




# Michigan Medicine Interpreter Services

Final Consulting Report  
Prepared by ACT\*M Consultants

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# Executive Summary

Michigan Medicine has experienced inefficient staffing issues in providing interpreter services. Since a total two million patients use its services and represent different demographics, interpreter services are integral to best provide patient care. However, the institution is having difficulty in scheduling interpreters with patients due to lack of an efficient booking system. Around 65% of interpreters are scheduled the day before the appointments, and there are many reported cases that patients either missed the opportunity to have an interpreter or had to wait too long to get assigned appropriate interpreters. In the worst cases, service providers have failed to deliver proper medical service due to this lack of medical interpreters. In this regard, the client is looking for a better way to staff interpreters, and ideally seeks for staffing interpreters on-demand.

To assess the challenges, our team conducted contextual inquiries and personal in-depth interviews with key players from Michigan Medicine Interpreter Services in order to understand their overall work processes and daily workflow. The study was conducted over the past four months based on rigorous qualitative research, insightful findings and interpretation sessions. This report documents methodology, key findings, and final recommendations. Key findings and recommendation summary is as follows:

## **Alternative Interpretation Methods**

While in-person interpretation services are often preferred by providers and interpreters, with over 2,000 requests per month and limited resources, it is impossible to provide an interpreter for each patient appointment at Michigan Medicine. As a result, alternative interpretation methods, such as remote telephonic or video interpreting must be explored.

## **LEP Patient Focus**

While Interpreter Services exemplifies patient-focused values for LEP patients, training issues and other problems with clinics and hospitals makes it appear as if others in the health system are unaware of how to best care for LEP patients. As a result, the issue from lack of awareness of the importance of LEP patient's care from all related parties should be addressed in a timely manner.

## **The MiChart System**

We found that inefficiencies in the Michart system often leads to overbooking or underbooking, leading to overall inefficient staffing of interpreters as one of the root causes of Interpreter Services' staffing problems. Because Interpreter Services is able to make requests to MiChart for overall system changes, we identified multiple places for improvement and suggested recommendations in the current MiChart system.

# Introduction

## **Interpreter Services**

Michigan Medicine Interpreter Services is an organization that provides interpretive services for the greater University of Michigan Medical System, including clinics in Plymouth, Livonia, and Howell. They currently have over 2,000 requests per month for interpretation of more than 70 languages, including Deaf, Deaf/Blind, and Limited English Proficiency (LEP) patients. They provide face-to-face interpretation services, “high-quality telephone interpreting” (UMHS Interpreter Services), and are looking to expand into video remote interpreting (VRI) within the next year (Gatonez). Ambulatory care—of which Interpreter Services is a part—has set a benchmark goal for 80% of interpretive services to be conducted face-to-face (Gatonez). Interpreter Services currently employs about 100 interpreters but their roles are dependent on language spoken and hours worked per week. There are 44 staff interpreters, 20 contract sign language interpreters, 4 administrative staff, and about 40 temporary employees (UMHS Interpreter Services). Spanish, Mandarin, Arabic, and Sign Language are the four most commonly requested services (Gatonez).

## **Project Goal**

Although Interpreter Services is committed to providing the best quality healthcare to all patients regardless of English language capability, there are inefficiencies in their patient scheduling system that can result in confusing day-off rescheduling procedures at best and full appointment cancellations at worst. Interpreter Services claims this is the result of clerks incorrectly scheduling interpreters due to unintuitive scheduling procedures and lack of LEP patient focus. They currently employ different strategies, such as MiChart worklists, clerk training, phone interpretation, and video remote interpreting (VRI) prototyping in order to solve these issues but still record inefficiencies. In order to ensure the best possible health outcomes, Michigan Medicine Interpreter Services would like to better optimize their scheduling process in order to take full advantage of their limited staff and successfully help the high number of LEP patients that use the service.

# Background

## Current Institutional Solutions for Interpretation Services: Speaking Together

Speaking Together: National Languages Service Network (hereafter, Speaking Together) is a national collaborative founded in 2005 that brings together 10 different hospitals in order to foster interdisciplinary health solutions for LEP patients. In practice, these hospitals test different interpreter service solutions in order to “identif[y] effective ways to reduce ethnic and racial disparities in the quality of patient care...providing tools that health systems can use to improve the overall quality of care delivery” (Regenstein, Huang 3). Speaking Together’s main goals are creating national standards of care for (1) quality of language services, (2) quality performance measure implementation, and (3) research pertaining to the effect of effective language service delivery on chronic disease management (Regenstein, Huang 3). Michigan Medicine is a member of this collaborative. The quality control measures established by Speaking Together are based on the Institute of Medicine’s Six Domains of Quality to Language Service (Table 1).

