4/18/2018

Final Report

FDP Expanded Clearinghouse Pilot 2/1/2016 – 6/30/2017

Final

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EXECUTIVE SUMMARY

Background and Purpose

Encouraged by the dramatic success of the Federal Demonstration Partnership (FDP) Financial Conflict of Interest (FCOI) Clearinghouse, we embarked on this project to create a single-source location for organizational information necessary to manage sponsored projects awards and subawards, including audit reports. The goal was to create one-stop shopping for FDP to enable Pass-Through Entities to obtain and review all necessary subrecipient entity information and conduct subrecipient monitoring and risk assessment in a timely and streamlined fashion without requiring time and resources to send and collect various forms and data.

The FDP Executive Committee approved the following goals for the 18 month Pilot:

- To develop a standard FDP entity profile, initially in Excel, for Pilot entities to complete, certify, update and maintain entity related information about their organization on the FDP website
- To transition all Excel profiles to a single web-based repository for FDP Pilot entities (and potentially others) to enter, certify, update and maintain entity related information about their organization
- To develop additional tools, such as the sample Letter of Intent, to allow Pilot entities to easily collect project specific information
- To collect and analyze data on subrecipient activity and use of the Expanded Clearinghouse to determine administrative burden reduction and ease of use

Phase I: Excel Repository

In Phase I, volunteer participants from FDP member organizations created entity profiles based on a standard Excel template, and had those profiles certified by an authorized organizational official followed by submission to the Expanded Clearinghouse Working Group. The entity profile contained data about the participating organizations including demographic data, audit or financial questionnaire results, F&A rates, fringe benefit rates, PHS conflict of interest policy status, debarment and suspension status, and other reps and certifications. A sample "Letter of Intent" (LOI) was developed for PTEs to gather this transactional information. Pilot participants were encouraged to use this sample LOI, or similar short form, providing it did not include any data elements contained in the profile.

Grouping	Go-Live	Mechanism(s)	# FDP Members (Organizations (Profiles)	Running Total # FDP Members (Organizations (Profiles)
Cohort 1*	3/28/16	Excel -> Online	40 (51)	40 (51)
Cohort 2	8/18/16	Excel -> Online	39(76)	79 (127)
Cohort 3	7/07/17	Online Only	32 (37)	111 (164)
Remaining FDP members	Prior to 12/31/2017	Online Only	43 (TBD)	154 (TBD)

**included majority of Expanded Clearinghouse Working Group members*

Phase II: Web-based System

Based on the success of Phase I, Phase 2 of the Pilot was proposed to develop a web based system to house the organizational information and manage the process of the Clearinghouse. Vanderbilt University Medical Center volunteered to develop the system and after an exploratory meeting and proposal submitted to and approved by the FDP Executive Committee, initial development began in the summer of 2016 and continued into early 2017 with robust user acceptance testing in early 2017. The system went live for Cohorts 1 and 2 on 4/26/2017. Pilot participating organizations were required to enter their data directly into the system in order to further test the system and to ensure the usability of the system. All Profiles were published by early July of 2017 around the same time that we were able to bring on Cohort 3 adding 37 more profiles to the system, for a total of 164 Organization Profiles.

The web based system contains standard database and system functionality such as use of drop down menus, data validation, automatic data saving, user account management and security, workflow and administrative functions to support the review of profiles and integrity of the system.

Evaluation Data and Outcomes

Implementation, Administrative Burden and User Satisfaction

When asked overall, how satisfied they were with the online Expanded Clearinghouse, 98.6% of users said they strongly agreed or agreed. Various other specific satisfaction measures (shown in the full report) also elicited ratings above or near 90% satisfaction. Previous surveys of the rollout of the earlier versions of the Clearinghouse also had very high satisfaction ratings.

Users were asked how long it took them to complete their Expanded Clearinghouse on-line profile, and 77% reported that it took one hour or less, and 91% reported that it took 90 minutes or less. Since this profile need only be updated when data changes (usually one or two times per year) this represents a substantial time savings (shown below) over transaction-by-transaction processing.

Use of the Clearinghouse

During the course of the pilot, the **127 participating members** in Phases 1 and 2 issued **11,486 subaward actions** ("transactions") with other pilot members (including **10,830 during the last full year of the pilot**). Of that number, **the pass-through entity used the Expanded Clearinghouse on 57% of those transactions** (6,528). Some of the largest pass-through entities participating in the pilot did not use the Clearinghouse because they had alternative assessment methods already in place.

Across all 11,486 subawards transactions that occurred during the pilot period, more than 91% were for cost-reimbursement subawards, and 81% were subawards under grants. Prime funding sources for the transactions in this pilot were DHHS agencies (62%) and private funding agencies (13%). No other agency accounted for 10% or more of transactions; a more complete list is in the full report.

Time Saved

Clearly the most pressing question is, "***Does having this type of Clearinghouse actually result in a reduction in administrative burden? The answer to this was Yes!"*** Reduction in burden occurred because pass-through entities did not have to send or review completed subrecipient commitment forms on each transaction, and because subrecipient entities did not have to complete subrecipient commitment forms that asked many of the same types of questions but in many different forms and formats. In addition, key data on items such as recent audit reports and findings, DUNS number, F&A rates, fringe benefit rates, contacts, and payment addresses are readily available in a consistent form and format, with direct hyperlinks to key documents, are easily searchable and available in a single location. In addition, the data on each entity are available 24/7 and can be readily downloaded, printed or uploaded into local systems to satisfy audit documentation requirements.

