

## **Evaluation of the Casework Documentation Pilot**

### *Final Report*

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Submitted by:

Cynthia Osborne, Ph.D.  
Director, Child and Family Research Partnership  
LBJ School of Public Affairs, University of Texas at Austin

Authors:

Cynthia Osborne, Ph.D.  
Director, Child and Family Research Partnership  
Associate Professor  
LBJ School of Public Affairs, University of Texas at Austin

Anna Lipton Galbraith, MA  
Senior Research Associate  
Child and Family Research Partnership  
LBJ School of Public Affairs, University of Texas at Austin

Kyle Bradbury, MA  
Research Associate  
Child and Family Research Partnership  
LBJ School of Public Affairs, University of Texas at Austin

## EXECUTIVE SUMMARY

This report presents findings from the evaluation of an eight-week pilot of SpeakWrite transcription services by the Texas Department of Family Protective Services (DFPS). SpeakWrite contracted with Dr. Cynthia Osborne, Associate Professor and Director of the Child and Family Research Partnership (CFRP) at the Lyndon B. Johnson School of Public Affairs at the University of Texas at Austin, to conduct an independent evaluation of the pilot. The purpose of the evaluation was to answer the following research questions to guide DFPS's decisions related to the potential adoption of SpeakWrite:

1. Do caseworkers prefer SpeakWrite over other casework documentation methods?
2. How does access to SpeakWrite influence documentation quality, including accuracy, level of detail, and timeliness of documentation?
3. What are the costs associated with adopting SpeakWrite?

### Summary of Findings

Key evaluation findings include:

- The majority of caseworkers prefer Speakwrite, but Investigators preferences' are more divided.
- Most caseworkers report that SpeakWrite increases accuracy and improves the level of detail in documentation, and many report that it saves time.
- Challenges related to using SpeakWrite may decrease as caseworkers become more familiar with the tool.
- The empirical evidence from the pilot is too limited to draw firm conclusions about the effect of SpeakWrite on accuracy, level of detail, or timeliness. However, some trends toward an improvement related to level of detail are noted.
- Providing access to SpeakWrite at the level of use during the pilot period would cost DFPS approximately \$181 per caseworker each month, but actual costs may be lower, and this rate should be considered relative to current spending on documentation, including overtime pay.

### Summary of Recommendations

SpeakWrite can be a valuable tool for CPS caseworkers. DFPS may want to make strategic investments in SpeakWrite, particularly if further research shows that access to SpeakWrite during the pilot period was associated with reductions in the amount of overtime caseworkers worked due to documentation.

Although the empirical evidence was too limited to conclude that SpeakWrite affects the quality and timeliness of casework documentation, the majority of caseworkers who were given access to SpeakWrite during the pilot reported that they prefer SpeakWrite to their prior documentation method and many caseworkers and supervisors noted that SpeakWrite facilitated more timely and detailed documentation. Some caseworkers and supervisors also

indicated that use of SpeakWrite reduced overtime worked, which warrants further investigation.

If DFPS adopts SpeakWrite the agency may want to control the expenses associated with the transcription service by not making use of the service mandatory and setting usage caps, which are offered by SpeakWrite. Analyzing IMPACT and SpeakWrite data on an ongoing basis will be important for ensuring investments in SpeakWrite are helping the agency meet its goals and are cost-effective.

## INTRODUCTION

This report presents findings and recommendations from an evaluation of an eight-week casework documentation pilot of SpeakWrite transcription services by the Texas Department of Family Protective Services (DFPS) which oversees the department of Child Protective Services (CPS). Documenting casework is a central part of caseworkers' job responsibilities. Accurate, detailed, and timely documentation is critical for ensuring that CPS seamlessly serves the children and families with whom they work, as well as for informing law enforcement and judicial proceedings. Because of the nature of the agency's work, casework documentation is time sensitive, but caseworkers frequently struggle to complete their documentation within the timeframes required by the agency. Casework documentation is also time-consuming and documentation demands may contribute to overtime worked, work stress, and staff turnover. In addition, there is substantial variation in the quality of casework documentation, which can impact the quality of the services CPS provides.

Many caseworkers, particularly Investigators, are required to document contacts in IMPACT within a short window of time (24 hours). Currently, the standard options for caseworkers to document their casework include manual entry and the use of Dragon software. Caseworkers can type their notes, either during or after they make a contact, for entry into IMPACT or caseworkers can use Dragon, a software that allows caseworkers to make a voice recording of their notes and receive a computerized transcription.

SpeakWrite is a transcription service that allows clients to speak their notes to a dictation application and uses typists to transcribe the recordings. Although DFPS has used SpeakWrite in the past, caseworkers do not currently have access to SpeakWrite. SpeakWrite provided DFPS the opportunity to pilot their services for eight weeks, during which time the agency could determine whether it is an efficient and cost-effective tool for its caseworkers.

