Job Task Analysis Study and Results
May 14, 2010
# Table of Contents

ACKNOWLEDGMENTS ........................................................................................................... 3
  JOB/TASK ANALYSIS PANEL ......................................................................................... 3
  CCHI COMMISSIONERS ................................................................................................. 3
  CCHI ADVISORS ............................................................................................................. 4

EXECUTIVE SUMMARY ....................................................................................................... 6

BACKGROUND ..................................................................................................................... 8

DEFINITION OF A JOB/TASK ANALYSIS ........................................................................... 8

THE JOB/TASK ANALYSIS METHODOLOGY .................................................................... 8
  DEFINITION OF CCHI CERTIFIED HEALTHCARE INTERPRETER .................................. 9

MAJOR TASKS / KNOWLEDGE, SKILL AND ABILITY DOMAINS ................................... 9

KNOWLEDGE, SKILL AND ABILITY DOMAINS ................................................................ 10
  KNOWLEDGE DOMAINS ............................................................................................... 10
  SKILLS ............................................................................................................................. 11
  ABILITIES ......................................................................................................................... 11
  PHYSICAL ABILITIES REQUIRED .................................................................................. 12
  PERSONAL ATTRIBUTES DESIRED .................................................................................. 12

RATING SCALES .................................................................................................................. 13
  FREQUENCY ...................................................................................................................... 13
  IMPORTANCE ................................................................................................................... 13

DEMOGRAPHIC QUESTIONS ............................................................................................... 13

PILOT SURVEY .................................................................................................................... 14

SURVEY ADMINISTRATION ............................................................................................... 14

ANALYSIS OF DEMOGRAPHIC INFORMATION .................................................................. 15

DATA ANALYSIS ................................................................................................................ 21
  PERCENT “Do” ................................................................................................................ 22
  MEAN IMPORTANCE RATINGS ...................................................................................... 22
  STANDARD DEVIATION OF IMPORTANCE RATINGS .................................................... 23

RESPONSE ANALYSIS BY DEMOGRAPHIC SUB-GROUPS .................................................. 23

SUMMARY OF JTA RESULTS ............................................................................................. 24

SUMMARY OF PROPOSED TEST SPECIFICATIONS .......................................................... 24
  PART I – MANAGING HEALTHCARE INTERPRETER FUNCTIONS .................................. 24
  PART II – PERFORMING HEALTHCARE INTERPRETING .............................................. 25
  TASKS BY PERCENT “Do” AND MEAN IMPORTANCE .................................................. 26
  KSAS BY MEAN IMPORTANCE ..................................................................................... 28

REFERENCES ....................................................................................................................... 31
Acknowledgments

This Report on the Job/Task Analysis for Healthcare Interpreters was conducted on behalf of the Certification Commission for Healthcare Interpreters (CCHI) by The Caviart Group, LLC under the supervision of Clarence “Buck” Chaffee, President. This document is copyrighted and is intended for the sole use of CCHI.

The researchers conducting this study would like to thank the people who generously contributed their time, energy, and expertise toward the completion of this study.

This study could not have been completed without the effort and diligence of the CCHI Job/Task Analysis Panel, the leadership of CCHI, and the advice and counsel of Georgia Patrick and Anna Rubin of The Communicators and Cheryl Wild of Wild & Associates. These individuals are individually recognized below.

Job/Task Analysis Panel

Weli Awale, Jewish Vocational Services, Kansas City, MO
Sonia Bowe-Gutman, Health Partners/Regions, Minneapolis, MN
Ajdin Camaga, Spectrum Health, Grand Rapids, MI
Jeanne Farrow, University of Wisconsin Medical Center, Seattle, WA
María Elena Gaitán, Office of Diversity & Cultural Competency-Los Angeles County, CA
Jeanette Higgins, JMH International LLC, Columbia, MD
Maria Lara, Greenville Hospital System, Greenville, NC
Lien Huynh, International Language Services, Chicago, IL
Jasbeer Ratty, Harborview Medical Center, Seattle, WA
Di Wu, Midwest Association of Translators and Interpreters, Kokomo, IN.

CCHI Commissioners

Catherine Anderson, M.A., Manager, Language & Cultural Services, Jewish Vocational Service
Shiva Bidar-Sielaff, M.A., CCHI Treasurer; Spanish and French Interpreter; Director of Interpreter Services & Community Partnerships, University of Wisconsin Hospital & Clinics
Frederick Bw’Ombongi, M.H.A., Swahili Interpreter; Manager, Translation and Interpreting Services, Spectrum Health
Kathleen K. Diamond, M.A., Chair, Certification Task Force, Association of Language Companies (ALC)
Frederick D. Hobby, M.A., CCHI Vice-Chair, Outreach; President & CEO, Institute for Diversity in Health Management, an affiliate of the American Hospital Association
Jonathan Levy, M.A., Director of Language Services, CyraCom
Alejandro Maldonado, B.A., Spanish Interpreter; Limited English Proficiency Coordinator, Minnesota Department of Human Services
Maria Michalczyk, R.N., M.A., Institute for Health Professionals, Portland Community College; Healthcare Interpreting Training Program Director, AHA Training Center Coordinator
Natalya Mytareva, Russian Interpreter; Communications Programs Director, International Institute of Akron, Inc.
Elizabeth Nguyen, M.A., CCHI Secretary; Vietnamese and French Interpreter; Senior Diversity Specialist, Childrens Hospital Los Angeles
Virginia Pérez-Santallá, C.T., Spanish Translator and Interpreter; Officer of the Board of Directors, American Translators Association
Karin Ruschke, M.A., CCHI Vice-Chair, Certification; German Interpreter; President, International Language Services, Inc.
Mara Youdelman, J.D., LL.M., CCHI Chair; Project Director, National Language Access Advocacy Project; Senior Attorney, National Health Law Program

CCHI Advisors
Susan S. Abramson, M.H.S., Director, Public Health Policy Center, American Public Health Association (APHA)
Tricia Barrett, M.A., Vice President, Product Development, National Committee for Quality Assurance (NCQA)
Jeff Caballero, M.P.H, Executive Director, Association of Asian Pacific Community Health Organizations (AAPCHO)
Rita Carreón, Deputy Director, Clinical Strategies & Health Care Equity, America’s Health Insurance Plans (AHIP)
Jack Ginsburg, M.A., Director, Health Policy Analysis & Research, American College of Physicians
Carola E. Green, Coordinator for Court Interpreting Testing Services & Operations, National Center for State Courts, Research Division
Jerald A. Jacobs, Esq., Partner, Pillsbury Winthrop Shaw Pittman, LLP; and Co-Author of Certification and Accreditation Law Handbook
Carlos Javier González, B.A., Director of Language Initiatives, Center for Immigrant Health, NYU School of Medicine
Tanya Lopez, Senior Research Associate, American Medical Association (AMA)
Michael C. Martin, Credentialing Consultant, and Past-President, Institute for Credentialing Excellence (formerly NOCA)
Edward L. Martinez, M.S., Senior Consultant, National Association of Public Hospitals and Health Systems (NAPH)

