

NATIONAL QUALITY FORUM

Measure Submission and Evaluation Worksheet 5.0

This form contains the information submitted by measure developers/stewards, organized according to NQF's measure evaluation criteria and process. The evaluation criteria, evaluation guidance documents, and a blank online submission form are available on the [submitting standards web page](#).

NQF #: 2018 NQF Project: Population Health: Prevention Project
(for Endorsement Maintenance Review) Original Endorsement Date: Most Recent Endorsement Date: Last Updated Date: May 14, 2012
BRIEF MEASURE INFORMATION
De.1 Measure Title: Year of arrival to the United States (for the foreign born)
Co.1.1 Measure Steward: CDC
De.2 Brief Description of Measure: Percentage of foreign born residents by number of years living in the U.S. This measure provides information on the year when a foreign born individual came to live to the United States. The main purpose is to calculate duration of residence in the U.S
2a1.1 Numerator Statement: Number of foreign born patients, clients or respondents by year of arrival to live in the U.S.
2a1.4 Denominator Statement: Total number of foreign born patients, clients or respondents
2a1.8 Denominator Exclusions:
1.1 Measure Type: Patient Engagement/Experience 2a1. 25-26 Data Source: Other 2a1.33 Level of Analysis: Clinician : Individual, Facility, Health Plan, Population : Community, Population : County or City, Population : National, Population : Regional, Population : State
1.2-1.4 Is this measure paired with another measure? No
De.3 If included in a composite, please identify the composite measure (title and NQF number if endorsed):

STAFF NOTES <i>(issues or questions regarding any criteria)</i>
Comments on Conditions for Consideration:
Is the measure untested? Yes <input type="checkbox"/> No <input type="checkbox"/> If untested, explain how it meets criteria for consideration for time-limited endorsement:
1a. Specific national health goal/priority identified by DHHS or NPP addressed by the measure (check De.5): 5. Similar/related endorsed or submitted measures (check 5.1): Other Criteria:
Staff Reviewer Name(s):

1. IMPACT, OPPORTUNITY, EVIDENCE - IMPORTANCE TO MEASURE AND REPORT
Importance to Measure and Report is a threshold criterion that must be met in order to recommend a measure for endorsement. All three subcriteria must be met to pass this criterion. See guidance on evidence . <i>Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria. (evaluation criteria)</i>

1a. High Impact: H M L I

(The measure directly addresses a specific national health goal/priority identified by DHHS or NPP, or some other high impact aspect of healthcare.)

De.4 Subject/Topic Areas (Check all the areas that apply):

De.5 Cross Cutting Areas (Check all the areas that apply): Access, Disparities, Health and Functional Status, Population Health, Prevention, Prevention : Immunization, Prevention : Nutrition, Prevention : Obesity, Prevention : Physical Activity, Prevention : Screening, Prevention : Social Determinants

1a.1 Demonstrated High Impact Aspect of Healthcare: Affects large numbers, Patient/societal consequences of poor quality, Severity of illness, Other

1a.2 If "Other," please describe: Disparities

1a.3 Summary of Evidence of High Impact (Provide epidemiologic or resource use data):

many scientific reports have demonstrated the worsening health status of foreign born individuals with increasing years of residence in the U.S. These findings have been reported for a wide diversity of migrants from different countries of origin, and also for multiple health outcomes (e.g., diabetes, obesity, cardiovascular diseases, and mental health) [17-19]. Figure 5 shows that immigrants who have lived in the U.S for less than 5 years have a diabetes prevalence of 3.3%. Diabetes prevalence increases with longer residence in the U.S., until it reaches similar levels than the U.S-born population for migrants who have lived in the U.S for more than 15 years [19].

The foreign-born (i.e., migrants) are the fastest growing segment of the U.S population. The foreign-born population grew from 9.6 million in 1970 to 39.4 million in 2009, largely due to immigration from Asia and Latin America. In 2009, 12.7% of the total U.S population were foreign born. By 2050, it is projected that nearly 1 in 5 U.S residents will be an immigrant. In addition, in 2007, nearly 22 percent of children living in the U.S had at least one foreign-born parent [4].

Immigrants are often identified as a "vulnerable population", i.e., at increased risk for poor physical, psychological and social and social health outcomes and inadequate health care [5]. Immigrants, because of their migration experience, have many characteristics that differentiate them from native populations and may increase their vulnerability; this is also the case even when compared to individuals of similar race/ethnicity background. For example, a higher percentage of migrants are limited English proficient, maintain stronger ties to the culture, beliefs and attitudes of their countries of origin, and are more likely to have experienced different exposures to infectious and environmental factors in the countries of origin and transit.