The goal of SpeakWrite is to improve caseworkers' ability to complete their contacts in a timely manner, increase the level of detail in their contacts, and allow caseworkers to maximize time with their clients by reducing the time they spend documenting their casework. Additionally, SpeakWrite asserts that their services may reduce caseworker turnover and increase the number of contacts that are documented on time, and ultimately, improve child outcomes by allowing for better, more detailed, and timely data.

SpeakWrite also agreed to pay for an independent evaluation of the SpeakWrite services to assist DFPS with its decision making. Based on the recommendation of DFPS, SpeakWrite contracted with Dr. Cynthia Osborne, an Associate Professor and Director of the Child and Family Research Partnership (CFRP) at the LBJ School of Public Affairs at the University of Texas at Austin to complete the evaluation. This report presents the evaluation design, findings, and recommendations.

## EVALUATION DESIGN

### Evaluation Objectives

The goal of the evaluation is to determine whether providing caseworkers with access to SpeakWrite transcription services allows them to document casework more efficiently and improves the quality of casework documentation. To the extent possible, the evaluation aims to provide DFPS with insights into whether adopting SpeakWrite would be cost-effective and could be used to improve agency outcomes.

The evaluation aims to answer three primary research questions to inform DFPS decision-makers' deliberations regarding SpeakWrite transcription services:

1. Do caseworkers prefer SpeakWrite over other casework documentation methods?
2. How does access to SpeakWrite influence documentation quality, including accuracy, level of detail, and timeliness of documentation?
3. What are the costs associated with adopting SpeakWrite?

### Evaluation Design

The SpeakWrite pilot was conducted in Williamson County, Texas in January and February of 2015. During the pilot period SpeakWrite randomly assigned 72 caseworkers to one of two conditions: caseworkers who received access to SpeakWrite transcription services (Treatment group) and caseworkers who did not receive access to SpeakWrite (Control group). SpeakWrite stratified the sample based on caseworkers' job positions and length of employment, such that caseworkers with different positions and tenure were evenly distributed across the Treatment and Control groups. The majority of the caseworkers included in the pilot were Investigators or Conservatorship Specialists, but both groups also included Kinship Specialists, Adoption Specialists, Family-Based Services Specialists, and Human Services Technicians.

Caseworkers in the Treatment group participated in a training session on January 5, 2015 to learn how to use SpeakWrite and were strongly encouraged by their supervisors to use the service throughout the pilot period. The Control group did not have access to SpeakWrite: they continued to use their usual method of documentation which included the use of Dragon software or typing their contacts manually into IMPACT.

This evaluation examines differences between the Treatment and Control groups' documentation across two time periods: the pre-treatment period from October to December 2014, before either group had access to SpeakWrite, and the treatment period from January to February 2015, when the Treatment group had access to SpeakWrite. This approach allows evaluators to analyze differences in the preferences of the Treatment and Control groups and differences in the quality of the two groups' documentation over time.

## Data Sources and Analysis

The evaluators used several data sources to inform this evaluation. Each data source is detailed below, including the sample sizes where applicable.

### **SURVEY OF CASEWORKERS**

The evaluators surveyed caseworkers in both the Treatment and Control groups after the treatment period ended (March 2015). The survey inquired about caseworkers' documentation processes and preferences. Survey respondents included 32 caseworkers from the Treatment (89% response rate) group and 26 caseworkers from the Control group (72% response rate). Study participants who did not respond to the survey included staff who were no longer with the department at the end of the study or who were on long-term leave at the time the survey was conducted. The job positions of survey respondents were evenly distributed across the Treatment and Control groups. Survey responses were analyzed for differences between the Treatment and Control groups and differences over time.

### **FOCUS GROUPS WITH CASEWORKERS**

The evaluators conducted two focus groups (one Treatment and one Control) with caseworkers after the treatment period ended (March 2015) to inquire about their casework documentation processes and preferences. One focus group included six caseworkers from the Treatment group and the other focus group included seven caseworkers from the Control group. Both focus groups included caseworkers from all of the job positions included in the study.

### **SUPERVISOR COMMENTS**

The evaluators asked supervisors who oversee the caseworkers participating in the study to provide their observations about caseworkers' experiences using SpeakWrite. The evaluators interviewed select supervisors before and after the treatment period and solicited feedback over email from a broader group of supervisors after the treatment period (March 2015). The supervisors were asked their opinions regarding the advantages and disadvantages of using SpeakWrite to document casework and about any changes in the quality and timeliness of casework documentation that they observed during the treatment period. Four of the ten supervisors provided feedback via email and three supervisors were interviewed.

