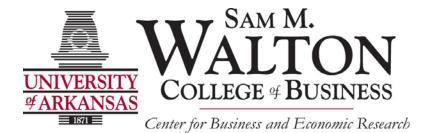
## **Final Report:**

# Estimating the Supply of and Demand for Bilingual Nurses in Northwest Arkansas

Produced for the Nursing Education Consortium



Center for Business and Economic Research Reynolds Center Building 217 Sam M. Walton College of Business 1 University of Arkansas Fayetteville, Arkansas 72701-1201 (479) 575-4151

Contact: Katherine A. Deck, Interim Director March 2007

## **Executive Summary**

In 2004, researchers at the Center for Business and Economic Research (CBER) in the Sam M. Walton College of Business at the University of Arkansas prepared a report that detailed the projected shortage of minority nurses in the four county region of Northwest Arkansas. The study focused particularly on the Hispanic residents of Northwest Arkansas, as projections showed the estimated proportion of the total population for that ethnicity increasing from 9.5 percent in 2005 to 16.0 percent in 2025. A separate set of projections in the report estimated that the proportion of the nursing workforce with Hispanic ethnicity would increase from 2.1 to 3.9 percent over the same time period. The report concluded that over the 20 year period, there would be an ever-increasing Hispanic representation disparity in the Northwest Arkansas nursing labor force.

That study succeeded in its goal of quantifying the projected shortage of minority nurses relative to the overall population base. This provided nurse educators, hospitals, and grant-makers with sufficient information to begin addressing the Hispanic nurse gap with a variety of programs. However, upon the completion of the study, additional questions remained regarding the second language skills of the Northwest Arkansas nursing workforce and the effect on the quality of patient healthcare.

To that end, the Nursing Education Consortium approached the CBER about producing a new report with four objectives:

- 1. To determine the existing bilingual nursing population, and to the degree possible, the extent of the language capabilities of the existing nursing population;
- 2. To determine the frequency of interaction between non-English speaking patients and non-bilingual nurses/healthcare staff;
- 3. To determine how information is conveyed when a non-bilingual healthcare provider interacts with a non-English speaking patient; and
- 4. To qualitatively and quantitatively where possible, estimate the impact of interactions between non-bilingual healthcare providers and non-English speaking patients on the following measures:
  - a. The quality of care,
  - b. Patient privacy and record confidentiality, and
  - c. Efficiency of providing healthcare services

In order to accomplish these objectives, substantial support was necessary from Northwest Arkansas hospital administrators, nurse supervisors, nurse educators, and bilingual nursing students. A study methodology was conceived employing surveys of three distinct populations: hospital administrators in Benton and Washington Counties, the nursing workforce in Northwest Arkansas, and non-English speaking patients at the six acute care hospitals in Benton and Washington Counties. From these surveys, the following highlights resulted.



- Northwest Arkansas hospital administrators reported that 3.5 percent (53 out of 1,497) of their nursing workforce had bilingual capabilities at the end of 2006.
- 4.8 percent of the sample of nurses in Northwest Arkansas self-reported either proficiency or fluency in oral Spanish.
- None of the 359 nurses included in the study sample reported having any proficiency or fluency in Marshallese or Vietnamese.
- 70.0 percent of hospital administrators reported that non-English speaking patients interact with non-bilingual nurses on at least a daily basis.
- Only 42.5 percent of nurses reported personal interactions with non-English speaking patients on at least a daily basis. LPNs were more likely to interact with non-English speaking patients daily than RNs.
- When bilingual nurses are unavailable, personal communication is accomplished as shown in the table below:

When no bilingual nurse is available, what percentage of the time is communication accomplished	Hospital Administrator Average	Nurse Average
By a Bilingual Clinical Staff Member?	28.0%	38.0%
By a Bilingual Non-Clinical Staff Member?	38.0%	34.0%
By a Bilingual Adult Relative of the Patient?	49.0%	49.0%
By a Bilingual Minor Relative of the Patient?	29.0%	38.0%

- All of the hospital administrators reported that telephone translation services were used on at least a daily basis. Only 26.1 percent of nurses reported at least daily usage of telephone translators.
- The table below summarizes the hospital administrator and nurse perceived negative and strong negative effects of interactions between non-bilingual nurses and non-English speaking patients.

Measure	Percent of Hospital Administrators Reporting Negative or Strong Negative Effects	Percent of Nurses Reporting Negative or Strong Negative Effects
<b>Patient Assessment</b>	88.9%	79.7%
Standard of Care	77.8%	57.2%
<b>Record Confidentiality</b>	44.4%	51.3%
Facility Efficiency	30.0%	79.8%

- 85.8 percent of surveyed non-English speaking patients identified a hospital translator as being the most beneficial form of communication, but only 41.2 percent of patients reported receiving medical information from a hospital translator.
- 52.2 percent of non-English speaking patients reported that the most beneficial aspect of bilingual nursing staff was the ability to receive timely answers to medical questions.



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## Introduction

In its earlier study entitled 'Nursing Workforce Shortage and Diversity Disparity in Northwest Arkansas¹ released in September 2004, the Center for Business and Economic Research (CBER) estimated the overall shortage of registered nurses (RNs) and the shortage of minority nurses in Northwest Arkansas relative to minority representation in the general population. Unfortunately, the fundamental questions germane to both the quality of care provided to non-English speaking patient populations and the possible inefficiencies caused by the unavailability of a bilingual nursing workforce were not addressed due to the lack of sufficient funding. Additional funding would have allowed for the compilation of localized nursing data, especially data related to nurses' language capabilities. These deficiencies imply the previous study was not able to shed direct light on the shortage of bilingual nurses and the impact of that shortage on healthcare outcomes.

In response to the widely discussed/adopted strategy of recruiting bilingual high school graduates to Northwest Arkansas's nursing schools in hopes of increasing the bilingual nursing population, it is important to examine whether there exists a shortage of bilingual nurses and the severity of such a shortage in the existing nursing workforce. Further, even if such a shortage is determined, its urgency cannot be substantiated unless a negative relationship is found between healthcare quality and efficiency and the shortage of bilingual nurses.

To accomplish the above, this proposed study must achieve the following objectives:

- 1. To determine the existing bilingual nursing population, and to the degree possible, the extent of the language capabilities of the existing nursing population;
- 2. To determine the frequency of interaction between non-English speaking patients and non-bilingual nurses/healthcare staff;
- 3. To determine how information is conveyed when a non-bilingual healthcare provider interacts with a non-English speaking patient; and
- 4. To qualitatively and quantitatively where possible, estimate the impact of interactions between non-bilingual healthcare providers and non-English speaking patients on the following measures:
  - a. The quality of care,
  - b. Patient privacy and record confidentiality, and
  - c. Efficiency of providing healthcare services

Completion of the objectives listed above will significantly improve our understanding of the relationship between supply of and demand for bilingual nurses, and more importantly, the magnitude of the costs in monetary and non-monetary terms of failing to provide bilingual nurses to serve the non-English speaking patient population.

<sup>&</sup>lt;sup>1</sup> Defined as the region including Benton, Carroll, Madison, and Washington Counties.



In order to accomplish these objectives, substantial support was necessary from Northwest Arkansas hospital administrators, nurse supervisors, nurse educators, and bilingual nursing students. A study methodology was conceived employing surveys of three distinct populations: hospital administrators in Benton and Washington Counties, the nursing workforce in Northwest Arkansas, and non-English speaking patients at the six acute care hospitals in Benton and Washington Counties. When the results of these surveys are combined with the estimates of the disparity between minority representation in the general population and minority representation in registered nurses in Northwest Arkansas, a much broader picture of bilingual nursing supply and demand emerges.

This report is structured as follows. In the next section, some background information from the 2004 CBER report on the nursing workforce shortage is presented. The next section contains a description of and the results from the hospital administrator survey. Following that are the methodology and outcomes of the nurse survey and the non-English speaking patient survey. A set of conclusions ties all of the results together. At the end of the document there is an appendix which contains screen shots of the Internet based surveys and copies of the paper based survey instruments and informed consent forms.



## **Background Information**

The following table and graph summarized many of the results of the 2004 CBER Report "Nursing Workforce Shortage and Diversity Disparity in Northwest Arkansas." Of particular note to the current report are the projections about the Hispanic population and Hispanic registered nurses. The table shows that the percentage of the overall population in Benton, Carroll, Madison, and Washington Counties that is Hispanic is expected to rise from 9.5 percent in 2005 to 16.0 percent in 2025. At the same time, the proportion of registered nurses who are Hispanic is expected to rise from 2.1 percent to 3.8 percent. This implies an ever-increasing shortage of Hispanic nurses based on population representation.

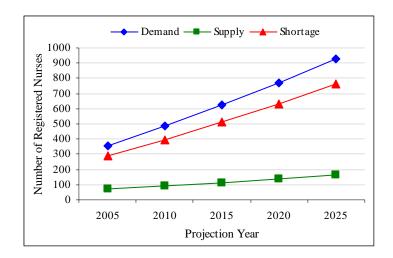
Disparity between Racial/Ethnic Minority Representation in the General Population and the Population of Registered Nurses in Northwest Arkansas

G	General Population and the Population of Registered Nurses in Northwest Arkansas					
	Percent of Projected General Population					
Year	Non-Hispanic Black	Hispanic	Asian/Pacific Islander	American Indian Alaskan Native	Other Races or Ethnicity	Minority Total
2002	1.3%	9.5%	1.6%	1.3%	1.5%	15.1%
2005	1.5%	10.7%	1.8%	1.2%	1.5%	16.7%
2015	1.9%	13.9%	2.2%	0.9%	1.5%	20.4%
2025	2.2%	16.0%	2.4%	0.8%	1.5%	23.0%
	I	Percent of Pa	rojected Number	of Registered Nurse	es	
Year	Non-Hispanic Black	Hispanic	Asian/Pacific Islander	American Indian Alaskan Native	Other Races or Ethnicity	Minority Total
2002	5.0%	2.1%	3.7%	0.5%	2.5%	13.8%
2005	5.4%	2.3%	3.8%	0.4%	3.2%	15.1%
2015	6.5%	3.1%	4.2%	0.3%	5.4%	19.5%
2025	7.6%	3.8%	4.6%	0.2%	7.7%	23.9%
	R	acial/Ethni	c Minority Rep	resentation Dispari	ty	
Year	Non-Hispanic Black	Hispanic	Asian/Pacific Islander	American Indian Alaskan Native	Other Races or Ethnicity	Minority Total
2002	3.8%	-7.3%	2.1%	-0.8%	1.0%	-1.3%
2005	3.9%	-8.4%	2.0%	-0.7%	1.6%	-1.5%
2015	4.6%	-10.8%	2.0%	-0.6%	3.9%	-0.9%
2025	5.4%	-12.2%	2.1%	-0.6%	6.1%	0.9%
(-)	(-) indicates under-representation and (+) indicates over-representation in registered nurses					

Source: UA Center for Business and Economic Research



### Projected Demand, Supply, and Shortage Trends of Hispanic Nurses in the 4-County Study Area



As can be seen, while shortfalls are projected based on racial and ethnic representation, no specific information about the language capabilities of the nursing workforce emerge. Hispanic nurses may or may not have Spanish language capabilities, just as nurses of other ethnicities may or may not have Spanish language capabilities. Therefore, programs that are designed to alleviate the disparity of nurses based on ethnicity may not be sufficient to address a lack of bilingually trained nurses in the Northwest Arkansas area.

The remaining portions of this report are designed to illuminate what the bilingual capabilities of the Northwest Arkansas nursing workforce are and what impacts bilingual capabilities have on the quality of the region's healthcare.



## **Administrator Survey**

### Description

The first part of the three-pronged approach to examine the status of bilingual nurses in Northwest Arkansas involved surveying local hospital administrators. The administrators consisted of chief nursing officers, directors of information, and compliance officers within their assorted organizations. The survey instrument was designed to elicit information about the characteristics of each hospital's nursing workforce, specifically their language capabilities. The survey also sought to quantify the prevalence of interactions between non-English speaking patients and non-bilingual nurses, and the administrators' perceptions of the effects those interactions have on patient assessment, standard of care, and record confidentiality, as well as overall facility efficiency. The administrators were also queried about their perceptions of the need for bilingual medical training for their employees. Administrators from all six hospitals in Washington and Benton Counties participated in this survey, so the results reflect a complete picture of the state of bilingual nursing in the region's hospitals.