Depending on their countries of origin, there is great diversity among the foreign born in terms of education, age and gender distribution, language and culture, reasons for migrating, and other socio-economic characteristics. However, immigrants in the U.S are more likely to live in overcrowded housing and to reside in urban and inner-city metropolitan areas than US-born residents. Immigrants also have lower educational attainment, family income, occupational status, and homeownership rates, and higher poverty and unemployment rates than U.S-born populations. However, there are important exceptions. For example, Asian and black immigrants tend to have higher socio-economic status than their US-born counterparts. Differences in culture and language both inhibit our understanding of issues and limit many immigrants' ability to take full advantage of health education and programs [6].

Foreign born individuals from race/ethnic minorities may suffer additional discrimination because of their migration status. The risk of discrimination is exacerbated during periods of economic and political instability. Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of national origin under any program or activity receiving Federal funds. Country of birth is one important variable that defines national origin and thus essential to monitor discrimination against foreign born individuals [7]. Depending on their migration status, foreign born individuals face legal, policy and practical limitations in the public benefits they are entitled to in U.S (e.g., access to public health insurance, education, unemployment benefits).

There is an extensive literature both in the U.S and internationally demonstrating that the health status of foreign- born persons, their health care needs and access to care differ from those of persons born in the U.S. Studies have shown a complex picture, with both positive and negative indicators present when comparing the health of migrants to US-born populations, and also with great diversity by country of origin within migrant populations. Positive health indicators for migrant populations include: longer life expectancy, better birth outcomes, lower incidence and mortality for certain types of cancer, lower mortality from suicide, and lower use of tobacco, alcohol and illegal drugs [8]. Those health advantages remain even after adjusting for socio-demographic variables (i.e., the so-called "healthy migrant paradox").

Severe disparities have also been reported when comparing foreign- and U.S-born populations. Some of the more frequently

reported disparities include: a) access to health care, (e.g., higher proportion of uninsured and individuals without a primary source of care; b) access and use of preventive care (e.g., mammograms, Pap smear, colorectal cancer, immunizations) (Figure 3); c) health outcomes (e.g., tuberculosis, HIV/AIDS, neglected tropical diseases, certain types of cancer, such as cervical cancer, occupational mortality and injuries) (Figure 4). These health disparities remain when compared to U.S native persons of the same race/ethnicity and even after adjusting socio-demographic characteristics (e.g., age, gender, income, education) and other factors [5-14].

1a.4 Citations for Evidence of High Impact cited in 1a.3: [15] Derose KP, Bahney BW, Lurie, N. Immigrants and health care access, quality and cost. *Medical Care Research and Review*, 66(4):355-408 (2009)
[17] Uretsky MC and Mathiesen SG. (2007). The effects of years lived in the United States on the general health status of California's Foreign-born populations. *Journal of Immigrant health*, 9:125-136

[5] Derose KP, Escarce JJ, Lurie N. Immigrants And Health Care: Sources Of Vulnerability. (11 pages) *Health Affairs* 2007;26(5):1258-1268.

[6] Kandula NR, et al. Assuring the health of immigrants: what the leading health indicators tell us. *Annual review of public health*. 2004;25:357-76.

[7] National Research Council. (2004). *Improving Racial and Ethnic Data on Health: Report of a Workshop*. Daniel Melnick and Edward Perrin, Editors. Panel on DHHS Collection of Race and Ethnicity Data, Committee on National Statistics, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

[8] Singh GK, Hiatt RA. Trends and disparities in socioeconomic and behavioral characteristics, life expectancy, and cause-specific mortality of native-born and foreign born populations in the U.S., 1979-2003. *International Journal of Epidemiology* 2006;35:903-919

[9] Ku L. Health insurance coverage and medical expenditures of immigrants and native-born in the U.S. *American Journal of Public Health* 99 (7), 2009: 1322-1328

[10] Gushulak BD, Weekers J, MacPherson DW. Migrants in a globalized world – health threats risks and challenges: an evidence-based framework. *Emerging Health threats Journal* 2010, 2:e10

[11] Cunningham SA. et al. Health of foreign-born people in the United States: a review. *Health Place*. 2008 Dec;14(4):623-35.

[12] Dey AN, Lucas JW. Physical and mental health characteristics of U.S.-and foreign-born adults: United States, 1998–2003. *Advance data from vital and health statistics; no 369*. Hyattsville, MD: National Center for Health Statistics. 2006.

[13] Cain KP; Benoit S.R; Winston C.A; et al. Tuberculosis Among Foreign-Born Persons in the United States. *JAMA*. 2008;300(4):405-412

[14] Schenker MB. Work related injuries among immigrants: A growing global health disparity. *Occupational and Environmental Medicine* 2008;65(11):717-718.

[18] Cuninghame P and Artiga S. How does health coverage and access to care for immigrants vary by length of time in the U.S.? (2009, June). Washington D.C.: Kaiser Commission for Medicaid and the Uninsured.