### **CASEWORKERS' CONTACTS**

The evaluators reviewed 203 contacts documented by 20 caseworkers during the pre-treatment period and the treatment period to assess differences in quality between the Treatment and Control groups and changes in quality over time. Evaluators oversampled both groups in the treatment period to increase the sample size for the comparison between Treatment and Control. The sample sizes for each period and group are presented in Table 1. Because all of the contacts required redacting names by hand and the evaluation timeline was short, the contact sample size was limited to approximately 200 contacts, rather than the 800 contacts the evaluators initially proposed in the evaluation plan. In addition, the evaluators only pulled contacts from 20 caseworkers (10 in the Treatment group and 10 in the Control group)

and the contacts analyzed were limited to contacts made by Investigators and Conservatorship specialists.

**Table 1: Contact Coding Sample Size**

	October to December 2014	January to February 2015	Total
Treatment	INV: 25 CVS: 11	INV: 50 CVS:11	<b>INV: 75</b> <b>CVS: 22</b>
Control	INV: 23 CVS:12	INV: 48 CVS:22	<b>INV: 71</b> <b>CVS: 34</b>
<b>Total</b>	<b>INV: 48</b> <b>CVS: 23</b>	<b>INV: 98</b> <b>CVS: 33</b>	<b>INV: 146</b> <b>CVS: 56</b>

Notes: INV indicate Investigator contacts and CVS indicate Conservatorship Specialist contacts.

The contacts were redacted of identifiable information and each contact was reviewed by two coders to assess the accuracy and level of detail. To assess accuracy, each coder rated contacts on a scale of 1 to 5 (5 indicating the highest level of accuracy) weighing the spelling, grammar, sentence structure, and clarity. To assess the level of detail, coders rated three criteria on a 1 to 5 scale (5 indicating the highest level of detail), evaluating the degree to which: 1) the contact captured the language of the interviewees; 2) the allegation was clearly documented; and 3) another caseworker could take over the case. Coders were provided descriptions of the criteria for each rating (1 to 5) and trained on the coding processes. The contact coding was reviewed to ensure inter-rater agreement between coders and ratings that disagreed by more than one point were reconciled by a third coder.

Although results from the contact analyses are presented in this report, there are important limitations to these analyses. In addition to only being able to review 200 contacts, the evaluators found that there was limited variation within a caseworkers' documentation. That is, if a caseworker was detailed in one of her or his contacts, the caseworker was generally detailed in all of the contacts. The small sample size and lack of variation within a caseworker limited the statistical power in the analyses and made it difficult for the evaluators to draw empirical conclusions about the differences observed between the Treatment and Control groups and across time periods. These limitations are further detailed in the Findings section of this report. For future analysis, the evaluator would require a bigger sample of contacts and select a smaller number of contacts per caseworker.

### **SPEAKWRITE PILOT DATA REPORTS**

SpeakWrite provided the evaluators with data reports from the pilot period including the Job Turnaround Report, Cap Report, and Usage Report. Evaluators used data from these reports to inform analyses related to costs and turnaround time presented in this report. These reports could not be linked directly to the observed contacts, however.