The FY17 figures showed that more than 19,000 staff hours were saved during the 16 month period of the pilot, even after accounting for the time spent gathering data and entering an institutional profile. During the last full year of the pilot, **17,562 staff hours were saved across 10,830 subaward transactions issued by the 127 participating institutions to their fellow participants, in the one year period of 7/1/16 – 6/30/17. This equates to savings of 1.62 hours per transaction.**

Although pilot data are by definition limited to only those subawards these 127 entities exchanged with each other they still managed to save an average of 153 hours per year (all participants), and **an average 266 staff hours per year for the 66 entities that had at least 25 subaward transactions with fellow piloteers during the reporting year.**

To better understand the total potential impact of the FDP Expanded Clearinghouse, two (large) institutions analyzed the percentage of their subaward transactions handled via the Expanded Clearinghouse. **That data suggests that large institutions might be able to save approximately 1400 - 1800 staff hours annually via use of this tool.** Even institutions with modest portfolios of subawards (e.g., 50 transactions per year) could save 80 hours of staff time per year; time that could be devoted to other activities or other subrecipient monitoring tasks they may feel is of higher priority (such as progress tracking or invoice review).

Pilot Resources (Phase I and II)

The FDP Expanded Clearinghouse Pilot project was a substantial project for FDP and utilized very active co-chair and project management leadership, working group with subgroups and developers, as well as facilitated the addition of some great resources for FDP to use going forward. The three co-chairs for the Pilot and project, Lynette Arias, Pamela Webb and Jennifer Barron spent a significant amount of time on all aspects of this project and continue to perform the FDP Admin Reviewer function on a daily and weekly basis. FDP paid approx. $7,800 in actual costs to support the development of the system including travel for exploratory meeting and developer travel to the FDP meetings during the Pilot.

The system was developed largely on volunteered time that included approx. $10,688 from University of Washington (as well as significant project manager volunteered effort) and $57,100 worth of volunteer developer time from the VUMC.

Phase III: Post Pilot

The FDP Expanded Clearinghouse continues to be enhanced and maintained on a regular basis. An additional subgroup was recently formed to specifically oversee the development of an application programming interface (API) for participating organizations to access the data in the Clearinghouse and pull into their in-house organizational systems. An initial Business Requirements Document (BRD) has been developed and subgroup calls are scheduled every other week throughout the fall to move this key enhancement forward. This group includes representatives from the FDP eRA committee to ensure strong partnership with this group. It is hoped that an initial beta version of this API will be available in the fall of 2017 or early 2018.

One of the initial Pilot subgroups (Pilot Supporting Documents) continues work to develop a standard set of data elements for a “financial questionnaire” to be utilized by organizations that are not subject to Single Audit requirements. This set of data elements and questions would provide a more expanded set of data and information than provided for Single Audit organizations currently in the Expanded Clearinghouse. The goal is to have a pdf fillable form to test with Pilot organizations in the fall of 2017 and begin to assess how the data elements would be added to a specific section of the Clearinghouse system and/or integrated into current sections to allow non Single Audit organizations to become members of the Clearinghouse.

Work will begin in September to prepare for the addition of additional FDP and potentially non-FDP single audit organizations. The work that needs to be done in this area includes preparing all current participating organizations to adjust processes to handle the fact that new organizations will be added on a one-by-one basis and not in Cohorts or batches.

As of the date of submission of this report, the FDP Expanded Clearinghouse contains profiles for 164 organizations that are part of 111 FDP members.

Continuing support from the Co-Chairs (who serve as “FDP Admin Reviewers”), the FDP Expanded Clearinghouse Workgroup members and the developers will be needed to support the Expanded Clearinghouse going forward. Details are included in the full report for these three areas and the table below summarizes the costs to date and going forward for the Clearinghouse.

Past Costs				Future Costs			
VUMC	**UW**	**FDP**	**TOTAL**	**VUMC**	**UW**	**FDP**	**TOTAL**
2/1/2016 - 6/30/2017				**7/1/2017 - 6/30/2018**			
$57,000	**$10,688**	**$7,883**	**$75,571**	**$10,944**	**$0**	**$15,456**	**$26,400**

Synopsis of Recommendations

CURRENT FDP MEMBER RELATED:

1) ***Re-invite FDP members and organizations that are not already in to join, on a one-by-one basis.***
   a. Proposed Timing – Mid October

2) ***At start of the next FDP phase, make participation in the Clearinghouse mandatory for members***
   a. Items that Working Group will continue to consider and report back on include:
      i. Obstacles to entry with those who have not yet joined, or new FDP members
      ii. Connected to #1 above. If all FDP members have joined by then, will be resolved
      iii. Be able to clearly article pros and cons, resources and time needed, impacts, etc.

3) ***Allow working group to continue development and enhancement work, focusing first on items that support FDP members specifically including:***
   a. Ongoing small to medium enhancements to improve ongoing use of the system
   b. Develop an API (including assessing options/impacts of vendors having access)
   c. Continue development and pilot use of a "Financial Questionnaire" form (outside of the system) to be used for non-Single Audit organizations.

