City and County of San Francisco

Office of the Controller – City Performance

HUMAN SERVICES AGENCY

Adult Protective Services Staffing Analysis

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HSA Project Sponsors:

Shireen McSpadden, Executive Director,
Department of Aging & Adult Services
Jill Nielsen, Deputy Director of Programs

City Performance Team:

Peg Stevenson, Director
Kyle Patterson, Project Manager
David Weinzimmer, Performance Analyst

For more information, please contact:

David Weinzimmer
Office of the Controller
City and County of San Francisco
(415) 554-7656 | david.weinzimmer@sfgov.org

Purpose of the Report

This report documents the Controller's Office analysis and findings from a staffing analysis of Adult Protective Services. Job shadows, a peer survey, and an analysis of case data highlight the key drivers of case complexity and inform business decisions around unit organization and caseload management.

Background & Methodology

Every year, the City and County of San Francisco's Adult Protective Services (APS) unit receives thousands of reports regarding allegations of abuse or self-neglect of elderly adults or adults with disabilities. These allegations of abuse or self-neglect result in over 5,000 cases per year that are addressed by APS, with the majority of these cases involving in-person investigation by APS social workers.

APS leadership perceived that cases have grown more difficult and resource-intensive to resolve. APS requested that the Controller's Office perform a staffing analysis to inform business decisions around the use of specialized units and caseload management, as well as to add to the organization's understanding of the resources required to serve high-intensity cases.

The Controller's Office conducted two interviews, two job shadows, a survey and a focus group of social workers, a peer survey of 74 APS programs across the country, and an in-depth analysis of case-level data.

Key Findings from Job Shadows and Focus Group

- Social workers serve clients with complex and often multiple needs.
- Social workers face challenges to their safety and emotional health.
- Clients often refuse services, which makes it difficult to reduce their risk and can lead to recurring cases.
- Social workers' time is very fragmented; among the many activities in their day, the largest segment of time is spent on the phone connecting with collateral agencies, clients, and service providers.
- Social workers rely heavily on other resources in reducing client risk and setting up sustainable service plans for clients; these resources are scarce and have their own timelines and eligibility criteria.

Key Findings from Peer Survey

The Controller's Office conducted a peer survey of APS programs that received 74 responses (34 in California and 40 from elsewhere).

- While most APS programs do not have specialized units, those that do tend to be satisfied with them; those that were dissatisfied had issues balancing resources and caseloads across units.
- Financial abuse units are the most common type of specialized unit.
- A majority of programs consider current caseload when assigning cases, either formally or informally.
- Weighted caseloads have rarely been attempted, and have been

Key Recommendations

Based on the report findings and input from stakeholders throughout the project, the Controller's Office has identified a number of recommendations. The following are the key recommendations for APS:

Caseload Management and Case Assignment

- Consider piloting rotation-based case assignment that also takes into account social worker preferences by type of abuse.
- The Controller's Office does not suggest using a points-based system of weighted caseloads for case assignment and/or caseload balancing.

Specialized Units

- In creating a specialized unit, continually assess whether caseloads and resources are appropriately balanced across units, and maintain lower caseloads within the specialized unit.
- Provide supplementary training to specialist social workers.
- On an ongoing basis, evaluate the effectiveness of the specialized unit for different types of abuse and self-neglect.

unsuccessful among the limited sample in the survey; they have been difficult to administer and have had minimal caseload impact.

- Other caseload management tools (e.g., caseload caps, modifications to a pure rotation system) are more effective and less difficult to administer than weighted caseloads.
- Services, especially tangible services (e.g., home-delivered meals), tend to be provided at higher rates in California.
- Average caseloads vary widely across the country, and there are not strong geographical patterns.
- There is a wide range of rates of repeat clients, and almost a quarter of programs do not know how many of their clients are repeat clients.
- Financial abuse is the most commonly cited type of frequent abuse, and is overall seen to be the most challenging type of abuse to address.
- However California programs reported that self-neglect cases were the most challenging type of abuse to address, particularly when the client has capacity and refuses services.

Key Findings from Case-Level Data Analysis

The Controller's Office analyzed 22,514 cases opened from 2012 to 2015, performing summary analyses and regressions of case length and level of activity.

- The number of cases has grown steadily in recent years, but workload is increasing more quickly as a growing portion of cases are deemed high-risk (i.e., require Face-to-Face meetings with clients).
- Cases that include a Face-to-Face visit account for 72% of all case activity, and nearly half of all case activity is telephone calls to collateral agencies.
- Self-neglect cases are more resource-intensive than abuse by others, but the most intensive cases on average are ones where both types of abuse occur.
- Sixty percent of cases from 2012-2015 corresponded to clients who had more than one case in that time period. In December 2015, 35 percent of new cases were for clients who had already had one or more previous cases in the preceding 12 months.
- Response times have the strongest correlation of any case-related factor with case length and level of activity.
- Housing-related variables and indicators of financial abuse are associated with longer cases with more activity.
- Homelessness, clients receiving interventions from other sources, and alcohol abuse are all associated with shorter cases with less activity.
- While regression analyses are helpful for uncovering patterns in case length and level of activity, there is too much variability in the dataset to predict case length and level of activity with sufficient precision for use in developing weighted caseloads.

Case Work

- Ensure that language competencies among social workers and case aides match client needs.
- Seek out trainings on motivational interviewing or other methods that could help social workers elicit cooperation and behavior change from reluctant clients.
- Develop enhanced guidelines and stronger policies and procedures on which tasks should be assigned to case aides to even out their utilization and ensure tasks are delegated more consistently. Review social workers' case aide utilization regularly.
- Explore opportunities for greater coordination and data sharing across HSA and other departments (including DPH and DHSH) that could result in more effective, coordinated care.

Cases for Repeat Clients

Sixty percent of cases from 2012-2015 were for clients with more than one APS case.

- Conduct further study of the root causes of repeat cases to address them when possible.
- Monitor the rates of repeat clients in routine reporting, and whether a new specialized unit successfully reduces the rate of repeat cases.

Further recommendations are included in Chapter 5 of the report.

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LIST OF ACRONYMS

Abbreviation	Description
AACTS	Aging & Adult Client Tracking System (software)
APS	Adult Protective Services
DAAS	Department of Aging and Adult Services
F2F	Face-to-Face
FAST	Financial Abuse Specialist Team
FTE	Full-time equivalent
HSA	Human Services Agency
HST	Human services technician
NAPSA	National Adult Protective Services Association
NAPSRC	National Adult Protective Services Resource Center
NASUAD	National Association of States United for Aging and Disabilities
NTD	No ten day (no in-person response required)
NIFFI	No Initial Face-to-Face Investigation
PSW	Protective services worker
ROA	Report of abuse
ROC	Record of contact

Chapter 1: Introduction & Methodology

Every county in California is mandated by the state to operate an Adult Protective Services (APS) program that is responsible for accepting, investigating, and responding to reports of elder and dependent adult abuse. The abuse may be physical violence, sexual assault, financial exploitation, neglect by others or self, abandonment, or emotional harassment and intimidation. APS investigates reports of abuse 24 hours a day, 7 days a week. The program also provides short-term case management and crisis intervention services for victims, connecting them to the services needed to ensure their continuing safety. APS charges no fees and has no income eligibility restrictions, and its services are voluntary and can be refused.

San Francisco's APS is operated by the Department of Aging and Adult Services (DAAS), which is part of the San Francisco Human Services Agency. DAAS Integrated Intake and Information Services provides intake for APS during business hours (with intake performed directly by APS outside of normal business hours so that intake is available 24 hours a day). DAAS Integrated Intake receives thousands of reports of abuse or self-neglect annually, which result in over 5,000 cases per year that are addressed by APS social workers (referred to by San Francisco APS as protective services workers, or PSWs).

For each report of abuse or self-neglect, the determination is made as to whether a face-to-face meeting/investigation (F2F) is necessary, and if so the required response time (anywhere from immediate to 10 days). If clients are eligible and accept services, social workers complete a comprehensive psychosocial assessment and may provide both intangible services (e.g., referrals to in-home supportive services and other programs) and tangible services (e.g., emergency meals, transportation, emergency housing/lodging, etc.). APS generally does not have preferential access for their clients for the services to which they refer clients; typically, they are limited to providing voluntary assistance to their clients to link them with services. They close their cases once the client is no longer at immediate risk and has a service plan in place to manage their risk in the longer term. Unless a client is found to lack capacity to make decisions for themselves, all services must be accepted voluntarily by the client, and if the client does not accept services the case will be closed noting the client's refusal.

APS leadership perceived that cases have grown more difficult and resource-intensive to resolve, particularly for housing/eviction-related cases and high-risk self-neglect cases, for which they have requested a specialized unit through the budgeting process. San Francisco Human Services Agency asked the Controller's Office to study the key drivers of case complexity at APS.

This report documents the findings of the Controller's Office's study of APS work, and is intended to inform APS in business decisions around the use of specialized units and caseload management, as well as to add to the organization's understanding of the resources required to serve high-intensity cases. To provide more context to the localized findings regarding San Francisco APS, the Controller's Office also administered a peer survey of APS programs across the country.

Methodology

The Controller's Office combined qualitative and quantitative methods to study the drivers of APS case complexity, with the project methodology including:

- Two interviews (one of a social worker and one of a supervisor)
- Two full-day job shadows
- A "mini-survey" of social workers to get more input on the duration of frequent activities
- A peer survey that received 74 responses (34 from California APS programs and 40 from others across the country)
- An in-depth data analysis of case-level data from the system used to track all case work
- A focus group with APS staff, which included both general discussion on the key drivers of case complexity as well as specific discussions of draft findings from the Controller's Office analysis of case-level data and peer survey

For the analysis of case-level data, the Controller's Office considered two key measures of case complexity: case length (measured as the number of days a case is open) and level of activity (measured through a composite index based on the record of contacts that captures every activity attached to each case). The analysis of case-level data includes summary statistics to understand levels and trends of various indicators, as well as regression analyses to understand which factors most strongly influence case length and level of activity. Findings from the focus group are mentioned when relevant throughout the report.

Report Organization

Chapter 1 of this report provides a brief overview of the job shadows and insights into the complexity of APS casework. Chapter 2 provides an analysis of the peer survey of APS programs across the country. Lastly, Chapter 3 presents the analyses of case-level data from San Francisco APS.

The appendices include further detailed information on data collection and analyses.

Chapter 2: Job Shadows

The Controller's Office conducted two full-day job shadows in April 2016, with a Controller's Office analyst shadowing one employee each day, taking minute-by-minute notes. These detailed notes were transcribed and coded into different categories of activities.

Social Worker Activity Analysis

Figure 1 below shows the amount of time spent on different types of activities on average per day during the two job shadows.

Figure 1. Percent of Time by Activity (Average, Per Day)

Time	Activity	Percent
2:22	Outbound phone call	27%
1:28	Waiting or searching for right person	17%
1:07	Travel	13%
0:58	In-person investigation	11%
0:41	ROCs in AACTS	8%
0:21	Inbound phone call	4%
0:10	Voicemail	2%
0:09	Service provision by emergency services	2%
0:08	Email	2%
0:08	Look at files	2%
1:08	Other	13%
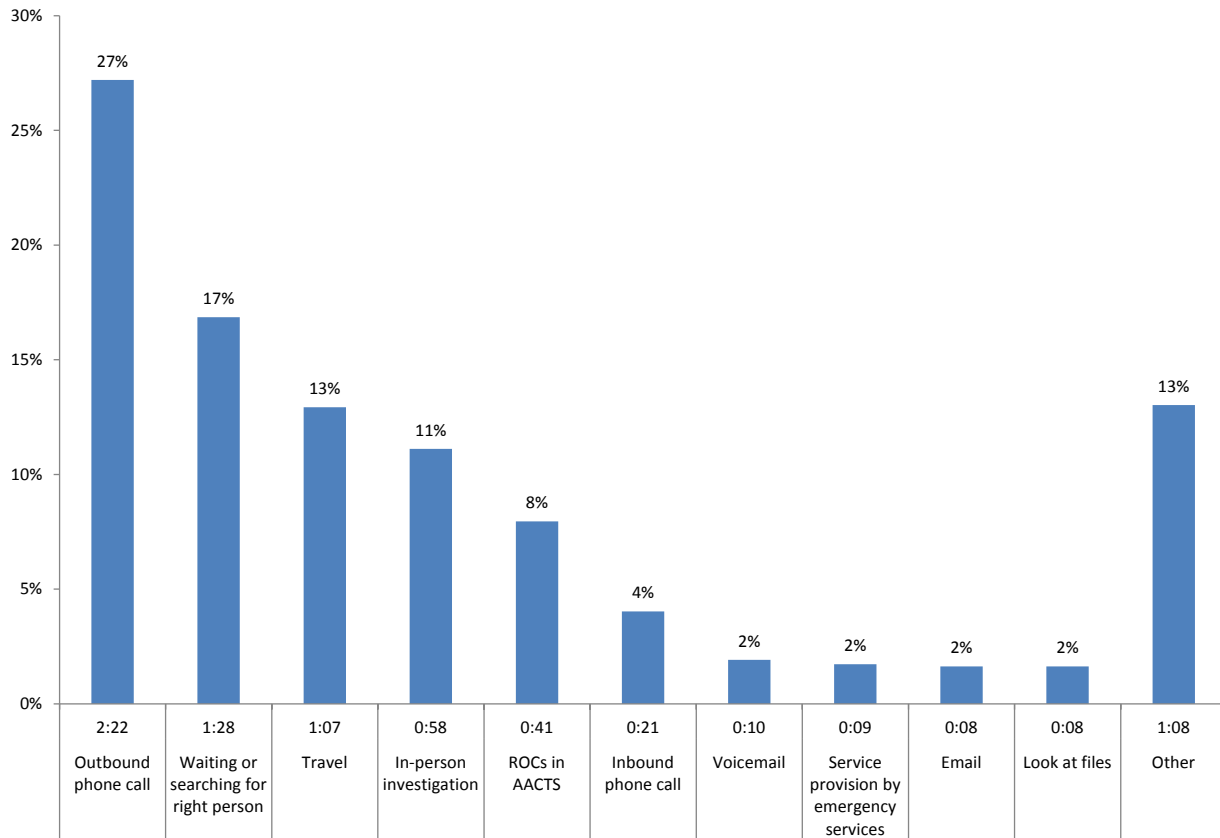
These numbers should not be taken to be precise or representative of all social workers or cases – APS work can vary immensely from one day to the next, and to provide a more accurate view of APS social work overall it would be necessary to record time across many more days and social workers. However, Figure 1 does provide some insight into APS work and its complexities. During the two job shadows, just over a quarter of all work time was spent on outbound telephone calls, which demonstrates APS's role as being the connector between many different people – clients, collateral agencies, service providers, and others.

Due to the need for in-person investigation and face-to-face meetings with clients, a significant amount of time is spent traveling between clients, the San Francisco APS office, and sometimes other locations.

The two social workers shadowed used personal vehicles and happened to have clients who were closer to the office, but travel time may be much more substantial in other circumstances.

Social workers are required to record every activity performed for cases as records of contact (ROCs) in the software system used to track APS case work, and this consumes a substantial portion of their day. The ROCs provide a legal record of case work performed, including a category for every activity and narrative detail.

Social workers' time can be very fragmented. During their limited in-office time, social workers must often place many calls in a row for multiple cases to research services, arrange appointments on behalf of their clients, advocate on their clients' behalf, or investigate alleged abuse. In between every activity, social workers must either record the corresponding ROC or make a note to record it soon thereafter.

APS workers must investigate cases in person and unannounced to preserve the integrity of their findings, but this means that often clients are not home or are difficult to locate. The second-largest component of the social workers' time over the two job shadows was spent waiting or searching for the right person since clients, employees of collateral agencies, and service providers may all be either difficult to track down, late, or busy, causing the social worker to wait or search for them. The considerable share of time spent searching or waiting for the right person demonstrates a key challenge of APS work that was also highlighted in interviews and the focus group.

Challenges Facing Social Workers

APS social workers face many significant challenges in their-day-to-day work. Some challenges witnesed or discussed during the job shadows and focus group include:

- Social workers face challenges to their own emotional health as they are exposed to high levels of secondary trauma in the course of their work.
- Social workers put their personal safety at risk at times, for example showing up unannounced and alone to households where abuse is present.
- Social workers serve clients with complex and often multiple needs. For instance, in two days of shadowing social workers, the Controller's Office witnessed clients with needs including: severe, untreated injuries and other physical health issues; untreated mental health issues such as schizophrenia; recurring drug and alcohol abuse; cognitive impairment and/or dementia; suicidal ideations; severely cluttered living spaces that pose environmental hazards; food insecurity; housing challenges, either in the form of evictions or difficulty finding a board and care placement; and lack of family or other reliable support structure.
- Clients often refuse services, which makes it hard to reduce their risks and can lead to recurring cases. Family members and others may also be uncooperative with social workers' investigations.
- Social workers rely heavily on other resources (such as public assistance, nonprofit case managers, board and care facilities, etc.) in reducing risk and setting up sustainable service plans for clients; these resources are scarce, and social workers must accommodate their timelines and eligibility criteria.

Chapter 3: APS Peer Survey

The Controller's Office formulated a survey to learn from peer agencies about their APS programs' unit organization and case management practices. There have been a number of national surveys of APS programs, including a major survey conducted in 2012 of 53 agencies across the country, sponsored by the National Association of States United for Aging and Disabilities (NASUAD) and the National Adult Protective Services Association (NAPSA).[1]

However, previous surveys have not focused on unit organization and case management practices. Since many of the business decisions around day-to-day operations hinge on these topics, the Controller's Office formulated this survey to understand how San Francisco's practices compare to other jurisdictions across the country.

The survey asked about the clients and geographic area served by each program, whether social workers/APS investigators are specialists or generalists in the cases they investigate, and how case assignment and caseloads are managed. If weighted caseloads are or have ever been used by an APS program, they were asked about their approach to weighted caseloads and whether it was successful. All respondents were then asked about risk assessment tools used and what tangible and intangible services are provided. Lastly, the survey asked about case statistics and program information: the number of cases per year, average duration of cases, number of staff, typical caseload, case recidivism rates, and the most challenging cases to resolve. The full survey instrument is included in Appendix 1.

The survey was distributed to every county in California and nationally via a professional listserve as well as targeted emails to peer jurisdictions in medium to large cities across the country. After consolidating duplicate responses, the survey received 74 responses: 34 responses from California APS programs (including San Francisco), and 40 responses from APS programs elsewhere in the United States.

As shown in Figure 1, among responses from peer jurisdictions outside California ("National" responses), 24 responses were from APS programs at the county level, 13 were from state programs, two were from APS districts within a state, and one was from a federally recognized tribe of Native Americans. All California responses were from counties, since APS programs in California are administered at the county level.

