.	Does the tool have an organizational hierarchy and a clear structure of main topics and sub-topics?	☐ Yes ☐ Some	□ No what	
•	Restricting your hierarchy to fewer than five levels makes it easier for users to navigate the tool. Does the tool have fewer than five levels in the hierarchy?	□ Yes	□ No	
•	Is the hierarchy maintained throughout the tool?	☐ Yes☐ Some	□ No what	
3.	Is the tool structure based on tasks?	☐ Yes ☐ Some	□ No what	
4.	Does the tool have headings (this can apply to printed documents, Web-based documents, presentations, etc.)?	□ Yes	□ No	
•	Are sections or headings arranged in a logical order? Do they clearly describe the contents of the sections they cover?	☐ Yes☐ Some	□ No what	
•	Do the paragraphs relate to the headings? (Do they contain information users would expect to find under each heading?)	☐ Yes☐ Some	□ No what	
	Does each section identify the appropriate user?	☐ Yes ☐ Some	□ No what	
5.	Are there clear cross references to other sections, research, tools, or toolkits (e.g. Web hyperlinks)?	☐ Yes☐ Some	□ No what	

4.	Fool Checklist (continued)		
Eac con des	Design Considerations  Each tool should conform to AHRQ Publishing and Communications Guidelines. These ensure a consistent look and feel across materials. You may want to consider consulting with a graphic designer who can assist with layout and incorporating graphic elements. Examine the questions in this section to determine if you can improve the tool's look and usability.		
1.	Does each tool's design adhere to AHRQ Publishing and Communications Guidelines and have the same branding and style?	☐ Yes	□ No
2.	Does each tool address 508 compliance issues? <sup>2</sup>	☐ Yes	□ No
3.	Does the tool appear accessible and easy to use?	☐ Yes	□ No
4.	Does the tool have a visual focal point (logo, title, or design element)?	□ Yes	□ No
5.	Does the tool have an intentional and predictable grid with elements lining up vertically on the page? For example, do paragraphs start at 1" and all bulleted lists start at 2" from the border?	□ Yes	□ No
6.	Does the tool use common and easily readable fonts, such as Arial, Verdana, Tahoma, Garamond, or Times Roman?	☐ Yes	□ No
7.	Are different fonts or sizes used to denote different levels of the organizational hierarchy?	☐ Yes	□ No
8.	Does the tool use emphasis typeface techniques, such as bold and italics, without overusing them?	☐ Yes	□ No
9.	Are the fill-in spaces on the tool large enough for users to comfortably enter information? If the toolkit is Web based, do the fields expand to accommodate any number of characters?	□ Yes	□ No
10.	Are pages, items, or questions numbered to help users navigate?	☐ Yes	□ No
11.	Does the tool use bullets or numbers to list important information?	☐ Yes	□ No
12.	Does the tool use white space—the area not used for text, such as borders and the space between lines—to visually organize sections and items and make the tool more reader friendly?	□ Yes	□ No ewhat

<sup>&</sup>lt;sup>2</sup> Section 508 Amendment to the Rehabilitation Act of 1973 requires Federal agencies to make their electronic and information technology accessible to people with disabilities. See <a href="https://www.section508.gov">www.section508.gov</a> and Chapter 2 of the AHRQ Publishing and Communications Guidelines for more information and additional resources.

4.	Tool Checklist (continued)		
13.	Does the tool use color and shading to help users navigate?	☐ Yes	□ No
14.	Does the tool use visual displays in addition to text, such as tables, lists,	☐ Yes	□ No
	and graphics?	□ Some	what
•	Do the visuals have descriptive titles?	☐ Yes	□ No
•	Do the visuals support the text and help communicate the message to	☐ Yes	□ No
	users?	☐ Some	what
•	Are these visuals 508 compliant, i.e., do they contain text to make them	☐ Yes	□ No
	accessible to individuals with disabilities?	□ Some	what
Cle you	Language Considerations  Clear and concise language aids in communicating your message. Use this section to ensure your grammar and word choice are appropriate for the tool. You may also consider having an editor review the product to ensure these considerations are addressed.		
1.	Does the tool use clear and concise language that's free of jargon?	☐ Yes	□ No
2.	Does the tool use positive or simple negative sentence construction whenever possible? (for example: Always include or never include not don't include)	□ Yes	□ No
3.	Does the tool use the active voice (for example: consult with stakeholders not stakeholders should be consulted)?	□ Yes	□ No
4.	Does the tool use personal pronouns (for example: <i>your</i> evaluation team)?	□ Yes	□ No
5.	Does the tool use action verbs (for example: assess not make an assessment)?	□ Yes	□ No
6.	Does the tool use gender-neutral words?	☐ Yes	□ No
7.	Does the tool use words and terms consistently?	☐ Yes	□ No
8.	Does the tool use lists or tables for several items or conditional statements (i.e., if X, then Y)?	□ Yes	□ No
9.	Does the tool use correct spelling, grammar, and punctuation?	☐ Yes	□ No