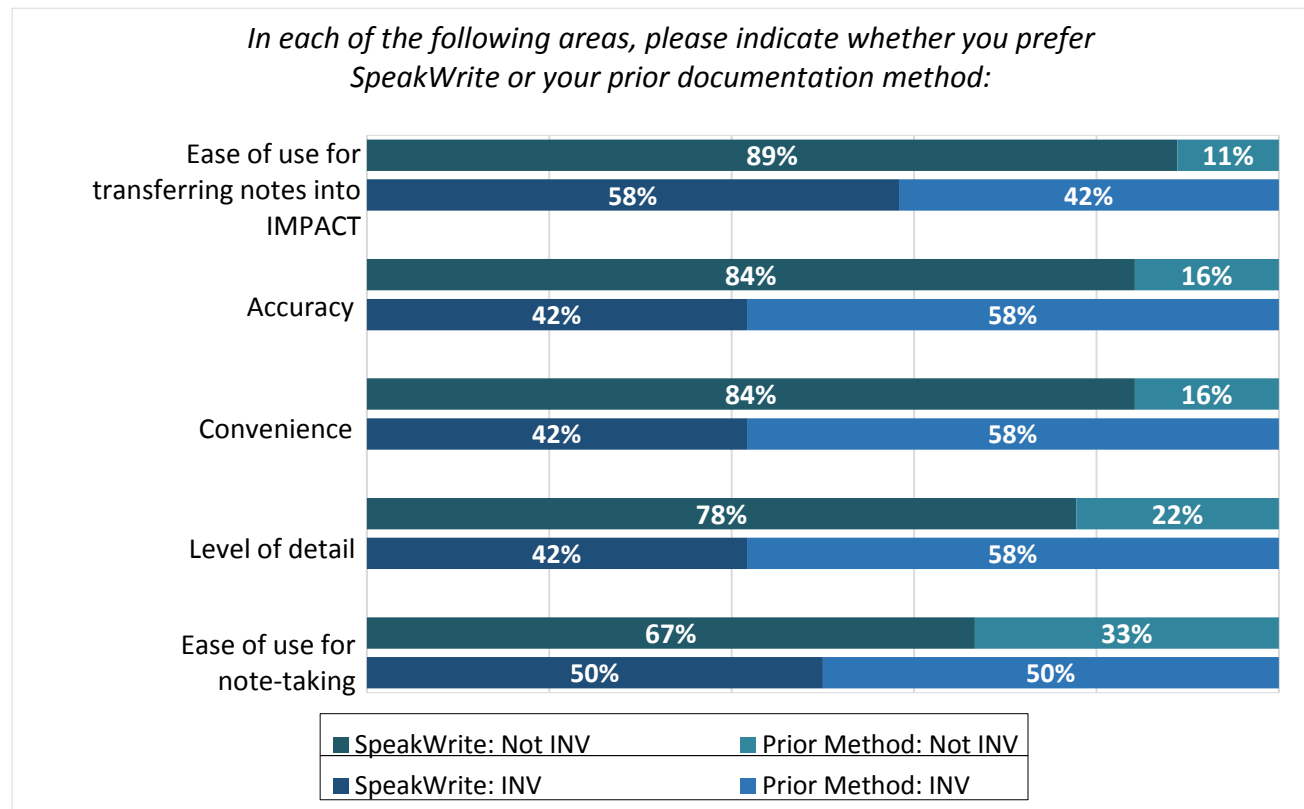
## FINDINGS

### Do caseworkers prefer SpeakWrite over other methods for casework documentation?

#### THE MAJORITY OF CASEWORKERS PREFER SPEAKWRITE, BUT INVESTIGATORS' PREFERENCES ARE MORE DIVIDED

At the end of the pilot period, the majority of the caseworkers in the Treatment group reported that they prefer SpeakWrite over their prior documentation method. However, Investigators were more divided in their preferences than caseworkers in other positions [shown in Figure 1]. The majority of caseworkers in the Treatment group reported that the documentation method they used before they had access to SpeakWrite was typing their contact notes manually into IMPACT, either during or after making the contact. Two caseworkers reported using Dragon prior to SpeakWrite, but in general, caseworkers reported that they find Dragon is very difficult to use and the overwhelming majority do not use Dragon.

**Figure 1: Casework Documentation Preferences of SpeakWrite Users (Treatment Group, N=32)**



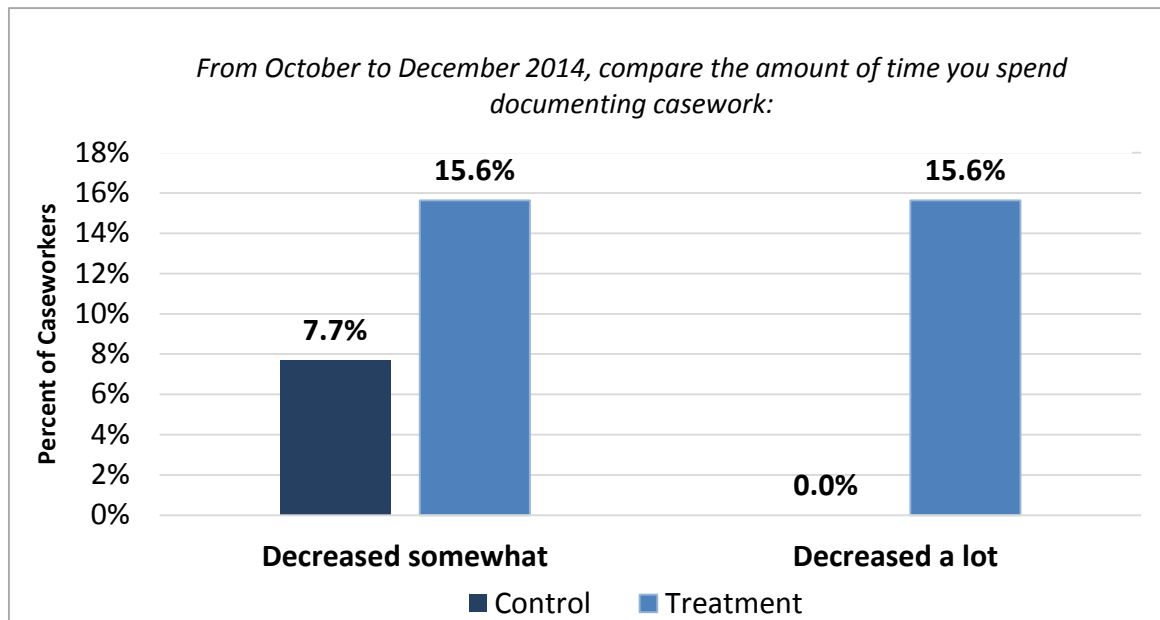
Source: Casework Documentation Pilot Survey.

