ULS' Spanish Online and Automated Intake System Final Report

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I. PROJECT GOALS & OBJECTIVES

The goal for this grant was to develop and implement an automated intake interview system and an online application in Spanish that enhances access to services for low-income Spanish speaking persons and improves access as well as the effectiveness and efficiency of ULS' intake system. The specific objectives follow:

➢ Create and implement an A2J automated intake-form interview system in Spanish that enhances the effectiveness and efficiency of ULS' intake system for Spanish speakers and by implementing system features that allow staff to directly import data from the automated intake system into the client database system; and

➢ Create a more efficient system to screen eligibility for Spanish Speaking applicants which allows greater access to services and increases the number of Spanish-speaking clients served by enabling clients to submit applications and intake data "24/7." and by implementing system features that allow staff to directly import data from the online intake system into the client database system.

II. EVALUATION DATA & METHODOLOGIES

The methods and data collection defined in the evaluation plan were executed as planned and included the following:

➢ Description of system's components, capacities and technical specifications

➢ Description of test protocols and summary of test results and significant system changes based on test results

➢ Confirmation that necessary data is obtained via automated system; description of any changes made to ensure necessary data obtained

- ➢ Pre- and post-implementation data regarding: total number of intakes, intakes/intake worker, average length of intakes, intake worker errors, total number of intakes generated as well as the location and time of submissions and other relevant indicators;

- ➢ Review of entered data, confirmation via intake workers to determine if information input was the same as what was asked;

- ➢ Survey of intake staff regarding the automated intake-form interview system usability and usefulness and satisfaction with automated vs. previous intake mechanisms as well as usability, utility and stability of import function;

- ➢ Online survey of users of the Online Intake System.

III. SUMMARY OF MAJOR ACCOMPLISHMENTS, RECOMMENDATIONS AND FUTURE STEPS

<u>Accomplishments:</u> We were able to accomplish all of our goals in this project. Specifically, we were able to do the following:

- ➢ We set up a system for Spanish speaking applicants to apply 24/7 which effectively screens out ineligible applicants and imports the data directly into our case management system. Some specific results follow:

  - 90% said they found the system easy to use;

  - 100% said they would recommend it to a friend;

  - 100% were determined to be LSC eligible, as compared to only 55% of all other intakes; and

  - Anecdotally, reviewing the information submitted with the applicant takes half as much time as obtaining the information cold.

- ➢ We translated our A2J automated intake script into Spanish. The result is a more efficient, more consistent and higher quality intake procedure as follows:

  - Cut staff time for the initial screening by roughly 8%; and

  - Cut error rates by about 85%.

<u>Recommendations:</u> ULS' experience indicates that this would be helpful to legal aid programs around the country. The SPAIS has been very helpful to staff who no longer have to translate the English script. The SPOA has not been as utilized as

we anticipated it would be so working with other agencies that work with the Spanish speaking community is essential. Also, any program that desires to implement an A2J automated intake script should begin with the strategic policy level, getting staff on board and understand that the concept of an automated intake script is more than a template; it is a fundamental component of providing consistent and decreased errors in screening clients using technology in a purposeful, managed and clearly-articulated way. Project management will be a key component to the success of a project, especially if working with outside partners.

<u>Future steps:</u> ULS received a TIG grant to expand this project to create a version of the A2J interview that can be used in automatically generating a client information sheet in English and Spanish.

IV.   IN-DEPTH ANALYSIS OF ACCOMPLISHMENTS

Objective 1: Create and implement an A2J automated intake-form interview system in Spanish that enhances the effectiveness and efficiency of ULS' intake system for Spanish speakers and by implementing system features that allow staff to directly import data from the automated intake system into the client database system.

We began by reviewing the English A2J automated intake script. Because not everything was getting translated – only the "script" directed towards the client, we had to determine what to translate and what not to translate. Once that was decided, translation into Spanish began. The translation occurred in 2 steps. The first step consisted of running the English version of the script through Google translate. The second step involved our Spanish translator taking the Google translated version and revising it.

The SPAIS was sent out to staff for comment on July 16, 2013. Bugs were fixed as they were reported and suggested improvements were also added as requested. A few examples of changes included minor language changes, minor bugs with the translation not showing correctly, etc. An example of some minor language changes follow:

   "Maybe it's just me… but I always say:
   1.   ¿Su problema legal esta en Utah? For "is your legal problema in Utah?"
   2.   Para datos estadísticos for "for stadistics only…"
   3.   Soltero for "single"

4.   Pareja doméstica for "domestic partner"
5.   Separado for "separated"
6.   Tu eres la pesrona que está demandando la orden de protección o la orden de acecho/acoso? For "are you the one filing for PO/SI?
7.   Usted ha dicho que no hay ingreso en su hogar for "you
8.   The Spanish AIS says Do you or anyone in your household need work related tools or equipment. Which I think is not correct. I would put instead: Usted o algún otro miembro de la familia tiene herramientas o equipos relacionados con el trabajo."