# **Acknowledgments**

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# **Section 6: Branding Design Element Specifications**

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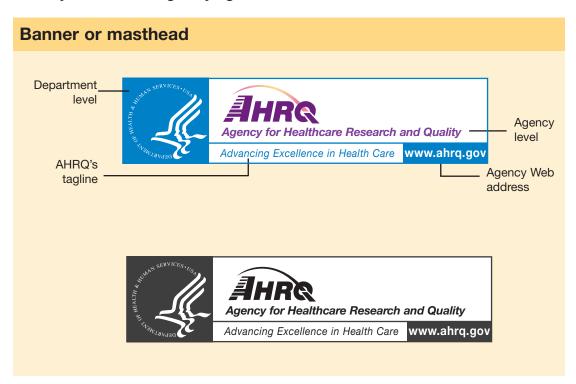
#### **Introduction**

The Agency for Healthcare Research and Quality (AHRQ) has created a branded identity so that our messages and materials are easily recognized by external audiences. This section was developed to give you an overview of how to apply AHRQ's design element to your products and materials to keep the integrity and clarity of the branded identity.

#### **Design Element Treatments**

The AHRQ design element must be included on all AHRQ products and communication materials produced in-house or by a contractor for AHRQ publication. It should be used on all printed and electronic products, and it should only be used in the ways shown in this guide. The branded identity is a combination of design elements in this order:

- Department of Health and Human Services (Department level)
- Agency for Healthcare Research and Quality (Agency level)
- Advancing Excellence in Health Care (AHRQ's tagline)
- www.ahrq.gov (Agency Web address)
- Optional: other logo or program identification



# Vertical placement example





# Horizontal placement example



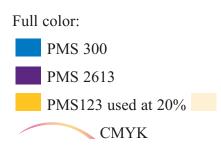
# **Teamed with Agency sub-brand example**





# Teamed with outside program example 2 point line 1 point line 2 point line 1 point line Agency for Healthcare Research and Quality Advancing Excellence in Health Care • www.ahrq.gov Children's Hospital Boston

#### **Color Palette**



Two color

PMS 300

PMS 2613

### **Web Templates**

The most current banner, footer, and subordinate page header graphics, as well as implementation source codes, are available at http://webdev.ahrq.gov. For access to the site, contact:

Biff Levee AHRQ Web Site Manager, Office of Communications and Knowledge Transfer E-mail: biff.levee@ahrq.hhs.gov

Phone: 301-427-1897



#### **Public Web sites\***



\*Example of a third-level domain of the AHRQ Web site with an authorized design element. See Section 2: Web Product and Web Site Development Guidelines.

#### **Electronic newsletters**



#### **Exhibits**

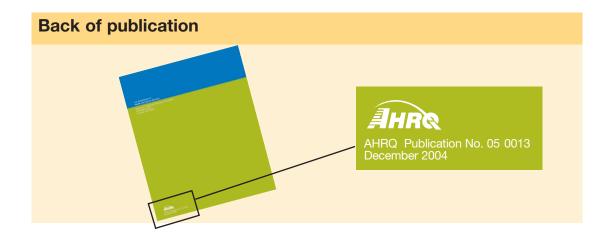
#### **General AHRQ exhibit**





# Special Uses For AHRQ Logo

In some cases, the AHRQ logo is used by itself. Check with the Office of Communications and Knowledge Transfer publishing staff for special uses. Call 301-427-1893. Also, see Section 1, page 1-6 for more specifics on logo use.



#### **Artwork File Formats**

The AHRQ design element is available in several formats upon request. The following table will help you determine which format you need.

Product	File Type
Desktop publishing	EPS or TIF
Word document	TIF
PowerPoint <sup>TM</sup>	JPEG
Web	JPEG or GIF

#### **Additional Information**

To discuss specific issues or to get additional guidance on branding design element specifications, contact:

Sandy Cummings

Deputy Director of Operations/Publishing

Office of Communications and Knowledge Transfer

E-mail: sandy.cummings@ahrq.hhs.gov

Phone: 301-427-1893