Figure 1. Jurisdiction of Respondents
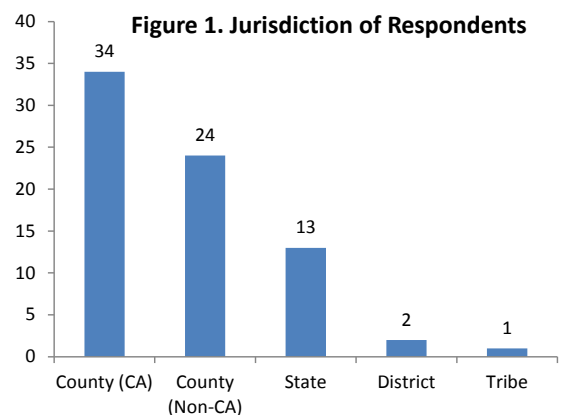
All surveyed APS programs in California as well as 33

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[1] National Association of States United for Aging and Disabilities, "Adult Protective Services in 2012: Increasingly Vulnerable." Washington, DC, 2012. Accessed June 2016 at http://www.nasuad.org/sites/nasuad/files/hcbs/files/218/10851/NASUAD_APS_Report.pdf.

of the 40 National peer jurisdictions serve both elder abuse clients (age 65+) and vulnerable or dependent adults/adults with disabilities; seven National jurisdictions serve elders only (age 60+).

Specialized Units

In the Controller's Office survey, programs were asked if their APS social workers/investigators are organized in specialized units by type of abuse (e.g., a financial abuse group) or if they are generalists who work on all types of cases.

Key Finding #1: While most programs do not have specialized units, those that do tend to be satisfied with them.

The majority of programs treat social workers/investigators as generalists who work on all types of cases (84% of all programs; 88% of California programs). However, as shown in Figure 2, 12 APS programs surveyed (16%) have or have tried to use specialized units.

Figure 2. Use of Specialized Units

Specialization can mean different things to different programs. Among the survey responses, there are at least four levels of specialization of staff:

1. Generalist Staff – there is no specialization and any staff member may receive any case.
2. Informally Specialized Staff – while specialization is not enshrined in titles or formally adopted organizational procedures, specialized skills of certain staff are recognized in case assignment.
3. Formally Specialized Staff – designated staff are officially recognized as being specialized in certain types of cases, with corresponding titles and training, but they are interspersed throughout the program's work units.
4. Specialized Unit – formally specialized staff are placed in a separate unit that works only or primarily on certain types of cases.

Key Finding #2: Among programs that were dissatisfied with specialization, the issues seem to have been around balancing resources and caseloads across units.

Most programs that have tried using specialized units reported that they were satisfied with them. As shown in Figure 3, among the 12 programs that have or had specialized units, only a quarter were somewhat or very dissatisfied. Comments from two of the dissatisfied programs (Hawaii and Florida) indicated that their frustrations stemmed not from issues with organizational structure but primarily from an imbalance in resulting caseloads inside and outside of the specialized unit: specialized units were not right-sized for their corresponding caseloads, or their caseloads were volatile.

Figure 3. Satisfaction with Specialization
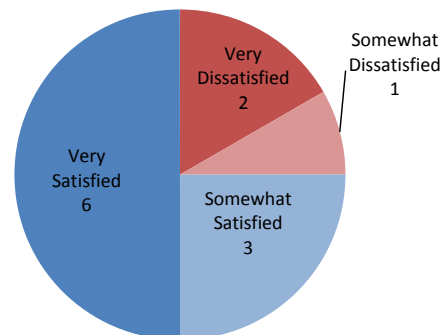
In Florida, due to variations in the number of cases received, caseload per worker was uneven. Likewise, Hawaii experimented with assigning financial exploitation cases on the island of Oahu to a three-person team (one APS worker, one auditor, and one social services assistant) for 3-4 years. The team was limited in size due to funding constraints. The three positions were quickly overwhelmed with the volume of financial exploitation cases, and overflow cases were assigned to other Oahu APS workers. Specialized units were discontinued because APS workers (both financial specialists and generalists) were not able to keep up with caseloads.

Key Finding #3: Financial abuse units are much more common than any other form of specialized unit; having a different type of specialized unit would likely be an innovation with relatively few precedents.

The most common type of specialized unit reported by programs was for financial abuse; every program that provided details on their specialized units (11 of 12) mentioned using financial abuse units, which some called a Financial Abuse Specialist Team (FAST).[2] Maine was the most recent program among respondents to establish a FAST program. Their FAST program was established in June 2016 as one outcome of the Maine Attorney General's Task Force on Financial Exploitation of the Elderly, which additionally identified statutory, judicial case management, and criminal rule changes needed to combat financial exploitation of the elderly.[3]

In California, Sacramento, San Mateo, Santa Clara, and Sonoma Counties reported using specialized units for financial abuse. However, some noted that due to department caseloads, members of the financial abuse team may sometimes be assigned non-financial abuse cases and vice versa. San Mateo County's financial abuse unit, the Elder Dependent Adult Protection Team, includes both deputy public guardians and social workers, and was put into operation in fall 2015. The unit has been able to strengthen its collaboration between the District Attorney, law enforcement, and County Counsel. Sonoma County's financial specialists are attached to the department's investigation units, but also meet weekly for case discussions and receive specialized training. The program notes that all investigators are trained to be competent in addressing financial abuse, but financial specialists are better equipped to handle very complex cases.

Multnomah County (Portland, Oregon and nearby areas) has not only a financial abuse team, but also specialized community, facility, and screening teams.

Other programs, as mentioned above, had specialized staff rather than units. For instance, the Philadelphia Corporation for Aging has a Financial Exploitation Specialist and a Nurse Investigator, while

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[2] Of the 12 programs that are categorized here as having specialized units/staff, one (the Philadelphia Corporation for Aging) is actually not an entire unit of employees but rather one Financial Exploitation Specialist. Some FAST teams actually function as multi-disciplinary working groups rather than social worker/investigator units. The Controller's Office did not independently verify the organizational structure of departments that self-identified as having specialized units.

[3] Maine Office of the Attorney General, Final Report of the Maine Attorney General's Task Force on Financial Exploitation of the Elderly, March 11, 2015, accessible at http://www.maine.gov/tools/whatsnew/attach.php?id=639824&an=1.

the rest of APS staff are in five teams. Many other programs reported having nurses on staff, and Placer County, California mentioned its interest in developing a housing specialist position in its program.

In addition to specialization of staff, some programs work on particularly challenging cases through multi-disciplinary meetings or working groups. For instance, San Francisco's APS program participates in a twice-monthly meeting (the Elder Abuse Forensic Center) to discuss complicated cases. The multi-disciplinary center is run by a neutral third party, the Institute on Aging, and brings together professionals from medical, legal, social work, and neuropsychological backgrounds, as well as law enforcement, Adult Protective Services, and the Office of the Public Guardian. The goal of the Forensic Center is to provide an opportunity for in-depth discussion, evaluation, and intervention on specific cases of dependent adult and elder abuse.

Case Assignment

Respondents were asked to describe how their APS program manages case assignment of new cases to APS workers, and were also asked specifically whether APS workers' current caseloads have an impact on case assignment.

Key Finding #4: A majority of programs consider current caseload when assigning cases, either informally or formally.

Key Finding #5: About a third of programs reported considering social worker skills, expertise, or language capabilities during case assignment.

All programs were asked whether they consider current caseload when assigning cases, and then were additionally given a free response box to describe their case assignment process. Most programs routinely take more than one factor into consideration in case assignment; less than a quarter of programs described case assignment as being based on just one factor (14% a rotation basis without other considerations mentioned, and 10% based on APS workers' current caseload only).

The survey asked programs if they consider caseload when assigning new cases to staff. As shown in Figure 4, 64% of jurisdictions indicated that they took into account current caseloads when assigning new cases (70% of California programs and 59% of non-California programs). In most cases, this is a qualitative consideration, with programs aiming to maintain a relatively balanced caseload across APS workers. Two jurisdictions reported having a specific cap on the number of cases per APS worker (at 24 cases in Tulare County, CA and 25 cases for case management in Maine; by comparison, San Francisco self-reported an average caseload of 28 active cases). Some programs stated that caseload is not a factor in case assignment since it could incentivize workers to work more slowly to avoid a new case assignment.

Figure 4. Case Assignment Factors

Factor	Percent of Programs
Caseload	64%
Rotation	39%
Geography	32%
Skills, Exper., Lang.	31%
Prior client	8%
Only one social worker	8%
Varies by Office	6%
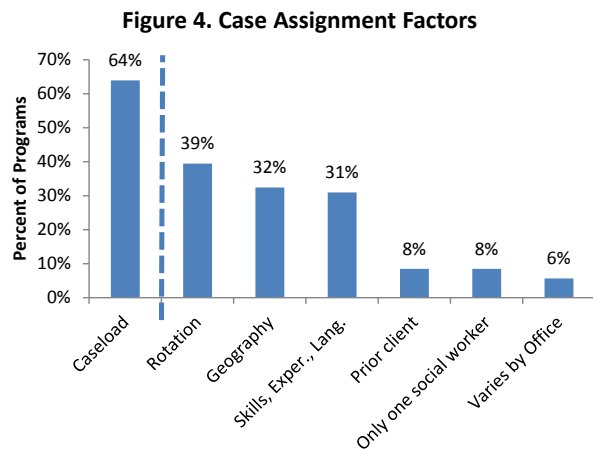
The survey next asked programs to describe what other factors they consider when assigning cases to staff. The most common factors reported were: proceeding through a rotation of APS workers (39%); geography (32%); skills, experience, or language of APS workers (31%); and prior cases with the client (8%).[4] For 8% of programs, there is only one social worker to assign cases to (either in the program or within each geographic area), and for 6% of programs case assignment varied by local offices and the respondent was not able to specify case assignment criteria.

San Diego County's APS program has done a number of Lean Six Sigma projects to improve their APS program, and its most successful changes have been with respect to case intake and assignment. San Diego found that assigning cases to workers based on preferences of allegation types and strengths of workers was successful. Their most successful project was with triage and case assignment: they allow more time for intake and triage to vet the case, verify information, check various databases for further information, follow up with the reporting party, verify demographics, and find the best time to find the client at home or an alternate location. These improvements had a positive impact on workload and led to a perceived better outcome for both the clients and APS workers.

Use of Weighted Caseloads

Under a system of weighted caseloads, programs assign specific weights to different cases to create a "weighted" measure of a worker's current caseload for purposes of equitable case assignment. In theory, a weighted caseload would provide a more accurate representation of the intensity of a worker's current caseload than an unweighted simple count of cases.

Key Finding #6: Weighted caseloads have rarely been attempted, and have been unsuccessful among the two programs in the survey; they were found to be difficult to administer and did not change social workers' caseloads.

It is relatively rare for APS departments to formalize a weighted caseloads system. Of the 74 jurisdictions that responded, none currently used such a weighted caseload system and two (3%) had tried using such systems in the past but abandoned that approach:

- Philadelphia used a program developed in Montana that assigned points based on different case characteristics with the goal of equalizing caseloads within teams. In the end, it proved difficult to maintain this system, and it was perceived that the weighting did not have value since it still involved too much subjectivity. Philadelphia rolled back the weighted caseloads after trying them for a few months. Supervisors can currently adjust caseloads within their own teams if they would like, but there is no longer a formalized weighted caseload system.
- As one of San Diego County's Lean Six Sigma projects to improve APS they implemented weighted caseloads. One unit participated in a pilot project of assigning point values to each case at the time of assignment with the goal of creating an equitable workload. They also attempted to assign cases based on the perception of whether they would have short-term or

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[4] These percentages should not be compared directly to the response regarding consideration of current caseload since the two questions were asked in a different way. Due to the first question being asked in a multiple choice format and the second one as a free response, respondents were more likely to over-report considering current caseload and underreport other considerations.

long-term needs. The weighting was implemented by the unit supervisor and two front-end workers meeting daily to review the assignments received since the previous meeting and using guidelines to weight cases. What San Diego APS found was that workers ended up with the same number of cases per month regardless of the time-consuming system of weighting cases or whether they used their previous approach of assigning based on region, language, and other special project needs. Additionally, perceptions of the perceived time a case would take were not accurate. San Diego APS did not continue the weighted caseloads pilot.

Currently, supervisors can put a worker on "protection" from new cases if their current caseload is exceptionally complex or a certain case has a high level of need, but there is not a formalized weighted caseload system.

Responses from programs did not specifically address how weighted caseloads have been negotiated with employee unions.

Key Finding #7: Other mechanisms exist that are more effective and less difficult to administer than weighted caseloads, such as caps or other modifications to a pure rotation system.

Some departments used mechanisms other than weighted caseloads to increase the equitability of case assignment. Nine programs (12%) described an approach to APS worker caseloads that recognized that particular types of cases take more work than others, and would make case assignment decisions taking into account not only the number of active cases in an APS worker's portfolio but also the type. For instance, one program said that if a case was particularly complex, for instance involving six or more victims, it might be counted as two cases. Another program mentioned that particularly high risk cases or ones involving conservatorship could warrant keeping an APS worker at a lower overall caseload.

Multiple programs mentioned that case assignment would take into account if a particular APS worker already had multiple cases perceived to be very complex, or if the case being assigned was particularly complex. This appears to be more common among smaller programs where there are fewer APS workers among whom to assign cases. While a number of APS programs in large cities indicated that they consider current caseload in case assignment, none described specifically considering the complexity of each APS worker's portfolio of active cases during case assignment.

In San Francisco, if a social worker presents a case before the Elder Abuse Forensic Center, they are exempted from one rotation of case assignments out of recognition of both the extra preparation and paperwork involved in presenting to the Forensic Center as well as the complexity of the underlying case (since the Forensic Center is intended to be used for challenging cases requiring a multidisciplinary approach).

In addition, as mentioned earlier, two programs (Tulare County, CA and Maine) mentioned having caps on the maximum number of active cases per social worker. Supervisors in San Diego may also put social workers on "protection" from new cases, temporarily removing them out of the normal rotation of case assignment. San Diego, which was in the 87th percentile of cases per social worker among programs surveyed, has also sought to moderate the number of cases assigned to social workers overall by developing a "Case Exception Guide." The guide strengthened guidelines for when a case does not need

to be seen face to face, reducing time spent on lower-risk cases to let staff focus on risky and complex cases.

Responses from other programs about risk assessment tools are included in Appendix 2.

Services Provided

Key Finding #8: Intangible services are the core of APS across the country, and are provided at higher rates than tangible services.

The Controller's Office survey next asked about intangible (e.g., referrals) and tangible services (e.g., home-delivered meals) provided by APS programs. As shown in Figures 5 and 6 on the next page, intangible services are provided at a higher rate than tangible services, both nationally and to a lesser extent in California. Referrals to in-home supportive services and referrals to other programs were the two core types of intangible services that every surveyed APS program reported providing. Connections to public assistance and client advocacy were also reported at high levels (80-90%) in both California and nationally, while all other intangible services were provided at substantially higher rates in California compared to the rest of the country (for example, translation assistance: 76% in California, 51% nationally; nursing services by agency staff: 53% versus 19%).

Tangible services are less frequently provided by APS programs than intangible services; among National respondents, 19% had no funding at all for tangible services. The only tangible service provided more frequently by National APS programs than California programs was bed bug preparation services (32% nationally versus 24% in California). The tangible services that had the greatest difference between California and National programs were emergency meals (91% of California programs, 57% nationally), transportation (85% of California programs, 43% nationally), and emergency housing/lodging (79% of California programs, 54% nationally).

Figure 5. Intangible Services Provided

Percent of Programs
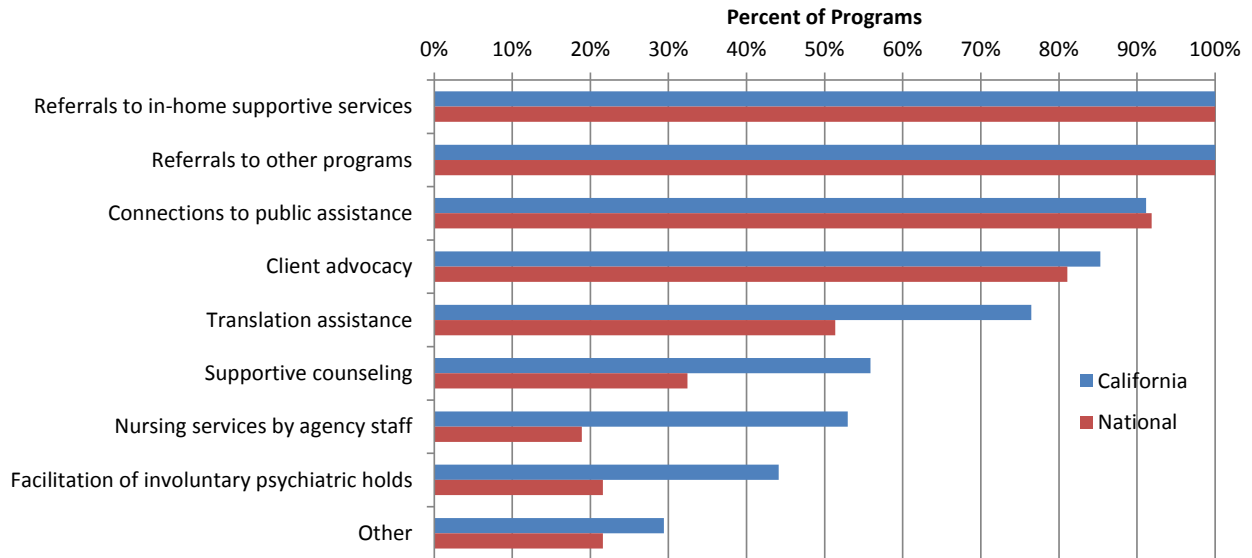
Figure 6. Tangible Services Provided

Percent of Programs
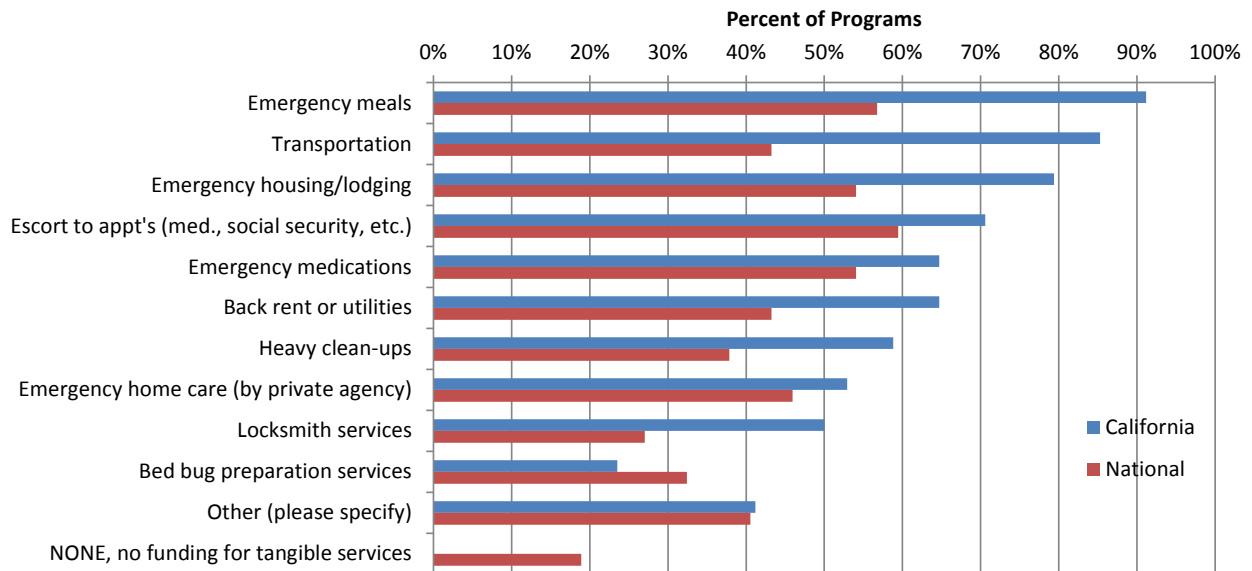
Some less common tangible services reported by programs include:

- Funding for emergency or one-time goods and services needed for client safety (Colorado, with similar funding reported by other programs),
- An APS Resource Fund for use during crisis intervention for a limited time period per case, intended to allow for small purchases without needing a service contract (Hawaii),

- Wheelchair ramps and home remodeling to widen doorways or make showers accessible, adaptive equipment, etc. (Florida),
- Attorney fees for guardianship/conservatorship establishment (Nebraska),
- Relocation services through the State Victim Compensation Board if the client is a victim of crime (Alameda County, California),
- Homeless assistance for walk-in clients (Los Angeles County, California),
- One-time nursing, legal, or psychological assessments (Santa Barbara County, California), and
- Gift cards for groceries, pharmacies, or supermarkets for bed linens, incontinence supplies, space heaters, or fans (Fresno County, California).