The survey was administered starting in November 2006. An Internet based survey instrument was used (see the Appendix for screen shots of the survey instrument). A total of 10 hospital administrators provided information on Northwest Medical Center-Bentonville, Northwest Medical Center-Springdale, Siloam Springs Memorial Hospital, St. Mary's Hospital, Washington Regional Medical Center, and Willow Creek Women's Hospital.

### Results

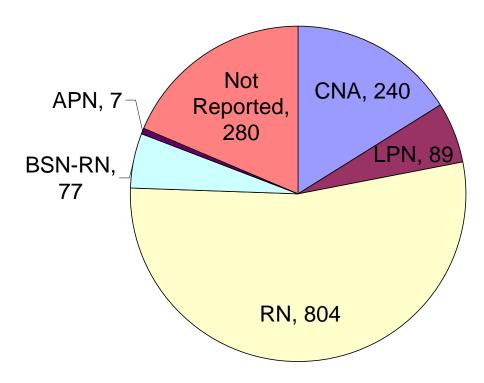
Table 1 presents the breakdown of nurse licensures at the respondent facilities. Nearly 1,500 nurses worked at the six hospitals in Benton and Washington Counties. Of these nurses, a total of 53.7 percent were reported as licensed at the registered nurse (RN) level. There were 280 nurses included in the survey results whose designations were not reported. If these nurses have licensures that are distributed like those that were reported, then 66.1 percent of the hospital nurses would have RN designations. Figure 1 shows how RNs make up the bulk of the hospital nursing workforce, followed by Certified Nurse Assistants (CNAs), Licensed Practical Nurses (LPNs), RNs with Bachelors of Science in Nursing (BSN-RNs), and Advanced Practice Nurses (APNs).

Table 1: How many full-time equivalent nurses are employed at your facility by licensure?

Nurse Licensure	Number	Percent of Total
CNA	240	16.0%
LPN	89	5.9%
RN	804	53.7%
BSN-RN	77	5.1%
APN	7	0.5%
Not Reported	280	18.7%
Total	1,497	100.0%







Having established the total population of nurses working at Benton and Washington County hospitals, determining the bilingual skills of that population was the next imperative. Table 2 details the bilingual capabilities of the respondent facilities' nursing populations. Although, the hospital administrator respondents were asked about multiple language capabilities (including Spanish, Vietnamese, Marshallese, and all other languages), respondents only reported the existence of bilingual Spanish capabilities among their nursing staffs. Table 2 shows that 53 nurses were identified as having bilingual capabilities by their administrators. While RNs constituted the largest number of bilingually capable nurses, only 2.6 percent of the RN population in Benton and Washington County hospitals were identified as being bilingual. Each of the other nurse licensure categories have fewer bilingual representatives in Northwest Arkansas hospitals, but a greater percentage of the nurses in each category have bilingual skills. The largest percentages of bilingual nurses by licensure were CNAs (7.5 percent), BSN-RNs (6.5 percent), and LPNs (5.6 percent). The hospital administrator respondents reported that none of the nurses working with APN licensure had bilingual capabilities. Overall, 3.5 percent of the Benton and Washington County hospital nursing workforce was identified as having bilingual Spanish capabilities. This percentage is virtually identical to the 3.4 percent rate of bilingual capabilities in the nurses whose licensures were not reported by their hospital administrator.



Table 2: How many full-time equivalent nurses have bilingual capabilities?

Nurse Licensure	Spanish	Spanish as Percent of Total	Vietnamese	Marshallese	Other
CNA	18	7.5%	0	0	0
LPN	5	5.6%	0	0	0
RN	21	2.6%	0	0	0
BSN-RN	5	6.5%	0	0	0
APN	0	0.0%	0	0	0
<b>Not Reported</b>	10	3.4%	0	0	0
Total	53	3.5%	0	0	0

The hospital administrators were then asked to evaluate the oral and written language capabilities of their nursing staffs by licensure. Once again, the administrators only reported having bilingual capabilities in the Spanish language. Vietnamese, Marshallese, and other language capabilities were not reported, even in elementary form, among the hospital nursing staffs. Table 3 presents the results of the language proficiency evaluations. The hospital administrators reported proficient and fluent CNAs, elementary-skilled LPNs, RNs at every capability level, and no bilingual capabilities among the APN workforce.

Table 3: Please provide an evaluation of the extent of the language capabilities, both written and

oral, of your bilingual nursing staff.

	Oral Language Capability	Spanish	Vietnamese	Marshallese	Other
CNA	Elementary	0	0	0	0
	Proficient	2	0	0	0
	Fluent	5	0	0	0
LPN	Elementary	2	0	0	0
	Proficient	0	0	0	0
	Fluent	0	0	0	0
RN	Elementary	3	0	0	0
	Proficient	5	0	0	0
	Fluent	1	0	0	0
<b>BSN-RN</b>	Elementary	2	0	0	0
	Proficient	2	0	0	0
	Fluent	2	0	0	0
APN	Elementary	0	0	0	0
	Proficient	0	0	0	0
	Fluent	0	0	0	0



	Written Language Capability	Spanish	Vietnamese	Marshallese	Other
CNA	Elementary	1	0	0	0
	Proficient	0	0	0	0
	Fluent	4	0	0	0
LPN	Elementary	1	0	0	0
	Proficient	0	0	0	0
	Fluent	1	0	0	0
RN	Elementary	4	0	0	0
	Proficient	1	0	0	0
	Fluent	0	0	0	0
<b>BSN-RN</b>	Elementary	2	0	0	0
	Proficient	0	0	0	0
	Fluent	1	0	0	0
APN	Elementary	0	0	0	0
	Proficient	0	0	0	0
	Fluent	0	0	0	0

The first part of the hospital administrator survey instrument established some descriptive statistics about the hospital nursing staff population in Northwest Arkansas. The second part of the survey instrument was designed to collect information about the respondent hospital administrators' perception of the interactions between non-English speaking patients and non-bilingual nurses. Table 4 shows the reported breakdown of the frequency of interactions between non-English speaking patients and non-bilingual nurses. 70.0 percent of the respondent administrators reported that non-English speaking patients interact with non-bilingual nurses in their facility at least daily, with 30.0 percent reporting hourly interaction between non-English speaking patients and non-bilingual staff. 10.0 percent of respondents reported these interactions occur on a weekly basis and the remaining 20.0 percent reported interaction between non-English speaking patients and non-bilingual nursing staff seldom/never happen.

Table 4: How often do non-English speaking patients interact with non-bilingual nurses?

How Often?	Count	Percent of Total
<b>Every Hour</b>	3	30.0%
Daily	4	40.0%
Weekly	1	10.0%
Monthly	0	0.0%
Seldom/Never	2	20.0%

When interactions between non-English speaking patients and non-bilingual nurse occur, there are a variety of ways that information can be conveyed. Table 5 shows that translator phone services are most often used (80.0 percent of the time), followed by interacting via an adult bilingual relative of the patient (49.0 percent of the time), interacting via a bilingual non-clinical hospital staff member (38.0 percent of the time), interacting via a bilingual minor relative of the patient (29.0 percent of the time), and



interacting via a bilingual clinical staff member who is not a nurse (28.0 percent of the time.)

Table 5: When non-English speaking patients interact with non-bilingual nurses, what percentage of that time is used to convey healthcare information...

How?	Average	Median	Count
By a Bilingual Clinical Staff Member?	28.0%	20.0%	8
By a Bilingual Non-Clinical Staff Member?	38.0%	30.0%	10
By a Bilingual Adult Relative of the Patient?	49.0%	40.0%	9
By a Bilingual Minor Relative of the Patient?	29.0%	20.0%	7
By Translation Phone?	80.0%	80.0%	5

Using one of these alternate communication options for interacting with a non-English speaking patient when no bilingual nurse is available may affect various aspects of the patient's hospital experience and satisfaction as well as the management and effectiveness of the hospital as an organization. The next part of the hospital administrator survey instrument was designed to investigate whether managers perceived any differential effects on a variety of quality measures. These measures include patient assessment quality, standard of care, record confidentiality, and facility efficiency.

Table 6 shows that 88.9 percent of the hospital administrators reported that the lack of a bilingual nurse led to a negative or strongly negative effect on patient assessment. In Table 7, it can be seen that 77.8 percent of the hospital administrators perceive a negative or strongly negative effect on the standard of care a non-English speaking patient receives when a bilingual nurse is unavailable.

Table 6: On average, when a bilingual nurse is not available, what effect is there on the quality of the assessment a nurse completes for that non-English speaking patient?

Effect	Count	Percent of Total
<b>Strong Positive Effect on Assessment</b>	0	0.0%
Positive Effect on Assessment	0	0.0%
No Effect on Assessment	1	11.1%
Negative Effect on Assessment	5	55.6%
Strong Negative Effect on Assessment	3	33.3%

Table 7: On average, when a bilingual nurse is not available, what effect is there on the standard of care a non-English speaking patient receives?

Effect	Count	Percent of Total
Strong Positive Effect on Standard of Care	0	0.0%
Positive Effect on Standard of Care	0	0.0%
No Effect on Standard of Care	2	22.2%
Negative Effect on Standard of Care	6	66.7%
Strong Negative Effect on Standard of Care	1	11.1%

Hospital administrators do not report the same levels of negative effects on record confidentiality as on assessment and standard of care when non-English speaking patients interact with non-bilingual nurses. In fact as shown in Table 8, 11.1 percent of



administrators believe that there is a positive effect on record confidentiality, while 44.4 percent believe that there is no differential effect on record confidentiality when a bilingual nurse is unavailable.

Table 8: On average, when a bilingual nurse is not available, what effect is there on the record

confidentiality of non-English speaking patients?

Effect	Count	Percent of Total
Strong Positive Effect on Record Confidentiality	0	0.0%
Positive Effect on Record Confidentiality	1	11.1%
No Effect on Record Confidentiality	4	44.4%
Negative Effect on Record Confidentiality	3	33.3%
Strong Negative Effect on Record Confidentiality	1	11.1%

Table 9 shows that hospital administrators also have mixed feelings about the overall benefit bilingual nurses have on the ability of the facility staff to serve each patient efficiently. A total of 60.0 percent of the hospital administrators indicated that the unavailability of bilingual nursing staff had a positive or strongly positive effect on facility efficiency. 30.0 percent of the administrators indicated a negative or strongly negative impact on efficiency, and 10.0 percent indicated no impact on facility efficiency.

Table 9: On average, when a bilingual nurse is not available, what effect is there on facility efficiency

(the ability of the facility staff to serve each patient efficiently)?

Effect	Count	Percent of Total
<b>Strong Positive Effect on Efficiency</b>	2	20.0%
Positive Effect on Efficiency	4	40.0%
No Effect on Efficiency	1	10.0%
Negative Effect on Efficiency	1	10.0%
Strong Negative Effect on Efficiency	2	20.0%

The final part of the hospital administrator survey instrument queried the hospital management about their telephone translation systems, perceived interest in offering medical Spanish training opportunities for their nursing staff, and policies for evaluating and rewarding staff for having bilingual skills.

The information in Table 10 reiterates the importance of telephone translation services (as previously shown in Table 5). A total of 60.0 percent of the respondent administrators indicate using telephone translators every hour, and the remaining 40.0 percent of administrators reported daily use of this service.

Table 10: How often are telephone translators used in your facility?

How Often?	Count	Percent of Total
<b>Every Hour</b>	6	60.0%
Daily	4	40.0%
Weekly	0	0.0%
Monthly	0	0.0%
Seldom/Never	0	0.0%



Most of the administrator respondents did not provide information about the expenditures required for the telephone translation services; however, two of the respondents indicated that such services averaged \$4,750 per month for their hospital facilities. Table 11 shows this information.