Holly Mikkelson, Certified Spanish Interpreter & Translator; Associate Professor of Translation and Interpretation, Monterey Institute of International Studies

Ann Morse, Program Director, Immigrant Policy Project, National Conference of State Legislatures (NCSL)

Guadalupe Pacheco, Jr., M.S.W., Special Assistant to the Director, Office of Minority Health, U.S. Department of Health and Human Services

Ellen Pryga, Director, Policy, American Hospital Association (AHA)

Elena V. Rios, M.D., M.S.P.H., President & CEO, National Hispanic Medical Association (NHMA), and President, National Hispanic Health Foundation (NHHF)

Laurie Swabey, Ph.D., Principal Investigator, Collaboration for the Advancement of Teaching Interpreter Excellence (CATIE)

Gayle Tang, M.S.N., R.N., Senior Director, National Linguistic and Diversity Infrastructure Management, National Diversity, Kaiser Permanente

Ho Tran, M.D., M.P.H., President & CEO, National Council of Asian and Pacific Islander Physicians (NCAPIP)

Lois Wessel, R.N., C.F.N.P., Associate Director for Programs, Association of Clinicians for the Underserved (ACU)

Ellen Wu, M.P.H., Executive Director, California Pan-Ethnic Health Network (CPEHN)
Executive Summary

The Certification Commission for Healthcare Interpreters (CCHI) was launched in September 2009 to develop a national, valid, credible vendor-neutral certification program for healthcare interpreters. These four adjectives define CCHI’s approach, guide their process, and are the critical elements that differentiate CCHI interpreters and the stakeholders who are counting on them to provide a trained, qualified, and certified population of healthcare interpreters.

CCHI’s certification for healthcare interpreters is not branded to or licensed from any vendor of language services. CCHI is developing a certification from the ground up and not relying on any commercially-oriented certification, training, assessment developed by other organizations. CCHI is not derived from or related to a commercial owner/sponsor.

CCHI’s process of developing a national certification program for healthcare interpreters began with a Job/Task Analysis (JTA) study of the profession of healthcare interpreters. The results of this national survey provide the overarching framework for CCHI’s certification program. The JTA is the primary mechanism for establishing the job-relatedness of decisions concerning standards for professional certification and for supporting arguments of content validity for examinations. The process started with the JTA panel defining the tasks performed by Healthcare Interpreters and the knowledge, skill and ability (KSA) believed to be important for competent performance of those tasks. The panel came to consensus on the characteristics of individuals for whom CCHI’s first certification is designed - the entry level healthcare interpreter:

A person who is able to perform the functions of an entry level healthcare interpreter competently and independently in a healthcare setting with the knowledge, skill and ability required to relay messages accurately from a source language to a target language in a culturally responsive manner and in accordance with established ethical standards.

A survey was then developed based to gather information on the KSAs identified by the JTA panel. Close to 2,500 responses, representing healthcare interpreting services in 141 languages were received during the survey period. This represented an excellent response rate and well exceeded the minimum required for statistically reliable results for the study. The distribution of the demographic characteristics of the respondent population was reviewed by subject matter experts and is representative of the breadth of the profession.

The analysis of the data collected through this Job/Task Analysis study confirm that the study has appropriately and accurately identified the tasks performed by entry level healthcare interpreters and the KSAs required to perform those tasks. Therefore, CCHI has what it needs in an examination specification document to achieve a valid, fair and legally defensible certification examination.

CCHI’s Job Task Analysis provides the overarching framework – the test blueprint – for CCHI’s certification examination. The proposed test blueprint below reflects the intent of
the knowledge, skills, and abilities defined through the JTA process as being important for competent performance of the job of healthcare interpreters and how those KSAs should be grouped and weighted to produce a valid and reliable examination. CCHI is now working with its panel of certification professionals to define, design, develop and deploy a psychometrically sound, legally defensible certification examination that is customized to the specific practices of healthcare interpreters.

Part I – Managing Healthcare Interpreter Functions

Manage an Interpreting Encounter

- Manage the healthcare encounter
- Maintain ethical standards in the encounter
- Establish ground rules for the healthcare encounter with all participants
- Explain rules of confidentiality to the patient
- Introduce yourself to the patient according to protocols
- Document healthcare encounters on paper
- Position yourself relative to other participants to manage room dynamics and support communication

Healthcare Terminology

Interact with Other Healthcare Professionals

- Advocate for the patient (e.g., take action on behalf of the patient that goes beyond communication)
- Assist patients in navigating the healthcare care system (i.e., structure, procedures, protocols, regulations)
- Debrief with other interpreters or clinicians
- Instruct healthcare providers in how to work with interpreters and patients with limited English proficiency
- Participate in community outreach efforts
- Interpret during patient check-out process (e.g., assisting with prescriptions, appointments, financial)
- Determine interpreting needs of inpatients

Prepare for an Interpreting Encounter

- Determine interpreting mode to be used
- Confirm dialect or regional language issues
- Assess need for personal protective gear and/or universal precautions.
- Determine your ability to interpret a healthcare encounter (i.e., an interpreting session)
- Initiate or respond to telephone calls from off-site patients

Demonstrate Cultural Responsiveness

- Perform cultural brokering (e.g., determine, convey and mediate patient's cultural values)

Part II – Performing Healthcare Interpreting

Perform consecutive interpreting

Perform simultaneous interpreting

Sight Translate/Translate Healthcare Documents

- Perform Sight Translations of Healthcare Documents
- Perform Written Translations of Healthcare Documents
Background

There is a critical and growing need for qualified health care interpreters in the medical industry. Although there have been numerous conversations surrounding healthcare interpreter certification and a variety of companies and organizations have announced plans for various forms of credentialing for healthcare interpreters, there has not been a unified, national effort at creating a nationally recognized and endorsed professional certification. That is, until CCHI was formed.

CCHI brought together a coalition of industry stakeholders with the goal of developing and administering a “national, valid, credible, vendor-neutral certification program for healthcare interpreters.” The organization will achieve this objective by providing “one voice, one set of industry-formed and approved standards, and an assurance of competency through an accredited, professional certification program.”

To begin the process of developing a defensible and appropriate certification program, the CCHI undertook this Job/Task Analysis study of the profession of healthcare interpreters.