Speaking Together further defined the standards listed below for “qualified” interpreter and bilingual providers. However, Speaking Together left it to the 10 hospitals to determine the definition and practice of “quality” interpretation (Regenstein, Huang 6).

1. Bilingual staff or providers who have been assessed for proficiency in the language(s) for which they provide care.
2. Medical interpreters who have been trained in medical interpreting methods and protocols and assessed for language proficiency.

After careful research and communication with participant hospitals, Speaking Together proposed the following performance measures utilizing a patient-centered framework in order to study the effects of standardization of language services over time (Table 2).

**Table 1 Applying IOM’s six domains of quality to language services**

- **Safety:** Avoiding injuries to patients from the language assistance that is intended to help them
- **Timeliness:** Reducing waits and sometimes harmful delays for those who receive and those who provide language services
- **Effectiveness:** Providing language services based on scientific knowledge that contributes to all who could benefit, and refraining from providing services to those not likely to benefit
- **Efficiency:** Avoiding waste, including waste of scarce language services resources; the time of patients and clinicians, hospital staff, and interpreter services personnel; and equipment, supplies, ideas, and energy
- **Equity:** Providing language assistance that does not vary in quality because of personal characteristics, such as language preference, sex, ethnicity, geographic location, and socioeconomic status
- **Patient-centeredness:** Providing language assistance that is respectful of and responsive to individual patient preferences, needs, culture, and values; and ensuring that patient values guide all clinical decisions

Source: Institute of Medicine, *Crossing the Quality Chasm*. Washington, DC: National Academies Press; 2001.

**Table 2 Proposed Speaking Together performance measures**

- **ST1: Screening for preferred language.** The percent of patients who have been screened for their preferred spoken language
- **ST2: Patients receiving language services from qualified language service providers.** The percent of LEP patients receiving initial assessment and discharge instructions from assessed and trained interpreters or from bilingual providers assessed for language proficiency
- **ST3: Patient wait time.** The percent of encounters where the patient wait time for an interpreter is 15 minutes or less
- **ST4: Time spent interpreting.** The percent of time interpreters spend providing medical interpretation in clinical encounters with patients
- **ST5: Interpreter delay time.** The percent of encounters during which interpreters wait less than 10 minutes to provide interpreter services to provider and patient

Source: Speaking Together, 2006.  
LEP = Limited English proficiency

# Background cont.

Speaking Together also required participant hospitals to engage with non-interpreter hospital staff in order to adequately implement these performance measures. Regenstein and Huang (10) report:

“Such a change required hospitals to interact, either directly or indirectly, with registration staff to educate them about the importance of asking about preferred language, offer suggestions about how the information could be recorded, and encourage them to routinely collect the information, despite adding another information field to the registration process.”

This is important to note because Speaking Together has not only orchestrated a concentrated effort to implement national professional and performance standards but also requires these standards to be hospital-wide in implementation, something that has often been unclear in the past, leading to confusion on the part of clinics (Jimenez 16-26). Likewise, other research finds hospital-wide policy statements promoting “service culture” for LEP patients is just as important as ensuring access to professional interpreters in order to deliver quality language services (Hudelson). The Speaking Together collaborative ultimately resulted in increased performance based on their five proposed performance measures and a shift in hospital-wide attitudes towards recognition of the necessity of quality language services, representing the importance of implementing changes and following standardized performance measures (RWJF 13).

Because Michigan Medicine Interpreter Services is already a member of Speaking Together, many issues of standardization are already being implemented. However, UMHS has emphasized only part of these standards by focusing on the performance measures but failing to integrate Interpreter Services into a greater intra-hospital setting (RWJF 21), resulting in continuing inefficiencies on the part of non-interpreter staff (Participant 1).

## **Technological Innovation in Interpretation Services: Video Remote Interpreting**

Besides phone interpretation services, video remote interpreting (VRI) has also become an alternative to face-to-face interpretation recently, especially for those hospitals which continue to struggle with hiring quality interpreters as following Speaking Together standards. Video services are not only more cost effective and convenient, but also “improve access and quality of care to LEP persons...” (Masland 739). As well as this, VRI has documented improvements over telephone-based interpretation, further improving efficiencies of interpreter services during periods of overbooking (Price 226).

Michigan Medicine Interpreter Services is currently in the process of prototyping a VRI system for their organization due to inefficiencies encountered in current scheduling processes, hostility of providers towards past phone interpretation methods, and the potential to generate revenue by expanding their renowned interpretation services beyond the circle of UMHS (Gatonez).