Table 11: How much does your facility expend monthly for telephone translators?

	Average	Count
How Much?	\$4,750	2

When queried about the perceived level of interest in offering medical Spanish programs for English speaking nursing staff, all respondents indicated that they were at least somewhat interested. 70 percent of administrators responded that their level of interest was very high, as shown in Table 12.

Table 12: What would the level on interest be in offering medical Spanish programs for English speakers on your staff?

Level of Interest	Count	Percent of Total
Very Interested	7	70.0%
<b>Somewhat Interested</b>	3	30.0%
Not Interested	0	0.0%

However, when it comes to evaluating the performance of nurses with additional language skills, only 30.0 percent of respondents indicated that they were aware of the National Standards on Culturally and Linguistically Appropriate Services (CLAS). Only 10.0 percent of respondents indicated that interpretation is included in the job description or performance evaluation for their nursing staff.

Table 13: Are you familiar with the National Standards on Culturally and Linguistically Appropriate Services (CLAS)?

Familiarity	Count	Percent of Total
Yes	3	30.0%
No	7	70.0%

Table 14: Is interpretation a part of the job description and performance evaluation of your nurses with additional language skills?

Job Description and Evaluation Contain Interpretation	Count	Percent of Total
Yes	1	10.0%
No	9	90.0%

Finally, the hospital administrators were invited to share any other thoughts that they might have on the bilingual nursing situation in Northwest Arkansas. All of the comments offered by the respondents dealt with the practical issues of bilingual skill dissemination and retention. Table 15 details the comments in their entirety.



Table 15: Are there any other observations or comments you would like to share with the Center for Business and Economic Research and the Nursing Education Consortium regarding the bilingual nursing situation in Northwest Arkansas?

- Frequent small learning sessions would be helpful if conducted with words/phrases staff must use every day
- Nurses want to learn languages to be better able to serve the patients that they care for. They desire language skills that are conversational as well as medically based to care for the whole patient. A continuum of courses needs to be conveniently offered.
- I am in a beginning Spanish class, and, even though I took Spanish several years ago, it is very difficult to learn a language at my age. I have also been amazed by the lack of interest nurses have in learning a second language.

## **Nurse Survey**

## Description

The second prong of the three-tiered approach to examining the bilingual nursing population in Northwest Arkansas involved surveying the nurses themselves. The nurse survey instrument was designed to elicit information about the bilingual skills of the population, perceptions about the quality of care that non-English speaking patients receive, and interest in and motivation for taking medical Spanish training classes. Of the three surveys included in this study, the nurse component is perhaps the most important for providing a ground level view of the status of the bilingual nursing community as well as the impact of interactions between non-English speaking patients and non-bilingual nurses.

In order to administer the nurse survey, address lists of current RNs and LPNs were obtained from the Arkansas Nursing Board. Within the broad four county region of Northwest Arkansas (Benton, Carroll, Madison, and Washington Counties), there were 1,101 LPNs and 3,141 RNs. Table 16 contains the breakdown of nurses by county.

Table 16: LPN and RN Nurse Population in Northwest Arkansas

County	LPN	Percent of Total	RN	Percent of Total	LPN and RN	Percent of Total
Benton	407	37.0%	1,319	42.0%	1,726	40.7%
Carroll	80	7.3%	171	5.4%	251	5.9%
Madison	55	5.0%	95	3.0%	150	3.5%
Washington	559	50.8%	1,556	49.5%	2,115	49.9%
Total	1,101	100.0%	3,141	100.0%	4,242	100.0%

Source: Arkansas Nursing Board (November 2006)

In November 2006, postcards were sent to each of the Northwest Arkansas nurses on the Arkansas Nursing Board list. Figure 2 shows the text of that postcard. Participants were



asked to use an online survey tool (available in the Appendix of this document) or to request a paper survey if Internet access was unavailable.

Figure 2: Postcard Soliciting Participation in Nurse Survey

## AN INVITATION FROM THE NURSING EDUCATION CONSORTIUM TO PARTICIPATE IN THE BILINGUAL NURSING WORKFORCE STUDY

As one of the over 4000 Northwest Arkansas nurses licensed by the Arkansas State Board of Nursing, you are invited and encouraged to help the Nursing Education Consortium (NEC) and the Center for Business and Economic Research of the University of Arkansas (CBER) to project the future nursing workforce needs to adequately serve the growing Hispanic population in Northwest Arkansas. The objective of the study is to accurately determine the number of current nurses who are bilingual and to project the nursing workforce need. The results will assist the nursing schools, as well as the hospitals, clinics and long-term healthcare providers, in their strategic planning.

The survey will take five minutes to complete. You will have until **Friday**, **December 1**, **2006** to participate in this study. You have two participation options:

Access the confidential online survey before **December 1** at http://cber.waltoncollege.uark.edu/survey/Nurse/Request a paper survey by **November 24** by calling Dr. Deck 479-575-4151 or emailing kdeck@walton.uark.edu

Thank you for your anticipated response to the Bilingual Nursing Workforce Study. The findings will be reported on Thursday, December 14 at 9 AM at the CBER auditorium.

The Executive Committee of the Nursing Education Consortium Dr. Thomas Kippenbrock, President

This initial request for participation netted about 100 completed survey responses. As a second strategy for obtaining surveys, hospital administrators at each of the six Washington and Benton County hospitals were asked to encourage their nursing staffs to complete the survey. A combination of making hospital Internet connections available to nursing staff to complete the online instrument, providing paper surveys and postage-paid return envelopes in conspicuous locations, and having CBER researchers operate laptop computers with wireless Internet connections in public hospital spaces increased the response rate to the survey. A total of 359 surveys were completed by nursing staff during the study period which ended on March 1, 2007. This response level means that, in general, one can be 95% confident that the survey sample averages reflect the true population averages with a confidence interval of plus or minus 5 percent.

#### Results

The results of the survey of nurses are presented in this section. The nurses were asked to identify their facility or worksite name. The facilities were then coded by county. Table 17 and Figure 3 show the nurse survey sample distribution by facility county. Washington County accounted for 48.5 percent of the responses, while Benton County accounted for 39.0 percent. If the responses where facility was not reported are

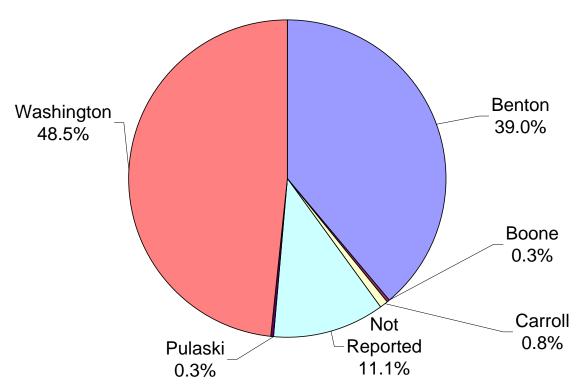


distributed like the rest of the sample, then Washington County facilities employ 54.5 percent of the nurse respondents and Benton County facilities employ 43.9 percent of the nurse respondents. Boone, Carroll, and Pulaski counties also were reported as containing facilities that employ nurses included in the sample.

Table 17: Nurse Survey Respondent Distribution by Facility County

Facility County	Count	Percent of Total
Benton	140	39.0%
Boone	1	0.3%
Carroll	3	0.8%
Pulaski	1	0.3%
Washington	174	48.5%
Not Reported	40	11.1%
Total	359	100.0%

Figure 3: Respondent Distribution by Facility County



After determining the county of employment for the nurse sample, a question was then asked about each nurse's county of residence. This question allows for direct comparison between the sample of respondents to the nurse survey and the population of nurses in Northwest Arkansas as defined by the Arkansas Nursing Board's master list. Table 18 and Figure 4 show the respondent distribution by county of residence. The results show that the distribution of survey respondents was disproportionately likely to be from Benton County and disproportionately unlikely to be from Washington County as

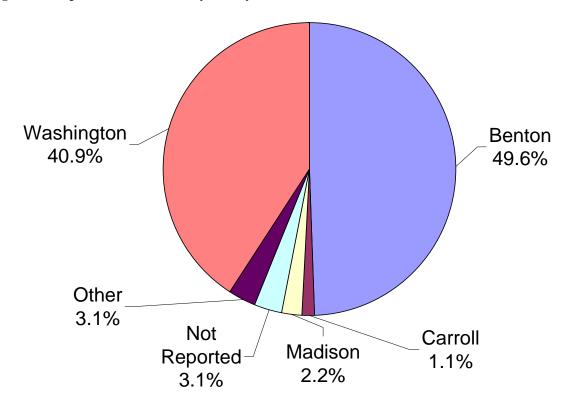


compared to the overall nurse population in Northwest Arkansas. The comparisons between the Carroll and Madison County respondent rates were not significantly different from their population percentages.

Table 18: What is your county of residence?

County of Residence	Count	Percent of Total
Benton	178	49.6%
Carroll	4	1.1%
Madison	8	2.2%
Washington	147	40.9%
Other	11	3.1%
Not Reported	11	3.1%
Total	359	100.0%

Figure 4: Respondent Distribution by County of Residence



The nurse respondents were then asked about their level of licensure. Table 19 shows the distribution of the licensure level for the nurse survey respondent sample. Out of the sample, 86.1 percent of the respondents reported having a RN designation as their highest level of licensure, and 10.0 percent of the respondents report having a LPN designation. When the APNs, CNAs, and respondents who did not report licensure are excluded, these percentages are 89.6 percent for RNs and 10.4 percent for LPNs. As the true population has a RN percentage of 74.0 percent and an LPN percentage of 26.0 percent, it can be seen that the respondents were disproportionately likely to be RNs and disproportionately unlikely to be LPNs, relative to the true population.



Table 19: What is your highest level of Arkansas nursing licensure?

Nursing Licensure	Count	Percent of Total
<b>Advanced Practice Nurse</b>	5	1.4%
Registered Nurse	309	86.1%
Licensed Practical Nurse	36	10.0%
Certified Nursing Assistant	3	0.8%
Not Reported	6	1.7%
Total	359	100.0%

The next survey instrument question asked the respondents about their levels of nursing education. Almost half (48.2 percent) of the survey respondents indicated that an associate degree was their highest level of nursing education, while an additional 28.7 percent indicated that a baccalaureate degree was their highest level of nursing education. According to 2000 U.S. Census Bureau data, in Benton and Washington Counties, 22.4 percent of the general population has at least a baccalaureate degree. Thus, the educational attainment of the nurse survey sample was slightly higher than that of the general population (data were not available for the nursing population).

Table 20: What is your highest level of nursing education?

Educational Attainment	Count	Percent of Total
Diploma	69	19.2%
Associate	173	48.2%
Baccalaureate	87	24.2%
Masters	15	4.2%
Doctorate	1	0.3%
Total	359	100.0%

Although postcards were sent to the entire population of nurses in Benton, Carroll, Madison, and Washington Counties, extra effort was placed on acquiring respondents from the six acute care hospitals in Benton and Washington Counties. Therefore the results shown in Table 21 are not surprising. A total of 85.6 percent of all the nurse respondents reported being employed by acute care hospitals. An additional 4.8 percent of nurses reported working in medical, surgery, or specialty clinics, with other employers making up less than a percent apiece. The remainder of the results for the nurse survey should, therefore, be viewed through that lens—the respondents were most likely nurses working in an acute care hospital setting.



Table 21: What type of facility employs you?