[19] Reena Oza-Frank R, Stephenson R, and Venkat Narayan M. Diabetes Prevalence by Length of Residence Among US Immigrants

1b. Opportunity for Improvement: H M L I

(There is a demonstrated performance gap - variability or overall less than optimal performance)

1b.1 Briefly explain the benefits (improvements in quality) envisioned by use of this measure:

Collecting this information will allow to better understand changes in health-related behaviors, outcomes and access to care by time in the U.S. This information will facilitate the design and implementation of health interventions for immigrants

1b.2 Summary of Data Demonstrating Performance Gap (Variation or overall less than optimal performance across providers):

[For Maintenance – Descriptive statistics for performance results for this measure - distribution of scores for measured entities by quartile/decile, mean, median, SD, min, max, etc.]

Please see 1a.3

1b.3 Citations for Data on Performance Gap: [For Maintenance – Description of the data or sample for measure results reported in 1b.2 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included]

1b.4 Summary of Data on Disparities by Population Group: [For Maintenance –Descriptive statistics for performance results for this measure by population group]

Please see 1a.3

1b.5 Citations for Data on Disparities Cited in 1b.4: [For Maintenance – Description of the data or sample for measure results reported in 1b.4 including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included]

Please see 1a.4

1c. Evidence (Measure focus is a health outcome OR meets the criteria for quantity, quality, consistency of the body of evidence.)

Is the measure focus a health outcome? Yes No If not a health outcome, rate the body of evidence.

Quantity: H M L I **Quality:** H M L I **Consistency:** H M L I

Quantity	Quality	Consistency	Does the measure pass subcriterion1c?
M-H	M-H	M-H	Yes <input type="checkbox"/>
L	M-H	M	Yes <input type="checkbox"/> IF additional research unlikely to change conclusion that benefits to patients outweigh harms: otherwise No <input type="checkbox"/>
M-H	L	M-H	Yes <input type="checkbox"/> IF potential benefits to patients clearly outweigh potential harms: otherwise No <input type="checkbox"/>
L-M-H	L-M-H	L	No <input type="checkbox"/>

Health outcome – rationale supports relationship to at least one healthcare structure, process, intervention, or service

Does the measure pass subcriterion1c?

Yes IF rationale supports relationship

1c.1 Structure-Process-Outcome Relationship (Briefly state the measure focus, e.g., health outcome, intermediate clinical outcome, process, structure; then identify the appropriate links, e.g., structure-process-health outcome; process- health outcome; intermediate clinical outcome-health outcome):

1c.2-3 Type of Evidence (Check all that apply):

Selected individual studies (rather than entire body of evidence), Systematic review of body of evidence (other than within guideline development)

1c.4 Directness of Evidence to the Specified Measure (State the central topic, population, and outcomes addressed in the body of evidence and identify any differences from the measure focus and measure target population):

The health-related behaviors, access to care, living and working conditions of foreign born changes with duration of stay in the country. Duration of stay has been considered a proxy for acculturation. Those changes can have a direct impact on health outcomes and an indirect impact through access and quality of health care.

1c.5 Quantity of Studies in the Body of Evidence (Total number of studies, not articles): There have been multiple studies, at least 20, conducted both in the U.S and abroad

1c.6 Quality of Body of Evidence (Summarize the certainty or confidence in the estimates of benefits and harms to patients across studies in the body of evidence resulting from study factors. Please address: a) study design/flaws; b) directness/indirectness of the evidence to this measure (e.g., interventions, comparisons, outcomes assessed, population included in the evidence); and c) imprecision/wide confidence intervals due to few patients or events): The studies indicated above are considered high quality and include the National Health Interview Survey and NHANES. The effect of duration of stay on several health outcomes has been demonstrated even after adjusting in the analysis for multiple risk factors

1c.7 Consistency of Results across Studies (Summarize the consistency of the magnitude and direction of the effect): **There has been a high degree of consistency in the cited studies**

1c.8 Net Benefit (Provide estimates of effect for benefit/outcome; identify harms addressed and estimates of effect; and net benefit - benefit over harms):

1c.9 Grading of Strength/Quality of the Body of Evidence. Has the body of evidence been graded? **No**

1c.10 If body of evidence graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias:

1c.11 System Used for Grading the Body of Evidence: **Other**

1c.12 If other, identify and describe the grading scale with definitions: **None**

1c.13 Grade Assigned to the Body of Evidence:

1c.14 Summary of Controversy/Contradictory Evidence:

1c.15 Citations for Evidence other than Guidelines(Guidelines addressed below):

1c.16 Quote verbatim, the specific guideline recommendation (Including guideline # and/or page #):

1c.17 Clinical Practice Guideline Citation:

1c.18 National Guideline Clearinghouse or other URL:

1c.19 Grading of Strength of Guideline Recommendation. Has the recommendation been graded? **No**

1c.20 If guideline recommendation graded, identify the entity that graded the evidence including balance of representation and any disclosures regarding bias:

1c.21 System Used for Grading the Strength of Guideline Recommendation: **Other**

1c.22 If other, identify and describe the grading scale with definitions: **None**

1c.23 Grade Assigned to the Recommendation:

1c.24 Rationale for Using this Guideline Over Others:

Based on the NQF descriptions for rating the evidence, what was the developer's assessment of the quantity, quality, and consistency of the body of evidence?