4) ***Develop long range planning for FDP Expanded Clearinghouse***
   a. Should FDP own and maintain this system long term
   b. How data can be used to support FDP pilots ongoing
   c. How FDP Expanded Clearinghouse can or should relate and interact with federal systems or inform changes in current federal systems
   d. Assess feasibility of merging in FCOI Clearinghouse or other areas of FDP data
   e. Other uses or impacts

NON FDP MEMBER RELATED:

1) ***Invite non-FDP members who are also single audit recipients to join on a one-by-one basis***
   a. Items that Working Group will continue to consider and report on include:
      i. Should there be a fee charged for access for non FDP organizations
      ii. When is realistic target date for this?
      iii. Does charging bring with it more accountability for accuracy of data?

2) ***Invite non-FDP members who are not single audit recipients to join on a one-by-one basis.***
   a. Items that Working Group will continue to consider and report on include:
      i. Same considerations as above
      ii. Requires "Financial Questionnaire" data elements to be added to Clearinghouse (after date elements have been pilot tested via a manual form)

3) ***Allow the FDP Executive Committee to determine use of revenue from non-members to support the following (listed in priority order):***
   - Expanded Clearinghouse maintenance
   - Continued enhancements
   - Other FDP pilots or projects

And most importantly, the Co-Chairs wish to extend a huge thank you to the incredible team that has worked on the Expanded Clearinghouse. This group exemplified the adage “many hands make light work”. In addition, we wish to especially thank University of Washington student **Lulu Sun**, who travelled almost the entire journey with us and awed us with her organizational and Excel skills, and University of Wisconsin student **Ryan Jackson**, who followed in Lulu’s footsteps to make sure we finished as strong as we started. And we also wish to extend our deep appreciation for the **FDP Executive Committee**, who time and again expressed strong support.

WORKGROUP MEMBERS	
Lynette Arias (Co-Chair)	University of Washington
Jennifer Barron (Co-Chair)	Johns Hopkins University
Pamela Webb (Co-Chair)	University of Minnesota
Patrice Carroll	Brown University
Marcy Friedle	Florida State University
Rebecca Balentine	Icahn School of Medicine at Mount Sinai
Julie Thatcher (Lead, Evaluations)	Institute for Systems Biology (ERI)
Amanda Hamaker	Purdue University
Gloria Greene/ Steve Parker	University of Alabama
Jennifer Rodis (Lead, Instructions**)**	University of Wisconsin-Madison
Sara Clough	UT Austin
Courtney Swaney (Lead, Help Desk)	UT Austin
Robert Prentiss (Lead, Data Analysis)	UT Austin
Tyra Patrice Darville-Layne	Northwestern University
Christopher Renner (Lead, Programming)	Vanderbilt University Medical Center
Michael Johnson	Vanderbilt University Medical Center

Thank you!

FULL REPORT

BACKGROUND AND PURPOSE

In 2011, the FDP created a PHS Financial Conflict of Interest (FCOI) Clearinghouse as a mechanism for FDP member and non-FDP member institutions to document that they had a PHS FCOI compliant policy in place. This repository allowed participants to forego the exchange of thousands of individual transaction-specific documents. As of August 2017, 1115 institutions are listed in the FCOI Clearinghouse.

The success of this initiative led to the concept of an expanded clearinghouse that would contain audit, demographic and fiscal information needed by pass-through entities (PTEs) when they are issuing subawards. The need for a national repository was exacerbated by release of the Uniform Guidance, which expands subaward risk assessment and monitoring obligations. Many organizations have created “Subrecipient Commitment Forms” to collect such data, but the proliferation of many different forms collecting mostly similar information has underscored the need for national consistency and a more efficient process. In 2015, the working group collected 133 subrecipient commitment forms from its members, and analyzed the data elements to derive a single, common profile that can be broadly used for this purpose.

The pilot was divided into two phases and one post-pilot phase:

- **Phase I** eliminated the use of subrecipient commitment forms among participating organizations in favor of a national online repository of entity profiles completed in Excel. The Pilot sought to test whether a standardized, streamlined subrecipient data repository is feasible, and whether such a repository effectively reduces the data collection and review burden for pass-through entities and subrecipients alike, while still ensuring stewardship over federal funding.
- **Phase II** created a more robust web-based system to house these entity profiles. This web-based system allows for virtually real-time updates, secure certification of information, and ease of use for both clearinghouse participants and others looking for up to date information.
- **Phase III** (now in process) will enhance the web-based system by adding an application programming interface (API) to enable institutions to pull clearinghouse data directly into their home systems; and potentially adds a financial questionnaire that can be completed by non-single audit organizations (subject to additional Executive Committee approval). It also paves the way for potentially including non-FDP members in the Clearinghouse, as well as organizations not subject to Single Audit requirements (also subject to further approval).

The Success Criteria for the Pilot included the following:

1. Participants can efficiently and accurately complete the Entity Profile template.
2. Entity Profile forms are certified to be accurate by authorized institutional officials.
3. Entity Profiles are posted in a timely manner and easily accessed on the FDP website.
4. Participants routinely access and use the Entity Profile to obtain annual/static information needed for subaward issuance or modification.
5. Participants are able to update their Entity Profiles efficiently, and do so at least one time per year.
6. Participants determine that access to the Expanded Clearinghouse is more efficient than sharing of individual Subaward Commitment forms.

We believe that the success of the Pilot not only demonstrates a more efficient stewardship model than that in common use today, but highlights the vast potential of a reliable, certified central repository for this kind of information.