Technological Innovation in Interpretation Services: Electronic Health Record  
Michigan Medicine Interpreter Services uses MiChart, an electronic health record (EHR) software program, for the scheduling of interpreters to the LEP patients that

# Background cont.

require them. Almost all aspects of patient care are accessed through MiChart, including patient registration and scheduling, transportation services, billing, and patient care orders (MiChart). All approved hospital staff—around 26,000 people—can access MiChart and see past and future visits, assign changes to a patient’s record, and schedule appointments (Swiderski).

Speaking Together includes guides for optimal use of this technology in their initial report on performance measures for hospital language services, informing hospitals that they should meet with IT staff in order to include interpreter registration in their systems (Regenstein, Huang 10). InDemand Interpreting, a technology-enabled language services organization, has created guidelines for effective language service especially related to EHR, noting the following relevant technological and data driven methods of effective interpreter services:

1. Make the preferred language a “stop field” in the software program
2. Track your interpreter requests
3. Compare your interpreter request numbers to the Information Desk and/or Registration numbers
4. Facilitate the documentation on the Electronic Medical Record (EMR) so providers can accurately document the language and the fact that an interpreter was used for the encounter.
5. It is common for patterns of usage to show which will help you staff accordingly
  - For example, Mondays is traditionally a heavy interpreter use day
  - Fridays tend to be lighter in volume
6. Know the number of requests for your top languages and
  - Track daily/monthly requests
  - Track requests by location

# Methodological Overview

## Contextual Inquiry

In efforts to produce sufficient recommendations for the Michigan Medicine Interpreter Services improper scheduling issue our team followed a human-centered approach for comprehending internal processes by utilizing contextual inquiry techniques. Contextual inquiry consists of gathering field data and requirements by observing an organization's day-to-day work activities in order to determine a consensus about the workflow in the context of its environment (Holtzblatt 16). It has become a standard within the industry when it comes to analyzing qualitative data. Being able to observe and capture various processes within the Interpreter Services workflow enabled the team to see different work dynamics and allowed us to produce more concrete analysis. Using the contextual inquiry methodology over the course of the semester our team conducted interviews, observed employees, collected artifacts, and interpreted results via affinity diagrams--all of which assisted us in formulating recommendations for Interpreter Services.

## Interviews

We interviewed a total of five employees within Interpreter Services, each interview lasting between 45 to 60 minutes. Our main objective for conducting interviews was to determine the bases of the Interpreter Service's scheduling problem and how their work activities potentially influence or contribute to this issue. Two members from the team conducted each interview: one as interviewer, the other as documenter. During our initial interview, we were able to develop a better understanding of the Interpreter Services and the impact it has on patients and Michigan Medicine as a whole. The following interviews provided insight into how various roles within the Interpreter Services and the utilization of internal systems such as MiChart work together to schedule interpreters for patients. From our observations, we were exposed to a





# Methodological Overview cont.

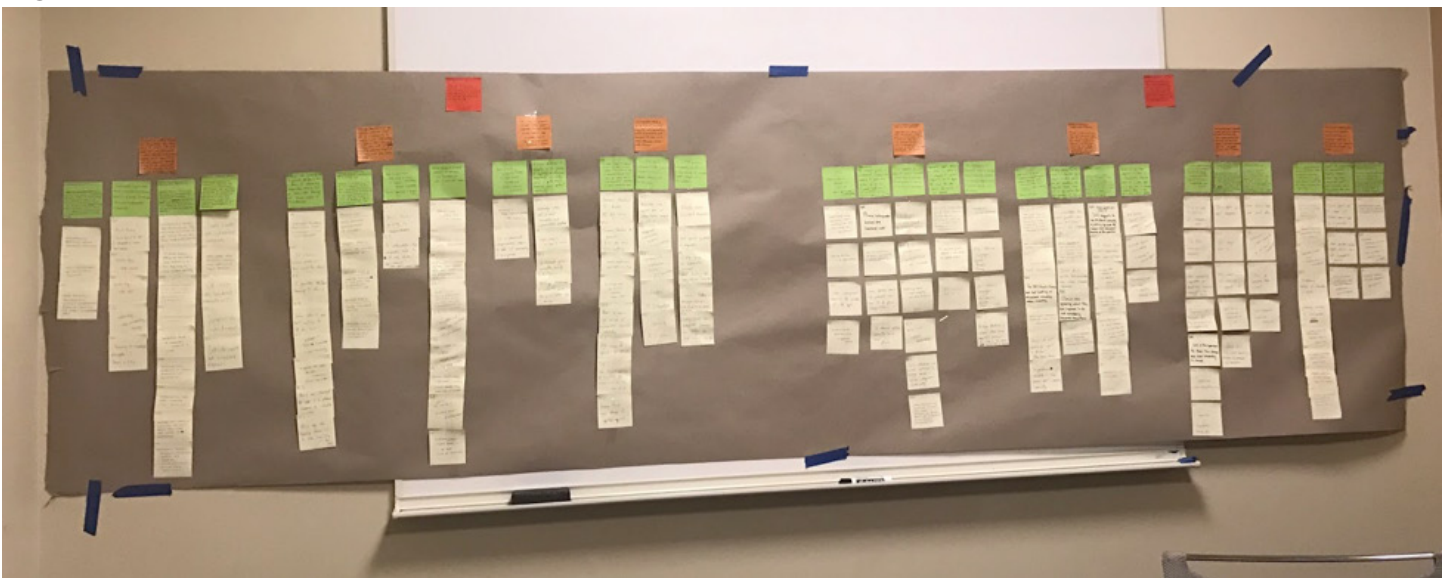
number of different system tools the Interpreter Services use, such as Snapboard, that function simultaneously to schedule interpreters.