1c.25 Quantity: **High** **1c.26** Quality: **High****1c.27** Consistency: **High**

1c.28 Attach evidence submission form:

1c.29 Attach appendix for supplemental materials:

Was the threshold criterion, *Importance to Measure and Report*, met?

(1a & 1b must be rated moderate or high and 1c yes) Yes No

Provide rationale based on specific subcriteria:

For a new measure if the Committee votes NO, then STOP.

For a measure undergoing endorsement maintenance, if the Committee votes NO because of 1b. (no opportunity for improvement), it may be considered for continued endorsement and all criteria need to be evaluated.

2. RELIABILITY & VALIDITY - SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. **(evaluation criteria)**

Measure testing must demonstrate adequate reliability and validity in order to be recommended for endorsement. Testing may be conducted for data elements and/or the computed measure score. Testing information and results should be entered in the appropriate field. Supplemental materials may be referenced or attached in item 2.1. See [guidance on measure testing](#).

S.1 Measure Web Page (*In the future, NQF will require measure stewards to provide a URL link to a web page where current detailed specifications can be obtained*). Do you have a web page where current detailed specifications for this measure can be obtained? No

S.2 If yes, provide web page URL:

2a. RELIABILITY. Precise Specifications and Reliability Testing: H M L I

2a1. Precise Measure Specifications. (*The measure specifications precise and unambiguous.*)

2a1.1 Numerator Statement (*Brief, narrative description of the measure focus or what is being measured about the target population, e.g., cases from the target population with the target process, condition, event, or outcome*):

Number of foreign born patients, clients or respondents by year of arrival to live in the U.S.

2a1.2 Numerator Time Window (*The time period in which the target process, condition, event, or outcome is eligible for inclusion*):

Yearly

2a1.3 Numerator Details (*All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, codes with descriptors, and/or specific data collection items/responses*):

The question is similar to the one used in the American Community Survey:

When did this person come to live in the United States? Print numbers in boxes

2a1.4 Denominator Statement (*Brief, narrative description of the target population being measured*):

Total number of foreign born patients, clients or respondents

2a1.5 Target Population Category (*Check all the populations for which the measure is specified and tested if any*): Adult/Elderly Care, Children's Health, Maternal Health, Populations at Risk, Special Healthcare Needs

2a1.6 Denominator Time Window (*The time period in which cases are eligible for inclusion*):

Yearly

2a1.7 Denominator Details (*All information required to identify and calculate the target population/denominator such as definitions, codes with descriptors, and/or specific data collection items/responses*):

Place of birth (i.e., U.S or abroad) is needed to differentiate foreign born from U.S born

2a1.8 Denominator Exclusions (*Brief narrative description of exclusions from the target population*):

2a1.9 Denominator Exclusion Details (*All information required to identify and calculate exclusions from the denominator such as definitions, codes with descriptors, and/or specific data collection items/responses*):

2a1.10 Stratification Details/Variables (*All information required to stratify the measure results including the stratification variables, codes with descriptors, definitions, and/or specific data collection items/responses*):

Any health outcome, behavior and access to care measure could be stratified by duration of stay (or residence) in the U.S. Duration of stay can be calculated by subtracting the "year of arrival" from the current year or year of data collection

2a1.11 Risk Adjustment Type (*Select type. Provide specifications for risk stratification in 2a1.10 and for statistical model in*

2a1.13): **2a1.12 If "Other," please describe:**

2a1.13 Statistical Risk Model and Variables (Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development should be addressed in 2b4.):

2a1.14-16 Detailed Risk Model Available at Web page URL (or attachment). Include coefficients, equations, codes with descriptors, definitions, and/or specific data collection items/responses. Attach documents only if they are not available on a webpage and keep attached file to 5 MB or less. NQF strongly prefers you make documents available at a Web page URL. Please supply login/password if needed:

2a1.17-18. Type of Score:

2a1.19 Interpretation of Score (Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score):

2a1.20 Calculation Algorithm/Measure Logic(Describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; aggregating data; risk adjustment; etc.):

2a1.21-23 Calculation Algorithm/Measure Logic Diagram URL or attachment:

2a1.24 Sampling (Survey) Methodology. If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate):

2a1.25 Data Source (Check all the sources for which the measure is specified and tested). If other, please describe:
[Other](#)

2a1.26 Data Source/Data Collection Instrument (Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.): [US Census Bureau American Community Survey](#)

2a1.27-29 Data Source/data Collection Instrument Reference Web Page URL or Attachment: [URL](#)
http://www.census.gov/acs/www/methodology/questionnaire_archive/