Definition of a Job/Task Analysis

The term “job/task analysis” refers to a variety of systematic procedures designed to obtain information about the tasks performed on a job and/or the knowledge and skills necessary to perform those tasks (Arver & Faley, 1988; Gael, 1983). A job/task analysis is the primary mechanism for establishing the job-relatedness of decisions concerning standards for professional certification and for supporting arguments of content validity for examinations constructed from the results of a job/task analysis. The job/task analysis described in this report was designed to be consistent with the Standards for Educational and Psychological Testing (American Educational Research Association et al., 1999) and current professional practice.

The Job/Task Analysis Methodology

The study included a diverse panel of subject-matter experts (See Acknowledgments) and a large-scale survey of practitioners. The primary responsibility of the expert panel was to define the tasks performed by Healthcare Interpreters and the knowledge, skill and ability believed to be important for competent performance of those tasks.

The JTA panel met in person on December 10 and 11, 2009 in Chicago, IL. During this meeting, the group discussed and came to consensus on the characteristics of individuals for whom the certification is designed - the entry level healthcare interpreter.
The final description of the characteristics of such an individual is as follows:

**Definition of CCHI Certified Healthcare Interpreter**

A person who is able to perform the functions of an entry level healthcare interpreter competently and independently in a healthcare setting with the knowledge, skill and ability required to relay messages accurately from a source language to a target language in a culturally responsive manner and in accordance with established ethical standards.

*(Entry level means “the level required to be able to begin to perform unsupervised healthcare interpreting competently.”)*

**Major Tasks / Knowledge, Skill and Ability Domains**

With consideration for the characteristics described above, the committee drafted the following list of the major tasks that such individuals might undertake:

- Gather healthcare and/or situational background information about a planned encounter
- Assess need for personal protective gear and/or universal precautions
- Confirm dialect or regional language issues
- Determine your ability to interpret in an encounter
- Recognize situations in which you should disqualify yourself from interpreting an encounter
- Position yourself relative to other participants to manage room dynamics and support communication
- Determine interpreting mode to be used
- Introduce yourself to the patient according to protocols
- Establish ground rules for the encounter with all participants
- Explain rules of confidentiality to the patient
- Manage the encounter
- Perform consecutive interpreting
- Perform simultaneous interpreting
- Monitor the encounter for patient/provider comprehension
- Maintain the register
- Mediate the register
- Maintain accuracy and transparency
- Maintain ethical standards in the encounter
- Perform cultural brokering
- Perform sight translation of institutional documents (e.g., HIPAA, Patient Bill of Rights, etc.)
- Perform sight translation of patient educational material (e.g., a brochure on
diabetes, etc.)

- Perform sight translation of specific patient care instructions (e.g., discharge instructions, etc)
- Perform sight translation of legal documents (e.g., consent forms, etc.)
- Perform written translation of specific patient care instructions (e.g., discharge instructions, etc)
- Advocate for the patient (e.g., take action on behalf of the patient that goes beyond communication)
- Perform check out tasks (e.g., assisting with prescriptions, appointments, financial transactions, etc.)
- Assist in patient scheduling
- Document the encounter
- Debrief with other interpreters or clinicians
- Determine interpreting needs of inpatients
- Initiate or respond to telephone calls from off-site patients
- Participate in community outreach efforts
- Participate in home visits with a healthcare provider
- Instruct healthcare providers in working with interpreters and LEP patients
- Assist patients in navigating the healthcare care system
- Provide remote interpreting
- Provide distance education and training
- Document encounters in electronic medical records system

Knowledge, Skill and Ability Domains

The committee considered and discussed the knowledge, skill or ability required to perform each of these tasks competently. The group developed the following list of major knowledge, skill and ability domains:

Knowledge Domains

- Knowledge of sources of information (e.g., medical records, medical terminology, rules, etc)
- Knowledge of universal precautions and protocols
- Knowledge of appropriate use of protective gear
- Knowledge of regional variations in the language of the patient and healthcare provider
- Knowledge of healthcare interpreting standards of practice
- Knowledge of effective participant positioning in interpreting encounters
- Knowledge of appropriate interpretation modes for various situations
- Knowledge of healthcare facility policies and procedures
- Knowledge of rules of confidentiality
- Knowledge of mandatory reporting rules (e.g., child abuse, domestic violence, etc)
• Knowledge of basic concepts of interpreting in an encounter (e.g., how/when to manage the flow of information, interpret in the first person, etc.)
• Knowledge of cultural practices, beliefs and behaviors
• Knowledge of healthcare specialties
• Knowledge of basic emergency medical response procedures
• Knowledge of anatomy and physiology terminology
• Knowledge of emergency room protocols
• Knowledge of healthcare terminology (e.g., medical tests, procedures, diseases and conditions, diagnoses, treatments, equipment, etc.)
• Knowledge of healthcare protocols
• Knowledge of dental terminology
• Knowledge of diet and nutrition terminology
• Knowledge of healthcare security measures and protocols
• Knowledge of basic components and functions of healthcare care system
• Knowledge of patient’s need for privacy and modesty during examinations
• Knowledge of basic video equipment

Skills

• Skill in active listening
• Skill in retaining information in short term memory
• Skill in note taking
• Skill in recognizing non-verbal communication
• Skill in anticipatory listening

Abilities

• Ability to recognize potentially hazardous conditions
• Ability to adapt to the context of the situation
• Ability to clearly explain common interpreting protocols
• Ability to establish expertise in the eyes of the patient and the healthcare provider
• Ability to speak with fluency in English and the language of the patient (with minimal accent)
• Ability to hear and discern a dialect from spoken language
• Ability to recognize non-verbal clues that indicate dialect or region
• Ability to create linguistic equivalence when there is no direct translation for a medical term
• Ability to evaluate effectiveness to participate in a sensitive or emotionally charged case
• Ability to work with a team to evaluate a problem
• Ability to minimize accent in speech
• Ability to use conference phone system
• Ability to use video healthcare interpreting equipment
• Ability to use pagers
• Ability to use an electronic dictionary
• Ability to integrate skills
• Ability to project information with confidence
• Ability to speak in public
• Ability to analyze and re-state a message
• Ability to mediate

Physical Abilities Required

• Ability to hear normal speech
• Ability to speak clearly

Personal Attributes Desired

• Respect
• Compassion
• Empathy
• Multitasking ability
• Flexibility
• Patience
• Tolerance
• Interpersonal skills
• Friendliness
• Courteous
• Curiosity
• Detachment
• Tact
• Ability to control stress
Rating Scales

The committee discussed the appropriate rating scales to be used in the survey for both the task and knowledge/skill domains. The following rating scales were adopted:

**Frequency**

*How often do you or Healthcare Interpreters under your direction perform this task?*

1. Never
2. Rarely
3. Sometimes
4. Often
5. Always

**Importance**

*How important is this task for competent performance by an entry level Healthcare Interpreter?*

1. Not important
2. Somewhat important
3. Important
4. Very important
5. Extremely important

*How important is this knowledge, skill or ability for competent performance by an entry level Healthcare Interpreter?*

1. Not important
2. Somewhat important
3. Important
4. Very important
5. Extremely important

**Demographic Questions**

In order to ensure that the survey respondents represented a cross-section of the individuals actually performing the job, the committee drafted demographic questions to be included in the survey addressing the respondents’:

1. Role in Providing Healthcare Interpreting Services *(interpreter, trainer, supervisor/manager)*
2. Method of Delivering Healthcare Interpreting Services *(face-to-face, via telephone or video)*
3. Languages in which Delivering Interpreting Services
4. Work Setting *(e.g. hospital, clinic, etc.)*
Pilot Survey

The information prepared by the subject matter expert’s committee was compiled and formed into a draft survey instrument. This draft survey was completed by 35 healthcare interpreters. In addition to responding to the survey items, the Pilot Testers also completed a feedback form with suggestions for clarifications and additional survey questions.