From our second interview, we learned that approximately 1 in 100 patients need interpreters, meaning clinics may not be familiar with the process of scheduling interpreters, perhaps leading to the recorded inefficiencies of the current scheduling processes. The team also gained a better understanding of the relationship between Interpreter Services and clinic clerks. Moreover, we learned about the various communication platforms such as Skype messenger and pager services which serves as the main modes of communication between interpreters and the interpreter schedulers. During our final interview, we were able to discern a reoccurring [pattern across all interviews regarding the gaps of times interpreters are busiest and thus most often overbooked: 8:00am -12:00pm and 3:00pm-5:00pm.

## Qualitative Analysis

After our team completed conducting client interviews, we began to interpret, review and analyze the data we have obtained from interviews and observations. Interpretation sessions were held shortly after our interviews with Interpreter Services in order to analyze our findings. These sessions consisted of an interviewer, a note taker, and a general interpretation team member. The notes taken from our interpretation session were then annotated, allowing the team to clarify unanswered questions and increase our comprehension of the data gathered from the interviews. This enabled us to develop a more concrete analysis of our findings. The next step of our analytical process was the construction of our Affinity Wall. An Affinity Wall can be used to make sense of a large amount of qualitative information. As seen in the image below each sticky note represents a single interpretation of the data collected from our interviews (Figure 3). The summarization of the notes enabled the team to identify patterns and develop new conclusions. Each of the sticky notes were grouped into a hierarchy of various clusters, with red notes representing our two main findings- interpersonal and infrastructure problems with the current scheduling processes. Along with interview observations, the Affinity Wall was essential for analyzing all pieces of qualitative data and producing recommendations for Interpreter Services.

Figure 3



# Findings and Recommendations

## Alternative Interpretation Methods

While in-person interpretation services are often preferred by providers and interpreters, with over 2,000 requests per month and limited resources it is impossible to provide an interpreter for each patient appointment at Michigan Medicine. As a result, alternative interpretation methods, such as remote telephonic or video interpreting, must be explored. Based on our findings and research, integrating these technologies will improve the staffing issues articulated by the client in our initial meeting.

### Finding 1

Phone interpretation is neither the preferred or most effective method of providing interpreting services to LEP patients, but eliminating this service could potentially lead to legal issues.

#### Evidence

Telephone interpretation, calls to Interpreter Services, and other last-minute interpretation measures are not efficient systems and lack equal and professional standards of care for LEP patients, resulting in frustration on the part of clinics, interpreters, and patients. From our interviews we learned that less than 40% of patients who were assigned phone interpretation were actually using the service (Participant 2). Moreover, there is no clear data or documentation of what happens to the patients who choose not to use the interpreter phone method as providers and patients fail to follow up with Interpreter Services. This option is not as effective as in-person and VRI options (Price 226) and is less popular (Participant 2). As well as this, the loss of visual information sometimes reduces interpretation quality (Masland 742). Additionally, physicians within the Michigan Medicine Health System often resist using these services even when other options are unavailable, risking patients' ability to understand their diagnoses and treatment options. In addition to the effect this resistance has on patient satisfaction, there are significant legal implications for refusing to provide interpretation services. Under the ADA and the Civil Rights Act, physicians are required to provide an interpreter for LEP patients (Bishop 2012). While telephone interpreting should not be relied on as a primary method of serving LEP patients, when embraced and used correctly, it can provide impromptu interpreter services to avoid legal and ethical troubles.