Another suggested additional translations to the automated intake script as follows:

"Maybe the following need translation:
1.   Asian/Black/Hispanic/Native American/White
2.   Person/Organization/nobody
3.   When you choose "criminal charge" The part where it says, "find public info from public defender 211…" is not translated
4.   Are you citizen/resident/none of the U.S.?
5.   Does anyone in household receive SSI/SSDI
6.   Survivors"

An example of an improvement was the ability to add explanatory text when the case was denied for reasons such as criminal cases, unlawful residents, etc.
It went live on our website on August 1, 2013.

We designed the SPAIS systems so that the variables, field order and placement, etc. were identical to the English system. Consequently, the Spanish XSL transforms were also designed identical to the English. Files generated by the automated intake script are run through a transform and then transferred into a separate subdirectory on our network, accessible to our case management system. The XSL transform converts the data generated by the A2J interview into a .csv file. The .csv file is then automatically transmitted to our local server, where we can access it to import into our Kemps. Ken Bresin programmed the import function. Intake workers press a button labeled "Retrieve AIS". This will find any files created by the intake worker and incorporate the information into the table(s) that holds all our client information, determining whether the case was rejected or accepted and create a simple eligibility record or a full case recording based upon the information. Despite the fact that they were identical, we still tested the transform by submitting several test interviews to make sure the

variables and fields were accurate. We also then tested importing the transformed file into our database. So far, the transform and import functions have worked flawlessly. All other aspects of the system track the English version that is in use and has been thoroughly updated and enhanced based on feedback during its use, all now to the benefit of the Spanish version.

To assess the effectiveness of the Spanish automated intake script, we surveyed all those participating in intake, including all intake workers, intake managers and other staff that sometimes had to "fill in" and do intake screening. Of the 7 surveyed (4 intake workers, 1 "fill-in" intake workers and 2 intake managers), 100% said they found that the system helped reduce intake errors, 80% said they liked it, some commenting that it was the best intake system they had ever used, and 80% said they were able to better apply the rules and regulations involved in screening applicants. In addition, although we were unable to track solely Spanish calls, a review of our case management system and phone queue system data showed that the average call length for the initial screening from the automated intake system (AIS) generally (both English and Spanish) was 8 minutes and 43 seconds as compared to an average call length of 9 minutes 30 seconds before implementation of the AIS. Error rates went down from 7.9% prior to implementation of the AIS to 0.9% after implementation. This shows that the automated interview is effectively reducing the time intake workers are spending to screen clients and that it has helped decrease the number of errors made while screening. When surveying staff about the import system, 100% said the system was user friendly and mostly stable. They did express some frustration with the occasional problem with importing the data (though generally, this was caused by their own data entry error) and the occasional problem with accessing the A2J interview due to connectivity issues. These problems have been minimal, however.

Objective 2: Create a more efficient system to screen eligibility for Spanish Speaking applicants which allows greater access to services and increases the number of Spanish-speaking clients served by enabling clients to submit applications and intake data "24/7." and by implementing system features that allow staff to directly import data from the online intake system into the client database system.

We began by reviewing the English A2J online application and translating it into Spanish. Unlike the automated intake script which was only partially translated, everything was translated for the online application. The translation for the online application was also done in 2 steps as described above. After translation, the A2J Author Online Guided Interview was sent to the Diversity Coordinator of the Utah Domestic Violence Council for review of the design by the Hispanic LEP Domestic Violence community and to Centro Hispano, a community organization for the Hispanic community. Feedback was also solicited from DWS workers, Victim Advocates, the Utah Domestic Violence Coalition, other non-profit legal organizations, including Legal Aid Society of Salt Lake and Disability Law Center, Centro Hispano, the courts and Comunidades Unidas. To date, all comments have been positive. No one has suggested any changes to the design, so no changes to design have been made.

We set up the system so that we have very few callbacks and so that we can discuss legal issues with clients immediately during our intake hours. Hence, the procedure is based upon the 2 possible ways clients can reach us after submitting an online application as addressed below:

1) Scheduled appointments: We used our existing structure to implement the procedure. We currently have 4 Spanish speaking intake workers, who will rotate responsibility for the online intake, each taking one day of the week. The intake worker will review online submissions for the previous day while we were not available and be responsible for calling clients who scheduled an appointment. These appointments can only be scheduled up to 2 days in advance and are available in 30 minute increments, currently set for 10:00 am, 10:30 am, 1:00 pm and 1:30 pm. This schedule is adjustable for us so we can set different and/or more times as needed. The intake will proceed pursuant to our current telephone intake process. All submissions will be marked as case type "V" so that we can track the number of cases coming in.

2) Priority call status: We set up a toll-free number that is given at the end of the online intake application process. This number will give the submitter priority

status in our telephone intake process, meaning that they will get directly into a special queue just for them, with intake workers taking calls from this queue with priority status. Once answered by the intake worker, it will follow our current procedure for telephone intake. Use of this queue will allow us to track the number of calls coming in.