During the focus groups, evaluators found that caseworkers' preferences related to SpeakWrite are influenced by their note-taking method. Some caseworkers use real-time documentation (primarily Investigators), others take handwritten notes and type them later, and others do not take notes during their contacts and type them up after the fact, either directly into IMPACT or into Word to be copied into IMPACT. Caseworkers who use real-time documentation were more likely to report during the focus group that they prefer manual note-taking to using SpeakWrite. Although caseworkers who typically type their notes after making a contact found that using SpeakWrite saved time and allowed them to be more detailed, caseworkers who use real-time documentation found that using SpeakWrite slowed them down and made it difficult for them to be as detailed. Supervisors confirmed that they observed SpeakWrite was a useful tool for many caseworkers, particularly those who had struggled with meeting documentation deadlines in the past, but slowed down some caseworkers who already had good documentation systems in place.

### **MOST CASEWORKERS REPORT THAT SPEAKWRITE INCREASES ACCURACY AND IMPROVES THE LEVEL OF DETAIL IN DOCUMENTATION, AND MANY REPORT THAT IT SAVES TIME**

When asked about the benefits of using SpeakWrite, many of caseworkers in the Treatment group reported that using SpeakWrite frequently saved time and helped them avoid backlog. Importantly, during the focus groups and in open-ended survey responses some caseworkers noted that access to SpeakWrite allowed them to reduce overtime because they were able to complete their documentation more quickly. Nearly one-third of caseworkers in the Treatment group reported that they spent less time documenting contacts when they had access to SpeakWrite [shown in Figure 2].

**Figure 2: Decrease in Time Spent Documenting Casework, Treatment Period**



Source: Casework Documentation Pilot Survey.

Notes: Difference between treatment and control was significant when controlling for age, caseload, and change in caseload from the pre-treatment to treatment time period.

In addition, three caseworkers in the Control group noted in the focus group that they had access to SpeakWrite in the past and would like to use the service again. It is important to note, however, that during the focus groups the caseworkers in the Treatment group reported that the largest time-savings realized from using SpeakWrite came from using the service while driving between contacts. Caseworkers were instructed not to use the service while driving, but most caseworkers argued that making better use of travel time is one of the key values of SpeakWrite.

On average, SpeakWrite turned around jobs in less than one hour during the pilot period. Jobs submitted between 9:00 am and 5:00 pm were completed somewhat faster than jobs submitted during off hours [shown in Table 2], but all jobs were completed quickly. During the focus groups, a few Investigators noted that SpeakWrite turnaround time was somewhat slower when they worked on evening and weekends and that using SpeakWrite was not always appropriate during these times because of the time-sensitive nature of their documentation. Interestingly, SpeakWrite's turnaround time was not strongly correlated with the job word count ( $r=.51$ ).