#### Recommendation 1 (Mid-term)

Eliminating telephonic interpreting completely could leave providers without options when other interpretation services are unavailable, exposing Michigan Medicine to potential legal and ethical issues. However, this method is not as effective as VRI and in-person interpreting, so overuse of telephonic interpreting can lead to lower levels of patient satisfaction and reduced interpretation quality. We recommend utilizing telephonic interpretation only as an emergency measure when all other options have been exhausted to help Michigan Medicine avoid legal ramifications.

# Findings and Recommendations cont.

## **Finding 2**

Video Remote Interpreting (VRI) is an effective method for providing interpreting services to LEP patients when it is not possible to provide the patient with an in-person interpreter.

### **Evidence**

Video remote interpreting (VRI) has become an alternative to face-to-face interpretation, especially for those hospitals which continue to struggle with hiring quality interpreters that adhere to Speaking Together standards. Boasting equal levels of patient satisfaction as in-person interpreting, video services are not only more cost effective and convenient, but also “improve access and quality of care to LEP persons...” (Masland 739). Additionally, VRI has documented improvements over telephone-based interpretation, further improving efficiencies of interpreter services during periods of overbooking (Price 226).

### **Recommendation 2 (Long-term)**

While in-person interpretation is preferred by providers and interpreters, the volume of requests for interpretation services make it unrealistic for Interpreter Services to honor each one of these requests. We recommend implementing a VRI system in which patients can be provided with interpreter services even when interpreters are unavailable through.

## **Finding 3**

Michigan Medicine’s peer institutions who are members of the Speaking Together initiative have experienced success with VRI, and there is reason to believe Michigan Medicine Interpreter Services would experience similar success if they implemented this method as well.

### **Evidence**

The Speaking Together initiative created clear, executable measures to improve the quality of patient care for LEP patients seeking interpreter services. Utilizing these measures, along with technical innovations such as VRI, many member hospitals were able to improve the quality and accessibility of available services for LEP patients, as well as expand offerings to include on-demand services for a wider variety of languages. Patients of Michigan Medicine have similarly benefitted from the adaptation of these quality measures, but resistance against new systems and Speaking Together cultural ideas prevents Michigan Medicine from further advancing care for LEP patients.

### **Recommendation 3 (Long-term)**

The Speaking Together initiative has helped Michigan Medicine transform their interpreting services so that they are able to provide the same level of care for which they are known to LEP patients. However, other Speaking Together institutions have successfully implemented systems that would help reduce the impact of the staffing issues articulated by the client. We recommend looking to these institutions for inspiration and following their lead--for example,

# Findings and Recommendations

making on-demand interpretation options such as VRI available--to improve the patient experience for LEP patients by reducing wait-time and increasing access for patients speaking a variety of languages.

## LEP Patient Focus

### Finding 4

While Interpreter Services exemplifies patient-focused values for LEP patients, training issues and other problems with clinics and hospitals makes it appear as if others in the health system are unaware of how to best care for LEP patients.

#### Evidence a

When speaking to participants in the Interpreter Services office, it was abundantly clear that there is a great deal of respect for LEP patients among those who work with and for this population. Interpreters were willing to adapt their schedules to meet sudden and unexpected needs, interpreter schedulers spend countless hours curating the schedules of the staff interpreters to make sure as many patients as possible have support, and supervisors are committed advocates for their supervisees to ensure they can provide the best care possible. Patient focus is clearly a core value of Michigan Medicine Interpreter Services.

#### Evidence b

Based on interviews conducted with these participants, this value is not as apparent in clerks within the health system due to persistent training and staffing issues, a lack of understanding of the importance of interpreting services, and gaps in cultural understanding. When asked about why they believed clerks were not following through on their responsibility to schedule interpreters for LEP patients, Participant 5 noted that the high turnover rate in clinic offices may be a contributing factor. Coupled with the time-consuming process of learning to use the complex MiChart system, clerks may not be receiving the training needed to understand the importance of these services in serving LEP patients.

#### Recommendation 4 (Mid-term)

While staffing issues at clinics and hospitals around the Michigan Medicine Health System are beyond the control of Interpreter Services, a greater focus on developing compassion and understanding for LEP patient needs in clerks could potentially lessen the impact of these issues on Interpreter Services and LEP patients. We recommend advocating to higher authorities within the Michigan Medicine Health System for this training to be implemented, perhaps using the potential legal or ethical issues and enhanced patient outcomes associated with adequate interpreting services as evidence that it is necessary.

### Finding 5

There is a lack of communication protocols in place for Interpreter Services and clinics to handle LEP patient issues.