The results for the pilot study were very good. Participants indicated no difficulty understanding the instructions or rating scales. They also offered some changes to improve the survey, many of which were incorporated into the final survey document.

Survey Administration

An internet survey software system was used to deliver the final survey. Any computer with a web browser and a web connection could be used to access the survey.

On January 19, 2010, the CCHI JTA survey was launched. Individuals were recruited to respond through direct email invitations as well as publications in industry web sites, listservs and newsletters. Two follow-up emails were sent to individuals on CCHI’s mailing list who had not started the survey as well as those who had started the survey but had not completed the survey. The survey was closed on February 3, 2010.

A total of 2,479 responses were received during the survey period. This represents an excellent response rate and well exceeds the minimum required for statistically reliable results for the study. The distribution of the demographic characteristics of the respondent population was reviewed by subject matter experts and is believed to be representative of the breadth of the profession.
Analysis of Demographic Information

The following charts graphically depict selected demographic information gathered in the job/task analysis survey. The purpose of collecting this data was to describe the population of individuals who responded to the survey and whose data was included in the final analysis.

![Percent Responses by Relationship to HC Interpreters](chart1)

- Interpreter: 71%
- Manager: 16%
- Trainer: 13%

![Percent Responses by U.S. Geographic Zone](chart2)

- East: 34%
- Middle: 33%
- West: 26%
- Other Country: 6%
Percent Responses by Age

Percent Responses by Gender
### Percent Responses by Ethnicity

- Hispanic: 50%
- Not-Hispanic: 49%

### Percent Responses by Race

- White: 62%
- Black or African American: 5%
- American Indian or Alaska Native: 1%
- Asian: 12%
- Native Hawaiian or Other Pacific Islander: 0%
- Some other race: 19%
**Percent Responses by Education**

- No HS Diploma: 0%
- HS Diploma/GED: 4%
- Some college: 16%
- Associate’s degree: 15%
- Bachelor’s degree: 37%
- Master’s degree: 22%
- Doctorate degree: 5%

**Percent Responses by Training**

- None: 9%
- < 40 hrs: 17%
- 40+ hrs < AA degree: 65%
- AA degree: 5%
- Bach. degree: 2%
- Master’s degree: 1%
Percent Responses by Experience

Less than 2 years: 15%
2 to 10 years: 55%
More than 10 years: 29%

Percent Responses by Primary Method of Delivery

In person: 83%
Video: 2%
Telephone: 14%
Percent Responses by Density

- Urban: 77%
- Suburban: 15%
- Rural: 8%
### Languages in which Healthcare Interpreting Services are Provided by Survey Respondents

