

Series 2
No. 127



Vital and Health Statistics

From the CENTERS FOR DISEASE CONTROL AND PREVENTION / National Center for Health Statistics

The Assessment of Immigration Status in Health Research

September 1999



U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics



Copyright Information

Permission has been obtained from the copyright holder to reproduce the questionnaire in appendix Xlb. Further reproduction of this material is prohibited without specific permission of the copyright holder. Reproduction of other questionnaires in the appendices is contingent on written permission from the study authors. All other material appearing in this report is in the public domain and may be reproduced or copied without permission; citation as to source, however, is appreciated.

Suggested citation

Loue S, Bunce A. The assessment of immigration status in health research. National Center for Health Statistics. *Vital Health Stat* 2(127). 1999.

Library of Congress Catalog Card Number

Loue, Sana.

The assessment of immigration status in health research submitted to the National Center for Health Statistics, in partial fulfillment of OMB-No. 0990-0115, Order No. 0009830136 / by Sana Loue, Arwen Bunce.

p. cm. — (Vital and health statistics. Series 2, Data evaluation and methods research; no. 127)

"October 28, 1998."

Includes bibliographical references. (p.).

ISBN 0-8406-0558-7

1. Immigrants—Health and hygiene—Research—United States—Methodology. 2. Aliens—Health and hygiene—Research—United States—Methodology. 3. Health surveys—United States—Methodology. I. Bunce, Arwen. II. National Center for Health Statistics (U.S.) III. Title. IV. Series. RA409.U45 no. 127

[RA448.5.I44]

362.1'07'23 s—dc21

[614.4'273'08691]

99-40419

CIP

For sale by the U.S. Government Printing Office
Superintendent of Documents
Mail Stop: SSOP
Washington, DC 20402-9328
Printed on acid-free paper.

Vital and Health Statistics

The Assessment of Immigration Status in Health Research

Series 2:
Data Evaluation and
Methods Research
No. 127

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics

Hyattsville, Maryland
September 1999
DHHS Publication No. (PHS) 99-1327

National Center for Health Statistics

Edward J. Sondik, Ph.D., *Director*

Jack R. Anderson, *Deputy Director*

Jack R. Anderson, *Acting Associate Director for International Statistics*

Lester R. Curtin, Ph.D., *Acting Associate Director for Research and Methodology*

Jennifer H. Madans, Ph.D., *Acting Associate Director for Analysis, Epidemiology, and Health Promotion*

P. Douglas Williams, *Acting Associate Director for Data Standards, Program Development, and Extramural Programs*

Edward L. Hunter, *Associate Director for Planning, Budget, and Legislation*

Jennifer H. Madans, Ph.D., *Acting Associate Director for Vital and Health Statistics Systems*

Douglas L. Zinn, *Acting Associate Director for Management*

Charles J. Rothwell, *Associate Director for Data Processing and Services*

Division of Health Interview Statistics

Jane F. Gentleman, Ph.D., *Director*

Foreword

The implementation of the Personal Responsibility and Work Opportunity Act of 1996 (P.L. 104–193) and the Health Insurance Portability and Accountability Act of 1996 (P.L. 104–191) require the reassessment of national survey questions that obtain information on welfare programs, health insurance coverage, and citizenship status. The devolution of responsibility for various programs to State and local governments as well as market-based transformations in the health system pose new challenges for Federal agencies that collect and analyze national data on these issues. The National Center for Health Statistics (NCHS), the Office of the Assistant Secretary for Planning and Evaluation (ASPE) of the Department of Health and Human Services (DHHS), and the U.S. Bureau of the Census are collaborating on a research project to develop or modify survey questions designed to assess the impact of changes in health and welfare programs. This report on survey methods used to ascertain immigration status, funded by ASPE, is one of the components of this collaboration.

NCHS and ASPE commissioned this report for the purpose of summarizing current methodologies as well as identifying areas where further research is needed. Because health and welfare public benefits are limited to certain immigrant statuses, standard sets of questions that can distinguish between relevant groups need to be identified and evaluated according to their specificity, reliability, validity, and field performance under varying study conditions. The aim is to develop a question battery that can be used to assess the unmet needs and health outcomes of immigrant populations where immigration status is appropriately defined.

The report includes the following:

- A review of the literature on the use of immigration status survey questions
- The identification of questions that can distinguish between different, relevantly defined immigrant statuses
- An assessment of questionnaire field performance and reliability
- Recommendations for developing question sets to address specific analytic issues

The nature of the analytic objectives coupled with the logistic problems involved in surveying components of the immigrant population makes the identification of a standard set of questions to ascertain immigration status a difficult task. Further development and testing of a questionnaire battery is needed. In addition to validating that the questions do in fact tap different aspects of immigration status, it will be necessary to determine whether information on all conceptually relevant dimensions can be obtained from studies of the general population. The research presented in this report is viewed as a beginning.

Federal laws governing public funded benefits for eligible and ineligible qualified aliens have been in a state of change since this report was written. Readers are cautioned to check appropriate Federal laws to access current eligibility and ineligibility criteria for qualified alien's access to public funded benefits. Also, the reader should note that the content, conclusions, and recommendations given in this report are those of the authors and do not reflect the views of NCHS and ASPE.

J. Neil Russell, Ph.D.
Project Officer
National Center for Health Statistics

Dale Hitchcock
Project Officer
Office of the Assistant Secretary for
Planning and Evaluation

Contents

Abstract	1
Chapter 1. Executive Summary	1
Chapter 2. Introduction	5
Methods	5
Chapter 3. Literature Review	6
Defining Immigrant	6
The Social Science Paradigm	6
The Immigration Law Paradigm	7
Public Benefit Law	7
Choice of Paradigm	9
Measuring Immigration Status	9
Place of Birth	9
Algorithms	10
Other Measures	10
Sampling Strategies and Sources of Recruitment	11
The Sampling Frame	11
Snowball Sampling	11
Random and Multistage Sampling	12
Convenience Sampling	12
Reliance on Secondary Data Bases	12
Discussion	12
Chapter 4. Review of Current Instruments	13
Appendix I (Aroian)	13
Irish Immigrant Study	13
Polish Social Support/Conflict Study	13
Appendix II (Asch, et al.)	14
Appendix III (Cornelius, et al.)	14
Appendix IV (Curiel, et al.)	15
Appendix V (Dumka, Roosa, and Jackson) (Form unavailable)	15
Appendix VIa (Heer and Falasco)	15
Appendix VIb (Heer and Falasco)	16
Appendix VII (Hubbell, Chavez, Mishra, Magana, and Valdez)	16
Breast Cancer Control Program	16
Comparative Analysis, Orange County	16
Appendix VIII (Hubbell, Waitzkin, Mishra, Dombrink, and Chavez)	17
Appendix IX (Lambert and Lambert)	17
Appendix X (Lee, Crittenden, and Yu)	17
Appendix XIa (Loue and Foerstel)	18
Appendix XIb (Loue)	18
Appendix XII (Loue, Faust, and Bunce)	18
Appendix XIII (Mehta)	19
Appendix XIV (Perilla, et al.)	19
Appendix XV (Robinson)	19
Appendix XVI (Schilit and Nimnicht)	20

Appendix XVII (Sherraden and Barrera)	20
Appendix XVIII (Undocumented Workers Policy Research Project)	21
Appendix XIX (University of Pennsylvania: Mexican Migration Project)	21
Appendix XX (Urban Institute: Ku, Fix, and Enchautegui)	21
Appendix XXI (Current Population Survey)	22
Appendix XXII (Survey of Income and Program Participation).....	22
Chapter 5. Conclusions and Recommendations	22
Chapter 6. Literature Cited	26

Table

1. Summary of Immigration Measures Used in Health-related Studies.....	33
--	----

Appendixes

I. Aroian	44
II. Asch, et al.	47
III. Cornelius, et al.	49
IV. Curiel, et al.	51
V. Dumka, Roosa, and Jackson (Form unavailable.)	52
VIa. Heer and Falasco	53
VIb. Heer and Falasco	56
VII. Hubbell, Chavez, Mishra, Magana, and Valdez	59
VIII. Hubbell, Waitzkin, Mishra, Dombink, and Chavez	62
IX. Lambert and Lambert	64
X. Lee, Crittenden, and Yu	66
XIa. Loue and Foerstel	68
XIb. Loue	80
XII. Loue, Faust, and Bunce	92
XIII. Mehta	93
XIV. Perilla, et al.	94
XV. Robinson	95
XVI. Schilit and Nimnicht	96
XVII. Sherraden and Barrera	97
XVIII. Undocumented Workers Policy Research Project	99
XIX. University of Pennsylvania: Mexican Migration Project	101
XX. Urban Institute: Ku, Fix, and Enchautegui	111
XXI. Current Population Survey	113
XXII. Survey of Income and Program Participation	115

Objective

This report examines methodological issues relating to immigrant health, definition of immigrant, the assessment of immigrant status, and sampling strategies with immigrant populations.

Methods

A literature review was conducted for the period 1977–98, utilizing various computer data bases to identify relevant studies. A total of 179 separate U.S.-based studies were reviewed. Twenty-two sample instruments and two revised versions of instruments for the assessment of immigration status were evaluated.

Results

In general, research relating to immigrants and their health has not attended to methodological issues inherent in such investigations. Instruments utilized to assess immigration status differ across studies, making cross-study comparisons difficult. Few studies have relied on probability sampling. Almost no data are available on field performance of instruments developed to assess immigration status.

Conclusions

Development of an appropriate instrument requires consideration of the definition of immigrant to be used, the level of respondent knowledge to be presumed, the political and social climate that exists at the time of the survey administration, the populations and geographic locales with which the instrument will be utilized, the complexity of the instrument, and methods of the instrument administration. In view of the paucity of data pertaining to the field performance of instruments used to assess immigration status, any instrument considered for use must be field tested and revised appropriately before incorporation into a national survey. The appropriateness of any particular sampling strategy should be evaluated in the context of the field testing.

Keywords: *immigrants • immigration status • health research*

The Assessment of Immigration Status in Health Research

by Sana Loue, J.D., Ph.D., M.P.H., Case Western Reserve University, School of Medicine, Department of Epidemiology and Biostatistics; Arwen Bunce, M.A., Case Western Reserve University, Department of Anthropology

Chapter 1 Executive Summary

This paper explores various methodological issues relating to immigrant health, including the definition of an immigrant, the assessment of immigrant status, and sampling and recruitment strategies for studies relating to immigrant health. This examination proceeded in two phases. The first consisted of a literature review of 179 separate U.S.-based studies identified through computer searches of MEDLINE, POPLINE (a social science data base), PSYCHLIT, AGELINE, and ERIC (Educational Resources Information Center), PAIS (Public Affairs Information Service), Family Studies Database, and SOCIOFILE for the years 1977–98. Searches were conducted using the key words “immigrant,” “immigration,” “refugee,” “health,” “health care,” “health services,” “illness,” “disease,” “health status,” “medical,” “Medicaid,” and “Medicare.” The bibliographies of the articles that were obtained provided additional references. Two categories of articles were eliminated for the purpose of this review: Articles that addressed the issue of immigrant health on a theoretical basis without reference to a definition, specific group, or empirical research and historical pieces, such as an examination of Pittsburgh’s typhoid epidemic during the early part of this century. A total of 179 U.S.-based studies were reviewed. To better understand the criteria used, efforts were made to contact one or more of the named investigators of any study in

which the criteria used to define immigrant were unclear.

Three basic paradigms for the ascertainment of immigration status were identified from the literature: A social science definition, an immigration law definition, and a public benefit definition. The appropriate choice of a paradigm is primarily dependent on the purpose of the investigation, the nature of the target population, and the projected purpose for which the findings are to be used. The measurement of immigration status has generally rested on the ascertainment of the respondent’s place of birth, on an algorithm constructed for a particular study, or on inferences based on the source of recruitment or screening for particular benefits. Although some studies have utilized random sampling strategies, the majority have relied on organization-based network sampling, snowball sampling, or convenience sampling. Details relating to these issues are provided in the review of the literature, chapter 3 of this report.

The second phase of the study required the review of sample instruments used to assess immigration status. These were requested from all investigators who relied on an algorithm for this determination. Those that were available are discussed in chapter 4 and are included as appendixes. A total of 22 basic instruments and two revised versions were examined. Details are provided with respect to the purpose of the study in which the instrument was used, the funding source(s), the study design, sampling procedures, the geographic area of the study, the study population, and the field performance. The discussion of each instrument also

contains an assessment of its expected performance on national surveys based on the data available. In general, little information was available regarding the field performance of any of the instruments used.

This review of the relevant literature and various instruments for the assessment of immigration status gives rise to the following conclusions:

- In general, research relating to immigrants and their health has not attended to the methodological issues inherent in such investigations. These issues include, most notably, the definition of an immigrant, assessment of the reliability and validity of measures to determine immigration status, measurement of biases that attend the various sampling approaches used, and the various sources of recruitment.
- The instruments developed for the assessment of immigration status differ across studies, making cross-study comparisons difficult. To some extent, these differences cannot be completely avoided, as the legal criteria for immigration subcategories may change over time.
- The assumptions that underlie the specific classification criteria used in any particular study are rarely stated explicitly, rendering it again difficult to make cross-study comparisons and to interpret the findings of any specific study. Many studies implicitly suggest that immigration status is static, e.g., if an individual once entered as an immigrant, the individual is always an immigrant. Such assumptions may be inappropriate, depending on the hypothesis under investigation. Variations in acculturation level exist at the individual and group levels. These differences may also demand attention depending on the hypothesis under investigation.
- The majority of studies in which immigration status has been examined are cross-sectional in nature. The ability of any particular instrument to detect changes in immigration status over time has not been examined. Additionally, few if

any studies have attempted to examine changes in health or access to health care concurrent with changes in immigration status.

- Few studies have relied on random samples of individuals but instead have used organization-based network sampling, snowball sampling, and convenience sampling. Few authors have addressed the reasons underlying their choice of sampling strategy. However, these choices may be related to difficulty in locating the target population, such as undocumented individuals; reluctance of individuals to participate in a study in which they may have to disclose information about their immigration status; the closed nature of some of the communities in which the research is carried out; and the lack of telephone access to portions of the target communities. Neither the potential direction or extent of the resulting biases nor the ability to generalize the research findings as a result of reliance on nonrandom sampling strategies has been adequately addressed in the relevant literature.
- Almost no data are available with respect to the field performance of any of the instruments for the assessment of immigration status, including instruments based on individuals' self-reports. This includes, for instance, instrument reliability and validity, refusal rates, time required for instrument administration, preferred method of administration (e.g., written survey or oral interview), and interviewer training issues. Data are also lacking with respect to coding and analysis issues.

Based on the foregoing, the following recommendations are made:

- In view of the paucity of data pertaining to the field performance of most existing instruments, it is strongly recommended that any instrument considered for use be field tested and revised appropriately before incorporation into a national survey.

- A decision must be made regarding the intended usage of the data and, accordingly, the paradigm that will guide the development of the instrument. Reliance on an immigration law or public benefits framework requires a more complex instrument, but also provides the greatest flexibility for the use of the resulting data, e.g., studies involving access to care issues, utilization issues, health status, etc.

As an example, a study relating to access to care or health services utilization must consider an individual's legal status because that status may be determinative of eligibility for health care benefits in the absence of private health insurance or sufficient private resources to cover costs. In this context, even the identification of individuals as permanent residents (green card holders) would be inadequate as current law distinguishes between the following:

- Qualified eligible aliens who can receive publicly funded health care services
- Qualified ineligible aliens who, although otherwise eligible, are subject to a temporary bar to the receipt of benefits and can receive only emergency services through public funding
- Unqualified aliens who, based upon their current immigration status, are ineligible for publicly funded care other than emergency services

A misclassification of individuals could lead to erroneous conclusions, e.g., that permanent residents as a group, rather than ineligible qualified permanent residents, are responsible for a large proportion of emergency department presentations.

- The development of the instrument must consider the level of respondent knowledge that is to be presumed. For instance, designation of place of birth requires very little sophistication on the part of the respondent, but self-classification of specific immigration status may, depending on the population, the individual, or the state of the law at a given time, require a great deal of knowledge. It is recommended that

any measure of immigration status strike a balance between a level of simplicity sufficient to permit self-administration of the instrument and a level of complexity to permit distinction between critical categories of immigrants.

- The political and social climate at a particular time may potentially affect the questions that are to be asked and the prospective respondents' willingness to provide the information requested. For instance, previous studies have indicated that individuals may delay seeking care where they feared being reported for their immigration status. It is not known, however, how this fear may impact refusal rates because of the lack of adequate data pertaining to field testing and refusal rates.
- The instrument should be field tested in a variety of geographic locales and with a variety of populations. To date, the majority of instruments have been utilized with Latino or Asian immigrant populations. It is not at all clear, for instance, that an instrument acceptable in one community will be acceptable in another. Too, a large proportion of the instruments available have been utilized in the West and in large urban areas. A national survey would necessarily demand that the instrument be utilized in other regions of the country and in smaller communities.
- In field testing the proposed instrument, attention should be paid to various sampling strategies. It may be advisable, for instance, to test the instrument in different locations, using a different sampling approach in each. The validity of the proposed instrument should also be assessed during this testing phase.
- It appears that the efficiency and effectiveness of various data collection strategies have not been evaluated. Consequently, it is not known whether response rates and data reliability would be enhanced or diminished through the use of telephone interviews, in-person interviews, or mail-in questionnaires/surveys. Use of a complex instrument would seem to

mitigate against reliance on mail-in responses. Telephone interviews may be less likely than in-person interviews to encompass the undocumented population.

- Depending on the complexity of the instrument to be used and the mechanism for use (e.g., survey or oral interview), extensive interviewer training may be necessary. Although studies outside of the immigration context indicate that interviews are facilitated by reliance on interviewers of the same ethnic and linguistic background as the respondents, it is not known whether this also applies in the context of an assessment of immigration status. Consequently, the impact of the interviewer's characteristics on the course of the interview or the prospective participant's initial willingness to respond is unclear.
- The questions recommended for inclusion in an assessment of immigration status vary depending on the paradigm chosen and the hypothesis to be tested. For instance, in a study of the incidence and prevalence of cancer within specific groups, it may be important to know the proportion of an individual's life spent in the United States, but the individual's legal status may not be relevant. However, a study examining health services utilization by immigrants with cancer would require additional information regarding individuals' legal status because it may be relevant to issues relating to access to care. The following suggested questions attempt to consider the various contexts in which a need for immigration status may arise:

A. Where were you born?
_____ (country)

Explanation—This question is a threshold question that distinguishes between U.S. citizens by birth and all others. This information is critical regardless of the paradigm being used for assessment of immigration status. The designation of a specific country permits more detailed analysis that may

be particularly helpful in studies relating to incidence and prevalence of specific disorders.

B. Where was your mother born?
_____ (country)

C. Where was your father born?
_____ (country)

D. What is your birth date?

Explanation—These three questions are necessary to determine whether the individual may be a U.S. citizen despite birth outside of the United States, i.e. whether the person may have derived citizenship from one or both parents (immigration and public benefit law paradigms).

E. If you were not born in the United States, how many years have you spent in the United States, counting all the time together?

Explanation—This question is not relevant to an assessment of immigration status per se, but may be useful to those needing a surrogate measure of acculturation.

F. Did you become a citizen of the United States through naturalization?
_____ yes _____ no

Explanation—This question assesses change in immigration status to that of a citizen. This information is important when utilizing an immigration or public benefit law paradigm because the response provides additional information relating to current eligibility for publicly funded health care benefits.

IF YES, STOP IMMIGRATION QUESTIONS HERE. IF NO, CONTINUE WITH G.

G. Are you a permanent resident (green card holder) or conditional permanent resident?
_____ yes _____ no

IF YES, ANSWER H. IF NO, SKIP TO I.

H. In what year did you receive your green card or your conditional permanent residence?

Explanation—Questions G and H will determine whether an individual is a permanent resident or conditional permanent resident. (Conditional residents are individuals who receive permanent residence through marriage to a U.S. citizen on a conditional basis for 2 years. They must subsequently demonstrate that the marriage was valid for the purposes of immigration to be adjusted to permanent residence.) An inquiry regarding the date on which permanent residence was received will provide some indication as to whether the individual is eligible for publicly funded medical benefits or is subject to a 5-year bar on their receipt (immigration law/public benefit law paradigms).

IF A PERMANENT RESIDENT, END IMMIGRATION QUESTIONS HERE. OTHERWISE CONTINUE WITH I.

I. Have you received political asylum or withholding of deportation?
_____ yes _____ no

Explanation—Individuals who have received political asylum or withholding of deportation are, under current law, qualified aliens not subject to the 5-year bar and are consequently eligible for full-scope publicly funded medical care (immigration law and public benefit law paradigms). This information is critical in evaluating access and utilization issues. This question does not provide adequate information for the classification of “refugee” within a social science paradigm because it focuses the inquiry on the individual’s legal status rather than his/her subjective reasons for leaving the country of origin/nationality. The subjective reason, however, is not determinative of status under either the immigration or public benefit law paradigms.

IF YES, END IMMIGRATION QUESTIONS HERE. IF NO, CONTINUE WITH J.

J. Have you received parole status for 1 year or more?
_____ yes _____ no

IF YES, CONTINUE AND END WITH K. IF NO, PROCEED TO L.

Explanation—Individuals who have received parole status for 1 year or more are, under current law, qualified aliens not subject to the 5-year bar and are consequently eligible for full-scope publicly funded medical care (immigration and public benefit law paradigms). This information is critical in evaluating access and utilization issues.

K. If you received parole for more than 1 year, when does that status end?

Explanation—This information indicates whether the individual’s permission is still valid and, consequently, whether the individual is entitled to receive full-scope publicly funded medical services (immigration and public benefit law paradigms). This issue is critical for studies relating to access to care and utilization.

L. Which of the following best describes your current immigration status?

1. Permission to be in the United States for a temporary period but without permission to work, e.g., tourist, student, and that permission has not expired
2. Permission to be in the United States for a temporary period with permission to work, e.g., student, corporate transferee, temporary worker and that permission has not expired
3. Entered the United States legally for a temporary period but stayed past the time allowed
4. No papers to enter the United States and no permission to work
5. No papers to enter the United States but received permission to work

Explanation—These categories distinguish between those who are in the United States legally as nonimmigrants, with and without employment authorization, and those who entered illegally and have or do not have permission to work. (Some individuals may have entered illegally but because of specific court cases or temporary

status newly applied to a class of persons, may have received permission to work.) These questions, together with questions regarding employment status, permit inferences to be made regarding the legality of an individual’s presence and, depending on other data collected, potential ability to access care. For instance, if an individual reports that he/she is in the United States legally but without permission to work, but also reports that he/she is working, it can be inferred that the individual is actually here illegally because he/she is in violation of status. Individuals who are employed may have greater access to monetary and/or insurance resources for health care services and/or may use services differently than individuals who are here legally but without authorization to work and without employment.

The mode of administration is important in deciding the format of the questions. For instance, skip patterns may be confusing to individuals completing a self-administered questionnaire. However, this should not be a problem in a face-to-face interview. The following set of questions are recommended as an alternative to skip patterns with self-administered instruments.

A. Which of the following best describes your current immigration status?

1. U.S. citizen
2. Permanent resident
3. Conditional resident through marriage to a U.S. citizen
4. Recipient of asylum or withholding of deportation
5. Recipient of parole status for 1 year or more
6. Permission to be in the United States for a temporary period but without permission to work, e.g., tourist, certain students, and that permission has not expired
7. Permission to be in the United States for a temporary period with permission to work, e.g., student, corporate transferee, temporary worker, and that permission has not expired

8. Entered the United States legally for a temporary period but stayed past the time allowed
 9. No papers to be in the United States and no permission to work
 10. No papers to be in the United States but received permission to work
- B. Which of the following best describes your immigration status when you first entered the United States?
1. Permanent resident
 2. Conditional resident through marriage to a U.S. citizen
 3. Recipient of asylum or withholding of deportation
 4. Recipient of parole status for 1 year or more
 5. Permission to be in the United States for a temporary period but without permission to work, e.g. tourist, certain students, and that permission has not expired
 6. Permission to be in the United States for a temporary period with permission to work, e.g. student, corporate transferee, temporary worker, and that permission has not expired
 7. Entered the United States legally for a temporary period but stayed past the time allowed
 8. No papers to be in the United States and no permission to work
 9. No papers to be in the United States but received permission to work
- C. In what year did you first enter the United States?
-

Explanation—These questions avoid the confusion that may accompany skip patterns. They also avoid the confusion that may accompany use of the term “nonimmigrant.” In the legal context, that term refers to individuals who are in the United States legally with specific types of permission but who generally do not have the intent to remain here permanently. (There are exceptions to the intent requirement.) However,

individuals who are not immigrant, i.e., green card holders, may erroneously self-classify as “nonimmigrants,” regardless of their legal status, because they know that they are not immigrants. Use of the questions without a skip pattern also assumes a greater level of understanding on the part of the respondents, e.g., that individuals who may have derived citizenship are aware that they are citizens. A choice of instrument will depend to some degree on the extent of misclassification that is acceptable. However, the extent of misclassification that attends either of these approaches is not known.

Chapter 2 Introduction

A significant body of literature has been developed relating to immigrants, health, and health care. For instance, immigration status has been considered in the examination of explanatory models for specific diseases (Ailinger and Dear, 1997; DeSantis, 1993; Ying, 1990), the relationship between immigration status, access to care, and barriers to care (Asch, et al., 1994; Cobb-Clark, 1991; Cornelius, et al., 1984; Jenkins, et al., 1996; Loue and Oppenheim, 1994), health care service utilization patterns (August, 1984; Chavez, et al., 1986; Chi, 1984; Guendelman, 1991; Heer and Jackson, 1984; Tran, et al., 1997), risk factors for specific diseases (Hingson, et al., 1991; Klatsky and Armstrong, 1991; Shimizu, et al., 1991; Sorenson and Shen, 1996a; Zuber, et al., 1997), the incidence and/or prevalence of specific diseases among immigrant groups (Shrout, et al., 1992; Vega, et al., 1985; Villa, et al., 1997), and the impact of immigrants’ usage of publicly funded health care on the health care system (Siddharthan and Ahern, 1996; Siddharthan and Alalalundaram, 1993).

Despite this impressive attention to immigration status as a variable of interest, relatively few researchers have focused on the methodological issues that attend its use, including the underlying definition of immigrant, the

measures used to determine immigration status, the biases that may result from the definitions and measurements used, and the strengths and weaknesses of specific sampling strategies. This review includes an examination of the various definitions of immigrant that have been used in the literature, a discussion of the measures that have been used and the context of their use, and an examination of the various sampling strategies that have been used.

Methods

Computer searches were conducted of the following data bases for the years 1977–98: MEDLINE, POPLINE (a social science data base), PSYCHLIT, AGELINE, and ERIC (Educational Resources Information Center), PAIS (Public Affairs Information Service), Family Studies Database, and SOCIOFILE. Searches were conducted using the key words “immigrant,” “immigration,” “refugee,” “health,” “health care,” “health services,” “illness,” “disease,” “health status,” “medical,” “Medicaid,” and “Medicare.” The bibliographies of the articles that were obtained provided additional references. Two categories of articles were eliminated for the purpose of this review: Articles that addressed the issue of immigrant health on a theoretical basis without reference to a definition, specific group, or empirical research and historical pieces, such as an examination of Pittsburgh’s typhoid epidemic during the early part of this century. A total of 179 U.S.-based studies were reviewed. To better understand the criteria used, efforts were made to contact one or more of the named investigators of any study in which the criteria used to define “immigrant” were unclear.

Sample instruments for the assessment of immigration status were requested from all investigators who relied on an algorithm for this determination. Those that were available are discussed in chapter 4 and are included in the appendixes. A total of 22 basic instruments plus two revised versions were examined. Details are provided with respect to the purpose of the study in which the instrument was

used, the funding source(s), the study design, sampling procedures, the geographic area of the study, the study population, and the field performance. The discussion of each instrument also contains an assessment of its expected performance on national surveys, based on the data available.

Chapter 3 Literature Review

Defining Immigrant

The Social Science Paradigm

In general, three broad paradigms exist for the definition of immigrant and the determination of immigration status: Social science, immigration law, and public benefit law/entitlement.

Logically, a study's definition or measurement of immigration status should be consistent with the purpose for which it is being used. As the following discussion indicates however, researchers' choice of measurement has not always been logically consistent with the enunciated purpose. Additionally, differences in the methods used across studies often render a comparison of study findings difficult.

Social science has defined migration as "the relatively permanent movement of persons over a significant distance" (Sills, 1968: volume 1. 1: 286).

Other definitions have included the following:

- We define migration as the physical transition of an individual or a group from one society to another. This transition usually involves abandoning one social setting and entering a different one (Eisenstadt, 1955:1).
- Migration is a relatively permanent moving away of . . . migrants, from one geographical location to another, preceded by decision-making on the part of the migrants on the basis of a hierarchically ordered set of values or valued ends and resulting in changes in the interactional set of migrants (Mangalam, 1968:8).

- Migration is defined as a permanent or semipermanent change of residence (Lee, 1966:49).

These definitions seem to indicate that all individuals who have relocated across international borders, whether temporarily or permanently, voluntarily or involuntarily, repetitively or on a single occasion, legally or illegally, and for whatever purpose are to be considered immigrants.

Herein lies the beginning of the confusion found in the literature. The permanency of relocation and immigrant status may be difficult to determine. A student may relocate to the United States, intending to remain for only a few years, but in fact remains permanently. In the social science definition of immigrant, it would appear that once an immigrant, always an immigrant. However, reliance on relocation as a basis for ascertainment of immigration status may be misplaced if the purpose of the study is to assess access to care or the economic impact of immigrants' utilization of health services. For instance, unlike temporary immigrants such as tourists and students, immigrants who have relocated to the United States but have become either permanent resident aliens (green card holders) or U.S. citizens are entitled to specified publicly funded health care benefits. Inclusion of such persons with the undocumented merely because all of these categories of persons are immigrants may be questionable where the purpose of the study is to assess the economic impact of their health care.

Similar issues attend the definition of refugee, a category of persons that has been much researched. Refugee status, within the social science definition, generally refers to an involuntary migrant. In this sense, all refugees are migrant, but not all migrants are refugees. Additionally, there are no accepted criteria to determine when a refugee is no longer to be considered a refugee, such as permanent resettlement or acquisition of a new nationality (Sills, 1968, volume 13: 362).

Dasgupta and Warriar, 1996, explicitly relied on the social science paradigm in their ethnography of

battered Asian Indian women. They defined an immigrant for the purpose of that study as an individual born outside of the United States who came to the United States as an adult, regardless of their actual legal status. Many studies, particularly those relating to risk factors and incidence/prevalence rates for specific diseases, appear to have relied *implicitly* on the social science paradigm, i.e., individuals who have relocated from another country, regardless of their current legal status or the length of time that they have been present in the United States. In most such instances, researchers have classified individuals based on whether they were born in the United States or abroad, or on the basis of their specific place of birth (Alston and Aguirre, 1987; Buskin, et al., 1994; Ehnert, et al., 1992; Herrinton, et al., 1994; Klatsky and Armstrong, 1991; Lee, et al., 1993; Rosenwaike and Hempstead, 1989; Rossing, et al., 1995; Shimuzu, et al., 1991; Sorenson and Shen, 1996a, 1996b; Stanford, et al., 1995; Ziegler, et al., 1993).

What appears to be implicit reliance on this definition may be misplaced in a number of contexts. As an example, Weitzman and Berry, 1992, also included Puerto Ricans in their study of the health care needs of female immigrant home attendants in New York City, presumably utilizing the social science definition of immigrant. However, the policy implications of their findings may differ greatly with respect to Puerto Ricans and non-Puerto Ricans because of differences in eligibility for publicly funded health care, as Puerto Ricans are citizens by birth. However, these policy implications are difficult to evaluate because the conclusions fail to adequately distinguish between the two groups.

Hingson, et al., 1991, compared levels of human immunodeficiency virus (HIV) knowledge and levels of behavioral risk for HIV transmission among native-born and foreign-born students. Although data pertaining to length of U.S. residence were obtained, differences in level of knowledge and risk behavior were reported by immigration status (immigrant versus

not an immigrant), but not by length of time in the United States. Although immigration status was found to be associated with lower levels of knowledge and higher frequency of specified risk behaviors, one must query whether acculturation level or proportion of life spent inside/outside of United States would have been a more appropriate measure.