# Findings and Recommendations

## **Evidence**

When asked how clerks and interpreter schedulers communicate with one another when issues arise, Participant 5 simply answered, “We don’t.” Despite the numerous scheduling conflicts, errors, and changes that are made on a daily basis, it is rare that clerks or interpreter schedulers email, call, or instant message one another to resolve these issues. When appointments are cancelled or rescheduled, interpreter schedulers are often not notified, leading to wasted time and resources.

## **Recommendation 5 (Short-term)**

Providing better care for LEP patients starts with ensuring all those involved in their care are communicating openly with one another. A patient being scheduled without an interpreter, an appointment being cancelled or rescheduled, or other scheduling anomalies are all examples of situations in which interpreter schedulers and/or clerks would benefit from having a procedure established to contact one another so that they can make accommodations for that patient right away. We recommend using the current systems available to interpreter schedulers and clerks, such as phone and email, to develop a communication plan that includes specific modes of communication and situations in which one or both groups should be contacted to not only encourage more open communication between offices but to also provide better, more coordinated care for LEP patients.

## **Finding 6**

Although Michigan Medicine implemented the procedural parts of Speaking Together, it appears that the system may be struggling to embrace the cultural components of the initiative.

## **Evidence**

Despite Michigan Medicine playing an instrumental role in the revolutionary Speaking Together initiative and the creation of the standards that form the basis of interpreter service programs at hospitals and medical facilities around the country, based on our interviews it appears that the knowledge of the purpose and impact of this program, as well as the role of Interpreter Services, is not shared throughout the health system. When interviewing participants 1, 4, and 5 in particular, it became clear through their description of interactions with Clerks that there was a misunderstanding of who was to be scheduling interpreters and why. These participants also were able to describe scenarios in which a lack of cultural sensitivity and knowledge of how to handle the unique needs of LEP patients led to insensitive handling of the scheduling process. Finally, based on our findings with the MiChart system and participants’ description of the scheduling process, it is clear that the technology that is meant to be used to schedule interpreters for LEP patients contributes to the ambiguity surrounding the role of Interpreter Services and Interpreters by placing the mechanisms for scheduling Interpreters in unintuitive places within the system, as well as labeling interpreters as “Secondary Providers”.

# Findings and Recommendations

## **Recommendation 6a (long-term)**

Similar to recommendation 4 above, handling this finding requires involvement from upper management throughout the hospital system. Advocating for those who train Clerks and manage the facilities in which they work to raise awareness of Interpreter Services and their role, the needs of LEP patients, and incorporating training for handling this population into the onboarding and professional development process may help reduce ambiguity and improve the understanding Clerks have of Interpreting Services at Michigan Medicine.

## **Recommendation 6b (mid-term)**

Ambiguity within the MiChart system is a major contributor to many of the issues surrounding scheduling interpreters, and as such, reducing this ambiguity by improving the usability of the system for scheduling purposes is a critical step in improving scheduling outcomes. We recommend doing this by redesigning the scheduling process with the goal of placing the search function for finding interpreters in a more pronounced place in the system. Additionally, using language that is clear and meaningful to clerks (i.e. “Interpreter” instead of “Provider”) may help reduce confusion.

## **MiChart**

Michigan Medicine Interpreter Services uses MiChart, an electronic health record (EHR) software program, for the scheduling of interpreters to the LEP patients that require them. Clerks are responsible for scheduling interpreters to patients using this system while Interpreter Services is expected to only schedule patients in cases of emergency, such as surgeries, rescheduling, or absent interpreter. When an LEP patient is not scheduled an interpreter in the MiChart system, they are added to the MiChart worklist, a constantly updating list of patients that interpreter schedulers must manually consult and schedule interpreters from either day-of or day before patient appointments. This often leads to overbooking in the morning and late afternoon and underbooking in the early afternoon, leading to overall inefficient staffing of interpreters. Because Interpreter Services is able to make requests to MiChart for overall system changes, we identified multiple places for improvement and suggested recommendations in the current MiChart system.

## **Finding 7**

Both clerks and Interpreter Services acknowledge that scheduling interpreters with the current MiChart system is not an intuitive process.

### **Evidence**

Participant 1 offered us a step-by-step process for scheduling interpreters and gave us two training documents for interpreter scheduling in MiChart. Participant 1 acknowledged multiple pain points about this process from the point of view of clerks, including 1) the signifier for “Interpreter needed” is small and located in a place where clerks may not be looking 2) the process of scheduling an interpreter is different from how clerks usually schedule for primary providers 3) the secondary process of scheduling interpreters is lengthy.