<table>
<thead>
<tr>
<th><strong>Acholi</strong></th>
<th><strong>Dutch</strong></th>
<th><strong>Laotian</strong></th>
<th><strong>Romanian</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Albanian</strong></td>
<td><strong>Ewe</strong></td>
<td><strong>Lingala</strong></td>
<td><strong>Russian</strong></td>
</tr>
<tr>
<td><strong>Amharic</strong></td>
<td><strong>Finnish</strong></td>
<td><strong>Lithuanian</strong></td>
<td><strong>Russian</strong></td>
</tr>
<tr>
<td><strong>Anuak</strong></td>
<td><strong>French</strong></td>
<td><strong>Macedonian</strong></td>
<td><strong>Samoan</strong></td>
</tr>
<tr>
<td><strong>Arabic</strong></td>
<td><strong>Fukinese</strong></td>
<td><strong>MaiMai</strong></td>
<td><strong>Serbian</strong></td>
</tr>
<tr>
<td><strong>Arakanese</strong></td>
<td><strong>Fulani</strong></td>
<td><strong>Malayalam</strong></td>
<td><strong>Serbo-Croatian</strong></td>
</tr>
<tr>
<td><strong>Armenian</strong></td>
<td><strong>Georgian</strong></td>
<td><strong>Malaysian</strong></td>
<td><strong>Slovak</strong></td>
</tr>
<tr>
<td><strong>Assyrian</strong></td>
<td><strong>German</strong></td>
<td><strong>Mam</strong></td>
<td><strong>Somali</strong></td>
</tr>
<tr>
<td><strong>Bassa</strong></td>
<td><strong>Greek</strong></td>
<td><strong>Marathi</strong></td>
<td><strong>Spanish</strong></td>
</tr>
<tr>
<td><strong>Bengali</strong></td>
<td><strong>Gujarati</strong></td>
<td><strong>Marshallese</strong></td>
<td><strong>Sudanese</strong></td>
</tr>
<tr>
<td><strong>Bosnian</strong></td>
<td><strong>Haitian Creole</strong></td>
<td><strong>May</strong></td>
<td><strong>Swahili</strong></td>
</tr>
<tr>
<td><strong>Bulgarian</strong></td>
<td><strong>Hakka</strong></td>
<td><strong>Mein.Basaa</strong></td>
<td><strong>Swedish</strong></td>
</tr>
<tr>
<td><strong>Burmese</strong></td>
<td><strong>Hebrew</strong></td>
<td><strong>Mende</strong></td>
<td><strong>Tagalog</strong></td>
</tr>
<tr>
<td><strong>Burundian</strong></td>
<td><strong>Hindi</strong></td>
<td><strong>Mien</strong></td>
<td><strong>Taiwanese</strong></td>
</tr>
<tr>
<td><strong>Cambodian/Khmer</strong></td>
<td><strong>Hmong</strong></td>
<td><strong>Mina</strong></td>
<td><strong>Tamil</strong></td>
</tr>
<tr>
<td><strong>Cape Verdean</strong></td>
<td><strong>Hungarian</strong></td>
<td><strong>Mixteco</strong></td>
<td><strong>Telugu</strong></td>
</tr>
<tr>
<td><strong>Catalan</strong></td>
<td><strong>Ilocano</strong></td>
<td><strong>Moldavian</strong></td>
<td><strong>Thai</strong></td>
</tr>
<tr>
<td><strong>Cebuano</strong></td>
<td><strong>Indonesian</strong></td>
<td><strong>Mongolian</strong></td>
<td><strong>Tibetan</strong></td>
</tr>
<tr>
<td><strong>Chaldean</strong></td>
<td><strong>Iranian/Farsi/</strong></td>
<td><strong>Navajo</strong></td>
<td><strong>Tigrinya</strong></td>
</tr>
<tr>
<td><strong>Chamorro</strong></td>
<td><strong>Persian</strong></td>
<td><strong>Nepali</strong></td>
<td><strong>Toisanese</strong></td>
</tr>
<tr>
<td><strong>Chinese Mandarin</strong></td>
<td><strong>Italian</strong></td>
<td><strong>Ntumu</strong></td>
<td><strong>Trique</strong></td>
</tr>
<tr>
<td><strong>Chinese Taiwanese</strong></td>
<td><strong>Japanese</strong></td>
<td><strong>Nuer Sudanese</strong></td>
<td><strong>Turkish</strong></td>
</tr>
<tr>
<td><strong>Chinese Toisanese</strong></td>
<td><strong>Karakalpak Uzbek</strong></td>
<td><strong>Ojibwe</strong></td>
<td><strong>Turkish</strong></td>
</tr>
<tr>
<td><strong>Chuukese</strong></td>
<td><strong>Karen</strong></td>
<td><strong>Oromo</strong></td>
<td><strong>Ukrainian</strong></td>
</tr>
<tr>
<td><strong>Crioulo</strong></td>
<td><strong>Kayah</strong></td>
<td><strong>Pakistani</strong></td>
<td><strong>Urdu</strong></td>
</tr>
<tr>
<td><strong>Croatian</strong></td>
<td><strong>K’iche’</strong></td>
<td><strong>Pashto/Pushtu</strong></td>
<td><strong>Uzbek</strong></td>
</tr>
<tr>
<td><strong>Czech</strong></td>
<td><strong>Kinyamurenge</strong></td>
<td><strong>Patois</strong></td>
<td><strong>Vietnamese</strong></td>
</tr>
<tr>
<td><strong>Danish</strong></td>
<td><strong>Kinyarwanda</strong></td>
<td><strong>Polish</strong></td>
<td><strong>Visayan</strong></td>
</tr>
<tr>
<td><strong>Darfurian Arabic</strong></td>
<td><strong>Kirundi</strong></td>
<td><strong>Poqomam</strong></td>
<td><strong>Wolof</strong></td>
</tr>
<tr>
<td><strong>Dari</strong></td>
<td><strong>Kisii</strong></td>
<td><strong>Portuguese</strong></td>
<td><strong>Yiddish</strong></td>
</tr>
<tr>
<td><strong>Die-jiu</strong></td>
<td><strong>Korean</strong></td>
<td><strong>Pulaar</strong></td>
<td><strong>Yoruba</strong></td>
</tr>
<tr>
<td><strong>Dinka</strong></td>
<td><strong>Kurdish</strong></td>
<td><strong>Punjabi</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Data Analysis

The purpose of the data analysis is to determine whether the survey population validates that the knowledge, skills and abilities identified by the JTA Panel as being required for the job of entry-level healthcare interpreter are sufficiently important to be included in the certification examination.

To assist in the interpretation of the survey results, cut-points were established to differentiate more important activities and knowledge areas from less important
activities and knowledge areas. Activities and knowledge areas not meeting one or more of the criteria were flagged for omission from the certification examination. The cut-points that were set in this study and their rationales are provided below.

Tasks and KSAs that were close to the cut-points were also flagged and reviewed by the CCHI Commission.

Percent “Do”

The first analysis was the percentage of respondents who indicated that they perform the task in their job. The respondents were asked to indicate how frequently they performed the task. The “Percent Do” scale reflects the percentage of the respondents that indicated that they performed the task at least occasionally. If less than 51% of the respondents fell into this category, the task was not considered to be a core task for this job and was therefore not included for consideration in the certification program.

The following tasks fell below this flag:

- Task 40 - Document healthcare encounters in electronic medical records systems
- Task 48 - Provide distance education and training for healthcare interpreters

Mean Importance Ratings

Mean importance ratings were computed for all task and knowledge/skill statements. The importance scale ranged from 1 (not important) to 5 (extremely important). Statements with mean importance ratings of 2.50 (the point on the scale that is half way between “somewhat important” and “important”) or less were flagged as failing the importance rating.

Importance ratings play a critical role in the design of certification examinations. Professional and legal guidelines indicate that if content is to be included in an examination, the developer or user must be able to demonstrate that it is important for competent performance (AERA, 1985). The 2.50 cut-point recommended is consistent with this requirement of demonstrating job relevance.

The following tasks or KSAs fell below this flag:

- KSA 106 - Knowledge of basic video equipment
- KSA 125 - Ability to use video healthcare interpreting equipment
- KSA 126 - Ability to use pagers
Standard Deviation of Importance Ratings

Finally, the standard deviation of importance responses was calculated. This is a measure of the degree to which the respondents agreed with each other. Low standard deviations indicate a high level of agreement while higher numbers mean that there was less agreement as to how the importance of the statement should be rated. Statements with a standard deviation above 1.50 were flagged for special review by the subject matter experts committee due to the relatively high level of disagreement among the survey respondents.

The following tasks or KSAs fell above this flag:

- Task 39 - Document healthcare encounters on paper
- Task 40 - Document healthcare encounters in electronic medical records systems

Response Analysis by Demographic Sub-Groups

It is critically important that a certification examination test for knowledge, skill and abilities that are required for competent practice of the profession regardless of the demographic characteristics of the individual. This ensures that the test is not biased for or against any portion of the candidate population.

The relative importance of the knowledge, skills and abilities questions were analyzed based on each of the demographic questions on the survey. (Populations with less than 100 respondents were not included in this study since the sample size is too small for accurate representation.)

If the mean importance rating of any sub-groups fell below 2.55, the KSA was flagged for special review and consideration by the certification commission to determine whether that KSA should be included in the examination.

The following tasks or KSAs fell below this flag:

- KSA 125 – Ability to use video healthcare interpreting equipment
- KSA 126 – Ability to use pagers
Summary of JTA Results

The analysis of the data collected through this Job/Task Analysis study confirm that the study has appropriately and accurately identified the tasks performed by entry level healthcare interpreters and the knowledge, skills and abilities required to perform those tasks.

Therefore, an examination specification can be constructed using this data that will result in a valid, fair and legally defensible certification examination.