Facility Type	Count	Percent of Total
Acute Care Hospital	303	85.6%
Medical Clinic	5	1.4%
Surgical Clinic	4	1.1%
<b>Specialty Clinic</b>	8	2.3%
Rehabilitation Clinic	3	0.8%
<b>Dental Clinic</b>	0	0.0%
Nursing Home	2	0.6%
<b>Extended Care Facility</b>	0	0.0%
Industrial Nurse	1	0.3%
School Nurse	3	0.8%
<b>Not Currently Practicing Nursing</b>	1	0.3%
Other	24	6.8%
Total	354	100.0%

Respondents were then asked how often they interacted with non-English speaking patients. 74.8 percent of respondents indicated they interact with non-English speaking patients at least weekly, with 42.5 percent indicating that interaction was, at least, on a daily basis. Table 22 shows the full distribution, while Table 23 shows the cross tabulation of the interaction of nurses with non-English speaking patients by nurse licensure (the percentage totals do not match because respondents had to have answered both questions in order to be included in the cross tabulation). As can be seen, LPNs report slightly more frequent interaction with non-English patients (88.9 percent report at least weekly interaction) than RNs (72.4 percent report at least weekly interaction with 39.6 reporting at least daily interaction).

Table 22: How often do you interact with non-English speaking patients?

How Often	Count	Percent of Total
<b>Every Hour</b>	23	6.5%
Daily	128	36.0%
Weekly	115	32.3%
Monthly	59	16.6%
Seldom/Never	31	8.7%
Total	356	100.0%

Table 23: Nurse Interaction with non-English Speaking Patients by Licensure

	APN	RN	LPN	<u>CNA</u>	Total
<b>Every Hour</b>	0.0%	5.5%	16.7%	0.0%	6.5%
Daily	100.0%	34.1%	38.9%	33.3%	35.5%
Weekly	0.0%	32.8%	33.3%	33.3%	32.4%
Monthly	0.0%	18.2%	5.6%	33.3%	16.8%
Seldom/Never	0.0%	9.4%	5.6%	0.0%	8.8%



Nurses were then queried about interactions between non-bilingual nurses and non-English speaking patients. Table 24 shows how often communications were completed via bilingual clinical and non-clinical staff members (not nurses), and via adult and minor relatives of the patient. The sample of nurses reported that bilingual adult relatives of patients were most likely to be the communication conduit when bilingual nurses were unavailable to interact with non-English speaking patients. There was no statistical difference between the frequency of interaction via bilingual clinical and non-clinical staff members and by bilingual minor relatives of the patient.

Table 24: When non-English speaking patients interact with non-bilingual nurses, what percentage of that time is used to convey healthcare information...

How?	Average	Median	Count
By a Bilingual Clinical Staff Member?	38%	30%	312
By a Bilingual Non-Clinical Staff Member?	34%	20%	301
By a Bilingual Adult Relative of the Patient?	49%	40%	315
By a Bilingual Minor Relative of the Patient?	38%	40%	304

Tables 25 through 28 detail the respondent nurses' perceptions of patient assessment quality, standard of care, record confidentiality, and facility efficiency when bilingual nurses are unavailable to interact with non-English speaking patients. These questions were identical to those in the hospital administrator survey and provide an interesting basis of comparison.

Table 25 reports the results of the question about the nurse sample's perceptions of the impact on the quality of patient assessment when bilingual nurses are not available to interact with non-English speaking patients. A total of 79.7 percent of the nurse respondents reported a negative or strong negative effect on assessment. Hospital administrators reported negative or strong negative effects on assessment 88.0 percent of the time.

Table 25: On average, when a bilingual nurse is not available, what effect is there on the quality of the assessment a nurse completes for that non-English speaking patient?

<i>Effect</i>	Count	Percent of Total
<b>Strong Positive Effect on Assessment</b>	8	2.3%
Positive Effect on Assessment	9	2.6%
No Effect on Assessment	54	15.4%
Negative Effect on Assessment	217	62.0%
<b>Strong Negative Effect on Assessment</b>	62	17.7%
Total	350	100.0%

Table 26 contains the results of the survey question designed to investigate the nurses' perception of the impact the lack of a bilingual nurse has on a non-English speaking patient's standard of care. Of the nurse sample, 57.2 percent reported that there was a negative or strong negative effect on standard of care when a non-bilingual nurse interacted with a non-English speaking patient. An additional 37.1 percent of respondents indicated no effect on standard of care. The hospital administrators reported



perceptions of a negative or strong negative impact on standard of care 77.8 percent of the time.

Table 26: On average, when a bilingual nurse is not available, what effect is there on the standard of

care a non-English speaking patient receives?

Effect	Count	Percent of Total
Strong Positive Effect on Standard of Care	9	2.6%
Positive Effect on Standard of Care	11	3.1%
No Effect on Standard of Care	130	37.1%
Negative Effect on Standard of Care	171	48.9%
Strong Negative Effect on Standard of Care	29	8.3%
Total	350	100.0%

Record confidentiality was the next issue addressed in the survey instrument. As shown in Table 27, 51.3 percent of the nurses sampled reported a negative or strong negative effect on record confidentiality from non-bilingual nurse interactions with non-English speaking patients. 43.5 percent of nurse respondents reported no impact on record confidentiality. The corresponding statistics from the hospital administrator survey were: 44.4 percent reported negative or strong negative impact on record confidentiality and 44.4 percent reported no effect on record confidentiality.

Table 27: On average, when a bilingual nurse is not available, what effect is there on the record

confidentiality of non-English speaking patients?

Effect	Count	Percent of Total
Strong Positive Effect on Record Confidentiality	6	1.7%
Positive Effect on Record Confidentiality	12	3.5%
No Effect on Record Confidentiality	151	43.5%
Negative Effect on Record Confidentiality	144	41.5%
Strong Negative Effect on Record Confidentiality	34	9.8%
Total	347	100.0%

Table 28 shows the results of the query about perceptions of overall facility efficiency when bilingual nurses are unavailable to interact with non-English speaking patients. As is shown, 79.8 percent of the nurse sample reported they believe there is a negative or strong negative impact on facility efficiency. These results are the most markedly different from the hospital administrator survey. Only 30.0 percent of hospital administrators reported perceptions of negative or strong negative effects on the ability of the facility staff to serve each patient efficiently.



Table 28: On average, when a bilingual nurse is not available, what effect is there on facility efficiency (the ability of the facility staff to serve each patient efficiently)?

(					
Effect	Count	Percent of Total			
<b>Strong Positive Effect on Efficiency</b>	6	1.7%			
<b>Positive Effect on Efficiency</b>	9	2.6%			
No Effect on Efficiency	56	16.0%			
Negative Effect on Efficiency	226	64.4%			
Strong Negative Effect on Efficiency	54	15.4%			
Total	351	100.0%			

The next couple of questions investigate the self-reported oral and written second language capabilities of the nursing sample. Table 25 shows the results of the overall oral bilingual capabilities of the sample in terms of Spanish, Vietnamese, and Marshallese. For Spanish oral second language capabilities, 4.8 percent of the sample reported proficiency or fluency and 48.0 percent reported elementary skills. 47.1 percent of the sample reported no Spanish language capability. For Vietnamese and Marshallese, no survey respondents indicated having achieved either oral proficiency or fluency and 2.8 and 2.1 percents, respectively, indicated elementary oral skills.

Table 29: What is your oral second language capability?

23. What is your oral second language ea	pasmey		
Oral Second Language Capability	Spanish	Vietnamese	Marshallese
None	47.1%	97.2%	97.9%
Elementary	48.0%	2.8%	2.1%
Proficient	2.7%	0.0%	0.0%
Fluent	2.1%	0.0%	0.0%
Count	331	288	287

In addition to the oral second language capabilities described in the table above, two respondents indicated fluency in each of the following: French, Portuguese, and German. Individual respondents indicated fluency in Chinese, Polish, and American Sign Language. Two additional respondents indicated proficiency in French, and one respondent indicated elementary skills in Arabic.

Table 30 displays the cross tabulation of oral Spanish capabilities with the distribution of nurse licensure of the survey respondents. Again, the total column does not match Table 29 because only respondents who answered both the licensure and the oral Spanish capability questions are included. As is shown, RNs are more likely to have elementary capabilities than LPNs, but there is no statistical difference in reported Spanish proficiency and fluency between the two groups.

Table 30: Oral Spanish capability by licensure

Oral Spanish Capability	APN	RN	LPN	CNA	Total
None	20.0%	46.7%	56.3%	66.7%	47.4%
Elementary	60.0%	48.8%	37.5%	0.0%	47.4%
Proficient	0.0%	2.8%	0.0%	33.3%	2.7%
Fluent	20.0%	1.7%	6.3%	0.0%	2.4%



Table 31 presents the written or reading second language capabilities for the sample in terms of Spanish, Vietnamese, and Marshallese. As is shown, 5.1 percent of the sample indicated either proficiency or fluency in Spanish, while 33.1 percent indicated elementary Spanish skills. 99.3 percent of the sample indicated no Vietnamese written or reading language capability and 98.6 percent indicated no Marshallese written or reading capability. Again, the results indicated that there were no Vietnamese or Marshallese proficient or fluent nurses in the sample.

Table 31: What is your written or reading second language capability?

Written or Reading Second Language Capability	Spanish	Vietnamese	Marshallese
None	61.7%	99.3%	98.6%
Elementary	33.1%	0.7%	1.4%
Proficient	3.9%	0.0%	0.0%
Fluent	1.2%	0.0%	0.0%
Count	332	288	289

In addition to the written or reading second language capabilities indicated in the above table, two respondents indicated fluency in French, Portuguese, and German. One respondent indicated fluency in Chinese. Single respondents indicated proficiency in French and Polish.

Table 32 presents the results of the nurse sample's perceptions about how often telephone translation services are used. A total of 26.1 percent of respondents indicated that telephone translators are used at least daily. This compares to the 100.0 percent of the hospital administrators who indicated that telephone translators were used at least daily.

Table 32: How often are telephone translators used in your facility?

How Often?	Count	Percent of Total
<b>Every Hour</b>	9	2.6%
Daily	80	23.5%
Weekly	95	27.9%
Monthly	52	15.2%
Seldom/Never	105	30.8%
Total	341	100.0%

The final three questions of the nurse survey instrument queried the nurses about their interest in, the convenience of, and their motivation to take Spanish language courses in medical terms and conversation. Table 33 shows the results of the nurse sample's self-reported level of interest in taking a Spanish language course. Of the respondents, 86.0 percent indicated at least some interest, with 58.9 percent of the respondents indicating that they were very interested in such an opportunity.



Table 33: How interested would you be in taking a Spanish language course in medical terms and conversational style?

Interest Level	Count	Percent of Total
Very Interested	206	58.9%
<b>Slightly Interested</b>	95	27.1%
Not Interested	49	14.0%
Total	350	100.0%

Once interest was ascertained, the next question asked about the most convenient time for Spanish medical conversational classes to be offered. The nurses' responses varied widely, with the most popular option being weekday mornings from 10am to 12pm, as shown in Table 34. Among those who had indicated being very interested in Spanish language courses in the previous question, the preferences were even more disparate, but the weekday morning 10am to 12pm time slot was still reported the most preferred.

Table 34: If a Spanish language medical conversation course were available, which time format would you prefer?

Which Time Format?	Count	Percent of Total	Very Interested Count	Percent of Total
Weekday Mornings from 10 AM to 12 PM	96	30.6%	59	28.8%
Weekday Afternoons from 3 to 5 PM	54	17.2%	32	15.6%
Weekday Evenings from 5 to 7 PM	63	20.1%	43	21.0%
Weekday Evenings from 7 to 9 PM	52	16.6%	35	17.1%
Saturday Mornings from 10 AM to 12 PM	40	12.7%	30	14.6%
Saturday Afternoons from 3 to 5 PM	9	2.9%	6	2.9%
Total	314	100.0%	205	100.0%

Finally, the nurse survey respondents were asked what would most motivate them to take a Spanish language medical conversation course. As is shown in Table 35, personal growth was reported as the most popular option (29.9 percent of respondents), followed closely by paid tuition (29.0 percent of respondents).

Table 35: Which option would most motivate you to take a Spanish language medical conversation course?

Option	Count	Percent of Total
Personal Growth	98	29.9%
<b>Continuing Education Credit</b>	70	21.3%
Paid Tuition	95	29.0%
<b>Stipend for Course Completion</b>	65	19.8%
Total	328	100.0%

Like the hospital administrators, the nurses who completed their survey instrument were given the opportunity to make any comments they wanted about the bilingual nursing



situation in Northwest Arkansas. These comments are reported (with spelling, but no grammar correction) below in Table 36. Many of the nurse respondents took the time to share their opinions. Those opinions fell into two broad categories: those who believed having nursing staff with the ability to translate was imperative and that patient care suffered when it was not available, and those who believed that communicating in English should be the responsibility of the patient, rather than having facilities make accommodations.