2a1.30-32 Data Dictionary/Code Table Web Page URL or Attachment:
[URL](#)
http://www.census.gov/acs/www/data_documentation/data_main/

2a1.33 Level of Analysis (Check the levels of analysis for which the measure is specified and tested): [Clinician : Individual, Facility, Health Plan, Population : Community, Population : County or City, Population : National, Population : Regional, Population : State](#)

2a1.34-35 Care Setting (Check all the settings for which the measure is specified and tested): [Ambulatory Care : Ambulatory Surgery Center \(ASC\), Ambulatory Care : Clinician Office/Clinic, Ambulatory Care : Outpatient Rehabilitation, Ambulatory Care :](#)

Urgent Care, Behavioral Health/Psychiatric : Inpatient, Behavioral Health/Psychiatric : Outpatient, Emergency Medical Services/Ambulance, Hospital/Acute Care Facility, Other:Community

2a2. Reliability Testing. (*Reliability testing was conducted with appropriate method, scope, and adequate demonstration of reliability.*)

2a2.1 Data/Sample (*Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included*):

This measure has been used by the Census Bureau for many decades. Please see report Report P.1: Evaluation Report Covering Place of Birth, Citizenship, and Year of Entry
http://www.census.gov/acs/www/methodology/2006_report_series/

2a2.2 Analytic Method (*Describe method of reliability testing & rationale*):

The 2006 ACS Content Test consisted of a national sample of approximately 62,900 residential addresses in the contiguous United States. (The sample universe did not include Puerto Rico, Alaska and Hawaii). To meet the primary test objective of evaluating question wording changes, approximately half of the sample addresses were assigned to a test group (31,450) and the other half to a control group (31,450). For the topics already covered in the ACS, the test group included the proposed alternative versions of the questions, and the control group included the current version of the questions as asked on the ACS. Both the test and control questionnaires included three new topics not currently on the ACS. Both test and control included the three new topics to keep context and questionnaire length consistent between the two versions.

The ACS Content Test used a similar data collection methodology as the current ACS, though cost and time constraints resulted in some deviations. Initially, the ACS collects data by mail from sampled households, following a mailing strategy geared at maximizing mail response (i.e., a pre-notice letter, an initial questionnaire packet, a reminder postcard, and a replacement questionnaire packet). The Content Test implemented the same methodology, mailing each piece on the same dates as the corresponding panel in the ACS. However, the Content Test did not provide a toll-free number on the printed questionnaires for respondents to call if they had questions, as the ACS does. The decision to exclude this service in the Content Test primarily reflects resource issues in developing the materials needed to train and implement the operation for a one-time test. However, excluding this telephone assistance allows us to collect data that reflects the respondent's interpretation and response without the aid of trained Census Bureau interviewer.

The ACS follows-up with mail nonrespondents first by Computer Assisted Telephone Interviewing (CATI) if a phone number is available, or by Computer Assisted Personal-visit Interviewing (CAPI) if the unit cannot be reached by mail or phone. For cost purposes, the ACS subsamples the mail and telephone nonrespondents for CAPI interviewing. In comparison, the Content Test went directly to CAPI data collection for mail nonrespondents, dropping the CATI data collection phase in an effort to address competing time and resource constraints for the field data collection staff. While skipping the CATI phase changes the data collection methods as compared to the ACS, eliminating CATI allowed us to meet the field data collection constraints while also maintaining the entire mail nonrespondent universe for possible CAPI follow-up. Using CATI alone for follow-up would have excluded households for whom we do not have a phone number.

The ACS also implements an edit procedure on returned mail questionnaires, identifying units for follow-up who provided incomplete information on the form, or who reported more than five people living at the address. (The ACS questionnaire only has space to collect data for five people.) This is called the Failed Edit Follow Up operation (FEFU). The ACS calls all households identified as part of the FEFU edit to collect the remaining information via a CATI operation. The Content Test excluded this follow-up operation in favor of a content reinterview, called the Content Follow-Up (CFU). The CFU also contacts households via CATI but the CFU serves as a method to measure response error, providing critical evaluative information. The CFU operation included all households who responded by mail or CAPI and for whom we had a phone number. More information about the CFU operation follows below.

The Content Test mailed questionnaires to sampled households around December 28, 2005, coinciding with the mailing for the ACS January 2006 panel. The Content Test used an English-only mail form but the automated instruments (both CAPI and CFU) included both English and Spanish translations. Beginning February 2006, a sample of households that did not respond by mail was visited by Census Bureau field representatives in attempt to collect the data. The CAPI operations ended March 2, 2006.