The Immigration Law Paradigm

Reliance on a definition of immigrant pursuant to immigration law has been most frequent in the context of studies pertaining to the utilization of publicly funded health care (August, 1984; Norton, et al., 1996; Siddharthan and Alalasundaram, 1993; Undocumented Workers Policy Research Project, 1984), and various dimensions of access to care (Asch, et al., 1994; Cornelius, et al., 1984; Gelfand, 1991; Loue and Oppenheim, 1994), patterns of health care utilization (Chavez, et al., 1997; Guendelman, 1991; Guendelman and Jasis, 1992). Unlike the social science definition, immigration law distinguishes between immigrants, those persons who intend to remain permanently, and nonimmigrants, those who come with the intent to remain only temporarily. The category of immigrants would include, for instance, permanent resident aliens, individuals who have been granted asylum or refugee status, and conditional residents. Examples of nonimmigrants are tourists, students, temporary business persons, sports players, and dancers. Citizens are distinguished from immigrants and nonimmigrants by their birth in the United States, their naturalization as U.S. citizens, or the derivation of citizenship through their parents, pursuant to specified criteria.

In some situations, an individual's status is not clearly defined. For instance, an individual might present for admission to the United States claiming asylum from his or her country. Successful application requires that the individual demonstrate that he or she is unwilling or unable to return to the country or is unable or unwilling to avail him- or herself of the protection of

that country because of persecution or a well-founded fear of persecution, and that the persecution stems from the individual's race, religion, nationality, membership in a particular social group, or political opinion. An individual who has applied for asylum but has not yet been granted asylum is neither a nonimmigrant in the legal sense, nor an immigrant, although clearly he or she is an immigrant within the social science definition of the term.

Additionally, documented status is not synonymous with legal status, nor is undocumented status synonymous with illegal status. The asylum applicant, for instance, may have documentation to remain in the United States pending resolution of his or her claim to asylum, but this is not synonymous with legal status, which is what is at issue (Loue, 1992; Loue and Foerstel, 1994; Loue and Foerstel, 1996).

The health literature reflects confusion with the more complex distinctions. In their study of uncompensated medical care to individuals in Dade County, Florida, Siddharthan and Alalasundaram, 1993, classified as undocumented all patients who were unable to produce any documents establishing legal residency. Refugees were classified as entrants and included with undocumented individuals, although pursuant to then-existing immigration law, they would have been considered documented and legally present (Immigration and Nationality Act, (INA) section 207) and, pursuant to then-existing public benefit law (see below), they would have been eligible for Medicaid benefits and would not be classifiable as individuals receiving uncompensated care (Loue and Foerstel, 1994). The potential for misclassification of individuals was also present in a later study of inpatient utilization of health care by undocumented individuals compared to Medicaid beneficiaries and uninsured residents (Siddharthan and Ahern, 1996). In this study, all individuals without proof of legal residency were classified as undocumented and ineligible for Medicaid benefits, although U.S. citizens are not required to possess any proof of residency or citizenship and certain

undocumented aliens were entitled, at the time of the study, to full Medicaid benefits despite their undocumented status (see "Public Benefit Law").

Public Benefit Law

Public benefit law adds yet another level of complexity to the definition of immigrant. Before the passage and effective date of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, various classes of persons were considered immigrants for the purpose of Medicaid eligibility, although they were not considered immigrants within the context of immigration law and may, in fact, have been undocumented. For instance, individuals who were undocumented with the intent to remain in the United States permanently and whose presence was known to the Immigration and Naturalization Service (INS), but whose departure the INS was not contemplating enforcing were classified under public benefit law as "permanently residing under color of law" (PRUCOL). This status legally entitled them to public benefits, although they might not have had a legal status in the country (Loue and Foerstel, 1996). Reliance on an immigration or social science definition of immigrant may be misplaced where the purpose of the study is to assess the burden of uncompensated care by non-U.S.-born persons because such individuals would have been undocumented, i.e., unable to produce proof of legal residency, but would have been legally entitled to receive publicly funded care pursuant to Federal law.

In contrast, current immigration law provides that not only undocumented individuals but also some individuals with legal immigration status, including some permanent residents, are ineligible for publicly funded medical care. A brief explanation of the governing criteria may be helpful.

The availability of publicly funded medical care to otherwise eligible aliens was greatly curtailed with the passage of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Welfare Act) and the Illegal Immigration Reform and Immigrant

Responsibility Act of 1996 (IIRAIRA). In general, aliens who are not considered “qualified aliens” within the meaning of the Welfare Act are ineligible for the receipt of Federal publicly funded benefits with the exception of the following:

- Medical assistance under the Medicaid program for emergency medical services not related to an organ transplant procedure
- Short-term, noncash, in-kind emergency disaster relief
- Public health assistance for immunizations for immunizable diseases and for the testing and treatment of symptoms of communicable diseases, whether or not the symptoms are caused by a communicable disease
- Programs, services, or assistance that deliver in-kind services at the community level, do not condition the provision of assistance or the amount or cost of that assistance on the recipient’s resources or income, and are necessary for the protection of life or safety. These programs and services include crisis counseling and intervention services; child protection; adult protective services; violence and abuse prevention; services for victims of domestic abuse; short-term shelter for homeless persons, victims of domestic abuse, or runaway, abused, or abandoned children; assistance for individuals during periods of adverse weather conditions; soup kitchens, community food banks, and other nutritional services; medical and public health services, such as the treatment and prevention of diseases and injuries; and activities to protect the life and safety of community residents.

The Welfare Act provides that the following categories of aliens are to be considered qualified aliens for the purpose of determining eligibility for federally funded public benefits, such as medical care under various currently existing programs:

- Those admitted as lawful permanent resident aliens

- Those who have been granted asylum under section 208 of the INA
- Those who have been admitted as refugees under section 207 of the INA
- Those who have been paroled into the United States under section 212(d)(5) of the INA for a minimum period of 1 year
- Those whose deportation is withheld under the former section 243(h) of the INA
- Those who were granted conditional entry pursuant to former INA section 203(a)(7) in effect before April 1, 1980
- Certain battered spouses and children

For a battered spouse or child to qualify as a “qualified alien” for the purpose of eligibility for Federal public benefits, the following requirements must be met:

- The alien must have been battered or subjected to extreme cruelty in the United States by a spouse or parent, or by a member of the spouse or parent’s family residing in the same household as the alien and with the consent or acquiescence of the spouse or parent or the alien’s child has been battered or subjected to extreme cruelty in the United States by a spouse or parent, or by a member of the spouse or parent’s family residing in the same household as the alien and with the consent or acquiescence of the spouse or parent.
- There is a substantial connection between the battery or cruelty and the need for the benefits.
- The alien has had a petition approved or has a petition pending that sets forth a prima facie case for status as the battered spouse or child of a United States citizen.
- The batterer no longer lives in the same household as the battered spouse or child.

Qualified aliens who entered the United States after the date of enactment of the Welfare Act will be subject to a 5-year bar on the receipt of benefits under any Federal means-tested program, including medical benefit programs. The following groups of

aliens are exempt from this bar, pursuant to amendments to the Welfare Act made by the Balanced Budget Act of 1997:

- Refugees admitted under section 207 of the INA
- Asylees admitted under section 208 of the INA
- Aliens who have received withholding of deportation under former section 243(h) of the INA
- Certain veterans, active duty members of the armed services, and their spouses and unmarried dependent children
- Cuban-Haitian entrants as defined in section 501(e)(2) of the Refugee Education Assistance Act of 1980 who have been paroled into the United States for a minimum period of 1 year

Even after the 5-year period, the availability of publicly funded medical benefits to qualified aliens through Federal programs will be severely restricted because of new rules relating to the deeming of sponsors’ and sponsors’ spouses’ income and resources. These new rules provide that the income and resources of an alien’s sponsor and sponsor’s spouse will be counted as if they belonged to the alien in determining the alien’s eligibility for the benefit under the Federal program, until the alien naturalizes or accrues 40 qualifying quarters for the purpose of social security. Three categories of aliens will be exempt from these deeming provisions: Asylees, refugees, and lawful permanent residents who have earned or who have been credited with 40 qualifying quarters for social security purposes. Additionally, certain battered spouses and children will be exempt from the deeming provisions for a 1-year period. This 1-year period may be extended if there is a formal recognition by the INS, a judge, or an administrative law judge that the battering occurred and a determination by the agency providing the benefits that the battery continues to have a connection to the need for the benefits. A 1-year exemption to the deeming requirement is also available to lawful permanent residents who have been abandoned by their sponsors or whose

sponsors' contributions are inadequate to assure shelter or food.

Pursuant to IIRAIRA, as noted previously, many aliens will be ineligible for most federally funded benefits or will be barred from receiving such benefits for at least 5 years. However, aliens who are otherwise eligible, regardless of their immigration status, will be able to receive emergency Medicaid services that are not related to an organ transplant procedure. An emergency medical condition is defined as a medical condition, including labor and delivery, that manifests by acute symptoms of sufficient severity such that the absence of immediate medical attention could reasonably be expected to result in placing the patient's health in serious jeopardy, in serious impairment to bodily functions, or in the serious dysfunction of any bodily organ or part. The House and Senate conferees, in discussing restrictions on eligibility, specifically restricted emergency medical care to that care that "is strictly of an emergency nature, such as medical treatment administered in an emergency room, critical care unit, or intensive care unit."

Pursuant to IIRAIRA, aliens who are not qualified aliens, nonimmigrants pursuant to the INA, or aliens who have been paroled into the United States under section 212(d)(5) of the INA for 1 year or less are not eligible to receive State or local benefits except for:

- Assistance for health care items and services that are necessary for the treatment of an emergency medical condition, as defined previously
- Short-term, noncash, in-kind emergency disaster relief
- Public health assistance for immunizations for immunizable diseases and for the testing and treatment of communicable diseases even if the symptoms are not caused by a communicable disease
- Programs, services, or assistance that deliver in-kind services at the community level, do not condition the provision of assistance or the amount or cost of that assistance on the income or resources of the beneficiary and are necessary for the protection of life or safety

States may decide to provide their own benefits to categories of aliens other than those listed above, but to do so, the State must affirmatively enact legislation that specifically provides for such eligibility.

Choice of Paradigm

Based on the foregoing, various criteria are suggested for consideration in the selection of a paradigm in the context of a particular study:

- The purpose of the study, e.g., to examine changes in health status regardless of legal status (social science paradigm) or to examine the impact of utilization on the health care system (immigration/public benefit law paradigms)
- The target population, e.g., all non-U.S.-born individuals or individuals with a specific legal status
- The projected purpose of the findings, e.g., the development of disease prevention programs or the formulation of health care financing policy

Measuring Immigration Status

Place of Birth

Many studies have classified individuals as immigrants on the basis of their birth or their parents' birth inside or outside of the United States or by their specific place of birth. (See [table 1](#). For examples of such instruments, see [chapter 4](#) and [appendix XIV](#).) This is especially true of studies that have relied on secondary data, such as birth and death certificates (Chavkin, et al., 1987; Rosenwaike and Hempstead, 1989; Selby, et al., 1984; Sorenson and Shen, 1996a, 1996b), census data (Bean, et al., 1995; Bean, et al., 1997; Borjas and Trejo, 1991; Frey, 1995), Medicaid data (Norton, et al., 1996), or mandatory surveillance data (Ehnert, et al., 1992; Moore, et al., 1997). Use of an individual's place of birth as an indicator of immigration status offers several advantages. First,

it is time efficient to ascertain place of birth and is significantly less complex in nature than many of the algorithms that have been developed. Second, it reflects to some degree definitions of all three basic paradigms for definition of an immigrant. Third, it may be the only existing indicator of immigration status in many secondary data bases. However, reliance on this measure may be inadequate in a variety of contexts.

First, reliance on place of birth collapses individuals into two categories (United States/non-United States) regardless of the actual residence experience of the individual. Assume, for instance, that one is studying risk factors for a specific form of cancer. A 60-year-old individual born abroad who has spent 45 years in the United States may be quite different with respect to variables under examination (nutrition and other environmental exposures) than a 60-year-old individual who only recently relocated to this country. In such an instance, it may be advisable to consider, in addition to place of birth, the proportion of one's lifetime spent in the United States.

Reliance on place of birth as a measure of immigration status in the context of health services research may result in misclassification because of its failure to reflect any of the nuances of either immigration law or public benefits law. For instance, assume that a researcher is interested in determining the extent of health care utilization by citizens and noncitizens. Place of birth represents a very crude measure because some individuals born outside of the United States may have derived citizenship from their parents or may have become naturalized citizens and may consequently be misclassified as noncitizens based upon their place of birth.

In this regard, reliance on parental place of birth and grandparents' place of birth in addition to subject place of birth will minimize misclassification of U.S. citizens as immigrants, within the meaning of immigration law and public benefit law (Hubbell et al., 1989, 1991, 1995; Lee, Crittenden, and Yu, 1996; Sherraden and Barrera, 1997). (See [chapter 4](#) and corresponding

appendixes.) Most citizens who were born outside of the United States but have derived citizenship through their parents will have had parents and/or grandparents who were born in the United States. It is unclear to what extent the inclusion of this factor would result in greater misclassification of noncitizens as citizens. Reliance on parents' prior place of residence, rather than their place of birth, will not serve to minimize misclassification, however, as residence is not synonymous with citizenship (Lambert and Lambert, 1984). (See [chapter 4](#) and corresponding appendix.)

There are no published reports evaluating the validity or reliability of place of birth as a measure of immigration status. It should be noted as well that place of birth by itself does not have the potential to distinguish between categories of individuals other than citizens and noncitizens.

Algorithms

A relatively small proportion of health studies relating to immigrants have relied on algorithms consisting of multiple criteria to determine immigration status. For instance, Asch, et al., 1994, relied on country of birth, length of time in the United States, U.S. citizenship status, and self-reported immigration status to determine immigration status. (See [chapter 4](#) and corresponding appendix.) Chavez, et al., 1997, in their study of the health status of Latinos in Orange County, California, used a complex algorithm consisting of the following factors: Place of birth, self-reported status as a legal resident, possession or lack of papers or false papers, lack of papers but application for permanent residence, lack of papers but application for asylum, status as a naturalized citizen, possession of temporary protected status, and receipt of political asylum. (This algorithm is similar to the one used by Hubbell, et al., 1995, and is discussed in [chapter 4](#) and the corresponding appendix.)

Heer and Falasco's algorithm (1982), used in a study that examined the socioeconomic status of mothers of

Mexican origin, relied on a complex algorithm tied to legal requirements of immigration status: Place of birth, citizenship status, possession of an alien registration card, date of first arrival in the United States, number of years as a resident in the United States, and whether the individual had left the United States for 6 months or more.

Based on the responses to these questions, individuals were classified as undocumented, legal residents or naturalized citizens, or native-born citizens. Cornelius, et al., 1984, utilized the following factors to assess immigration status in the context of a study relating to access to care by Mexican immigrants: Place of birth, type of immigration papers at first and last entry to the United States, application date for immigration papers, and date of receipt of immigration papers. (See [chapter 4](#) and corresponding appendix.) Loue and Oppenheim, 1994, used a legal framework to classify individuals in their pilot study of HIV-positive individuals' access to care: Place of birth, current specific immigration status and immigration category, type of entry into the United States, length of time authorized to remain in the United States, and length of time in the United States. No published reports indicate the validity or reliability of these methods.

Guendelman's study (1991) examining factors related to choice of care in the United States or Mexico by service users on the Mexican border evaluated immigration status based on whether the person had valid papers that permitted legal entry into the United States or whether the person had no documentation. It is unclear how the validity of the papers was assessed; data are not available on the extent of misclassification, if any. Additionally, the possession or lack of entry documentation is relevant to the question of whether one can gain entry to the United States; it does not adequately address either specific immigration status or eligibility for health care.

Loue and Foerstel, 1996, have reported on an assessment of immigration status and health benefit

eligibility instrument that integrates the immigration law and public benefit law definitions of immigration status. (See [chapter 4](#) and corresponding appendix for additional detail.) The reliability and validity of the instrument were assessed against an intake questionnaire used by attorneys to determine immigration status. The instrument was reported to have good construct validity. The reproducibility of the results between the two surveys ranged from excellent to good. The kappa statistic for the determination of whether an individual was documented or undocumented was 1.00, while the kappa statistic for the category of documentation among those who were documented was 0.47. This appears to be the only instrument for which reliability and validity have been reported. This instrument has been revised to incorporate changes effectuated by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 and the Illegal Immigration Reform and Responsibility Act of 1996, but has not been reexamined for reliability and validity. (See [chapter 4](#) and corresponding appendix.)

The Mexican Migration Project utilizes a complex algorithm that incorporates detailed data relating to entries, manner of entry, and length of residence in the United States. (See [chapter 4](#) and corresponding appendix.)

Other Measures

Various other strategies have been used to assess immigration status, including knowledge, inference based on source of recruitment, and screening for eligibility for specific immigration benefits. Each of these is discussed in greater detail later.

In a study of service delivery to Russian immigrants, Gelfand, 1986, did not utilize a measurement tool to assess immigration status. This writer was advised that the investigator assumed that the participants were immigrants, presumably based on an inference that all persons receiving services at these locations were, in fact, either refugees or other immigrants. However, administrators and lawyers for the named nonprofit agencies indicated that

they do not provide access to their clients or listings of their clients to any researchers as a matter of policy. Participants in Dasgupta and Warriar's study of battered Asian Indian women (1996) were all acquaintances of the investigators (personal communication). Somewhat similarly, Faller, 1985, presumed in the context of a study of perinatal health care needs that all Hmong women who self-identified as Hmong were immigrants to the United States.

Several studies have explicitly inferred from the source of recruitment or the specific circumstances that the subjects of the study were, in fact, immigrants or refugees. Die and Seelbach, 1988, assumed that all individuals recruited for their health study from the Vietnamese Resettlement Office were refugees, as did Duncan and Simmons, 1996, who recruited their participants from the Refugee Resettlement Program of the VA Council of Churches (personal communication). No additional efforts were made to verify refugee status. In a study of drownings in Imperial County, California, it was assumed that individuals were undocumented if they had drowned while crossing from Mexico and someone from their family or home town reported it, or they had drowned, were judged by the coroner's office or sheriff's department to be Hispanic, and no one had reported them missing (Agoos, et al., 1994; personal communication with R. B. Trent). North and Houston, 1976, presumed in their study of the role of illegal aliens in the U.S. labor market that any alien who had been detained or arrested by the INS was illegally present in the United States. The validity and reliability of this strategy to determine immigration status is clearly dependent on the extent of misclassification at the source of recruitment, which is difficult to ascertain.

Other studies have relied on specific criteria under immigration law to identify subsets of eligible participants. For instance, Blum, et al., 1993, and Gelfand, 1991, presumed in the context of their studies that individuals applying for legalization under the Immigration Reform and Control Act of 1986 were actually undocumented, because

eligibility for amnesty benefits was limited to individuals who had entered the United States illegally or who had had legal status at entry but whose status had expired. It is unlikely that individuals who knowingly have legal status in the United States would self-identify as undocumented through an application process. Consequently, this measurement strategy may be useful in limited circumstances depending on the objective of the study. For instance, this strategy permits the classification of individuals as documented or undocumented, but may be inadequate for the identification of individuals who are eligible or ineligible for a particular immigration status.

A number of studies have utilized participants' self-assessments of immigration status (Aroian, 1993; Robinson, 1985; Schilit and Nimmicht, 1990). (See [chapter 4](#) and corresponding appendixes.) Often, the participants' designation of immigration status must conform to one of various predefined categories. This may result in misclassification due to a failure to include all possible statuses or to overly broad classifications that collapse together categories of immigrants who may differ greatly on critical factors. Misclassification may also result from respondents' misunderstanding of either the question or their own status or because of deliberate misreporting.

Sampling Strategies and Sources of Recruitment

A variety of sampling strategies have been utilized including snowball sampling, random sampling, multistage sampling, and convenience sampling. Sources of recruitment have included churches, nonprofit agencies, hospitals and clinics, schools, ongoing studies, apartment complexes, residential facilities, union locals, and telephone listings. Each of these strategies is discussed in greater detail, following a brief discussion of sampling frame construction.

The Sampling Frame

The sampling frame is essentially a listing of eligible units, e.g., individuals

or households, composing a population from which the sample will be drawn. A sampling frame must include all or nearly all of the members of the relevant population if it is to be representative (Fink, 1995). Frames that are constructed for general population samples are often derived from existing lists, such as telephone listings or organizational listings. These may be inadequate for use in the context of health studies with immigrants because they are likely to omit the homeless, migrants, those without telephones, those who are detained or incarcerated, and those who may be relatively more hidden in the community because of fears relating to their immigration status and the lack of necessity for a higher level of interaction with others, as may be the case with women and young children.

Snowball Sampling

Snowball sampling has been used in a variety of contexts, including studies of health service utilization (Chavez, et al., 1986; May, 1992; Salcido, 1982), access to care (Cornelius, et al., 1984) perceptions of risk and illness (D'Avanzo, et al., 1994; DeSantis, 1993; Hattar-Pollara and Meleis, 1995; Tabora and Flaskerud, 1997), health, illness, and health care experiences (Kuss, 1997; Lipson, 1992; Meleis, et al., 1992; Thompson, 1991; Weeks, et al., 1989), and risk behaviors (Wewers, et al., 1995).

Refusal rates using snowball sampling techniques appear to be generally low (Cornelius, 1982). Snowball sampling may permit access to a range of subcategories of immigrants, including those who are undocumented and also allows the investigator to verify information from one respondent with data gathered from others. However, snowball sampling may result in selection bias: The resulting sample is more likely to include individuals who are present in the United States on a long-term basis and consequently have the relationships that allow them to be identified through a snowball sampling process (Cornelius, 1982). Only one identifiable published study has analyzed the networks resulting from snowball

sampling to allow inferences to be made regarding the nature and extent of possible selection bias (Cornelius, et al., 1984).

Random and Multistage Sampling

Several studies have utilized random sampling, often in conjunction with a one- or two-stage random digit dialing scheme (Chavez, et al., 1997; Guendelman, 1991; Hurh and Kim, 1990; Kolody, et al., 1986; Meinhardt, et al., 1986; Pang, 1996; Portes, et al., 1992; Siddharthan and Sowers-Hoag, 1989; Sowers-Hoag and Siddharthan, 1992; Tran, et al., 1997; Vega, et al., 1985; Ziegler, et al., 1993). (Undocumented individuals cannot, clearly, be sampled through a strict random sampling procedure, however, because of the clandestine nature of their presence and the difficulty in locating them.) Published literature does not indicate the refusal rates to participation among noncitizens.

Convenience Sampling

Convenience sampling may facilitate recruitment of eligible individuals. Convenience samples have most frequently been drawn from clinics (Ailinger and Dear, 1997; Bass, et al., 1992; Catanzaro and Moser, 1982; Parenti, et al., 1987; Ying, 1990), schools (Braun, et al., 1996; Brindis, et al., 1995; Schilit and Nimnicht, 1990), unions, (Weitzman and Berry, 1992), and churches and other community-based groups and organizations (DeSantis and Thomas, 1992; Kennedy, 1992; Laffrey, et al., 1989; Lee, et al., 1993; Loue and Oppenheim, 1994; McCloskey, et al., 1995; Meleis, et al., 1992; Mui, 1996a, 1996b). However, reliance on this sampling strategy may result in serious selection bias and an inability to generalize the results.

Reliance on Secondary Data Bases

Various researchers have relied on existing data, such as birth and death

certificates (Chavkin, et al., 1987; Rosenwaike and Hempstead, 1989; Selby, et al., 1984; Sorenson and Shen, 1996a, 1996b), census data (Bean, et al., 1995; Bean, et al., 1997; Borjas and Trejo, 1991; Frey, 1995), Medicaid data (Norton, et al., 1996), or mandatory surveillance data (Ehnert, et al., 1992; Moore, et al., 1997). Reliance on census data may be problematic because of the omission of undocumented and homeless individuals (Margolis, 1995; Passel, 1985). For instance, Passel's 1985, estimates of the 1980 census results indicate that 20 to 40 percent of undocumented individuals were not counted. Additionally, census data do not provide information relating to immigration status. Rather, all immigrants are treated as an homogenous group, although significant differences may exist between groups due to the nonrandom distribution of certain characteristics (de la Puente, 1992). The inability to control for immigration status or these characteristics through either restriction or analysis may produce biased results.

Use of mandatory surveillance data, such as is required by States for the reporting of tuberculosis and other communicable diseases, may result in an incomplete sampling frame due to the unwillingness of noncitizens to present for treatment and diagnosis (Asch, et al., 1994). Agency records based on patient self-identification of immigration status may also yield less than a complete sample. Individuals may be reluctant to self-identify as nonnative because of distrust of the investigators (Lipson and Meleis, 1989), fear of the potential immigration consequences (Asch, et al., 1994; Lipson and Meleis, 1989; Messias, 1996), or a feeling or belief that they are no longer immigrants because of length of residency in the United States or change of legal status.

Discussion

This literature review of the methodology used to assess immigration status raises several critical issues. First,

it is extremely difficult to identify on the basis of the available published literature the definitions relied on by researchers, the measurements used, the reliability, validity, and field performance of those measures, and the sampling strategies and recruitment schemes utilized. The vast majority of published articles do not adequately address the methodology underlying the assessment of immigration status. It cannot be determined from this review whether this gap in the literature reflects editorial discretion, a concern for brevity by either authors or editors, a lack of interest in the methodological issues surrounding health research with immigrant populations, and/or a lack of researcher sophistication with respect to these issues.

Second, reported research frequently relies implicitly on one or more of the three paradigms noted above for the identification of immigrants and immigration status. However, few authors explicitly state these underlying definitions or relate them to the purpose of their studies. In some instances, the selection of the underlying paradigm appears to be inappropriate to the enunciated purpose of the study.

The measurements used to assess immigration status and the classification schemes for that status differ tremendously across studies. This lack of consistency is to some extent valid. For instance, a study of risk factors for breast or prostate cancer may be more interested in the fact of migration than the legal status of an individual, whereas a study of barriers to accessing care is more likely to focus on legal status. However, measures and classification schemes used differ even within the same genre of study, e.g., health care access, making it difficult to compare methodological and substantive findings across studies.

Few researchers have reported on the field performance or the validity or the reliability of the measures used to assess immigration status. Based on the literature review alone, it would appear that most researchers have not considered these issues in the development of their instruments. Although a number of authors have speculated in the context of their

articles' discussion sections that their data may be subject to misclassification, no published articles could be located that actually assess the extent of misclassification.

Reliance on secondary data bases for classification of immigration status is also problematic. The literature review would seem to indicate that the vast majority of researchers do not discuss the limitations and biases inherent in the data bases on which they are relying. For example, changing criteria for alien eligibility for publicly funded health care services are rarely incorporated into analyses addressing immigrants' access to care.

Sampling schemes and recruitment strategies have also varied across studies and range from random sampling to convenience sampling. Few published articles contain data relating to the success of the strategies used, e.g., rates of refusal among immigrants or among particular classes of immigrants, or the ability of any particular sampling scheme to encompass specified subgroups of individuals, such as undocumented persons. It is, consequently, extremely difficult to evaluate the potential of success of a particular sampling or recruitment method in a specific context. The literature does seem to indicate, however, that snowball sampling results in relatively low refusal rates and provides the most effective mechanism for the identification and enrollment of individuals in specified subgroups, such as the undocumented or migrant farmworkers.

Study design represents yet another methodological issue raised by this literature review, but not addressed in depth previously. Most of the identified published studies focusing on immigrant health have relied on a cross-sectional design (table 1). Utilization of this design in this context brings with it all of the advantages that generally attend the use of cross-sectional design, including efficiency and decreased cost. However, significant limitations attend the use of this study design. First, instruments developed to assess immigration status in the context of cross-sectional study may not be appropriate for use in a longitudinal

study where immigration status or immigration classifications external to the study may change over time. Second, reliance on a cross-sectional design impedes the ability to make causal inferences and to assess changes in health status or health care access in conjunction with changes in immigration status over time. This lack of information may then impact the ability to develop and implement relevant and appropriate policy relating to immigrant health care.

Chapter 4 Review of Current Instruments

This section provides a review of the instruments for which copies were available from public sources or were provided by study investigators directly. This section reviews 20 different instruments for the determination of immigration status, setting forth a description of the purpose, design, and funding source of the study in which it was used; the sampling procedures used; the geographical area in which it was used; the populations with which the instrument was used; the field performance of the instrument; and the expected performance of the instrument in national surveys.

Appendix I (Aroian)

Description of Instrument:

Immigration status is determined on the basis of three questions: Place of birth, citizenship status (yes/no), and status at time of initial entry into the United States (refugee/immigrant visa issued abroad/conditional immigrant/temporary resident/illegal alien/other).

Purpose of Study: The instrument was utilized in the context of two studies, one that examined the emotional difficulties associated with the experiences of Irish individuals immigrating illegally to the United States, and the second with sources of

social support and conflict for Polish immigrants.

Irish Immigrant Study

Funding Source(s): Funded in part by grants from Sigma Theta Tau and Boston College.

Study Design: Cross-sectional; data collected through questionnaire and in-depth, open-ended interview.

Sampling Procedures: 17 Irish immigrants over the age of 18 and residents of the Boston area; recruited through a key informant familiar with the community and snowball sampling.

Geographic Area: Boston.

Population: Irish.

Field Performance: Data unavailable. Response rate to immigration questions specifically and participation generally are unavailable.

Polish Social Support/Conflict Study

Purpose of Study: To examine sources of social support and conflict.

Funding Source(s): Funded by the American Nurses' Foundation and Boston College.

Study Design: Cross-sectional; data collected through questionnaire and semistructured interview.

Sampling Procedures: Recruitment through written and in-person advertisements in Polish organizations and activities sponsored by the Polish community; stratified sampling by wave of migration (World War II wave, 1960–70's, and Solidarity era 1981–89).

Geographic Area: Seattle-Tacoma area of Washington State.

Population: 25 Polish immigrants.

Field Performance: Data unavailable. No data relating to reliability or construct validity. Response rate to immigration questions specifically and participation generally are unavailable.

Expected Performance on National Surveys: Reliance on two questions for a determination of immigration status, rather than a complex algorithm, is

clearly simpler. These particular questions have been used with two diverse populations (Irish and Polish), seemingly successfully. It appears likely to distinguish between citizens and noncitizens. However, it is unclear to what extent these questions will permit distinctions between various categories of noncitizens. First, individuals may not know their own immigration status because of the complexity of the law and/or their individual situations. Second, the categories as enunciated are overlapping and exclusionary. For instance, someone here illegally may be claiming refugee status. It is unclear whether the individual would self-classify as a refugee or as an alien illegally present. Individuals may have obtained their immigrant status while in the United States through the process known as adjustment of status, yet there is no way for them to indicate this, other than by self-classifying as “other.” However, permanent residents are then likely to be included in the same classification as parolees, recipients of voluntary departure, and various other statuses. Individuals in many of these other statuses are currently ineligible for publicly funded care, rendering analysis of many issues, such as access and utilization, problematic.

Appendix II (Asch, et al.)

Description of Instrument:

Immigration status is determined on the basis of responses to these questions: Country of birth, status as a U.S. citizen (yes/no/refused/unsure/no answer), self-reported current status (permanent resident or green card/temporary resident/without papers/student or tourist visa/expired visa/asylee/other), and length of time in United States.

Purpose of Study: To examine the relationship between immigration-related variables, symptoms, and delay in seeking care for tuberculosis.

Funding Source(s): Robert Wood Johnson Foundation.

Study Design: Cross-sectional.

Sampling Procedures: Survey of 313 consecutive patients with active tuberculosis from 95 different facilities.

Geographic Area: Los Angeles County.

Population: Not specified; most common languages of study population were English, Spanish, Mandarin, Tagalog, and Vietnamese.

Field Performance: Data unavailable with respect to refusal rate. Researchers report that interviewers made an average of 16 attempts to contact respondents. Interview data were compared to tuberculosis registry data for variables derived from both sources, including country of birth; investigators reported “good agreement” (no statistics available).

Expected Performance on National Surveys: This particular instrument is subject to many of the same strengths and deficiencies as the Aroian instrument (appendix I). As with the Aroian instrument, the form requests that the study participant reach a conclusion regarding his or her immigration status and presumes sufficient knowledge on the part of that individual to be able to do so accurately. The validity of this assumption is untested. As with the Aroian instrument, the categories that are delineated may unintentionally promote misclassification or may classify together categories of individuals with distinctly different statuses. For instance, individuals who have received withholding of deportation would be classified as “other,” but unlike corporate executives or professional athletes, who would also be classifiable as “other,” are entitled to remain in the United States permanently and to receive publicly funded health care benefits.

Appendix III (Cornelius, et al.)

Description of Instrument:

Immigration status is determined indirectly through a series of questions:

- And now, are you thinking about getting papers?

- Are you in the process of getting papers?
- Would you like to get papers?
- Did you have trouble getting into the country?
- Would there be any advantage to you in getting papers?
- The first time that you came to the United States, did you enter with papers or did you have to enter without them?
- And the most recent time you came to the United States, did you enter with papers or did you have to enter without them?