Summary of Proposed Test Specifications

CCHI’s Job Task Analysis provides the overarching framework – the test blueprint – for CCHI’s certification examination. The proposed test blueprint below reflects the intent of those knowledge, skills, and abilities defined through the JTA process as being important for competent performance of the job of healthcare interpreters and how those KSAs should be grouped and weighted to produce a valid and reliable examination. CCHI is now working with its panel of certification professionals to define, design, develop and deploy a psychometrically sound, legally defensible certification examination that is customized to the specific practices of healthcare interpreters.

<table>
<thead>
<tr>
<th>Part I – Managing Healthcare Interpreter Functions</th>
<th>Percent of Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage an Interpreting Encounter</td>
<td>30% - 35%</td>
</tr>
<tr>
<td>- Manage the healthcare encounter</td>
<td></td>
</tr>
<tr>
<td>- Maintain ethical standards in the encounter</td>
<td></td>
</tr>
<tr>
<td>- Establish ground rules for the healthcare encounter with all participants</td>
<td></td>
</tr>
<tr>
<td>- Explain rules of confidentiality to the patient</td>
<td></td>
</tr>
<tr>
<td>- Introduce yourself to the patient according to protocols</td>
<td></td>
</tr>
<tr>
<td>- Document healthcare encounters on paper</td>
<td></td>
</tr>
<tr>
<td>- Position yourself relative to other participants to manage room dynamics and support communication</td>
<td></td>
</tr>
</tbody>
</table>

Healthcare Terminology 22% - 25%

Interact with Other Healthcare Professionals 20% - 24%

- Advocate for the patient (e.g., take action on behalf of the patient that goes beyond communication)
- Assist patients in navigating the healthcare care system (i.e., structure, procedures, protocols, regulations)
- Debrief with other interpreters or clinicians
- Instruct healthcare providers in how to work with interpreters and patients with limited English proficiency
- Participate in community outreach efforts
- Interpret during patient check-out process (e.g., assisting with prescriptions, appointments, financial)
- Determine interpreting needs of inpatients
Prepare for an Interpreting Encounter 16% - 20%
- Determine interpreting mode to be used
- Confirm dialect or regional language issues
- Assess need for personal protective gear and/or universal precautions.
- Determine your ability to interpret a healthcare encounter (i.e., an interpreting session)
- Initiate or respond to telephone calls from off-site patients

Demonstrate Cultural Responsiveness 3% - 6%
- Perform cultural brokering (e.g., determine, convey and mediate patient’s cultural values)

Part II – Performing Healthcare Interpreting

Perform consecutive interpreting 75% - 80%
Perform simultaneous interpreting 10% - 15%
Sight Translate/Translate Healthcare Documents 10% - 15%
- Perform Sight Translations of Healthcare Documents
- Perform Written Translations of Healthcare Documents

Tables

The following tables indicate the data generated from this study. Filters were applied in accordance with the cut points indicated above for percent “Do”, “Importance” and “Standard Deviation” (S.D.). Those tasks or knowledge/skill statements that met or exceeded the filter received a “Pass” rating below while those that did not received a “Fail” rating.

Sub-tasks or sub-domains with one or more “Fail” ratings for “Do” or “Importance” are generally not included in the test construction.

Sub-task and sub-domains that were borderline for “Do” or “Importance” (flagged in color) or that received a “Fail” for “Standard Deviation” were reviewed by the CCHI Commissioners who made the following decisions:

a. Delete: 40/74 - Document healthcare encounters in electronic medical records systems (fails % Do flag)
b. Delete 48/82 - Provide distance education and training for healthcare interpreters (fails % Do flag)
c. Keep Task 39 - Document healthcare encounters on paper (fails SD flag)
d. Delete KSA 106 - Knowledge of basic video equipment (fails importance flag)
e. Delete KSA 125 - Ability to use video healthcare interpreting equipment (fails importance flag for sub groups - Age, Race, Ethnicity and Work Setting )
f. Delete KSA 126 - Ability to use pagers (borderline for subgroup flag)
g. Keep all other Tasks and KSA’s
## Tasks by Percent "Do" and Mean Importance

