

No Wrong Door eRoom Evaluation

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Washington State Department of Social and Health Services Management Services Administration Research and Data Analysis Division

NO WRONG DOOR eROOM EVALUATION

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EXECUTIVE SUMMARY

Background

The DSHS multidisciplinary teams that are part of No Wrong Door and other integrated service initiatives are comprised of staff in different DSHS programs and community agencies, all working with the same client and/or family. Team members may not be located in the same building or even the same part of town. The teams have said that they need a secure way to converse electronically about each client, and a secure location to post and store documents such as client action plans, actions taken between meetings, and comments.

This report evaluates the impact of web-based group collaboration application software chosen to meet this need. The particular application tested, eRoom, was chosen by a committee comprised of technical staff from each of the divisions. The eRoom software was installed in the Puyallup Valley CSO and the Yakima CA/JRA site.

eRoom Usage

The primary use of eRoom during the pilot was as a centralized data information repository. Client data, status and case notes from multiple divisions were entered into the eRoom system prior to each client case staffing by the assigned caseworker. Team members could then consult the data in eRoom before meeting with the client and other members of the team.

Many of the features of eRoom, such as discussion groups, calendaring and voting, were not used during the pilot. Staff did not find these features particularly useful, as they preferred to use the more familiar e-mail system to provide these functions.

• The Puyallup eRoom pilot site performed 72 NWD case staffings and utilized 72 eRooms from February 1, 2003 – July 31, 2003.

Staff at the Puyallup site stated that not everyone used eRoom on a consistent or timely basis, and that if everyone used eRoom it would be a much more useful tool.

• The Yakima eRoom pilot site performed 30 NWD case staffings and utilized 4 eRooms from February 1, 2003 – July 31, 2003.

After using the eRoom software for a few client staffings, participants at the Yakima pilot site determined that the software was a duplication of effort and did not provide enough benefit to justify the added workload. The Yakima pilot site had dedicated

NWD coordinators; they organized most of the meetings and provided data. Based on these determinations, Yakima staff discontinued the use of eRoom after the first two months.

Puyallup Site Survey Results

A survey was administered to participating staff both before and after eRoom usage began. Fifteen staff completed the survey before, and thirteen after. There was a good deal of staff turnover, only 38% of staff responded that they filled out both the pre and post surveys. Table 1 below shows the changes in client process which occurred after eRoom was installed.

TABLE 1: BEFORE AND AFTER EROOM SURVEY RESULTS

	BEFORE eRoom	AFTER eRoom	Percent Change
Average Daily Number of Telephone Calls about Shared Clients	1.8	1.3	- 28%
Average Daily Number of E-Mails about Shared Clients	1.8	1.1	- 39%
Average 6 month Number of Emergency Meetings about shared clients	5.0	0.5	- 900%
Percent of Staff Reporting that Tracking Changes For Shared Clients was "Fairly Easy" or "Not Difficult."	20%	46%	+130%
Percent of Staff Reporting that coordinating appointments was "Fairly Easy" or "Not Difficult."	43%	36%	- 16%
Percent of Staff Reporting that scheduling team meetings was "Fairly Easy" or "Not Difficult."	62%	55%	- 11%

Table 1 suggests that collaboration software like eRoom is useful in service integration. Six months after eRoom software was installed, participating staff made 28% fewer phone calls (about one less call every two days) and sent 39% fewer email messages (somewhat less than an email a day) regarding shared clients to other team members. Emergency meetings dropped from almost one a month to one every six months. Staff were much more likely to report that tracking changes was "very easy" or "not difficult." There was not much impact on scheduling team meetings and coordinating appointments (perhaps because staff did not use e-Room for that purpose, preferring to use the calendaring functions in Outlook). However, staff expectations and evaluations were also measured in the pre and post surveys. Those results reveal that staff did not find the software as useful as they had hoped. Staff indicated, in a post survey session, that if everyone involved in a case had entered information well before the staffing date, it would have been more useful.

- Before installation, 87% of staff anticipated that eRoom software would be a lot of help or extremely helpful in sharing information. Afterwards, only 67% of staff believed that eRoom was a lot of help or extremely helpful.
- Before installation, 67% of staff anticipated that the eRoom software would be a lot of help or extremely helpful in communicating. The post survey showed that only 25% of staff believed that eRoom was in fact a lot of help or extremely helpful.
- When asked if they wanted to continue using eRoom, 54% of the staff said yes. The rest either did not answer the question, or said they would, if everyone used it.

Staff Experiences

At the conclusion of the evaluation period, staff were asked what they did and did not like about eRoom and/or the eRoom project.