Purpose of Study: To review methodological issues in interviewing undocumented persons.

Funding Source(s): Unavailable.

Study Design: Review paper.

Sampling Procedures: Recommends snowball sampling.

Geographic Area: Various; includes San Diego County, California.

Population: Spanish-speaking.

Field Performance: Cornelius’ assessment of this approach is that it is good; no specific reliability or validity data available. No quantitative data are available with respect to response rate on immigration questions. Cornelius indicates that the “fieldwork is likely to be complex, difficult, and time-consuming . . .” Cornelius indicates that research involving nondetained illegal immigrants in the United States requires acceptance of “something less than conventionally rigorous standards of population sampling” as well as the use of well-trained interviewers with extensive personal contacts in the research community.

Expected Performance on National Surveys: These questions most likely distinguish undocumented from documented individuals. However, it is not clear that these questions, which are much more vague and indirect than those seen on numerous other instruments, would distinguish between various subcategories of documented individuals. The questions as posed are

difficult to administer other than in the context of a personal interview, as contrasted with a written survey instrument. It appears that these questions have been used primarily with Spanish-speaking populations. Consequently, it is unclear how well they would perform when used with other populations.

Appendix IV (Curiel, et al.)

Description of Instrument:

Immigration status is assessed by self-report (born in the United States, naturalized citizen, pending naturalization, pending resident status, or other).

Purpose of Study: To assess knowledge of and need for health, social, and educational services among Hispanic residents of Oklahoma City.

Funding Source(s): Starting Right.

Study Design: Cross-sectional.

Sampling Procedures: Household, within targeted geographic areas.

Geographic Area: Oklahoma City.

Population: 212 Hispanic households.

Field Performance: Data unavailable. Data relating to reliability and validity unavailable. No data are available with respect to response rate to immigration question or overall refusal rate for study participation.

Expected Performance on National Surveys: These questions are likely to distinguish citizens from noncitizens but are not likely to distinguish between various classifications of immigrants.

Appendix V (Dumka, Roosa, and Jackson) (Form unavailable)

Description of Instrument:

Immigration status is assessed by place of birth. There is no form available, but reliance on this question is reviewed here.

Purpose of Study: To evaluate mothers' supportive parenting and inconsistent discipline practices as mediators of the effects of multiple risk factors and family conflict on children's conduct and depression.

Funding Source(s): National Institute for Mental Health Grant 2-P50-MH39246-06.

Study Design: Cross-sectional.

Sampling Procedures: 121 low-income Mexican immigrant and Mexican American mothers and their fourth grade children. The mothers were recruited from a larger sample of 167 families recruited for a parent training intervention through two schools in a southwestern city.

Geographic Area: Southwest.

Population: 121 mothers, of whom 94 (78 percent) were born in Mexico.

Field Performance: The entire instrument was pretested with Spanish-speaking students, some of whom took it home to test with their relatives. The instrument was not pretested with the target population. There was a 9-percent refusal rate to participation. The refusal rate for this specific item is unavailable. There is no information available on the immigration status of those refusing to participate. Data relating to validity and reliability are unavailable.

Expected Performance on National Surveys: Reliance on place of birth most likely distinguishes between most citizens and noncitizens. It does not permit further delineation between various classifications of noncitizens and does not permit identification of those who are citizens other than by birth.

Appendix VIa (Heer and Falasco)

Description of Instrument:

Immigration status is determined through a series of questions relating to birth in the United States (yes/no), place of birth, citizenship status in United States (yes/no), possession of an alien registration card (green card) (yes/no), year of entry into the United States, and

periods of absence from the United States of 6 months or more. On the basis of these responses, individuals were classified as being an undocumented immigrant, a legal resident alien or naturalized citizen of the United States, or a U.S. citizen by birth. Individuals claiming status as a permanent resident alien were asked to show their alien registration (green) card.

Purpose of Study: To examine the socioeconomic status of recent mothers of Hispanic origin living in Los Angeles County.

Funding Source(s): Grant 5 R01 HD14342 from the National Institute of Child Health and Human Development.

Study Design: Cross-sectional; 903 interviews of one parent of all babies whose mother or father reported on the child's birth certificate Mexican origin and parental place of birth in either the United States or Mexico.

Sampling Procedures: Probability sampling of birth certificates for Los Angeles County for 1980 and 1981. Individuals excluded from study if mother under the age of 18, the baby was of low birthweight, the baby had died or been adopted, or the mother had suffered complications during pregnancy. The final sample included 700 interviews of mothers born outside the United States and 188 interviews with mothers born in the United States.

Geographic Area: Los Angeles County, California.

Population: Mexican ethnicity.

Field Performance: No data available with respect to reliability or construct validity. Weighted nonresponse rate for all respondents gathered from frame of mothers born in the United States was 52.9 percent and was 48.5 percent for those born outside of the United States. Nonresponse was attributable to new unknown addresses, names found not to be qualified, lack of response to three attempts at contact, lack of contact by the cutoff date, and refusals.

Expected Performance on National Surveys: As with appendixes I and II, this instrument is relatively simple to

administer in the context of a national survey. Although there are no data available with regard to validity or reliability, it appears that it would be able to distinguish between U.S. citizens and permanent residents. It is not clear, though, that it would correctly classify individuals who are legally temporarily in the United States or undocumented. The instrument appears to have been used with only one population, making it difficult to assess its acceptability to other communities.

Appendix VIb (Heer and Falasco)

Description of Instrument:

Immigration status is determined through a series of questions relating to place of birth, citizenship status in United States (yes/no), possession of an alien registration card (green card) (yes/no), basis of eligibility for permanent residence, temporary status in the United States, year of first and most recent entries into the United States, and number of times that the individual has come to live in the United States.

Purpose of Study: Not available.

Description of Instrument: Not available.

Study Design: Not available.

Sampling Procedures: Not available.

Geographic Area: Los Angeles County, California.

Population: Mexican ethnicity.

Field Performance: Data unavailable.

Expected Performance on National Surveys: See [appendix VIa](#).

Appendix VII (Hubbell, Chavez, Mishra, Magana, and Valdez)

Description of Instrument:

Immigration status is determined through a series of questions relating to place of birth, father's place of birth, mother's place of birth, date of birth, date of most recent entry into the United

States, number of years of residence in the United States, current immigration status (legal permanent resident, without papers, no papers but requested work permit, no papers but requested permanent residence, no papers but requested political asylum, United States citizen, temporary protected status, political asylee/refugee, other), and intent to remain permanently in the United States.

Purpose of Study: The instrument was used for two studies. The first study pertains to the development of a breast cancer control program for Latinas (Hubbell, Chavez, Mishra, Magana, and Valdez, 1995). The second study compares health service utilization of documented and undocumented immigrants in Orange County, California (Chavez, Hubbell, Mishra, and Valdez, 1997).

Breast Cancer Control Program

Funding Source(s): Public Health Service grant 5R01CA52931 from the National Cancer Institute, National Institutes of Health, Department of Health and Human Services.

Study Design: Cross-sectional.

Sampling Procedures: Participants in ethnographic interviews were recruited through organization-based network sampling. Participants in the telephone survey were randomly selected from telephone listings.

Geographic Area: Orange County, California.

Population: *Ethnographic interviews:* 28 Salvadoran immigrants, 39 Mexican immigrants, 27 U.S.-born Latinas of Mexican heritage, 27 Anglo women, and 30 physicians. *Telephone survey:* 269 U.S.-born Latinas, 425 Mexican immigrants, 109 other Latina immigrants, 422 Anglo women.

Field Performance: Data unavailable. In a study by Chavez, Hubbell, Mishra, and Valdez, 1997, (see [table 1](#)), which utilized a similar instrument, there was an overall cooperation rate of 78.5 percent, defined as the number of completed interviews divided by the sum of the

completed interviews plus refusals by eligible individuals. A total of 19 of 533 (3.6 percent) non-U.S.-born respondents in that study did not respond to the question pertaining to immigration status.

Expected Performance on National Surveys:

Although no data are available with respect to validity, it appears that the instrument would be able to distinguish U.S. citizens from noncitizens with minimum misclassification, because of the detailed questions relating to place of birth. As with the instrument reviewed previously, this instrument presumes that individuals will be able to accurately self-classify immigration status. However, the various immigration classifications are overlapping, e.g., someone may have no papers and may have requested a work permit and permanent residence or may have temporary protected status and have applied for political asylum, rendering the accuracy of self-classification somewhat questionable. The instrument appears to have been used predominantly, if not exclusively, with immigrants from Latin America. Consequently, it is unclear how well it would perform in other groups. Because of the instrument's relative brevity, it would be relatively easy to administer in the context of a survey.

Comparative Analysis, Orange County

Funding Source(s): National Cancer Institute (5 RO1 CA 51931).

Study Design: Cross-sectional.

Sampling Procedures: Subset from random sample of women in Orange County who participated in study of knowledge, attitudes, beliefs, and practices related to breast and cervical cancer.

Geographic Area: Orange County, California.

Population: Latina immigrants (Mexican, Central American, and South American) and Puerto Rican women.

Appendix VIII (Hubbell, Waitzkin, Mishra, Dombrink, and Chavez)

Description of Instrument:

Self-classification as citizen resident, student visa, worker visa, visitor visa, or undocumented.

Purpose of Study: To determine local access to medical care among Latinos.

Funding Source(s): Center for Orange County Research, St. Joseph Health System Foundation (St. Jude Hospital), the California Community Foundation, and the U.S. Public Health Service (PE 19154-07).

Study Design: Cross-sectional.

Sampling Procedures: Telephone surveys of residents in the northern inland portion of Orange County, from October 19, 1987 through February 2, 1988. In October 1987, selection of 300 families with incomes less than 125 percent of national poverty level and 352 families with incomes between 125 percent and 200 percent of poverty level, selected randomly from census tracts in which at least 100 households had incomes below the national poverty level, according to the 1980 census. In February 1988, selected 306 families with incomes greater than 200 percent of the Federal poverty level (“nonpoor”) from random sample of telephone numbers of families living in the same geographic location as the low-income group selected in October 1987.

Geographic Area: Northern inland portion of Orange County, California.

Population: Poor and nonpoor Latinos.

Field Performance: Data unavailable. No data available with respect to reliability or construct validity or refusal/response rates.

Expected Performance on National Surveys: The instrument appears to distinguish well between those who are citizens and those who are not. There may be some misclassification due to the limited number of categories available, e.g., those with political asylum are not encompassed within any of the enumerated categories.

Appendix IX (Lambert and Lambert)

Description of Instrument: The assessment of immigration status is based primarily on the respondent’s reported place of birth. Data are also collected on country of prior residence, country of parents’ prior residence, length of residence in United States, and length of parents’ residence in United States.

Purpose of Study: To examine the effects of a standard role induction procedure on immigrant patients having their first therapy experience.

Funding Source(s): Data unavailable.

Study Design: Behavioral intervention.

Sampling Procedures: 30 participants recruited through intake workers at community mental health center.

Geographic Area: Hawaii.

Population: 30 patients at community mental health center; nationality and immigration status unspecified.

Field Performance: 25 percent general refusal rate; several refusals on immigration questions specifically. No data are available with respect to reliability or validity.

Expected Performance on National Surveys: This instrument appears relatively simple and straightforward to administer. However, reliance on the questions in addition to place of birth does not contribute to the determination of immigration status because the instrument relies on parental residence, rather than place of birth, for a determination of citizenship. However, place of residence is not synonymous or coterminous with place of birth/nationality. Second, the instrument is unable to distinguish between subcategories of noncitizens, e.g., documented/undocumented, permanent resident/temporary resident, etc. Unlike many of the other instruments, the Lambert instrument was utilized with a Korean rather than Latin American population.

Appendix X (Lee, Crittenden, and Yu)

Description of Instrument:

Immigration status is determined on the basis of several questions: Place of birth, parents’ place of birth, date of entry into the United States, whether a U.S. citizen, and reason for leaving country of birth.

Purpose of Study: To examine the effects of quantitative, structural, and functional aspects of social relationships on the level of depressive symptoms among elderly Korean immigrants, as part of an overall needs assessment survey of the ethnic elderly in Chicago.

Funding Source(s): Not available.

Study Design: Cross-sectional.

Sampling Procedures: The sampling frame for the 1988 Ethnic Elderly Needs Assessment Survey consisted of Korean immigrants aged 50 years or older residing in uptown Chicago. This sampling frame consisted of approximately 2,000 names. A random sample of 400 names were selected from this list. Of these, 284 individuals were contacted by interviewers, and 200 Korean elders were interviewed between May 1988 and August 1988.

Geographic Area: Chicago area.

Population: Korean immigrants aged 50 years or older.

Field Performance: 30-percent general refusal rate; data unavailable with respect to immigration questions. No information on reliability or validity.

Expected Performance on National Surveys: Although no data are available with respect to validity, it appears that the instrument would be able to distinguish U.S. citizens from noncitizens with minimum misclassification, because of the detailed questions relating to place of birth. As with the instrument reviewed previously, this instrument presumes that individuals will be able to accurately self-classify immigration status. This is one of the few instruments to have been used with a non-Latino population.

Appendix XIa (Loue and Foerstel)

Description of Instrument:

Immigration status is determined through a series of questions relating to individual's and family's immigration situation. Each question requires a yes or no response, which then leads the interviewer to the next appropriate question. Responses to each indicated question along the path leads to a conclusion regarding the individual's current immigration status and eligibility for publicly funded health care benefits.

Purpose of Study: To develop an instrument for health care providers to determine immigration status and assess eligibility for publicly funded health care benefits, such as Medicaid and Medicare.

Funding Source(s): Funded in part by Alliance Healthcare Foundation in conjunction with study of human immunodeficiency virus (HIV) risk behaviors and HIV knowledge among nine different Asian and Pacific Islander communities in San Diego County.

Study Design: Cross-sectional.

Sampling Procedures: Convenience and snowball sampling. Recruitment conducted face to face.

Geographic Area: San Diego County.

Population: Latinos, Asians and Pacific Islanders.

Field Performance: No refusals in the field. The reliability and validity of the instrument were assessed against an intake questionnaire used by immigration attorneys to assess clients' immigration status. The kappa statistic for the determination of whether an individual was documented or undocumented was 1.0. The kappa statistic for the category of documentation among individuals who were documented was 0.47. (See Loue and Foerstel, 1996.)

Expected Performance on National Surveys: This is the only instrument for which detailed data are available with respect to construct validity and reliability. The instrument as it is now

constituted is out of date because of changes effectuated by recent Federal welfare and immigration reform legislation. Consequently, the instrument should not be used in national surveys. (See [appendix XIb](#) for discussion of revised form.)

Unlike most other instruments, this instrument leads the respondent down any number of pathways depending on the response to particular questions. The ultimate conclusion regarding immigration status is based on these responses. Consequently, this instrument does not presume that the respondent has sufficient knowledge to self-classify his or her immigration status. However, because of the complexity of the divergent pathways, this instrument is most appropriate for use in the context of an interview, rather than a written survey.

Appendix XIb (Loue)

Description of Instrument: This is a revised version of the form described in [appendix XIa](#). The revised version incorporates changes in the law effectuated by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 and the Illegal Immigration Reform and Immigrant Responsibility Act of 1996.

Purpose of Study: To evaluate the efficacy of an HIV prevention intervention for Latinas.

Funding Source(s): National Institute of Mental Health.

Study Design: Phase 2 is cross-sectional and consists of interviews with 75 men and 75 women at each of two sites (individuals of Mexican ethnicity in San Diego County, California, and individuals of Puerto Rican ethnicity in Cuyahoga County, Ohio). Phase 3 is an HIV prevention intervention trial to be conducted at each of the two sites. Phase 2 is ongoing at each of the sites.

Sampling Procedures: Organization-based network sampling and snowball sampling.

Geographic Area: San Diego County, California (immigration component).

Population: 75 men and 75 women of Mexican ethnicity.

Field Performance: A total of 61 interviews in San Diego have been completed to date. To date, there has been a 1-percent general refusal rate and no refusals to respond to the immigration questions.

Expected Performance on National Surveys: This revised version has not been validated and, unlike the previous version, is currently being used only with Latino immigrants. The instrument has the same strengths and weaknesses as the original version, described previously.

Appendix XII (Loue, Faust, and Bunce)

Description of Instrument:

Immigration status is determined through a series of questions:

- How long have you been living in the United States?
- Now, some people who are immigrants have a green card. Other people have other kinds of permission to be here. Do you have a green card or do you have another kind of permission?
- Has the kind of permission changed since August 22, 1996?
- If the permission has changed, what kind of permission do you have now?
- Sometimes people have permission but then it is not good anymore. Did this happen to you?

Purpose of Study: To assess the ability of immigrants in Cuyahoga and Lorain Counties, Ohio, to access medical care following the passage of the Federal welfare and immigration reform legislation.

Funding Source(s): Contract with health care institution.

Study Design: Cross-sectional.

Sampling Procedures: Snowball and institution-based network sampling to recruit sample of 251 immigrants.

Geographic Area: Cuyahoga and Lorain Counties in northeast Ohio.

Population: All non-U.S. citizens were eligible.

Field Performance: Approximately a 5- to 10-percent refusal rate to participate in study. No refusals to answer immigration questions. Interviews were conducted face to face with trained interviewers. Approximately 10 percent of the sample provided responses that did not accurately indicate immigration status, e.g., applied for some kind of work permit.

Expected Performance on National Surveys: These questions do not distinguish between citizens and noncitizens because citizens were ineligible to participate and were excluded after initial screening based on place of birth only. No data are available with respect to the validity or reliability of the instrument.

Appendix XIII (Mehta)

Description of Instrument:

Immigration status is assessed through a series of questions focusing on self-reported immigration status (naturalized U.S. citizen, resident/green card holder, temporary/tourist visa, student visa, birth in the United States), number of years in the United States, and the year of entry into the United States.

Purpose of Study: To assess the relationship between acculturation and mental health.

Funding Source(s): American Psychological Association's Minority Fellowship Program.

Study Design: Cross-sectional.

Sampling Procedures: Community sample recruited through cultural and community associations.

Geographic Area: Unspecified.

Population: 195 Indian immigrants, one-half of whom were U.S. citizens.

Field Performance: Data unavailable. Data relating to validity and reliability unavailable. Forty-five percent of the surveys were completed and returned at cultural festivals, forty-three percent

were returned by mail, and eleven percent were returned at designated temples or grocery stores where participants could receive the study stipend. It was estimated that the return rate for mail-in surveys ranged from 26 percent to 42 percent across regions. Face-to-face solicitation resulted in almost 100 percent participation.

Expected Performance on National Surveys: These questions most likely distinguish between citizens, permanent residents, and some nonimmigrants. The number and nature of the categories are insufficient to distinguish between nonimmigrants and undocumented persons.

Appendix XIV (Perilla, et al.)

Description of Instrument:

Immigration status is assessed by place of birth and date of entry into the United States.

Purpose of Study: To identify predictors of domestic violence in a sample of 60 immigrant Latinas, 30 of whom had sought help for abuse and 30 of whom had sought assistance for other family issues.

Funding Source(s): APA Minority Fellowship Dissertation grant; Hispanic services of Saint Joseph's Hospital, Atlanta.

Study Design: Cross-sectional; data collected through a semistructured questionnaire and a set of eight standardized instruments.

Sampling Procedures: Recruited through programs provided to the Latino community by a Catholic hospital.

Geographic Area: Unspecified southeastern metropolitan area.

Population: 43 Mexican-born women and 17 women born in other Latin American countries.

Field Performance: No refusals in the field.

Expected Performance on National Surveys: Designation of place of birth provides the simplest means for

classification of individuals as U.S. citizens or noncitizens. However, as indicated in the context of the literature review, this schema is subject to misclassification, the extent of which remains undetermined. Further, reliance on place of birth as a measure of immigration status presumes that an individual retains the status of immigrant regardless of the number of years in the United States or his or her legal status. Ultimately, reliance on place of birth as a measure tracks the social science paradigm for the definition of an immigrant.

Usage of this criteria alone is unlikely to provoke refusals to respond. It has been used in numerous populations and geographic areas. Unlike other instruments requiring self-assessment of status, place of birth neither presumes a more sophisticated level of knowledge on the part of the respondent, as does the Hubbell instrument, nor requires more extensive interviewer training, as does the Loue and Foerstel instrument.

Appendix XV (Robinson)

Description of Instrument:

Immigration status is determined on the basis of one question, which asks the respondent to report his or her status as a citizen, permanent resident, or parolee.

Purpose of Study: To evaluate the effectiveness of two bilingual, nontraditional mental health peer counseling programs providing services to Southeast Asian refugees.

Funding Source(s): Unavailable.

Study Design: Evaluation; longitudinal.

Sampling Procedures: 150 clients of 2 mental health centers, representing 100-percent sample of all Southeast Asian clients at these two centers between July 1983 and December 1984.

Geographic Area: Minneapolis-St. Paul.

Population: Cambodian, Lao, Hmong, and Vietnamese clients of two mental health centers.

Field Performance: Data unavailable. No data are available on reliability or construct validity of this measure. Evaluation study; included all immigrant clients.

Expected Performance on National Surveys: This assessment can be presumed to distinguish, in most cases, between permanent resident and U.S. citizens. It lacks the ability to distinguish between all other classes of entrants to the United States and allows only for the additional designation of parolee, which is a relatively rare status. Consequently, confusion in the field and misclassification of status are likely.

Appendix XVI (Schilit and Nimnicht)

Description of Instrument: This instrument is specific to individuals who qualified or believed they qualified for legal status pursuant to the provisions of the Immigration Reform and Control Act of 1986 (IRCA) (amnesty and special agricultural worker status). Immigration status is determined by a series of five questions: The kind of immigration document that the respondent currently possesses, the country of origin, the year in which the individual came to live in the United States, the basis of eligibility for status under IRCA, and the status of any application for legal residency that has been filed.

Purpose of Study: To gather descriptive data relating to individuals legalized under IRCA.

Funding Source(s): Florida State Department of Health and Rehabilitative Services, Tallahassee.

Study Design: Cross-sectional.

Sampling Procedures: Written interviews of 1,000 individuals selected from adult education classes; interviews with 300 individuals recruited through churches and labor camps.

Geographic Area: Broward, Collier, Dade, Orange, Palm Beach, and Polk counties, Florida.

Population: Individuals who had obtained their legal status based on illegal entry or undocumented status in the United States before January 1, 1982, (amnesty individuals) and individuals who obtained legal status based on their employment as seasonal agricultural workers as defined by the IRCA. The study population consisted of Haitian and Hispanic individuals (Colombia, El Salvador, Guatemala, Honduras, Nicaragua, and other unspecified countries).

Field Performance: Data unavailable. No data available with respect to refusal/response rates or reliability and validity.

Expected Performance on National Surveys: This instrument to assess immigration status was developed for use during the period of effectiveness of the IRCA. Consequently, as currently constituted, it should not be used in the field because it emphasizes some items that are no longer relevant. Like many of the other instruments used, this measure presumes that the individual is able to appropriately self-classify his or her immigration status. It apparently has been used in written form in the field with some success, although specific data relating to field performance is unavailable.

Appendix XVII (Sherraden and Barrera)

Description of Instrument: Immigration status is assessed for the respondent's mother and father, based on the parental place of birth. The respondent's immigration status is assessed based on her place of birth and her self-reported immigration status (U.S. citizen, green card, work permit, undocumented, or don't know). The respondent's partner's immigration status is determined based on the respondent's report.

Purpose of Study: To examine the family support and birth outcomes among second-generation Mexican immigrants.

Funding Source(s): Robert Wood Johnson Foundation, University of Missouri, and University of Missouri-St. Louis.

Study Design: Cross-sectional.

Sampling Procedures: Participants recruited through a teaching hospital, a public hospital, a federally financed community health center, board of health clinics, and community hospitals; interviews with 41 second-generation Mexican-American women.

Geographic Area: Chicago.

Population: Second-generation Mexican-American women who gave birth to low birthweight infants, excluding mothers with incorrect telephone numbers, those who had relocated, and those with disconnected telephone numbers. Approximately 14 percent of the participants were born outside of the United States but arrived in the United States before the age of 5.

Field Performance: Data unavailable. Data relating to construct validity and reliability unavailable. There were two refusals to participate in the study. No data are available with respect to response/refusal rates for the immigration questions.

Expected Performance on National Surveys: The instrument appears to have the ability to distinguish between U.S. citizens, permanent residents, undocumented individuals, and all others. The ability to distinguish between various subgroups of other immigrants who may differ from each other with respect to significant variables, is questionable. For instance, classification of individuals under the category of "work permit" includes those who are here legally on temporary visas as managers or journalists, some types of students, some professionals, and some agricultural workers, as well as individuals who have received asylum, withholding of deportation, or various administrative remedies. Presumably, the health issues facing low-wage agricultural workers are quite different from those facing managers, and access to care issues are quite different for recipients of asylum as

compared to agricultural workers and corporate executives. Reliance on this type of classification scheme will obviate the ability to draw such distinctions.

Appendix XVIII (Undocumented Workers Policy Research Project)

Description of Instrument:

Immigration status is determined based on a series of questions relating to place of birth, possession of papers to enter at time of entry, the continuing validity of those papers, the date of entry, and reason for coming to the United States.

Purpose of Study: To compare the cost of providing public services to undocumented individuals in Texas with the revenue received from taxes and fees paid by undocumented individuals.

Funding Source(s): Lyndon Baines Johnson Foundation, Austin, Texas; Texas Governor's Office of Budget and Planning, Austin.

Study Design: Cross-sectional.

Sampling Procedures: Interviews with 214 undetained and 39 detained undocumented persons; sources of and strategies for recruitment unspecified.

Geographic Area: Texas

Population: Individuals from Argentina, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Peru, and Venezuela.

Field Performance: Data unavailable on refusal/response rates and validity/reliability.

Expected Performance on National Surveys: The open-ended nature of the questions relating to papers to enter would seem to suggest that this measure of immigration status is most appropriate in the context of personal interview rather than a written survey. The questions most likely distinguish between most U.S. citizens and all others. It is not clear to what extent the questions can accurately differentiate between other classes of individuals.

Appendix XIX (University of Pennsylvania: Mexican Migration Project)

Description of Instrument:

Immigration history assessed at various points in time through detailed questions relating to type of entry, place of crossing, documentation at entry, cost of entry. Immigration status is assessed through a series of questions asking respondent if he/she was "indocumentado" (undocumented) or illegal or had used "documentos falso" (false documents).

Purpose of Study: To create a comprehensive data set on Mexican migration to the United States.

Funding Source(s): National Institute of Child Health and Human Development (Grant 1 R37 HD-24047).

Study Design: Longitudinal.

Sampling Procedures: A sample of 200 households from each of two to five Mexican communities was obtained each year through simple random sampling. A smaller number of households was sampled if the size of the community was less than 500 residents. An additional nonrandom sample of 10 to 20 out-migrant households from each community were interviewed during their sojourns in the United States.

Geographic Area: National.

Population: Mexican.

Field Performance: Investigator reported that these questions had no effect on the refusal rate for interviews conducted in Mexico.

Expected Performance on National Surveys: This instrument requires great detail regarding the migration experience. It is likely that it will distinguish well between U.S. citizens, permanent residents, undocumented individuals, and some other subgroups of sojourners to the United States. However, the complexity of the instrument precludes its use in the context of a written survey. Reliance on the instrument in the context of personal

interviews would require extensive interviewer training. Unlike many of the instruments, it does not presume respondent ability to self-classify immigration status. The investigator advised that he doesn't think that the "lack of problems would hold for a survey done in the United States, where illegal respondents would be very reluctant to talk to unknown outsiders."

Appendix XX (Urban Institute: Ku, Fix, and Enchautegui)

Description of Instrument:

Immigration status determined through series of questions requiring a yes/no response. Each response prompts individual to proceed to next appropriate question. Instrument appears to be able to distinguish between U.S. citizens, permanent residents, and all others.

Purpose of Study: Data not yet available from investigator.

Funding Source(s): Data not yet available from investigator.

Study Design: Data not yet available from investigator.

Sampling Procedures: 1,625 households at each site. The sample is composed from administrative data used to locate users of food stamps and through random digit dialing.

Geographic Area: Los Angeles County and New York City.

Population: The study contains 400 families that lost food stamps during 1997; 400 families that have retained food stamps in their entirety; 400 families above 200 percent of the poverty level; 400 families below the poverty level; and 400 families containing at least one elderly individual. Most of the elderly come from one of the other subgroups. Households are sampled only if they contain at least one foreign-born adult.

Field Performance: No data available.

Expected Performance National Surveys: Inadequate data to assess.

Appendix XXI (Current Population Survey)

Description of Instrument: The survey is conducted monthly by the U.S. Bureau of the Census. The basic survey includes questions about labor force participation of each household member age 15 years and older, country of birth, and citizenship. Approximately 50,000 households are eligible to be interviewed each month. Approximately 3,200 households are not interviewed each month because of unavailability.

Purpose of Study: To collect labor-force-related information. Secondary purposes include the collection of data pertaining to educational enrollment and attainment; income and poverty status; fertility, voting activity, and nativity; citizenship; year of entry; and parental nativity of respondents.

Funding Source(s): Federal Government.

Study Design: Longitudinal.

Sampling Procedures: The sampling frame consists of housing units enumerated in the last previous census. A total of 47,000 to 50,000 households are eligible to be interviewed each month; of these, approximately 3,200 are not interviewed because of unavailability. Each monthly sample contains eight rotation panels and every housing unit in the survey is assigned to a specified panel. Each panel is rotated in and out of the survey over a 16-month period and is then replaced by a new panel. The new panel is interviewed for 4 consecutive months, is taken out of the sample for 8 months, and is then put back into the sample for another 4 consecutive months and, finally, is replaced. There is approximately a 75-percent overlap in the sample from month to month and a 50-percent overlap from year to year for the same month. Undercoverage is estimated to be approximately 8 percent, which varies by race, age, and sex.

Geographic Area: Nationwide.

Population: Civilian noninstitutional population of the United States.

Field Performance: Nonresponse has averaged approximately 6.5 percent monthly. The item-specific nonresponse rate varies, from less than 1 percent for demographic items including place of birth to 12 percent for earnings items.

Expected Performance on National Surveys: There are discrepancies between the information reported via the Current Population Survey and the data reported by the Immigration and Naturalization Service with respect to numbers of individuals naturalized during a specific period.

Appendix XXII (Survey of Income and Program Participation)

Description of Instrument: A proposed battery consists of three questions: Status at time of entry into the United States, whether that status has been changed to permanent residence, and the date of such change.

Purpose of Study: To collect source and amount of income, labor force information, program participation and eligibility data, and general demographic characteristics to measure the effectiveness of existing Federal, State, and local programs; to estimate future costs and coverage for government programs, such as food stamps; and to provide improved statistics on the distribution of income in the country.

Funding Source(s): Federal Government.

Study Design: Longitudinal.

Sampling Procedures: The survey design is a continuous series of national panels, with sample size ranging from approximately 14,000 to 36,700 interviewed households. The duration of each panel ranges from 2 1/2 years to 4 years. The SIPP sample is a multistage-stratified sample of the U.S. civilian noninstitutionalized population.

Geographic Area: Nationwide.

Population: U.S. civilian noninstitutionalized population.

Field Performance: Some information is available at this Web site:

<http://www.sipp.census.gov/sipp/qp/pdf/c5.pdf>

Expected Performance on National Surveys: This formulation would appear to distinguish well between permanent residents and nonpermanent residents at the time of their entry into the United States. The category of nonimmigrant assumes that individuals understand the legal meaning of nonimmigrant and do not think of themselves as nonimmigrants simply because they do not have permanent residence. The category of “other” may encompass not only those who are here without documentation or who entered illegally, but also individuals who are here legally in some other status, e.g., individual grant of parole, who are qualified aliens under the current public benefit laws. The questions may not provide accurate information regarding an individual’s current immigration status. For instance, an individual may have entered the United States as a permanent resident, but may have lost that status because of a variety of circumstances; the battery does not inquire regarding current status.

Chapter 5 Conclusions and Recommendations

This review of the relevant literature and various instruments for the assessment of immigration status gives rise to the following conclusions:

- In general, research relating to immigrants and their health has not attended to the methodological issues inherent in such investigations. These issues include, most notably, the definition of an immigrant, assessment of the reliability and validity of measures to determine immigration status, measurement of biases that attend the various sampling approaches used, and the various sources of recruitment.