# Findings and Recommendations

## **Recommendation 7a (Short-term)**

Create a more obvious signifier for when a patient requires an interpreter.

## **Recommendation 7b (Short-term)**

Disallow clinic schedulers from completing the scheduling process until an interpreter has been assigned, effectively creating a stop field in the MiChart system. We believe this is easily accomplished since the MiChart system is already configured to recognize that a patient who has not been scheduled an interpreter must be put on to the worklist.

## **Recommendation 7c (Mid-term)**

Redesign the scheduling process to allow clerks to search for both primary and secondary providers at once in the method clerks prefer. By using the search function for both providers and interpreters simultaneously, the system could automatically filter appointments to only show clerk options that have shared availability for both providers and interpreters.

## **Finding 8**

Unlike the previous scheduling software, the MiChart system does not alert clerks or interpreter schedulers when changes to patient schedules have been made, resulting in miscommunication in terms of scheduling.

### **Evidence**

During observation, interpreter schedulers were expected to monitor multiple screens of scheduling data in order to check for any appointment cancellations and updates. They would check these different screens every 3-5 minutes in order to assess whether scheduling was necessary. While interviewing Participant 2, they informed us that the old scheduling software would notify Interpreter Services of a cancellation or schedule change, meaning in interpreter schedulers would not be required to constantly and manually check patient schedules for updates.

## **Recommendation 8a (Short-term)**

An updated notification system should be amended to the MiChart system that alerts both interpreter schedulers and clerks about altered appointment information. This would allow an increased communication pathway between Interpreter Services and clerks, resulting in more efficient, transparent understanding of where patients and interpreters are needed to be. Because this system worked well in the past, it would be best to reinstate it in the future.

## **Recommendation 8b (Short-term)**

Interpreter Services and clinics should work together to create protocols for communication (ie. when should one office call the other for what type of situation). Participant 1 stated that although the best clinics--those that schedule interpreters often and well--do not contact them much, they always make sure to in case of appointment changes or cancellations. This is good

# Findings and Recommendations

practice for all clinics to adopt as it fosters clear communication pathways and decreases confusion on the part of both Interpreter Services and clerks.

## **Finding 9**

There is underlying animosity between clerks and interpreter services as a result of MiChart inefficiencies, leading to confusion about the role of interpreter services and a cycle of blame.

### **Evidence**

At times, all participants expressed dissatisfaction with the work of clerks and blamed them for many inefficiencies of the MiChart system. When prompted by question for possible fixes that Interpreter Services could implement to mitigate the inefficiencies of the scheduling process, both Participant 1 and Participant 2 adamantly believed that scheduling processes would work perfectly “if only clerks did their jobs correctly.” These comments did not acknowledge the inefficiencies underlying the entire system and instead placed almost all blame onto clerks.

### **Recommendation 9a (Short-term)**


Interpreter Services and clinics should work together to address the scheduling inefficiencies caused by the MiChart system. Perhaps both entities appealing for MiChart changes and more efficient scheduling processes could both encourage cross-department teamwork and the chances of being listened to by both MiChart for system changes and the upper level management needed to make these changes happen.

### **Recommendation 9b (Mid-term)**

Interpreter Services should conduct more thorough, empathetic surveys of what goes wrong in the scheduling process in clinics. By addressing scheduling inefficiencies through clinic-cited pain points, Interpreter Services and clinics can work together to create a better, more efficient scheduling process in the MiChart system.



# Conclusion

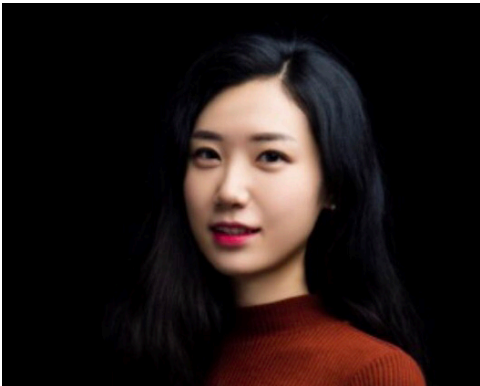


In order to seek the root causes of the client's problem and more robust and efficient interpreter services scheduling system, our group conducted contextual inquiry, in-depth interviews and analyzed existing problems to find the most feasible and practical solutions. Through the study, the team was able to analyze a large amount of qualitative data and through this process we truly realized that providing a high quality of interpreter services is crucial to Michigan Medicine as their core mission is to offer excellent care to every patient. As one of the top-notch medical institutions inside and outside the country, future investment based on previously mentioned recommendations would be critical and should be addressed in a timely manner. This would not only allow every patient of Michigan Medicine to enjoy the best medical service but also enables the institution to thrive in the long run. We hope that our recommendation can shed lights on future investigations and improvements into interpreter service scheduling systems at Michigan Medicine.

# Works Cited

- Bishop, Anne W. "Physicians Required to Provide Interpretive Services to Non-English Speaking Patients." *The Impact of Fake News: Economy - Part 2 - Lexology*, Snell & Wilmer LLP, 31 May 2012, [www.lexology.com/library/detail.aspx?g=1dcd0d32-07df-4d51-af10-9c21331d0c70](http://www.lexology.com/library/detail.aspx?g=1dcd0d32-07df-4d51-af10-9c21331d0c70).
- Gatonez, Oliver. Consulting Interview. 16 Oct. 2018.
- Holtzblatt, Karen, and Hugh Beyer. "Principles of Contextual Inquiry." *Contextual Design*, 2017, pp. 43-80., doi:10.1016/b978-0-12-800894-2.00003-x.
- Hudelson, P., Vilpert, S. "Overcoming language barriers with foreign-language speaking patients: a survey to investigate intra-hospital variation in attitudes and practices." *BMC Health Services Research* 9:187 (2009). BMC. Web. 21 Oct. 2018.
- InDemand Interpreting. "Language Access Plan Basics." 2016. [indemandinterpreting.com](http://indemandinterpreting.com). Web. 21 Oct. 2018.
- Jimenez, Luz E. "Barriers to Interpreter Use in the Medical Clinical Encounter." (2009). *Yale Medicine Thesis Digital Library*. 140. Web. 20 Oct. 2018.
- Masland, Mary C., Christine Lou, and Lonnie Snowden. "Use of Communication Technologies to Cost-Effectively Increase the Availability of Interpretation Services in Healthcare Settings." *Telemedicine Journal and e-Health* 16.6 (2010): 739-745. PMC. Web. 21 Oct. 2018.
- Price, Erika Leemann et al. "Interpreter Perspectives of in-Person, Telephonic, and Videoconferencing Medical Interpretation in Clinical Encounters." *Patient education and counseling* 87.2 (2012): 226-232. PMC. Web. 21 Oct. 2018.
- Regenstein M, Huang J et al. "Hospital Language Services: Quality Improvement and Performance Measures." *Advances in Patient Safety: New Directions and Alternative Approaches (Vol. 2: Culture and Redesign)* (2008). NCBI. Web. 20 Oct. 2018.
- RWJF. "RWJF Program Results Report." 18 April 2011. [rwjf.org](http://rwjf.org). Web. 21 Oct. 2018.
- Swiderski, Kelly. Consulting Interview. 16 Oct. 2018.
- UMHS Interpreter Services. "About us." [med.umich.edu/interpreter](http://med.umich.edu/interpreter), 2018. Web. 20 Oct. 2018.

# Our Team



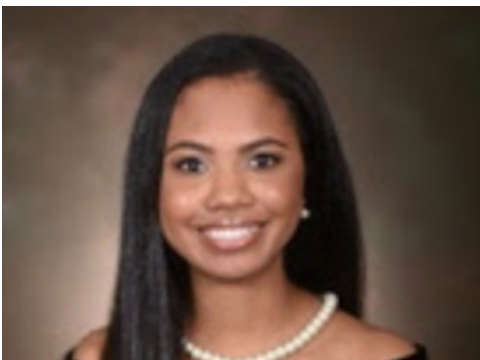
## **April Shin**

April Shin is a passionate User Experience designer. She is currently a first-year graduate student studying Human-Computer Interaction at the University of Michigan. April is an experienced User Experience/Business professional with a demonstrated history of working in the financial, consulting services industry. Skilled in UX Design/Research/Strategy, Future Trend/Data analysis, Leadership, and UX/BX marketing.



## **Chloe Clark**

Chloe Clark is a first-year student in the Master of Science in Information program at the University of Michigan, specializing in UX Design and HCI. In addition to the several years she spent working at a small private liberal arts college in digital engagement and admissions, she also has experience working at a major metropolitan hospital system in graphic design and marketing.



## **Tayloir Thompson**

Tayloir Thompson is a first-year MSI student specializing in User Experience. She recently graduated from Spelman College with a B.S. in Computer Science. She is excited to work with Michigan Medicine this semester!



## **Megan St. Andrew**

Megan St. Andrew is currently studying UX Design and HCI at the University of Michigan School of Information. Her past experiences include work with international organizations and research on various topics in media in relation to gender and ethnic identities. Now, her area of focus is designing technological objects and spaces for traditionally under-represented groups in information science.