**Table 2: SpeakWrite Turnaround Time**

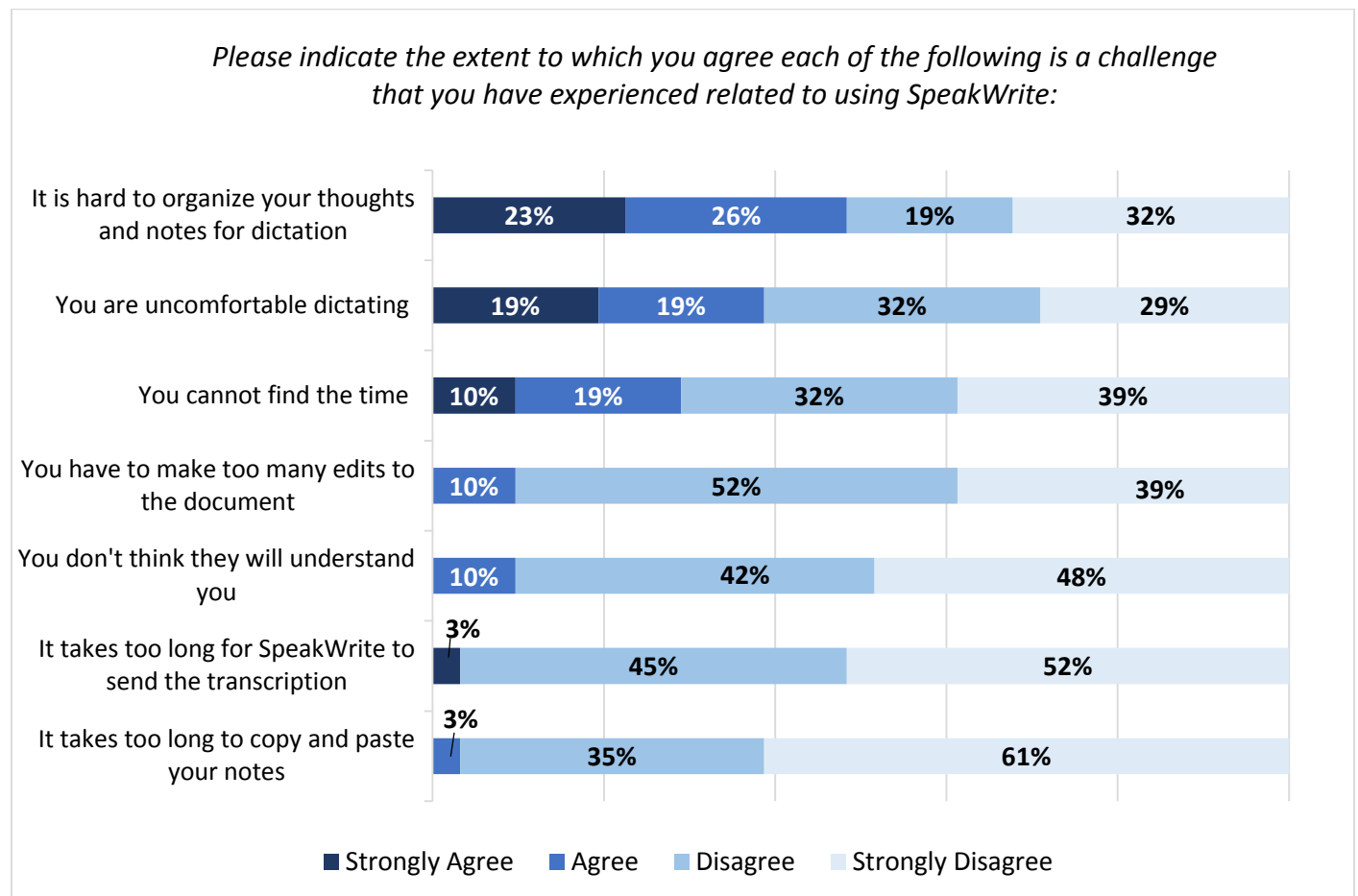
	Average	Minimum	Maximum	N
<b>All Jobs</b>	<b>53 minutes</b>	<b>2 minutes</b>	<b>8 hours and 15 minutes</b>	<b>1866</b>
Jobs between 9:00 am- 5:00 pm	48 minutes	3 minutes	5 hours and 20 minutes	1406
Off hours jobs	67 minutes	2 minutes	8 hours and 15 minutes	460

Source: SpeakWrite Usage Reports.

### CHALLENGES RELATED TO USING SPEAKWRITE MAY DECREASE OVER TIME

The majority of caseworkers favorably rated both the quality and turnaround time of the transcriptions sent by SpeakWrite. The primary challenges caseworkers noted were related to organizing their thoughts for dictation, being uncomfortable dictating, and finding the time for dictation [shown in Figure 3]. It is likely that these challenges are related to caseworkers' personal note-taking methods and will decrease as individuals become more experienced with using SpeakWrite for casework documentation. Indeed, some caseworkers reported during the focus group that they had become more comfortable using SpeakWrite over the course of the pilot period.

Of note is that a few focus group participants mentioned being uncomfortable dictating in the office, and chose to sit in their car to dictate or waited until they got to their home. In addition, although most caseworkers liked SpeakWrite, the survey responses indicated no differences between the Treatment and Control groups in levels of job satisfaction or caseworkers' anticipated tenure at CPS. It is likely that the pilot period was not enough time to measure these types of differences.

**Figure 3: Challenges Related to Using SpeakWrite**

Source: Casework Documentation Pilot Survey.

### How does access to SpeakWrite influence documentation quality, including accuracy, level of detail, and timeliness of documentation?

**DUE TO LIMITATIONS IN THE CONTACT DATA ANALYSIS, WE ARE UNABLE TO DRAW FIRM CONCLUSIONS ABOUT IMPROVEMENTS IN DOCUMENTATION QUALITY DUE TO SPEAKWRITE; ALTHOUGH SOME RESULTS TREND IN A FAVORABLE DIRECTION.**

The evaluators analyzed a sample of 203 contacts to assess whether access to SpeakWrite improved the accuracy, level of detail, and timelines of casework documentation. For the contact analyses, the evaluators measured accuracy in terms of content clarity, assessing criteria such as spelling, grammar, sentence structure, and precision in the language used. The evaluators examined three criteria to assess the level of detail in the contacts, including the degree to which: 1) the contact captured the language of the interviewees; 2) the allegation was clearly documented; and 3) another caseworker could take over the case. Analyses related to timeliness examined the length of time between making and documenting contacts and the

proportion of Investigators' contacts that were submitted to IMPACT within one calendar day of making the contact.

These analyses are limited because the sample size for the contacts is substantially smaller than the evaluators intended. Evaluators were unable to analyze the intended 800 contacts because of the short pilot timeframe and because all of the identifiable information in contacts had to be redacted by hand before the contacts could be coded and analyzed. In addition to only being able to review 200 contacts, the evaluators found that there was limited variation within a caseworkers' documentation. That is, if a caseworker was detailed in one of her or his contacts, the caseworker was generally detailed in all of the contacts. The small sample size and lack of variation in the contacts limit the statistical power in the analyses and made it difficult for the evaluators to draw empirical conclusions about the differences observed between the Treatment and Control groups, and across time periods.