Subsequent phases of the Expanded Clearinghouse will explore and may include automated data entry into a database structure from federally available data sources, such as SAM records and the Federal Audit Clearinghouse, or alternatively influencing one of those national repositories to record and make publically available the data elements needed by organizations issuing subawards. Finally, a related initiative involves trying to obtain regulatory relief from the need to share and monitor audit data among Single Audit recipients. Removal of this portion of the data need would, in and of itself, provide significant relief and would influence the need for and the breadth of data that would need to be collected. We are continuing to monitor this closely.

PHASE I - EXCEL REPOSITORY (February 2016 – April 2017)

In Phase I, volunteer participants from FDP member organizations created entity profiles based on a standard Excel template, and had those profiles certified by an authorized institutional official and submitted to the Expanded Clearinghouse Working Group. Entity profiles were posted on the FDP website after a brief review process by the Co-Chairs. Participating organizations agreed to having their profile publically available and agreed to update their profile on a timely basis when necessary (e.g., for new audit results or when their F&A or fringe benefit rates change). Participating organizations were expected to forego use of their individual subrecipient commitment forms (the portions that collect Entity based data/information) when issuing subawards to other pilot participants, in favor of accessing the posted entity profiles to obtain needed static/annual data from their proposed subrecipient.

To address transaction-specific data (e.g., IRB and IACUC approvals), a working group went over all project related questions that were typically asked on subrecipient commitment forms, and surveyed when and why these data elements were collected. The working group debated the necessity of collecting such information at the proposal stage versus inclusion in the subaward agreement itself, and determined that only minimal information was required to be collected prior to subaward issuance. A sample "Letter of Intent" (LOI) was developed for PTEs to gather this transactional information. Pilot participants were encouraged to use this sample LOI, or similar short form, providing it did not include any data elements contained in the profile.

The entity profile contained data about the participating organization including demographic data, audit or financial questionnaire results, F&A rates, fringe benefit rates, PHS conflict of interest policy status, debarment and suspension status, and other reps and certifications. Detailed instructions and a list of FAQs were provided to the participants for profile creation, updating, approval, and submission as well as specific expectations for participants. Participants were provided real-time support through the use of an email help desk, managed by the co-chairs and other key working group members, in addition to listservs where participants could ask questions to a wider group. Two "welcome calls" were held during each cohort, where co-chairs explained the requirements, went over the profile questions, and participants could ask questions or get clarifications.

Cohort 1, which went live on March 28, 2016, included the majority of the Pilot working group and approximately 40 FDP member organizations who had expressed interest in participating, for a total of 51 profiles. Cohort 2, which went live on August 18, 2016, included an additional 76 profiles, for a total of 127 profiles for Phase I.

Pilot participant organizations were expected to:

- Create entity profiles based on a standard Excel template, and have those profiles certified by an authorized institutional official.
- Send the completed and authorized profile to the designated working group co-chair for review prior to being sent to FDP for posting to the FDP website.
- Agree that the profile can be posted as public information on the FDP website

- Agree to timely update the profile (e.g., for new audit results, updated F&A rates, any changes in answers to key questions).
- Forego use of any individual subrecipient commitment forms to collect entity data when issuing subawards to other pilot participants, in favor of accessing the posted entity profiles to obtain needed static/annual data from their proposed subrecipient.
- Use the sample Letter of Intent or similar form to collect project-specific information, and not duplicate data elements that are available in the clearinghouse profile.
- Provide suggestions for improvement on the entity profile template and the sample Letter of Intent.
- Provide a minimum of one annual update to their profile.
- Evaluate the effectiveness and impact of the clearinghouse by tracking activity and providing reports at predetermined intervals during the pilot period.

Participants had the option to:

- Place a link to their FDP-posted template on their own local web pages for use by non-pilot participants who are interested in seeing the data, or for local use by organizational staff needing access to the "organizational factoid" data (DUNS number, CAGE codes, etc.) contained in the template.
- Terminate participation in the pilot at any time. If an organization elected to terminate participation, their template would be removed from the FDP website (as of 12/4/2017 no orgs have requested to terminate their involvement).

PHASE II: WEB BASED SYSTEM (April 2016 – July 2017)

Based on the success of Phase I utilizing the standard Excel Entity Profile and testing the standard data elements, along with the desire to add more organizations, Phase 2 of the Pilot was proposed to develop a web based system to house the organizational information and manage the process of the Clearinghouse. The original Working Group included a representative from Vanderbilt University and early in the Pilot they volunteered to perform the development work to build a web based system. An exploratory meeting took place at Vanderbilt University in April 2016 and a proposal was developed, submitted to the FDP Executive Committee and approved in June 2016. A system development subgroup was created and development work began in the summer of 2016. Vanderbilt University went through reorganization in 2016 and also a change in developer staffing in early fall. Initial development took place in the summer and fall of 2016 and continued into early 2017 with robust user acceptance testing in early 2017. Functional requirements were documented and the web based system went live for Cohorts 1 and 2 on 4/26/2017. Pilot participating organizations were required to enter their data directly into the system in order to further test the system and to ensure the usability of the system. All Profiles were published by early July of 2017 around the same time that we were able to bring on Cohort 3 adding 37more profiles to the system, for a total of 164 Organization Profiles.