<table>
<thead>
<tr>
<th>JTA Question Number</th>
<th>Tasks</th>
<th>N Responses</th>
<th>% Do</th>
<th>Freq SD</th>
<th>Importance Mean</th>
<th>Imp. SD</th>
<th>Filter Do</th>
<th>Filter Importance</th>
<th>Filter SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Assess need for personal protective gear and/or universal precautions.</td>
<td>1641</td>
<td>0.77</td>
<td>1.44</td>
<td>3.62</td>
<td>1.33</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>16</td>
<td>Confirm dialect or regional language issues</td>
<td>1647</td>
<td>0.87</td>
<td>1.30</td>
<td>3.79</td>
<td>1.07</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>17</td>
<td>Determine your ability to interpret a healthcare encounter (i.e., an interpreting session)</td>
<td>1624</td>
<td>0.86</td>
<td>1.54</td>
<td>4.37</td>
<td>0.85</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>18</td>
<td>Recognize situations in which you should disqualify yourself from interpreting a healthcare encounter</td>
<td>1643</td>
<td>0.74</td>
<td>1.46</td>
<td>4.30</td>
<td>0.92</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>19</td>
<td>Position yourself relative to other participants to manage room dynamics and support communication</td>
<td>1637</td>
<td>0.90</td>
<td>1.39</td>
<td>3.67</td>
<td>1.11</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>20</td>
<td>Determine interpreting mode to be used</td>
<td>1637</td>
<td>0.91</td>
<td>1.40</td>
<td>3.79</td>
<td>1.07</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>21</td>
<td>Introduce yourself to the patient according to protocols</td>
<td>1631</td>
<td>0.99</td>
<td>0.86</td>
<td>4.12</td>
<td>1.00</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>22</td>
<td>Establish ground rules for the healthcare encounter with all participants</td>
<td>1639</td>
<td>0.94</td>
<td>1.27</td>
<td>3.77</td>
<td>1.13</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>23</td>
<td>Explain rules of confidentiality to the patient</td>
<td>1633</td>
<td>0.96</td>
<td>1.24</td>
<td>4.12</td>
<td>1.06</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>24</td>
<td>Manage the healthcare encounter</td>
<td>1622</td>
<td>0.87</td>
<td>1.47</td>
<td>3.37</td>
<td>1.29</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>25</td>
<td>Perform consecutive interpreting</td>
<td>1641</td>
<td>0.99</td>
<td>0.91</td>
<td>3.96</td>
<td>1.07</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>26</td>
<td>Perform simultaneous interpreting</td>
<td>1647</td>
<td>0.85</td>
<td>1.10</td>
<td>2.93</td>
<td>1.27</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>27</td>
<td>Monitor the encounter for patient/provider comprehension</td>
<td>1644</td>
<td>0.95</td>
<td>1.19</td>
<td>4.14</td>
<td>1.02</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>28</td>
<td>Maintain and mediate the register</td>
<td>1607</td>
<td>0.92</td>
<td>1.40</td>
<td>3.69</td>
<td>1.21</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>29</td>
<td>Maintain accuracy and transparency</td>
<td>1636</td>
<td>0.99</td>
<td>0.73</td>
<td>4.70</td>
<td>0.69</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>30</td>
<td>Maintain ethical standards in the encounter</td>
<td>1637</td>
<td>1.00</td>
<td>0.63</td>
<td>4.69</td>
<td>0.71</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td>31</td>
<td>Perform cultural brokering (e.g., determine, convey and mediate patient's cultural values)</td>
<td>1631</td>
<td>0.98</td>
<td>1.10</td>
<td>3.94</td>
<td>1.07</td>
<td>Pass</td>
<td>Pass</td>
<td>Pass</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>32</td>
<td>66</td>
<td>Perform sight translation of institutional documents (e.g., intake forms, patient's rights documents, etc.)</td>
<td>1630</td>
<td>1634</td>
<td>0.88</td>
<td>1.22</td>
<td>3.40</td>
<td>1.21</td>
<td>Pass</td>
</tr>
<tr>
<td>33</td>
<td>67</td>
<td>Perform sight translation of legal documents (e.g., consent forms, waivers, releases, etc.)</td>
<td>1629</td>
<td>1620</td>
<td>0.80</td>
<td>1.32</td>
<td>3.37</td>
<td>1.36</td>
<td>Pass</td>
</tr>
<tr>
<td>34</td>
<td>68</td>
<td>Perform sight translation of patient educational material (e.g., a brochure on diabetes, etc.)</td>
<td>1631</td>
<td>1627</td>
<td>0.85</td>
<td>1.24</td>
<td>3.36</td>
<td>1.25</td>
<td>Pass</td>
</tr>
<tr>
<td>35</td>
<td>69</td>
<td>Perform sight translation of specific patient care instructions (e.g., discharge instructions, etc.)</td>
<td>1626</td>
<td>1618</td>
<td>0.87</td>
<td>1.32</td>
<td>3.78</td>
<td>1.28</td>
<td>Pass</td>
</tr>
<tr>
<td>36</td>
<td>70</td>
<td>Perform written translation of specific patient care instructions (e.g., discharge instructions, etc.)</td>
<td>1645</td>
<td>1626</td>
<td>0.78</td>
<td>1.34</td>
<td>3.45</td>
<td>1.40</td>
<td>Pass</td>
</tr>
<tr>
<td>37</td>
<td>71</td>
<td>Advocate for the patient (e.g., take action on behalf of the patient that goes beyond communication)</td>
<td>1646</td>
<td>1619</td>
<td>0.79</td>
<td>1.24</td>
<td>3.00</td>
<td>1.38</td>
<td>Pass</td>
</tr>
<tr>
<td>38</td>
<td>72</td>
<td>Interpret during patient check-out process (e.g., assisting with prescriptions, appointments, financial</td>
<td>1645</td>
<td>1638</td>
<td>0.95</td>
<td>1.13</td>
<td>3.72</td>
<td>1.12</td>
<td>Pass</td>
</tr>
<tr>
<td>39</td>
<td>73</td>
<td>Document healthcare encounters on paper</td>
<td>1646</td>
<td>1636</td>
<td>0.74</td>
<td>1.67</td>
<td>3.13</td>
<td>1.44</td>
<td>Pass</td>
</tr>
<tr>
<td>40</td>
<td>74</td>
<td>Document healthcare encounters in electronic medical records systems</td>
<td>1641</td>
<td>1620</td>
<td>0.41</td>
<td>1.60</td>
<td>2.71</td>
<td>1.51</td>
<td>Fail</td>
</tr>
<tr>
<td>41</td>
<td>75</td>
<td>Debrief with other interpreters or clinicians</td>
<td>1634</td>
<td>1630</td>
<td>0.74</td>
<td>1.25</td>
<td>2.94</td>
<td>1.26</td>
<td>Pass</td>
</tr>
<tr>
<td>42</td>
<td>76</td>
<td>Determine interpreting needs of inpatients</td>
<td>1639</td>
<td>1621</td>
<td>0.74</td>
<td>1.47</td>
<td>3.47</td>
<td>1.34</td>
<td>Pass</td>
</tr>
<tr>
<td>43</td>
<td>77</td>
<td>Initiate or respond to telephone calls from off-site patients</td>
<td>1641</td>
<td>1624</td>
<td>0.76</td>
<td>1.41</td>
<td>2.96</td>
<td>1.33</td>
<td>Pass</td>
</tr>
<tr>
<td>44</td>
<td>78</td>
<td>Participate in community outreach efforts</td>
<td>1642</td>
<td>1620</td>
<td>0.72</td>
<td>1.18</td>
<td>2.64</td>
<td>1.21</td>
<td>Pass</td>
</tr>
<tr>
<td>45</td>
<td>79</td>
<td>Instruct healthcare providers in how to work with interpreters and patients with limited English proficiency</td>
<td>1640</td>
<td>1632</td>
<td>0.78</td>
<td>1.28</td>
<td>3.47</td>
<td>1.33</td>
<td>Pass</td>
</tr>
<tr>
<td>46</td>
<td>80</td>
<td>Assist patients in navigating the healthcare care system (i.e., structure, procedures, protocols regulations,</td>
<td>1642</td>
<td>1634</td>
<td>0.80</td>
<td>1.31</td>
<td>3.10</td>
<td>1.29</td>
<td>Pass</td>
</tr>
<tr>
<td>47</td>
<td>81</td>
<td>Provide remote interpreting (e.g., telephonic, video, etc.)</td>
<td>1647</td>
<td>1626</td>
<td>0.81</td>
<td>1.36</td>
<td>3.13</td>
<td>1.31</td>
<td>Pass</td>
</tr>
<tr>
<td>48</td>
<td>82</td>
<td>Provide distance education and training for healthcare interpreters</td>
<td>1630</td>
<td>1600</td>
<td>0.30</td>
<td>0.98</td>
<td>2.67</td>
<td>1.50</td>
<td>Fail</td>
</tr>
</tbody>
</table>
## KSAs by Mean Importance

