

Introducing technology into a well established field of work is never easy. With continuous feedback in the process, however, implementers can close gaps between what is working and what is not. These recommendations present that kind of feedback to inform the experience and improve the process.

In the first phase of the pilot project, there were several policy and management recommendations that remain valid. These include taking a broader look at caseload, focusing on change management and overall support, dedicating resources to training, and developing additional measures of improvement. Additional recommendations from the extended pilot assessment are presented here.

Recommendations

1. Allow More Time for Entire Process

One year does not appear to be enough time to test a project of this complexity, which requires procuring, deploying, assessing, and reporting on the effects of laptop use in twelve months. As seen in Figure 2 (above), there are many organizations and factors that shape the laptop experience. The interdependencies created with several organizations setting policy and providing services adds complexity and slows processes on the front end of the project. For more reliable conclusions, data should come from longer periods of CPS caseworkers use of the laptop, allowing for integration into their work to observe the full effects. The first few months of use are likely to be strongly affected by difficulties in learning how to exploit the new technology as well as working out initial set-up, connectivity, and management issues.

An 18 to 24 month period may be better for work of this type. Deploying laptops in the original pilot and in the extended pilot show that it has taken approximately six to seven months from legislative mandate to deployment. This includes budget development, procurement, receiving, imaging, deploying, and setting up connectivity for the devices. In addition, three months of data collection is not enough time for the caseworker to fully integrate the laptop into their work. A longer data collection period of six to seven months is preferable. Then analyzing data and report generation from several hundred caseworkers adds another two to three months. The full cycle can thus take longer than one year to accomplish.

2. Maintain Support for Laptop Deployment

When CPS caseworkers were asked about recommending a laptop to their colleagues, a large proportion of them say they would highly recommend it. The high overall satisfaction appears to result from increased flexibility, a higher level of feeling valued by the organization, and having enhanced resources to do their job. These positive impacts are often hard to quantify, but can be very important parts of the overall laptop experience. Continuing to support laptops can provide CPS caseworkers in other districts the opportunity to see how mobile technologies can impact their work.

3. Revisit Longstanding Policies and Management Practices

Maximizing the value of laptop use in child protective services depends as much on attention to areas of policy and management as it does to technology. Policies and procedures to implement the policies are developed for a certain set of conditions within a specific environment. When the conditions change and the environment is modified, the existing policies, practices, and regulations may need revision. Revisiting the policies to make certain that they are still valid and appropriate for the new environment is critical. Throughout this assessment three policy areas emerged as needing review: no working from home, office/field scheduling, and compensation for work outside normal hours.

Working From Home

In this study we found that caseworkers used the laptops primarily at home after regular work hours to catch up on documentation. Since NYC policies state that no one can be paid for working at home, caseworkers cannot get paid for doing work in the one location they most frequently use. Thus we recommend ACS approach DCAS for discussions about revisiting or changing this policy so the caseworkers can maximize the potential value of the laptop and attain increased flexibility in where and when work is completed.

Office and Field Scheduling

Field offices and even units within field offices manage work by designating office days and field work days. Caseworkers are assigned certain days of the week to make visit appointments. Other days are scheduled for case workers to be in the office for documentation, supervision, and other administrative tasks. Court appointments are not included in those field visits and occur when scheduled by the court system.

This policy should be revisited because the laptop was implemented to increase mobility and thus allow more time for caseworkers to work in the field with children and families. When a policy specifies when and where a caseworker must work, it can limit the potential value of laptop use. Continuing to designate office days is counter to encouraging more time out of the office. In addition, to fully understand how the laptop affects a caseworker's mobility, there should be as little restrictions (on work location) as possible.

Overtime and Compensatory Time

The procedures and management practices that accompany overtime policy state that some offices have a daily cap for all overtime work, although some caseworkers stated that this isn't true for all offices. In addition, policies are not consistently implemented across all CPS departments. Some field offices have different procedures for overtime and compensatory time approvals. Some offices require caseworkers to submit a request, which then must go through a several layer review process to allow for the overtime to be approved after it has occurred. Ensuring overtime consistency across field offices may increase the effectiveness of laptop use.

4. Continue to Address Infrastructure and Connectivity Concerns

Since first reported, the technology issues (such as poor system performance) are being addressed by ACS's MIS department. ACS MIS reports that improved performance while entering data in CONNECTIONS will result from reconciling the network path and configuration so that caseworkers can access the CONNECTIONS application through either a NYC or NYS SSL Virtual Private Network (VPN) connection. Additionally, simplification of the security requirements should improve users' experience. By streamlining the network path and removing some layers, the performance problems should be alleviated.

Problems with connectivity coverage and speed are not directly within the control of MIS, although MIS has contacted Verizon and discussed the problems extensively. From these exchanges, ACS MIS stated that it has begun an upgrade of the laptop's wireless capabilities. The improved speed and reduced latency associated with this upgrade should improve connectivity and stability. Connectivity in fixed locations such as courthouses also continue to be of concern. While ACS MIS indicated a desire to make Wi-Fi connectivity available in the courthouses, it was not completed in time for this pilot. All connectivity within the courts is approved and coordinated by the NYS Office of Court Administration. Working closely with OCA on connectivity concerns and then sharing information with caseworkers will help keep everyone "on the same page."

Finally, it is important to note that caseworkers did not report all connectivity or performance issues to MIS. Instead, caseworkers only called the help desk when they could not establish connection or their laptop was not working at all. Caseworkers only shared their frustration when asked about any technical problem while in the workshop. One caseworker stated: "I would highly recommend the laptop because despite its flaws it helps minimize the task of doing all notes in the office. I wish the computer glitches were fixed because the laptop would be even more desirable. If it was designed to be faster getting on to CONNECTIONS, allowing more time to type without being logged off, and there was no delay in the words typed appearing on the screen." Encouraging caseworkers to share feedback about using the laptop on a regular basis, whether it be through face to face meetings or email, may bring to light issues that may have not otherwise surfaced.

Future Considerations

This report is only one step in a longer term effort to improve caseworker's ability to meet the needs of children and families in NYS. This study recommends maintaining support for laptop deployment, but its also suggest several factors to consider before making more investments.

The larger question is: "How much mobility is desired?" If a highly mobile caseworker is the ideal, then several policies must be revisited, such as working from home, overtime, and field and office day scheduling. Restricting where and when a caseworker can work, limits their ability to be mobile.

On the technical side, optimizing infrastructure and connectivity is also critical. This includes considering swapping laptops for traditional desktops. Aside from the concerns of supporting multiple platforms, caseworkers

may be more apt to use the laptop outside the office when they are accustomed to using it in the office as well. Planning for connectivity should be addressed in the beginning and continually assessed for effectiveness.

Finally, any technology deployment rests on a strong foundation of training and support. In many cases when there are no dedicated resources for this steps, such initiatives flounder. A strong predictor of successful deployment of technology is the overall effort for training and ongoing support.