Table 36: Are there any other observations or comments you would like to share with the Center for Business and Economic Research and the Nursing Education Consortium regarding the bilingual nursing situation in Northwest Arkansas?

- We have had only two referrals for bilingual or different speaking individuals in the ten plus years I have worked for this facility. We have people from the community, churches, hospital, and some staff.
- 1) Have a person on staff, somewhere who can translate or 2) Promote English speaking classes in the community
- 1) I have yet to encounter a time when I could not adequately communicate with my patient to give appropriate nsg. care. 2) We do need more help in bilingual nsg. staff to help communication with patient.
- 1) If you cannot speak the language, then you should learn! 2) It is neither pragmatic nor realistic to place this language burden on nurses (who are already overburdened! 3) Patients who speak only Spanish should provide a translator (family or friend) 4) "Red Phones"-translation services are too backlogged to be practical...????one must schedule an appointment with an all-too-scarce translator, which may lead to a 90 minute wait (not the thing to do in an instance of , say, acute chest pain) -Forget this idea altogether unless it can be made real time asap
- A free class would be beneficial.
- A need for nurses to be bilingual is evident in this area, but educating nurses to be bilingual should not excuse the non-English speaking community from their responsibility to learn and be able to communicate in English.
- An option of an online course for those of us in management that have unpredictable hours.
- Answer to number 15 is all the above also start offering English classes along with citizenship applications
- Answer to question number 15 is all the above. All people should document
  whether they are here legally, if not then they should be required to register
  at that point for entry into the U.S. and make them eligible to receive
  Medicaid benefits or file for SS
- As a proficient bilingual Spanish interpreter to educate pts on home care instructions and well any kind of instructions takes a lot of time. Non bilingual staff don't understand that you have to take more time with these pts.
- Dictionary would be helpful
- English should be the required language for the USA and citizenship



- Have a translator available when situations arise-time consuming to everyone. Spanish when the need for it is not that great.
- Hospitals in this area need to have access to a translator on staff or "in house" 24 hours a day
- Hospitals should be required to have bilingual staff available to interpret for nurses & doctors-24 hours/round the clock. ER's should have at least one nurse on for each shift that can speak SPANISH
- I actually believe that bilingual nurses should not be used because maybe if there were no one able to speak their language they would finally take the time to learn ours. The burden should be taken off of us and put back on them where it belongs.
- I already speak Spanish-I don't understand what to do in number 11
- I am assuming #11 refers to my own capabilities, not to my clinic as a whole. We have a bilingual receptionist and 1 bilingual nurse. Many patients EXPECT us to utilize them in communicating. There are times when both are unavailable.
- I am new to this area but I am proficient in both oral and written Spanish. I have a BA in Spanish and have taught Spanish for Nursing through Command Spanish, Inc. I currently am taking my students to a LTAC facility.
- I believe that appreciation and compensation should be offered by our employer.
- I believe that some of us that are being used to translate for patients should be compensated, such as with more pay.
- I believe your survey is addressing an important issue in regards to nursing care vs. being bilingual. Although on some your questions, I feel your choices should have had the option of one or more choices to choose from.
- I do not think the Spanish speaking community gets the same pt/nurse interaction time as those who speak English
- I don't believe it is our responsibility to Spanish. Most of these people are in our country illegally. We are already paying for the health care of most of these patients and the children they deliver. Our national language should be English and patients should be required to bring a translator.
- I feel it is the lack of practice opportunities that limits my use of Spanish. An initial course would be wonderful, but without practice, my language skills will be quickly lost.
- I feel it would benefit our facility if we hired some "on facility" interpreters that all departments could call on and use when needed. This would cut down on having to "borrow" Spanish speaking staff from other floors in the hospital who usually are not nurses, but dietary, secretaries, or techs. This would make more sense than having all the nurses take classes.
- I feel that money barriers to entering Bilingual (especially native speaking) nurses are in place. Money-wage based education-Knowing about program, availability of ESL geared toward the native speaker wanting to go into



- medical/nursing field.
- I have lived in several non-English speaking countries. I learned to speak their language in order to communicate. Not once did the other country attempt to accommodate my language. Put your efforts into teaching English to persons coming to live in this country.
- I have taken a course for my personal growth but I am still not proficient in Spanish.
- I know it is a need. I have tried to do it.-take Spanish, but I can't. I can get the language well enough to understand their conversation no matter how simple, its their slang -not all of them talk the same.
- I personally do not think that the nurse should be forced to take a Spanish or any other language course. I strongly feel that if non-English people want to come to our hospital then they should be required to provide a translator at their own convenience
- I previously worked at WRMC here in Fayetteville and frequently had Spanish speaking patients. I learned enough (on my own through self study) to communicate the essentials but it would have been helpful to have someone on staff there that was bilingual.
- I really don't feel like I could answer these questions very well, as I am not working in a hospital on a regular basis. Some questions I could not answer at all.
- I should not have to learn a second language while living in my native country. If a person can not speak the native language of the country they are in they should be required to provide their own translator, not the hospital providing for them. If I was to visit another country, I would be expected to either know their language or to have my own translator. Why is this country so different?
- I strongly believe that we need to offer English as a second language regularly in all communities, as well as offering Spanish as a second language regularly in the community. I think the difficulties and barriers cross the cultures both ways.
- I think the Hospital should pay for the Spanish language class, they are the one who will most benefit. The nurses will be doing it for the hospital.
- I understand this is a critical issue and the most expedient solution is to educate the healthcare workers. However, as a secondary goal, the community and national leaders need to make it known to the non-English speaking people that it is their responsibility.
- I work as Don of Geriatric Psych unit, and in 4 years have had 1 non-English speaking person
- If classes were held and paid for many would get involved. Medical conversational Spanish would better help our customers
- In our department, we have all discharge instructions and most teaching information available in Spanish. My most difficult problem is unable to have question/answer time with patient due to language barrier if no



- translator available.
- In question #15, all of the answers would motivate me to take the course. I feel that my knowledge really lies somewhere between "elementary" and "proficient", although closer to elementary. I have personally studied anatomy charts in Spanish.
- Is there a program to motivate the Spanish speaking to learn English to make their stay more enjoyable and proficient??
- It is a very frightening liability issue to care for a non-English speaking patient. We also get very concerned because we are often not able to get a complete history or give thorough education. This is a dangerous situation for the patient and facility.
- It is extremely difficult to care properly for a patient when they cannot speak English
- It is somewhat better now than 5 years ago.
- It is very challenging especially in emergency situations.
- It is very hard for a non clinical interpreter to know and explain medical facts and conditions. I have found that the nurses tend to spend less time with the Spanish speaking patients and their parents.
- less attention is given to non English speaking patients, mostly because they do not ask for assistance"
- Make English the requirement for those entering the US, not Americans increasing time away from their own families to accommodate them.
- Need a separate hourly rate given to bilingual RN's
- Negative effect- for answers are a bit strong. When assessing a patient their history is an essential component of the assessment ~ along with the remainder of the questions. For my response- Negative effect suggests that the care was not optimal.
- Neither English speaking or Spanish speaking individuals sustain or obtain enough in areas I have work to get or keep anything but minimal communication for medical treatment (i.e. in some interaction there is a full-back to "I don't understand: in two ways 1) there is true misunderstanding and 20 there is a I don't want to accept what is presented so I don't understand can be a blocker or a way out of communication 30 You can take this as a bilingual prejudice but in this date and time it exists-many medical and personal interaction are culturally too uncomfortable on perceived differently to have the openness needed even with language less of a barrier. Is there a need for bilingual now-when that 9mo. plus lady comes in fully ready to give birth, you or anyone could wish she had learned English and Spanish at least before that last hour! I am told to answer yes or no..yes, yes, yes!!!
- New immigrants should be encouraged to learn the principle language of the country they are migrating to.
- Non English speaking pt. need to bring an interpreter to stay with them or learn English.



- Patients need someone fluent in their language to be able to communicate needs in the medical area. This should be a standard of care.
- Pay for class per week/compensate with salary-like CPR or ACIS or any other required education.
- Phone is not effective when discussing female teaching care or breast feeding when interpreter is male-most don't like to discuss these issues by phone
- Please consider funding Spanish courses for non-bilingual nurses. It would help provide better care for non-bilingual patients.
- Please consider making classes available in Benton County or centrally located so that nurses living in Benton County could minimize travel.
- Question #11 is confusing. I assume it is asking my personal fluency, not my department/hospital.
- Question #3 not answered, I'm a LPN. I obtained my license through a Vocational School, not considered a degree.
- Spanish lessons are very needed here at St. Mary's.
- Thank you for your invitation to participate in this survey. This is a very needed area of concern for myself as I am almost daily faced with non English clients. I have an elementary knowledge of Spanish and would very much like to learn more.
- thanks
- Thanks for their assistance, it is greatly appreciated.
- The efficiency of care is equal for ALL patients regardless of color, age, and status. The language barrier is a huge inconvenience for all. It is somewhat disturbing to some people because they feel "forced" to learn Spanish.
- The hospital needs to have 3-4 employees on call at all times including night and weekends. These employees should have some medical experience/medical terminology. The translation phone is not the easiest to use its difficult to hear.
- The percentage of Spanish/Marshallese speaking patients in our agency has increased dramatically in the past 5 years. I am glad to see the NEC addressing this issue. I would like to be kept updated on the progress of this study and see the results.
- The problem with having a class is that there always needs to be a proficient Spanish speaking or other foreign language speaking person as things can really get messed up. This definitely impacts pt care. The class is not the whole fix to the problem.
- The Red Phones are better than nothing, but just barely. In our department, many times, we have a male interpreter discussing very personal information with a female, which is culturally inappropriate. Also, the patients seem very uncomfortable using the red phones and are hesitant to ask questions to clarify information. Also-Bilingual staff members should receive monetary incentive, much like critical care pay or certification pay-maybe not as much as the others, but something to acknowledge their value in providing care to the non-English speaking patients.