<table>
<thead>
<tr>
<th>JTA Question Number</th>
<th>KSA</th>
<th>N Responses</th>
<th>Importance Mean</th>
<th>SD</th>
<th>Filter Importance</th>
<th>Filter SD</th>
<th>Sub Group Flags</th>
</tr>
</thead>
<tbody>
<tr>
<td>84</td>
<td>Knowledge of sources of information (e.g., medical records, medical terminology, rules, etc)</td>
<td>1647</td>
<td>4.31</td>
<td>0.94</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>85</td>
<td>Knowledge of universal precautions and protocols</td>
<td>1645</td>
<td>4.11</td>
<td>1.01</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>86</td>
<td>Knowledge of appropriate use of protective gear</td>
<td>1638</td>
<td>3.90</td>
<td>1.17</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>87</td>
<td>Knowledge of regional variations in the language of the patient and healthcare provider</td>
<td>1636</td>
<td>3.88</td>
<td>1.05</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>88</td>
<td>Knowledge of healthcare interpreting standards of practice</td>
<td>1634</td>
<td>4.40</td>
<td>0.89</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>89</td>
<td>Knowledge of effective participant positioning in interpreting encounters</td>
<td>1635</td>
<td>3.87</td>
<td>1.01</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>90</td>
<td>Knowledge of appropriate interpretation modes for various situations</td>
<td>1626</td>
<td>4.02</td>
<td>1.03</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>91</td>
<td>Knowledge of healthcare facility policies and procedures</td>
<td>1640</td>
<td>3.96</td>
<td>1.06</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>92</td>
<td>Knowledge of rules of confidentiality</td>
<td>1642</td>
<td>4.70</td>
<td>0.70</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>93</td>
<td>Knowledge of mandatory reporting rules (e.g., child abuse, domestic violence, etc)</td>
<td>1640</td>
<td>4.31</td>
<td>1.03</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>94</td>
<td>Knowledge of basic concepts of interpreting in a healthcare encounter (e.g., how/when to manage the flow</td>
<td>1645</td>
<td>4.46</td>
<td>0.80</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>95</td>
<td>Knowledge of how a patient's cultural practices and beliefs can effect communication</td>
<td>1646</td>
<td>4.31</td>
<td>0.86</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Knowledge of healthcare specialties</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>86</td>
<td>Knowledge of basic emergency medical response procedures</td>
<td>1651</td>
<td>3.78</td>
<td>0.99</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>87</td>
<td>Knowledge of anatomy and physiology terminology (i.e., parts of the human body and their functions)</td>
<td>1648</td>
<td>4.37</td>
<td>0.85</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>88</td>
<td>Knowledge of healthcare terminology (e.g., medical tests, procedures, diseases and conditions, diagnoses,</td>
<td>1641</td>
<td>4.35</td>
<td>0.88</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>89</td>
<td>Knowledge of emergency room protocols</td>
<td>1643</td>
<td>3.66</td>
<td>1.16</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>90</td>
<td>Knowledge of healthcare protocols</td>
<td>1631</td>
<td>3.66</td>
<td>1.13</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>91</td>
<td>Knowledge of dental terminology</td>
<td>1631</td>
<td>3.35</td>
<td>1.17</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>92</td>
<td>Knowledge of diet and nutrition terminology</td>
<td>1641</td>
<td>3.72</td>
<td>1.03</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>93</td>
<td>Knowledge of healthcare security measures and protocols</td>
<td>1624</td>
<td>3.51</td>
<td>1.17</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>94</td>
<td>Knowledge of basic components and functions of healthcare care system (i.e., structure, procedures,</td>
<td>1648</td>
<td>3.44</td>
<td>1.07</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>95</td>
<td>Knowledge of basic video equipment</td>
<td>1638</td>
<td>2.35</td>
<td>1.18</td>
<td>Fail</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>96</td>
<td>Is there additional knowledge that is important for competent practice of healthcare interpreters that we have not asked about?</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>97</td>
<td>Skill in active listening</td>
<td>1649</td>
<td>4.65</td>
<td>0.65</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>98</td>
<td>Skill in retaining information in short term memory</td>
<td>1641</td>
<td>4.54</td>
<td>0.76</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>99</td>
<td>Skill in note taking</td>
<td>1636</td>
<td>3.54</td>
<td>1.20</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>100</td>
<td>Skill in recognizing non-verbal communication</td>
<td>1643</td>
<td>4.02</td>
<td>1.06</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>101</td>
<td>Skill in anticipatory listening</td>
<td>1629</td>
<td>3.79</td>
<td>1.11</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>102</td>
<td>Are there additional skills that are important for competent practice of healthcare interpreters that we have not asked about?</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>103</td>
<td>Ability to recognize potentially hazardous conditions</td>
<td>1650</td>
<td>4.01</td>
<td>1.03</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>104</td>
<td>Ability to adapt to the context of the situation</td>
<td>1647</td>
<td>4.19</td>
<td>0.86</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Ability to clearly explain common interpreting protocols</td>
<td>1648</td>
<td>4.02</td>
<td>0.92</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>117</td>
<td>Ability to establish expertise in the eyes of the patient and healthcare provider</td>
<td>1635</td>
<td>3.99</td>
<td>1.06</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>118</td>
<td>Ability to speak with fluency in English and the language of the patient (with minimal accent)</td>
<td>1645</td>
<td>4.29</td>
<td>0.89</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>119</td>
<td>Ability to hear and discern a dialect from spoken language</td>
<td>1643</td>
<td>3.84</td>
<td>1.04</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>120</td>
<td>Ability to recognize non-verbal clues that indicate dialect or region</td>
<td>1639</td>
<td>3.54</td>
<td>1.19</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>121</td>
<td>Ability to create linguistic equivalence when there is no direct translation for a medical term</td>
<td>1636</td>
<td>4.28</td>
<td>0.91</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>122</td>
<td>Ability to evaluate effectiveness to participate in a sensitive or emotionally charged case</td>
<td>1628</td>
<td>4.15</td>
<td>1.01</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>123</td>
<td>Ability to work with a team to evaluate a problem</td>
<td>1633</td>
<td>3.85</td>
<td>1.12</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>124</td>
<td>Ability to use conference phone system</td>
<td>1627</td>
<td>3.29</td>
<td>1.26</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>125</td>
<td>Ability to use video healthcare interpreting equipment</td>
<td>1629</td>
<td>2.71</td>
<td>1.27</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>126</td>
<td>Ability to use pagers</td>
<td>1623</td>
<td>3.07</td>
<td>1.40</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>127</td>
<td>Ability to use an electronic dictionary</td>
<td>1628</td>
<td>2.94</td>
<td>1.30</td>
<td>Pass</td>
<td>Pass</td>
<td>None</td>
</tr>
<tr>
<td>128</td>
<td>Are there additional abilities that are important for competent practice of healthcare interpreters that we have not asked about?</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>
References


Tannenbaum, R. J., & Rosenfeld, M. (1994). Job/task analysis for teacher competence testing: Identification of basic skills important for all entry-level teachers. Educational and Psychological Measurement, 54, 199-211.