The data did not show any statistical difference in trends between the Treatment and Control group related to accuracy or timeliness, but two of the three criteria examined related to level of detail showed a statistically significant trend toward improvement among the Treatment group. For the level of detail criteria that the allegation was clearly documented and that another caseworker could take over the case, the Treatment group showed improvement from the pre-treatment to treatment period. Because the sample sizes are small and there are no significant differences between the Treatment and Control groups during the treatment period, the evaluators cannot draw conclusions about whether these trends would be replicated among a larger group of caseworkers.

### **What are the costs associated with adopting SpeakWrite?**

#### **PROVIDING ACCESS TO SPEAKWRITE AT THE LEVEL OF USE DURING THE PILOT PERIOD WOULD COST DFPS APPROXIMATELY \$181 PER CASEWORKER EACH MONTH, BUT ACTUAL COSTS MAY BE LOWER AND VARY CONSIDERABLY ACROSS CASEWORKERS**

The cost of SpeakWrite is a function of the number of words caseworkers submit for transcription, with SpeakWrite charging DFPS \$0.0125 per word transcribed. During the pilot, caseworkers were given a weekly cap that ranged from \$500 to \$1500. Although at the beginning of the pilot some caseworkers in the Treatment group were not using SpeakWrite, by Week 5 all of the caseworkers were using SpeakWrite for at least some of their contacts. Caseworkers' use of SpeakWrite, and consequently the costs associated with their use, varied substantially, with an average monthly user cost of \$181 [shown in Table 3]. These pilot costs may overestimate the cost of SpeakWrite, however, because caseworkers were instructed to use SpeakWrite during the pilot and some caseworkers expressed that they would not have used the tool if it had been optional.

**Table 3: SpeakWrite Costs**

	Average	Minimum	Maximum	N
Job Costs	\$7.26	\$1.25	\$75.75	1866
User Costs	\$181.32	\$2.51	\$580.38	36

Source: SpeakWrite Cost Reports.

Notes: Costs presented for all jobs completed during the 8-week pilot period.

To provide DFPS with a sense of the range in costs, evaluators categorized caseworkers into low, medium, high and very high user groups using even quartiles, shown in Table 4. The average costs ranged from \$29 per month among low users to \$355 per month among the very high users. For comparison, evaluators were told by DFPS that the cost of a Dragon license is a one-time fee of \$416 per user, although there was some lack of clarity on who the licenses applied to. Importantly, the \$181 per month figure should be considered in light of the costs DFPS is currently spending on caseworker documentation. If SpeakWrite does reduce the amount of documentation time and/or reduce overtime hours worked by caseworkers, the \$181 per month average cost may represent a cost savings. Further investigation is warranted with regard to cost savings.

**Table 4: Average Monthly Cost by User Group**

User Groups	Average
Low	\$29.75
Medium	\$129.71
High	\$210.16
Very High	\$355.65

Source: SpeakWrite Cost Reports.

Note: Each user group contains 25 percent of the Treatment Group.

The average monthly per user costs also varied substantially based on caseworkers' job position, shown in Table 5. The distribution of average costs by position may reflect differences in the documentation expectations for different positions, as well as variation in caseworkers' preferences related to SpeakWrite as a casework documentation tool. Based on the survey and focus group data, Investigators are the group among which use and average costs are most likely to be inflated during the pilot period.

**Table 5: Average Monthly Cost by Position**

Position	Average
Kinship	\$275.05
Investigator	\$222.38
Family-Based Services	\$192.41
Conservatorship	\$141.40
Other Position	\$91.52
Human Services Technician	\$86.36
Adoption	\$79.72

Source: SpeakWrite Cost Reports.

Based on use during the pilot period, the evaluators project that the annual cost of SpeakWrite would be approximately \$11.3 Million if DFPS provided the service to all caseworkers across the state at the level of use that was allowed during the pilot [shown in Tables 6 and 7]. It is likely that this amount is overestimated, however, because caseworkers who did not prefer SpeakWrite were encouraged to use the service during the pilot period, and therefore actual use may be lower.

It is also important to consider the costs DFPS is currently spending on casework documentation, including overtime. If the use of SpeakWrite substantially frees up the time of caseworkers to make additional contacts, this is equivalent to increasing the number of FTEs within the agency. Perhaps more realistic is that the use of SpeakWrite will reduce caseworkers' reliance on overtime to complete documentation. The average monthly cost of SpeakWrite per caseworker (\$181) would be realized if overtime was reduced by approximately six hours each month. The one-time cost of purchasing Dragon licenses was approximately \$2.1 million [shown in Table 8] which is less than SpeakWrite, but virtually no caseworkers use Dragon, and thus it is not a good comparison to SpeakWrite.