3.1.2 Content Follow-Up data collection

The CFU reinterview, conducted by the Census Bureau's three telephone centers, provided a method for measuring response error. About 2 weeks after receiving the returned questionnaire or completed CAPI interview, the responding unit entered the CFU operation. Telephone staff completed the CFU interviews between January 17 and March 17, 2006. At the first contact with a household, interviewers asked to speak with the original respondent. If that person was not available, interviewers scheduled a callback at a time when the household member was expected to be home. If at the second contact we could not reach the original

respondent, interviewers completed the interview with another adult household member. The CFU reinterview did not replicate the full ACS interview. Rather, the CFU used the roster and basic demographic information from the original interview and only asked questions specific to the analytical needs of the Content Test. Reinterview questions were of two general formats: the same question as asked in the original interview (in some cases, modified slightly for a CATI interview), or a different set of questions providing more detail than the question(s) asked in the original interview for the same topic. For topics in which the CFU asked the same question as the original interview, the CFU asked the test or control version of the question based on the original treatment. For these cases, the goal was to measure the reliability of the answers – how often we obtained the same answer in the CFU as we did in the original mail or CAPI data collection. For topics using a different question or set of questions than the original interview, we asked the same detailed series of questions regardless of the original treatment condition. Generally, these questions were more numerous than what we could ask in the ACS. In some cases the questions came from another existing survey, for example, for labor force, we asked the labor force questions from the Current Population Survey questions. In other cases the CFU asked additional probing questions based on prior testing results, such as for health insurance. For these topics, the goal was to measure how close the original answers were to the more detailed CFU answers.

3.2 Sample Design

The sample design for the ACS Content Test consisted of a multi-stage design, with the first stage following the Census 2000 Supplementary Survey (C2SS) design for the selection of Primary Selection Units (PSUs) defined as counties or groups of counties. The first stage selection of PSUs resulted in 413 PSUs or approximately 900 counties being selected. Within sampled PSUs, households were stratified into high and low response strata based on tract level mail response rates to the Census 2000 long form and a stratified systematic sample of households was selected. The strata were defined such that the high response stratum contained 75 percent of the housing units that reside in tracts with the highest mail response rate. The balance of the tracts was assigned to the low response stratum. To achieve similar expected number of mail returns for the high and low response strata, 55 percent of the sample was allocated to the low response strata and 45 percent to the high response strata. A two-stage sampling technique was used to help contain field costs for CAPI data collection. The initial sample of PSUs was sorted by percentage of foreign-born population since the majority of that target population responds via CAPI. At least one item undergoing testing in the content test required an adequate sample of this population. The 20 PSUs with the highest percentage of foreign-born population were included with certainty and the remaining PSUs were sampled at a rate of 1 in 3. For the second stage, mail nonresponding households were sampled at a rate of 1 in 2 within the top 20 PSUs and at a sampling rate of 2 in 3 within the remaining PSUs. The final design designated 151 PSUs be included in the CAPI workload. In the majority of PSUs, we assigned cases to both the control and test groups. To maintain field data collection costs and efficiencies, PSUs with an expected CAPI workload of less than 10 sampled addresses had all of their work assigned to only one treatment (either control or test). The PSUs were allocated to the two groups such that the aggregated PSU characteristics between the two groups are similar for employment, foreign born, high school graduates, disabled, poverty status, tenure, and Hispanic origin.

There was no sampling for CFU. A CFU interview was attempted for all responding households to the Content Test for which we had a phone number.

3.3 Methodology Specific to the Research Questions

An automated coding process was used for the place of birth item. Codes were assigned to U.S. state and foreign country responses.¹⁰ The items were assigned high, medium, and low confidence, with high and medium confidence items being autocoded at the U.S. Census Bureau headquarters. Expert coders at the National Processing Center (NPC) coded items with low confidence. Expert coders at headquarters manually coded the detailed place of birth section of the item. A code was assigned to the city, town, or village responses that were related to the foreign country of birth. Coded information from the NPC file was used in conjunction with write-in responses to assign the appropriate code to the city, town, or village responses.

2a2.3 Testing Results (Reliability statistics, assessment of adequacy in the context of norms for the test conducted):

The control and test version had roughly equivalent item nonresponse rates for year of arrival, although nonresponse was high for both. Overall, there were no differences between test and control in terms of consistency at a decade level.

2b. VALIDITY. Validity, Testing, including all Threats to Validity: H M L I

2b1.1 Describe how the measure specifications (measure focus, target population, and exclusions) are consistent with the evidence cited in support of the measure focus (criterion 1c) and identify any differences from the evidence:

2b2. Validity Testing. (Validity testing was conducted with appropriate method, scope, and adequate demonstration of validity.)

2b2.1 Data/Sample (Description of the data or sample including number of measured entities; number of patients; dates of data; if

a sample, characteristics of the entities included):

The main risk to validity of this measure is the potential fear of respondents to provide accurate information about when they arrived to the U.S because that would identify them as immigrants and they fear negative consequences such as discrimination, problems with immigration authorities or limitations in their access to publicly funded benefits, including access to care. This potential bias is more likely during periods of social and political anti-immigrant environment, and for individuals from countries more associated with unauthorized immigration (e.g., Mexico). Year of arrival is also associated with different immigration status categories and eligibility to specific publicly funded programs, and thus the respondent may have incentives not to provide accurate information. Another risk to validity to this measure is that respondents who have traveled in different occasions to the U.S may have different concept of when they first came to live in this country

2b2.2 Analytic Method (Describe method of validity testing and rationale; if face validity, describe systematic assessment):

2b2.3 Testing Results (Statistical results, assessment of adequacy in the context of norms for the test conducted; if face validity, describe results of systematic assessment):

POTENTIAL THREATS TO VALIDITY. (All potential threats to validity were appropriately tested with adequate results.)