- There are a few of us who are trying to take courses offered by NWACC. But being a small clinic, only a couple can do this. I would very much like to learn for my personal and professional growth. As well as for the positive effect that it would have.
- There are so many non-English speaking patients where I work and it hinders the care they receive. It also hinders the care of the other patients because our phone translators do not understand medical terminology.
- There is a great need for bilingual nurses.
- These times are not remotely applicable to 120 shift workers. Maybe 1-2 Day week classes that are 3-4 in length
- This is America, they need to learn English before we even think about learning their language. If these patients are in this country illegally, why are we submitting to their ways.
- This is greatly needed!!!
- This is the worst survey I have ever done. If there is a language barrier, of course there will be a lack in care. However, this is America and we speak English. Please stop contributing to the downfall of our great country.
- Those Bilingual Nurses we currently have should complete some form of certification for their skills and then receive a pay differential because we call on them all the time to interpret for us/doctors, etc.
- To be added to survey:#1. My county of residence: Newton#2. I will soon graduate as RN in December '06 and take NCLEX in January '07.#3. Will have an associate degree as an RN, but already have BA, MA and ABD PhD in Spanish Lang. and Lit., Anthropology.
- To become clinically competent in a language is much easier than being conversationally competent in the language.
- Too subjective!!!
- Too subjective. I have traveled all over the world. No other country accommodates me. I learned their language to assist my communications.
- Very Subjective.
- We all recognize that there is a vast shortage of proficient bi-lingual nursing staff in NW Arkansas. We have got to be able to offer more help/assistance to the Hispanic community to not only commence but more importantly complete the nursing course.
- We daily do an injustice to our non-English speaking patients. I feel that the hospital should provide an on-staff interpreter to be utilized by staff for all medical needs. This is such a huge need in this community.
- We have a serious need for more Marshallese translators, a Marshallese language for HCW course and basic pt ed materials in Marshallese. I personally think that all nursing curriculums should require a Spanish medical terms course.
- We have several trained in-house interpreters which has made it easier to communicate recently.
- We need help with this situation, badly



- we need to know Spanish
- We take care of unconscious people and people on ventilators and give great care. It is good to have bilingual individuals around, but it is not absolutely necessary.
- We use our Hispanic Housekeepers for interpreters-which only works if they have enough English-but they can be very helpful at times-usually there is a pts' family member who speaks English-though they are not always available.
- We use the red phone a lot however some patients seem to be intimidated by this
- We work very hard to take care of our non- speaking patients the same way that we would take care of our English speaking patients. Communication between both parties is very important to us and the care that we give is consistent with every patient we care for.
- What about a hybrid type course that enables the learner to do some work on-line and through watching lessons on a DVD, and then going to class prepared to discuss and validate competency of the lessons that are completed on their own.
- When Do We Start?
- When I first started 3 years ago, we saw non-English speaking patients once every couple of months, now we have non-English speaking patients weekly.
- When people come to live in America, an attempt should be made to learn the language.
- While caring for non-English speaking patients is stressful and I feel concerned when unable to communicate efficiently with them, I must admit I am not overly motivated to learn a foreign language when I repeatedly deal with individuals that immigrate to this country by choice and by choice make little or no effort to learn the language here. It is one thing to help individuals that make a sincere effort to help themselves, it is quite another to be put in a situation where I am made to feel responsible for accommodating another's poor choices
- Why is this happening? Why don't we require the Hispanic Population to assimilate as all other immigrants have? What's the deal here?
- Why not offer English speaking lessons to the Hispanic Population. We are an English speaking nation.
- You might be interested in the overall nursing shortage data as well as the bilingual experience. As you are well aware, the average age in the profession is well over 40 and the average age for nursing professors is higher than that.



## **Patient Survey**

### Description

The third piece of this study involved surveying non-English speaking patients in Northwest Arkansas hospitals to ascertain how having or not having access to bilingual nursing staff impacted the quality of their care. In consultation with hospital administrators, the survey instrument went through a large number of revisions. Universally, hospital administrators had two concerns about querying patients concerning the quality of their care.

- The patient burden of answering questions should be minimized, as people come to the hospital because they are sick.
- Survey questions that implied patients might receive differential care or that medical information and advice were not sufficiently communicated raise significant legal liability for the hospitals and would not be allowed.

The final survey instrument (found in both English and Spanish forms in the Appendix) was designed to address both of these issues, to determine whether the patient had interactions with bilingual nursing staff, and to quantify their perceptions about the value of bilingual nursing staff. A methodology was developed where nurse supervisors would identify (likely) Hispanic, non-English speaking patients and bilingual nursing students (from Northwest Arkansas Community College, NTI, and the University of Arkansas) who have received scholarships from the Nursing Education Consortium would administer a short survey to the patients on days when the students were doing their clinical work. The month of February was chosen for the survey period. Administrators from five out of the six hospitals in Northwest Arkansas agreed to host the survey in one way or another. In some cases, patients from emergency rooms were included, and in others, only admitted patients were surveyed. In no case were patients in Intensive Care situations made available for the survey. The bilingual nursing students administered the survey to 15 patients at the various hospitals.

#### Results

Table 37 shows the gender breakdown of the respondents. Two-thirds of the respondents were female and one-third were male.

Table 37: What is the patient's gender?

Gender	_ Count _	Percent of Total
Female	10	67.7%
Male	5	33.3%

On average, the patient respondents indicated being born in 1980. Table 38 shows the breakdown of respondents by decade of birth. When the patient was a minor, the survey respondent was the adult parent.



Table 38: In what year were you born?

Year Range	Count	Percent of Total
1960-1969	4	26.7%
1970-1979	4	26.7%
1980-1989	4	26.7%
1990-1999	0	0.0%
2000-2007	3	20.0%

Each of the 15 survey respondents self-identified as being of Hispanic ethnicity as is shown in Table 39.

Table 39: Please describe your ethnicity.

Ethnicity	Count	Percent of Total
Hispanic	15	100.0%
Non-Hispanic	0	0.0%

Table 40 contains a summary of the reported reasons for the patients being in the hospital. A total of 60.0 percent of the respondents indicated that they were in the hospital for emergency treatment, while 20.0 percent each indicated surgery and inpatient treatment as the reason for their hospital visit.

Table 40: Why were you in the hospital?

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Reason	Count	Percent of Total
<b>Outpatient Treatment</b>	0	0.0%
Surgery	3	20.0%
Emergency Service	9	60.0%
Maternity	0	0.0%
Inpatient Treatment	3	20.0%

The breakdown of reported country of origin for the non-English speaking patients is found in Table 41. The respondents were split with 60.0 percent coming from Mexico and 40.0 percent coming from El Salvador.

Table 41: What is your country (continent) of origin?

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Country of Origin	Count	Percent of Total
United States	0	0.0%
Mexico	9	60.0%
Central America (El Salvador)	6	40.0%
Europe	0	0.0%
Asia	0	0.0%
Other	0	0.0%

Table 42 shows the distribution of the respondents reported ability to understand medical instructions in English. A little more than half of the patients (53.3 percent) indicated no ability to understand English medical instructions, while the remainder identified their ability as limited.



Table 42: Which describes your ability to understand medical instructions in English?

Ability to Understand Medical Directions in English	Count	Percent of Total
Completely Able	0	0.0%
Limitedly Able	7	46.7%
Unable	8	53.3%

The interactions between non-English speaking patients and bilingual nurses, as reported by the respondents, are detailed in Table 43. 20 percent of the patients indicated some interaction with Spanish speaking nursing staff. The remaining 80 percent did not interact with bilingual nurses.

Table 43: Did nursing staff that treated you speak Spanish?

Did Nursing Staff Speak Spanish?	Count	Percent of Total
Yes	3	20.0%
No	12	80.0%

Table 44 describes the reported methods for communicating medical information that the non-English speaking patients experienced. Having a hospital translator was the most common way, but written instructions, telephone translation services, using bilingual friends and family members, as well as receiving no Spanish communication at all were also noted.

Table 44: Which answers best describe how you received medical information?

Method	Count	Percent of Total
Written Form	2	11.8%
Telephone Translator	2	11.8%
Hospital Translator	7	41.2%
Family Member or Friend	2	11.8%
Other (Non Clinical Staff)	1	5.9%
Other (Own Limited English)	3	17.6%

Table 45 quantifies the results of the query to the non-English speaking patients about what form of communication is most beneficial to them. 85.8 percent indicated that having a hospital translator available was the most beneficial form of communication, as compared to written information, a telephone translator, or a bilingual family member or friend.

Table 45: Of all of these forms of communication, which was the most beneficial to you?

Method	Count	Percent of Total
Written Form	1	7.1%
Telephone Translator	0	0.0%
Hospital Translator	12	85.8%
Family Member or Friend	1	7.1%
Other	0	0.0%



Finally, Table 46 indicates the perceptions of the non-English speaking patients as to how bilingual nursing staff would have been beneficial. Several respondents chose an "all of the above" answer, so the response counts are higher than 15. Overall, respondents were most likely to say that one possible benefit of having a bilingual nurse would have been more timely answers to any questions they may have.

Table 46: I would consider bilingual nursing staff to be a benefit because:

Why?	Count	Percent of Total
It Would Ease Anxiety, Frustration and Concerns	6	26.1%
It Would Provide Timelier Answers to Questions	12	52.2%
It Would Create More Trust	5	21.7%
Other	0	0.0%

As with the hospital administrator and nurse surveys, the non-English speaking patients were provided with an open-ended question soliciting any comments that they may have about bilingual nurses. Every comment reiterated the demand of the patient sample for bilingual nursing services to help with communication.

Table 47: Are there other comments you would like to make for this survey?

#### Comments (As Interpreted by Interviewer)

- It would really help to have bilingual nurses because of the fact that there are people that don't speak English and can't understand the nurses and doctors. This makes it more confusing
- Yes, I think that having an interpreter or bilingual nurse helps because sometimes my family members are too busy to be coming to the hospital to be with me and interpret.
- A translator would have allowed better communication of symptoms and better treatment.
- It would have been better to have nurses that speak Spanish. I needed a lot of help because I don't understand English.
- It is very important to have bilingual nurses
- That they hire this interviewer to provide nurses that speak Spanish. That the hospital help and open a school for nurses that speak Spanish.
- Would be appropriate if I could communicate in my own language concerning my health status
- If someone speaks Spanish it is better for him.

## **Conclusions**

This study reports the results of surveys administered to three distinct populations: hospital administrators, nurses, and patients. Each group was surveyed to ascertain information concerning both the status and impact of the bilingual nursing population in Northwest Arkansas. When the results of this report are combined with the projections of growth in the Hispanic population in Northwest Arkansas and in the incidence of



Hispanic nurses, some aspects of the demand for and supply of bilingual nurses can be described.

## Demand for Bilingual Nurses in Northwest Arkansas

In the CBER's 2004 report entitled 'Nursing Workforce Shortage and Diversity Disparity in Northwest Arkansas', a set of projections were made about the growth of the overall population of the region. In that report, it was projected that the proportion of Hispanics will go from accounting for 9.5 percent of the population in 2005 to 16.0 percent of the population in 2025. As noted in that report, "It is difficult to define which segment of the population is bilingual. It is almost certain all first generation immigrants speak their own language, but not necessarily true that they are fluent in the language of their adopted country."

According to the 2000 Census, people who spoke a language other than English at home accounted for 10.4 percent of the population in the Fayetteville-Springdale-Rogers metropolitan area, and 5.7 percent of the population spoke English "less than very well." People who specifically spoke Spanish at home accounted for 7.9 percent of the population in the Fayetteville-Springdale-Rogers metropolitan area, and 4.8 percent spoke English "less than very well." Because of the relatively small population of Northwest Arkansas, the U.S. Census Bureau does not have updated annual estimates for people who speak languages other than English at home, but it is reasonable to assume that as the Spanish-speaking population increases as a percent of the population, so too will the proportion of people who speak English "less than very well."

The results of the surveys of hospital administrators and the nurses in Northwest Arkansas point to some of the reasons non-English speaking patients could be better served by bilingual nurses. A majority of respondents believe that there are negative impacts on several patient care quality measures when non-bilingual nurses interact with non-English speaking patients. In particular, patient assessment stands out as being perceived as adversely affected by both survey samples.

Table 48: Comparison of Hospital Administrator and Nurse Perceptions of the Effect of non-Bilingual Nurse Interactions with non-English Speaking Patients

Measure	Percent of Hospital Administrators Reporting Negative or Strong Negative Effects	Percent of Nurses Reporting Negative or Strong Negative Effects
Patient Assessment	88.9%	79.7%
Standard of Care	77.8%	57.2%
Record Confidentiality	44.4%	51.3%
Facility Efficiency	30.0%	79.8%

According to the results of the non-English speaking patient survey, of all forms of communicating medical information, having hospital translators is most beneficial when compared to receiving medical information in a written form, via a telephone translator,



or through the interpretation of a friend or family member. In particular, the survey respondents indicated that the primary benefit would be the ability to get timely answers to questions that they may have.

## Supply of Bilingual Nurses in Northwest Arkansas

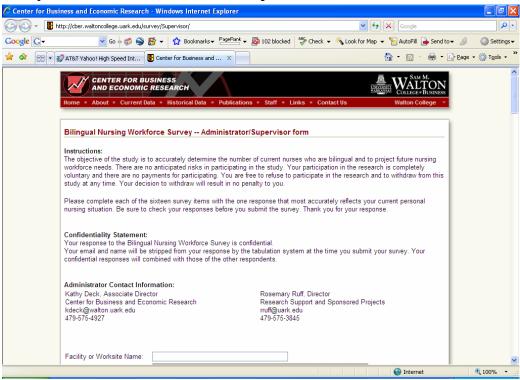
This study identifies the supply of bilingual nurses in Northwest Arkansas, both quantitatively and qualitatively. Within the six hospitals in Benton and Washington Counties, administrators report that of the 1,497 nursing staff members, 3.5 percent have bilingual capabilities. When queried about their own bilingual skills, 4.5 percent of the sampled RNs indicated they have proficient or fluent oral Spanish skills and 6.7 percent of the sampled LPNs indicated they have proficient or fluent oral Spanish skills. Moreover, an additional 48.8 percent of RNs and 37.5 percent of LPNs indicated they have elementary oral Spanish skills. This implies that there is a basis to build upon beyond Hispanic nurses in terms of improving the Spanish fluency of the overall nursing population.