A third of APS programs that responded do not have access to or do not provide emergency housing or lodging, partially due to a lack of facilities in many parts of the country. Ventura County, California, noted that they will provide emergency lodging by paying for a motel if appropriate, but that they have no emergency housing in their county. They have not found facilities willing to take their clients, especially after hours.

Key Finding #9: San Francisco provides a higher level of services than most programs and California in general also provides a higher level of services than the rest of the country.
San Francisco's APS program provides a higher level of intangible and tangible services than most other programs, including all the specifically named intangible and tangible services on the previous page in Figures 5 and 6. For intangible services listed in Figure 5, California programs provided on average 6.1 services per program, compared to 5.0 by National programs. For tangible services listed in Figure 6, California programs provided on average 6.4 services per program, compared to 4.5 by National programs. Only three of the 74 programs reported providing all of the listed tangible and intangible services: Minnesota APS, San Francisco APS, and San Mateo County, California APS.[5]

Case Statistics and Program Information
The survey respondents were a mix of district, county, and state programs, as shown earlier in Figure 1, and as such operate at very different scales.

Key Finding #10: There is a very wide range across the country in the size of APS programs (cases per year) and annual number of cases per social worker/investigator.
Survey respondents were asked the number of full-time equivalent (FTE) staff among social workers/investigators and supervisors as well as annual case volumes. Among the 63 respondents who gave annual case volumes, the average number of cases per year was 4,763, but as is visible in Figure 7, relatively few programs are close to this average number.

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[5] The formulation of these survey questions, however, was based on a list of services provided by San Francisco APS. This formulation of the question could exaggerate San Francisco's service offerings relative to other programs if respondents did not comprehensively list other services they provide under "Other."

Figure 7. FTEs vs. Cases per Year
(Programs with less than 12,000 Cases per Year)
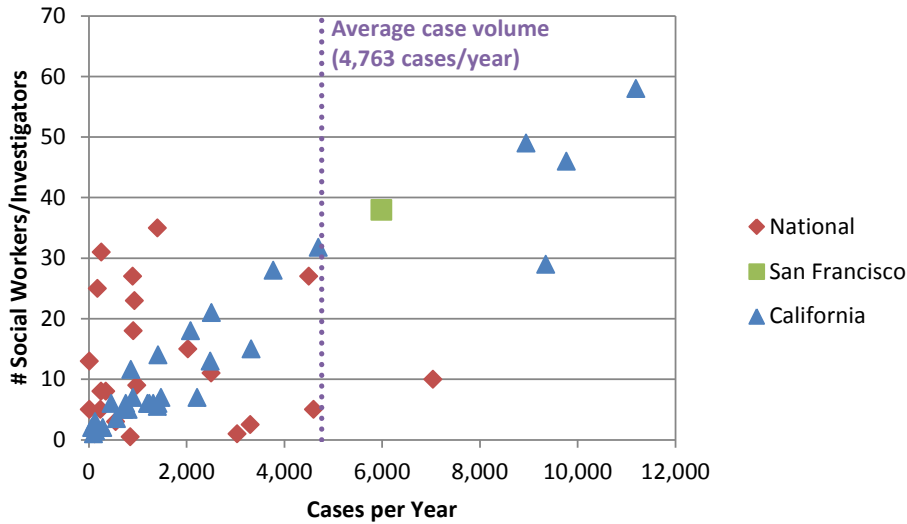
Figure 7 excludes three programs (Los Angeles County and the state-level programs in Florida and Texas) since they have dramatically higher case volumes (35,000 or more cases per year). In Figure 7, most of the California programs fall near a diagonal trend line that corresponds to around 160 cases per year per social worker, while there is not such a clear pattern among the National programs. Florida and Texas, while they are outside of the range of the chart above, both have a similar ratio of annual cases per social worker to the California programs in Figure 7, while Los Angeles County had a substantially higher volume of cases per social worker.

Further information on case volumes and the ratios of cases to full-time equivalent (FTE) staff is shown in Figure 8 below, along with self-reported average point-in-time caseloads. The National results are shown with Florida and Texas separately since their patterns were significantly different from those of other, smaller National programs that responded to the survey.

Figure 8. Staffing Ratios and Average Caseloads

	Overall	San Francisco only	California overall	National overall	National excluding Florida & Texas	Florida & Texas only
Annual cases per APS program	4,678	5,986	3,524	6,088	1,422	64,415
Social workers/investigators per APS program	30.3	38	17.6	45.8	16.4	413.9
Annual cases per social worker/investigator	128	158	163	87	81	160
Annual cases per supervisor	751	855	921	539	508	894
Social workers/investigators per supervisor	5.6	5.4	5.3	5.9	5.9	5.6
Average social worker/investigator caseload (point-in-time)	23.8	28	25.1	22.3	22.3	23

Note: Information above is reported only for programs that gave information on both case volumes and FTEs.

California programs, including San Francisco, have higher caseloads (both on social workers/investigators and supervisors) than most national programs. The average caseloads in California counties are similar though to the two large, state-level programs that responded with staffing information (Florida and Texas). However, at all geographies there is substantial variation around these averages, with many programs having much higher or lower case volumes per FTE than the average. Organizationally, most programs across the country staff five to seven social workers/investigators per supervisor.

The average number of days to close a case was 44.8 days across all respondents, but this was shorter in California than nationally (37.1 days in California and 53.0 days nationally). As a result of the shorter duration of cases in California, the elevated level of annual cases does not translate directly to higher active caseloads at a point in time.

Key Finding #11: Average caseloads (at a point in time) vary significantly across the country, and there are not strong geographical patterns.

As shown in the last row of Figure 8, the average caseload of APS social workers or investigators was similar in California and elsewhere, averaging 24.9 open and active cases per social worker/investigator at any point in time across all respondents (25.1 in California and 24.7 nationally). However, as with annual case volumes, average caseloads vary substantially, with relatively few programs being close to the overall average.

Key Finding #12: There is a wide range of rates of repeat clients, and almost a quarter of programs do not know how many of their clients are repeat clients.

Many programs reported having significant numbers of repeat clients, as shown in Figure 9. However, these numbers are self-reported, and are therefore less reliable than direct calculations on case data. Nonetheless, more than a third of programs reported having high rates of repeat clients (20% or more of cases). Interestingly, the programs reporting the highest level of repeat cases (30%

Figure 9. Percentage of Cases with Repeat Clients

or more) were mostly rural APS programs, with the exception of Los Angeles County, California, and the State of Utah which includes urban areas. The 20 to 29% bucket of repeat cases however includes programs of all sizes, including San Francisco. Programs with very low levels of repeat clients (less than 10%) included rural programs, state programs (Florida, Hawaii, and Nebraska), and larger urban areas such as Philadelphia and Multnomah County (Portland, Oregon).

Types of Abuse

Programs were also asked about the percentage of cases that involve self-neglect and abuse by others. Since there can be multiple allegations per case, the percentages for these two categories usually add up to more than 100%.

Key Finding #13: While there is substantial variation, abuse by others is more common than self-neglect in California, while the opposite is true among National programs.

In California, abuse by others was more common than self-neglect (65% and 48% of cases, respectively), while among National programs the opposite was true (60% self-neglect and 43% abuse by others).[6] San Francisco APS reported comparable levels of self-neglect and abuse by others (57% and 55%, respectively).

Key Finding #14: Financial abuse is the most commonly cited type of frequent abuse, and is also overall seen to be the most challenging type of abuse to address.

Programs were lastly asked to report the most common and most challenging types of abuse for their programs. Figure 10 shows the most common types of abuse reported subjectively by programs, who were allowed to choose up to three types of abuse. Across all programs, financial abuse by others was the most commonly cited type of abuse, with 81% of respondents selecting it as one of their top three types of abuse (85% in California and 76% nationally). The next most frequently cited type of abuse was self-neglect for health and safety hazards, indicated by 69% of respondents (65% in California and 73%

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[6] Data from California programs for this question was based off of the Form SOC 242 monthly statistical report submitted by each APS program to the state on a monthly basis. Data from non-California programs was self-reported in the survey, and may therefore be less precise than California data.

nationally). In general, results were similar in both California and nationally, with the exception of mental and psychological abuse by others, which was indicated by 18% of California programs and only 3% of National programs.

Figure 10. Most Common Types of Abuse
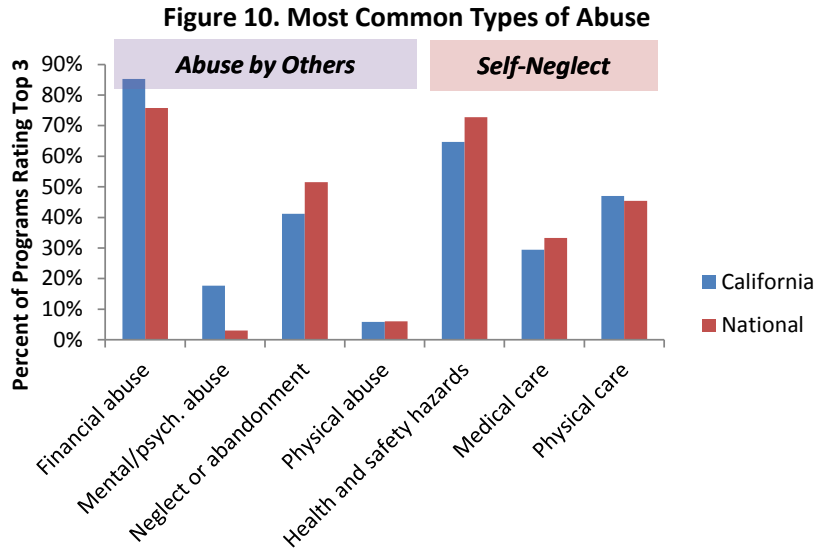
Programs also explained in a free text response which cases they find to be the most challenging to resolve. These free text responses were coded for the most common themes, which are shown in Figure 11 below.

Figure 11. Most Challenging Types of Abuse
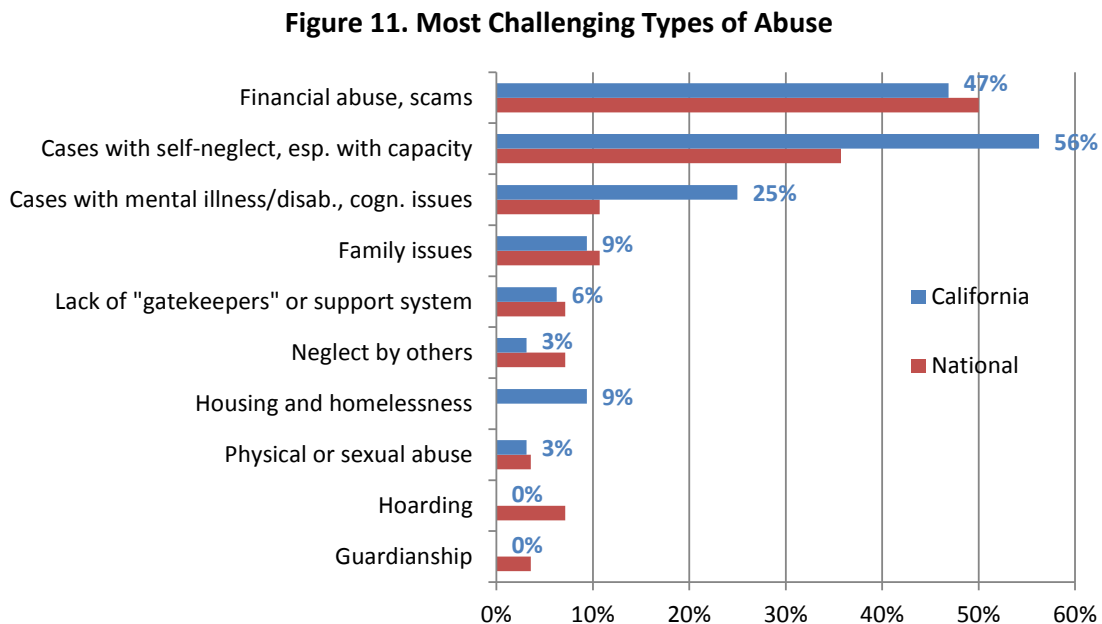
In addition to being a very common type of abuse for programs, financial abuse and scams were viewed as being the most difficult type of cases to resolve among all respondents, with 48% of programs mentioning financial abuse.

Key Finding #15: Among California programs, the most difficult cases were reported to be self-neglect cases.

Self-neglect cases were cited almost as frequently as financial abuse (47% of programs), though more frequently by California programs than others (56% versus 36%). Many programs cited self-neglect cases as being particularly challenging when the client has capacity (and thus the right to self-determination) but is uncooperative or refuses services. One program noted that "competency and capacity remain a fuzzy area for social workers… Court order or guardianship must [be] obtained to override the client's wishes when [the] client is not making sound decisions." Other programs noted the intersection of self-neglect with cognitive impairment and mental illness or disabilities makes those cases particularly difficult. Among all respondents, 18% mentioned mental illness/disabilities or cognitive impairment when describing their most difficult cases, though the rate was higher in California (25%). Interestingly, housing and homelessness issues were mentioned only by California programs (9% of California programs).

Chapter 4: Case Data Analysis

To understand trends in APS casework as well as the key factors driving case complexity, the Controller's Office has analyzed four years of San Francisco APS's case data. AACTS (an acronym for "Aging & Adult Client Tracking System") is the case management software program that was used by San Francisco's APS program until November 2016. AACTS serves as a database of all APS case work, including information at the client level, case level, reports of abuse (ROA), and records of contact (ROC). ROAs refer to reports of abuse received by DAAS Integrated Intake, generally from a mandated reporter, and include extensive, detailed information recorded during intake. ROCs serve as a record of work performed on each case by social workers, supervisors, and case aides. Every activity, whether it is a phone call to a collateral agency on behalf of a client, a face to face meeting with the client, or a case aide taking a client to apply for public benefits, is recorded as an ROC in AACTS.

This chapter presents analyses of a dataset extracted from AACTS of all 22,514 APS cases opened between January 1, 2012 and December 31, 2015. This chapter examines both case-level data and ROC-level data, focusing first on summary statistics before using regression analyses to examine what drives case intensity. In this analysis, cases are measured in two ways: case length (days) and the level of activity on the case (number of ROCs, weighted by level of effort).

Summary Statistics

This section will use summary statistics to examine the current levels of activity, trends in activity over the 2012-2015 time period, and different factors related to case complexity. Throughout the analysis, case complexity will be discussed both in terms of case length (number of days) and level of activity (a weighted index of ROCs).

Records of Contact (ROCs)

As social workers work on cases, every activity is recorded as a "record of contact" (ROC) that is associated with that case in the AACTS database.[7] ROCs are an imperfect measure of activity, since for instance multiple phone calls could be entered as one ROC, and different ROCs of the same category could take different amounts of time and effort. However, ROCs are a relatively good measure of the level of activity on a case, particularly in comparison to other cases.

AACTS tracks the following ROCs that capture activity by social workers and case aides (who provide logistical support to social workers):

- **Initial Face-to-Face** – an initial face-to-face meeting with a client
- **Follow-up Face-to-Face** – a follow-up face-to-face with a client; these are required every 30 days for active cases
- **Attempted Face-to-Face** – an unsuccessful attempt at either an initial or follow-up Face-to-Face

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[7] San Francisco APS switched from AACTS to a new database in November 2016. All data collection for this report reflects data and procedures used around the AACTS database, which may have changed since November 2016.

- **Telephone Call – Client** – a telephone call between the social worker and the client
- **Collateral Call** – a telephone call between the social worker and a collateral agency, such as In-Home Supportive Services or a case management nonprofit
- **Visitation Collateral** – a visit to a collateral agency's office
- **Office Visit Other** – a visit to another type of office
- **Update on Closed Case** – an ROC to add an update to a closed case
- **Other** – other tasks, especially clerical work on behalf of a case or preparing case closure documentation

Figure 1 below shows the frequency of these different types of ROCs across the 22,514 cases opened from 2012-2015. Initial and follow-up Face-to-Face meetings are combined.

Figure 1. Frequency of ROCs per Case
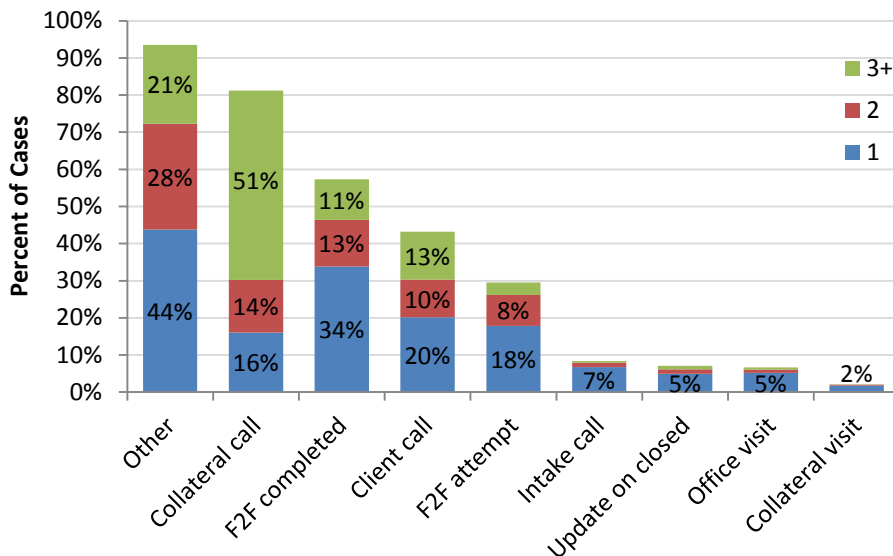
Almost all cases have at least one ROC of "Other," and the next-most universal ROC is collateral calls, which are also the type of ROC that most frequently appears three or more times in a case (51% of cases have 3+ collateral calls). Almost a third of cases (29%) have one or more unsuccessful Face-to-Face attempts.

Key Finding #1: Cases that include a Face-to-Face account for the majority of all case activity, and nearly half of all case activity is telephone calls to collateral agencies.
Cases that include a Face-to-Face account for a disproportionate amount of all ROCs. Figure 2 below is a treemap of all 224,506 ROCs recorded for cases from 2012-2015. Cases with a Face-to-Face complete (shown in blue) accounted for 72% of all ROCs, and have about twice as many ROCs as cases without a Face-to-Face (12.1 versus 6.2 ROCs per case on average). The treemap depicts the volume of activities recorded as ROCs for cases, but does not weight them based on the time required for each ROC; an alternative version of the treemap that does apply time-based weights is presented in Appendix 4.

Figure 2. Treemap of ROCs for Cases With and Without a Face-to-Face Complete
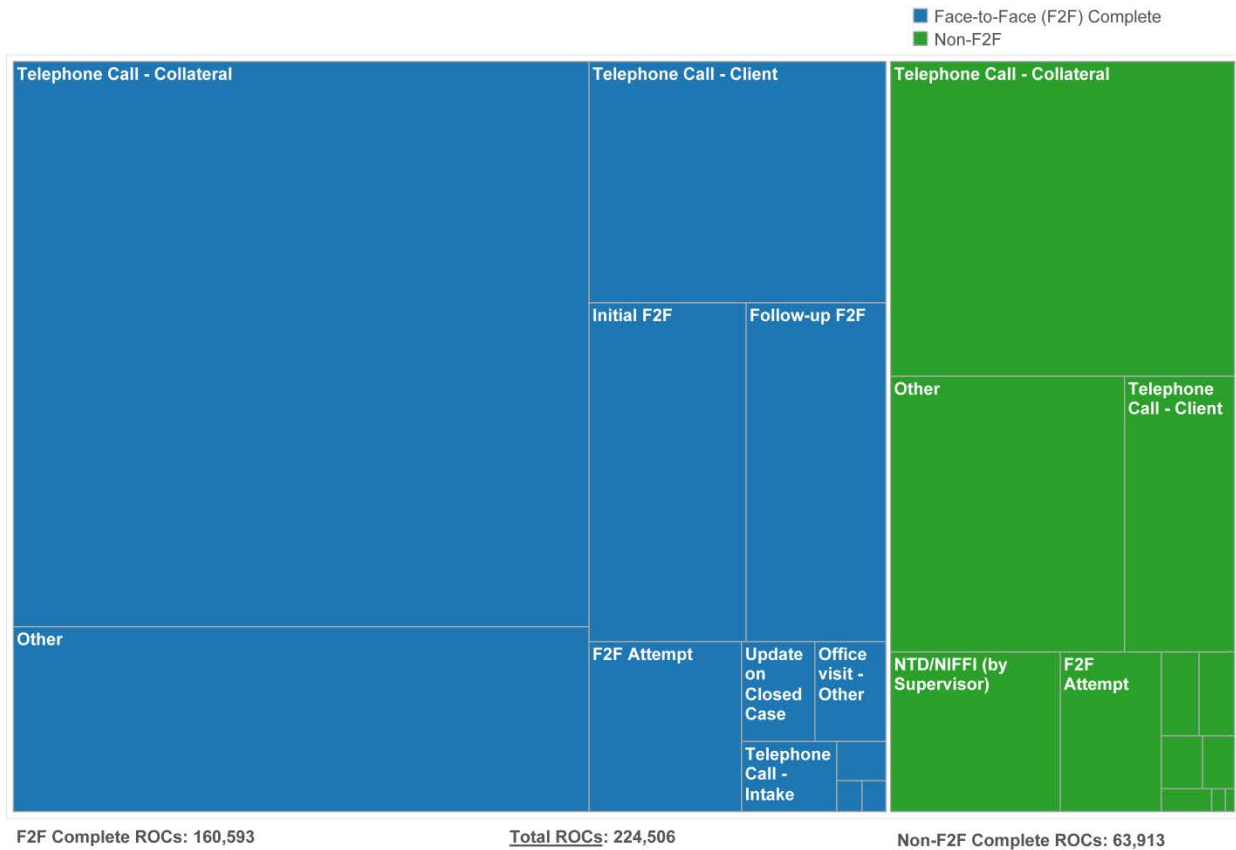
In addition, the treemap clearly shows that collateral calls are by far the most frequent ROC, accounting for 48% of all ROCs (36% for collateral calls on cases with a Face-to-Face). By contrast, initial and follow-up Face-to-Face meetings account for 11% of all ROCs. The average case has 4.7 collateral calls.

Key Finding #2: The Controller's Office's activity index provides an alternative to case length for measuring case intensity.

Instead of using just counts of ROCs to measure case activity, the Controller's Office developed an activity index that sums together all the ROCs on a case and weights them based on relative effort (measured as the average number of minutes required to complete). This activity index therefore accounts for the time-intensity of different ROCs, weighting a time-intensive Face-to-Face more highly than a phone call. The weights were developed based on the job shadow findings discussed in Chapter 2 and refined based on a mini-survey of social workers, included in Appendix 3. The final weights are shown in Figure 3 below. Additionally, as mentioned previously, a version of the treemap in Figure 2 that applies these weights is included in Appendix 4.

Figure 3. Activity Index Weights

Type of ROC	Activity Index Weight
Initial Face-to-Face	93
Follow-up Face-to-Face	73
Face-to-Face attempted	53
Office visit other	77
Telephone call – client	14
Telephone call – collateral	16
Update on closed case	13
Visitation collateral	73
Other	15

There is a reasonable relationship between the activity index and case length, but the index better captures the level of activity on a case, with some cases having much lower or higher levels of activity compared to other cases of the same length as shown in Figure 4 below. For example, cases in the dataset that lasted 100 days had activity index scores ranging from 259 to 1,580.

Figure 4. Activity Index vs. Case Length
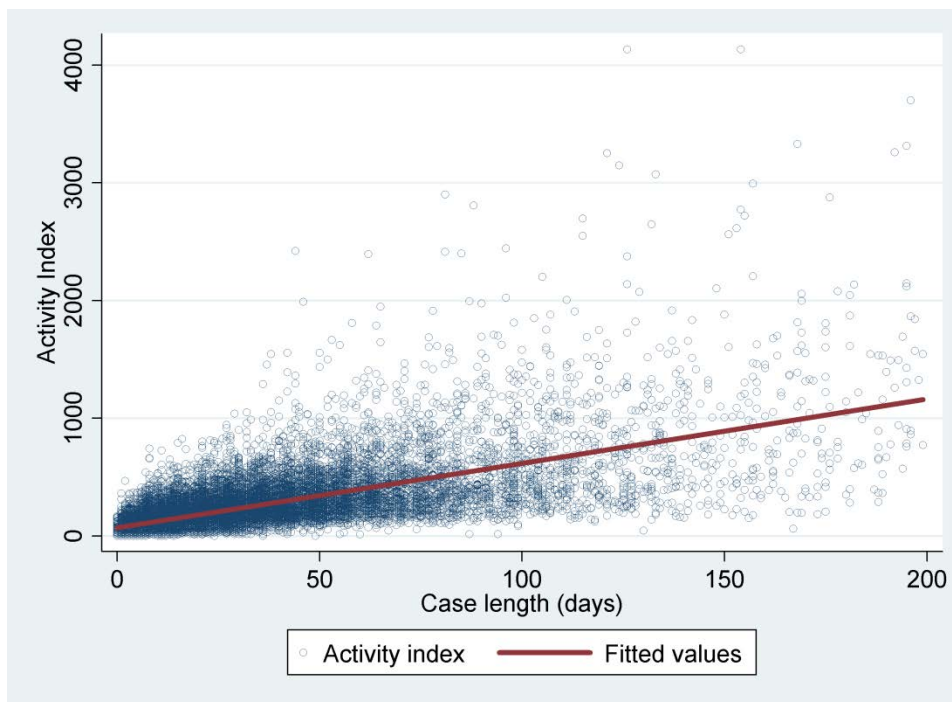
Trends in Case Length and Activity

Case volume has grown over time from 5,416 cases opened in 2012 to 5,919 in 2015. While overall number of cases is growing steadily over time (3.1% per year), workload is increasing more quickly since not all cases require the same level of effort.

Key Finding #3: Whether a Face-to-Face is completed and/or required is a strong indicator of the time and level of effort to complete a case.

At intake, APS staff assess the risk level for each case. High-risk cases are required to have a Face-to-Face visit. Cases with a completed Face-to-Face visit take substantially longer than cases for which a Face-to-Face visit is attempted but not be completed, which in turn take longer than cases that do not require a Face-to-Face at all. The overall average case length of cases from 2012-2015 was 31.9 days, with a very wide distribution of case lengths.[8] Cases with a Face-to-Face complete lasted on average 44.5 days, compared to 23.1 days for cases without a Face-to-Face completed and 9.7 days for cases that did not require a Face-to-Face. This is not surprising considering Face-to-Face visits take a significant amount of time, and are associated with higher-risk cases that may require more activity in general. In addition, the social worker has more milestones to complete on cases with completed Face-to-Face visits.

Figure 5. Average Case Length by Type of Case
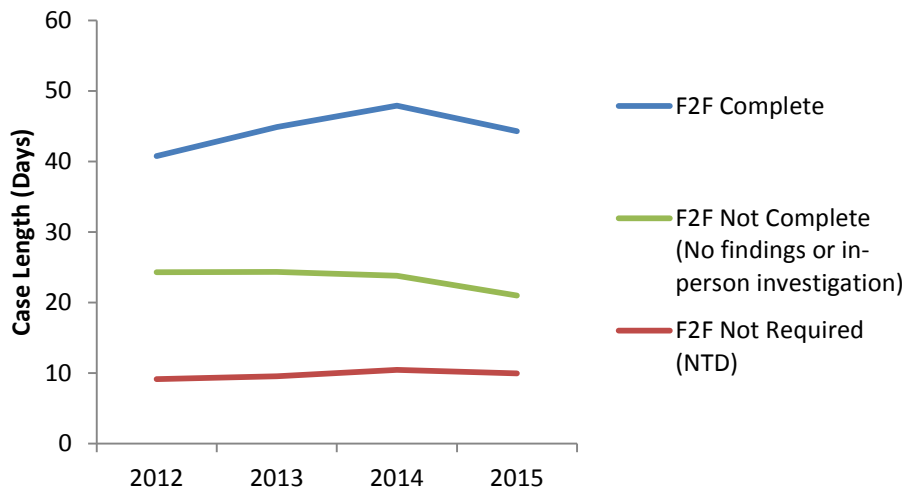
As shown in Figure 5, over the past four years, these differences in case length have been amplified. Cases without a Face-to-Face completed have tended to decrease moderately in case length, whereas cases with a Face-to-Face have tended to increase in case length.

Key Finding #4: The total number of cases has grown steadily over time, but workload is increasing more quickly as a growing portion of cases require face-to-face meetings with clients.

As shown in Figure 6 below, the volume of more difficult and time-intensive "Face-to-Face Complete" cases is increasing at 4.6% per year on average, while more straightforward cases that don't require a Face-to-Face are actually decreasing at 6.0% per year on average. As a result, the overall portfolio of cases has a growing proportion of high-intensity cases.

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[8] The standard deviation of average case length was 36.03, larger than the estimate itself of average case length. In general, there is significant variation in case length and level of activity for most estimates in this analysis, and it was common for the standard deviation to be as large as the estimate.

Figure 6. Number of Cases by Type of Case
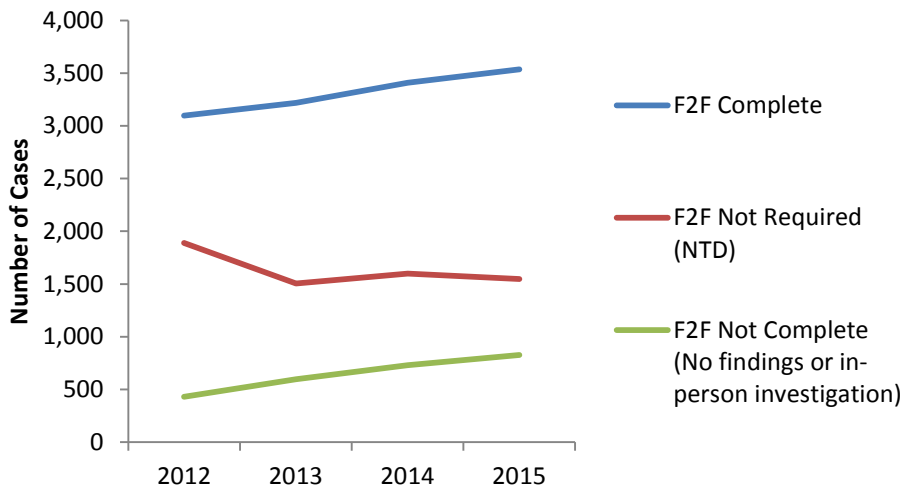
Therefore, the increases in average case length over 2012-2015 seem to be driven substantially by

- increases in the number of cases with a Face-to-Face complete, as shown in Figure 6, and
- increases in how long those cases with a Face-to-Face remain open, as shown in Figure 5.

In summary, San Francisco APS has been receiving more cases overall, and those cases are taking longer. A brief discussion of the increased variability of case length is also included in Appendix 5.

Factors Related to Case Length and Activity

Aside from whether a Face-to-Face was completed and/or required, many other factors influence case length and level of activity. The AACTS dataset the Controller's Office analyzed included over 400 variables that include information about case closure, overall case characteristics, client demographics, referrals, information captured during the report of abuse, and information captured during the initial Face-to-Face.

Closure reason provides a more granular view of cases than simply whether or not they have a Face-to-Face. Among the 13 different closure reasons, there can be dramatically different average case lengths.

Key Finding #5: Cases where a client is already receiving services elsewhere close quickly; cases where San Francisco APS reduces clients' risk are the lengthiest cases.

Cases where a client is already receiving services, such as community-based case management, can often be closed quickly since the client is linked to services that may be successfully mitigating their risks, or there may be a gatekeeper monitoring the situation that can help to ensure the successful implementation of a service plan. In contrast to the average case that is open for 31.9 days, cases where a client is already receiving services from another source close in just 14.9 days.[9] At the opposite end of the spectrum, cases with a closure reason of "Risk Reduced" correspond to the cases for which San

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[9] Cases that do not require a Face-to-Face (i.e., are No Ten Day in-person response – "NTD" – cases) make up 82% of these cases that were closed because of intervention from another source. When looking at only the remaining 18% that do require a Face-to-Face, the average case length is 38.3 days instead of 14.9 days.

Francisco APS has taken an active, primary role in linking the client to new services and reducing their risk; these cases close in 47.8 days on average.

Cases also vary based on whether the case has abuse by others, self-neglect, or a combination of both.

Key Finding #6: Self-neglect cases are more resource-intensive than cases of abuse by others, but the most intensive cases on average are ones where both types of abuse occur.

Figure 7 below shows the average case length and activity index for cases with allegations of abuse by others, self-neglect, and a combination of both; it then shows the same figures for cases where those abusers are confirmed. The same pattern emerges, though it is more dramatic for confirmed abuse: on average self-neglect requires more time and effort to resolve than abuse by others, but a combination of self-neglect and abuse by others is the most intense.

Figure 7. Average Case Length and Activity Index by Type of Abuser

Type of Abuser	Average Case Length		Average Activity Index	
	Alleged Abuser	Confirmed Abuser	Alleged Abuser	Confirmed Abuser
No Abuse Found	---	20.8	---	156.5
Abuse by Others	28.2	43.6	206.1	322.1
Self-Neglect	33.1	48.3	264.6	390.4
Combination	41.4	70.9	327.9	547.6

Key Finding #7: Sixty percent of cases from 2012-2015 corresponded to clients who had more than one case in that time period.

Another significant pattern in the data was repeat cases. While the patterns around case length and activity are difficult to explain for a client's second, third, and subsequent cases, it is notable that a large portion of case work is for clients who have been previously assigned a case.

Figure 8 below shows the distribution of the number of cases per client from 2012-2015. In that time period, 40% of cases were for clients who only had a single case, while 60% had two or more cases during those four years. For instance, 4,832 cases (21%) were for clients who had two cases (i.e., 2,416 clients had two cases).

Figure 8. Number of Cases per Client (2012-2015)
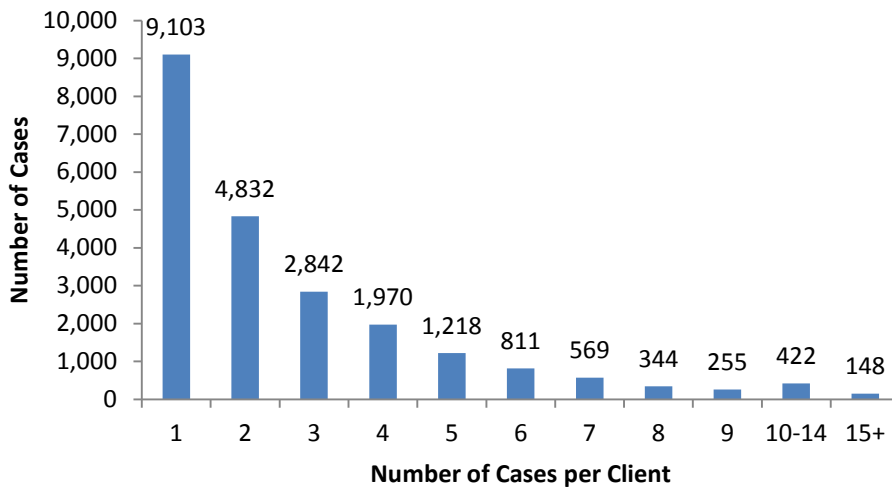
When looking at repeat cases over a shorter time period, the rate of repeat cases is lower. Among cases opened in December 2015, 35 percent were for clients who had already had at least one case earlier that year.

As shown in Figure 9 below, the patterns of case length for repeat cases were complex. Cases for clients with only one case from 2012-2015 tended to be shorter than cases for clients with between two to nine cases, but after that point the average case length is volatile but trends down (for clients with ten or more cases).

Figure 9. Case Length for Repeat Cases
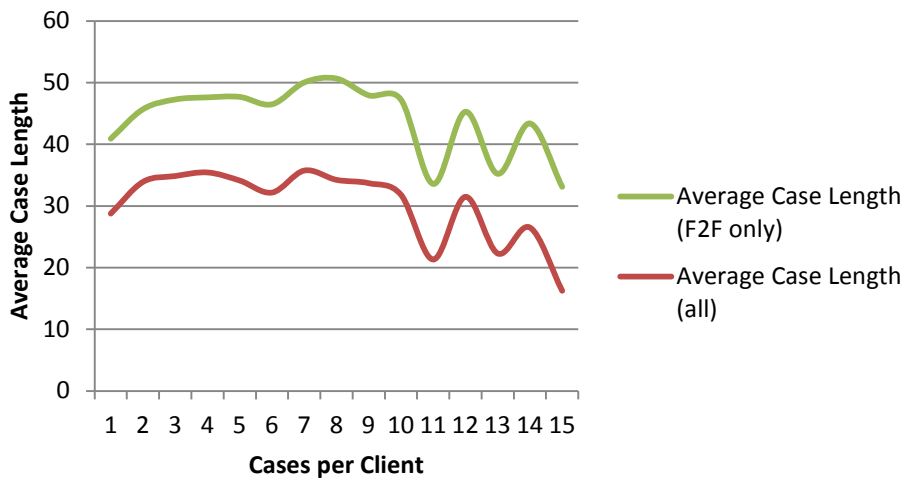
In short, single-case clients require fewer resources per case, on average, than clients who have a few repeat cases, but the most chronic clients require the least resources on a per-case basis. During the focus group, social workers mentioned that for certain types of cases such as alcohol or drug abuse, social workers may be called repeatedly as new reports of abuse are submitted to DAAS Integrated Intake, but if the client refuses services the case will be quickly closed (and quickly reported again by

another mandated reporter). The Controller's Office observed similar circumstances during the job shadow. However, from examining the closure reason for repeat cases, approximately 8-9% of cases close due to client refusal of services, regardless of whether they are first-time cases or repeat cases.

Another possible explanation is that clients with higher levels of repeat cases are more likely to already be receiving services from another source. Among clients with less than five cases, 19% of cases are closed because the client is already receiving services elsewhere. Among clients with five or more cases the figure is 28%, and among clients with ten or more cases the figure is 39%.

The patterns around repeat cases, their resource intensity, and opportunities for improved business processes around repeat cases are complex, and merit further study.

Aside from these case factors, client demographics also are correlated with difference in case length and activity.

Key Finding #8: Case length and level of activity increase with each age bracket.

There is a strong pattern of increasing average case length and level of activity for each age bracket, as shown in Figure 10 below. However, as is shown later in the regression analysis, age itself does not explain case length or level of activity directly, but rather is correlated with other factors (such as health frailty, support systems, etc.) that drive those two outcomes. When other factors are accounted for simultaneously in the regression analysis, age is a less influential factor.

Figure 10. Average Case Length and Level of Activity by Age Bracket
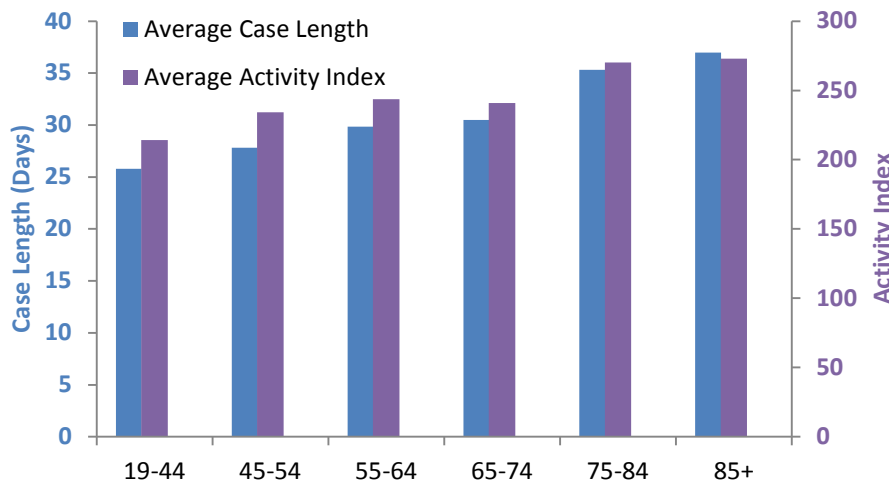
Key Finding #9: Cases for homeless clients close relatively quickly because they are more likely to already be receiving services; however, reducing risk for homeless clients not already connected to services is time-intensive.

The Controller's Office examined case length and activity levels by clients' homelessness status. From 2012-2015, there were 431 cases with homeless clients, which on average closed more quickly than other cases (18.9 days for homeless clients compared to 32.1 days for non-homeless clients) and with lower levels of activity (activity index of 185 for homeless clients and 250 for non-homeless clients).

The lower case lengths and activity levels are partially because cases with homeless clients are less likely to require a Face-to-Face visit (56% of cases for homeless clients do not require a Face-to-Face, i.e., are "NTD" cases, compared to 29% of cases for non-homeless clients). However, even among cases with a Face-to-Face visit, homeless clients' cases close more quickly.

The reason for this discrepancy is likely that homeless clients are more likely to already be receiving services elsewhere: 45% of homeless clients' cases have a closure reason indicating the client was receiving an intervention from another source, compared to 21% of cases overall. These cases typically take less time and effort because, after confirming that there is already an intervention from another source to reduce the client's risk, APS can close the case relatively quickly. An elevated number of cases that require a Face-to-Face for homeless clients are also closed more quickly because the client cannot be located after repeat attempts (10.2% of homeless clients' cases compared to 6.1% overall).

However, as shown in Figure 11 below, a smaller subset of cases for homeless clients require significantly more activity than the average case. As mentioned earlier, a closure reason of "Risk Reduced" corresponds to the cases for which San Francisco APS has taken an active, primary role in linking the client to new services and reducing their risk. These cases take about the same amount of time for homeless and non-homeless clients (47.5 and 47.8 days, respectively), but have significant higher levels of activity for homeless clients (28% higher than the activity index for non-homeless clients).

Figure 11. Level of Activity on Cases for Homeless and non-Homeless Clients

Closure Reason *	Non-Homeless: Activity Index	Homeless: Activity Index	% Difference: Homeless from non-Homeless	# Homeless Cases
Intervention from other source	129.1	104.6	-19%	189
Repeat attempts	199.2	140.4	-30%	43
Resolved, client safe	247.9	220.8	-11%	43
Risk reduced	351.6	450.7	28%	67

Note: This table includes only the four most common closure reasons for cases for homeless clients.

Clients who are assessed to have moderate or high risk of substance abuse issues (alcohol or drug abuse) have slightly shorter cases with lower levels of activity. Among cases that include a Face-to-Face meeting, clients at moderate or high risk of substance abuse have cases that last on average 45.5 days (compared to 47.7 days for clients at moderate or high risk for any of the other 20 risk factors assessed), and have an activity index that is on average 6% lower. These findings are confirmed in the regression analysis shown later in which substance abuse is correlated with shorter case lengths and lower levels of activity. Social workers at the focus group were not surprised to see shorter case lengths for substance abuse cases. In their experience, clients in substance abuse cases often refuse services, and social workers cannot do much once services are refused. In addition, it is not possible to do service planning with a client while they are under the influence.

Lastly, the presence of a gatekeeper at case closure was correlated with longer cases with more activity. Social workers try to identify a gatekeeper (such as a family member, friend, or a professional) at the

end of a case to be someone to keep an eye on the client and monitor their continued wellbeing. Cases with gatekeepers are open 31% longer and have 43% more activity than cases that do not have a gatekeeper. While this may seem counterintuitive at first, it may indicate that social workers go to greater lengths to establish a gatekeeper for cases that are higher risk or more complex to resolve (or that they are more likely to meet a potential gatekeeper in the course of those investigations).

Case Aide Utilization

The Controller's Office also conducted a preliminary analysis to try to understand the usage of case aides (referred to by San Francisco APS as human services technicians, or HSTs) across different cases. Case aides are staff who assist the social workers in carrying out and implementing service plans. For example, case aides in APS may transport and accompany a client to the doctor or to the Social Security Administration, or they may purchase and deliver emergency food or other household items.

There were not clear patterns on the types of cases that case aides are more likely to help with. The strongest patterns were that a small number of social workers appear to use a relatively large amount of case aide time. Both over- and under-utilization of case aides by social workers is an inefficient use of limited staff resources. Enhanced guidelines and stronger policies and procedures on which tasks should be assigned to case aides could help even out case aide usage and ensure that tasks are delegated to them more consistently. The Controller's Office has heard from management and social workers that it may also help if there are broader language competencies among case aides, particularly in Cantonese.

Regression Analyses

The previous section provided summary statistics that look at one or two variables at a time. Regression analysis allows for variation in dozens of variables to be considered at once to estimate the effect of many different case and client characteristics on either the number of days a case is open or the relative effort involved in a case (measured by the activity index).

Each regression model predicts one variable – in this analysis, it will be predicting either case length (in days) or level of case activity (in units of the activity index). To predict the outcome variable, regressions look at a list of input variables simultaneously and attribute the variation in the outcome variable based on those inputs. Every input variable is given a coefficient by the regression model.[10] The coefficient indicates, in reference to the average case, in what direction and how much this variable tends to "push" the outcome. For example, in one regression of case length, there is a variable for the total number of reports of abuse (ROAs), and it has a coefficient of positive 4.5. That means that for every report of abuse beyond the first report, the predicted length of a case increases by 4.5 days. A case with four ROAs would be predicted to take 13.5 days longer (3 x 4.5 = 13.5) than a case with only one ROA.

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[10] Coefficient estimates have varying levels of precision and certainty based on the underlying data. If a variable is "statistically significant," it means that statistics suggests this variable likely has a real effect (or more technically, that the estimate is not just random noise around a true value of zero, i.e., no real difference from the average due to this variable). Statistical significance is measured in the p-value, which measures the likelihood that a coefficient's "true" value is zero. If that likelihood is very small (a commonly accepted threshold is if it is less than 5%, or 0.05) the coefficient is considered to be statistically significant.

Variable coefficients can also be negative, which would mean that that variable reduces the case length or activity index, compared to the average.

Each model also has an R^2 statistic, which is the percentage of variation in the outcome variable that is successfully predicted and explained by the regression. An R^2 of 0.35 means that 35% of the variation in the data is explained by the regression, while the rest of the variation that occurs is either random or is explained by variables not included in the dataset (perhaps because they cannot be measured). While there is not any accepted threshold for what level of R^2 constitutes a strong model, it is a helpful metric to compare between models and get a general sense of the strength of the model.

Overview of Regression Models

The Controller's Office created two sets of models: "**full**" models, which include all variables in the dataset, and "**restricted**" models which include only variables collected before the case is assigned to a social worker (and notably excluding all variables from the in-person risk assessment conducted at the social worker's initial Face-to-Face with the client). The full models represent the most complete possible accounting of the drivers of case duration and level of activity, while the restricted models provide a better sense of the level of certainty around case complexity at the time of case assignment, and inform decisions around changes in case assignment procedures.

In both the full and restricted sets of models, there are two models: one of case length, and one of the activity index. Selected results and analysis are presented in this chapter, and the full regression outputs are included in Appendix 6.

The regressions were run on data representing 22,212 cases (22,202 for the activity index models), which excludes the top 1% outliers in terms of case length (cases longer than 170 days). This filter excludes exceptional outliers such as the longest case in the dataset, which was open for 840 days, and which do not likely provide strong insights into the majority of APS cases. The regressions include various types of variables:

Overall case characteristics: information such as the year of the case, the number of reports of abuse (ROAs) on the case, the number of cases the client has had with APS, whether or not this particular case has a gatekeeper (a designated party who will look out for the client's continued well-being), etc.

- **Client demographics:** including age, language spoken, physical/mental/developmental disability status, and marital status.
- **Referral source:** a financial services provider, law/legal enforcement, medical service provider, nonmandated reporter, or social services provider.
- **Risk factors from ROAs:** including a long list of risk factors asked of reporters during reports of abuse as well as the associated response time for the resulting case assignment.
- **Risk factors from Face-to-Face:** 21 risk factors for which the social worker makes an assessment at the initial Face-to-Face with the client; in this regression analysis, each risk is coded as a yes/no for whether the social worker indicated the client has moderate or high risk.

Figure 12 below is a concise overview of the four models presented in this chapter.

Figure 12. Overview of Regression Models

	Model 1 Case Length, Full Model	Model 2 Activity Index, Full Model	Model 3 Case Length, Restricted	Model 4 Activity Index, Restricted
R^2	0.3520	0.3588	0.2534	0.2503
Model predicts	Case length (days)	Activity Index	Case length (days)	Activity Index
Number of variables	65	65	50	50
Overall case characteristics	X	X	X	X
Client demographics	X	X	X	X
Risk Factors (ROAs)	X	X	X	X
Risk Factors (Face-to-Face)	X	X	---	---

Full Models

Figure 13 shows the results of Models 1 and 2 on one scatter diagram. All variables that were significant in both Models 1 and 2 (with a level of significance of p=0.10 or stronger) are plotted here. Each dot represents one variable, and its coordinate on the horizontal axis is its value in the activity index regression, while its value on the vertical axis is the value from the case length regression.

Figure 13. Scatter of Case Length & Activity Index Regressions (Statistically Significant Variables Only)
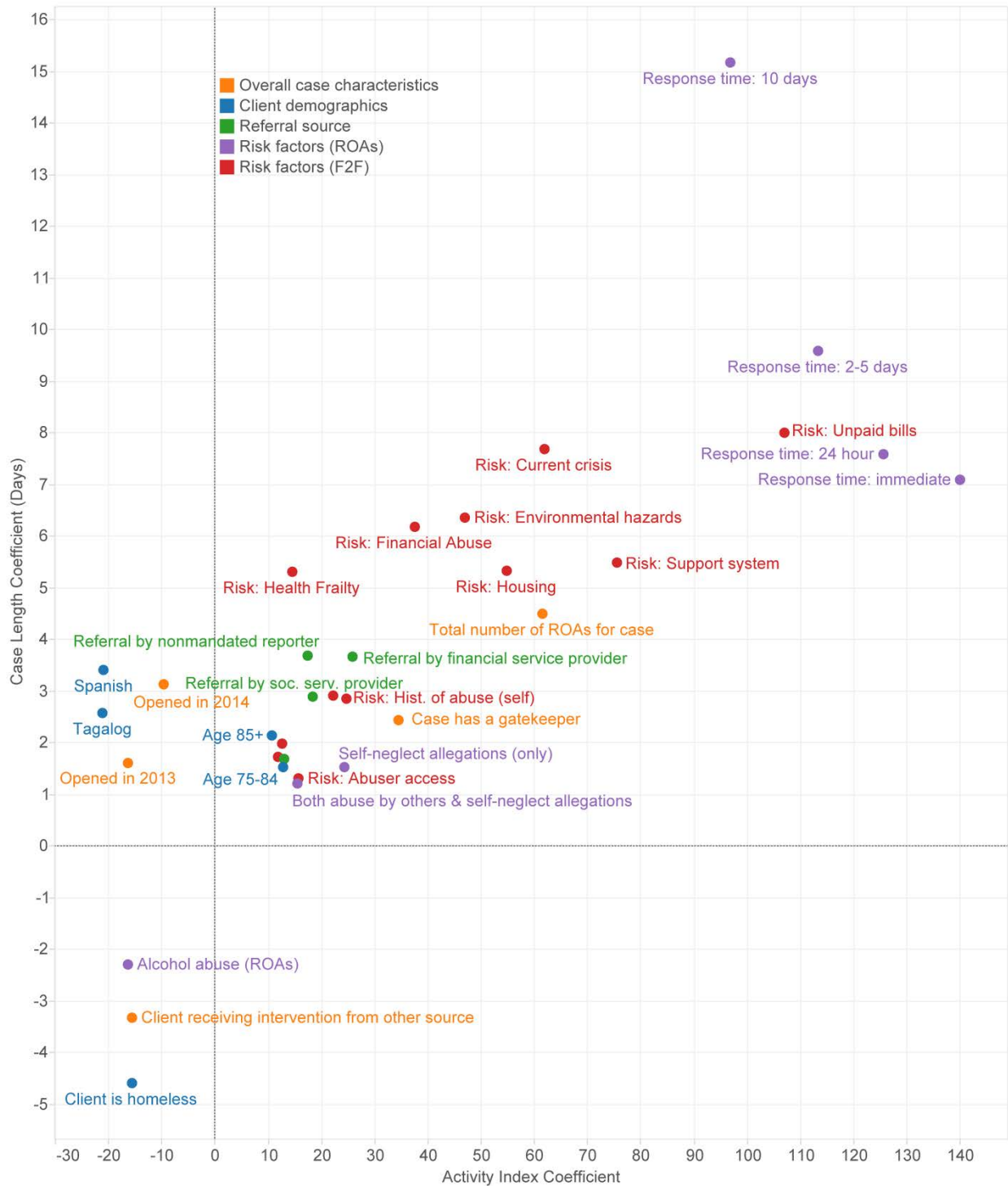
Three variables are in the lower left quadrant of the scatter diagram, meaning that they are correlated with both shorter case lengths and lower levels of activity.

Key Finding #10: Homelessness, clients receiving interventions from other sources, and alcohol abuse are all associated with shorter cases and lower levels of activity.

The least surprising of these is an indicator of closure reason for clients receiving interventions from another source. This closure reason signals lower involvement by APS, since these cases can often be closed quickly and with less activity if clients are already linked to services that are managing their risk or can monitor the client's situation. Homelessness is also correlated with lower case lengths and levels of activity, which may be the result of insufficient information provided regarding the client's location. As discussed earlier, this fits the patterns observed in summary statistics: homeless clients' cases are shorter and have less activity across all closure reasons other than "Risk Reduced" (where the opposite is true). Lastly, alcohol abuse reported in the ROA is also correlated with shorter and lower activity cases. While these cases are shorter, social workers reported in the focus group that they are likely to repeat multiple times as subsequent mandated reporters report the same self-neglect. In regression outputs, substance abuse follows a similar pattern to alcohol abuse, although it is only statistically significant in the case length regression and not in the activity index regression.

Key Finding #11: Cases opened in 2013 and 2014 as well as cases for Tagalog- and Spanish-speaking clients had slightly lower levels of activity but longer cases.

Four variables that were significant in both models are in the top left quadrant, meaning they are correlated with lower levels of case activity but longer case lengths. These variables were the indicators of cases opened in 2013 and 2014 (whose coefficients are in reference to cases opened in 2012) and cases for Tagalog- and Spanish-speaking clients. There are not certain explanations for these results, but they could be explained, for example, by a resource gap, overall in 2013 and 2014 (compared to 2012) and in general for Tagalog- and Spanish-speaking clients.

However, the majority of variables are in the top right quadrant, correlated with both longer cases and higher levels of activity. Of particular interest in this quadrant are:

- the relative impacts on case length and level of activity (dots that are farther away from the center have stronger impact), and
- variables that have a much stronger impact in one regression than the other. Most variables fall close to a diagonal line through this quadrant, but some are significantly above or below that imaginary line. For example, "Risk: Health Frailty" is above this imaginary diagonal line, meaning that health frailty has a relatively strong, positive impact on case length, but a weaker positive impact on the level of activity.

Key Finding #12: Response times have the greatest impact of any single variable on case length and level of activity; the shorter the required response time, the shorter the case but also the greater the intensity of activity.

APS assesses risk for all cases at intake and mandates a response time accordingly. Social workers must respond to the highest-risk cases immediately, while they can wait longer to respond to lower-risk cases. Regression findings indicate that response times assigned at intake are relatively strong predictors for case length and activity level: shorter response times are associated with shorter cases.

It is to be expected that response time predicts case length. A typical case will close more quickly if a social worker responds immediately than if she responds 10 days after receiving the case (the maximum assigned response time).

It is also to be expected that high-risk cases require more activity, and this pattern is present in the data: the shortest response times are associated with the highest overall levels of activity. This finding suggests that cases with the shortest response times are also the most time intensive (they have more activity than average, over a shorter timeframe than average), and may suggest that APS's risk assessment at intake effectively assesses risk.

Key Finding #13: Housing-related variables have some of the strongest positive impacts on case length and level of activity.

Aside from response times, the next largest impacts are arguably housing-related variables. Risk: Unpaid Bills and Risk: Housing (both from the Face-to-Face risk assessment) are two of the largest, positive coefficients in both regressions. These variables are both indicators of eviction risk and housing concerns. Social workers in the focus group also indicated that Risk: Unpaid Bills was most often, in their experience, related to unpaid rent, which would often correspond with eviction risk as well.

Unpaid bills has the largest coefficient of any variables from the Face-to-Face risk assessment, and for clients for whom it is a "yes" for all three variables (unpaid bills, housing risk, and housing/eviction risk from ROAs) all three coefficients would apply. As a result, the combined impact of housing-related issues on case complexity may be the sum of all three coefficients, representing an extremely strong driver of case complexity.

Key Finding #14: Financial abuse is also an especially strong driver of case length and level of activity.

Similarly to housing, there are multiple indicators of financial abuse that can sum up to an especially strong impact on case length and level of activity. Risk: Financial abuse (from the Face-to-Face risk assessment) has a strong, positive impact on both case length and level of activity, and cases referred by financial service providers are the strongest impact of any variable about referral sources. For cases referred by a financial service provider and with a moderate or high risk of financial abuse, the combined impact would be the sum of both coefficients.

Social workers reported in interviews and job shadows that financial abuse cases can be particularly difficult since they require extensive document review and research, and can also involve significant wait time to hear back from financial institutions and others involved in the investigation, and potentially to bring the case to the Elder Abuse Forensic Center.

Key Finding #15: The total number of reports of abuse on a case strongly increases case length and level of activity.

Among overall case characteristics, the strongest impact is from the total number of ROAs. Specifically, every additional ROA increases expected case length by 4.5 days and the activity index by 61.5 points (the equivalent of about four phone calls). This means that a case with three or four ROAs would be

expected to take significantly more time and effort than a more typical case with only one ROA, all else being equal.

Part of this effect may be because multiple ROAs can signal more serious cases, and ones with multiple types of abuse. In interviews, job shadows, focus groups, and the peer survey, APS professionals indicated that their most complex and challenging cases are not just ones with a particularly challenging type of abuse, but ones where there are multiple challenging types of abuse and self-neglect occurring simultaneously. The most challenging cases observed during the job shadow were ones with three or four concurrent, serious risk factors.

While "Risk: Current Crisis" is already measured separately in the regression, it is instructive to note how this variable correlates to the total number of ROAs. While 26.2% of clients with one ROA are deemed by social workers to be at moderate/high risk of being in a current crisis, this figure increases with every ROA, and among clients with four ROAs 58.3% are in current crisis.

This same effect is also compounded by the variable that indicates both abuse by others and self-neglect allegations (in comparison to cases with only abuse by others), which also has a significant and positive impact on both case length and level of activity.

Consistent with findings from the summary statistics, the establishment of gatekeepers at case conclusion was correlated with higher levels of case length and activity, though as stated earlier this is likely a reverse causal link. Social workers may place a higher priority on identifying a gatekeeper in more complex cases, or have more opportunity to do so.

Patterns for repeat cases were less clear. An indicator for repeat cases was insignificant for case length, suggesting inconsistent or weak effects. However, an indicator of chronically repeating cases (client with six or more cases) had a significant, negative impact on case length (though no impact on level of activity), confirming social workers' description at the focus group that these cases often close quickly due to client refusal of services. A more focused, in-depth study of cases for repeat clients would be needed to better understand the complex patterns around repeat cases.

Key Finding #16: Physical, mental, and developmental issues and disabilities, as well as age, were not strong drivers of case complexity.
A few variables were notable in their lack of strong impact on case length and activity. Indicators from ROAs of physical disabilities, mental disabilities, developmental disabilities, and confusion, memory loss, inappropriate response, or disoriented clients were all insignificant with regards to case length, and either insignificant or with very small impact with regards to level of activity.

From the Face-to-Face risk assessment, cognitive deficits were however positive and significant with respect to both case length and level of activity, but mental health and developmental disabilities of the client were not, and physical disabilities had a positive impact only on level of activity.

Social workers reported in the focus group, however, that level of disability is not measured very precisely with the existing risk assessment tool, and thus these results may also be a reflection of less refined measurement of disability.

Age also was a weaker predictor of case length and level of activity compared to the strength of trends in the summary statistical analysis. While the two oldest age brackets had a significantly positive impact on case length, and the three oldest for level of activity, the coefficients are relatively small (for instance, having a second ROA on a case has an impact that is twice as great on case length compared to the effect of being more than 85 years old). The majority of the increased case lengths and activity for older clients can be attributed to other, measurable case characteristics included in the regression.

Restricted Models

The restricted models include only information known at case assignment, (i.e., excluding variables from the Face-to-Face risk assessment). Most notably, these models have a significantly lower R^2 statistic than the full models (about 0.25, compared to about 0.35 for the full models) – they explain around a quarter of the variation in case length and level of activity. Put differently, the variables from the Face-to-Face risk assessment that are included only in the full models increase the predictive power by about 40%.

Key Finding #17: Among the information available before the initial Face-to-Face visit, the factors that most strongly predict case length and level of activity are the number of ROAs and the assigned response time.

In the restricted models, the total number of ROAs and response times are the strongest predictors of case length and level of activity, and are highly statistically significant.[11] Response times follow the same patterns as seen in the full regression models.

Other variables that were not significant or were less significant in the full models are more significant here. Most notably, every age bracket variable is highly statistically significant in both restricted models, and with larger estimated coefficients. This indicates that in the absence of the Face-to-Face risk assessment variables that more directly measure risk (e.g., health frailty, lack of support structure, etc.), increased case length and level of activity are spuriously attributed to age.

Key Finding #18: The alleged types of abuse do not reliably explain case length or activity.

Since the detailed risk assessment variables are excluded from the restricted models, they include instead the 11 type of allegations of abuse (e.g., medical self-neglect, financial abuse by others, etc.). Interestingly, while some of these variables are significant, they have very little explanatory power. Age and response times have substantially larger estimated coefficients than most allegation types, and when the allegation types are swapped out of these models there is almost no impact whatsoever on the R^2 statistic.[12] The only type of allegation that has a significant and relatively large impact in these

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[11] The vast majority of the predictive power of the restricted models comes from just the response time variables and the total number of ROAs. Barebones models that includes only these variables have an R^2 of 0.1894 for case length and 0.1802 for activity index, meaning that over 70% of the variation explained by the restricted models is explained by just these variables.

[12] When these 11 variables are omitted from the restricted model of case length, R^2 drops negligibly from 0.2534 to 0.2510.

models is financial self-neglect (which increases case length by an estimated 4.3 days and the activity index by 43 points).

Implications for Weighted Caseloads

Overall, most of the coefficients in the restricted models are relatively small, and it is difficult to strongly estimate the level of effort on different types of cases using information collected before the initial Face-to-Face. As a result, it would be challenging to create weights for different types of cases, for instance, to reliably use weighted caseloads in case assignment. This appears to validate the findings from the two peer survey jurisdictions (see Chapter 3) that administering a weighted caseload system was difficult to implement and did not result in improved caseload distribution.

The full models have significantly more explanatory power and give better insights into case factors that significantly influence case length and level of activity. However, while these models provide insights, it is also clear that patterns of case length and level of effort in APS case work are not systematic enough to be able to explain even the majority of variation in the data through these factors. Two cases with the same number of ROAs, same types of abuse, and matching risk factors could still take vastly different amounts of time and activity to resolve, as evidenced by the fact that the most strongly explanatory model still explains only 36% of the variation in the data.

Chapter 5: Recommendations

Based on the findings of the job shadows, peer survey, and case data analysis, the Controller's Office has identified several recommendations for San Francisco APS, organized into five areas:

- Considerations for San Francisco APS's proposed specialized unit
- Case work
- Case aide utilization
- Clients with chronically repeating cases
- Case assignment

Considerations for San Francisco APS's Proposed Specialized Unit

The Controller's Office analysis supports San Francisco APS's plans to implement a specialized unit focusing on housing/eviction-related and high-risk self-neglect cases in fiscal year 2017-18. The analysis of case data suggests that housing-related cases require more time and activity. Specialization along with decreased caseloads could more efficiently and effectively resolve these cases. In addition, chronically repeating cases are a key challenge highlighted in this report. Many of these cases will be assigned to the new specialized unit. By targeting the most chronically repeating clients with more services and more specialized social workers, San Francisco APS could reduce the program's overall caseload if the unit decreases the number of subsequent repeat cases. Lastly, most programs surveyed were satisfied with specialized units. In light of this, the Controller's Office has several recommendations.

- **Maintain lower caseloads within the specialized unit.** The greatest challenge reported by programs with specialized units has been balancing caseloads at appropriate levels across specialized and generalist social worker units. San Francisco APS will need to maintain a reduced caseload within the specialized unit to maintain a tenable workload for specialized social workers, since housing/eviction-related and high-risk self-neglect cases have longer durations and higher levels of activity.

  Preliminary Controller's Office analysis based on San Francisco APS's draft intake guidelines for the specialized unit suggests that cases to be assigned to the specialized unit are open 19% longer (50.6 days, compared to 42.4) and have a 39% higher activity index (428.9, compared to 308.2). Under these assumptions, it would be appropriate to maintain active caseloads within the specialized unit that are 72% of the caseloads outside the specialized unit.[13]

- **Continually assess whether caseloads among specialized and generalist units are balanced.** It is difficult to know in advance what will be an appropriate caseload for the new specialized unit that represents an equivalent amount of work to caseloads of generalist social workers. APS

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[13] Calculated as (1/1.39) = 71.9%. The 39% higher level of case activity is a preliminary analysis based on draft intake guidelines for the new specialized unit, and further study by San Francisco APS would be necessary to confirm that this is an appropriate assumption. The calculation is based only on cases that include a Face-to-Face meeting.

program administrators should monitor caseloads closely for the first year of the new unit, and continue to reassess whether caseloads are balanced on at least a quarterly basis thereafter. One possible tool to assess caseloads in a more balanced way across social workers and units would be to calculate the monthly activity index by social worker, using the same values as in this report. However, since actual time required for each activity can vary widely, the activity index must be balanced with other information, including direct communication with social workers about their caseloads.

- **Establish a clear expectation with staff that specialist cases may be assigned to generalists and vice versa.** To maintain appropriate caseloads across units, eviction-related or high-risk self-neglect cases may need to be assigned to a generalist, or a case that would not meet the specialized unit's assignment criteria may need to be assigned to a specialist social worker.

- **Establish policies for rotation of social workers into and out of the specialized unit.** The peer survey revealed that workers can burn out over time if only working on one type of case. Policies should establish the procedures for a generalist social worker to petition to become part of the specialized unit and vice versa, and should articulate a minimum tenure required after transfer/hire before the social worker may petition to be rotated to the other unit.

- **Provide supplementary training to specialist social workers.** While all social workers would benefit from enhanced training on evidence-based approaches (such as motivational interviewing, solution-focused therapy, etc.), it is important that specialist social workers have a higher level of mastery of these techniques. The cases assigned to the specialist unit are expected to include some of the most resource-intensive cases and those with a higher likelihood of being chronically repeating cases. Enhanced skills in successfully reducing risk for these most resource-intensive cases is likely to lead to better outcomes for clients and may reduce the program's rate of repeat cases.

- **Specialist social workers should coach generalist social workers on managing difficult cases.** Specialist social workers will have both enhanced training and experience in high-risk self-neglect and housing/eviction-related cases, but generalist social workers will inevitably still receive cases that include these risks. Ideally, this coaching would have a formalized structure to ensure that access to coaching is institutionalized rather than based on personal relationships. As an example, each specialist social worker could have a schedule of drop-in hours when they are available to discuss challenges with other social workers.

- **Evaluate the overall effectiveness of the specialized unit for different types of abuse and self-neglect.** San Francisco APS is creating a new specialized unit with a number of objectives, including more effectively reducing risk for the most difficult-to-resolve cases and reducing the rate of repeat cases. San Francisco APS should set up reporting to monitor the effectiveness of the specialized unit at achieving these objectives. This reporting should inform ongoing business decisions about adjusting the intake guidelines for the specialized unit or identifying opportunities for supplementary training. Evaluation could include:
    o Measure baselines for the different types of cases assigned to the specialized unit (clients at varying levels of repeat case frequency, eviction-related cases, etc.).

- o Examine case length, activity index, and rate of repeat cases for these different types of cases over time.
- o If there are more cases for the specialized unit than there is capacity at any point in time, conduct random assignment of cases between the specialized and generalist units and compare results.

Case Work

- **Increase efficiency by promoting enhanced resource-sharing between social workers.** Social workers spend time researching programs (e.g., eligibility rules) and this effort may be duplicated, either over time by the same social worker or across social workers. San Francisco APS should designate a group of social workers to suggest ways to effectively pool existing research into an easily accessible format. There are already some shared resources, including lists of vendors and organizations providing services, but it is possible that the existing resources could be improved to more comprehensively address what social workers need to know.
- **Explore opportunities for greater coordination and data sharing across HSA and other departments (including the Department of Public Health and the Department of Homelessness and Supportive Housing) that could result in more effective, coordinated care.** The sharing of medical, behavioral health, and homelessness services data could ensure services aren't duplicated and facilitate more coordinated care for the most intensive users of City services, reducing overall costs and increasing effectiveness.
- **Ensure that language competencies among social workers and case aides match client needs.** Case lengths vary by client language, which may be a result of differing program capacity by client language. In addition, the Controller's Office heard from social workers and managers that the limited language proficiencies among case aides preclude being able to use case aides for some cases (e.g., there is not currently a case aide who can work with monolingual Cantonese-speaking clients).

Case Aide Utilization

As mentioned in Chapter 4, case aide utilization varies substantially among social workers resulting in inefficiencies. Social workers who underutilize case aides have less time available for skilled tasks that only they can perform. On the other hand, overutilization of case aides is an unequitable allocation of scarce resources, and detracts from other social workers' ability to get help from case aides. The following recommendations encourage efficient case aide utilization.

- **Establish enhanced guidelines and stronger policies and procedures on which tasks should be assigned to case aides.** As a first step to ensuring consistent utilization of case aides, San Francisco APS should establish written standards to provide clarity and transparency on what tasks should be delegated to case aides.
- **Review social workers' case aide utilization regularly.** Supervisors should review social workers' case aide utilization for conformance with guidelines regularly, at least semi-annually. Social workers should receive constructive feedback if there are tasks that they should more consistently delegate to case aides.

Clients with Chronically Repeating Cases

As mentioned in Chapter 4, 60% of cases from 2012-2015 were for clients who had more than one case in that time period. In December 2015, 35% of new cases were for clients who had one or more previous cases in the preceding 12 months. These repeat cases use a significant amount of San Francisco APS's resources but have limited success at reducing the clients' actual or perceived risk. As mentioned above, these cases should be assigned to the specialized unit subject to ongoing evaluation as to whether this is a more effective way to meet clients' needs. Other recommendations include:

- **Monitor the rates of repeat clients in routine reporting.** San Francisco APS should develop regular reporting on repeat cases, both overall and within the specialized and generalist social worker units. Reporting should allow for San Francisco APS to measure whether a new specialized unit reduces the rate of repeat cases for the program overall. Reporting could take the form of a dashboard showing, by unit and overall, the percentage of new cases for clients that had a previous case in a set period of time (six months, one year, etc.), and how this has changed over time.
- **Perform further analysis on causes of chronically repeating cases.** The information in this report provides some analysis, but a more focused look at chronically repeating cases would be helpful for identifying the root causes.

Case Assignment

Currently, case assignment at San Francisco APS is primarily on a rotation basis, with few exceptions.

- **Consider piloting rotation-based case assignment that also takes into account social worker preferences.** San Diego APS reported in the peer survey that they have incorporated social worker preference of allegation types into case assignment and found it to be successful. San Francisco APS can consider if it would be feasible to add social worker preferences as one factor in case assignment for generalist social workers. Doing so would give social workers more of a voice in their work and allow for strengths-based case assignment and informal specialization.
- **Examine potential process improvements in triage and case assignment.** San Diego APS also experienced success with a more intensive intake model in which intake workers perform more extensive triage to vet the case, verify information, check various databases for further information, follow up with the reporting party, verify demographics, and find the best time to find the client at home or an alternate location. San Diego found this model had a positive impact on workload and a perceived better outcome for both the clients and APS workers. San Francisco APS should consider whether this model would be effective in the San Francisco system.

Appendix 1. Adult Protective Services, National Peer Survey

The following survey was distributed to peer APS programs across the country. A nearly identical version was distributed to every California APS program, modified only to remove questions about case volume that are readily available through state-level reporting.

Adult Protective Services, National Peer Survey

1. Introduction

The City and County of San Francisco, Controller's Office is working with the San Francisco Human Services Agency, Adult Protective Services (APS) Program to survey jurisdictions across California and the country about their APS programs to better understand organizational and case management practices. The survey results will be shared with you so you can learn about other jurisdictions' APS programs as well.

This is the National (non-California) version of the survey. If you are a California APS department, please click here to take the California version of the survey which omits questions based on data available from Form SOC-242.

This survey should take about 10-15 minutes to complete. You may save your responses by completing a page, clicking "next" and then exiting the survey, though this will only work if you have cookies enabled. When you return by clicking the survey link again, it will put you back to where you left off. You can go back and edit or add information, as needed. Please be aware that answers are only saved after you click "next" and go to the next blank page. There is no way to save your answers that you entered without first moving forward and allowing the system to "capture" your responses. You may also request a personal link to the survey by emailing david.weinzimmer@sfgov.org; the personal link will allow you to fill out the survey over multiple sessions.

If you have any questions or need assistance, please contact David Weinzimmer at 415-554-7656 or david.weinzimmer@sfgov.org.

2. Program Organization and Caseload Management

This section focuses on how your program is organized, and how caseload is managed and distributed.

1. Please provide your contact information. The jurisdiction/department name is important for us to be able to match your responses with publicly available reporting.

Name & Title

Jurisdiction/Department

Phone Number

Email

2. What is the geographical area your APS professionals/social workers serve?

◯ Entire state

◯ District within the state

◯ County

◯ City

◯ Service area within a city

◯ Other (please specify)

3. What types of APS clients does your program serve?

◯ Elder abuse clients (age 65+) ONLY

◯ Vulnerable or dependent adults/adults with disabilities (age 18-65) ONLY

◯ Both elder abuse and vulnerable adult clients

◯ Other (please specify)

4. Are your APS professionals/social workers organized in specialized units by type of abuse (e.g., a financial abuse group) or are social workers "generalists" who work on all types of cases?

○ NO, the social workers work on all types of cases

○ YES, we have specialized units by type of abuse (please explain below)

○ Other (please explain below)

If you answered "Yes" or "Other," please explain your response. How many units are there, and how are social workers allocated?

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5. How satisfied is or was your program with having specialized units of APS professionals/social workers? *If you have never had specialized units of social workers (i.e., if you selected "NO" for Q4), select "N/A" below.*

	Very dissatisfied	Somewhat dissatisfied	Neutral	Somewhat satisfied	Very satisfied	N/A
Satisfaction with specialized units	○	○	○	○	○	○

You may explain your response in this box if you would like. (Optional)

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6. How do you manage case assignment to APS professionals/social workers (i.e., when a new case comes in, how do you determine who it will be assigned to)?

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7. Does an APS professional's/social worker's current caseload impact whether they will be assigned another case?

○ Yes

○ No

You may explain your response in this box if you would like. (Optional)

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8. Does your program consider all cases equal when assigning cases to APS professionals/social workers?

(For example, are financial abuse cases counted as "two" due to their complexity, etc.)

◯ NO, we <u>do NOT</u> weight different types of cases when we determine social worker caseloads.

◯ NO; we <u>DID</u> use weighted caseloads in the past but have discontinued using them.

◯ YES, we <u>DO</u> currently use weighted caseloads.

You may explain your response in this box if you would like. (Optional)

3. Weighted Caseloads

You have indicated that you either currently use weighted caseloads or used them in the past.

This section focuses on how weighted caseloads are used and calculated.

9. What was your program's approach to creating the weighted caseload? How did you decide how to weight different types of cases? Answer briefly.

10. How does (or did) your program use weighted caseloads in day-to-day operations? Answer briefly.

11. How difficult has it been for your program to use weighted caseloads? How much value has your program found in using a weighted caseload?

	None	Not very much	Neutral	Somewhat	A lot
Difficulty of using weighted case loads	○	○	○	○	○
Value of weighted caseloads	○	○	○	○	○

You may explain your response in this box if you would like. (Optional)

4. APS Casework

This section focuses on APS casework, including risk assessment and services provided.

12. What risk assessment tool does your program use?

○ One we developed internally

○ One provided by the state or another jurisdiction

○ A commercially available risk assessment tool (please provide the name)

○ Other (please specify)

Please provide the name or other details about what risk assessment tool you use.

[   ]

13. How satisfied are you with your risk assessment tool?

	Very dissatisfied	Somewhat unsatisfied	Neutral	Somewhat satisfied	Very satisfied	N/A
Satisfaction with risk assessment tool	○	○	○	○	○	○

You may explain your response in this box if you would like. (Optional)

[   ]

14. What <u>intangible</u> services do you provide to clients? Check off all that apply.

☐ Referrals to in-home supportive services

☐ Connections to public assistance such as SSI

☐ Referrals to other programs

☐ Client advocacy

☐ Nursing services provided by your agency's staff

☐ Facilitation of involuntary psychiatric holds for hospitalization (California: 5150 orders)

☐ Translation assistance

☐ Supportive counseling

☐ Other (please specify)

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15. What <u>tangible</u> services do you provide to clients? Check off all that apply.

☐ NONE, we do not have funding for tangible services

☐ Transportation

☐ Escort to medical appointments, social security, DMV, etc.

☐ Emergency meals

☐ Heavy clean-ups

☐ Bed bug preparation services

☐ Other (please specify)

☐ Emergency home care (by a private home care agency)

☐ Locksmith services

☐ Emergency medications

☐ Back rent or utilities

☐ Emergency housing/lodging

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5. Case Statistics and Program Information

This is the last page of the survey. It focuses on an overview of case statistics and high-level information about the program.

16. How many new cases did your program open in 2015?
If you work at the local, county, or district level, please provide the caseload for that jurisdiction rather than the state.
Provide the number of assigned cases, not the number of allegations/reports of abuse. If numbers for 2015 are not available, provide an approximate number of new cases for the most recent year available.

17. What is the average number of days a case remains open?
If this information is not readily available, you may write that.

18. How many full-time equivalent (FTE) staff do you have of the following types?
Please provide the numbers of staff that correspond to the caseload you indicated above.

APS Investigators/Social workers

APS Supervisors

Support staff who work on cases but are not licensed social workers (e.g., human service technicians who help with logistics of casework, bringing clients to appointments, etc.)

19. What is the average/typical number of active cases a social worker has at any point in time (i.e., typical active caseload)?
This answer does not need to be precise -- a general estimate is sufficient.

20. Approximately what percentage of your cases involves self-neglect? What percentage involves abuse by others?

We recognize that many cases involve both types of abuse. Your numbers should add up to more than 100 if any cases have both types of abuse.

Self-neglect

Abuse by others

21. Approximately what percent of your cases are for repeat clients?

◯ Less than 10%

◯ 10 to 19%

◯ 20 to 29% (about a quarter)

◯ 30% or more (a third or more)

◯ I don't know

If you have a precise percent, please write it here.

22. What are the most common types of abuse for your program? Choose up to three.

☐ Financial abuse by others

☐ Mental or psychological abuse by others

☐ Neglect or abandonment by others

☐ Physical abuse by others

☐ Self-neglect: health and safety hazards

☐ Self-neglect: medical care

☐ Self-neglect: physical care

☐ Other (please specify)

23. What are the most challenging types of cases to resolve?

6. Thank you!

Thank you for taking the time to fill out our APS survey. The San Francisco Controller's Office will analyze the information as part of our report for San Francisco's APS program to understand what drives case complexity and best practices from other jurisdictions in program organization and caseload management. We will be happy to share this report with you if you are interested.

If you have any questions, concerns, or have the following materials to share with us, please send them to David.Weinzimmer@sfgov.org.

24. Feel free to share any other comments with us. Thank you for your time!

Appendix 2. Peer Survey Responses about Risk Assessment Tools

Respondents were asked in the APS peer survey about risk assessment tools used by their programs.

Figure 1. Risk Assessment Tools Used
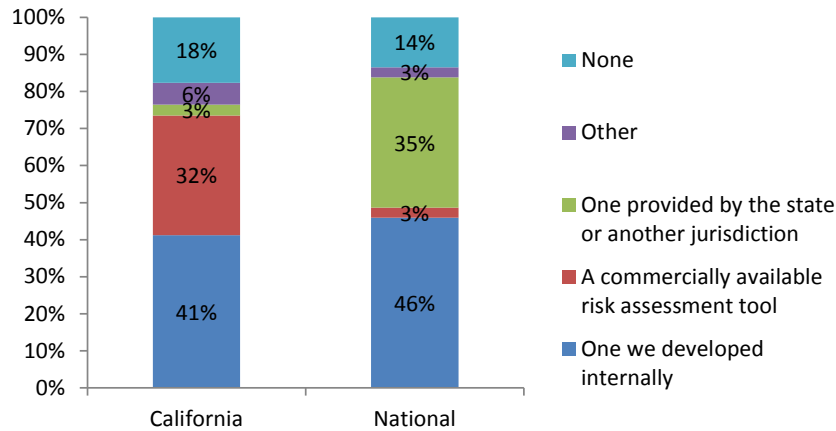
As shown in Figure 1, many jurisdictions do not use a risk assessment tool (18% of California programs and 14% of National programs). Some specified that they do not use a risk assessment tool, but do use tools for structured decision making or other consistency guidelines. Among respondents, 32% of California programs and 3% of National programs use a commercially available risk assessment tool (for almost all, this was the risk assessment tool included in the AACTS software used by many California APS programs at the time of the survey; this risk assessment tool was originally designed by San Francisco staff but is now modified and used in over 20 counties). Among National programs, about a third use a risk assessment provided by the state or another jurisdiction.

A very small number of programs use other risk assessment tools, such as TRIO (Tool for Risk, Intervention, and Outcomes) in Ventura County, CA, or SHIELD (Strategies that Help Intervention and Evaluation Leading to Decisions, developed in consultation with the National Center for Crime & Delinquency) in Texas's state APS program. Across all programs, only 18% are very satisfied with their current risk assessment tools.[1] Most programs that are satisfied with their risk assessment tools developed them internally; San Luis Obispo County, California is very satisfied with the Structured Decision Making Tool (SDM®) they use, while Ventura County, California and the State of Texas are very satisfied with their TRIO and SHIELD risk assessment tools.

The Controller's Office survey did not explicitly ask about use of evidence-based risk assessments and other evidence-based practices in casework, although a 2012 report from the National Adult Protective Services Resource Center (NAPSRC) provides the findings of a national survey about evidence-based

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[1] Programs that reported being very satisfied with risk assessment tools included the Maryland Office of Adult Services (The Adult Services Risk Assessment Tool), Texas Department of Family & Protective Services (who developed a tool called SHIELD in consultation with the National Center for Crime & Delinquency), San Luis Obispo County, CA (Structured Decision Making (SDM) Tool), Sonoma County, CA (using a tool built into their Harmony database), and Ventura County, CA (Tool for Risk, Intervention, and Outcomes (TRIO)). Other programs reported being satisfied with risk assessment tools, but did not leave more information about the name of the tools.

practices in APS.[2] The NAPSRC survey found that more than half of respondents said standard assessments were used statewide but relatively few had been researched for effectiveness, with the exception of capacity/cognition assessments.

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[2] National Adult Protective Services Resource Center, "Evidence-Based Practices in Adult Protective Services: Survey Results." Accessible at http://www.napsa-now.org/wp-content/uploads/2012/11/EBPinAPS.pdf.

Appendix 3. Record of Contacts Mini-Survey

The following survey was distributed to all San Francisco APS social workers to solicit input on the average length of time required to complete the various activities that correspond to a record of contact in the AACTS database.

This one-page survey should take about two minutes, and your responses are anonymous.

As part of the analysis of ROC data, we are trying to understand *relatively* how much time it takes for the activities behind each ROC. While there is a lot of variation in how long it takes to have a collateral call, travel to a client, etc., we are trying to get an **average time** for each ROC.

For instance, if some phone calls to clients are 2 minutes long, many are 30 minutes long, but most of them are about 10 minutes, then you can put down something that is close to 10 minutes as the average time.

To provide a reference point, these are the average values we've found so far, but we want to refine these based on your feedback. *All average durations include 5 mins for entering ROC notes.*

Activity	Average duration
Travel time	16 mins
Initial F2F	64 mins (excl. travel time)
Followup F2F	64 mins (excl. travel time)
Attempted F2F	36 mins (excl. travel time)
Telephone call - client	13 mins
Collateral call	13 mins
Call from intake	13 mins
Office visit other	90 mins (incl. travel time)
Visitation collateral	60 mins (incl. travel time)
Update on closed case	13 mins
"Other"	13 mins

1. In your experience, about how many <u>minutes</u> does it *usually* take to do each of the following activities corresponding to an ROC entry?

Average ONE-WAY travel time to a client

Initial F2F (exclude travel time)

Follow-up F2F (exclude travel time)

Attempted F2F (exclude travel time)

Telephone call - client

Collateral call

Call from intake

Office visit Other (<u>include</u> travel time)

Visitation collateral (<u>include</u> travel time)

Update on closed case

"Other"

2. The "Other" category is one of the most commonly used ROCs. For you, what types of activities/actions do you code in as "Other" for your ROCs?

3. Do you have any other comments?

Appendix 4. Treemaps of Records of Contact

Chapter 4: Case Data Analysis includes Figure 1 on the next page, which is a treemap depicting the total number of records of contact (ROCs) for cases opened from 2012 to 2015. The records of contact are shown in blue if they are for cases with a Face-to-Face meeting complete and in green for those without a Face-to-Face meeting.

The second treemap below, Figure 2, shows the same data with the weights from the Controller's Office activity index applied. As such, each area of the treemap represents the total activity index points for each type of ROC for cases opened from 2012 to 2015 rather than the count of ROCs as shown in Figure 1. This second treemap conveys the relative time intensity of the different types of ROCs over this time period.

Figure 1. Treemap of Records of Contact (2012-2015)
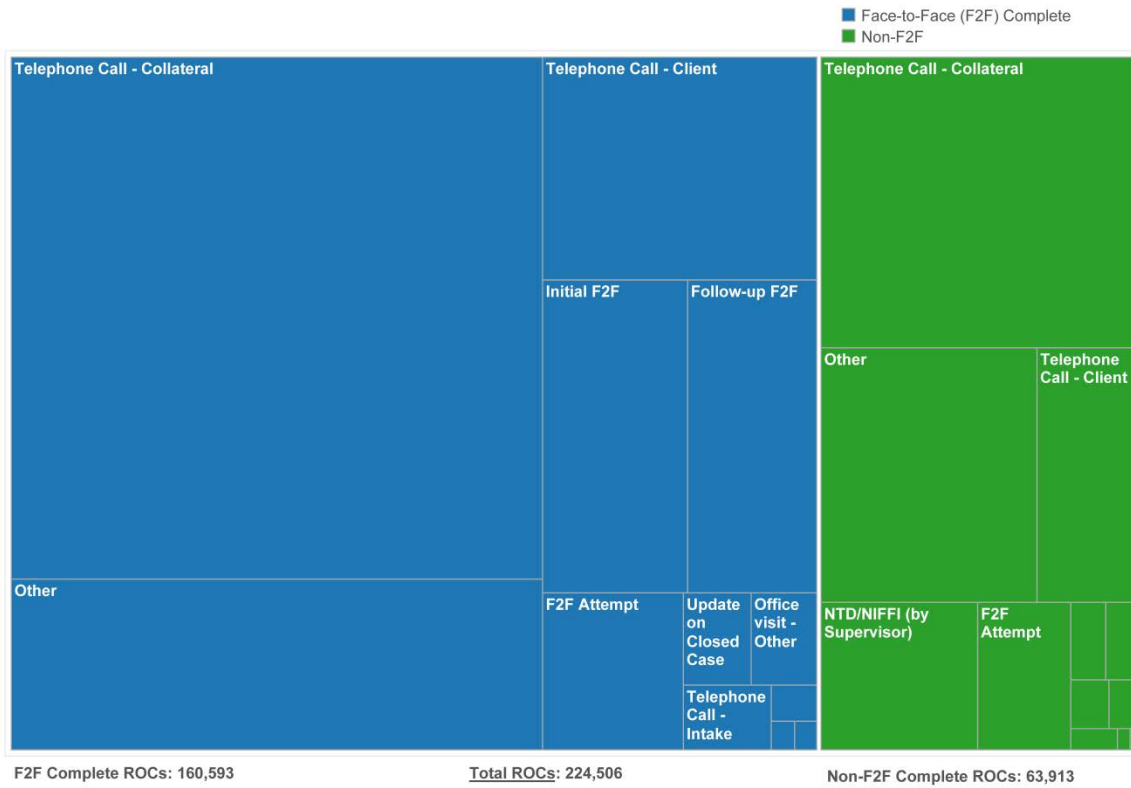
Figure 2. Treemap of Records of Contact, Weighted by Activity Index (2012-2015)
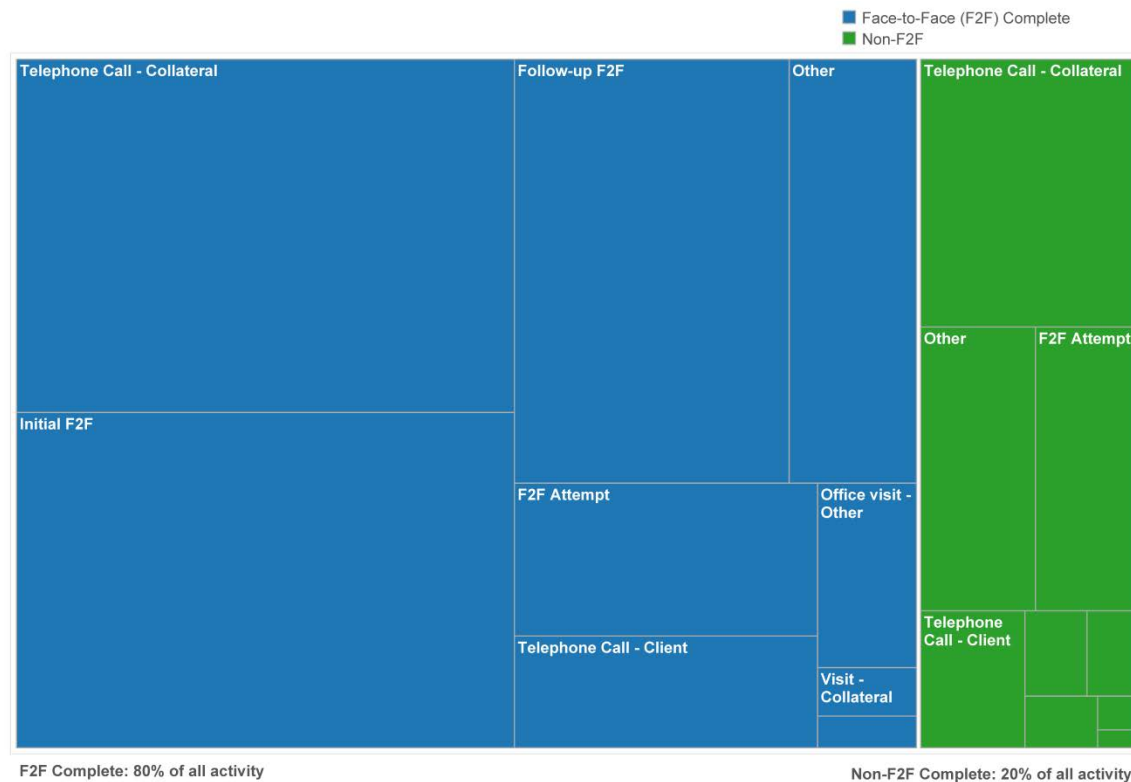
Appendix 5. Variability of Case Length

Variability in case length appears to have increased over the 2012-2015 time, as shown in Figure 1 below.