2b3. Measure Exclusions. (Exclusions were supported by the clinical evidence in 1c or appropriately tested with results demonstrating the need to specify them.)

2b3.1 Data/Sample for analysis of exclusions (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

2b3.2 Analytic Method (Describe type of analysis and rationale for examining exclusions, including exclusion related to patient preference):

2b3.3 Results (Provide statistical results for analysis of exclusions, e.g., frequency, variability, sensitivity analyses):

2b4. Risk Adjustment Strategy. (For outcome measures, adjustment for differences in case mix (severity) across measured entities was appropriately tested with adequate results.)

2b4.1 Data/Sample (Description of the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

2b4.2 Analytic Method (Describe methods and rationale for development and testing of risk model or risk stratification including selection of factors/variables):

2b4.3 Testing Results (Statistical risk model: Provide quantitative assessment of relative contribution of model risk factors; risk model performance metrics including cross-validation discrimination and calibration statistics, calibration curve and risk decile plot, and assessment of adequacy in the context of norms for risk models. Risk stratification: Provide quantitative assessment of relationship of risk factors to the outcome and differences in outcomes among the strata):

2b4.4 If outcome or resource use measure is not risk adjusted, provide rationale and analyses to justify lack of adjustment: Not applicable. This is a population-level measure

2b5. Identification of Meaningful Differences in Performance. (The performance measure scores were appropriately analyzed and discriminated meaningful differences in quality.)

2b5.1 Data/Sample (Describe the data or sample including number of measured entities; number of patients; dates of data; if a

sample, characteristics of the entities included):

2b5.2 Analytic Method (Describe methods and rationale to identify statistically significant and practically/meaningfully differences in performance):

2b5.3 Results (Provide measure performance results/scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance):

2b6. Comparability of Multiple Data Sources/Methods. (If specified for more than one data source, the various approaches result in comparable scores.)

2b6.1 Data/Sample (Describe the data or sample including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included):

2b6.2 Analytic Method (Describe methods and rationale for testing comparability of scores produced by the different data sources specified in the measure):

2b6.3 Testing Results (Provide statistical results, e.g., correlation statistics, comparison of rankings; assessment of adequacy in the context of norms for the test conducted):

2c. Disparities in Care: H M L I NA (If applicable, the measure specifications allow identification of disparities.)

2c.1 If measure is stratified for disparities, provide stratified results (Scores by stratified categories/cohorts):

2c.2 If disparities have been reported/identified (e.g., in 1b), but measure is not specified to detect disparities, please explain:

2.1-2.3 Supplemental Testing Methodology Information:

Steering Committee: Overall, was the criterion, Scientific Acceptability of Measure Properties, met?

(Reliability and Validity must be rated moderate or high) Yes No

Provide rationale based on specific subcriteria:

If the Committee votes No, STOP

3. USABILITY

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (**evaluation criteria**)

C.1 Intended Actual/Planned Use (Check all the planned uses for which the measure is intended): [Public Health/Disease Surveillance](#), [Public Reporting](#), [Quality Improvement \(Internal to the specific organization\)](#), [Quality Improvement with Benchmarking \(external benchmarking to multiple organizations\)](#)

3.1 Current Use (Check all that apply; for any that are checked, provide the specific program information in the following questions): [Public Reporting](#), [Public Health/ Disease Surveillance](#)

3a. Usefulness for Public Reporting: H M L I

(The measure is meaningful, understandable and useful for public reporting.)

3a.1. Use in Public Reporting - disclosure of performance results to the public at large *(If used in a public reporting program, provide name of program(s), locations, Web page URL(s)). If not publicly reported in a national or community program, state the reason AND plans to achieve public reporting, potential reporting programs or commitments, and timeline, e.g., within 3 years of endorsement: [For Maintenance – If not publicly reported, describe progress made toward achieving disclosure of performance results to the public at large and expected date for public reporting; provide rationale why continued endorsement should be considered.]*

3a.2. Provide a rationale for why the measure performance results are meaningful, understandable, and useful for public reporting. *If usefulness was demonstrated (e.g., focus group, cognitive testing), describe the data, method, and results: The measure will be useful to identify foreign born sub-populations (e.g., recent vs. long-term immigrants) at higher risk for negative health outcomes. The information could also be used to identify the timing of health interventions to prevent or limit the deterioration of health experienced by foreign born residents with longer time in the U.S*

3.2 Use for other Accountability Functions (payment, certification, accreditation). *If used in a public accountability program, provide name of program(s), locations, Web page URL(s):*

3b. Usefulness for Quality Improvement: H M L I
(The measure is meaningful, understandable and useful for quality improvement.)