- The instruments developed for the assessment of immigration status differ across studies, making cross-study comparisons difficult. To some extent, these differences cannot be completely avoided, as the legal criteria for immigration subcategories may change over time.
- The assumptions which underlie the specific classification criteria used in any particular study are rarely stated explicitly, rendering it again difficult to make cross-study comparisons and to interpret the findings of any specific study. Many studies implicitly suggest that immigration status is static, e.g., if an individual once entered as an immigrant, the individual is always an immigrant. Such assumptions may be inappropriate, depending on the hypothesis under investigation. Variations in acculturation level exist at the individual and group levels. These differences may also demand attention depending on the hypothesis under investigation.
- The majority of studies in which immigration status has been examined are cross-sectional in nature. The ability of any particular instrument to detect changes in immigration status over time has not been examined. Additionally, few if any studies have attempted to examine changes in health or access to health care concurrent with changes in immigration status.
- Few studies have relied on random samples of individuals but instead have used organization-based network sampling, snowball sampling, and convenience sampling. Few authors have addressed the reasons underlying their choice of sampling strategy. However, these choices may be related to difficulty in locating the target population, such as undocumented individuals; reluctance of individuals to participate in a study in which they may have to disclose information about their immigration status; the closed nature of some of the communities in which the research is carried out; and the lack of telephone access to portions of the target communities. Neither the

potential direction or extent of the resulting biases nor the ability to generalize the research findings as a result of reliance on nonrandom sampling strategies has been adequately addressed in the relevant literature.

- Almost no data are available with respect to the field performance of any of the instruments for the assessment of immigration status, including instruments based on individuals' self-reports. This includes, for instance, instrument reliability and validity, refusal rates, time required for instrument administration, preferred method of administration (e.g., written survey or oral interview), and interviewer training issues. Data are also lacking with respect to coding and analysis issues.

Based on the foregoing, the following recommendations are made:

- In view of the paucity of data pertaining to the field performance of most existing instruments, it is strongly recommended that any instrument considered for use be field tested and revised appropriately before incorporation into a national survey.
- A decision must be made regarding the intended usage of the data and, accordingly, the paradigm that will guide the development of the instrument. Reliance on an immigration law or public benefits framework requires a more complex instrument, but also provides the greatest flexibility for the use of the resulting data, e.g., studies involving access to care issues, utilization issues, health status, etc.

As an example, a study relating to access to care or health services utilization must consider an individual's legal status because that status may be determinative of eligibility for health care benefits in the absence of private health insurance or sufficient private resources to cover costs. In this context, even the identification of individuals as permanent residents (green card holders) would be inadequate as current law distinguishes between

- Qualified eligible aliens, who can receive publicly funded health care services
- Qualified ineligible aliens who, although otherwise eligible are subject to a temporary bar to the receipt of benefits and can receive only emergency services through public funding, and
- Unqualified aliens who, based upon their current immigration status, are ineligible for publicly funded care other than emergency services. A misclassification of individuals could lead to erroneous conclusions, e.g., that permanent residents as a group, rather than ineligible qualified permanent residents, are responsible for a large proportion of emergency department presentations.
- The development of the instrument must consider the level of respondent knowledge that is to be presumed. For instance, designation of place of birth requires very little sophistication on the part of the respondent, but self-classification of specific immigration status may, depending on the population, the individual, or the State of the law at a given time, require a great deal of knowledge. It is recommended that any measure of immigration status strike a balance between a level of simplicity sufficient to permit self-administration of the instrument and a level of complexity to permit distinction between critical categories of immigrants.
- The political and social climate at a particular time may potentially affect the questions that are to be asked and the prospective respondents' willingness to provide the information requested. For instance, previous studies have indicated that individuals may delay seeking care where they feared being reported for their immigration status. It is not known, however, how this fear may impact refusal rates due to the lack of adequate data pertaining to field testing and refusal rates.

- The instrument should be field tested in a variety of geographic locales and with a variety of populations. To date, the majority of instruments have been used with Latino or Asian immigrant populations. It is not at all clear, for instance, that an instrument acceptable in one community will be acceptable in another. Too, a large proportion of the instruments available have been utilized in the West and in large urban areas. A national survey would necessarily demand that the instrument be used in other regions of the country and in smaller communities.
- In field testing the proposed instrument, attention should be paid to various sampling strategies. It may be advisable, for instance, to test the instrument in different locations, using a different sampling approach in each. The validity of the proposed instrument should also be assessed during this testing phase.
- It appears that the efficiency and effectiveness of various data collection strategies have not been evaluated. Consequently, it is not known whether response rates and data reliability would be enhanced or diminished through the use of telephone interviews, in-person interviews, or mail-in questionnaires/surveys. Use of a complex instrument would seem to mitigate against reliance on mail-in responses. Telephone interviews may be less likely than in-person interviews to encompass the undocumented population.
- Depending on the complexity of the instrument to be used and the mechanism for use (e.g., survey or oral interview), extensive interviewer training may be necessary. Although studies outside of the immigration context indicate that interviews are facilitated by reliance on interviewers of the same ethnic and linguistic background as the respondents, it is not known whether this also applies in the context of an assessment of immigration status. Consequently, the impact of the interviewer's characteristics on the course of the

interview or the prospective participant's initial willingness to respond is unclear.

- The questions recommended for inclusion in an assessment of immigration status vary depending on the paradigm chosen and the hypothesis to be tested. For instance, in a study of the incidence and prevalence of cancer within specific groups, it may be important to know the proportion of an individual's life spent in the United States, but the individual's legal status may not be relevant. However, a study examining health services utilization by immigrants with cancer would require additional information regarding individuals' legal status because it may be relevant to issues relating to access to care. The following suggested questions attempt to consider the various contexts in which a need for immigration status may arise.

A. Where were you born?
_____ (country)

Explanation—This question is a threshold question that distinguishes between U.S. citizens by birth and all others. This information is critical regardless of the paradigm being used for assessment of immigration status. The designation of a specific country permits more detailed analysis, which may be particularly helpful in studies relating to incidence and prevalence of specific disorders.

B. Where was your mother born?
_____ (country)

C. Where was your father born?
_____ (country)

D. What is your birth date?

Explanation—These three questions are necessary to determine whether the individual may be a U.S. citizen despite birth outside of the United States, i.e., whether the person may have derived citizenship from one or both parents (immigration and public benefit law paradigms).

E. If you were not born in the United States, how many years have you

spent in the United States, counting all the time together?

Explanation—This question is not relevant to an assessment of immigration status per se, but may be useful to those needing a surrogate measure of acculturation.

F. Did you become a citizen of the United States through naturalization?
_____ yes _____ no

Explanation—This question assesses change in immigration status to that of a citizen. This information is important when utilizing an immigration or public benefit law paradigm because the response provides additional information relating to current eligibility for publicly funded health care benefits.

IF YES, STOP IMMIGRATION QUESTIONS HERE. IF NO, CONTINUE WITH G.

G. Are you a permanent resident (green card holder) or conditional permanent resident?
_____ yes _____ no

IF YES, ANSWER H. IF NO, SKIP TO I.

H. In what year did you receive your green card or your conditional permanent residence?

Explanation—Questions G and H together will determine whether an individual is a permanent resident or conditional permanent resident. (Conditional residents are individuals who receive permanent residence through marriage to a U.S. citizen on a conditional basis for 2 years. They must subsequently demonstrate that the marriage was valid for the purposes of immigration to be adjusted to permanent residence.) An inquiry regarding the date on which permanent residence was received will provide some indication as to whether the individual is eligible for publicly funded medical benefits or is subject to a 5-year bar on their receipt (immigration law/public benefit law paradigms).

IF A PERMANENT RESIDENT, END IMMIGRATION QUESTIONS HERE. OTHERWISE CONTINUE WITH I.

I. Have you received political asylum or withholding of deportation?
 _____ yes _____ no

Explanation—Individuals who have received political asylum or withholding of deportation are, under current law, qualified aliens not subject to the 5-year bar and are consequently eligible for full-scope publicly funded medical care (immigration law and public benefit law paradigms). This information is critical in evaluating access and utilization issues. This question does not provide adequate information for the classification of “refugee” within a social science paradigm because it focuses the inquiry on the individual’s legal status rather than his/her subjective reasons for leaving the country of origin/nationality. The subjective reason, however, is not determinative of status under either the immigration or public benefit law paradigms.

IF YES, END IMMIGRATION QUESTIONS HERE. IF NO, CONTINUE WITH J.

J. Have you received parole status for 1 year or more?
 _____ yes _____ no

IF YES, CONTINUE AND END WITH K. IF NO, PROCEED TO L.

Explanation—Individuals who have received parole status for 1 year or more are, under current law, qualified aliens not subject to the 5-year bar and are consequently eligible for full-scope publicly funded medical care (immigration and public benefit law paradigms). This information is critical in evaluating access and utilization issues.

K. If you received parole for more than 1 year, when does that status end?

Explanation—This information indicates whether the individual’s permission is still valid and, consequently, whether the individual is entitled to receive full-scope publicly

funded medical services (immigration and public benefit law paradigms). This issue is critical for studies relating to access to care and utilization.

- L. Which of the following best describes your current immigration status?
1. Permission to be in the United States for a temporary period but without permission to work, e.g., tourist, student, and that permission has not expired
 2. Permission to be in the United States for a temporary period, with permission to work, e.g., student, corporate transferee, temporary worker and that permission has not expired
 3. Entered the United States legally for a temporary period but stayed past the time allowed
 4. No papers to enter the United States and no permission to work
 5. No papers to enter the United States but received permission to work

Explanation—These categories distinguish between those who are in the United States legally as nonimmigrants, with and without employment authorization, and those who entered illegally and have or do not have permission to work. (Some individuals may have entered illegally but because of specific court cases or temporary status newly applied to a class of persons, may have received permission to work.) These questions, together with questions regarding employment status, permit inferences to be made regarding the legality of an individual’s presence and, depending on other data collected, potential ability to access care. For instance, if an individual reports that he/she is in the United States legally but without permission to work, but also reports that he/she is working, it can be inferred that the individual is actually here illegally because he/she is in violation of status. Individuals who are employed may have greater access to monetary and/or insurance resources for health care services and/or may use services differently than individuals who are here legally but without

authorization to work and without employment.

Skip patterns may be confusing to some. The following set of questions is recommended as an alternative.

- A. Which of the following best describes your current immigration status?
1. U.S. citizen
 2. Permanent resident
 3. Conditional resident through marriage to a U.S. citizen
 4. Recipient of asylum or withholding of deportation
 5. Recipient of parole status for 1 year or more
 6. Permission to be in the United States for a temporary period but without permission to work, e.g., tourist, certain students, and that permission has not expired
 7. Permission to be in the United States for a temporary period with permission to work, e.g., student, corporate transferee, temporary worker, and that permission has not expired
 8. Entered the United States legally for a temporary period but stayed past the time allowed
 9. No papers to be in the United States and no permission to work
 10. No papers to be in the United States but received permission to work
- B. Which of the following best describes your immigration status when you first entered the United States?
1. Permanent resident
 2. Conditional resident through marriage to a U.S. citizen
 3. Recipient of asylum or withholding of deportation
 4. Recipient of parole status for 1 year or more
 5. Permission to be in the United States for a temporary period but without permission to work, e.g., tourist, certain students, and that permission has not expired

6. Permission to be in the United States for a temporary period with permission to work, e.g., student, corporate transferee, temporary worker, and that permission has not expired
 7. Entered the United States legally for a temporary period but stayed past the time allowed
 8. No papers to be in the United States and no permission to work
 9. No papers to be in the United States but received permission to work
- C. In what year did you first enter the United States?

Explanation—These questions avoid the confusion that may accompany skip patterns. They also avoid the confusion that may accompany use of the term “nonimmigrant.” In the legal context, that term refers to individuals who are in the United States legally with specific types of permission but who generally do not have the intent to remain here permanently. (There are exceptions to the intent requirement.) However, individuals who are not immigrant, i.e., green card holders, may erroneously self-classify as “nonimmigrants,” regardless of their legal status, because they know that they are not immigrants. Use of the questions without a skip pattern also assumes a greater level of understanding on the part of the respondents, e.g., that individuals who may have derived citizenship are aware that they are citizens. A choice of instrument will depend to some degree on the extent of misclassification that is acceptable. However, the extent of misclassification that attends either of these approaches is not known.

Chapter 6

Literature Cited

- Agocs MM., Trent RB, Russell DM. Activities associated with drownings in Imperial County, CA, 1980–90: Implications for prevention. *Public Health Reports*; 109, 290–5. 1994.
- Ailinger RL, Dear MR. Latino immigrants’ explanatory models of tuberculosis infection. *Qualitative Health Research*; 7, 521–31. 1997.
- Alston LT, Aguirre B. Elderly Mexican Americans: Nativity and health access. *International Migration Review*; 21, 626–42. 1987.
- Anderson J, Moeschberger M, Chen MS, et al. An acculturation scale for Southeast Asians. *Social Psychiatry and Psychiatric Epidemiology*; 28, 131–41. 1993.
- Aroian K. Mental health risks and problems encountered by illegal immigrants. *Issues in Mental Health Nursing*; 14, 379–97. 1993.
- Aroian K. Sources of social support and conflict for Polish immigrants. *Qualitative Health Research*; 2, 278–287. 1992.
- Asch S, Leake B, Gelberg L. Does fear of immigration authorities deter tuberculosis patients from seeking care? *Western Journal of Medicine*; 161, 373–76. 1994.
- August LK. Health Service Utilization Patterns of Southeast Asian Refugees: Rhode Island Medicaid/Refugee Medical Assistance Data Analysis, October 1979 to December 1982. Cranston: Rhode Island State Social and Rehabilitative Services Department. 1984.
- Barry MA, Shirley L, Grady MT, et al. Tuberculosis infection in urban adolescents: Results of a school-based testing program. *American Journal of Public Health*; 80, 439–41. 1990.
- Bass JL, Mehta KA, Eppes B. Parasitology screening of Latin American children in a primary care clinic. *Pediatrics*; 89, 279–83. 1992.
- Bean FD, Van Hook JW, Glick JE. Country of origin, type of public assistance, and patterns of welfare reciprocity among U.S. immigrants and natives. *Social Science Quarterly*; 78, 432–51. 1997.
- Bean FD, Van Hook JW, Glick JE. Mode-of-Entry, Type of Public Assistance and Patterns of Welfare Reciprocity Among U.S. Immigrants and Natives. Texas Population Research Center Paper No. 94–95-17. Austin, Texas: University of Texas at Austin. 1995.
- Bhatt, K. Socio-economic influences in medical practice: A perspective. *Guru Nanak Journal of Sociology*; 15, 69–75. 1994.
- Blum RN, Polish LB, Tapy JM, et al. Results of screening for tuberculosis in foreign-born persons applying for adjustment of immigration status. *Chest*; 103, 1670–4. 1993.
- Borjas GJ, Hilton, L. Immigration and the welfare state: Immigrant participation in means-tested entitlement programs. *Quarterly Journal of Economics*; 111, 575–604. 1996.
- Borjas GJ, Trejo SJ. Immigrant participation in the welfare system. *Industrial and Labor Relations Review*; 44, 195–211. 1991.
- Braun KL, Takamura JC, Mougeot T. Perceptions of dementia, caregiving, and help-seeking among recent Vietnamese immigrants. *Journal of Cross Cultural Gerontology*; 11, 213–28. 1996.
- Brindis C, Wolfe AL, McCarter V, et al. The associations between immigrant status and risk-behavior patterns in Latino adolescents. *Journal of Adolescent Health*; 17, 99–105. 1995.
- Buchwald D, Panwala S, Hooton, TM. Use of traditional health practices by Southeast Asian refugees in a primary care clinic. *Western Journal of Medicine*; 156, 507–511. 1991.
- Buskin SE, Gake JL, Weiss NS, Nolan CM. Tuberculosis risk factors in King County, Washington, 1988 through 1990. *American Journal of Public Health*; 84, 1750–6. 1994.

- Catanzaro A, Moser RJ. Health status of refugees from Vietnam, Laos, and Cambodia. *Journal of the American Medical Association*; 247, 1303–8. 1982.
- Chan TC, Krishel SJ, Bramwell KJ, Clark RF. Survey of illegal immigrants seen in an emergency department. *Western Journal of Medicine*; 164, 212–6. 1996.
- Chaulk CP, Moore-Rice K, Rizzo R, Chaisson RE. Eleven years of community-based directly observed therapy for tuberculosis. *Journal of the American Medical Association*; 274, 945–51. 1995.
- Chavez JM, Buriel R. Mother-child interactions involving a child with epilepsy: A comparison of immigrant and native-born Mexican Americans. *Journal of Pediatric Psychology*; 13, 349–61. 1988.
- Chavez LR. Doctors, curanderos, and brujas: Health care delivery and Mexican immigrants in San Diego. *Medical Anthropology*; 15, 31–7. 1984.
- Chavez LR, Cornelius WA, Jones OW. Utilization of health services by Mexican immigrant women in San Diego. *Women and Health*; 11, 3–20. 1986.
- Chavez LR, Hubbell FA, Mishra SI, Burciaga Valdez R. Undocumented Latino immigrants in Orange County, California: A comparative analysis. *International Migration Review*; 31, 88–107. 1997.
- Chavkin W, Busner C, McLaughlin M. Reproductive health: Caribbean women in New York City, 1980–1984. *International Migration Review*; 21, 609–25. 1987.
- Chi PSK. Medical utilization patterns of migrant farm workers in Wayne County, New York. Presented at the 47th Annual Meeting of the Rural Sociological Society. College Station, Texas. August 22–25, 1984.
- Cobb-Clark, DA. Do Immigrants Have Adequate Health Insurance? The Implications of Foreign-Born Status for Health Insurance Coverage. United States Department of Labor. 1991.
- Cohen LM. Controlarse and the problems of life among Latino immigrants. In: Vega WA, Miranda MR, eds. *Stress & Hispanic Mental Health*. Rockville, Maryland: United States Department of Health and Human Services. Alcohol, Drug Abuse, and Mental Health Administration. 202–18. 1985.
- Cornelius WA. Interviewing undocumented immigrants: Methodological reflections based on fieldwork in Mexico and the United States *International Migration Review*; 16, 378–411. 1982.
- Cornelius WA, Chavez LR, Jones OW. *Mexican Immigration and Access to Health Care*. La Jolla, California: Center for U.S.-Mexican Studies, University of California at San Diego. 1984.
- Curiel H, Baker D, Mata J, et al. A Needs Assessment Survey of Hispanic Oklahoma City Residents in High Density Areas: A Report of Findings. Oklahoma City: Latino Community Development Agency. 1993.
- Dasgupta SD, Warriar S. In the footsteps of “Arundhati”: Asian Indian women’s experience of domestic violence in the United States. *Violence Against Women*; 2, 238–59. 1996.
- D’Avanzo CE, Frye B, Froman R. Stress in Cambodian refugee families. *IMAGE: Journal of Nursing Scholarship*; 26, 101–5. 1994.
- Davis JM, Goldenring J, McChesney M, Medina A. Pregnancy outcomes of Indochinese refugees, Santa Clara County, California. *American Journal of Public Health*; 72, 742–4. 1982.
- de la Puente M. An analysis of the underenumeration of Hispanics: Evidence from Hispanic concentrated small area ethnographic studies. In: *Proceedings of the 1992 Annual Research Conference*. Washington, D.C.: U.S. Department of Commerce, U.S. Bureau of the Census. 45–69. 1992.
- DeSantis L. Health care orientations of Cuban and Haitian immigrant mothers: Implications for health professionals. *Medical Anthropology*; 12, 69–89. 1989.
- DeSantis L. Haitian immigrant concepts of health. *Health Values*; 17, 3–16. 1993.
- DeSantis L, Thomas JT. Health education and the immigrant Haitian mother: Cultural insights for community health nurses. *Public Health Nursing*; 9, 87–96. 1992.
- Dewey KG, Daniels J, Teo KS, et al. Height and weight of Southeast Asian preschool children in Northern California. *American Journal of Public Health*; 76, 806–8. 1986.
- Die AH, Seelbach WC. Problems, sources of assistance, and knowledge of services among elderly Vietnamese immigrants. *Gerontologist*; 28, 448–52. 1988.
- Driscoll AK, Upchurch DM. Post-immigration childbearing patterns of Mexican women in the United States. Presented at the Population Association of America Meeting. San Francisco, California. 1995.
- Dumka LE, Roosa MW, Jackson KM. Risk, conflict, mothers’ parenting, and children’s adjustment in low-income, Mexican immigrant and Mexican American families. *Journal of Marriage and the Family*; 59, 309–23. 1997.
- Duncan L, Simmons M. Health practices among Russian and Ukrainian immigrants. *Journal of Community Health Nursing*; 13, 129–37. 1996.
- Ehnert EL, Roberto RR, Barrett L, et al. Cysticercosis: First 12 months of reporting in California. *Bulletin of PAHO*, 26; 165–72. 1992.
- Eisenstadt SN. *The Absorption of Immigrants*. Glencoe, Illinois: Free Press. 1955.
- Erickson P. Lessons from a repeat pregnancy prevention program for Hispanic teenage mothers in East Los Angeles. *Family Planning Perspectives*; 26, 174–8. 1994.
- Erickson R, Hoang GN. Health problems among Indochinese refugees. *American Journal of Public Health*; 70, 1003–6. 1980.
- Faller HS. Perinatal needs of immigrant Hmong women: Surveys of women and health care providers. *Public Health Reports*; 100 340–3. 1985.
- Fink A. *How To Sample in Surveys*. Thousand Oaks, California: Sage Publications. 1995.

- Frey WH. Demographic profiles of US states: Impacts of "new elderly births," migration and immigration. *Gerontologist*; 35, 761–70. 1995.
- Gaviria M, Stern G, Schensul SL. Sociocultural factors and perinatal health in a Mexican-American community. *Journal of the National Medical Association*; 74, 983–9. 1982.
- Gelfand DE. Assistance to the new Russian elderly. *Gerontologist*; 26, 444–8. 1986.
- Gelfand DE. Health and health care for legalized aliens. *Evaluation and Program Planning*; 14, 257–62. 1991.
- Ghaemi-Ahmadi S. Attitudes toward breast-feeding and infant feeding among Iranian, Afghan, and Southeast Asian immigrant women in the United States: Implications for health and nutrition education. *Journal of the American Dietetic Association*; 92, 354–5. 1992.
- Gilbert MJ. Alcohol consumption patterns in immigrant and later generation Mexican American women. *Hispanic Journal of Behavioral Sciences*; 9, 299–313. 1987.
- Gilman SC, Justice J, Saepharn K, Charles G. Use of traditional and modern health services by Laotian refugees. *Western Journal of Medicine*; 157, 310–5. 1992.
- Golding JM, Burnam MA, Benjamin B, Wells KB. Risk factors for secondary depression among Mexican Americans and non-Hispanic whites. *Journal of Nervous and Mental Disease*; 181, 166–75. 1993.
- Gozdzik E. Older Refugees in the United States: From Dignity to Despair. Washington, D.C.: Refugee Policy Group. 1990.
- Guendelman S. Health care users residing on the Mexican border: What factors determine choice of the U.S. or Mexican health system? *Medical Care*; 29, 419–29. 1991.
- Guendelman S, English PB. Effect of United States residence on birth outcomes among Mexican immigrants: An exploratory study. *American Journal of Epidemiology*; 142, S30–8. 1995.
- Guendelman S, English P, Chavez G. Infants of Mexican immigrants: Health status of an emerging population. *Medical Care*; 33, 41–52. 1995.
- Guendelman S, Jasis M. Giving birth across the border: The San Diego-Tijuana connection. *Social Science and Medicine*; 34, 419–25. 1992.
- Guendelman S, Witt S. Improving access to prenatal care for Latina immigrants in California: Outreach and inreach strategies. *International Quarterly of Community Health Education*; 12, 89–106. 1992.
- Halfon N, Wood DL, Burciaga Valdez R, et al. Medicaid enrollment and health services access by Latino children in inner-city Los Angeles. *Journal of the American Medical Association*; 277, 636–41. 1997.
- Hattar-Pollara M, Meleis AI. The stress of immigration and the daily lived experiences of Jordanian immigrant women in the United States. *Western Journal of Nursing Research*; 17, 521–39. 1995.
- Heer DM, Falasco D. The socioeconomic status of recent mothers of Mexican origin in Los Angeles County: A comparison of undocumented migrants, legal migrants, and native citizens. Presented at the Annual Meeting of the Pacific Sociological Association. San Diego, California. April 24, 1982.
- Heer DM, Jackson A. The relative utilization of health and welfare services by Mexican families in Los Angeles dependent on whether the mother is undocumented, a legal immigrant, or native-born. Presented at the 112th Annual Meeting of the American Public Health Association. Anaheim, California. November 11–15, 1984.
- Herrinton LJ, Stanford JL, Schwartz SM, Weiss NS. Ovarian cancer incidence among Asian migrants to the United States and their descendants. *Journal of National Cancer Institute*; 86, 1336–9. 1994.
- Hingson RW, Strunin L, Grady M, et al. Knowledge about HIV and behavioral risks of foreign-born Boston public school students. *American Journal of Public Health*; 81, 1638–41.
- Hubbell FA, Chavez LR, Mishra SI, et al. From ethnography to intervention: Developing a breast cancer control program for Latinas. *Journal of the National Cancer Institute Monographs*; 18, 109–15. 1995.
- Hubbell FA, Waitzkin H, Mishra SI, Dombrink J. Evaluating health-care needs of the poor: A community-oriented approach. *American Journal of Medicine*; 87, 127–31. 1989.
- Hubbell FA, Waitzkin H, Mishra SI, et al. Access to medical care for documented and undocumented Latinos in a Southern California county. *Western Journal of Medicine*; 154, 414–7. 1991.
- Hurh WM, Kim KC. Adaptation stages and mental health of Korean male immigrants in the United States. *International Migration Review*; 24, 456–79. 1990.
- Hurh WM, Kim KC. Correlates of immigrants' mental health. *Journal of Nervous and Mental Disease*; 178, 703–11. 1990.
- Ikels C. Older immigrants and natural helpers. *Journal of Cross-Cultural Gerontology*; 1, 209–22. 1986.
- Illegal Immigration reform and Immigrant Responsibility Act of 1996, Pub. L. No. 104-207, 110 Stat. 3008. October 1, 1996.
- Jenkins CNH, Le T, McPhee SJ, et al. Health care access and preventive care among Vietnamese immigrants: Do traditional beliefs and practices pose barriers? *Social Science and Medicine*; 43, 1049–56. 1996.
- Jensen L. Patterns of immigration and public assistance utilization, 1970–1980. *International Migration Review*; 22, 51–83. 1988.
- Kennedy M. Providing AIDS related services to recently arrived immigrant and refugee youth. *AIDS Education and Prevention*, Fall supp. 83–6. 1992.

- Kim O. Loneliness: A predictor of health perceptions among older Korean immigrants. *Psychological Reports*; 81, 591–4. 1997.
- Klatsky AL, Armstrong MA. Cardiovascular risk factors among Asian Americans living in Northern California. *American Journal of Public Health*; 81, 1423–8. 1991.
- Kolody B, Vega W, Meinhardt K, Bensussen G. The correspondence of health complaints and depressive symptoms among Anglos and Mexican-Americans. *Journal of Nervous and Mental Disease*; 174, 221–8. 1986.
- Krishnan A, Berry JW. Acculturative stress and acculturation attitudes among Indian immigrants to the United States. *Psychology and Developing Societies*; 4, 187–212. 1992.
- Kuo WH, Tsia YM. Social networking, hardiness, and immigrant's mental health. *Journal of Health and Social Behavior*; 27, 133–49. 1986.
- Kuss T. Family planning experiences of Vietnamese women. *Journal of Community Health Nursing*; 14, 155–68. 1997.
- Laffrey SC, Meleis AI, Lipson JG, et al. Assessing Arab-American health care needs. *Social Science and Medicine*; 29, 877–83. 1989.
- Lambert RG, Lambert MJ. The effects of role preparation for psychotherapy on immigrant clients seeking mental health services in Hawaii. *Journal of Community Psychology*; 12, 263–75. 1984.
- Lanska DJ. Geographic distribution of stroke mortality among immigrants to the United States. *Stroke*; 28, 53–7. 1997.
- Lauderdale DS, Jacobsen SJ, Furner SE, et al. Hip fracture incidence among elderly Asian-American populations. *American Journal of Epidemiology*; 146, 502–9. 1997.
- LeClere FB, Jensen L, Biddlecom AE. Health care utilization, family context, and adaptation among immigrants to the United States. *Journal of Health and Social Behavior*; 35, 370–84. 1994.
- Lee E. A theory of migration. *Demography*; 3, 47–57. 1966.
- Lee JA, Yeo G, Gallagher-Thompson D. Cardiovascular disease risk factors and attitudes towards prevention among Korean-American elders. *Journal of Cross Cultural Gerontology*; 8, 17–33. 1993.
- Lee M, Crittenden KS, Yu E. Social support and depression among elderly Korean immigrants in the United States. *International Journal of Aging and Human Development*; 42, 313–27. 1996.
- Lipson JG. Afghan refugee health: Some findings and suggestions. *Qualitative Health Research*; 1, 349–69. 1981.
- Lipson JG. The health and adjustment of Iranian immigrants. *Western Journal of Nursing Research*; 14, 10–29. 1992.
- Lipson JG, Meleis AI. Methodological issues in research with immigrants. *Medical Anthropology*; 12, 103–15. 1989.
- Lipson JG, Omidian PA, Paul SM. Afghan health education project: A community survey. *Public Health Nursing*; 12, 143–50. 1995.
- Loue S. Access to care and the undocumented alien. *Journal of Legal Medicine*; 13, 271–332. 1992.
- Loue S. Defining the immigrant. In: Loue S, ed. *Handbook of immigrant health*. New York: Plenum Press. 19–36. 1998.
- Loue S, Faust M, Bunce A. The effect of immigration and welfare reform legislation on immigrants' access to health care, Cuyahoga and Lorain counties. *Journal of Immigrant Health*. In press.
- Loue S, Foerstel J. Clarifying the legal definition of “undocumented aliens” (letter). *American Journal of Public Health*; 84, 1032. 1994.
- Loue S, Foerstel J. Assessing immigration status and eligibility for publicly funded medical care: A questionnaire for public health professionals. *American Journal of Public Health*; 86, 1623–5. 1996.
- Loue S, Oppenheim S. Immigration and HIV infection: A pilot study. *AIDS Education and Prevention*; 6, 74–80. 1994.
- Mack TM, Walker A, Mack W, Bernstein L. Cancer in Hispanics in Los Angeles County. *National Cancer Institute Monograph*; 69, 99–104. 1985.
- Mangalam JJ. *Human Migration: A Guide to Migration Literature in English 1955–1962*. Lexington, Kentucky: University of Kentucky. 1968.
- Margolis ML. Brazilians and the 1990 United States census: Immigrants, ethnicity, and undercount. *Human Organization*; 54, 52–9. 1995.
- Mattson S, Lew L. Culturally sensitive prenatal care for Southeast Asians. *Journal of Obstetric, Gynecology and Neonatal Nursing*; 21, 48–54. 1991.
- May KM. Middle Eastern immigrant parents' social networks and help-seeking for child health care. *Journal of Advanced Nursing*; 17, 905–12. 1992.
- McCloskey LA, Fernandez-Esquer ME, Southwick K, Locke C. The psychological effects of political and domestic violence on Central American and Mexican immigrant mothers and children. *Journal of Community Psychology*; 23, 95–116. 1995.
- Mehta S. Relationship between acculturation and mental health for Asian Indian immigrants in the United States. *Geriatric, Social, and General Psychology Monographs*; 124, 61–78. 1998.
- Meinhardt K, Tom S, Tse P, You CY. Southeast Asian refugees in the “Silicon Valley”: The Asian Health Assessment Project. *Amerasia*; 12, 43–65. 1985–86.
- Meleis AI, Lipson JG. Ethnicity and health among five Middle Eastern immigrant groups. *Nursing Research*; 41, 98–103. 1992.
- Messias DKH. Concept development: Exploring undocumentedness. *Scholarly Inquiry for Nursing Practice: An International Journal*; 10, 235–52. 1996.
- Mittman I, Crombleholme WR, Green JR, Golbus MS. Reproductive genetic counseling to Asian-Pacific and Latin American immigrants. *Journal of Genetic Counseling*; 7, 49–70. 1998.
- Montepio SN. Folk medicine in the Filipino American experience. *Amerasia*; 13, 151–62. 1986–87.

- Moon A. Predictors of morale among Korean immigrant elderly in the USA. *Journal of Cross Cultural Gerontology*; 11, 351–67. 1996.
- Moon J, Pearl JH. Sources of alienation among elderly Korean-American immigrants: Subjective reports. *Journal of Minority Aging*; 12, 1–16. 1990.
- Moore M, Onorato IM, McCray E, Castro KG. Trends in drug-resistant tuberculosis in the United States, 1993–1996. *Journal of the American Medical Association*; 278, 833–7. 1997.
- Mui AC. Depression among elderly Chinese immigrants: An exploratory study. *Social Work*; 41, 632–45. 1996a.
- Mui AC. Geriatric depression scale as a community screening instrument for elderly Chinese immigrants. *International Psychogeriatrics*; 8, 445–58. 1996b.
- Nagi SZ, Haavio-Mannila E. Migration, health status and utilization of health services. *Sociology of Health and Illness*; 2, 174–93. 1980.
- Nah KH. Perceived problems and service delivery for Korean immigrants. *Social Work*; 38, 289–96. 1993.
- North DS, Houstoun MF. *The Characteristics and Role of Illegal Aliens in the U.S. Labor Market: An Exploratory Study*. Washington, D.C.: New TransCentury Foundation and Linton & Company, Inc. 1976.
- Norton SA, Kenney GM, Elwood MR. Medicaid coverage of maternity care for aliens in California. *Family Planning Perspectives*; 28, 108–12. 1996.
- Otero-Sabogal R, Sabogal F, Perez-Stable EJ. Psychosocial correlates of smoking among immigrant Latina adolescents. *Monographs of the National Cancer Institute*; 18, 65–71. 1995.
- Pang KYC. Self-care strategy of elderly Korean immigrants in the Washington, D.C. metropolitan area. *Journal of Cross Cultural Gerontology*; 11, 229–54. 1996.
- Parenti DM, Lucas D, Lee A, Hollenkamp RH. Health status of Ethiopian refugees in the United States. *American Journal of Public Health*; 77, 1542–3. 1987.
- Passel JS. Undocumented immigrants: How many. In: *Proceedings of the Social Statistics Section of the American Statistical Association*. Washington, D.C.: American Statistical Association. 65–71. 1985.
- Peragallo NP, Fox PG, Alba ML. Breast care among Latino immigrant women in the U.S. *Health Care for Women International*; 19, 165–72. 1998.
- Perilla JL, Bakeman R, Norris FH. Culture and domestic violence: The ecology of abused Latinas. *Violence and Victims*; 4, 325–39. 1994.
- Personal Responsibility and Work Opportunity Reconciliation Act of 1996, Pub. L. No. 104–193, 110 Stat. 2105. August 11, 1996.
- Pickwell SM, Warnock F. Family nurse practitioner faculty clinical practice with undocumented migrants. *Family and Community Health*; 16, 32–8. 1994.
- Portes A, Kyle D, Eaton WW. Mental illness and help-seeking behavior among Mariel Cuban and Haitian refugees in South Florida. *Journal of Health and Social Behavior*; 33, 283–298. 1992.
- Reynoso TC, Flice ME, Shragg GP. Does American acculturation affect outcome of Mexican-American teenage pregnancy? *Journal of Adolescent Health*; 14, 257–61. 1993.
- Robinson BE. Evaluating mental health services for Southeast Asian refugees: Cross-cultural methodological issues. Presented at the Pacific Asian Research Method Workshop and the Annual Convention of the American Psychological Association, Ann Arbor, Michigan. 1985.
- Rosenwaike I. Cancer mortality among Mexican immigrants in the United States. *Public Health Reports*; 103, 195–201. 1988.
- Rosenwaike I, Hempstead K. Differential mortality by ethnicity: Foreign-born Irish, Italians and Jews in New York City, 1979–81. *Social Science and Medicine*; 29, 885–9. 1989.
- Rossing MA, Schwartz SM, Weiss NS. Thyroid cancer incidence in Asian migrants to the United States and their descendants. *Cancer Cases and Control*; 6, 439–44. 1995.
- Rowe DR, Jackson S. Dental screening and education among Cambodian, Lao, and Hmong refugees in Fresno County, California. *Migration World*; 6, 27–33. 1988.
- Rumbaut RG, Chavez LR, Moser, MJ, et al. The politics of migrant health care: A comparative study of Mexican immigrants and Indochinese refugees. *Research in the Sociology of Health Care*; 7, 143–202. 1988.
- Rumbaut RG, Weeks JR. Unraveling a public health enigma: Why do immigrants experience superior perinatal outcomes? *Research in the Sociology of Health Care*; 13B, 337–91. 1996.
- Salcido RM. Use of services in Los Angeles County by undocumented families: Their perceptions of stress and sources of support. *California Sociologist*; 119–32. 1982.
- Salgado de Snyder VN. Factors associated with acculturative stress and depressive symptomatology among married Mexican immigrant women. *Psychology of Women Quarterly*; 11, 475–88. 1987.
- Schapiro A. Adjustment and identity formation of Lao refugee adolescents. *Smith College Studies in Social Work*; 58, 157–81. 1988.
- Schilit J, Nimnicht G. *The Florida Survey of Newly Legalized Persons*. Tallahassee: Florida State Department of Health and Rehabilitative Services. 1990.
- Selby ML, Lee ES, Tuttle, DM, Loe HD. Validity of the Spanish surname infant mortality rate as a health status indicator for the Mexican American population. *American Journal of Public Health*; 74, 998–1002. 1984.
- Sherraden MS, Barrera RE. Family support and birth outcomes among second-generation Mexican immigrants. *Social Service Review*; 7, 608–33.
- Shimuzu H, Ross, RK, Bernstein L. et al. Cancers of the prostate and breast among Japanese and white immigrants in Los Angeles County. *British Journal of Cancer*; 63, 963–6. 1991.

- Shin KR. Psychosocial predictors of depressive symptoms in Korean-American women in New York City. *Women and Health*; 21, 73–82. 1994.
- Shrout PE, Canino GJ, Bird HR, et al. Mental health status among Puerto Ricans, Mexican Americans, and non-Hispanic whites. *American Journal of Community Psychology*; 20, 729–52. 1992.
- Siddharthan K. HMO enrollment by Medicare beneficiaries in heterogeneous communities. *Medical Care*; 28, 918–27. 1990.
- Siddharthan K, Ahern M. Inpatient utilization by undocumented immigrants without insurance. *Journal of Health Care for the Poor and Underserved*; 7, 355–63. 1996.
- Siddharthan K, Alalalundaram S. Undocumented aliens and uncompensated care: Whose responsibility? *American Journal of Public Health*; 83, 410–2. 1993.
- Siddharthan K, Sowers-Hoag K. Elders' attitudes and access to health care: A comparison of Cuban immigrants and native-born Americans. *Journal of Applied Gerontology*; 8, 86–96. 1989.
- Sorenson SB, Shen H. Homicide risk among immigrants in California, 1970 through 1992. *American Journal of Public Health*; 86, 97–100. 1996a.
- Sorenson SB, Shen H. Youth suicide trends in California: An examination of immigrant and ethnic group risk. *Suicide and Life-Threatening Behavior*; 26, 143–54. 1996b.
- Sowers-Hoag KM, Siddharthan K. Access and use of health related social services of immigrants and native-born Americans: Implications for social interventions. *Journal of Multicultural Social Work*; 1, 47–61. 1992.
- Stanford JL, Harrinton LJ, Schwartz SM, Weiss NS. Breast cancer incidence in Asian migrants to the United States and their descendants. *Epidemiology*; 6, 181–3. 1995.
- Starrett RA, Decker JT. The utilization of social services by Mexican-American elderly. *Journal of Gerontological Social Work*; 9, 87–101. 1986.
- Stellman SD, Wang QS. Cancer mortality in Chinese immigrants to New York City. *Cancer*; 73, 1270–5. 1994.
- Swenson I, Erickson D, Ehlinger E, et al. Fertility, menstrual characteristics, and contraceptive practices among white, black, and southeast Asian refugee adolescents. *Adolescence*; 24, 647–54. 1989.
- Tabora BL, Flaskerud JH. Mental health beliefs, practices, and knowledge of Chinese American immigrant women. *Issues in Mental Health Nursing*; 18, 173–89. 1997.
- Taylor EH, Barton LS. Vietnamese, Laotian, Ethiopian, & Former Soviet Union Refugees in Texas: Findings from the Texas Refugee Study. Austin, Texas: Texas Office of Immigration and Refugee Affairs and Texas Department of Human Services. 1994.
- Thamer M, Richard C, Casebeer AW, Ray NF. Health insurance coverage among foreign-born US residents: The impact of race, ethnicity, and length of residence. *American Journal of Public Health*; 87, 96–102. 1997.
- Thompson JL. Exploring gender and culture with Khmer refugee women: Reflections on participatory feminist research. *Advances in Nursing Science*; 13, 30–48. 1991.
- Tori CD, Amawattana T. Knowledge and attitudes about AIDS: A comparative study of Thais involved in sexual occupations, university students, and immigrants living in the United States. *Journal of the Medical Association of Thailand*; 76, 46–52. 1993.
- Tran TV, Dhooper SS, McInnis-Dittrich K. Utilization of community-based social and health services among foreign born Hispanic American elderly. *Journal of Gerontological Social Work*; 28, 23–43. 1997.
- Undocumented Workers Policy Research Project. *The Use of Public Services by Undocumented Aliens in Texas*. Austin, Texas: Lyndon B. Johnson School of Public Affairs. 1984.
- Urrutia-Rojas X, Aday LA. A framework for community assessment: Designing and conducting a survey in a Hispanic immigrant and refugee community. *Public Health Nursing*; 8, 20–6. 1991.
- VanGeest JB, Johnson TP. Substance use patterns among homeless migrants and nonmigrants in Chicago. *Substance Use and Misuse*; 32, 877–907. 1997.
- Vega WA, Kolody B, Hwang J, et al. Perinatal drug use among immigrant and native-born Latinas. *Substance Use and Misuse*; 32, 43–62.
- Vega WA, Kolody B, Valle JR. The relationship of marital status, confidant support, and depression among Mexican immigrant women. *Journal of Marriage and the Family*; 48, 597–605. 1986.
- Vega WA, Kolody B, Valle JR. Migration and mental health: An empirical test of depression risk factors among immigrant Mexican women. *International Migration Review*; 21, 512–29. 1987.
- Vega WA, Kolody B, Warheit G. Psychoneuroses among Mexican Americans and other whites: Prevalence and caseness. *American Journal of Public Health*; 75, 523–7. 1985.
- Ventura SJ, Taffel SM. Childbearing characteristics of U.S.- and foreign-born Hispanic mothers. *Public Health Reports*; 100, 647–52. 1985.
- Villa VM, Wallace SP, Moon A, Lubben JL. A comparative analysis of chronic disease prevalence among older Koreans and non-Hispanic whites. *Family and Community Health*; 20, 1–12. 1997.
- Warheit GJ, Vega WA, Auth J, Meinhardt K. Mexican-American immigration and mental health: A comparative analysis of psychosocial stress and dysfunction. In: Vega WA, Miranda MR. eds. *Stress & Hispanic Mental Health*. Rockville, Maryland: United States Department of Health and Human Services. Alcohol, Drug Abuse, and Mental Health Administration. 76–109. 1985.
- Weeks JR, Rumbaut RG. Infant mortality among ethnic immigrant groups. *Social Science and Medicine*; 33, 327–34. 1991.

- Weeks JR, Rumbaut RG, Brindis C. High fertility among Indochinese refugees. *Public Health Reports*; 104, 143–50. 1989.
- Weitzman BC, Berry CA. Health status and health care utilization among New York City home attendants: An illustration of the needs of working poor, immigrant women. *Women and Health*; 19, 87–105. 1992.
- Wewers ME, Ravinder DK, Moeschberger ML, et al. Misclassification of smoking status among Southeast Asian adult immigrants. *American Journal of Respiratory Critical Care Medicine*; 152, 1917–21. 1995.
- Whitaker RED, Edwards RK. A model-based approach to US policy on HIV-1 infection and immigration. *AIDS & Public Policy Journal*; 6, 3–14. 1991.
- Yeung WH, Schwartz MA. Emotional disturbance in Chinese obstetrical patients: A pilot study. *General Hospital Psychiatry*; 8, 258–62. 1986.
- Ying YW. Explanatory models of major depression and implications for help-seeking among immigrant Chinese-American women. *Culture, Medicine, and Psychiatry*; 14, 393–408. 1990.
- Young RF, Bukoff A, Waller JB Jr, Blount SB. Health status, health problems and practices among refugees from the Middle East, Eastern Europe and Southeast Asia. *International Migration Review*; 21, 760–82. 1987.
- Zambrana RE, Dunkel-Schetter C, Scrimshaw S. Factors which influence use of prenatal care in low-income racial-ethnic women in Los Angeles County. *Journal of Community Health*; 16, 283–95. 1991.
- Zambrana RE, Ell K, Dorrington C. The relationship between psychosocial status of immigrant Latino mothers and use of pediatric emergency services. *Health and Social Work*; 19, 93–102. 1994.
- Zambrana RE, Scrimshaw SCM, Collins N, Dunkel-Schetter C. Prenatal health behaviors and psychosocial risk factors in pregnant women of Mexican origin: The role of acculturation. *American Journal of Public Health*; 87, 1022–6. 1997.
- Ziegler RG, Hoover RN, Pike MC, et al. Migration patterns and breast cancer risk in Asian-American women. *Journal of the National Cancer Institute*; 85, 1819–27. 1993.
- Zuber PLF, McKenna MT, Binkin NJ, et al. Long-term risk of tuberculosis among foreign-born persons in the United States. *Journal of the American Medical Association*; 278, 304–7. 1997.

Table 1. Summary of Immigration Measures Used in Health-related Studies

Study	Purpose/design of study	Data/sample	Definition/measure of immigrant	Geographic area
Agocs, et al., 1994	Activities associated with drownings	Records of all investigations by sheriff-coroner of deaths due to injury or unknown cause	Classified as undocumented if drowned while crossing from Mexico and this was reported by someone in decedent's home town or found dead, judged to be Hispanic, and had not been reported missing	Imperial County, California
Ailinger and Dear, 1997	Latino immigrants explanatory models of tuberculosis (TB) infection	Convenience sample 65 individuals enrolled in TB preventive therapy in health department, interviews	Country of origin	Unspecified
Alston and Aguirre, 1987	Examine factors relating to differences in functional impairment in Mexican elderly	1976 Survey of Income and Education by U.S. census	Place of birth	Nationwide
Anderson, et al., 1993	Develop acculturation scale for southeast Asian immigrants	Telephone listing; snowball sampling	Unspecified definition; length of the U.S. residence	Ohio
Aroian, 1992 ^{app.1}	Sources of social support for Polish immigrants	25 interviews; recruited through community organizations	Place of birth, citizenship status, status at time of initial entry into the United States ¹	Seattle-Tacoma, Washington
Aroian, 1993 ^{app.1}	Mental health difficulties of "illegal" Irish immigrants	17 interviews; snowball sampling	Place of birth, citizenship status status at time of initial entry into the United States ¹	Boston, Massachusetts
Asch, et al., 1994 ^{app.11}	Examine relation of immigration status and delay in care	313 consecutive patients, 95 facilities; adults only, must speak English, Spanish, Tagalog, Vietnamese, or Mandarin	Country of birth, length of time in the United States, U.S. citizenship, immigration status ¹	Los Angeles County, California
August, 1984	Examine pattern of health service use among Rhode Island's southeast Asian refugees	Rhode Island Medicaid/Refugee Medical Assistance data	Refugee status; determination of status unspecified	Rhode Island
Barry, et al., 1990	Prevalence of purified protein derivation (PPD) positivity in school testing program	7th and 10th grade students	Country of origin	Boston, Massachusetts
Bass, et al., 1992	Analyze results of primary care based screening program for parasitosis	Pediatric clinic	Birth in Latin American country	Massachusetts
Bean, et al., 1995	Probability of receiving AFDC, SSI transfer payments	1980, 1990 censuses	Place of birth, mode of entry; students and Puerto Ricans not classified as immigrants	Nationwide
Bean, et al., 1997	Estimate probability receiving AFDC, SSI transfer payments	1 percent public use microdata sample (PUMS) 1980, 1990 census	Immigrant household: Any household in which the head of household, spouse, or both are foreign born	Nationwide
Bhatt, 1994	Socioeconomic influences in medical practice	Cambodian refugee patient population, 1993-94	Unspecified	Long Beach, California
Blum, et al., 1993	Prevalence of TB infection/disease in foreign-born cross-sectional	Chart review, Denver Department of Health and Hospitals	Self-identification as applicant for adjustment of status under the Immigration Reform and Control Act of 1986 (IRCA)	Denver, Colorado area
Borjas and Hilton, 1996	Utilization of publicly funded programs Prospective over 32 months	1984, 1985, 1990, 1991 Survey of Income and Program Participation	Place of birth, year of arrival in the United States	Nationwide
Borjas and Trejo, 1991	Examine immigrant participation in welfare system	1970, 1980 census data	Immigrant status of household: Country of birth of household head	Nationwide
Braun, et al., 1996	Perceptions of dementia among Vietnamese immigrants	Focus groups; recruited from English classes ¹	Not specified	Hawaii

Table 1. Summary of Immigration Measures Used in Health-related Studies—Con.

Study	Purpose/design of study	Data/sample	Definition/measure of immigrant	Geographic area
Brindis, et al., 1995	Identify differences in risk-taking Latino immigrant and native-born	Teen Health Risk Survey, 1,789 high school students, two schools	Place of birth	Northern California
Buchwald, et al., 1992	Prevalence of traditional health practices	80 Cambodian, Lao, Mien, ethnic Chinese attending refugee clinic	Unspecified	Seattle, Washington
Buskin, et al., 1994	Examine risk factors for TB in adults	Self-administered questionnaires, patients at local TB clinic; case-control study	Unspecified; appears to be foreign versus U.S. born	King County, Washington
Catanzaro and Moser, 1982	Evaluate health status of refugees from Cambodia, Laos, Vietnam	Recruited from medical center clinic; referred to clinic by community organizations	Unspecified	San Diego, California
Chan, et al., 1996	Examine reasons for seeking medical care in the United States	University hospital emergency department 20 miles from U.S.-Mexico border	Self-reported immigration status as part of emergency department (ED) intake procedures	San Diego, California
Chaulk, et al., 1995	Evaluate community-based directly observed therapy (DOT) for TB control; ecological study	City-specific data (Baltimore and other metro areas)	Foreign birth ¹	20 cities with more than 250,000 residents
Chavez, 1984	Impact of socioeconomic factors on Mexican immigrants use of health services	Survey of 2,103 persons	Place of birth	San Diego County, California
Chavez and Buriel, 1988	Mother-child interactions involving child with epilepsy	Unspecified ²	Place of birth, length of residency in the United States, language usage	Unspecified
Chavez, et al., 1986	Utilization of health services by Mexican immigrant women	In-home interviews of 1,028 women; snowball sampling	Place of birth	San Diego, California
Chavez, et al., 1997 ^{app.VII}	Descriptive comparison of Latinas and whites, various dimensions	Telephone survey; random digit dialing	Self-reported as legal resident, without papers or with false papers, no papers but requested work permit, no papers but requested permanent residence, no papers but requested asylum, naturalized citizen, temporary protected status, political asylee; place of birth	Orange County, California
Chavkin, et al., 1987	Descriptive study, risk factors for specified reproductive outcomes	Birth and death certificates, 1980–84	Mother's birthplace as recorded on newborn's birth certificate	New York City, New York
Chi, 1984	Utilization patterns of migrant farm workers	Interviews of 218 migrant farm workers from New York Migrant Health Interview Survey, 1982	Unspecified ²	Wayne County, New York
Cobb-Clark, 1991	Examine availability of health insurance to foreign-born workers	1983 Current Population Survey	Foreign versus U.S. birth; country of birth, year of immigration to United States	Nationwide
Cohen, 1985	Study of "controlarse" among individuals from Guatemala, El Salvador, and Andean nations	40 individuals recruited through health providers, and children's schools	Unspecified	Washington, D.C.
Cornelius, et al., 1984 ^{app.III}	Access to care among Mexican immigrants	Interviews 1981 to 1982, recruited through snowball sampling	Place of birth, type of immigration papers at first and last entry to the United States, application date for immigration papers, date of receipt of immigration papers	San Diego County, California
Curiel, et al., 1993 ^{app.IV}	Needs assessment of Hispanic residents	212 households surveyed, 1992 to 1993	Self-reported status ¹	Oklahoma City, Oklahoma
Dasgupta and Warriar, 1996	Ethnography of Asian Indian battered women	12 women, recruited from personal acquaintances	Place of birth, length of time in the United States; immigrant: Came to the United States as adult regardless of actual status ¹	Unspecified

Table 1. Summary of Immigration Measures Used in Health-related Studies—Con.

Study	Purpose/design of study	Data/sample	Definition/measure of immigrant	Geographic area
D'Avanzo, et al., 1994	Perceptions of stress-related factors among Cambodian refugees	120 Cambodian women recruited through snowball sampling	Ever been in refugee camp ¹	Lowell, Long Beach, California
Davis, et al., 1982	Examine pregnancy outcome	Birth certificates, obstetric records	Ethnicity of name; Laos and Cambodians assumed to be immigrants; immigrant and refugee used synonymously	Santa Clara County, California
DeSantis, 1989	Health care orientation of Cuban and Haitian immigrant mothers	Interviews with 30 Haitian and 30 Cuban mothers, 1984; source of recruitment unspecified	Place of birth	Dade County, Florida
DeSantis, 1993	Concepts of health among Haitian immigrants	Nonprobability sample of 76 adults recruited through churches, snowball sampling	Place of birth, raised in Haiti, entered the United States after 1978	South Florida
DeSantis and Thomas, 1992	Attitudes toward health education	Interviews with 30 Haitian mothers, recruited from churches, community	Unspecified	Dade County, Florida
Dewey, et al., 1986	Health assessment of southeast Asian preschoolers	Nonprofit health screening clinic	Place of birth, date of entry into the United States	Sacramento, California
Die and Seelbach, 1988	Descriptive data relating to health	60 Vietnamese immigrants through Vietnamese Resettlement Office	Place of birth ¹	Southeast Texas
Driscoll and Upchurch, 1995	Post-immigration childbearing practices of Mexican women in the United States	1990 Panel Study of Income Dynamics/Latino National Political Survey; 408 women born in Mexico between 1930–72 who immigrated	Unspecified ²	Unspecified
Dumka, et al., 1997 ^{app.v}	Effect of parental discipline on child depression and conduct disorder	121 mothers and children, from parent-training intervention	Place of birth ¹	Southwestern city
Duncan and Simmons, 1996	Health practices among Russian and Ukrainian immigrants	Questionnaire of 30 adults, recruited from refugee resettlement program	Assumed immigrants based on recruitment source	Virginia
Ehnert, et al., 1992	Analysis of statewide surveillance data for 1 year for cysticercosis	Mandatory confidential morbidity reports	Place of birth	Los Angeles County, California
Elfert, et al., 1991	Examine parents' perceptions of children with long-term health problems	16 Chinese immigrant families and 15 Euro-Canadian families recruited by community health nurses in two urban health units serving working class and immigrant populations	Place of birth ¹	Canada
Erickson and Hoang, 1980	Medical evaluations of Indochinese refugees	Attendees at clinic, 1979–80	Unspecified ²	Hartford, Connecticut
Erickson, 1994	Description of pregnancy prevention program	Recruitment source unspecified; 350 participants	Place of birth	Los Angeles, California
Faller, 1985	Perinatal needs of immigrant Hmong women	32 interviewees, recruited from clinic, social service agencies	Assumed immigrant status if individual self-identified as Hmong ¹	Denver, Colorado
Frey, 1995	Impact of migration on state elderly population	1990 census	Migration from abroad	Nationwide
Gaviria, et al., 1982	Perinatal health in Mexican American community	Interviews of 89 women; source of recruitment unspecified	Place of birth	Chicago, Illinois
Gelfand, 1986	Service delivery to Russian immigrants	Self-administered questionnaire, 259 individuals recruited from nonprofit agency ³	Knew were immigrants ¹	New York
Gelfand, 1991	Survey of health and health insurance status	Applicants for legalization under IRCA, recruited through immigration attorneys and nonprofit agencies	Self-identified as undocumented through application process	Maryland

Table 1. Summary of Immigration Measures Used in Health-related Studies—Con.

Study	Purpose/design of study	Data/sample	Definition/measure of immigrant	Geographic area
Ghaemi-Ahmadi, 1992	Attitudes towards breastfeeding among immigrants	Interviews with 150 immigrant mothers; recruitment unclear, part of a larger study	Unspecified ²	Unspecified
Gilbert, 1987	Drinking practices among immigrant Mexican women	Reanalysis of data from 1976 survey	Unspecified	California
Gilman, et al., 1992	Health practices of Mien	119 refugees	Unspecified	Richmond, California
Golding, et al., 1993	Risk factors for secondary depression	Los Angeles Epidemiologic Catchment Area	Unspecified ²	Los Angeles, California
Gozdziak, 1988	Descriptive study of needs of elderly refugees	Interviews with 100 elderly refugees; source of recruitment unspecified	Unspecified ²	Nationwide
Guendelman, 1991	Factors related to choice of care in the United States or Mexico by service users on Mexican border	Random sample of 660 households	Whether person has valid papers that permit legal entry into the United States, such as passport, green card, working permit, border crossing card, tourist visa, or no documentation	Tijuana, Mexico
Guendelman, et al., 1995	Sustainability of health advantage to newborns; cross-sectional	Multistage sampling neighborhoods	Birth in Mexico	San Diego County, California
Guendelman and English, 1995	Examine birth outcomes	Community-based household survey 1992–93	Place of birth “newcomer” lived in the United States less than 5 years “long term” lived in the United States more than 5 years	San Diego and Contra Costa Counties, California
Guendelman and Jasis, 1992	Factors associated with childbirth in California by border residents of Tijuana	1987 household survey of binational health service utilization on the U.S.-Mexico border; 660 households	Whether individual has U.S. citizenship or residency	Tijuana, Mexico
Guendelman and Witt, 1992	Assess strategies to improve prenatal care	67 providers and consumers of prenatal care in 12 focus groups	Unspecified ²	San Francisco, California
Halfon, et al., 1997	Medicaid access and enrollment of Latino children	Household survey of parents of 817 families	Based on self-report, classified as unauthorized resident, authorized resident, or citizen ²	Los Angeles, California
Hattar-Pollara and Meleis, 1995	Describes experiences of Jordanian immigrant women	Snowball sampling	Unspecified ²	San Francisco, California area
Heer and Falasco, 1982 ^{app. Via}	Socioeconomic status of mothers of Mexican origin	Sampling frame of probability sample of birth certificates 1980–81	Place of birth, citizenship status, possession of alien registration card, date of first arrival in the United States, number of years resident in the United States, departure from the United States for 6 months or more; individuals classified as undocumented, legal residents or naturalized citizens, or native-born citizens ¹	Los Angeles, California
Heer and Jackson, 1984	Utilization of health and welfare services by Mexican families	Interviews 1980–81 of foreign born parents of children selected from a frame of probability sampling of birth certificates	Place of origin	Los Angeles County, California
Herrinton, et al., 1994	Comparison of incidence rates of ovarian cancer between Asian migrants and U.S.-born Asians	Cancer Surveillance, Epidemiology, and End Result (SEER) data, 1973–86	Place of birth classified as United States, homeland, or other	San Francisco, Oakland, California; Hawaii; Western Washington State
Hingson, et al., 1991	Ascertain levels of human immunodeficiency virus (HIV) knowledge, behavioral risks	Survey of 3,049 students from a random sample of schools	Place of birth; length of U.S. residence	Boston, Massachusetts
Hubbell, et al., 1989	Determine unmet needs of low income families	Telephone survey of 652 adults selected randomly from specified census tracts	Place of birth, place of parents' birth	Orange County, California

Table 1. Summary of Immigration Measures Used in Health-related Studies—Con.

Study	Purpose/design of study	Data/sample	Definition/measure of immigrant	Geographic area
Hubbell, et al., 1991 ^{app.VIII}	Assess access to care among Latinos	Telephone survey of 958 persons response rate 66.3 percent	Place of birth, place of parents' birth, date of most recent entry into the United States, current immigration status, intent to remain in the United States permanently	Orange County, California
Hubbell, et al., 1995 ^{app.VII}	Assess breast cancer attitudes, knowledge, and behaviors among Latinas, and Anglo women	Ethnography, 121 female participants and 30 physicians	Place of birth, place of parents' birth, date of most recent entry into the United States, current immigration status, intent to remain in the United States permanently. Current status self-reported as legal resident, without papers or false papers, no papers but requested work permit, asylum, or permanent residence, naturalized citizen, temporary protected status, political asylee.	Orange County, California
Hurh and Kim, 1990	Examine correlates of mental health among Korean immigrants	Diagnostic interviews with 622 Korean immigrants more than 20 years old, random sampling from frame constructed from listings	Identified as Korean by name; measure of immigration unspecified	Chicago, Illinois
Hurh and Kim, 1990	Examine adaptation stages and mental health of Korean male immigrants	Epidemiologic survey 622 Korean immigrants more than 20 years old; random sample constructed from various lists	Place of birth ¹	Chicago, Illinois
Ikels, 1986	Study of natural helpers	Three individuals	Unspecified	Boston, Massachusetts
Jensen, 1988	Examine utilization of public assistance by immigrants and native-born	PUMS	Puerto Ricans born in the United States: Native-born; Puerto Ricans whose place of residence 5 years prior was other than 1 of 50 states: Recent immigrant; Puerto Rican; born outside of the United States but lived in 1 of 50 states 5 years prior: Not recent immigrant	Nationwide
Jenkins, et al., 1996	Examine traditional health beliefs as barrier to care	Interviews of random sample of Vietnamese; list developed from telephone books	Place of birth	San Francisco and Alameda counties, California
Kennedy, 1992	Descriptive study of homeless immigrant youth	Nonprofit agency for homeless youth	Self-identified, place of birth	San Francisco, California
Kim, 1997	Loneliness in older Korean immigrants	Recruitment unspecified	Unspecified ²	Large unspecified city
Klatsky and Armstrong, 1991	Risk factors for cardiovascular disease	Patients at prepaid health care program, 1978–85	Place of birth	Northern California
Kolody, et al., 1986	Examine relationship between depressive symptoms and somatic complaints	Modified random digit dialing telephone survey of 1,342 participants	Place of birth	Santa Clara County, California
Krishnan and Berry, 1992	Acculturative stress and acculturation attitudes among Asian Indians	Interviews of 76 Asian Indian immigrants	Unspecified ²	Midwestern city
Kuo and Tsai, 1986	Protective factors from psychological impairment among immigrants	Randomly selected households from existing telephone and organizational listings	Place of birth, age of relocation to the United States, year of entry into the United States ¹	Seattle, Washington
Kuss, 1997	Family planning experiences of Vietnamese women	Interviews with 15 women from community organizations and snowball sampling	Unspecified ²	Washington
Laffrey, et al., 1989	Health needs assessment Arab-American immigrants	Focus groups, key informants interviews, self-administered questionnaire with 47 respondents; recruited from 3 social groups in 2 cities	Country of origin	California

Table 1. Summary of Immigration Measures Used in Health-related Studies—Con.

Study	Purpose/design of study	Data/sample	Definition/measure of immigrant	Geographic area
Lambert and Lambert, 1984 ^{app.IX}	Effect of role preparation for psychotherapy on immigrants seeking mental health services	30 individuals recruited 1981	Length of U.S. residence, place of birth, country of parents' prior residence, country of prior residence, length of parents' residence in the United States ¹	Hawaii
Lanska, 1997	Geographic distribution, stroke mortality	National Center for Health Statistics (NCHS) and census 1979–81	Place of birth outside the United States but place of residence at death in the United States	Nationwide
Lauderdale, et al., 1997	Estimate of hip fracture incidence in Asian American elderly; cohort	Medicare data base	Persons of Asian ancestry were identified by surname from among those with race codes "Asian American" and "other." Year of immigration was deduced from date of issuance of social security number.	Nationwide
LeClere, et al., 1994	Adapt model of health care to immigrants	1990 National Health Interview Survey (NHIS)	Country of origin, duration of residence	Nationwide
Lee, et al., 1993	Risk factors for cardiovascular disease in elderly Korean Americans	Clients of senior citizen center	Place of birth	San Jose, California
Lee, et al., 1996 ^{app.X}	Effects of social relationships on depressive symptoms in elderly Korean immigrants	1988 Ethnic Elderly Needs Assessment Survey database; 200 interviewees, representing 70 percent response rate	Place of birth, date of entry into the United States, whether a U.S. citizen, parents' place of birth, reason for leaving place of birth ¹	Chicago, Illinois
Lipson, 1991	Ethnographic study of Afghan refugees	29 individuals, convenience sample	Unspecified	Northern California
Lipson, 1992	Examine health of Iranian immigrants	Snowball sampling	Unspecified ²	- - -
Lipson, et al., 1995	Community survey of Afghans	Telephone, community surveys; 196 families	Unspecified ²	San Francisco Bay area, California
Loue and Foerstel, 1996 ^{app.XIa}	Assessment of immigration status instrument	50 interviews, convenience sample	Used flow chart to identify current status, potential immigration remedies, and eligibility for public benefits	San Diego County, California
Loue and Oppenheim, 1994	Pilot study of access to care of HIV-infected immigrants	Self-identified HIV positive recent and undocumented immigrants recruited from nonprofit agency	Place of birth; immigration status; type of entry into the United States; length of time authorized to remain in the United States; length of time in the United States	San Diego County, California
Mack, et al., 1985	Patterns of occurrence of specified neoplasms in Hispanic community	USC Cancer Surveillance Program and census data	Birthplace, age at immigration as determined by social security number	Los Angeles, California
Mattson and Lew, 1991	Evaluate southeast Asian health project	Interviews with 119 women recruited from clinic	Unspecified ²	Long Beach, California
May, 1992	Describe social networks and help seeking among Arab American immigrants	Snowball sampling, interview-based	Unspecified ²	6 counties, Arizona
McCaw and DeLay, 1985	Examine disease prevalence among Afghan and Ethiopian refugees in San Francisco	110 Ethiopian and 59 Afghan refugee patients from refugee screening clinic at San Francisco General Hospital Medical Center	Referred by resettlement agencies; required to show proof of refugee status	San Francisco, California
McCloskey, et al., 1995	Psychological effects of domestic and political violence on immigrant mothers and children	70 interviews with Mexican and Central American mother-child pairs; recruited from refugee program and communitywide solicitation, other studies; telephone interviews	Unspecified ²	Texas

Table 1. Summary of Immigration Measures Used in Health-related Studies—Con.

Study	Purpose/design of study	Data/sample	Definition/measure of immigrant	Geographic area
Mehta, 1998 ^{app.XIII}	Assess relationship between acculturation and mental health	Community sample of 195 Indian immigrants, over one-half of whom were U.S. citizens	Place of birth, self-reported immigration status ¹	Unspecified
Meinhardt, et al., 1986	Epidemiologic survey of mental health status of southeast Asian refugees	Combines household sampling and random sampling from phone lists; 1,684 interviewed	Unspecified ²	Santa Clara County, California
Meleis, et al., 1992	Examine relationship between immigration and the health of Middle Eastern immigrants	Snowball sampling; recruitment through churches, clubs	Country of origin; length of time in the United States	Unspecified
Mittman, et al., 1998	Assess efficacy of cross-cultural education program for genetic counseling for Asian and Pacific Islander and Latin American immigrants	Clinical data, 1988–93 for 1,921 clients and 509 significant others	Place of birth ¹	San Francisco, California
Montepio, 1987	Examination of folk medicine in Filipino American experience	Interviews with 50 Filipinos; source of recruitment unspecified	Unspecified; author cannot be located	Los Angeles, California
Moon, 1996	Predictors of morale in elderly Korean immigrants	131 persons living in high-rise senior citizen apartment complex	Unspecified ²	Los Angeles, California
Moon and Pearl, 1990	Experiences of alienation	131 Korean immigrants	Unspecified	Oklahoma and California
Moore, et al., 1997	Descriptive analysis of TB data	Mandatory case reporting	Place of birth	Nationwide
Mui, 1996a	Assess stressful life events in elderly Chinese immigrants	Recruited from senior centers and meal sites; 50 interviews	Unspecified ²	Unspecified
Mui, 1996b	Use of geriatric depression scale as screening instrument for elderly Chinese immigrants	50 individuals recruited from senior centers and meal sites	Unspecified ²	Unspecified ²
Nagi and Haavio-Mannila, 1980	Examine utilization of health services	Probability sample of continental U.S. residents excluding Alaska	Birth outside the United States	Nationwide
Nah, 1993	Examine barriers to service delivery for Korean immigrants	Random sample of 90 Korean families from 10 ethnic churches	Unspecified ²	New York
North and Houstoun, 1976	Role of illegal aliens in the U.S. labor market	Sample of “illegal aliens” who have been detained by the Immigration and Naturalization Service (INS), Border Patrol	Illegal status assumed from the fact that they were detained/arrested; questions relating to employment as illegal alien; original entry into the United States as student or tourist	Various areas with high immigration
Norton, et al., 1996	Usage of Medicaid-funded labor and delivery services by aliens in California	Medicaid data 1987–91	Default coding; assumed all those classified under the Omnibus Budget Reconciliation Act were undocumented but eligible for benefits under State law	California
Otero-Sabogal, et al., 1995	Psychosocial correlates of smoking	Self-identified Latina and non-Latina adolescents	Place of birth, parents' place of birth, length of U.S. residence	San Francisco and San Mateo counties, California
Pang, 1996	Self-care strategy of Korean immigrants	Random sample of 230 participants derived from sampling frame of 995 eligible persons compiled from various community lists, plus 444 by snowball sampling (total 674)	Unspecified ²	Washington, D.C.
Parenti, et al., 1987	Evaluation of health status of 239 refugees in the United States	Recruited from health clinic in Brighton, Massachusetts, and Washington, D.C.	Unspecified; authors unable to provide information	Brighton, Massachusetts, Washington, D.C.
Peragallo, et al., 1998	Identify factors associated with care in Latina immigrant women	114 interviews with Mexican, Mexican American, and Puerto Rican women recruited from community	Place of birth ¹	Large midwest city

Table 1. Summary of Immigration Measures Used in Health-related Studies—Con.

Study	Purpose/design of study	Data/sample	Definition/measure of immigrant	Geographic area
Perilla, et al., 1994 ^{app.XIV}	Predictors of domestic violence among Latinas	60 interviews; sample recruited from Catholic hospital	Place of birth, date of entry into the United States ¹	Southeast metro area
Pickwell and Warnock, 1994	Description of symptoms presented to nurse practitioner by undocumented individuals detained in residential facility for undocumented	Residents of residential facility	Assumed to be undocumented because detained in facility of INS ¹	San Diego, California
Portes, et al., 1992	Use of mental health system	Random sample of Mariel Cubans and Haitian refugees from primary sampling units	Unspecified ²	Miami, Florida
Reynoso, et al., 1993	Affect of acculturation on teen pregnancy	116 pregnant teens attending university clinic	Birthplace, birthplace of parents, U.S. citizenship	Unspecified
Robinson, 1985 ^{app.XV}	Evaluate mental health peer counseling program for southeast Asian refugees	150 clients of two mental health programs (total sample)	Self-reported immigration status as parolee, permanent resident, or citizen	Minneapolis-St. Paul, Minnesota
Rosenwaike, 1988	Cancer mortality among Mexican immigrants	NCHS and census data	Place of birth	Nationwide
Rosenwaike and Hempstead, 1989	Mortality experience of foreign-born Irish, Italians, Jews, 1979–81	Mortality tapes of deaths from city health department, 1980 census	Place of birth	New York City, New York
Rossing, et al., 1995	Incidence rates of primary cancer of thyroid	SEER data	Place of birth	San Francisco, Oakland, California; Hawaii; Western Washington State
Rowe and Jackson, 1988	Dental screening and education among southeast Asian refugees	Recruited through community sites	Unspecified ²	Fresno County, California
Rumbaut, et al., 1988	Socioeconomic and demographic factors affecting the health of Mexican and Indochinese immigrants	Interviews with 2,103 Mexican immigrants, 739 Indochinese immigrants; snowball sampling	Unspecified	San Diego, California
Rumbaut and Weeks, 1996	Basis for epidemiological paradox with respect to immigrants superior perinatal health outcomes	Comprehensive Perinatal Program	Place of birth ¹	San Diego, California
Salcido, 1982	Utilization of health services by undocumented persons; descriptive	Snowball sampling, recruitment from agencies, structured interviews with 34 mothers	Undocumented persons: Persons who enter the United States without the necessary documentation and subject to deportation. Documented: Persons who have secured the necessary migration documentation to enter from Mexico.	Los Angeles, California
Salgado de Snyder, 1987	Factors associated with acculturative stress	140 immigrant Mexican women multistage sampling starting with county's marriage licenses	Birth in Mexico	Los Angeles, California
Schapiro, 1988	Identity formation of Lao refugee adolescents	15 interviews	Unspecified ²	Unspecified ²
Schilit and Nimnicht, 1990 ^{app.XVI}	Descriptive study of persons newly legalized/eligible aliens under IRCA.	1,300 written interviews; recruited through adult education classes	Specific to persons applying for status under IRCA; type of documentation; basis for eligibility under IRCA; country of origin; year of entry into the United States; status of application for residency	Six counties in Florida
Selby, et al., 1984	Validity of Spanish surname infant mortality rate as indicator	Linked birth and infant death records, 1974–75	Parental nativity as indicated on birth records	Harris County, Texas
Sherraden and Barrera, 1997 ^{app.XVII}	Examine pregnancy and childbirth experiences of Mexican immigrants	Mothers of low birthweight babies, with telephones, identified through hospital/clinic records, 1992–94	Birthplace; self-reported immigration status	Chicago, Illinois

Table 1. Summary of Immigration Measures Used in Health-related Studies—Con.

Study	Purpose/design of study	Data/sample	Definition/measure of immigrant	Geographic area
Shimizu, et al., 1991	Risks of prostate and breast cancer in 3 racial/ethnic groups	Los Angeles Tumor Registry	Birthplace	Los Angeles, California
Shin, 1994	Identify psychosocial predictors of depressive symptoms in Korean immigrant women	Survey of 262 women; snowball sampling	Unspecified ²	New York
Shrout, et al., 1992	Compare prevalence of mental health characteristics across groups	Multistage probability sampling	Country of birth, parents' country of birth, parents' ethnicity, grandparents' country of birth, grandparents' ethnicity	Los Angeles, California; Puerto Rico
Siddharthan, 1990	Variables associated with use of fee for service or capitated plan under Medicare	Telephone survey of elderly residents	Place of birth	Dade County, Florida
Siddharthan and Ahern, 1996	Severity of illness and resource use among undocumented persons	Eligible discharges from Jackson Memorial Hospital	Lack of documents establishing residency	Dade County, Florida
Siddharthan and Alal sundaram, 1993	Examine extent of uncompensated care provided to undocumented aliens	Hospital financial, admissions, discharge data	Failure to produce document = classification as undocumented; uses "refugee" synonymously with asylee and entrant	Dade County, Florida
Siddharthan and Sowers-Hoag, 1989	Attitudes toward health care of elderly Cuban immigrants and native-born Americans	1,448 respondents recruited through two-stage random digit procedure	Unspecified ²	Southeast Florida
Sorenson and Shen, 1996a	Examine trends in youth suicide	Death certificates, 1970–92	Birthplace: Foreign versus the United States; "foreign born" and "immigrant" used interchangeably	California
Sorenson and Shen, 1996b	Homicide risk in immigrants, 1970–92	Death certificates	Place of birth	California
Sowers-Hoag and Siddharthan, 1992	Use of social services by immigrants	Survey of 1,438 elderly persons recruited through 2-stage random digit dialing process	Unspecified ²	Southeast Florida
Stanford, et al., 1995	Examine breast cancer incidence	SEER data	Place of birth	San Francisco, Oakland, California; Hawaii; Western Washington State
Starrett and Decker, 1986	Use of health services by ethnic elderly	1,805 randomly sampled noninstitutionalized elderly Hispanics	U.S. nativity, U.S. citizenship	National
Stellman and Wang, 1994	Comparison of cancer mortality rates	Death certificates	Place of birth	New York City, New York
Swenson, et al., 1989	Comparison of fertility and menstrual characteristics	Adolescents recruited from health department	Unspecified ²	Minneapolis, Minnesota
Tabora and Flaskerud, 1997	Describe mental health beliefs and practices of Chinese American immigrant women	Convenience and snowball sampling, 86 Chinese American women	Place of birth	Los Angeles, California
Taylor and Barton, 1994	Study of Vietnamese, Laotian, Ethiopian, Soviet refugees	Unspecified	Names of potential participants obtained from preexisting lists and contractors working with immigrant communities; relied on self-reported status as refugee ("Are you a refugee?" yes/no) ¹	Texas
Thamer, et al., 1997	Examine insurance status	1989, 1990 NHIS	Foreign born	Nationwide
Thompson, 1991	Examine psychosocial adjustment among refugee women	12 to 16 Khmer women recruited by referral from health care providers and snowball sampling	Unspecified ²	Maine

Table 1. Summary of Immigration Measures Used in Health-related Studies—Con.

Study	Purpose/design of study	Data/sample	Definition/measure of immigrant	Geographic area
Tori and Amawattana, 1993	Comparison of HIV knowledge and attitudes between Thais in the United States and Thailand	465 students from Thammasar U. in Thailand; 850 participants solicited in the United States from Thai Buddhist temple (26 percent response rate)	Place of birth ¹	Bangkok, Thailand; San Francisco, California
Tran, et al., 1987	Examine psychological well-being of Vietnamese refugees	Survey of 160 persons; source and method of recruitment unspecified	Assumed refugee if entered the United States between 1975 and 1982 ¹	Dallas-Ft. Worth, Texas
Tran, et al., 1997	Utilization of health services among foreign-born Hispanic elderly	Probability sample of 1,114 Hispanics from 1988 National Survey of Hispanic Elderly People; telephone interviews	Unspecified; appears to be country of origin	Nationwide
Undocumented Workers Policy Research Project, 1984 ^{app.XVIII}	Use of public services by undocumented aliens in Texas	Interviews with 808 undetained households and 63 detained households; opinions of providers	Place of birth, papers at entry to the United States, type of papers, continuing validity of papers date of entry, reason for coming to the United States	Texas
Urrutia-Rojas and Aday, 1991	Community assessment of Hispanic immigrants and refugees	Multistage sampling, 242 interviews from 365 eligible households (66 percent)	Unspecified ²	Houston, Texas
VanGeest and Johnson, 1997	Descriptive study of substance use among homeless	465 client records randomly selected from medical clinic	Individuals reporting noncitizen status, including refugees and undocumented persons	Chicago, Illinois
Vega, et al., 1985	To determine prevalence of psychoneuroses among Mexican Americans and whites	1,176 telephone interviews; random digit dialing	Unspecified ²	Santa Clara County, California
Vega, et al., 1986	Role of confidant support in moderating depressive symptoms in Mexican immigrant women	1,915 interviews, multistage sampling	Unspecified	San Diego County, California
Vega, et al., 1987	Test Fabrega Migration Adaptation Model as predictor for depressive symptomatology in immigrant Mexican women	Sample from enrollees in randomized trial testing efficacy of social support interventions to prevent onset of depressive symptomatology	Unspecified	San Diego, California
Vega, et al., 1997	Determine prevalence of perinatal drug exposure cross-sectional	11,001 participants, California Substance Exposure Study	Birthplace foreign versus United States	California
Ventura and Taffel, 1985	Comparison of maternal-child health of U.S. and foreign-born Hispanic mothers and babies	1980 National Natality Survey	Parental place of birth	National
Villa, et al., 1997	Comparative analysis of chronic disease prevalence among Koreans and non-Hispanic whites	Multistage sampling; 223 Koreans, 201 non-Hispanics	Unspecified ²	Los Angeles County, California
Warheit, et al., 1985	Examine mental health consequences of immigration	551 Mexican Americans; probability sample	Place of birth	Santa Clara County, California
Weeks, et al., 1989	Fertility patterns among refugees from Cambodia, Laos, and Vietnam	Indochinese Health and Adaptation Project of UCSD and SDSU, Family Planning Knowledge (random sampling); Attitudes and Practice of the Southeast Asian Refugee Project of UCSF (snowball sampling for sampling frame)	Unspecified	San Diego, San Francisco, California
Weeks and Rumbaut, 1991	Calculate infant mortality rates for specific ethnic groups	Linked birth and infant death records	Ethnicity of surname; definition/determination of refugee status unspecified ²	San Diego, California metropolitan area

Table 1. Summary of Immigration Measures Used in Health-related Studies—Con.

Study	Purpose/design of study	Data/sample	Definition/measure of immigrant	Geographic area
Weitzman and Berry, 1992	Examine health care needs of female immigrant home attendants; cohort	Newly hired home attendants represented by union local	Country of origin; Puerto Ricans included as immigrants	New York City, New York
Wewers, et al., 1995	Misclassification of smoking status among southeast Asian immigrants	Interviews of 1,403 persons; list constructed from telephone book, others recruited from organizations and snowball sampling	Place of birth ¹	Franklin County, Ohio
Whitaker and Edwards, 1991	Assess efficacy of U.S. HIV-1 screening policy for immigrants	Applicants for permanent resident status from INS and Public Health Service	Self-identified as potential immigrant	United States/Foreign country
Yeung and Schwartz, 1986	Emotional disturbance in Chinese obstetrical patients	Questionnaire of 124 patients at clinic	Place of birth	New York City, New York (Chinatown)
Ying, 1990	Explanatory models of depression in immigrant Chinese women	40 immigrant women recruited from health clinic	Unspecified ²	San Francisco, California (Chinatown)
Young, et al., 1987	Assess health status	340 “refugees” from Vietnam, Poland, Iraq, Romania, and Hmong	Unspecified ²	Detroit, Michigan
Zambrana, et al., 1991	Examine use of prenatal care	Interviews through prenatal clinic	Birth in Mexico	Los Angeles, California
Zambrana, et al., 1994	Identify predictors of pediatric emergency department visits by Latino immigrant mothers	Identified through medical charts by hospital intake staff	Birthplace in Mexico, El Salvador, or Guatemala; years in the United States	Los Angeles County, California
Zambrana, et al., 1997	Role of acculturation and prenatal health behaviors in Mexican women	911 interviews, 1987–89 recruited from prenatal clinics	Place of birth, length of U.S. residency	Los Angeles County, California
Ziegler, et al., 1993	Breast cancer risk associated with migration; case control	Random digit dialing	Place of birth, parents' place of birth, grandparents' place of birth	California, Hawaii
Zuber, et al., 1997	Risk of TB in foreign born	TB cases reported to the Centers for Disease Control and Prevention, 1986–94	Place of birth	Nationwide

¹Not specified in article; information obtained directly from author(s).²Unspecified indicates that the article did not indicate how immigration status was determined. Additional information was not available from the author(s).³Could not be confirmed by agency noted in paper.

app. I through XXII Indicates the appendix number of each form.

Appendix I

Aroian

BOSTON COLLEGE	DC _____	School of Nursing
ISFA D&M e	# _____	Ph-1 D _____

DEMOGRAPHIC AND MIGRATION QUESTIONNAIRE

Please write in your answers to the following questions in the spaces provided or put a check mark [✓] next to your chosen answer.

1. What city of the former Soviet Union are you originally from?	_____
2. Your age?	_____
3. Date of arrival in the U.S. (Month and year)	_____
4. Are you a U.S. citizen?	[] 0 - no [] 1 - yes
5. When did you become a U.S. citizen? (Write in the date if applicable)	_____
6. Who did you come to the U.S. with?	[] 1 - alone [] 2 - spouse and/or child(ren) [] 3 - parents [] 4 - relatives (specify relationship) _____ _____
7. Who sponsored your coming to the U.S.?	[] 1 - no one [] 2 - spouse [] 3 - other family member (specify) _____ [] 4 - relative (specify relationship) _____ [] 5 - friend/acquaintance [] 6 - religious organization [] 7 - other (specify) _____

BOSTON COLLEGE**School of Nursing**

8. Your sex? 1 - male
 2 - female
9. Your marital status? 1 - single,
never married
 2 - married or
living with partner
 3 - divorced
 4 - legally separated due to
difficulties in marriage
 5 - geographically separated
due to immigration
 6 - widowed
10. Religious affiliation? _____
11. To what primary ethnic group (nationality) do you belong?
(i.e. Jewish, Russian, Armenian, etc.) _____
12. Your current employment status?
(Check all that apply) 1 - employed full time
 2 - employed part time
 3 - retired
 4 - unemployed,
not looking for work
 5 - unemployed,
looking for work
13. Your occupation in the U.S.? *(Please describe exactly what you do. If you are not
employed now describe your occupation before you stopped working)*

14. Your occupation prior to immigration? *(Please describe exactly what you did before coming to
this country or to another country)*

15. What was your household income before taxes
last year *(Include all sources of income)* _____
How many people were supported with this income? _____

ROSDEN COLLEGE DC _____ **School of Nursing**
ES&A DEMO e # _____ Ph-1 D _____

16. Your education? 1 - incomplete high school
 2 - high school graduate
 3 - incomplete college
 4 - college graduate
 5 - graduate degree

Specify the countries where you were educated: _____

17. Who do you currently live with?
 Relationship _____ Age _____ Relationship _____ Age _____
 Relationship _____ Age _____ Relationship _____ Age _____
 Relationship _____ Age _____ Relationship _____ Age _____

18. Do you have close relatives in the former Soviet Union? 0 - no
 1 - yes

19. Do you have close relatives in Boston or in the Boston area? 0 - no
 1 - yes

20. Do you have close relatives (except those already mentioned) within 5 hour drive of your current home? 0 - no
 1 - yes

21. What language are you most comfortable speaking? 1 - Russian
 2 - English
 3 - other (specify) _____
 4 - no preference

22. What was your entry status into the U.S.? 1 - refugee
 2 - imm. visa issued abroad
 3 - conditional immigrant
 4 - temporary resident
 5 - illegal alien
 4 - other (specify) _____

Appendix II

Asch, et al.

Card#1/5
ID#2-7/
26

In your lifetime, did you ever stay overnight or longer in a hospital for a mental or emotional problem or trouble with your nerves?

- (CIRCLE ONE)
- | | | |
|-----------------------------------|----|----|
| YES..... | 1. | |
| NO..... | 2 | |
| REFUSED..... | 7 | 8/ |
| NOT SURE/DON'T KNOW..... | 8 | |
| INTERVIEWER ERROR/ NO ANSWER..... | 9 | |

57. To get an idea of how income affects health, we would like to know the approximate combined total income for everyone in your household in 1992. That includes all kinds of income, including social security, interest, etc. Was it ...

- (CIRCLE ONE)
- | | | |
|-------------------------------------|---|----|
| Less than \$5,000..... | 1 | |
| Between \$5,000 and \$10,000..... | 2 | |
| Between \$10,000 and \$15,000..... | 3 | |
| Between \$15,000 and \$25,000..... | 4 | 9/ |
| Between \$25,000 and \$50,000..... | 5 | |
| Between \$50,000 and \$100,000..... | 6 | |
| More than \$100,000..... | 7 | |
| NOT SURE, DON'T KNOW..... | 8 | |
| NO ANSWER/INTERVIEWER ERROR..... | 9 | |

58. In what country were you born?

VERBATIM RESPONSE _____ 10-12/

CODE AFTER INTERVIEW COMPLETE WITH CODE BOOK

COUNTRY CODE _____ 13-15/

IF RESPONSE TO #58 IS "UNITED STATES" SKIP TO #62

59. About what date did you come to the US to stay?

URGE TO BE AS EXACT AS POSSIBLE

DATE / / 16-21/
(MO) (DAY) (YR)

60. Are you a US citizen? Remember that all your answers are completely confidential, including this one.

- (CIRCLE ONE)
- | | | |
|------------------------------------|-----------------|-----|
| YES..... | 1-->SKIP TO #62 | |
| NO..... | 2 | |
| REFUSED..... | 7 | 22/ |
| NOT SURE / DON'T KNOW..... | 8 | |
| INTERVIEWER ERROR / NO ANSWER..... | 9 | |

61. Tell me which of the following best describes your current status:

- (CIRCLE ONE)
- Permanent resident (green card)..... 1
 - Temporary resident..... 2
 - Without papers..... 3
 - Student or tourist visa..... 4
 - Expired visa..... 5
 - Asylee..... 6
 - Some other paper..... 7

62. Have you ever been in jail or prison?

- (CIRCLE ONE)
- YES..... 1
 - NO..... 2-->SKIP TO #64
 - REFUSED..... 7-->SKIP TO #64
 - NOT SURE/DON'T KNOW..... 8-->SKIP TO #64
 - INTERVIEWER ERROR/ NO ANSWER..... 9

63. Over the last 2 years, how long did you spend in prison or jail?

- ___ ___ DAYS
- ___ ___ WEEKS
- ___ ___ MONTHS

25-2
27-2
29-3
31-3

64. END TIME (24 HR FORMAT) _____

SOURCE: Excerpt taken from a questionnaire used in research findings that were published in Asch, et al., 1994.

Appendix III

Cornelius, et al.

degree of direct eye contact with the respondent. When dealing with open-ended questions, this often requires the interviewer to make only fragmentary notes on the response, and fill them in after the interview is completed. I and other researchers (e.g., Arias, 1981) have found the tape recorder to be an extremely useful tool in making interviews with non-detained undocumented immigrants as informal and non-threatening as possible. However, use of the tape recorder in a large-scale study to record most or all interview responses is not practical. The difficulties of coding and processing interview responses from verbatim tape transcripts are overwhelming. Even the 185 two-to-three hour interviews which I taped in 1978 required nearly two years to transcribe, code, and analyze.

Care can also be taken in question wording to minimize the sensitivity of certain topics which must be discussed in interviews with non-detained undocumented immigrants. The most obvious example is a question about the respondent's immigration status. Usually, the interviewer has no advance information on the immigration status of the respondent. In my own research, and in the on-going San Diego County study, we simply proceed on the assumption that most of our interviewees are undocumented, unless and until they prove otherwise in the course of an interview. In my 1978 fieldwork I never asked directly whether the respondent had papers or not; instead, I would ask a much less threatening (at least in format) question, such as

"Y ahora...piensa arreglar papeles?" (And now, are you thinking about getting papers?)

"Está arreglando papeles?" (Are you in the process of getting papers?)

"Le gustaría arreglar papeles?" (Would you like to get papers?)

"Tenía dificultades en entrar?" (Did you have trouble getting into the country?)

"Habría una ventaja en arreglar papeles?" (Would there be any advantage to you, in getting papers?)

If it was apparent from the response to this initial question that the respondent was undocumented, I would follow up immediately with a series of questions about mode of entry into the U.S., efforts to obtain legal papers, payments to covotes (smugglers of illegal migrants into the U.S.), dealings with immigration lawyers, and related matters.⁶

In the more highly structured interviews being done in San Diego County, the immigration status questions are asked in the following form:

"La primera vez que llegó a los Estados Unidos...entró con papeles, o tuvo que entrar sin papeles?" (The first time that you came to the U.S. did you enter with papers, or did you have to enter without them?)

"Y la última vez que llegó a los Estados Unidos...Entró con papeles, o tuvo que entrar sin papeles?" (And the most recent time you came to the U.S., did you enter with papers, or did you have to enter without them?)

We have found that use of the Spanish verb "tener" (to have to do something) in this context is just enough to soften the question and avoid a fearful or hostile reaction. Interviewers are also instructed to be sure to keep the interview "moving" well at that point.

In the current San Diego County study we are finding that the most sensitive questions do not relate to immigration status, or even to

⁶ Quite often an undocumented interviewee (at least one who has been approached in a non-threatening way) will readily acknowledge his illegal status with no prompting at all. This may occur, for example, in the course of reporting his job history in the United States, or in discussions of the migration history of the respondent's relatives.

Appendix IV

Curiel, et al.

28. Do you think that your neighborhood needs a community center where most services could be in one building?

- a. yes
- b. no
- c. don't know

29. What kinds of services may be needed for youths that are getting in trouble or have had contact with the police? (multiple answers)

- a. youth or recreation centers
- b. leadership clubs in school
- c. alternative education programs
- d. role model programs
- e. counseling services
- f. other (specify) _____

The next questions are purely voluntary and completely confidential. You can stop at anytime. Would you mind answering them?

30. Number of people living in the present household?

- a. adults (18 & over)
- b. children (17 & under)

31. Your residence status:

- a. born in the USA
- b. naturalized citizen
- c. pending naturalisation
- d. pending resident status
- e. other (specify) _____

32. Number of family members living in the house? _____

Thank you for your time and effort in completing this survey. We hope that this information will be helpful in improving the community services offered to you and your family in the future. All information is confidential.

THANK YOU!

Appendix V

Dumka, Roosa, and Jackson

Form unavailable.

Appendix VIa

Heer and Falasco

1980 Questionnaire

ID# _____
 C.T. _____
 Weight _____

QUESTIONNAIRE FOR NEW MOTHERS OF MEXICAN ETHNICITY IN LOS ANGELES COUNTY

Hello, my name is _____. May I speak with _____ (Name of mother)? Would you prefer that I speak in Spanish or English? I am helping to conduct a confidential survey concerned with persons of Mexican descent in the United States. The survey is sponsored by the University of Southern California and the interviewing is being carried out by the C.P.E. Project, Inc. We have gathered a list from the record of recently registered birth certificates in this county and families on that list will be paid \$10.00 if they take part in a completely confidential interview.

The purpose of the survey is to find out how well different portions of the Mexican community are getting along. We are especially interested in how well undocumented and documented immigrants are doing, compared to Mexican Americans who were born in the United States.

You and your family were selected for the survey because the birth certificate records indicate that you or your husband is of Mexican descent. As soon as the interviewing has been completed, we shall leave in your possession the only record we have of your name and address so that no one will ever be able to link what you have said on this questionnaire either to you or to your address. We only want to interview persons who are willing to tell us whether or not they are U.S. citizens, and if not, whether or not they are here legally. If you are eligible for the interview and you are willing to participate, you will be free to refuse to answer any question or questions, or to discontinue the interview at any time. However, if you do answer every question, I shall pay you \$10.00 at the end of the interview.

So, right now, I would first like to ask you:

1. Do you consider yourself to be of Mexican descent?
 Yes (skip to 1c)
 No (ask 1a)
 - a. Are you living with a man you consider to be your husband?
 Yes (ask 1c)
 No (Say "thank you" and discontinue the interview.)
 - b. Is he of Mexican descent?
 Yes (continue to 1c)
 No (say "thank you" and discontinue interview)
 Yes (continue to 1b)
 No or respondent has no husband (Say "thank you" and discontinue the interview) interview)
- b. In this interview, we will be asking if you and your close relatives are U.S. citizens. If any of you are not U.S. citizens, we will ask if you have residence papers or if you are undocumented. Are you willing to participate in this interview, and as part of this interview, tell me the answers to these questions when I ask them?
 Yes (continue)
 No (say "thank you" and discontinue the interview)

Before beginning with the remaining questions I should like you first to sign the consent form which I have here with me.

Main Questionnaire

(Interviewer: please indicate whether respondent is
 Male
 Female)

2. Were you born in the United States?
 Yes (skip to 2f)
 No (ask 2a and 2b)
 - a. In just what country were you born?
 Mexico
 Other Latin American nation
 Other nation
 - b. Are you a citizen of the United States?
 Yes (skip to 2d)
 No (ask 2c)

- c. Do you have an alien registration card (a green or a brown card) which permits you to reside in the United States? May I see this card?
 Yes and interviewer was able to see the card.
 Yes but interviewer was not able to see the card.
 No
- d. When did you first come to the United States to live?
 _____ (Year)
- e. Since you first came to the United States, have you left the United States for a period of six months or more?
 Yes (ask 2f)
 No (skip to 2ff)
- f. How many years have you lived in the United States six months or more each year?
 _____ (Number of years)
- ff. How many months in 1979 did you live in the U.S.?

- g. When did you first come to California to live?
 Born in California (skip to 2j)
 Came to California in _____ (Year) (ask 2h)
- h. Since you first came to California, have you left California for a period of six months or more?
 Yes (ask 2i)
 No (skip to 2j)
- i. How many years have you lived in California for a period of six months or more?
 _____ (Number of years)
- j. When did you first come to Los Angeles County to live?
 Born in Los Angeles County (skip to 3)
 Came to Los Angeles County in _____ (Year) (ask 2k)
- k. Since you first came to Los Angeles County, have you left Los Angeles County for a period of six months or more?
 Yes (ask 2l)
 No (skip to 3)
- l. How many years have you lived in Los Angeles for a period of six months or more?
 _____ (Number of years)

Now I would like to know something about your family.

Appendix VIb

Heer and Falasco

HOUSING QUESTIONNAIRE

Identification data

Census Tract	Block Group	Block
--------------	-------------	-------

Introduction

To the person who opened the door for you:

* Good morning (afternoon). Would you prefer that we speak in Spanish or English?

* I am helping to conduct a confidential and anonymous survey of persons who were born in Mexico and live in Los Angeles. The study is sponsored by the University of Southern California in Los Angeles and Colegio de la Frontera Norte in Tijuana, Mexico.

* I would like to ask you if at least one adult lives here who was born in Mexico.

NO - Thank you. (terminate interview)
YES - Continue

* I would like to speak with any adult who was born in Mexico.

If no person born in Mexico is available:

* Then I would like to speak with any other adult who could answer my questions.

To the person who agreed to answer the questions:

We believe that the results of this study will help us to know the needs and aspirations of the persons who live in Los Angeles and were born in Mexico. We do not wish to know anything personal about you or any other members of this household. We are only interested in statistical data. Further, at the end of this interview, we will provide you with the only proof that we have of your name and address and with the names and address of each member of this household. We will do this in such a way that in the future, no one could associate what you have said with the names or the address of your own house. We are especially interested in knowing if the immigrants are documented or undocumented; thus, we will ask you about the legal status of all of the adults of this household who were born in Mexico.

You are completely free to deny or refuse to answer any question or questions or, if you prefer, to terminate the interview at that moment that you decide.

May we begin?

Part II. Household Members

Could you tell me the names of all the persons who normally live in this house, including yourself? Begin with the owner of the house or he/she who rents the house.

	First Name	Sex	Age	Country born in		What familial relationship is he/she to the owner of the house or he/she who rents the house
		1 M 2 F		01 México 02 U.S.A 03 Other (specify)		
01						
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						

Familial relationship codes

- 1 Husband or wife
- 2 Son or Daughter
- 3 Brother or Sister
- 4 Father or Mother
- 5 Cous, Aunts/Unc, Niece/Nep
- 6 No family relation

Part III. Individual Questionnaire

I would like to ask you questions about each of the persons, starting with the first.

First Person: Write the name _____

4. Is this person considered to be of Mexican origin?

01 Yes 02 No

ONLY IF THIS PERSON WAS BORN IN MEXICO;

If this person is 18 or older, ask 4.1

If this person is 17 or younger, continue with 5

4.1 Is this person a United States Citizen?

01 Yes (continue with 5) 02 No

4.2 Does this person have a resident alien card (a green or brown card) that allows them to reside in the U.S.?

01 Yes 02 No (continue with 4.6)

4.3 Did this person get a residency card through amnesty (IRCA 1986)?

01 Yes 02 No (continue with 4.5)

4.4 Did this person qualify because they:

01 Had lived in the U.S. prior to 1982 (continue with 5)
02 Had worked in the fields (continue with 5)

4.5 Did this person get a resident alien card:

01 Because they were a dependent of a person who obtained a resident alien card through IRCA (continue with 5)
02 By some other means (continue with 5)

4.6 Does this person have a card which allows him/her to temporarily reside in the U.S.?

01 Yes (Continue with 5) 02 No

4.7 Is this person in a state of temporary protection which prohibits their deportation from the U.S.?

01 Yes 02 No

5. In which month and year did this person come to live in the U.S. for the first time?

5.1 In which month and year did this person come to live in the U.S. for the last time?

6. In all, how many years has this person lived in the U.S. for six months or more each year?

6.1 In all, how many times has this person come to live in the U.S.?

Appendix VII

Hubbell, Chavez, Mishra, Magana, and Valdez

Field Research Corporation
234 Front Street
San Francisco, CA 94111

529
111

--	--	--

Orange County Women's Health Care Survey

-Screener-

PHONE NUMBER:

--	--	--	--

 -

--	--	--	--

 -

--	--	--	--	--	--

INTRODUCTION:
Hello. I'm _____ from Field Research Corporation, a national public opinion research firm. We are conducting a survey for the University of California at Irvine on women's health issues.

The research is being sponsored by the National Cancer Institute and the information we obtain will be used to help develop health care programs to meet the needs of women in your community. All the information you provide will be strictly confidential -- we don't need your full name or address. But we do need to have the cooperation of as many women possible so that the survey results reflect the attitudes of all women in your area. If you do not feel like answering a question, please let us know and we will move on to the next question.

A. For this survey, we need to speak with women, 18 years of age or older who live in Orange County. Just to be sure, is this household in Orange County?

YES 1 -- CONTINUE
NO 2 -- TERMINATE

B. May I speak with the female in your household, 18 years of age or older, who had the most recent birthday.

(IF NECESSARY, SAY: This is so we can randomly select only one person in your household to interview.)

ASK FOR FIRST NAME OF DESIGNATED RESPONDENT

RECORD FIRST NAME: _____

(IF DESIGNATED RESPONDENT NOT AT HOME NOW, FIND OUT BEST TIME TO CALL BACK.)

WHEN YOU ARE SPEAKING WITH DESIGNATED RESPONDENT:

1. RECORD LANGUAGE PREFERENCE FOR INTERVIEW BELOW:

ENGLISH 1
SPANISH 2
NO PREFERENCE 3

2. First, I need to ask a few background questions such as your ethnicity, country of birth and age...

Would you describe yourself as Hispanic or Latino, non-Hispanic White or Anglo, African American or Black, Asian or Asian American or Native American?

HISPANIC/LATINO/INDIGENA . . . 1 - ASK Q.3
ANGLO OR NON-HISPANIC WHITE . . . 2

AFRICAN-AMERICAN OR BLACK . . . 3 TERMINATE BY SAYING: ---
ASIAN OR ASIAN AMERICAN . . . 4 Thank you very much for your
NATIVE AMERICAN 5 time but we have already
MIDDLE EASTERN 6 completed our quota of
interviews with women in this
group.]

OTHER (SPECIFY) _____ 7
REFUSED 8

3. In what country were you born?

U.S., except Puerto Rico 1 -- CONTINUE WITH Q.4
Puerto Rico 2
Cuba 3
Mexico 4 [IF HISPANIC/LATINO/INDIGENA, CONTINUE WITH
El Salvador 5 Q.4]
Guatemala 6 [IF FOREIGN-BORN AND ANGLO IN Q.2,
Nicaragua 7 TERMINATE BY SAYING: --- Thank you very
Other Central American Country 8 much for your time but we have already
(SPECIFY): _____ completed our quota of interviews with
South American Country 9 women in this group.]
(SPECIFY): _____
Other (SPECIFY): _____ 10

214 Front Street
San Francisco, CA 94111

1119



Orange County Women's Health Care Survey

-MAIN QUESTIONNAIRE-

4. In what country was your father born?

U.S., except Puerto Rico	1
Puerto Rico	2
Cuba	3
Mexico	4
El Salvador	5
Guatemala	6
Nicaragua	7
Other Central American Country	8
Other South American Country	9
Other (SPECIFY) _____	10

5. In what country was your mother born?

U.S., except Puerto Rico	1
Puerto Rico	2
Cuba	3
Mexico	4
El Salvador	5
Guatemala	6
Nicaragua	7
Other Central American Country	8
Other South American Country	9
Other (SPECIFY) _____	10

6. How would you describe your ethnic identification?

Mexican American/Chicano	1
Mexican/Mexicano	2
Hispanic/Latino	3
El Salvadorian	4
Guatemalan	5
Nicaraguan	6
Other Central American	7
Puerto Rican	8
Cuban or Cuban American	9
Other South American	10
Anglo American/White	11
American	12
Other (SPECIFY) _____	13
Don't know	dk
Refused/no answer	ref

7. Could you give me your date of birth? First the year...

REFUSED ref

7a. Now the month...

January	1
February	2
March	3
April	4
May	5
June	6
July	7
August	8
September	9
October	10
November	11
December	12
Refused/no answer	13

8. How many people live in your house or apartment, including yourself, your family, friends, and others?

_____ : IF ONE, SKIP TO Q.13 OTHERWISE, ASK Q.9
Refused ref

INTERVIEWER: IF NOT HISPANIC/LATINO, SKIP TO Q.87, IF HISPANIC/LATINO, ASK:

77. In general, what language(s) do you read and speak? (READ LIST)

Only Spanish	1
Spanish better than English	2
Both equally	3
English better than Spanish	4
Only English	5

78. What was the language(s) you used as a child?

Only Spanish	1
Spanish better than English	2
Both equally	3
English better than Spanish	4
Only English	5

79. What language(s) do you usually speak at home?

Only Spanish	1
Spanish better than English	2
Both equally	3
English better than Spanish	4
Only English	5

80. In which language(s) do you usually think?

Only Spanish	1
Spanish better than English	2
Both equally	3
English better than Spanish	4
Only English	5

81. What language(s) do you usually speak with your friends?

Only Spanish	1
Spanish better than English	2
Both equally	3
English better than Spanish	4
Only English	5

(IF HISPANIC/LATINO/INDIGENA AND BORN IN U.S., GO TO Q.86)

82. In what year did you come to the U.S. the last time?

<u> </u>	
Don't know	dk
Refused/no answer	ref

83. In total, how many years have you been in the U.S., including all of your trips?

<u> </u> years	
Not applicable	2
Don't know	dk
Refused/no answer	ref

84. What is your current immigration status?

Legal Permanent Resident (Green card, or "Mica")	1
Without Papers (undocumented; False documents)	2
Still does not have papers, but has requested work permit	3
Still does not have papers, but has requested permanent residency	4
Still does not have papers, but has requested political asylum	5
U.S. citizen	6
Temporary Protection Status (TPS)	7
Political asylee/refugee	8
Other (SPECIFY) <u> </u>	9
Not applicable	10
Don't know	11
Refused/no answer	12

85. Do you intend to stay permanently in the United States?

Yes	1
No	2
Don't know	dk
Refused/no answer	ref

Appendix VIII

Hubbell, Waitzkin, Mishra, Dombrink, and Chavez

4. REFUSED TO ANSWER. _____

_____ 63q) WAS YOUR TOTAL FAMILY INCOME LAST MONTH (AUGUST) ABOVE OR BELOW \$3769?

1. ABOVE..... _____

2. BELOW..... _____

3. DO NOT KNOW..... _____

4. REFUSED TO ANSWER. _____

_____ 63r) WAS YOUR TOTAL FAMILY INCOME LAST MONTH (AUGUST) ABOVE OR BELOW \$3969?

1. ABOVE..... _____

2. BELOW..... _____

3. DO NOT KNOW..... _____

4. REFUSED TO ANSWER. _____

_____ 63s) WAS YOUR TOTAL FAMILY INCOME LAST MONTH (AUGUST) ABOVE OR BELOW \$4169?

1. ABOVE..... _____

2. BELOW..... _____

3. DO NOT KNOW..... _____

4. REFUSED TO ANSWER. _____

_____ 63t) WAS YOUR TOTAL FAMILY INCOME LAST MONTH (AUGUST) ABOVE OR BELOW \$4368?

1. ABOVE..... _____

2. BELOW..... _____

3. DO NOT KNOW..... _____

4. REFUSED TO ANSWER. _____

_____ 64) WHAT IS YOUR (FILL IN THE AD'S NAME) 'S RESIDENCY STATUS?

1. U.S. CITIZEN....._____
2. RESIDENT ALIEN....._____
3. STUDENT VISA OR DEPENDENT....._____
4. WORKER VISA OR DEPENDENT....._____
5. VISITOR VISA....._____
6. UNDOCUMENTED....._____
7. DO NOT KNOW....._____
8. REFUSED TO ANSWER....._____

WE ARE PLANNING TO DO A SIMILAR STUDY IN FUTURE AND WOULD LIKE YOU TO PARTICIPATE IN THAT STUDY. DO YOU WISH TO BE CONTACTED AGAIN?

1. YES....._____
2. NO....._____

IF YES, MAY WE HAVE YOUR PHONE NUMBER_____

IN THE EVENT YOU CHANGE YOUR RESIDENCE AND/OR PHONE NUMBER, PLEASE COULD YOU INFORM US OF THE CHANGE (GIVE THE RESPONDENT THE SHEET WITH OUR ADDRESS)

THANK YOU VERY MUCH FOR YOUR TIME AND COOPERATION.

Appendix IX

Lambert and Lambert

PATIENT BACKGROUND

Name _____

1. What is your father's racial or nationality background? _____

2. What is your mother's racial or nationality background? _____

3. What languages do you speak other than English?

a. _____

b. _____

c. _____

d. _____

4. How many years have you lived in the United States?

a. _____ 1 year or less.

b. _____ 13 months to 3 years.

c. _____ 4 to 7 years.

d. _____ 8 to 11 years.

e. _____ 12 to 16 years.

f. _____ 17 years and over.

5. If you lived in another country before coming here, which country did you live in? _____

6. How long did you live in another country before coming here?

a. _____ never lived in another country.

b. _____ 1 year or less.

c. _____ 13 months to 3 years.

d. _____ 4 to 7 years.

e. _____ 8 to 11 years.

f. _____ 12 to 16 years.

g. _____ 17 years and over.

How long have your parents lived in the United States?

- a. _____ have never lived in the United States.
- b. _____ 1 year or less.
- c. _____ 13 months to 3 years.
- d. _____ 6 to 10 years.
- e. _____ 11 to 15 years.
- f. _____ over 15 years.

3. If your parents lived in another country before coming here, which country did they come from? _____

9. How long did they live in another country before coming here?

- a. _____ less than 15 years.
- b. _____ 16 to 25 years.
- c. _____ 26 to 35 years.
- d. _____ 36 to 45 years.
- e. _____ more than 46 years.

10. Do you expect your therapists's race to be alike or different from your own?

- a. _____ alike.
- b. _____ different.

11. Do you think the therapist's ethnicity or culture will make a difference in your therapy?

- 1. _____ yes.
- 2. _____ no.

Appendix X

Lee, Crittenden, and Yu

COOPERATIVES

82. Some elderly persons are getting together to form food and clothing cooperatives. That is, these groups of elderly buy large quantities of these items at cheaper prices and then pass on the savings to the members of the cooperatives. Do you think you would like to belong to a

A. Food cooperative?

- Yes(Ask A1) 1
- No(Ask B) 2
- Don't know. .(Ask B) 3

A1. [IF YES:] Would you be willing to help organize this cooperative?

- Yes(Ask A2) 1
- No(Ask B) 2

A2. [IF YES:] Would you be willing to help operate this cooperative?

- Yes(Ask B) 1
- No(Ask B) 2

B. Clothing cooperative?

- Yes(Ask B1) 1
- No(GO TO Q.83) 2
- Don't know. .(GO TO Q.83) 3

B1. [IF YES:] Would you be willing to help organize this cooperative?

- Yes(Ask B2) 1
- No(Ask Q.83) 2

B2. [IF YES:] Would you be willing to help operate this cooperative?

- Yes(GO TO Q.83) 1
- No(GO TO Q.83) 2

ETHNIC VALUES AND CULTURE

83. In what country/commonwealth were you born?

Name of Country/Commonwealth: _____ [CODER: ___|___]

A. [INTERVIEWER: Is the Respondent born in the U.S.?

- Yes(Ask B) 1
- No(Skip to D) 2]

B. [IF U.S. BORN] Was your father born in the U.S.?

- Yes, U.S.-born 1
- No, not born in the U.S. 2

C. [IF U.S. BORN] Was your mother born in the U.S.?

- Yes, U.S.-born(SKIP TO Q.87-A) 1
- No, not born in the U.S. . .(SKIP TO Q.87-A) 2

D. [IF FOREIGN BORN] How old were you when you came to this country?

_____ years old

E. Did you leave (your country) by choice or by force of circumstances?

- By choice 1
- By force of circumstances 2

*F. What was the most important reason you came to this country?

- Conflicts with government in home country01
- All my assets were confiscated02
- No chance to provide the basic necessities for my family. . . .03
- Religious, racial, or ethnocentric intolerance04
- Fear of death, imprisonment, or harm from government.05
- Offered a job in this country06
- Anticipation of better living standards in the U.S.10
- Assist children in their housework or babysit11
- Fear of starvation in home country.12
- Fear of lack of opportunities for children in home country. . .13
- To receive higher or specialized education in the U.S.14
- To get married or got married to someone who is here15
- Was brought over or came with parents and family.16
- Other (please specify) _____17

G. After you made the decision to leave your country or knew that you were coming to this country, how much preparation did you make to adapt to life in the U.S.? (This would include learning to speak, read, and write English; talking to people about what life is like in the U.S.; and other activities of that sort.) Would you say that

- You have prepared a lot? 1
- You have prepared moderately? 2
- You had a little preparation? 3
- You did not prepare at all? 4

H. Before you came to the U.S., how well did you read English?

- Very fluently 1
- Moderately well 2
- Can make do 3
- Poorly 4
- Not at all 5

I. Have you lived mostly in (country corresponding to above question) with some time in the United States, mostly in the United States, only in the United States, or about equally in the United States and abroad?

- Mostly abroad, with some time spent in the U.S. 1
- Mostly in the U.S., with some time spent abroad 2
- Only in the U.S. 3
- About equally in the United States and abroad 4

Appendix XIa

Loue and Foerstel

ASSESSMENT OF IMMIGRATION STATUS AND HEALTH BENEFIT ELIGIBILITY

I. PLACE OF BIRTH

A. In the United States

1. Were you born in the United States?

No... Go to question I.B.1
Yes... Go to question I.A.2.

2. Did you give up your citizenship?

No...

United States citizen. Eligible for full scope Medicaid and Medicare.
--

Yes... Go to question I.B.1

B. Outside of the United States

1. Were both parents United States citizens?

No... Go to question I.B.3
Yes... Go to question I.B.2

2. Did one of your parents reside in the United States prior to your birth?

No... Go to question I.B.3

Yes...

United States citizen. Eligible for full scope Medicaid and Medicare.
--

3. Did both of your parents acquire United States citizenship through naturalization?

No... Go to question I.B.5
Yes... Go to question I.B.4

4. **Were you under the age of 18 and residing in the United States at the time that your parents naturalized?**

No... Go to question I.B.5

Yes...

United States citizen. Eligible for full scope Medicaid and Medicare.
--

5. **Was one parent a United States citizen?**

No... Go to question II.A.1

Yes... Go to question I.B.6

6. **Were you born after 12/24/1952 and before 11/14/1986?**

No... Go to question I.B.8

Yes... Go to question I.B.7

7. **Did the United States citizen parent live in the United States for at least 10 years before your birth, 5 of which were after the parent was 14 years old?**

No... Go to question II.A.1

Yes...

United States citizen. Eligible for full scope Medicaid and Medicare.
--

8. **Were you born after 11/14/1986?**

No... Go to question II.A.1

Yes... Go to question I.B.9

9. Did your United States citizen parent live in the United States for at least 5 years prior to your birth, 2 of which were after the parent was 14 years old?

No... Go to question I.B.10

Yes... **United States citizen.
Eligible for full scope Medicaid and Medicare.**

10. Were you a permanent resident who applied for and received citizenship ("naturalization") and a certificate showing that you are a United States citizen?

No... Go to question II.A.1

Yes... **United States citizen.
Eligible for full scope Medicaid and Medicare.**

II. CURRENT STATUS

A. Permanent Residence

1. Do you have lawful permanent residence ("green card," "mica")?

No... Go to question II.B.1

Yes... **Documented (Permanent Resident).
Eligible for full scope Medicaid and Medicare.**

B. Amnesty/Special Agricultural Workers

1. Did you apply for status under the amnesty program or the special agricultural worker (SAW) program?

No... Go to question II.C.1

Yes... Go to question II.B.2

2. **is the application filed still being processed by the INS?**

No... Go to question II.C.1

Yes... Go to question II.B.3

3. **Since the time that you filed your application, have you been convicted of any felony or of more than two misdemeanors, or of any crimes involving drugs?**

No... **Temporary resident/Classifiable as PRUCOL.
Eligible for full scope Medicaid unless subject to 5-year disqualification.
Possibly eligible for Medicare.**

Yes... Go to question III.A.1

C. Other Status

1. **Do you have some other legal status, such as tourist, student, political asylum, refugee status, deferred action, or parole?**

No... Go to question III.A.1

Yes... Go to question II.C.2

2. **Is the status temporary according to a visa that has been issued (for example, business, tourist, student, journalist?)**

No... Go to question II.C.3

Yes... Go to question II.C.5

3. **Is the status a special grant of permission from the INS that gives you the right to be in the United States (parole, deferred action, extended voluntary departure)?**

No... Go to question II.C.4

Yes... **Documented. Classifiable as PRUCOL.
Entitled to full scope Medicaid.
Possibly eligible for Medicare.**

4. Is the status refugee status or political asylum?

No... Go to question II.C.5

Yes...

Documented. Classifiable as PRUCOL. Entitled to full scope Medicaid. Possibly eligible for Medicare.

5. Did you do anything to violate your immigration status, such as work without INS permission, commit a crime, work for an employer other than the one approved by the INS, or stay in the United States longer than the INS had authorized?

No...

Documented-temporary status. Entitled to emergency Medicaid only. Probably not entitled to Medicare.

Yes... Go to question III.A.1

III. POTENTIAL REMEDIES

A. Political Asylum

1: Are you afraid to return to your country of origin?

No... Go to question III.B.1

Yes... Go to question III.A.2

2. Are you afraid of being persecuted or have you been persecuted in your country?

No... Go to question III.B.1

Yes... Go to question III.A.3

3. Was the persecution based on race, religion, nationality, political opinion, or membership in a particular social group (for example, a labor union or being homosexual or being HIV+)?

No... Go to question III.B.1

Yes... Go to question III.A.4

4. Did you persecute other people?

No... Go to question III.A.5

Yes... Go to question III.B.1

5. Has you been convicted of a very serious crime, such as murder or drug trafficking?

No...

Undocumented. Potentially eligible for political asylum. Eligible for emergency Medicaid only. Potentially classifiable as PRUCOL after filing asylum application. If PRUCOL, eligible for full scope Medicaid. Probably not eligible for Medicare.

Yes...

Undocumented. Probably no immigration remedy. Eligible for emergency Medicaid only. Probably not eligible for Medicare.

B. Registry

1. Have you been residing in the United States continuously since before January 1, 1972?

No... Go to question III.C.1

Yes... Go to question III.B.2

2. Have you ever violated narcotic laws, smuggled aliens into the United States, or committed a crime?

No... Go to question III.B.3

Yes... Go to question III.C.1

3. Have you been convicted since 1972 of anything other than a minor traffic violation?

No... **Undocumented. Potentially eligible for registry.
Eligible for emergency Medicaid only.
Potentially classifiable as PRUCOL after filing registry application.
If PRUCOL, eligible for full scope Medicaid.
Possibly eligible for Medicare.**

Yes... Go to question III.C.1

C. Family Immigration

1. Do you have a United States citizen spouse, parent, or child or sibling over the age of 21 years who is able and willing to petition for you to immigrate?

No... Go to question III.C.2

Yes... **Undocumented. Potentially eligible for permanent residence.
Eligible for emergency Medicaid only.
Probably classifiable as PRUCOL once the petition has been filed and approved.
If PRUCOL, eligible for full scope Medicaid.
Probably not eligible for Medicare.**

2. Do you have a spouse who is a lawfully admitted permanent resident ("green card") who is willing and able to petition for you to immigrate?

No... Go to question III.C.3

Yes... **Undocumented. Potentially eligible for permanent residence.
Eligible for emergency Medicaid only.
Probably not eligible for Medicare.**

3. Are you unmarried, with a parent who is a lawfully admitted permanent resident ("green card") who is willing and able to petition for you to immigrate?

No... Go to question III.C.4.

Yes... **Undocumented. Potentially eligible for permanent residence.
Eligible for emergency Medicaid only.
Probably not eligible for Medicare.**

4. Are you the spouse or unmarried child under the age of 21 of someone who received permanent or temporary residence through the amnesty or special agricultural worker (SAW) program?

No... Go to question III.D.1

Yes... Go to question III.C.5

5. Did you enter the United States before May 5, 1988?

No... Go to question III.D.1

Yes... Go to question III.C.6

6. Have you been convicted of any felony or of more than two misdemeanors?

No... Go to question III.C.7

Yes... Go to question III.D.1

7. Have you been convicted of any crime involving drugs?

No... **Undocumented. Potentially eligible for family fairness.
Eligible for emergency Medicaid only.
Not eligible for Medicare.**

Yes... Go to question III.D.1

D. Special Immigrants--Juveniles

1. Have you been declared a dependent of a juvenile court in the United States?

No... Go to question III.E.1

Yes... Go to question III.D.2

2. Did the court find that you are eligible for long term care?

No... Go to question III.E.1

Yes... Go to question III.D.3

3. Has a court or administrative body found that it will not be in your best interest to be returned to another country?

No... Go to question III.E.1

Yes... **Undocumented. Potentially eligible for permanent residence as special immigrant.
Eligible for emergency Medicaid. If gets status as permanent resident, eligible for full scope Medicaid.
Probably not eligible for Medicare.**

E. Employment Immigration

1. Do you have a potential employer in the United States who is willing to file a petition for you to immigrate to work for him or her?

No... Go to question III.F.1

Yes... Go to question III.E.2

2. Does the employer have a real job for you to fill?

No... Go to question III.F.1

Yes... Go to question III.E.3

3. Do you have the job skills required for the job?

No... Go to question III.F.1

Yes... Go to question III.E.4

4. Are there probably United States citizens or permanent resident who are qualified to do the job that the employer would offer you, and who would be willing to do that job?

No... **Undocumented. Potentially eligible for permanent residence.
Eligible for emergency Medicaid only.
Probably not eligible for Medicare.**

Yes... Go to question III.F.1

F. Suspension of Deportation

1. Have you been continuously physically present in the United States for at least 7 years, with only minor breaks in your presence?

No... Go to question III.G.1

Yes... Go to question III.F.2

2. Have you been convicted during the last 7 years of anything other than a minor traffic violation?

No... Go to question III.F.3

Yes... **Undocumented. No obvious immigration remedy.
Eligible for emergency Medicaid only.
Probably not eligible for Medicare.**

3. Do you have a United States citizen or permanent resident spouse, parent, or child?

No... Go to question III.F.5

Yes... Go to question III.F.4

4. **Would that spouse, parent, or child suffer a great deal emotionally, physically, or mentally if you were forced to leave the United States?**

No... Go to question III.F.5

Yes... Go to question III.F.6

5. **Would you, if forced to leave the United States, suffer more emotionally, mentally, or physically than would most people in the same situation?**

No... Go to question III.G.1

Yes... Go to question III.F.6

6. **Have you done anything so bad that the United States might not want you to be here?**

No... **Undocumented. Potentially eligible for suspension of deportation.
Eligible for emergency Medicaid only.
Potentially classifiable as PRUCOL after filing of suspension application.
If PRUCOL, eligible for full scope Medicaid.
Possibly eligible for Medicare.**

Yes... **Undocumented. No obvious immigration remedy.
Eligible for emergency Medicaid only.
Probably not eligible for Medicare.**

G. Administrative Remedies (Deferred Action, Voluntary Departure)

1. **Are there particularly sympathetic factors in your situation that might convince the INS to let you stay here temporarily, such as a serious illness or the serious illness of a close relative who is a United States citizen or permanent resident?**

No... **Undocumented. No obvious immigration remedy.
Eligible for emergency Medicaid only.
Probably not eligible for Medicare.**

Yes... Go to question III.G.2.

2. **Have you done anything to make the United States not want you to be here, like commit a crime or use drugs, or abuse a spouse or child?**

No...

**Undocumented. Potentially eligible for administrative remedy.
Eligible for emergency Medicaid only.
Potentially classifiable as PRUCOL depending on nature of administrative remedy granted.
If PRUCOL, eligible for full scope Medicaid.
Probably not eligible for Medicare.**

Yes...

**Undocumented. No obvious immigration remedy.
Entitled to emergency Medicaid only.
Probably not eligible for Medicare.**

SOURCE: Excerpt taken from a questionnaire used in research findings published in Loue and Foerstel, 1996.

Appendix XIb

Loue

Participant ID Number _____
Date of Interview _____
Interviewer _____

ASSESSMENT OF IMMIGRATION STATUS AND HEALTH BENEFIT ELIGIBILITY

I. PLACE OF BIRTH

A. In the United States

1. Were you born in the United States?

No . . . Go to question I.B.1.
Yes . . . Go to question I.A.2.

2. Did you give up your citizenship?

No . . .

United States citizen. Eligible for full scope Medicaid; not subject to 5-year bar. Eligible for Medicare.
--

Yes . . . Go to question I.B.1.

B. Outside of the United States

1. Were both parents United States citizens?

No . . . Go to question I.B.3.
Yes . . . Go to question I.B.2.

2. Did one of your parents reside in the United States prior to your birth?

No . . . Go to question I.B.3.

Yes . . .

United States citizen. Eligible for full scope Medicaid; not subject to 5-year bar. Eligible for Medicare.
--

3. Did both of your parents acquire citizenship through naturalization?

No . . . Go to question I.B.5.

Yes . . . Go to question I.B.4.

4. Were you under the age of 18 and residing in the United States at the time that your parent naturalized?

No . . . Go to question I.B.5.

Yes . . .

United States citizen. Eligible for full scope Medicaid; not subject to 5-year bar. Eligible for Medicare.
--

5. Was one parent a United States citizen?

No . . . Go to question II.A.1.

Yes . . . Go to question I.B.6.

6. Were you born after 12/24/1952 and before 11/14/1986?

No . . . Go to question I.B.8.

Yes . . . Go to question I.B.7.

7. Did the United States parent live in the United States for at least 10 years before your birth, 5 of which were after the parent was 14 years old?

No . . . Go to question II.A.1.

Yes . . .

United States citizen. Eligible for full scope Medicaid; not subject to 5-year bar. Eligible for Medicare.
--

8. Were you born after 11/14/1986?

No . . . Go to question II.A.1.

Yes . . . Go to question I.B.9.

9. Did your United States parent live in the United States for at least 5 years prior to your birth, 2 of which were after the parent was 14 years old?

No . . . Go to question I.B.10.

Yes . . .

United States citizen. Eligible for full scope Medicaid; not subject to 5-year bar. Eligible for Medicare.
--

10. Were you a permanent resident who applied for and received citizenship (“naturalization”) and a certificate showing that you are a United States citizen?

No . . . Go to question I.A.11.

Yes . . .

United States citizen. Eligible for full scope Medicaid; not subject to 5-year bar. Eligible for Medicare.
--

11. Were you a permanent resident who applied for and received citizenship through the Department of State and a United States passport showing that you are a United States citizen?

No . . . Go to question II.A.1.

Yes . . .

United States citizen. Eligible for full scope Medicaid; not subject to 5-year bar. Eligible for Medicare.
--

II. CURRENT STATUS

A. Permanent Residence

1. Do you have lawful permanent residence (“green card,” “mica”)?

No . . . Go to question II.B.1.

Yes . . .

Documented (permanent resident). Eligible for full scope Medicaid and Medicare. May be subject to 5-year bar on receipt of benefits under federal programs.

B. Other Status

1. Have you been granted status in any of the following categories: asylum, withholding of deportation, or refugee?

No . . . Go to question II.B.2.

Yes . . .

Documented. "Qualified alien."
Eligible for full scope Medicaid. Not subject to 5-year bar.

2. Have you been granted status in either of the following categories: parole for one year or more or conditional entry under the law in effect prior to April 1, 1980?

No . . . Go to question II.B.3.

Yes . . .

Documented. "Qualified alien." Eligible for full scope Medicaid;
probably subject to 5-year bar on receipt of benefits under federal programs.

3. Have you or your child been battered or subjected to extreme cruelty by a United States citizen spouse/parent, or by a member of your spouse's family, residing in the same household, with the consent or acquiescence of your spouse?

No . . . Go to question III.A.1.

Yes . . .

Individual may be a qualified alien if certain other requirements have been met.
If a qualified alien, documented. Eligible for full scope Medicaid; not subject to 5-year bar.

III. POTENTIAL REMEDIES**A. Asylum**

1. **Are you afraid to return to your country of origin or your country of last habitual residence?**
No . . . Go to question III.B.1.
Yes . . . Go to question III.A.2.

2. **Are you afraid of being persecuted or have you been persecuted in your country?**
No . . . Go to question III.B.1.
Yes . . . Go to question III.A.3.

3. **Was the persecution based on race, religion, nationality, political opinion (including refusal to abort a child or to be sterilized), or membership in a particular social group (such as a labor union, or being a homosexual, or being HIV-positive)?**
No . . . Go to question III.B.1.
Yes . . . Go to question III.A.4.

4. **Did you persecute other people?**
No . . . Go to question III.A.5.
Yes . . . Go to question III.B.1.

5. Have you been convicted of a very serious crime, such as murder or drug trafficking?

No . . . Go to question III.A.6.

Yes . . . **Probably undocumented. Probably no immigration remedy.
Eligible for emergency Medicaid only.**

6. Have you already filed an application for asylum, which was denied?

No . . . Go to question III.A.7.

Yes . . . Go to question III.B.1.

7. Have you been in the United States for less than one year?

No . . . Go to question III.B.1.

Yes . . . **Individual may be documented or undocumented depending on status at entry and current status. Potentially eligible for asylum but must apply within one year of date of entry into United States. If individual receives asylum, he/she will be "qualified alien" and eligible for receipt of full scope Medicaid benefits; not subject to 5-year bar.**

B. Registry

1. Have you been residing in the United States continuously since before January 1, 1972?

No . . . Go to question III.C.1.

Yes . . . Go to question III.B.2.

2. Have you ever violated narcotics laws, smuggled aliens into the United States, or committed a crime?

No . . . Go to question III.B.3.

Yes . . . Go to question III.C.1.

3. Have you been convicted since 1972 of anything other than a minor traffic violation?

No . . .

Undocumented or documented depending on status at entry and current status. Potentially eligible for registry. Currently eligible for emergency Medicaid only. If receives registry, eligible for full scope Medicaid as "qualified alien;" probably subject to 5-year bar.

Yes . . . Go to question III.C.1.

C. Family Immigration

1. Do you have a United States citizen spouse, parent, child or sibling over the age of 21 who is willing and able to petition for you to immigrate?

No . . . Go to question III.C.2.

Yes . . .

Undocumented or documented depending on status at entry and since entry. Potentially eligible for permanent residence. Currently eligible for emergency Medicaid only. Classifiable as a "qualified alien" following receipt of permanent residence; probably subject to 5-year bar.
--

2. Do you have a spouse who is a lawfully admitted permanent resident (“green card holder”) who is willing and able to petition for you to immigrate?

No . . . Go to question III.C.3.

Yes . . .

Undocumented or documented depending on status at entry and since entry. Potentially eligible for permanent residence. Currently eligible for emergency Medicaid only. Classifiable as a “qualified alien” following receipt of permanent residence; probably subject to 5-year bar.
--

3. Are you unmarried, with a parent who is a lawful permanent resident (“green card holder”) who is willing and able to petition for you to immigrate?

No . . . Go to question III.D.1.

Yes . . .

Undocumented or documented depending on status at entry and since entry. Potentially eligible for permanent residence. Currently eligible for emergency Medicaid only. Classifiable as a “qualified alien” following receipt of permanent residence; probably subject to 5-year bar.
--

D. Special Immigrants--Juveniles

1. Have you been declared a dependent of a juvenile court in the United States?

No . . . Go to question III.E.1.

Yes . . . Go to question III.D.2.

2. Did the court find that you are eligible for long term care?

No . . . Go to question III.E.1.

Yes . . . Go to question III.D.3.

3. Has a court or administrative body found that it will not be in your best interest to be returned to your original country?

No . . . Go to question III.E.1.

Yes . . .

Probably undocumented. Currently eligible for emergency Medicaid only. Potentially eligible for permanent residence as a special immigrant. If receives status as a permanent resident, eligible for full scope Medicaid as a "qualified alien"; may be subject to 5-year bar.
--

E. Employment Immigration

1. Do you have a potential employer in the United States who is willing to file a petition for you to immigrate to work for him/her?

No . . . Go to question III.F.1.

Yes . . . Go to question III.E.2.

2. Does the employer have a real job for you to fill?

No . . . Go to question III.F.1.

Yes . . . Go to question III.E.3.

3. Do you have the job skills required for the job?

No . . . Go to question III.F.1.

Yes . . . Go to question III.E.4.

4. Are there probably United States citizens or permanent residents who are qualified to do the job that the employer would offer you and who would be willing to do that job?

No . . .

Undocumented or documented depending on status at entry and current status. Currently eligible for emergency Medicaid only. Potentially eligible for permanent residence. If receives permanent residence, potentially eligible for full scope Medicaid as a "qualified alien"; probably subject to 5-year bar.

Yes . . . Go to question III.F.1.

F. Cancellation of Removal for Non-Lawful Permanent Residents

1. Have you been continuously physically present in the United States for a period of at least 10 years?

No . . . Go to question III.G.1.

Yes . . . Go to question III.F.2.

2. Have you been convicted during this time for any offense other than a minor traffic violation?

No . . . Go to question III.F.3.

Yes . . . Go to question III.G.1.

3. **Would your removal from the United States result in exceptional and extremely unusual hardship to your United States citizen or permanent resident spouse or child?**

No . . . Go to question III.G.1.

Yes . . . **Probably undocumented. Currently eligible for emergency Medicaid only. Potentially eligible for cancellation of removal. If receives cancellation, eligible for full scope Medicaid; subject to 5-year bar.**

G. **Administrative Remedies (Deferred Action, Voluntary Departure)**

1. **Are there particularly sympathetic factors in your situation that might convince the INS to let you stay here temporarily, such as a serious illness or the serious illness of a close relative who is a United States citizen or permanent resident?**

No . . . **Probably undocumented. Currently eligible for emergency Medicaid only. No obvious immigration remedy.**

Yes . . . Go to question III.G.2.

2. **Have you done anything to make the United States not want you to be here, like commit a crime, or use drugs, or abuse a spouse or child?**

No . . . **Probably undocumented. Currently eligible for emergency Medicaid only. Potentially eligible for administrative immigration remedy.**

Yes . . . **Probably undocumented. Currently eligible for emergency Medicaid only. No obvious immigration remedy.**

Appendix XII

Loue, Faust, and Bunce

26. Do you have any friends or family members who have had trouble getting health care?

27. What kinds of problems have they had?

28. Have these problems gotten better or worse since August 22, 1996?

(Prompt for possible reasons for change if they think there has been a change.)

29. Are these friends or family members immigrants or are they United States citizens?

30. How long have you been living in _____ County?

31. In the United States?

32. Now some people who are immigrants have a "green card." Other people have other kinds of permission to be here. Do you have a green card or do you have another kind of permission?

(If person does not indicate what kind of permission, or seems unsure of permission, ask: Some people do not have any permission to be here, but they want to get permission. Or sometimes they had permission but it is not good anymore. Did this happen to you?)

33. Has the kind of permission that you have changed since August 22, 1996?

(If yes, ask how it has changed, e.g., was student, now married to US citizen.)

34. Now, the government passed new laws that talk about who can get health care and who can't. Have you heard about these laws?

Appendix XIII

Mehta

12. Immigration status:
 Naturalized US citizen; Residential status (green card);
 Temporary (tourist) visa; Student visa; American born
13. Number of years in the U.S.:
14. Year you came to the U.S.:
15. How old were you when you left India?
16. Have you lived somewhere else besides in India or the U.S?
 a. Where?
 b. Which years?
17. Home state in India:
18. Reason for migration (check only one):
 educational opportunities;
 career opportunities;
 to accompany spouse/parents;
 other (please state) _____
19. What Indian languages do you speak?
20. Number of relatives in North America:
 Who are they (e.g., mother? father? brother? uncle? etc.):
21. Religious preference:
 Hindu; Islam; Sikhism; Jainism; Zoroastrian;
 Christian; Other (please state) _____
22. If applicable, what is your caste? _____
 Sub-caste? _____

It has been suggested that skin color is one of the many factors that influences how people view others.

23. Please rate the extent to which you feel that your skin color affects how readily Americans accept you.
- | | | | | | |
|--------------------|---|---|---|---|-------------------|
| affects not at all | | | | | very much affects |
| | 1 | 2 | 3 | 4 | 5 6 |

Appendix XIV

Perilla, et al.

CUESTIONARIO (Mujeres - Rev.4/13/97)

Caso # _____ Tipo _____

Entrevistadora: _____ Corte: _____

Fecha de la entrevista: _____ Lugar: _____

Nombre de la participante _____

Nombre del compañero _____

B1. Fecha de nacimiento _____

B2. Lugar de nacimiento _____

B3. Cuánto tiempo ha estado casada/viviendo con su pareja? _____

B4. Cuántos niños tiene? Vivos _____ Fallecidos: _____

Nombre de los niños .	Edad	Lugar de nacimiento
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

B5. Ellos viven con usted? Si nó, con quién viven? _____

B6. Cuándo fué la última vez que los vió? _____

B7. Quién vive en su casa? Qué relación tienen con usted? Cuántos años tienen?

B8. Usted tiene más familiares viviendo en Atlanta? Cuántos? ____ Qué tan a menudo los ve? _____

B9. Su pareja tiene familiares en Atlanta? Cuántos? ____ Qué tan a menudo los ve? _____

B10. Dónde creció usted? _____

B11. Con quién vivía? _____

B12. Su mamá tomaba bebidas alcohólicas? _____

B13. Ella alguna vez se emborrachaba (embriagaba)? Con qué frecuencia? _____

B14. Su papá tomaba bebidas alcohólicas? _____

SOURCE: Questionnaire used in research findings published in Perilla, et al., 1994.

Appendix XV

Robinson

LEGAL ADJUSTMENT ENROLLMENT				SECURITY NUMBER				I-797 NUMBER					
NAME & MIDDLE				LAST NAME				AGE		BIRTHDATE			
ADDRESS				CITY				STATE		COUNTY			
HOME PHONE NUMBER				WORK OR OTHER PHONE NUMBER				CONTACT DATE		APPLICANT CODE			
612 -				612 -									
WORKER NUMBER				INTAKE DATE				DATE ARRIVED U.S.		DATE ARRIVED MINNESOTA			
								Mo. Yr.		Mo. Yr.			
MARITAL STATUS													
1 <input type="checkbox"/> NEVER MARRIED		3 <input type="checkbox"/> WIDOWED		5 <input type="checkbox"/> SEPARATED/DUE TO MIGRATION		7 <input type="checkbox"/> OTHER							
2 <input type="checkbox"/> NOW MARRIED		4 <input type="checkbox"/> DIVORCED		6 <input type="checkbox"/> SEPARATED/MARITAL DIFFICULTIES									
ETHNICITY (ETHNIC GROUP)													
<input type="checkbox"/> CHINESE		<input type="checkbox"/> HONGKONG		<input type="checkbox"/> OTHER									
<input type="checkbox"/> CAMBODIAN (KHMER)													
YEARLY INCOME			NO. PERSONS DEPENDENT ON INCOME			NO. PERSONS IN HOUSEHOLD			NO. CHILDREN IN HOUSEHOLD				
000													
WHO DOES HE LIVE WITH (CHECK ALL THAT APPLY)													
<input type="checkbox"/> ALONE		<input type="checkbox"/> FATHER		<input type="checkbox"/> BROTHER/SISTER		<input type="checkbox"/> OTHER RELATIVE							
<input type="checkbox"/> SPOUSE		<input type="checkbox"/> CHILDREN		<input type="checkbox"/> OTHER									
CURRENT IMMIGRATION STATUS													
1 <input type="checkbox"/> BUDDHIST		3 <input type="checkbox"/> CHRISTIAN/PROTESTANT		1 <input type="checkbox"/> PAROLEE		3 <input type="checkbox"/> CITIZEN							
2 <input type="checkbox"/> CHRISTIAN/CATHOLIC		4 <input type="checkbox"/> OTHER		2 <input type="checkbox"/> PERMANENT RESIDENT									
EMPLOYMENT STATUS													
3 <input type="checkbox"/> PART TIME		3 <input type="checkbox"/> STUDENT ONLY		5 <input type="checkbox"/> UNEMPLOYED/NOT IN SCHOOL		7 <input type="checkbox"/> OTHER							
4 <input type="checkbox"/> FULL TIME		4 <input type="checkbox"/> STUDENT & EMPLOYED		6 <input type="checkbox"/> HOMEMAKER									
TYPE OF EMPLOYMENT													
PLACE OF EMPLOYMENT													
EDUCATION COMPLETED BEFORE COMING TO U.S. (CHECK ONE)													
EDUCATION COMPLETED IN U.S. (CHECK ONE)													
1. NONE		1		AN ESL CLASS?		<input type="checkbox"/> YES <input type="checkbox"/> NO							
2. SOME ELEMENTARY/PRIMARY SCHOOL		2		VOCATIONAL TRAINING:		<input type="checkbox"/> YES <input type="checkbox"/> NO							
3. COMPLETED ELEMENTARY SCHOOL (THROUGH GRADE 6)		3		DESCRIBE									
4. SOME JUNIOR HIGH/HIGH SCHOOL		4		OTHER:		<input type="checkbox"/> YES <input type="checkbox"/> NO							
5. COMPLETED HIGH SCHOOL		5		DESCRIBE									
6. SOME COLLEGE/UNIVERSITY		6											
LEGAL SOURCE: HOW DID CLIENT FIND OUT ABOUT THE PROGRAM?													
1 <input type="checkbox"/> OTHER CLIENT		2 <input type="checkbox"/> RELATIVE		3 <input type="checkbox"/> FRIEND		4 <input type="checkbox"/> SPONSOR							
AGENCY/PROFESSIONAL - DESCRIBE													
SELF - DESCRIBE													
OTHER - DESCRIBE													

SOURCE: Excerpt taken from a questionnaire used in research findings published in Robinson, 1985.

Appendix XVI

Schilit and Nimnicht

la letra apropiada, indique que tipo de tarjeta o documento Ud. tiene:

document do you have?

(Circle the appropriate letter.)

- | | | |
|--------------------------|---|---------------------------------------|
| I-688A | A | Employment Authorization Card(I-688A) |
| I-688 | B | Temporary Resident Card (I-688) |
| I-551 | C | Permanent Resident Card (I-551) |
| o traje ningún documento | D | I didn't bring my papers |
| Otro: (indique) | E | Other: (indicate) |

6. Indique su ciudadanía (país de origen):

Indicate your original country of origin:

- | | | |
|-----------------|---|------------------|
| Colombia | A | Colombia |
| El Salvador | B | El Salvador |
| Guatemala | C | Guatemala |
| Haiti | D | Haiti |
| Honduras | E | Honduras |
| Mexico | F | Mexico |
| Nicaragua | G | Nicaragua |
| Otro: (Indique) | H | Other: (Specify) |

7. ¿En qué año llegó Ud. a los Estados Unidos para vivir aquí?

In what year did you come to live in the U.S.?

Año	Year
-----	------

8. ¿Sabe Ud. que después de que obtenga la residencia temporal, tendrá que hacer otra solicitud para poder obtener su residencia permanente?

Did you know that after you get temporary legal residency status, you have to re-apply to get permanent residency status?

- | | | |
|----|---|-----|
| Sí | A | Yes |
| No | B | No |

9. ¿Si Ud. ya ha solicitado su residencia permanente, --el "Green card"--, cuál es el estado de su solicitud?

If you have already applied for permanent legal residency, -- the "Green card"--, what is the status of the application?

- | | | |
|------------------------------|---|--------------------------------|
| Aprobada por Inmigración | A | Approved by Immigration |
| Rechazada por Inmigración | B | Denied by Immigration |
| Estoy esperando a saber. | C | I'm still waiting to find out. |
| No la he solicitado todavía. | D | I have not yet applied. |

Appendix XVII

Sherraden and Barrera

PERSONAL HISTORY, FAMILY BACKGROUND, AND IMMIGRATION HISTORY

We'd like to start by asking about where you grew up, at what your mother and father did, and about other people who were important in your life when you were a child.

Childhood community and household:

Birthplace (INCLUDE TOWN AND STATE) and place(s) where respondent lived as a child.

Born in Mexico/Puerto Rico: Type of community (RURAL, VILLAGE, SMALL TOWN, URBAN) (INDIGENOUS, MESTIZO)

Born in U.S.: Would you say that people who lived in your neighborhood were well off financially, average, poor? (NEIGHBORHOOD, ETHNICITY, ECONOMIC LEVEL)

Who did you live with throughout your childhood (HOUSEHOLD COMPOSITION?) Parents-live together always?

Mother:

Birthplace.

How many children did your mother have?

Mother's work? Paid? Does your mother still do this kind of work?

Mother's education? Can mother read and write?

How tall is mother?

Still living? If not, how old were you when she died?

Father:

Birthplace.

Father's work? Paid? Does your father still do this kind of work?

Father's education? Can father read and write?

How tall is father?

Still living? If not, how old were you when she died?

(PROBE:) Do you think there is a need for other services that are for families like yours? Specify.

What is your immigration status?

- 1. U.S. Citizen
- 2. Green card
- 3. Work permit
- 4. Undocumented
- 8. Don't know

What is husband/partner's immigration status?

- 1. U.S. Citizen
- 2. Green card
- 3. Work permit
- 4. Undocumented
- 8. Don't know

Appendix XVIII

Undocumented Workers Policy Research Project

Section I: Demographic Characteristics

First I want to ask you some questions about yourself.

1. Sex (check)
 F M
2. How old are you? _____
3. Where were you born? _____
4. Are you married?
 no yes
5. Is this the first time you have come to the United States?
 no yes
6. When you came to the U.S. --this time-- did you have papers to enter?
 no
 yes
 Which documents did you have? _____
 Are they still valid? no
 yes
 Do you work? no
 yes
7. What was the reason you came to the U.S.?

8. Prior to coming to the U.S. where did you live?
 In what state? _____
 In what country? _____
9. [SEE THE FOLLOWING PAGE]

9. Please answer the following questions for each person who lives in your house. Let's begin with you and then with each one of the people who live with you, from the oldest to the youngest. (RECORD BELOW)

Instructions

1. Fill in columns 1 through 3 simultaneously.
2. Fill in adults across.
3. Fill in children down by question.
(i.e., ask for all children)
4. Fill in column 10 after the others are complete.

Person's relation to you?	Sex	What is this person's age?	Person's place of birth	When did he/she come to U.S.?	How many yrs. of school has he/she finished?	Is this person enrolled in school now?	Does this person go to private or public school?	Employed?	How many of the people in your house are undocumented?
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1. <u>respondent</u>	_____	_____	_____	_____	_____	_____	_____	_____	_____
2.	_____	_____	_____	_____	_____	_____	_____	_____	_____
3.	_____	_____	_____	_____	_____	_____	_____	_____	_____
4.	_____	_____	_____	_____	_____	_____	_____	_____	_____
5.	_____	_____	_____	_____	_____	_____	_____	_____	_____
6.	_____	_____	_____	_____	_____	_____	_____	_____	_____
7.	_____	_____	_____	_____	_____	_____	_____	_____	_____
8.	_____	_____	_____	_____	_____	_____	_____	_____	_____
9.	_____	_____	_____	_____	_____	_____	_____	_____	_____
10.	_____	_____	_____	_____	_____	_____	_____	_____	_____

SOURCE: Questionnaire taken from the report "Undocumented Workers Policy Research Project, 1984."

Appendix XIX

University of Pennsylvania: Mexican Migration Project

TABLE A INFORMATION ABOUT FAMILY MEMBERS AND ALL PERSONS LIVING IN HOUSEHOLD
(begin with: household head, wife, ALL living children, from the oldest to the youngest, and other persons living in the same house)

Name	Sex	Relation to household head	Household Membership	Year of birth	Place of Birth (Municipality and State)	Marital Status		Years of education (c)	Current Principal Economic Activity	Code (d)
						(a)	(b)			
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										

Informant's Name:

.....

- | | | |
|--|---|---------------------------------|
| (a) Age at First Marriage or Consensual Union | (c) Guide to COMPLETED School Years | (d) Codes |
| (b) Current Marital Status: | Elementary = 6 | High School = 12 |
| 1. Single | Secondary = 9 | Normal without High School = 13 |
| 2. Married | Technical without Second Normal School = 16 | Normal Superior = 18 |
| 3. Free Union | Technical = 12 | College = 17 |
| 4. Widowed | Academy = 12 | Manual |
| 5. Divorced | | Check |
| 6. Separated | | |
| 9. Unknown | | |

TABLE B HOUSEHOLD HEAD'S MARITAL HISTORY AND INFORMATION ABOUT DECEASED CHILDREN

Union	Start Year	Type of union (1)	End Year	Ending Reason (2)	Children								
					1		2		3		4		
					Birth	Death	Birth	Death	Birth	Death	Birth	Death	
1													
2													
3													
4													

(1) Type of Union

- 1 = Religious
- 2 = Civil
- 3 = Consensual Union
- 4 = Religious and Civil
- 9 = Unknown

(2) Reason for the Termination of Union

- 1 = Separation
- 2 = Divorce
- 3 = Spouse's Death
- 9 = Unknown

TABLE D INFORMATION ON EACH PERSON FROM TABLE A WITH MIGRANT EXPERIENCE IN THE UNITED STATES

FIRST VISIT TO THE UNITED STATES							MOST RECENT TRIP TO THE UNITED STATES							
Name	No. in A	Year of depart.	Duration years & months	Docu- menta- tion	Principal destination (City and State)	Principal occupation during 1st trip	Hourly wage (dollars)	Year of depart.	Duration years & months	Docu- menta- tion	Principal destination (City and State)	Principal occupation during last trip	Hourly wage (dollars)	Total No. of trips
						Code						Code		
						Code						Code		
						Code						Code		
						Code						Code		
						Code						Code		
						Code						Code		
						Code						Code		
						Code						Code		
						Code						Code		
						Code						Code		

DOCUMENTATION

- 1 = Legal Resident (Green Card)
- 2 = Labor contract - Bracero
- 3 = Labor contract- H2
- 4 = Tourist / Local Passport
- 5 = Citizen
- 6 = Silva Letter
- 7 = Undocumented
- 8 = Refugee/Political Refugee
- 9 = Unknown

FOR THE ABOVE MENTIONED PEOPLE WHO ARE LEGAL RESIDENTS OF THE

No. in A:	Year of application	Year when documents were received	On the basis of:

ON THE BASIS OF:

- 1 = Spouse
- 2 = Son/daughter
- 3 = Father/mother
- 4 = Sibling
- 5 = Amnesty (Rodino)
- 6 = Special Agricultural Worker(SAW)
- 7 = Through job (not SAW)
- 8 = Other:
- 9 = Unknown

TABLE E INFORMATION ON FORMATION AND HISTORY OF BUSINESSES, FIRMS, OR OTHER ACTIVITIES THAT REQUIRE AN INVESTMENT FROM THE HOUSEHOLD HEAD OR HIS/HER SPOUSE

Business number	Description/type of business or firm	Year of formation (or when it began)	Year of sale	Was business financed with migradollars? (dollars earned in US)	Number of family members who work(ed) in business (incl. bosses)	Number of employees aside from family members	Is it located in the United States?	How was business started? (1) ***

*** (1) mark all that apply:

- 1 = Savings
- 2 = Mortgage/bank loan
- 3 = Family loan
- 4 = Friends loan
- 5 = Inheritance
- 6 = Other:
- 9 = Unknown

TABLE G U.S. MIGRATORY EXPERIENCE OF HOUSEHOLD HEAD'S FAMILY OF ORIGIN

Relationship to household head	Sex	Year of First Trip	Do you have a Green Card?	Year of acquisition	Is he/she alive?	Living in the U.S. (City and State)
Mother						
Father						
Sibling 1						
Sibling 2						
Sibling 3						
Sibling 4						
Sibling 5						
Sibling 6						
Sibling 7						
Sibling 8						
Sibling 9						
Sibling 10						
Sibling 11						
Sibling 12						

Appendix XX

Urban Institute: Ku, Fix, and Enchautegui

IL IMMIGRATION STATUS

RF5. The last time [YOU/NAME] came to the US to live [WERE YOU/WAS NAME] admitted as a tourist, with a student visa or with other temporary permit?

YES1 (GO TO RF8)
 NO0
 DK.....9
 REFUSED8

RF6. [WERE YOU/WAS NAME] admitted as a refugee?

YES1 (GO TO RF8)
 NO0
 DK.....9
 REFUSED8

RF7. [WERE YOU/WAS NAME] admitted as a permanent resident?

YES1
 NO0
 DK.....9
 REFUSED8

RF8. [ARE YOU/IS NAME] a citizen of the United States?

YES.....1
 NO.....0 (GO TO RF12)
 DK.....9 (GO TO RF12)
 REFUSED.....8 (GO TO RF12)

RF9. Did [YOU/NAME] become a citizen of the United States through naturalization?

YES1 (GO TO RF11)
 NO0
 DK.....9
 REFUSED8

RF10. Were [YOU/NAME] born a citizen of the United States?

YES1 (GO TO BOX RESPO-F19)
 NO0
 DK.....9
 REFUSED8

RF11. When did [YOU/NAME] become a citizen?

YEAR _____
 [If during "1996" or later, ask:] MONTH _____
 DK.....-99
 REFUSED-98

GO TO BOX RESPO-F19

RF12. [ARE YOU/IS NAME] currently a permanent resident? [PROBE: [DOYOU/DOES NAME] have a green card?]

- YES 1 (GO TO RF14)
- NO 0 GO TO RF17
- DK..... 9 GO TO RF17
- REFUSED 8 GO TO RF17

RF14. [HAVE YOU/HAS NAME] applied for US citizenship?

- YES..... 1
- NO..... 0 (GO TO RF17)
- DK..... 9 (GO TO RF17)
- REFUSED 8 (GO TO RF17)

RF15. In what year and month did [YOU/NAME] apply for US citizenship?

- YEAR _____, MONTH _____
- DK.....-99
- REFUSED-98

RF16. What is the status of [YOUR/NAME's] application? Is it still pending, waiting to be sworn, or was citizenship denied? (MARK ONLY ONE)

- STILL PENDING..... 1
- WAITING TO BE SWORN..... 2
- DENIED..... 0
- OTHER (SPECIFY)

GO TO BOX RESPO-F19

RF17. [DO YOU/DOES NAME] have a document allowing [YOU/(HIM/HER)] to remain for a limited time in the US?

- YES..... 1
- NO..... 0 (GO TO RF19)
- DK..... 9 (GO TO RF19)
- REFUSED 8 (GO TO RF19)

RF18. What type of document is that?

ENTER DESCRIPTION OR NAME

IF ANSWER TO RF18 IS "GREEN CARD" GO TO BOX RESPO-F19

RF19. [HAVE YOU/HAS NAME] applied for a green card?

- YES..... 1
- NO..... 0
- DK..... 9
- REFUSED 8

Appendix XXI

Current Population Survey

Nativity Questions on the Current Population Survey

The next few questions ask about each household member's country of birth.

NATVTY In what country (were/was)..... born? (Enter Code) _____

MNTVTY In what country was.....'s mother born? _____

FNTVTY In what country was.....'s father born? _____

(screens with country codes not shown)

AUTOMATED SKIP PATTERN:

If NATVTY = US (1) → END sequence for this person

If NATVTY = PR* (2) or OA* (3) → go to INUSYR

If MNTVTY and FNTVTY = US (1), PR* (2) or OA* (3) → go to INUSYR

ALL OTHERS → go to CITIZN

CITIZN (Are/Is) . . . a CITIZEN of the United States?

1. YES
 2. NO → go to CITTYPA
 3. DK* → go to INUSYR
 4. R* → go to INUSYR
-

CITYPA (Were/Was) . . . born a citizen of the United States?

1. YES
2. NO --> go to INUSYR
3. DK* --> go to CITYPB
4. R* --> go to CITYPB
R* --> go to INUSYR

CITYPB Did . . . become a citizen of the United States through naturalization?

1. YES
2. NO --> go to INUSYR
3. DK* --> go to INUSYR
4. R* --> go to INUSYR
R* --> go to INUSYR

INUSYR When did . . . come to live in the United States?

1. YEAR 19_____
2. _____ years --> programmed exact year verification
3. DK*
4. R*

* PR= Puerto Rico; OA= Outlying Area; DK= Don't Know; R= Refused.

Source: U.S. Census Bureau

Author: Laura K. Yax (Population Division)

Last Revised: May 13, 1998 at 08:28:11 AM

Appendix XXII

Survey of Income and Program Participation

The following sequence of proposed questions, for possible inclusion in the Survey of Income and Program Participation (SIPP) would provide data on immigration status:

Q1. If not a citizen, when you moved to the U.S., what was your immigration status?

1. immediate relative or family sponsored permanent resident
2. employment based permanent resident
3. other permanent resident
4. granted refugee or asylee status, or granted withholding of deportation because of fear of persecution in your home country
5. granted parolee status for a period of at least one year (e.g., Russians, Cubans, others)
6. nonimmigrant (e.g., diplomatic, student, business, or tourist visa)
7. other

SKIP: IF 4-7 THEN GO TO Q2

Q2. Has your status been changed to permanent resident?

1. yes
2. no
7. refused
9. don't know

Q3. What year was your status changed to permanent resident?

Year: _____

9997 refused

9999 don't know

SOURCE: Proposed Immigration questions for inclusion in the Survey of Income and Program Participation.

Vital and Health Statistics series descriptions

- SERIES 1. **Programs and Collection Procedures**—These reports describe the data collection programs of the National Center for Health Statistics. They include descriptions of the methods used to collect and process the data, definitions, and other material necessary for understanding the data.
- SERIES 2. **Data Evaluation and Methods Research**—These reports are studies of new statistical methods and include analytical techniques, objective evaluations of reliability of collected data, and contributions to statistical theory. These studies also include experimental tests of new survey methods and comparisons of U.S. methodology with those of other countries.
- SERIES 3. **Analytical and Epidemiological Studies**—These reports present analytical or interpretive studies based on vital and health statistics. These reports carry the analyses further than the expository types of reports in the other series.
- SERIES 4. **Documents and Committee Reports**—These are final reports of major committees concerned with vital and health statistics and documents such as recommended model vital registration laws and revised birth and death certificates.
- SERIES 5. **International Vital and Health Statistics Reports**—These reports are analytical or descriptive reports that compare U.S. vital and health statistics with those of other countries or present other international data of relevance to the health statistics system of the United States.
- SERIES 6. **Cognition and Survey Measurement**—These reports are from the National Laboratory for Collaborative Research in Cognition and Survey Measurement. They use methods of cognitive science to design, evaluate, and test survey instruments.
- SERIES 10. **Data From the National Health Interview Survey**—These reports contain statistics on illness; unintentional injuries; disability; use of hospital, medical, and other health services; and a wide range of special current health topics covering many aspects of health behaviors, health status, and health care utilization. They are based on data collected in a continuing national household interview survey.
- SERIES 11. **Data From the National Health Examination Survey, the National Health and Nutrition Examination Surveys, and the Hispanic Health and Nutrition Examination Survey**—Data from direct examination, testing, and measurement on representative samples of the civilian noninstitutionalized population provide the basis for (1) medically defined total prevalence of specific diseases or conditions in the United States and the distributions of the population with respect to physical, physiological, and psychological characteristics, and (2) analyses of trends and relationships among various measurements and between survey periods.
- SERIES 12. **Data From the Institutionalized Population Surveys**—Discontinued in 1975. Reports from these surveys are included in Series 13.
- SERIES 13. **Data From the National Health Care Survey**—These reports contain statistics on health resources and the public's use of health care resources including ambulatory, hospital, and long-term care services based on data collected directly from health care providers and provider records.
- SERIES 14. **Data on Health Resources: Manpower and Facilities**—Discontinued in 1990. Reports on the numbers, geographic distribution, and characteristics of health resources are now included in Series 13.
- SERIES 15. **Data From Special Surveys**—These reports contain statistics on health and health-related topics collected in special surveys that are not part of the continuing data systems of the National Center for Health Statistics.
- SERIES 16. **Compilations of Advance Data From Vital and Health Statistics**—Advance Data Reports provide early release of information from the National Center for Health Statistics' health and demographic surveys. They are compiled in the order in which they are published. Some of these releases may be followed by detailed reports in Series 10–13.
- SERIES 20. **Data on Mortality**—These reports contain statistics on mortality that are not included in regular, annual, or monthly reports. Special analyses by cause of death, age, other demographic variables, and geographic and trend analyses are included.
- SERIES 21. **Data on Natality, Marriage, and Divorce**—These reports contain statistics on natality, marriage, and divorce that are not included in regular, annual, or monthly reports. Special analyses by health and demographic variables and geographic and trend analyses are included.
- SERIES 22. **Data From the National Mortality and Natality Surveys**—Discontinued in 1975. Reports from these sample surveys, based on vital records, are now published in Series 20 or 21.
- SERIES 23. **Data From the National Survey of Family Growth**—These reports contain statistics on factors that affect birth rates, including contraception, infertility, cohabitation, marriage, divorce, and remarriage; adoption; use of medical care for family planning and infertility; and related maternal and infant health topics. These statistics are based on national surveys of women of childbearing age.
- SERIES 24. **Compilations of Data on Natality, Mortality, Marriage, Divorce, and Induced Terminations of Pregnancy**—These include advance reports of births, deaths, marriages, and divorces based on final data from the National Vital Statistics System that were published as supplements to the *Monthly Vital Statistics Report* (MVSR). These reports provide highlights and summaries of detailed data subsequently published in *Vital Statistics of the United States*. Other supplements to the MVSR published here provide selected findings based on final data from the National Vital Statistics System and may be followed by detailed reports in Series 20 or 21.

For answers to questions about this report or for a list of reports published in these series, contact:

Data Dissemination Branch
National Center for Health Statistics
Centers for Disease Control and Prevention
6525 Belcrest Road, Room 1064
Hyattsville, MD 20782-2003
(301) 436-8500
E-mail: nchsquery@cdc.gov
Internet: www.cdc.gov/nchswww/

**DEPARTMENT OF
HEALTH & HUMAN SERVICES**

Centers for Disease Control and Prevention
National Center for Health Statistics
6525 Belcrest Road
Hyattsville, Maryland 20782-2003

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

STANDARD MAIL (B)
POSTAGE & FEES PAID
CDC/NCHS
PERMIT NO. G-284