Positive Experiences with eRoom in Order of Importance to Staff

- The pilot team provided good training and support services.
- Staff liked the concept of a centralized client information repository. *"I would not have known about CPS involvement [with a case] without using eRoom."*
- Staff were grateful that the tool was made available to them.
- The ability to cut and paste between division level case management systems and eRoom was helpful. *"I have found eRoom to be helpful in putting in notes. This allows everyone that is not able to view eJAS system a little more information on the customer."*
- Everyone had the same look and feel.

Concerns About eRoom In Order of Importance to Staff

- There was a lack of equal participation by all staff. *"If all involved Divisions used eRoom, it would be wonderful"*
- Information entered into eRoom was not detailed enough. "Some of the information that was input into eRoom was useful, but it needs to be more complete."
- Information entered into eRoom was not timely enough.

- eRoom should not be a replacement for showing up to a case staffing in person. "eRoom is helpful. Unfortunately it allows partners not to attend the CSI staffings. As always, in person contact is better."
- eRoom did not provide access to other case management systems.

Conclusions

The difference between the before and after surveys in Puyallup suggests that having a secure electronic environment to share client information does significantly ease the staff work involved in participating in a multidisciplinary team environment. This is an important benefit.

However, despite those benefits, Puyallup staff were not as pleased with eRoom as they had anticipated that they would be. They noted that not everyone used it, and its usefulness as a collaboration tool was therefore limited.

Only a little over half the Puyallup staff said they would recommend continuing to use eRoom under the current configuration. However, a number of those who said "no" said they would want to continue using it, if all program areas and staff on the teams participated equally in its use.

This is not a technical issue. If it is to be resolved, it would require the development of some cross-program expectations about what sorts of material would, and would not, be recorded in the e-Rooms. The department, and the Puyallup site, need to decide whether it is worthwhile to engage in that endeavor.

If the DSHS Cabinet and the Puyallup site decide to continue the e-Room installation at Puyallup, RDA is willing to continuing supporting them technically and with training at no charge. However, maintaining e-Room at Puyallup would require that the department pay \$14,000 to renew the software licenses.

The Yakima NWD site has determined that, given their work processes and the small volume of clients they are managing, the eRoom software is not an effective tool in their work process.

INTRODUCTION

Context

The DSHS No Wrong Door/Coordinated Services Initiative teams are comprised of staff in different DSHS programs and community agencies, all working with the same client and/or family. Team members are not usually located in the same building or even the same part of town. The teams have said that they need a secure way to converse electronically about each client, and a secure location to post and store documents (e.g. client action plans) and comments. This pilot called such a site a secure, client-based website.

The need for a secure, client-based website was anticipated in Spring 2001 by the No Wrong Door technical committee, which evaluated a number of software options before selecting a software package called eRoom. This software allows for the creation of a virtual "room" for each client where data can be stored pertinent to that client. Each client room is accessible through a standard web browser with security measures in place.

ISSD created a proposal to implement the committee's software recommendation for the three year No Wrong Door startup period. The proposal called for up to 200 users spread across 10 sites. The cost for the first year was about \$200,000.

DSHS top management decided that was too much money to invest in an untried implementation. So the No Wrong Door teams began without any secure client-based website.

In May of 2002, RDA created a project proposal, which was a scaled down version of the original ISSD proposal. The revised proposal outlined an implementation of the eRoom software at two No Wrong Door sites with up to 30 users.

Project Implementation

The following two sites were chosen to participate in the eRoom pilot project:

Puyallup Valley CSO: The Puyallup NWD/CSI site targets long term TANF clients (36 months on the caseload) AND someone in the household who has also received a disability related grant (SSI or GAU/X), mental health or alcohol/drug treatment, or services from CA, JRA, DDD or AASA.

The Puyallup site consisted of approximately 25 staff initially performing about six new client case staffings per week. In April, the Puyallup site adjusted their

NWD/CSI staffing schedule to performing four new case staffings twice per month. A total of 72 NWD/CSI staffings were held during the pilot project.

Yakima CA/JRA NWD Site: The Yakima NWD site targets youth and their families who are receiving services from JRA or CA as well as youth and families who are receiving or have in the last year received services from DSHS programs such as DDD, MHD, DASA, DVR, GAU, AASA, or GA-X.

The Yakima site consisted of approximately 5 staff performing about 30 client staffings during the eRoom pilot project.

Training

NWD/CSI staff were instructed on the use of eRoom by using a combination of hands-on training and telephone support. A majority of staff attended a two hour hands-on training session, instructed by RDA staff, in which they were shown the capabilities of the eRoom software, and given the opportunity to explore its functionality. Staff who were unable to attend the hands-on training were instructed on the basic functionality of eRoom via telephone. Follow up phone calls were placed to participating staff to ensure that they were not experiencing any problems, and to answer any questions that they may have had.