3b.1. Use in QI. *If used in quality improvement program, provide name of program(s), locations, Web page URL(s): [For Maintenance – If not used for QI, indicate the reasons and describe progress toward using performance results for improvement].*

3b.2. Provide rationale for why the measure performance results are meaningful, understandable, and useful for quality improvement. *If usefulness was demonstrated (e.g., QI initiative), describe the data, method and results: Year of arrival to the U.S and duration of stay is a relatively straightforward concept that is easy to understand*

Overall, to what extent was the criterion, Usability, met? H M L I
Provide rationale based on specific subcriteria:

4. FEASIBILITY

Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. **(evaluation criteria)**

4a. Data Generated as a Byproduct of Care Processes: H M L I

4a.1-2 How are the data elements needed to compute measure scores generated? *(Check all that apply).*

Data used in the measure are:

Other

The American Community Survey (ACS) is conducted by the U.S. Census Bureau. It uses a series of monthly samples to produce annually updated data for the same small areas (census tracts and block groups) formerly surveyed via the decennial census long-form sample.

4b. Electronic Sources: H M L I

4b.1 Are the data elements needed for the measure as specified available electronically *(Elements that are needed to compute measure scores are in defined, computer-readable fields): ALL data elements are in a combination of electronic sources*

4b.2 If ALL data elements are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using other than electronic sources:

4c. Susceptibility to Inaccuracies, Errors, or Unintended Consequences: H M L I

4c.1 Identify susceptibility to inaccuracies, errors, or unintended consequences of the measurement identified during

testing and/or operational use and strategies to prevent, minimize, or detect. If audited, provide results:
 For foreign born individuals who have migrated to the U.S in several occasions and for different time periods, it might be difficult to assess the year of arrival and actual duration of residence in the U.S

4d. Data Collection Strategy/Implementation: H M L I

A.2 Please check if either of the following apply (regarding proprietary measures):

4d.1 Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues (e.g., fees for use of proprietary measures):

Overall, to what extent was the criterion, *Feasibility*, met? H M L I
 Provide rationale based on specific subcriteria:

OVERALL SUITABILITY FOR ENDORSEMENT

Does the measure meet all the NQF criteria for endorsement? Yes No

Rationale:

If the Committee votes No, STOP.

If the Committee votes Yes, the final recommendation is contingent on comparison to related and competing measures.

5. COMPARISON TO RELATED AND COMPETING MEASURES

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure before a final recommendation is made.

5.1 If there are related measures (either same measure focus or target population) or competing measures (both the same measure focus and same target population), list the NQF # and title of all related and/or competing measures:

5a. Harmonization

5a.1 If this measure has EITHER the same measure focus OR the same target population as [NQF-endorsed measure\(s\)](#): Are the measure specifications completely harmonized?

5a.2 If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden:

5b. Competing Measure(s)

5b.1 If this measure has both the same measure focus and the same target population as [NQF-endorsed measure\(s\)](#): Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible):

CONTACT INFORMATION

Co.1 Measure Steward (Intellectual Property Owner): CDC, 1600 Clifton Rd, MS-E03, Avondale Estates, Georgia, 30329

Co.2 Point of Contact: Alfonso, Rodriquez, jqi3@cdc.gov, 619-692-8406-

Co.3 Measure Developer if different from Measure Steward: CDC, 1600 Clifton Rd, MS-E03, Avondale Estates, Georgia, 30329

Co.4 Point of Contact: Alfonso, Rodriquez, jqi3@cdc.gov, 619-692-8406-

Co.5 Submitter: [Clive, Brown, Associate Director for Science \(Acting\), cmb8@cdc.gov, 404-639-3952-, CDC Division of Global Migration and Quarantine](#)

Co.6 Additional organizations that sponsored/participated in measure development:

Co.7 Public Contact: [Alfonso, Rodriquez, jqj3@cdc.gov, 619-692-8406-, CDC](#)

ADDITIONAL INFORMATION

Workgroup/Expert Panel involved in measure development

Ad.1 Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.

Ad.2 If adapted, provide title of original measure, NQF # if endorsed, and measure steward. Briefly describe the reasons for adapting the original measure and any work with the original measure steward:

Measure Developer/Steward Updates and Ongoing Maintenance

Ad.3 Year the measure was first released:

Ad.4 Month and Year of most recent revision:

Ad.5 What is your frequency for review/update of this measure?

Ad.6 When is the next scheduled review/update for this measure?

Ad.7 Copyright statement:

Ad.8 Disclaimers:

Ad.9 Additional Information/Comments:

Date of Submission (MM/DD/YY): [05/02/2012](#)