**Table 6: Projected Annual SpeakWrite Cost by User Group**

<b>User Group</b>	<b>Average Monthly Cost</b> (Source: SW Pilot)	<b>Number of Staff</b> (Source: 2014 Databook)	<b>Projected Monthly Cost for User Group</b>	<b>Projected Annual Cost for User Group</b>
Low	\$ 29.75	1,297.75	\$ 38,608.06	\$ 463,296.75
Medium	\$ 129.71	1,297.75	\$ 168,331.15	\$ 2,019,973.83
High	\$ 210.16	1,297.75	\$ 272,735.14	\$ 3,272,821.68
Very High	\$ 355.65	1,297.75	\$ 461,544.79	\$ 5,538,537.45
<b>Total</b>		<b>5,191</b>	<b>\$ 941,219.14</b>	<b>\$ 11,294,629.71</b>

Sources: SpeakWrite Pilot Usage Reports and DFPS 2014 Databook.

Note: User groups' average monthly costs based on average use by quartile during the pilot.

**Table 7: Projected Annual SpeakWrite Cost by Postion**

<b>Title</b>	<b>Average Monthly Cost by Position</b> (Source: SW Pilot)	<b>Number of Staff</b> (Source: 2014 Databook)	<b>Projected Monthly Cost</b>	<b>Projected Annual Cost</b>
Investigation	\$ 222.38	2031	\$ 451,653.78	\$ 5,419,845.36
Conservatorship	\$ 141.40	1759	\$ 248,722.60	\$ 2,984,671.20
FBSS	\$ 192.41	864	\$ 166,242.24	\$ 1,994,906.88
Kinship	\$ 275.05	180	\$ 49,509.00	\$ 594,108.00
Other	\$ 91.52	169	\$ 15,466.88	\$ 185,602.56
Adoption	\$ 79.72	188	\$ 14,987.36	\$ 179,848.32
<b>Total</b>		<b>5191</b>	<b>\$ 946,581.86</b>	<b>\$ 11,358,982.32</b>

**Table 8: Cost of Dragon**

<b>Cost</b>	<b>Number of Staff</b> (Source: 2014 Databook)	<b>Total Cost</b>
\$ 416.00	5,191.00	<b>\$ 2,159,456.00</b>

Sources: DFPS report of Dragon cost and DFPS 2014 Databook.



## RECOMMENDATIONS

### **SPEAKWRITE CAN BE A VALUABLE TOOL FOR CPS CASEWORKERS AND DFPS MAY WANT TO MAKE STRATEGIC INVESTMENTS IN SPEAKWRITE**

The majority of caseworkers who were given access to SpeakWrite during the pilot reported that they prefer SpeakWrite to their prior documentation method and many caseworkers and supervisors noted that SpeakWrite facilitated more timely and detailed documentation. A number of caseworkers and supervisors reported that using SpeakWrite helped to reduce overtime, which could have implications for costs and staff turnover, and warrants further investigation. Although the limited empirical analysis of the contact observations could not provide evidence on whether access to SpeakWrite improved the accuracy and timeliness of casework documentation, there is some limited evidence that access to SpeakWrite increased the level of detail in documentation.

DFPS may want to consider its priorities related to casework documentation and invest in SpeakWrite and set usage caps accordingly. Although many caseworkers preferred SpeakWrite to their prior documentation method, Investigators were more divided. Supervisors noted that SpeakWrite improved some caseworkers' documentation, but they also noted that it slowed others. If DFPS adopts SpeakWrite, we recommend that its use not be mandatory and that it should be considered as one potential tool for caseworkers who find it enhances their documentation. DFPS may also consider setting usage caps to prioritize SpeakWrite use for the job positions and regions in which the agency believes the tool will be most valuable. In addition, if DFPS chooses to adopt SpeakWrite new policies may be needed to accompany the tool. Many caseworkers noted that the largest time-savings came from using SpeakWrite in their car and policies regarding driving while using the service will need to be clarified.

### **ADDITIONAL RESEARCH IS NEEDED TO ENSURE SPEAKWRITE IS A COST-EFFECTIVE TOOL**

Analyzing IMPACT and SpeakWrite data on an on-going basis will be important for ensuring investments in SpeakWrite are helping the agency meet its goals and are cost-effective. Because of the short length and small sample size in this pilot study, it is unclear the extent to which the results found here will be replicated across the state. Monitoring SpeakWrite use and additional analyses of costs, contact content, and use of overtime may be valuable to help DFPS prioritize SpeakWrite access to maximize the cost-effectiveness of the tool. The cost of SpeakWrite should be considered in the context of potential cost savings from reduced overtime associated with less time spent on documentation. If DFPS finds that SpeakWrite reduces overtime by six hours per month, DFPS may realize cost savings equivalent to the expenditure on SpeakWrite.