Survey and Discussion Forums

In an attempt to measure the effectiveness of eRoom software in the NWD/CSI work environment, RDA administered a pre and post survey to all staff who attended the training sessions. The survey was designed to measure the number of interactions between MDT members via e-mail, telephone and un-scheduled emergency meetings, as well as the difficulty level of obtaining and sharing information about shared clients. These measurements were taken before staff had used eRoom and again six months after eRoom had been in use. The purpose of the survey was to determine whether the eRoom software would increase efficiency, by decreasing the number of e-mails and telephone calls made to other MDT members, as well as increasing the amount of communication and data sharing between divisions. The survey was administered in an anonymous fashion so that staff would feel comfortable answering the questions without scrutiny.

Several staff who did not attend the formal training were trained over the phone, and may not have completed the survey. Due to staff turnover and/or re-structuring, the original staff who filled out the pre eRoom survey were not necessarily the same staff who filled out the post eRoom survey.

At the conclusion of the evaluation period, a discussion forum was held in Puyallup in order to solicit feedback from the pilot participants on the eRoom software and the project in general. Participants were asked what they did not like about eRoom and/or the eRoom project.

eRoom Usage

The eRoom software offers many capabilities that could be potentially useful in a team collaboration environment. Such features include, calendaring, polling (voting) and discussion groups. Throughout the pilot, staff used the software primarily as a centralized data and information repository. Prior to each client case staffing, case notes and staff comments were input by NWD staff into the appropriate client eRoom. The remaining members of the MDT team would then view the data as necessary before meeting with the client and/or the rest of the team.

Usage Data

The Puyallup eRoom pilot site performed 72 NWD case staffings and utilized 72 eRooms from February 1, 2003 – July 31, 2003. Staff at the Puyallup site commented that not everyone used eRoom on a consistent or timely basis, and that if everyone used eRoom it would be a much more useful tool.

The Yakima eRoom pilot site performed 30 NWD case staffings and utilized 4 eRooms from February 1, 2003 – July 31, 2003. After using the eRoom software for a few client staffings, participants at the Yakima pilot site determined that the software was a duplication of effort and did not provide enough benefit to justify the added workload.

The reporting capabilities of the eRoom software are limited in their capacity to track user activity once logged into an eRoom. The only indicator of eRoom activity is the number of client eRooms created and the number of times staff logged into the eRooms. A successful login is reported once per day for each client eRoom that a user signs into. If a user signs into the same eRoom more than once during the day, only one login will be recorded. Once logged into the client eRoom, user activity cannot be tracked. Future versions of the eRoom software will provide interfaces to third party reporting tools, which will offer more comprehensive user activity tracking.

At the beginning of the project, staff turnover and workload issues were contributing factors to the slow adoption of eRoom. As the pilot progressed, eRoom became more of an integral part of the case staffing process and more staff began to use it. Toward the end of the evaluation period a training session was held on August 5 for additional Children's Administration staff. Because the training was so late in the project, the increased activity by these staff is not reflected in this report.

In April of 2003, the Community Services Division (CSD) renamed the NWD initiative to the Coordinated Services Initiative (CSI). In addition to the name change, CSI case staffing schedules were changed from performing six case staffings each week

to performing four case staffings twice per month. The decrease in the number of case staffings resulted in a proportionate decrease in the number of logins to eRoom as well as the number of client eRooms created. The following figures show the number of logins per month and the number of eRooms created per month at the respective sites.

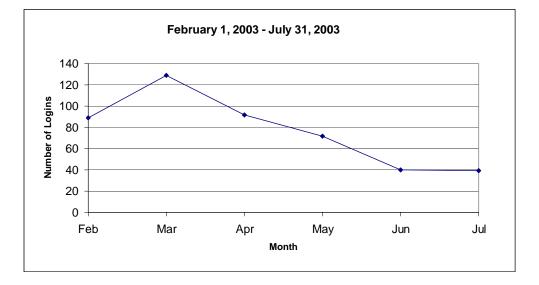


Figure 1. Puyallup eRoom Logins by Month

Figure 2. Puyallup eRooms Created by Month

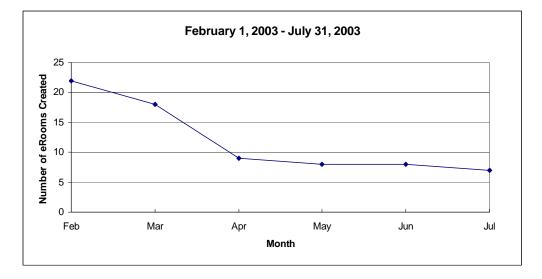


Figure 3. Yakima eRoom Logins by Month

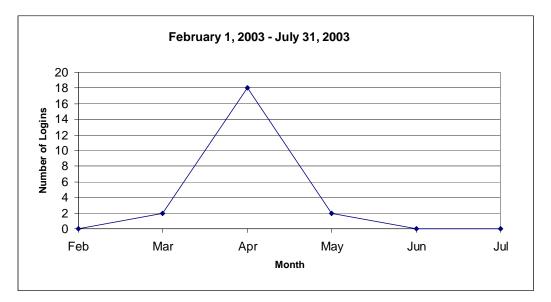
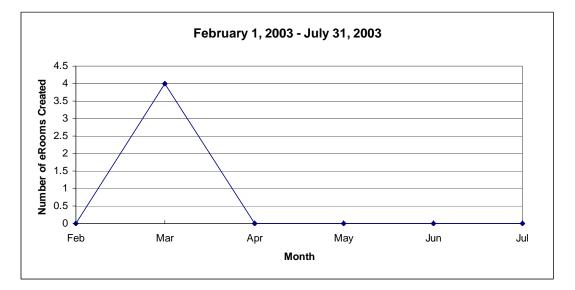


Figure 4. Yakima eRooms Created by Month



SURVEY RESULTS AND FORUM DISCUSSIONS

In an attempt to determine the effectiveness of the eRoom software, pilot staff were asked a series of questions before using eRoom and then again six months after using the eRoom software. In addition, a forum with staff was held in Puyallup, to ask staff for their feedback on how the software could be improved. The results suggest that collaboration software has the potential to ease staff work and increase efficiency in a multidisciplinary team which is not co-located. Based on staff feedback, the software would be very useful if everyone used it consistently and there was more communication regarding content.

Table 2 below shows the changes in client process which occurred after eRoom was installed.

	BEFORE eRoom	AFTER eRoom	Percent Change
Average Daily Number of Telephone Calls about Shared Clients	1.8	1.3	- 28%
Average Daily Number of E-Mails about Shared Clients	1.8	1.1	- 39%
Average 6 month Number of Emergency Meetings about shared clients	5.0	0.5	- 900%
Percent of Staff Reporting that Tracking Changes For Shared Clients was "Fairly Easy" or "Not Difficult."	20%	46%	+130%
Percent of Staff Reporting that coordinating appointments was "Fairly Easy" or "Not Difficult."	43%	36%	- 16%
Percent of Staff Reporting that scheduling team meetings was "Fairly Easy" or "Not Difficult."	62%	55%	- 11%

TABLE 2: BEFORE AND AFTER eROOM SURVEY RESULTS

Phone Calls

Figure 5 shows responses to the question, "Think back to a typical workday in the last month. How many phone calls did you make to try to reach someone on a No Wrong Door (NWD) team about a NWD client in this typical day?" At the end of the pilot, staff made fewer phone calls relating to NWD/CSI clients as compared to the beginning of the pilot. The volume of saving is about one phone call every two days.

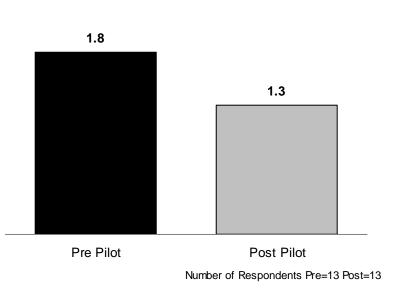
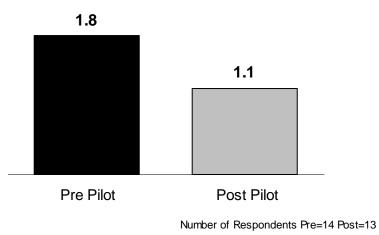


Figure 5. Average Number of Phone Calls Made to Other MDT Members on a Typical Day

E-mail Messages

Figure 6 shows responses to the question, "Think back to a typical workday in the last month, how many email messages did you send to communicate with someone on a NWD team about a NWD client in this typical day?" At the end of the pilot, staff sent fewer e-mail messages relating to NWD/CSI clients as compared to the beginning of the pilot – a savings of more than one email message every two days.

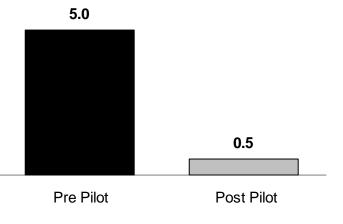
Figure 6. Average Number of E-mails Sent to Other MDT Members on a Typical Day



Emergency Meetings

Figure 7 shows responses to the question, "In the past 6 months, how many times did you have to schedule, or attend, emergency meetings with 2 or more team members, including community partners, between regularly scheduled team meetings?" At the end of the pilot, fewer emergency meetings regarding NWD client were required as compared to the beginning of the pilot – about one meeting a month was saved.

Figure 7. Average Number of Emergency Meetings Scheduled or Attended in the Past Six Months

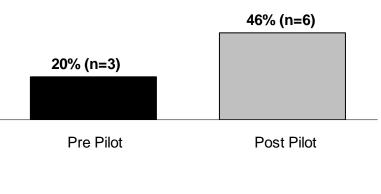


Number of Respondents Pre=13 Post=13

Tracking Client Changes

Figure 8 shows responses to the question "How difficult is it to track significant changes and/or services authorized by someone else on the NWD Team about a NWD client, especially between team meetings? (such as hospitalizations, changes in status, household moves, etc.)" At the beginning of the pilot, 20% of the staff surveyed responded that tracking significant changes regarding NWD clients was fairly easy or not difficult. At the end of the pilot, 46% responded that tracking significant changes regarding NWD clients.

Figure 8. Percent Staff Reporting That Tracking Significant Changes Around Shared Clients was Fairly Easy or Not Difficult

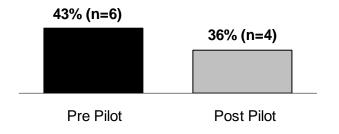


Number of Respondents Pre=15 Post=13

Coordinating Appointments

Figure 9 shows responses to the question "When NWD clients need appointments with more than one team member, how easy is it to schedule these appointments so that the client only has to make one trip?" In the pre pilot survey, 43% of staff responded that it was fairly easy or not difficult to coordinate appointments with other NWD MDT members as opposed to 36% in the post survey.

Figure 9. Ease in Coordinating Appointments

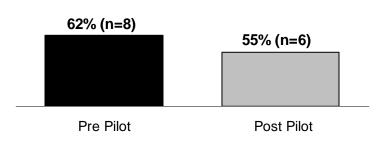


Number of Respondents Pre=14 Post=11

Scheduling Meetings

Figure 10 shows responses to the question "How difficult is it to schedule team meetings for a NWD team?" At the beginning of the pilot, 62% of staff surveyed responded that it was fairly easy or not difficult to schedule meetings before participating in the pilot. At the end of the pilot, 55% of staff responded that it was fairly easy or not difficult.





Number of Respondents Pre=13 Post=11

Sharing Client Information

Figure 11 shows responses to the question "Will being able to share work plans and other client documents with the other NWD partners be helpful?" The post pilot question was worded "Was being able to share information about clients with the other CSI/NWD partners helpful?" In the pre survey, 87% of staff anticipated that the eRoom software would be a lot of help or extremely helpful in sharing information regarding NWD/CSI clients. The post survey showed that 67% of staff thought that eRoom was in fact a lot of help or extremely helpful.

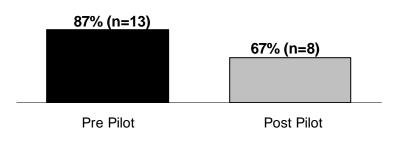


Figure 11. Was Sharing Client Information Helpful?

Number of Respondents Pre=15 Post=12

Communication

Figure 12 shows responses to the question "How much help do you think electronic collaboration software (eRoom) will be in helping to communicate about clients between regularly scheduled meetings?" The post pilot question was worded "How much help do you think electronic collaboration software (eRoom) was in communicating about clients between regularly scheduled meetings?" In the pre survey, 67% of staff anticipated that the eRoom software would be a lot of help or extremely helpful in communicating with other MDT members. The post survey showed that 25% of staff thought that eRoom was in fact a lot of help or extremely helpful.

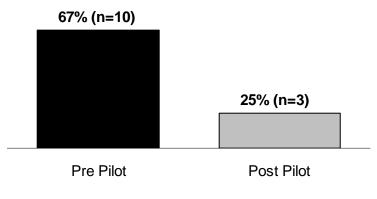
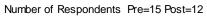


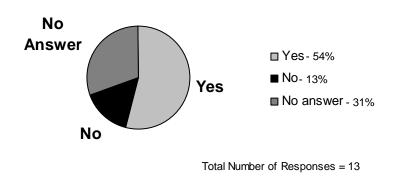
Figure 12. Was eRoom Helpful in Communication?



Continue the Use of eRoom

Figure 13 shows responses to the post survey question "Would you like to continue using eRoom?" Of the 13 respondents, 7 (54%) said they would like to continue using it, 2 (15%) said they would not, and 4 (31%) people gave no answer.

Figure 13. Would You Like to Continue Using eRoom?



Discussion Forum Results

At the conclusion of the evaluation period, a discussion forum was held in Puyallup in order to solicit feedback from the pilot participants on the eRoom software and the project in general. Participants were asked what they did not like about eRoom and/or the eRoom project.

Positive Experiences with eRoom in Order of Importance to Staff

- The pilot team provided good training and support services. *"I would not have known about CPS involvement [with a case] without using eRoom."*
- Staff liked the concept of a centralized client information repository.
- Staff were grateful that the tool was made available to them.
- The ability to cut and paste between division level case management systems and eRoom was helpful. *"I have found eRoom to be helpful in putting in notes. This allows everyone that is not able to view eJAS system a little more information on the customer."*
- Everyone had the same look and feel.

Concerns About eRoom In Order of Importance to Staff

- There was a lack of equal participation by all staff. *"If all involved Divisions used eRoom, it would be wonderful"*
- Information entered into eRoom was not detailed enough. "Some of the information that was input into eRoom was useful, but it needs to be more complete."
- Information entered into eRoom was not timely enough.
- eRoom should not be a replacement for showing up to a case staffing in person. *"eRoom is helpful. Unfortunately it allows partners not to attend the CSI staffings. As always, in-person contact is better."*
- eRoom did not provide access to other case management systems.

Because of the low usage at the Yakima site, a discussion forum was not held; however, a conference call was held with staff to gather feedback on their experiences with eRoom. Overall staff did not feel that eRoom would be an effective tool at their site. Staff felt that eRoom was an added workload, and using conventional means of communication was more efficient. Staff expressed the following comments: "Because we are such a small site and a small community, we don't have problems communicating and sharing data with other members of the MDTs...eRoom was an added workload and a duplication of effort."

"The disruption of staff turnovers and layoffs kept us from doing the software justice...time was too critical, we did not have the resources."

Analysis

The results of the pre and post survey suggest that the use of eRoom has the potential to decrease the number of e-mails, phone calls and emergency meetings required between MDT team members. In addition, eRoom can be helpful in tracking client changes throughout the NWD/CSI process.

The calendaring capabilities of eRoom were not used during the pilot, as staff preferred to use their Microsoft Outlook based calendars instead. Therefore, the questions regarding coordinating appointments and scheduling meetings were not particularly meaningful.

The results of the pre survey questions, regarding how helpful staff believed that eRoom would be in sharing client information and communication, show that staff had high expectations of the software. The post survey results illustrate that the eRoom software alone did not meet these expectations. Participating staff comments at the end of the pilot suggested that, if used in a more consistent and comprehensive manner, eRoom would be a useful tool in sharing client information and communication.

In the post survey, a majority of staff responded that they would like to continue using the eRoom software, particularly if staff participation increased. Of the two staff who responded negatively, one included a comment that they would like to continue using eRoom if all staff participated equally.

LESSONS LEARNED

Several lessons were learned throughout the pilot project. As staff attempted to integrate the eRoom software into their existing work processes, potential barriers to future expansion were identified.

Lack of Detailed and Timely Information

As staff evaluated the effectiveness of the eRoom software, it was determined that the information entered into eRoom was not sufficient to meet their needs. When asked about the information stored in eRoom, staff expressed the following concerns:

- Information entered into eRoom was not comprehensive enough. Often times staff had to use telephone and/or e-mail to gather more details regarding the client information in eRoom.
- Information in eRoom was not made available far enough in advance of the case staffing. Many times data was entered the day before the staffing, which did not allow staff enough time to compile the data or follow up with questions regarding the data.

In order for eRoom to become a useful tool in the NWD/CSI process, more comprehensive information needs to be input in a timely fashion. During the discussion forum, staff suggested that there was a lack of communication between DSHS program areas regarding which data should be entered into eRoom. To overcome this obstacle, division staff in each pilot will need to establish an ongoing discussion detailing which data would be most beneficial to them.

Lack of Participation

Not all staff participated equally in the entering of data into the client eRooms. Several staff explained, that on numerous occasions, client information was not entered into eRoom prior to the case staffing. Lack of information forced staff to rely on telephone and e-mail to gather client information.

Several contributing factors to the lack of participation were identified:

• Because staff possess varying degrees of computer skills, some were more comfortable using the software than others. Staff with less computer experience were less likely to use the eRoom software on a regular basis.

- Several staff stated that using eRoom was an added work load and they did not have the time to use it.
- In some cases, staff felt that more conventional means of communication and data sharing, such as e-mail or telephone, were more efficient than using eRoom.

Double Entry

A significant barrier to the wide acceptance of the eRoom software is the added work load of double entry. Because eRoom does not directly interface with existing DSHS case management systems, staff were required to enter client information into the eRoom, in addition to their division level systems. This double entry requirement led to situations where client data was not being entered into the client eRoom in a timely fashion, or not being entered at all.

Throughout the project, various methods for transferring data between systems, such as "cutting and pasting" between screens, were tried. Although alternate methods had the potential to limit the amount of typing required, staff found them more difficult than manually re-typing the information.

The requirement for double entry will be an ongoing factor until a method is developed for integrating existing case management systems. Developing such a solution would be very difficult given the diversity of systems used throughout DSHS divisions.

Staff Turnover / Re-Structuring

Throughout the evaluation phase of the pilot project, the participating sites experienced staff turnover in several positions. Some of the new staff were trained over the phone, and others attended a hands-on training session. In either case, the integration of new staff into the work process caused a discontinuity in the overall flow of the project.

Near the end of the evaluation phase of the project, one site added several new staff to the NWD/CSI teams. The new staff did not have time to properly evaluate the effectiveness of the eRoom software.

In order to successfully support new NWD/CSI staff, a system for ongoing training in collaboration software would need to be established. The training would need to be structured is such a way that incoming staff could quickly become familiar with the basic functionality of the eRoom software, and how it is used within their NWD/CSI teams.

Technical Difficulties

At the onset of the project, RDA staff experienced several technical issues with the compatibility of the eRoom software and the DIS Fortress proxy server. The Fortress server is the method in which a secured connection is established from a computer outside of the state network, to the eRoom server, which is inside of the protected state network. The workaround was to utilize an older version of the Fortress system. eRoom technical support stated that the next version of the software would be compatible with the newer Fortress server technology. The next version of the eRoom software is expected to be released in the fall of 2003.

Although the technical difficulties were overcome, the project was set back three months and the timeline was adjusted appropriately. No other significant technical problems were experienced during the pilot project.

CONCLUSIONS AND IMPACTS

The two participating sites, which were significantly different in size and client workload, came to different conclusions regarding the effectiveness of eRoom in their daily work routine.

At the Yakima NWD site, it was determined that the added workload of entering data into eRoom outweighed the benefits that the software offered. Staff at the site concluded that more conventional means of data sharing and communication were more efficient than using the eRoom environment.

At the Puyallup NWD/CSI site, the concept of a central data repository, where they could access client information from other divisions, was very appealing to staff. Several staff used the eRoom consistently throughout the pilot; however, not all staff participated equally.

Based on the outcomes of the staff surveys and participant feedback, it has been concluded that eRoom has the potential to aid staff in communicating and sharing client information as part of the NWD/CSI process. The survey results show that staff had very high expectations about how helpful eRoom would be in the NWD/CSI process; however, the actual usefulness of the software did not reach its potential. Several barriers were identified to the successful implementation of the eRoom software.

The most significant barrier to the effectiveness of the eRoom software was the lack of detailed information entered into the client eRooms. A majority of staff agreed that eRoom would be a useful tool if a few obstacles were overcome. Below is a list of suggestions, submitted by participating staff, for increasing the effectiveness of eRoom in the NWD/CSI process.

- All parties involved must participate equally in the entry of data into the client eRooms.
- Communication must be established between divisions to determine which data should be entered into eRoom by each division.
- There must be total buy-in from all participating staff.
- Information must be entered into eRoom in a timely fashion.

Impact on the Future

The difference between the before and after surveys in Puyallup suggests that having a secure electronic environment to share client information does significantly ease the staff work involved in participating in a multidisciplinary team environment. This is an important benefit.

However, despite those benefits, Puyallup staff were not as pleased with eRoom as they had anticipated that they would be. They noted that not everyone used it, and its usefulness as a collaboration tool was therefore limited.

Only a little over half the Puyallup staff said they would recommend continuing to use eRoom under the current configuration. However, a number of those who said "no" said they would want to continue using it, if all program areas and staff on the teams participated equally in its use.

This is not a technical issue. If it is to be resolved, it would require the development of some cross-program expectations about what sorts of material would, and would not, be recorded in the e-Rooms. The department, and the Puyallup site, need to decide whether it is worthwhile to engage in that endeavor.

If the DSHS Cabinet and the Puyallup site decide to continue the e-Room installation at Puyallup, RDA is willing to continuing supporting them technically and with training at no charge. However, maintaining e-Room at Puyallup would require that the department pay \$14,000 to renew the software licenses.

The Yakima NWD site has determined that, given their work processes and the small volume of clients they are managing, the eRoom software is not an effective tool in their work process.

APPENDIX A - SURVEYS

Pre Survey – Administered at the beginning of the eRoom evaluation

<u>eRoom Survey Questions</u>

1. Think back to a typical workday in the last month. How many <u>phone calls</u> did you make to try to reach someone on a No Wrong Door (NWD) team about a NWD client in this typical day?

About _____ phone calls in a typical day

2. Think back to a typical workday in the last month, how many <u>email messages</u> did you send to communicate with someone on a NWD team about a NWD client in this typical day?

About ______ email messages in a typical day

3. How difficult is it to track significant changes and/or services authorized by someone else on the NWD Team about a NWD client, especially between team meetings? (such as hospitalizations, changes in status, household moves, etc.)

Not difficult____ Fairly easy____ Some problem____ Difficult____ Very difficult____

4. When NWD clients need appointments with more than one team member, how easy is it to schedule these appointments so that the client only has to make one trip?

Not difficult____ Fairly easy____ Some problem____ Difficult____ Very difficult____

5. How difficult is it to schedule team meetings for a NWD team?

Not difficult____ Fairly easy____ Some problem____ Difficult____ Very difficult____

6. In the past 6 months, how many times did you have to schedule, or attend, emergency meetings with 2 or more team members, including community partners, between regularly scheduled team meetings?

About ______ emergency meetings in last 6 months

7. Have you ever been trained on how to send email that is secure or encrypted?

Yes ____ No____

If yes: How many times in the last 6 months did you use secure or encrypted email?

About _____ times

If no: Is a session scheduled to train on the new DSHS Secure Email system?

Yes ____ No ____ Don't know ____

8. Will being able to share work plans and other client documents with the other NWD partners be helpful?

No help____ Help a little ____ Some help ____ A lot of help ____ Extremely helpful ____

9. How much help do you think electronic collaboration software (eRoom) will be in helping to communicate about clients between regularly scheduled meetings?

No help____ Help a little ____ Some help ____ A lot of help ____ Extremely helpful ____

Post Survey – Administered after six months of eRoom evaluation

eROOM SURVEY QUESTIONS

1. Think back to a typical workday in the last month. How many phone calls did you make to try to reach someone on a Coordinated Services Initiative/No Wrong Door (CSI/NWD) team about a CSI/NWD client in this typical day?

About _____ phone calls in a typical day

2. Think back to a typical workday in the last month, how many email messages did you send to communicate with someone on a CSI/NWD team about a CSI/NWD client in this typical day?

About ______ email messages in a typical day

3. How difficult is it to track significant changes and/or services authorized by someone else on the CSI/NWD Team about a CSI/NWD client, especially between team meetings? (such as hospitalizations, changes in status, household moves, etc.)

Not difficult____ Fairly easy____ Some problem____ Difficult____ Very difficult____

4. When CSI/NWD clients need appointments with more than one team member, how easy is it to schedule these appointments so that the client only has to make one trip?

Not difficult____ Fairly easy____ Some problem____ Difficult____ Very difficult____

5. How difficult is it to schedule team meetings for a CSI/NWD team?

Not difficult____ Fairly easy____ Some problem____ Difficult____ Very difficult____

6. In the past 6 months, how many times did you have to schedule, or attend, emergency meetings with 2 or more team members, including community partners, between regularly scheduled team meetings?

About ______ emergency meetings in last 6 months

7. Have you ever been trained on how to send email that is secure or encrypted?

Yes ____ No____

If yes: How many times in the last 6 months did you use secure or encrypted email?

About _____ times

If no: Is a session scheduled to train on the new DSHS Secure Email system?

Yes ____ No ____ Don't know ____

8. Was being able to share information about clients with the other CSI/NWD partners helpful?

No help____ Help a little ____ Some help ____ A lot of help ____ Extremely helpful ____

9. How much help do you think electronic collaboration software (eRoom) was in communicating about clients between regularly scheduled meetings?

No help____ Help a little ____ Some help ____ A lot of help ____ Extremely helpful ____

10. What part(s) of eRoom did you find most useful?

11. What capability would you like to see added to the software?

12. Would you like to continue using eRoom?

Yes ____ No ____

If no, please explain?

13. Was the training for eRoom sufficient?

Yes ____ No ____

14. If not, what could we have done better?

15. Did you fill out a similar survey at the beginning of the eRoom project?

Yes ____ No ____

16. Enter any comments regarding eRoom or the eRoom project here.

APPENDIX B - BUDGET

Below is a budget estimate to continue the eRoom project at current levels with existing staff for FY 04.

Continuing License Costs	Qty	Cost
SQL Server 2 proc lic. (2 years @ \$3545.56/ea)	2	\$7,091.12
Windows Adv. Server	1	\$866.03
eRoom Server Maintenance	1	\$3,230.00
eRoom Client Maintenance (@ \$48/ea)	55	\$2,640.00
Total		\$13,827.15