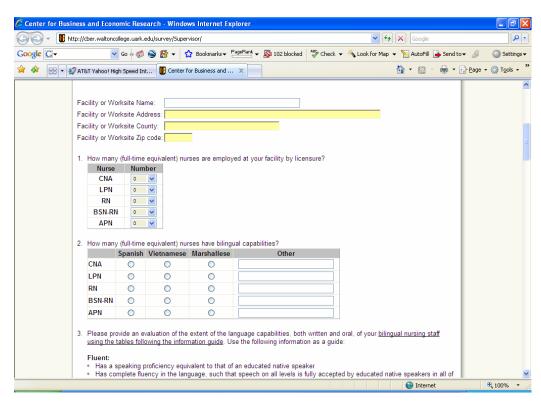
The results of this study were not as promising in terms of increasing the Vietnamese, Marshallese, and other second language skills of the Northwest Arkansas nursing population. Only 2.8 percent of the nurse respondents reported elementary oral Vietnamese skills and 2.1 percent of the nurse respondents reported elementary oral Marshallese skills. Because those languages are not taught in a substantial and organized way in the public schools and because the representation of these ethnicities is relatively small in the general, the nursing population has much less familiarity with the basics of the language. Efforts to recruit nurse trainees from these ethnic populations are probably more likely to be successful relative to training the existing nursing population in Marshallese and Vietnamese.



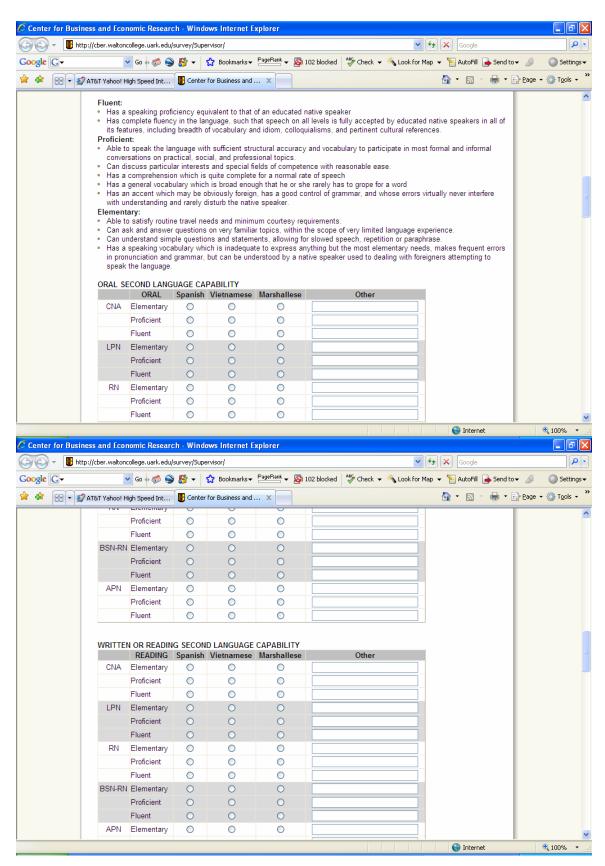
## **Appendix**

## Hospital Administrator Survey

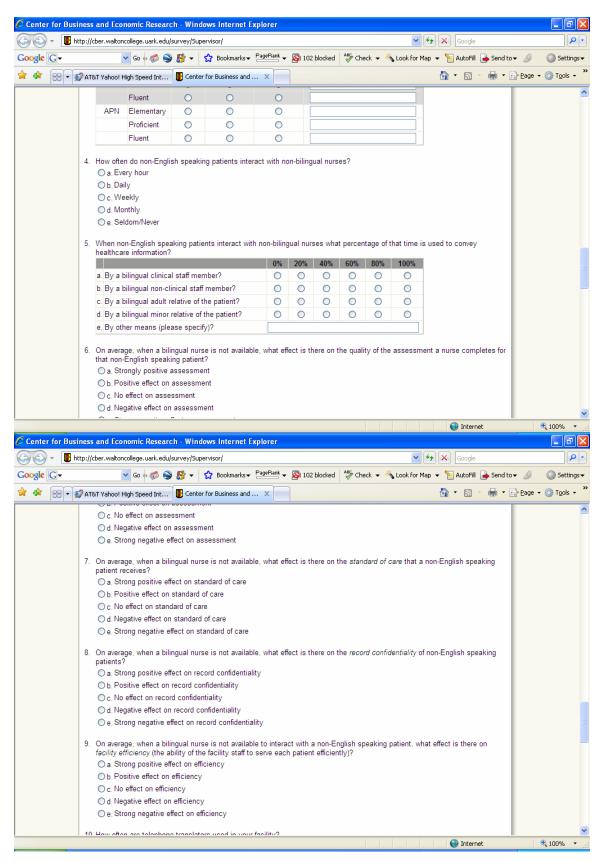




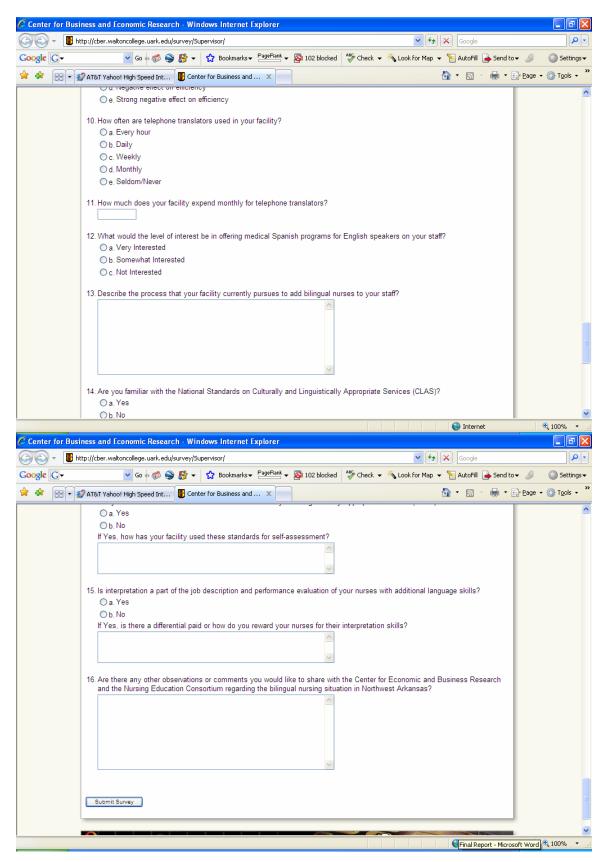






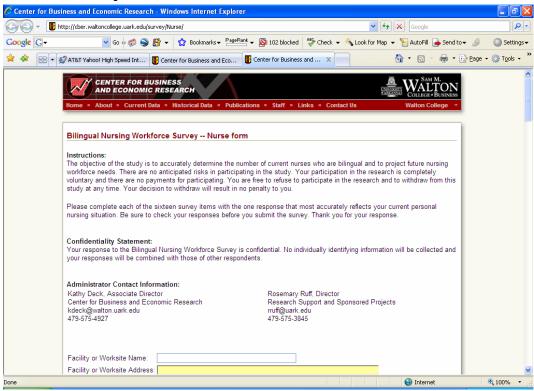


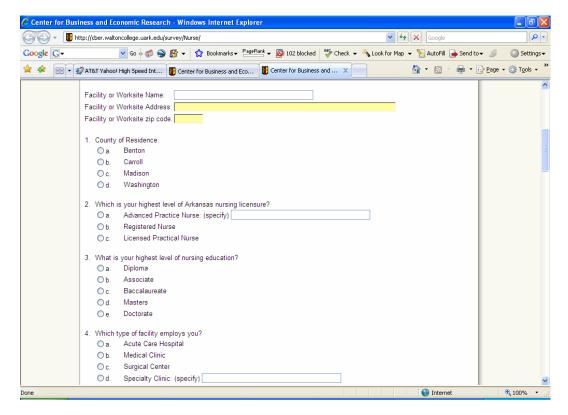




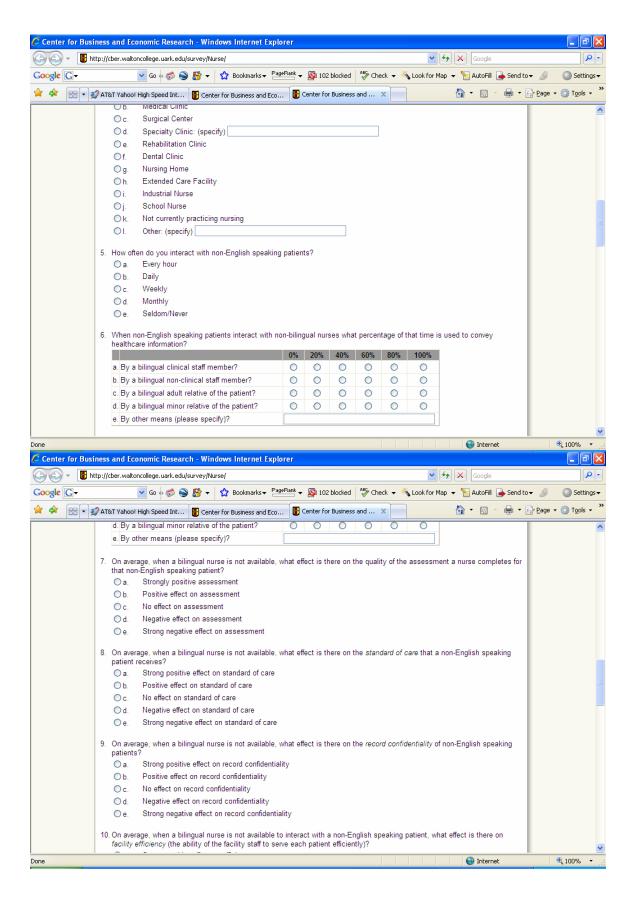


## **Nurse Survey**

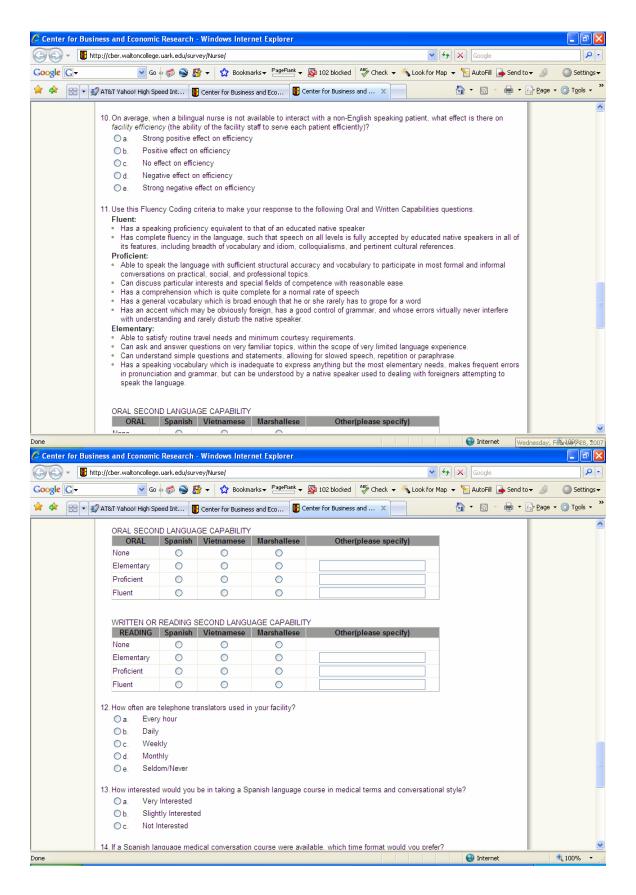




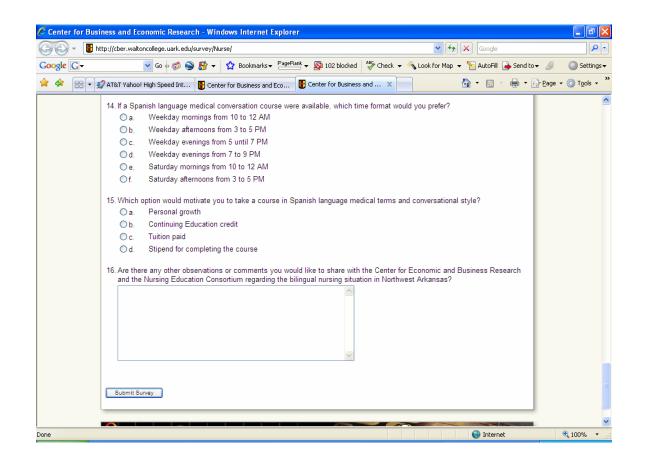














## Patient Survey

### **English Version**

#### INFORMED CONSENT

Title: An Analysis of the Bilingual Nursing Population and Healthcare Outcomes in Northwest Arkansas of Business