Figure 1. Average Case Length by Quarter (Cases with Face-to-Face Complete Only)
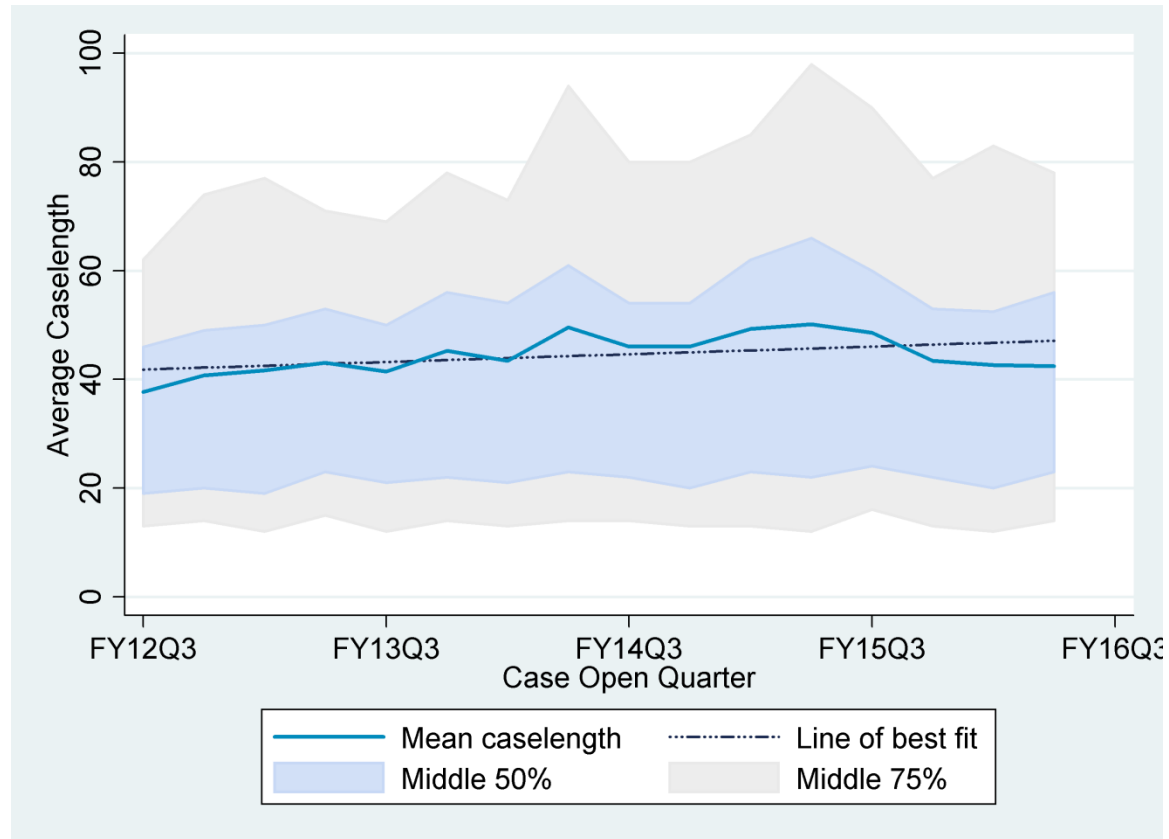
The mean case length for cases with a Face-to-Face completed (light blue line above) has trended upward over 2012-2015, as shown by the dashed line of best fit's upward slope. However, the dispersion of case lengths around that mean has also increased. The light blue area above shows the "middle 50%" of case lengths (on a quarterly basis) and the grey area shows the "middle 75%." For both, the upper limit of these ranges was much higher at the end of the four-year period than at the beginning. For example, in FY2012 Q3 (January-March 2012) the top of the middle 50% range (i.e., the 75th percentile) was 46 days, whereas in FY16Q2 (October-December 2015) it was 56 days.

Aside from the overall increasing trend, there is also significant seasonality to case length variability. The two highest peaks in Figure 1 correspond to the second quarter of each fiscal year, which encompasses October through December. This pattern suggests that cases are more likely to take longer in Q2, which would make sense for instance if there is less social worker availability during the holiday season (or if demand is higher, or both). Nonetheless, even outside of the seasonal peaks, there was more variability in case length in 2015 than there was in 2012.

Appendix 6. Regression Model Outputs

		Model 1 - Full information, Case Length				Model 2 - Full information, Activity Index					Model 3 - Pre-F2F variables only, Case Length				Model 4 - Pre-F2F variables only, Activity Index			
		Observatic	22,212			Obs	22,202				Obs	22,212				Obs	22,202		
		R^2	0.3520			R^2	0.3588				R^2	0.2534				R^2	0.2503		
Type of Variable	Variable	Coef.	Std. Err.	t	P>|t|	Coef.	Std. Err.	t	P>|t|	Variable	Coef.	Std. Err.	t	P>|t|	Coef.	Std. Err.	t	P>|t|
Overall case	2nd+ case for this client (2012-16)	-0.267	0.359	-0.75	0.456	6.164	2.930	2.1	0.035	2nd+ case for this client (2012-16)	1.484	0.365	4.06	0	16.390	3.006	5.45	0.000
characteristics	Client has 6+ cases (2012-16)	-1.493	0.524	-2.85	0.004	1.350	4.286	0.32	0.753	Client has 6+ cases (2012-16)	-1.495	0.559	-2.67	0.008	1.281	4.604	0.28	0.781
	Client receiving intervention from other source	-3.332	0.451	-7.39	0	-15.567	3.685	-4.22	0	Client receiving intervention from other source								
	Case has a gatekeeper	2.447	0.327	7.48	0	34.362	2.674	12.85	0	Case has a gatekeeper								
	Case opened in 2013	1.602	0.450	3.56	0	-16.461	3.675	-4.48	0	Case opened in 2013								
	Case opened in 2014	3.124	0.447	6.98	0	-9.603	3.655	-2.63	0.009	Case opened in 2014								
	Case opened in 2015	1.714	0.448	3.83	0	-1.550	3.661	-0.42	0.672	Case opened in 2015								
	Total number of ROAs for case	4.504	0.358	12.6	0	61.532	2.921	21.07	0	Total number of ROAs for case	4.878	0.393	12.43	0	67.408	3.230	20.87	0.000
Client demographics	Female	0.325	0.318	1.02	0.306	2.225	2.595	0.86	0.391	Female	-0.273	0.340	-0.8	0.422	-3.314	2.799	-1.18	0.236
	Age 19-44 (reference category)									Age 19-44 (reference category)								
	Age 45-54	0.832	0.754	1.1	0.27	8.300	6.166	1.35	0.178	Age 45-54	1.765	0.809	2.18	0.029	17.901	6.657	2.69	0.007
	Age 55-64	0.585	0.664	0.88	0.378	3.083	5.423	0.57	0.57	Age 55-64	1.679	0.711	2.36	0.018	13.971	5.853	2.39	0.017
	Age 65-74	0.811	0.709	1.14	0.253	11.936	5.793	2.06	0.039	Age 65-74	2.097	0.760	2.76	0.006	24.734	6.258	3.95	0.000
	Age 75-84	1.532	0.728	2.1	0.035	12.849	5.953	2.16	0.031	Age 75-84	3.535	0.779	4.54	0	31.441	6.413	4.9	0.000
	Age 85+	2.142	0.760	2.82	0.005	10.659	6.210	1.72	0.086	Age 85+	4.229	0.806	5.24	0	28.729	6.638	4.33	0.000
	Chinese	-1.892	0.557	-3.39	0.001	6.345	4.553	1.39	0.163	Chinese	-0.322	0.591	-0.54	0.586	19.835	4.866	4.08	0.000
	English (reference category)									English (reference category)								
	Russian	12.278	1.119	10.97	0	13.444	9.143	1.47	0.141	Russian	15.831	1.186	13.35	0	33.085	9.758	3.39	0.001
	Sign Language (n=33)	9.660	3.994	2.42	0.016	49.727	32.629	1.52	0.128	Sign Language (n=33)	12.078	4.282	2.82	0.005	75.047	35.239	2.13	0.033
	Spanish	3.414	0.610	5.6	0	-20.912	4.986	-4.19	0	Spanish	2.399	0.652	3.68	0	-29.020	5.371	-5.4	0.000
	Tagalog	2.574	0.993	2.59	0.01	-21.196	8.120	-2.61	0.009	Tagalog	3.460	1.061	3.26	0.001	-15.444	8.742	-1.77	0.077
	Other API	1.371	1.140	1.2	0.229	3.865	9.310	0.42	0.678	Other API	0.249	1.221	0.2	0.838	-8.577	10.047	-0.85	0.393
	Other Non-English	0.400	1.333	0.3	0.764	-3.420	10.894	-0.31	0.754	Other Non-English	0.128	1.430	0.09	0.929	-3.004	11.769	-0.26	0.799
	Unknown Language	-2.107	1.274	-1.65	0.098	-8.875	10.410	-0.85	0.394	Unknown Language	-3.161	1.366	-2.31	0.021	-19.204	11.241	-1.71	0.088
	Client is bedbound	-3.128	0.840	-3.73	0	-6.070	6.862	-0.88	0.376	Client is bedbound	-1.860	0.904	-2.06	0.04	3.242	7.444	0.44	0.663
	Client is homeless	-4.592	1.131	-4.06	0	-15.641	9.236	-1.69	0.09	Client is homeless	-3.857	1.211	-3.18	0.001	-10.507	9.969	-1.05	0.292
	Client has a physical disability	-0.070	0.556	-0.13	0.899	8.369	4.540	1.84	0.065	Client has a physical disability	0.376	0.592	0.63	0.525	12.054	4.876	2.47	0.013
	Client has a developmental disability	1.050	1.033	1.02	0.309	11.374	8.436	1.35	0.178	Client has a developmental disability	1.963	1.031	1.9	0.057	15.008	8.488	1.77	0.077
	Client has a mental disability	-0.150	0.542	-0.28	0.782	4.928	4.433	1.11	0.266	Client has a mental disability	-0.003	0.577	-0.01	0.995	7.477	4.755	1.57	0.116
	Client suffers from confusion, memory loss, inapprop. response, disoriented	0.473	0.384	1.23	0.217	9.705	3.135	3.1	0.002	Client suffers from confusion, memory loss, inapprop. response, disoriented	0.952	0.409	2.33	0.02	14.107	3.364	4.19	0.000
Referral source	Has referral by financial serv provider	3.672	0.854	4.3	0	25.792	6.978	3.7	0	Has referral by financial serv provider	2.206	0.936	2.36	0.018	15.296	7.708	1.98	0.047
	Has referral by law/legal enforcement (reference category)									Has referral by law/legal enforcement (reference category)								
	Has referral by med serv provider	1.680	0.489	3.43	0.001	13.014	3.997	3.26	0.001	Has referral by med serv provider	2.167	0.530	4.09	0	15.218	4.362	3.49	0.000
	Has referral by nonmandated reporter	3.688	0.489	7.54	0	17.367	3.996	4.35	0	Has referral by nonmandated reporter	3.711	0.534	6.94	0	18.119	4.399	4.12	0.000
	Has referral by soc serv provider	2.893	0.476	6.07	0	18.356	3.892	4.72	0	Has referral by soc serv provider	3.416	0.511	6.68	0	23.300	4.208	5.54	0.000
Risk factors (ROA)	Infestation issue in ROAs	1.175	1.942	0.6	0.545	7.243	15.868	0.46	0.648	Infestation issue in ROAs	3.058	2.124	1.44	0.15	14.453	17.479	0.83	0.408
	Housing/eviction risk (ROAs)	3.475	1.749	1.99	0.047	20.319	14.289	1.42	0.155	Housing/eviction risk (ROAs)	4.924	1.917	2.57	0.01	33.131	15.774	2.1	0.036
	Wandering risk (ROAs)	1.621	1.173	1.38	0.167	4.684	9.581	0.49	0.625	Wandering risk (ROAs)	0.627	1.254	0.5	0.617	-4.548	10.319	-0.44	0.659
	Suicidality (ROAs)	0.638	1.233	0.52	0.605	1.301	10.069	0.13	0.897	Suicidality (ROAs)	0.704	1.321	0.53	0.594	2.491	10.871	0.23	0.819
	Alcohol abuse (ROAs)	-2.301	0.801	-2.87	0.004	-16.439	6.544	-2.51	0.012	Alcohol abuse (ROAs)	-2.803	0.849	-3.3	0.001	-16.790	6.988	-2.4	0.016
	Substance abuse (ROAs)	0.070	0.411	0.17	0.864	1.226	3.357	0.37	0.715	Substance abuse (ROAs)	-0.361	0.450	-0.8	0.422	-4.501	3.707	-1.21	0.225
	Allegations of abuse by others (only) (reference category)									Allegations of abuse by others (only) (reference category)								
	Self-neglect allegations (only)	1.523	0.389	3.91	0	24.351	3.181	7.65	0	Self-neglect allegations (only)	2.003	0.850	2.36	0.018	26.178	6.994	3.74	0.000
	Both abuse by others and self-neglect allegations	1.219	0.538	2.27	0.023	15.464	4.395	3.52	0	Both abuse by others and self-neglect allegations	0.434	0.776	0.56	0.576	8.516	6.389	1.33	0.183
	Response Time NTD/NIFFI (reference category)									Response Time NTD/NIFFI (reference category)								
	Response time: immediate	7.105	0.862	8.24	0	139.964	7.046	19.86	0	Response time: immediate	19.799	0.886	22.36	0	229.569	7.287	31.5	0.000
	Response time: 24 hour	7.595	0.852	8.92	0	125.636	6.958	18.06	0	Response time: 24 hour	20.234	0.873	23.17	0	215.647	7.187	30.01	0.000
	Response time: 2-5 days	9.586	0.591	16.23	0	113.303	4.827	23.47	0	Response time: 2-5 days	20.792	0.571	36.43	0	193.071	4.697	41.1	0.000
	Response time: 10 days	15.178	0.442	34.35	0	96.885	3.611	26.83	0	Response time: 10 days	25.734	0.384	67.03	0	174.014	3.160	55.06	0.000
Risk factors (F2F)	Risk: Health Frailty	5.309	0.526	10.09	0	14.540	4.297	3.38	0.001	Allegations: Medical self-neglect	-0.919	0.493	-1.86	0.062	-0.158	4.060	-0.04	0.969
	Risk: Cognitive deficits	2.917	0.500	5.84	0	22.132	4.083	5.42	0	Allegations: Physical self-neglect	1.169	0.549	2.13	0.033	11.092	4.521	2.45	0.014
or	Risk: Undue influence	1.984	0.563	3.52	0	12.649	4.599	2.75	0.006	Allegations: Health & safety self-neglect	1.957	0.588	3.33	0.001	13.030	4.842	2.69	0.007
	Risk: Poor judgment	1.730	0.490	3.53	0	11.887	4.006	2.97	0.003	Allegations: Malnutrition/dehydration self-neglect	-0.344	0.766	-0.45	0.653	3.580	6.312	0.57	0.571
Allegation types	Risk: Substance Abuse (client)	-2.618	0.718	-3.64	0	-4.603	5.869	-0.78	0.433	Allegations: Financial self-neglect	4.331	0.769	5.64	0	43.070	6.326	6.81	0.000
(pre-F2F)	Risk: Mental Health (client)	0.817	0.521	1.57	0.117	5.614	4.257	1.32	0.187	Allegations: Other self-neglect	0.974	0.588	1.66	0.098	17.220	4.841	3.56	0.000
	Risk: Physical disb	-0.166	0.536	-0.31	0.756	15.254	4.380	3.48	0	Allegations: Physical or sexual abuse or abandonment by others	-0.108	0.627	-0.17	0.864	10.398	5.159	2.02	0.044
	Risk: Developmental disb	1.810	1.425	1.27	0.204	-10.130	11.642	-0.87	0.384	Allegations: Psychological/mental abuse or isolation by others	0.891	0.500	1.78	0.075	-0.209	4.113	-0.05	0.960
	Risk: Current crisis	7.686	0.465	16.52	0	61.788	3.801	16.25	0	Allegations: Financial abuse by others	0.954	0.543	1.76	0.079	-1.804	4.468	-0.4	0.686
	Risk: Environ hazards	6.365	0.570	11.16	0	46.837	4.660	10.05	0	Allegations: Neglect/abandonment by others	2.311	0.580	3.99	0	20.413	4.772	4.28	0.000
	Risk: Weapons	-2.439	1.993	-1.22	0.221	11.326	16.278	0.7	0.487	Allegations: Other abuse by others	1.606	0.836	1.92	0.055	14.402	6.883	2.09	0.036
	Risk: HistofAbuse (other)	1.356	0.703	1.93	0.054	-2.194	5.746	-0.38	0.703									
	Risk: HistofAbuse (self)	2.852	0.558	5.11	0	24.634	4.561	5.4	0									
	Risk: Financial Abuse	6.176	0.792	7.8	0	37.511	6.471	5.8	0									
	Risk: Unpaid bills	8.014	1.030	7.78	0	106.913	8.411	12.71	0									
	Risk: Housing	5.336	0.769	6.94	0	54.807	6.280	8.73	0									
	Risk: Support system	5.485	0.568	9.66	0	75.521	4.639	16.28	0									
	Risk: Abuser access	1.320	0.537	2.46	0.014	15.562	4.385	3.55	0									
	Risk: Substance Abuse (abuser)	-1.350	0.995	-1.36	0.175	-19.002	8.131	-2.34	0.019									
	Risk: Mental Health (abuser)	2.305	0.959	2.4	0.016	7.555	7.836	0.96	0.335									
	Risk: CriminalViolence (abuser)	1.802	1.322	1.36	0.173	30.886	10.798	2.86	0.004									
	Regression Constant	0.378	0.867	0.44	0.663	-25.516	7.081	-3.6	0	Regression Constant	-2.561	0.943	-2.72	0.007	-55.364	7.760	-7.13	0.000