As with the SPAIS system, we designed the SPOA systems so that the variables, field order and placement, etc. were identical to the English system. Consequently, the Spanish XSL transform is also designed identical to the English. As noted above, files generated by the online intake application are run through a transform and then transferred into a separate subdirectory on our network, accessible to our case management system. The XSL transform converts the data generated by the A2J interview into a .csv file. The .csv file is then automatically transmitted to our local server, where we can access it to import into our Kemps. Ken Bresin programmed the import function. Intake workers press a button labeled "Online Intake". This automatically retrieves the information from all files sitting on our server when opened. The intake workers then view the information submitted, revise it if needed, add to it, check for duplicates and conflicts, and then if appropriate, move and incorporate the information into the table(s) that holds all our client information. Despite the fact that they were identical, we still tested the transform by submitting several test interviews to make sure the variables and fields were accurate. We also then tested importing the transformed file into our database. So far, the transform and import functions have worked flawlessly. All other aspects of the system track the English version that is in use and has been thoroughly updated and enhanced based on feedback during its use, all now to the benefit of the Spanish version.

The SPOA was put up for testing on August 27, 2013 and officially launched on ULS' website on September 20, 2013.

To assess the effectiveness of the online intake system, we surveyed all those participating. Of the 10 surveyed, 90% said they found the system easy to use and 100% said they would recommend it to a friend. In addition, to determine the effectiveness of the system to screen out ineligible applicants, a review of our case management system data showed that 100% of the applicants were determined to be LSC eligible, as compared to only 55% of all other intakes. In addition, anecdotally, it appears that reviewing the information submitted with the applicant takes half as much time as obtaining the information cold. This shows that the interview is effectively reducing the time intake workers are spending on each individual caller as well as on non-eligible clients.

V. FACTORS AFFECTING PROJECT ACCOMPLISHMENTS

We really had no factors that affected the accomplishment of the project. However, we did have a few things that came up that we had to consider. For instance, one unanticipated consequence was that the Spanish online application has not been used as much as we thought it would. Staff has asked callers through the Spanish automated intake if they knew about the online application and we were surprised by the answers. Many people knew about the application but did not want to use it because they were either illiterate or uncomfortable using technology. We will have to take literacy into account in the future when considering translations. Another constant is the consistency of change. Being able to change the system as new ideas and/or requirements come up is essential.

VI. STRATEGIES TO ADDRESS MAJOR CHALLENGES

We found that the most effective way to use the Spanish online application is through the use of other community agencies and/or advocates who are willing to walk potential clients through the system – not because it is hard to do, but because of the literacy issue. Some of the strategies in place that helped were:

1) Contacting more community agencies who work with the Spanish speaking population and making them aware of the system;

2) Regular communication/meetings. Our intake workers meeting almost daily to discuss the current intake system and make suggestions on improvements and/or changes that would make the work more efficient and better for callers;

3) Project management is essential. Without having a point person to coordinate all the pieces and make the necessary changes to the schedule, the project would likely have been greatly delayed, if even finished.

VII. MAJOR LESSONS AND RECOMMENDATIONS

The primary lessons learned follow:

➢ No matter how much you plan, you need to be flexible. Issues will arise that will cause delays, whether it is with the technology or personnel or something else.

- This is much the same as website content. As with any web page, content and ease of use is the most important factor. The interview questions must be understandable to those who use it. Incorporating all the lessons learned from the website, such as plain language and bringing in partners to make sure we address potential issues and concerns of potential applicants was not only very helpful, but essential.

- As with any project, we need to achieve buy-in from the staff and community partners. Staff and community partners are our greatest ambassadors for the process. If they are able to use the system and see its usefulness to clients, they are likely to refer clients. In addition, getting buy-in especially from senior management goes along way into getting buy-in from other staff members.

- As noted above, project management is essential. Without having a point person to coordinate all the pieces and make the necessary changes to the schedule, the project would likely have been greatly delayed, if even finished.

- We have also been the recipient of those who have gone before, including ourselves. The ability to see what others have done and to incorporate those insights has added tremendously to the project even where it differed from past efforts.

Some recommendations for other grantees include the following:

- When designing systems that involve XML data, be aware that the people who will use the system can find unexpected ways to "break" the system. When this happens, the data will not upload into the case management system. Make the interview as bullet-proof as possible. Take into consideration all the limitations of the case management system, such as character limits, and put those restrictions at the front end.

- Communicate well and get feedback often. Communication is very important in accomplishing any task. Though communication and feedback can be a two-edged sword, we have found it to be invaluable in improving and ascertaining the effectiveness of the system.

- Keep updated on technology tools. As use of the web becomes more popular, the tools being used and access become important in our delivery systems. We

shouldn't be "afraid" to expand our technology to what is currently being used. They can be used effectively and make processes more efficient.