Key elements of the web based system include:

- Use of dropdown menus with established values whenever possible
- Warnings and immediate validation of data type or formatting at time of data entry
- Flexibility in data entry to allow moving from section to section or entering in any order, and entering data at different times, since data is saved after each piece is entered
- System user accounts and security
- Workflow to allow for separate creation and certification of profile by participating org
- FDP Admin reports to help track data out of date or time delayed
- FDP Admin Reviewer function to provide final review of Profile to enhance integrity

The system was developed utilizing the following staff, resources and tools:

- Project Manager (contributing as much as 25% FTE during peak Pilot times)
- University of Washington Work study student assistant contributing approximately 1,288 hours (6/1/2015 – 5/31/2017)
- System development team of two – with one Lead Developer and one support developer
- System development subgroup
- Weekly calls
- Shared development space
- Shared documentation – github and dropbox
- Change management process
- Dev, Test and Production instances
- Enhancement List – maintained and prioritized weekly

Estimate of developer time and cost for Phase 1:

- Development time approx. 10/1/2016 – 3/31/2017
- Lead developer – 25% time (260 hours), support developer 50% (520 hours)
- Maintenance and heavy initial support, troubleshoot and enhancement time 4/1/2017 – 6/30/2017 approximately an additional 240 hours

EVALUATION DATA AND OUTCOMES

Evaluation

Once each cohort went live, participants were asked to complete a survey describing their experience completing the excel profile, clarity of the instructions, ease of use, and amount of time to complete. Results shown below are for the on-line web-based system; other data from the earlier Excel-based profile also showed positive results.

The results of the Implementation survey showed an extremely high level of satisfaction with the roll-out of the Clearinghouse. There were 75 responses to this survey, including members of Cohort 3:

Question	% Agree or Strongly Agree	% Disagree or Strongly Disagree	Comments
1. Overall, I am satisfied with the rollout of the Expanded Clearinghouse Web-based System	**98.6%**	1.3%	Some question as to whether the person who responded strongly disagree got his/her scale backwards!
2. I am pleased with the general usability and user interface	**98.7%**	1.3%	
3. The data elements are relevant and appropriate	**97.3%**	1.3%	1.3% were neutral
4. The process of entering and certifying a profile is intuitive	**91.9%**	2.8%	5.4% were neutral
5. The instructions for completing a profile are clear.	**89.1%**	1.4%	8.1% were neutral, 1.4% did not use instructions because the person didn't need them
6. The Organizational Worksheet helped with the collection of information locally before entering into the system (Cohort 3 only)	**88.9%**	0%	11.1% didn't use the Worksheet.
7. I understand how to update my profile in the system	**88.8%**	1.4%	2.8% were neutral

In addition, data was collected on the administrative burden associated with the Clearinghouse – specifically, how long it took to complete the on-line profile (not counting the certifying official review and endorsement time). **Overall, 77% of respondents were able to complete their on-line profile within one hour, and 91% were able to complete their profile within 90 minutes.**

Amount Of Time	% of Total Responses
0-30 minutes	30%
31-60 minutes	47%
61-90 minutes	14%
91-120 minutes	5%
121-50 minutes	3%
151-180 minutes	1%

Comments on the survey are being used to continue to refine the Clearinghouse.

Outcomes

The primary focus of our outcomes were to answer Success Factor #4 (Participants routinely access and use the Entity Profile to obtain annual/static information needed for subaward issuance or modification) and #6: (Participants determine that access to the Expanded Clearinghouse is more efficient than sharing of individual Subaward Commitment forms). The data collected demonstrated that the Clearinghouse was actively used - more than 6,528 uses by pass-through entities, and the same number of uses by subrecipients, and the time saved was significant – approximately 19,000 staff hours during the pilot. Details follow.

Clearinghouse members had the potential to benefit bi-directionally – once in their role as PTE to other members (issuing subawards), and again in their role as subrecipient to other members (receiving subawards).

Because quantifying the estimated reduction of administrative burden was critical to being able to answer our Success criteria, all participants were asked to track their subaward activity as a pass-through entity with other pilot institutions in a Tracking Form. The tracking form contained the name of the subrecipient so that impact data and pairings could be calculated, but at the same time ensuring that subawards were not double counted. This Excel workbook (see appendix) contained a standardized method and instructions for logging each Pilot transaction. After an initial three month ramp-up period, participants were asked to report every four months. Data were analyzed after each reporting period. Data collected on those transactions included the name of the subrecipient;, type of action; prime funding agency; grant versus contract; and whether or not the pass-through entity used the Clearinghouse to process a transaction.

1. USE OF THE CLEARINGHOUSE

Several very large organizations did not use commitment forms pre-pilot, and did not use the Entity Profile as a pass-through entity because they already had alternative monitoring systems in place; however, about **57% of the transactions conducted during the pilot used the Clearinghouse**. For those entities continuing to use alternative monitoring systems, the benefit of Clearinghouse participation was one-directional (e.g., they did not have to complete other participants' subaward commitment forms). The tables below reflect these variations in business practice.

Table 1: Frequency of Use of the Expanded Clearinghouse During the Pilot

Reporting Period	Total Number of Subaward Actions	Number of Subaward Actions Using the Entity Profile	Percent Usage
1 (Ramp-Up)	656	269	41.01%
2	3,099	1,845	59.54%
3	3,586	2,190	61.07%
4	4,145	2,224	53.66%
Grand Total	**11,486**	**6,528**	**56.83%**

Table 2: Largest Volume Institutions and Their Use of the Expanded Clearinghouse

Institution	Actions Recorded as PTE	Entity Profile Used as PTE	Entity Profile Used as Subrecipient
Massachusetts General Hospital	669	0	133
Brigham and Women's Hospital	662	0	94
Harvard University	647	0	68
Johns Hopkins University	518	0	230
University of Michigan	447	0	202
University of California, San Francisco	429	429	211
University of Washington	387	385	240
University of North Carolina at Chapel Hill	372	368	169
Duke University	360	253	192
University of California, Los Angeles	328	112	166

2. VOLUME OF SUBAWARD TRANSACTIONS HANDLED DURING THE PILOT

The volume of subaward transactions exchanged among the 127 participants during the pilot was significant:

Table 3: Volume of Subaward Transactions Issued during the Pilot

Reporting Period	# of Active Profiles in Use at that Time	# of Subaward Transactions Reported
Rpt 1 (3/18/16 – 6/30/16)	51 profiles	656 transactions
Rpt 2 (7/1/16 – 10/31/16)	127 profiles*	3,099 transactions
Rpt 3 (11/1/6 – 2/28/17)	127 profiles	3,586 transactions
Rpt 4 (3/1/17 – 6/30/17)	127 profiles	4,145 transactions
	Total (all periods)	**11,486 transactions**
	One year volume	**10,830 transactions**

**Cohort 2 was first added to the Clearinghouse six weeks into Reporting Period 2, resulting in slightly lower transaction numbers than if they had been tracking subaward transactions from the very start of that reporting period.*

Institutions varied significantly in size and in terms of the volume of subawards they handled with other pilot members, ranging from 0 to 669 transactions**. 65% of pilot members had between 1-200 transactions, with 20% having no transactions and 15% having more than 200 transactions**. A review of the institutions reporting 0 transactions found that they tended to be smaller in size (emerging research institutions or smaller campuses in large state systems).

Table 4: Frequency of Subaward Transactions among Pilot Members

Subaward Actions	Number of Institutions	Percent of Total
0	26	20%
1-100	68	53%
100-200	15	12%
200-300	4	3%
300-400	9	7%
400-500	2	2%
500-600	1	1%
600-700	3	2%

3. TIME SAVED

Clearly the key question was, "***Does having this type of Clearinghouse actually result in a reduction in administrative burden? The answer to this was clearly "Yes."***

The FY17 figures showed that more than 19,000 staff hours were saved during the sixteen months of the pilot, after adjusting for the estimated time spent collecting data and entering an institutional profile. **Looking at data for the last full year, 17,562 staff hours were saved across 10,830 subaward transactions** issued by participating institutions to their fellow participants, in the one year period of 7//16 – 6/30/17, or **1.62 hours per transaction.**

As each participating institution started in the Clearinghouse, they were asked how much time they devoted to sending out and reviewing a subrecipient commitment form sent to a subrecipient, as well as how much staff time they devote to completing and returning subrecipient commitment forms received by others. These figures were then averaged across all participating institutions.

Although pilot data are by definition limited to only those subawards exchanged among the 127 entities, the pilot entities still managed to save 153 staff hours per year (averaged across all participants) or **an average 266 staff hours per year for the 66 entities that had at least 25 subaward transactions during the reporting year.** It is important to note that a key time factor was not able to be captured - because it isn't a metric where "before" or "after" data could be obtained; namely, how much more rapidly an institution was able to issue a subaward because they had immediate on-line access to the profile information and thus did not need to wait for it to be sent to them.

Table 5: Time Saved by Participating Institution

# of Entities	Used as PTE	Used as Sub	Total Hours Saved	Average Hours Saved Per Institution	Average Hours Saved Per Year
127	6,258	6,259	19,401	153	153

Table 6: Time Saved by Participating Institutions with 25 or More Subaward Transactions

# of Entities	Used as PTE	Used as Sub	Total Hours Saved	Average Hours Saved Per Institution	Average Hours Saved Per Year
66	5,975	5,236	17,562	266	266

While it would have been impractical to ask all Expanded Clearinghouse members to calculate what percentage of their subawards were done in the Clearinghouse, we did gather some use case data. Two (large) institutions analyzed the percentage of their subaward transactions handled via the Expanded Clearinghouse. The data are shown below.

Table 7: Percentage of All Subaward Transactions Handled in Expanded Clearinghouse

Institution	% of Subaward Transactions (as PTE) in the EC	Total Transactions in the EC	Total Subawards as PTE	Annual Time savings for transactions handled in the Clearinghouse (1.62 hours/ transaction)	Inputed Annual time savings if 100% of subaward transactions were handled in the Clearinghouse
University of Minnesota	27.7%	321	1160	520 hours	1,879 hours (.9 FTE)
University of Washington	38.3%	334	871	541 hours	1,411 hours (.7 FTE)

Based on these two (large) organizations, we can do a rough calculation of the time saved if all of our subawards were to use the Clearinghouse. It should be noted that even institutions with modest subaward portfolios, such as 50 subaward transactions per year, could save 80 hours of staff time that could be re-purposed for other duties or to subrecipient monitoring tasks they believe are higher priority (such as progress tracking or invoice review). The time saved calculation is likely an understatement, since part of any organization's subaward portfolio includes non-Single Audit entities, and that type of subrecipient typically require more time and effort to assess risk than a Single Audit entity (e.g., using a Financial Questionnaire or other risk assessment technique).

4. DEMOGRAPHIC DETAILS ABOUT SUBAWARD TRANSACTIONS HANDLED IN THE CLEARINGHOUSE

Data was collected on the types of subaward transactions that were handled in the Expanded Clearinghouse during the pilot. Across all 11,486 subawards transactions that occurred during the pilot period, more than 91% were for cost-reimbursement subawards, and 81% were subawards under grants. Prime funding sources for the transactions in this pilot were DHHS agencies (62%) and private funding agencies (13%). No other agency accounted for 10% or more of transactions.

Table 8: Subaward Transaction Type

Action Type	Number	Percent
Modification	5,850	50.93%
New Subaward	3,939	34.29%
Unknown	1,418	12.35%
Proposal	279	2.43%
Grand Total	11,486	100.00%

Table 9: Which Prime Sponsors Occurred Most Frequently

Prime Sponsor	Subaward Actions	Percent
DHHS	7,102	61.83%
Private	1,485	12.93%
Other Federal	1,100	9.58%

DOD	728	6.34%
NSF	708	6.16%
Unknown	193	1.68%
State/Local	170	1.48%
Grand Total	11,486	100.00%

Table 10: Award Types

Prime Award Type	Number of Actions	Percent
Grant	9,256	80.59%
Cooperative Agreement	1,259	10.96%
Contract	704	6.13%
Other	157	1.37%
Unknown	110	0.96%
Grand Total	11,486	100.00%

Table 11: Subaward Costing Mechanisms

Subaward Type	Number of Actions	Percent
Cost Reimbursement	10,453	91.01%
Fixed Price	464	4.04%
Unknown	405	3.53%
Other	164	1.43%
Grand Total	11,486	100.00%

5. REPEAT BUSINESS WITH OTHER MEMBERS

It was possible to collect data that allowed an analysis of who did business with whom. Not surprisingly, geographic proximity was a major factor. As shown in the charts below, there were significant "pairings" of institutions in the Clearinghouse. The extent/frequency of these pairings served to underscore the value of having entity-based information be able to be collected and reviewed once, rather than on a transaction-by-transaction basis.

Table 12: Which pairs of institutions had the most activity

Institutional Combinations	Subaward Actions
Vanderbilt University & Vanderbilt University Medical Center	289
Brigham and Women's Hospital & Massachusetts General Hospital	206
Brigham and Women's Hospital & Harvard University	153
Duke University & University of North Carolina at Chapel Hill	145
Harvard University & Massachusetts General Hospital	143
Dana-Farber Cancer Institute & Massachusetts General Hospital	110
Stanford University & University of California, San Francisco	102
Dana-Farber Cancer Institute & Harvard University	90
University of Kansas Center for Research, Inc. & University of Kansas Medical Center Research Institute, Inc.	77
Brigham and Women's Hospital & Dana-Farber Cancer Institute	75
University of California, Los Angeles & University of California, San Francisco	71
Brigham and Women's Hospital & Harvard T.H. Chan School of Public Health	70

Table 13: Which pairs of locations had the most activity

City Combinations	Subaward Actions
Boston, MA & Cambridge, MA	651
Boston, MA & Boston, MA	425
Nashville, TN & Nashville, TN	289
Chapel Hill, NC & Durham, NC	145
New York, NY & New York, NY	127
Baltimore, MD & Boston, MA	113
San Francisco, CA & Stanford, CA	102
Boston, MA & New York, NY	87
Fairway, KS & Lawrence, KS	77
Los Angeles, CA & San Francisco, CA	72
Baltimore, MD & Baltimore, MD	70
Portland, OR & Seattle, WA	68

Pilot Resources (Phase I and II)

The FDP Expanded Clearinghouse Pilot project was a substantial project for FDP and utilized very active co-chair and project management leadership, working group with subgroups and developers, as well as facilitated the addition of some great resources for FDP to use going forward. The three co-chairs for the Pilot and project, Lynette Arias, Pamela Webb and Jennifer Barron spent a significant amount of time on all aspects of this project and continue to perform the FDP Administrative Reviewer function on a daily and weekly basis.

The project team accomplished the following tasks during the life of the project and many of these tasks are ongoing:

- Developed, updated and continue to maintain a robust website of all related materials and resources
- Developed and maintain a large and detailed set of shared files via dropbox
- Developed and maintain pilot listservs to provide regular updates to participating orgs and provide information
- Developed three subgroups with subgroups leads holding regular and sometimes weekly calls
- Developed and maintain an ongoing system change management process for enhancements and updates
- Developed and maintain on ongoing project management and process structure to track work in progress overall and specifically related to participant profiles

Resources paid by FDP directly and utilized for the success of this project include:

- Github account
- Cloudways web hosting server
- Purchased fdpclearinghouse.org domain name
- Dropbox shared files
- Initial exploratory meeting at VUMC
- Developer travel to FDP meetings for demo’s, training and support of the Pilot

PHASE III – POST PILOT (July 2017 – current)

The FDP Expanded Clearinghouse continues to be enhanced and maintained on a regular basis. The system development subgroup continues to have a weekly phone call, maintains an ongoing enhancement request listing and discusses and prioritizes updates regularly. An additional subgroup was recently formed to specifically oversee the development of an application programming interface (API) for participating organizations to access the data in the Clearinghouse and pull into their in-house organizational systems. An initial Business Requirements Document (BRD) has been developed and subgroup calls are scheduled every other week throughout the fall to move this key enhancement forward. This group includes representatives from the FDP eRA committee to ensure strong partnership with this group. It is hoped that an initial beta version of this API will be available in the fall of 2017 or early 2018.

One of the initial Pilot subgroups (Pilot Supporting Documents) continues work to develop a standard set of data elements for a "financial questionnaire" to be utilized by organizations that are not subject to Single Audit requirements. This set of data elements and questions would provide a more expanded set of data and information than provided for Single Audit organizations currently in the Expanded Clearinghouse. The goal is to have a pdf fillable form to test with Pilot organizations in the fall of 2017 and begin to assess how the data elements would be added to a specific section of the Clearinghouse system and/or integrated into current sections to allow non Single Audit organizations to become members of the Clearinghouse.

Work will begin in September to prepare for the addition of additional FDP. The work that needs to be done in this area includes preparing all current participating organizations to adjust processes to handle the fact that new organizations will be added on a one-by-one basis and not in Cohorts or batches.

Current Status of Expanded Clearinghouse

As of the date of submission of this report, the FDP Expanded Clearinghouse contains profiles for 164 organizations that are part of 111 FDP members. The listing of pdf/excel Profiles that had been maintained on the FDP webpage through the majority of the Pilot has now been retired and the FDP Expanded Clearinghouse webpage now points people to fdpclearinghouse.org and the list of Participating Organizations there. The co-chairs of the project and Pilot maintain established documented procedures for the administration of the Clearinghouse, including change management, helpdesk coverage and regular FDP Admin Reviewer activity to review and publish ongoing Profile updates.

Estimated resource needs going forward:

FDP EXPANDED CLEARINGHOUSE | RESOURCE AND COST ESTIMATE 9/1/2017 – 8/31/2018

- **FDP Administrative Reviewers (Co-Chairs)**
  - Ongoing Profile review, approval/publishing for updates to existing Profiles (approx. 1 hrs/week)
  - Review of new Profiles or new organizations (approx. 1-3 hours/week depending on volume)
  - Profile integrity reviews – Performed by Co-chairs (approx. 2 hrs/week dependent on volume)
    - Monitoring Profiles Pending Certification/aging report
    - Monitoring Profiles with expired certifications/report

- **FDP Working Group Effort**
  - System Development Subgroup – approx. 2 hrs/week each for 5 members
  - Instructions/Evaluations/Reports & Supporting Documents Subgroup – as needed

- **<u>System maintenance development and support</u>**
  - Developer time – Maintenance (Bug Fixes & Minor Enhancements) – estimated 24 hrs/mth
  - Developer time – API – estimated 62 hrs
  - Development support costs, cloud storage
  - Pilot travel support
  - Developer time - Financial Questionnaire – estimated 50 hrs

RECOMMENDATIONS TO FDP EXECUTIVE COMMITTEE

Due to the overwhelming success of the Pilot and the broad interest in expanding the participants, we recommend the following as potential next steps for the Expanded Clearinghouse.

CURRENT FDP MEMBER RELATED:

1) ***Re-invite FDP members and organizations that are not already in to join, on a one-by-one basis.***
    a. Proposed Timing – Mid October.

2) ***At start of the next FDP phase, make participation in the Clearinghouse mandatory for members***
    a. Items that Working Group will continue to consider and report back on include:
        i. Obstacles to entry with those who have not yet joined, or new FDP members.
        ii. Connected to #1 above. If all FDP members have joined by then, will be resolved.
        iii. Be able to clearly article pros and cons, resources and time needed, impacts, etc.

3) ***Allow working group to continue development and enhancement work, focusing first on items that support FDP members specifically including:***
    a. Ongoing small to medium enhancements to improve ongoing use of the system
    b. Develop an API (including assessing options/impacts of vendors having access)
    c. Continue development and pilot use of a "Financial Questionnaire" form (outside of the system) to be used for non-Single Audit organizations.

4) ***Develop long range planning for FDP Expanded Clearinghouse***
    a. Should FDP own and maintain this system long term?
    b. How data can be used to support FDP pilots ongoing?
    c. How FDP Expanded Clearinghouse can or should relate and interact with federal systems or inform changes in current federal systems?
    d. Assess feasibility of merging in FCOI Clearinghouse or other areas of FDP data.
    e. Other uses or impacts.

NON FDP MEMBER RELATED:

5) ***Invite non-FDP members who are also single audit recipients to join on a one-by-one basis***
    a. Items that Working Group will continue to consider and report on include:
        i. Should there be a fee charged for access for non FDP organizations?
        ii. When is realistic target date for this?
        iii. Does charging bring with it more accountability for accuracy of data?

6) ***Invite non-FDP members who are not single audit recipients to join on a one-by-one basis.***
    a. Items that Working Group will continue to consider and report on include:
        i. Same considerations as above.
        ii. Requires "Financial Questionnaire" data elements to be added to Clearinghouse (after date elements have been pilot tested via a manual form).

7) ***Allow the FDP Executive Committee to determine use of revenue from non-members to support the following (listed in priority order):***
    - Expanded Clearinghouse maintenance
    - Continued enhancements
    - Other FDP pilots or projects

APPENDIX

Unless otherwise noted, please click on the link below to reach the document in question:

- Original Excel Entity Profile
- Link to system
- System Instructions
- Phase 1 Proposal
- Phase 2 Proposal
- List of all Participating Organizations