Researchers: Administrator:

Katherine A. Deck, Interim Director Center for Business and Economic Research Sam M. Walton College of Business University of Arkansas 217 Reynolds Center Fayetteville, AR 72701-1201 479-575-4151 kdeck@walton.uark.edu Rosemary Ruff, Director Research and Sponsored Programs Research Compliance University of Arkansas 120 Ozark Hall Fayetteville, AR 72701-1201 479-575-3845 rruff@uark.edu

Description: The present study will investigate the effects of the existing bilingual nursing population in Northwest Arkansas on patient care. You will be asked to complete a short, paper survey about your perceptions of your care at this facility.

Risks and Benefits: The benefits include contributing to the knowledge about how bilingual nursing care affects perceived patient outcomes. The results will be used to help aid public policy decisions about bilingual nursing. There are no anticipated risks to participating in the study.

Voluntary Participation: Your participation in the research is completely voluntary. There are no payments for participating.

Confidentiality: No individually identifying information is being collected. Your answers will be aggregated by researchers who will not be able to identify you.

Right to Withdraw: You are free to refuse to participate in the research and to withdraw from this study at any time. Your decision to withdraw will bring no Negative consequences—no penalty to you.



## **Patient Survey Instrument**

Procto	or Name
Patien	at Survey Instructions
•	Please ask the respondent if they would be more comfortable communicating in English or Spanish, and then use the appropriate survey instrument.
•	Please begin the survey by reading the following script:
•	"My name is and I am a nursing student who is helping with a survey that is designed to measure the need for bilingual nursing staff in Northwest Arkansas. Would you be willing to answer a few short questions about your experiences in the hospital? If you have any concerns about your care that you want to pass along to the staff of this facility, I will be happy share them with staff members. These comments are entirely separate from your survey responses. May I begin?"
•	If the patient answers Negatively, thank them for their time and move to the next subject.
•	If the patient answers Positively, ask them to sign two informed consent forms. One will stay with the hospital and one will be returned to the CBER.
•	Please mark the appropriate choice on Question 1.
•	Please ask every respondent Questions 2-7.
•	If the respondent answers (a) on <b>both</b> Question 6 and Question 7, you may skip Questions 8-12.
•	Please mark the respondent's answer to each question in the space provided.
Patien	at Survey
1.	What is the patient's gender? a. Female b. Male
2.	In what year were you born? (Year: 19)



3.	Please identify your race.  a. African American b. Asian c. Caucasian d. Pacific Islander e. Other (Specify Race:)
4.	Please describe your ethnicity a. Hispanic b. Non-Hispanic
5.	Why were you in the hospital?  a. Outpatient treatment b. Surgery c. Emergency Service d. Maternity e. Inpatient treatment
6.	What is your country (continent) of origin?  a. United States b. Mexico c. Central America (Specify Country:) d. South America (Specify Country:) e. Europe (Specify Country:) f. Asia (Specify Country:) g. Other (Specify Country:)
7.	Which describes your ability to understand medical instructions in English?  a. I am completely able to understand medical instructions in English.  b. I am able to understand a limited amount of English.  c. I am unable to understand English.



# Questions 8-12 are specifically for those respondents born outside the U.S. or with limited English proficiency:

8.	Did nursing staff that treated you speak Spanish?
	a. Yes
	b. No
9.	Which answers best describe how you received medical information?  a. Medical information was provided in my language in a written form.  b. A telephone translation service was used to provide medical information.  c. A hospital translator was used to provide medical information.  d. Other. (
10	Of all of these forms of communication, which was most beneficial to you?
10.	·
	a. The written instructions.
	b. The telephone translation service.
	c. The hospital translator.
	d. Other. ()
11.	I would consider bilingual nursing staff to be a benefit because:
	a. It would ease anxiety, frustration, and concerns for patients and family.
	b. It would provide an opportunity to ask questions and receive answers in a
	timelier manner.
	c. It would create more trust between the medical staff and patients and their
	families.
	d. Other: Specify

12. Are there other comments you would like to make for the survey?



### **Spanish Version**

#### INFORME DE CONSENTIMIENTO

Título: Un Análisis del Numero de Enfermeras (ros) Bilingües y de los Resultados del Cuidado Médico en el Noroeste de Arkansas.

Investigadores:
Katherine A. Deck, Directora Interina
Centro de Negocios y Investigación Económica
Patrocinados Sam M.Walton College of Business
Universidad de Arkansas
217 Reynolds Center
Fayetteville, AR 72701-1201
479-575-4151
kdeck@walton.uark.edu

Administrador:
Rosemary Ruff, Directora
Investigación y Programas
Conformidad de la Investigación
Universidad de Arkansas
120 Ozark Hall
Fayetteville, AR 72701-1201
479-575-3845
rruff@uark.edu

Descripción: Este estudio investigará los efectos en el cuidado del paciente, que tienen las enfermeras(ros) bilingües que existen actualmente en el Noroeste de Arkansas. Le pedirán completar una breve encuesta, sobre su opinion acerca del cuidado médico en esta facilidad.

Riesgos y Ventajas: Las ventajas incluyen su contribución para el conocimiento sobre cómo el cuidado de enfermeras(ros) bilingües afecta la percepción recibida por el paciente. Los resultados serán utilizados para ayudar en las decisions del orden público sobre el oficio de enfermera(ro) bilingüe. No se anticipa ningun riesgo en participar en este estudio.

Participación Voluntaria: Su participación en la investigación es totalmente voluntaria. No hay ningún pago por participar.

Acuerdo Confidencial: No se está tomando ninguna información de identificación individual. Sus respuestas serán agregadas, al resto de la información recibida, por los investigadores que no podrán identificarle.

Derecho de Retirarse de la Entrevista: Usted está libre de rechazar en la participación de esta investigación y usted puede retirarse de este estudio en cualquier momento. Su decision de rechazar o de retirarse de esta investigación no le traerá ninguna consecuencia negativa y no será penalizado por su decisión.

Informe de Consentimiento: Yo, \_\_\_\_\_\_\_\_, he leído la descripción, incluyendo el propósito del estudio, los procedimientos que serán utilizados, los posibles riesgos y efectos secundarios, los terminos de confidencialidad, así como la opción de rechazar o retirarse del estudio en cualquier momento. Cada uno de estos puntos me han sido explicados por el investigador. El investigador ha contestado todas mis preguntas con respecto al estudio, y creo que entiendo las implicaciones. Mi firma



indica que estoy de acuerdo a participar libremente en este estudio y que he reci copia de este acuerdo.		
Firma	Fecha	
INSTRUMENTO PARA LA	ENCUESTA DEL PACIENTE	

Nombre del Procurador	
Fecha/	

#### Instrucciones sobre la Encuesta del Paciente

- Por favor pregunte a la persona responsable de llenar la encuesta si el o ella prefiere comunicarse en inglés o español, y de acuerdo a la respuesta utilize el instrumento de encuesta apropiado.
- Por favor comience la encuesta levendo el siguiente informe:
  - o "Mi nombre es\_\_\_\_\_ y soy un estudiante del oficio de enfermera(ro) que está ayudando con una encuesta diseñada para medir la necesidad de tener enfermeras(ros) bilingües en el Noroeste de Arkansas. Estaría usted dispuesto(a) a contestar algunas breves preguntas sobre sus experiencias en el hospital? Si usted tiene alguna pregunta o duda sobre su cuidado en el hospital que usted desea hacer conocer al personal de esta facilidad, me agradaría compartirlas con los miembros del personal. Estos comentarios son enteramente a parte de sus respuestas a la encuesta. Puedo empezar?"
  - o Si el paciente contesta negativamente, agradezcale por su tiempo y continue con el siguiente tema.
  - o Si el paciente contesta positivamente, pida que firme dos informes de concentimiento. Uno permanecerá en el hospital y uno será devuelto al CBER.
  - o Por favor marque la opción apropiada en la pregunta 1.
- Por favor pregunte a la persona entrevistada las preguntas 2-7.
- Si la persona entrevistada contesto <u>ambos</u> (a) en las preguntas 6 y 7 usted puede saltar las preguntas 8-12.
- Por favor marque la respuesta a cada pregunta, proporcionada por la persona entrevistada, en el espacio proporcionado.

#### **Encuesta del Paciente**

13. Cuál es su género?



a. Femenino
b. Masculino
14. En qué año nació? (Año: 19)
15. Por favor identifique su raza.
a. Africano Americano
b. Asiático
c. Caucásico
d. De las Islas del Pacífico
e. Otra (Especifique la raza:)
16. Por favor describa su pertenencia étnica.
a. Hispano
b. No Hispano
17. Porqué estuvo usted en el hospital?
a. Tratamiento de paciente no internado
b. Cirugía
c. Servicio de emergencia
d. Maternidad
e. Tratamiento de paciente internado
c. Tratamento de paerente internado
18. Cuál es su país (continente) de origen?
a. Estados Unidos
b. Méjico
c. America Central (Especifique el país:)
d. Sudamerica (Especifique el país:)
e. Europa (Especifique el país:)
f. Asia (Especifique el país:)
g. Otro (Especifique el país:)
g. Ono (Especifique el país)
19. Cuál describe su capacidad de entender instrucciones médicas en inglés?
a. Puedo entender completamente las instrucciones médicas en inglés.
a. Tuedo entender completamente las instrucciones inedicas en ingres b. Puedo entender una cantidad limitada de inglés.
c. No entiendo inglés.
c. 140 chilchid ingics.



## Las preguntas 8-12 son específicamente para las personas entrevistadas que no nacieron en los Estados Unidos ó con abilidad limitada de entender y hablar inglés:

20. Las enfermeras(ros) que le trataron en el hospital hablabán español?
a. Sí
b. No
21. Cuál de estas respuestas mejor describe cómo usted recibió la información
médica?
a. La información médica fue proporcionada en mi idioma en forma escrita.
b. Un servicio de traducción por teléfono fue utilizado para proporcionar la información médica.
c. Un traductor del hospital fue utilizado para proporcionar la información
médica.
d. Otro. ()
22. De todas estas formas de comunicación, cual le era la más beneficiosa?
a. Las instrucciones escritas.
b. El servicio de traducción por teléfono.
c. El traductor del hospital.
d. Otro. ()
23. Yo consideraría que enfermeras(ros) bilingües serián una ventaja porque:
a. Facilitaría a no sentir ansiedad, frustración, y las preocupaciones por
pacientes y familia.
b. Proporcionaría una oportunidad de hacer preguntas y de recibir respuestas
de manera inmediata.
c. Crearía más confianza entre el personal médico, los pacientes y sus
familias.
d. Otro: Especifique:

