

Adult Protective Services CLIENT OUTCOMES STUDY

Summary Report



U.S. Department of Health and Human Services,
Administration for Community Living,
Office of Elder Justice and Adult Protective Services

Acknowledgment

This report is provided to the Office of Elder Justice and Adult Protective Services (OEJAPS), Administration for Community Living (ACL), U.S. Department of Health and Human Services (HHS), by New Editions Consulting, Inc., under contract number HHSP233201500113/HHSP23337002T.

The research team and ACL would like to extend our deepest appreciation to all of the Adult Protective Services (APS) program staff and clients who participated in the APS Client Outcomes Study. The success of the study depended on the voluntary participation of APS leaders, workers, and clients in nine states: Illinois, Maryland, Minnesota, Missouri, New Hampshire, North Carolina, North Dakota, Oregon, and Utah. This work would not be possible without their time and efforts.

We would also like to thank the members of the Technical Expert Panel (TEP) for their contributions and guidance throughout the design and implementation of the study: Tonia Bell, LMSW (Alabama Department of Human Resources); David Burnes, MSW, PhD (University of Toronto); Marie-Therese Connolly, JD (Woodrow Wilson International Center for Scholars);

Carol Dayton, ACSW, LISW (Former APS Chief, Cuyahoga County Department of Senior and Adult Services); Lori Delagrammatikas, MSW (Former Executive Director, National Adult Protective Services Association); Sherry Hamby, PhD (Sewanee: The University of the South); Joy Swanson Ernst, MSW, PhD (Wayne State University School of Social Work); Zach Gassoumis, PhD (University of Southern California); Helen Lamont, PhD (U.S. Department of Health and Human Services); Marian Liu, PhD (Purdue University).

Additionally, we would like to thank the National Adult Protective Services Association (NAPSA) for their partnership throughout the study. In particular, NAPSA helped us engage with the APS community to share information about the study and to support recruitment and enrollment of APS programs in study activities.

Finally, we would like to acknowledge and thank the APS Technical Assistance Resource Center (TARC) for sharing important information about their APS process and systems evaluation and the National Adult Maltreatment Reporting System (NAMRS).

Disclaimer

The views, opinions, and content of this publication are those of the authors and do not necessarily reflect the views, opinions, or policies of OEJAPS, ACL, or HHS. Nothing in this document constitutes a direct or indirect endorsement by ACL of any non-federal entity's products, services, or policies, and any reference to non-federal entity's products, services, or policies should not be construed as such.

TABLE OF CONTENTS

Introduction	2
Background	3
Figure 1: Comprehensive APS Logic Model – Abbreviated Version	4
Study Design	5
Methods	5
Sampling	6
Procedures	6
Approvals and Human Subjects Protections	7
Surveys	7
Figure 2. Sampling Strata	8
Figure 3. Application of Sampling Strata to Select States	8
Survey Results	9
Figure 4. Alleged and Substantiated Maltreatment Types	9
Figure 5: Self-Reported Client Experiences with APS	10
Figure 6: Self-Reported Client Outcomes	11
Comparison of Self-Neglect Clients to Clients with Other Maltreatment Types	11
Table 1. Group Means for Self-Neglect Clients Compared to Clients with Other Maltreatment Types, by Disposition	12
Impact of the COVID-19 Pandemic	12
Figure 7: Number of Counties by Percentage of In-Person Visits: Pre-COVID and March-September 2021	13
Multivariate Analysis: Predicting Client Outcomes with Survey Data	14
Table 2: Multivariate Model Results for Self-Reported Client Outcomes	14
Virtual Site Visits	15
Perspectives on Outcomes: Views of APS Program Leaders and APS Workers	15
Table 3: Barriers and Facilitators that Impact Client Outcomes	16
Perspectives on Outcomes: Views of APS Clients	17
Figure 8: Quotes from APS Clients	17
National Adult Maltreatment Reporting System	18
Recurrence	18
Figure 9: Probability of Recurrence by Time Since Initial Episode Closure	18
Multivariate Analysis	19
Table 4: Multivariate Model Results for Recurrence	20
Discussion	22
Conclusion	26
References	27



INTRODUCTION

Adult Protective Services (APS) programs are provided by state and local governments nationwide to serve older adults and adults with disabilities facing abuse, neglect, self-neglect, or financial exploitation. APS programs are often the entry point for adults who experience maltreatment to access additional community, social, medical and behavioral health, and legal services to maintain independence in the settings in which they prefer to live. Additionally, APS programs are an important avenue through which maltreatment is reported to law enforcement or other agencies. APS programs work closely with clients and a wide variety of allied professionals to maximize safety and independence, while respecting each client's right to self-determination. Although APS programs are designed and run differently across the U.S., APS programs commonly provide the following services:

- investigating reports of adult maltreatment;
- case planning, monitoring, evaluating, and other casework; and
- providing, arranging for, or facilitating the provision of medical, social, economic, legal, housing, law enforcement, or other protective, emergency, or support services.

Despite the ubiquity of APS programs and their important role in meeting the needs of older adults and adults with disabilities who face maltreatment, there is limited research examining the impact of APS programs on client outcomes. To help address this gap, the U.S. Department of Health and Human Services, Administration for Community Living (ACL), Office for Elder Justice and Adult Protective Services (OEJAPS) funded the design and implementation of the APS Client Outcomes Study.

BACKGROUND

There is limited existing research on APS client outcomes. Most existing studies tended to focus on examining the influence of APS on client risk of subsequent maltreatment or recurrence of maltreatment (Dong et al., 2013; Ernst & Smith, 2012, Lithwick et al., 2000; Roberto et al., 2004). Other outcomes that have been studied include satisfaction with APS (Booker et al., 2018), guardianship (Heath et al. 2005), placement in alternative living situations (Heath et al. 2005), health services use (Heath et al. 2005), institutionalization (Lachs et al., 2002; Blenkner et al., 1971), and mortality (Blenkner et al., 1971; Lachs et al., 1998). Overall, there is no strong conceptual consensus in the APS field about what constitutes successful APS client outcomes. Furthermore, there are few national-level, federal datasets that provide information needed for APS client outcomes research. Among all the datasets we reviewed, only the National Adult Maltreatment Reporting System (NAMRS) could provide information for this study.

Although existing literature and datasets provided useful insights for the APS Client Outcomes Study, we designed the study primarily through our development of a logic model and conceptual framework, and inviting substantive input and guidance from ACL content experts and stakeholders from the APS field. We developed the Comprehensive APS Logic Model to provide a theoretical basis for our examination of APS and make explicit our understanding of how APS operates and towards what ends. This logic model builds on an initial version developed with ACL as part of a process evaluation of APS (APS TARC, 2022), which illustrates the environment or context within which APS operates, inputs and resources supporting APS programs, activities undertaken by APS, and outputs from those activities. The Comprehensive APS Logic Model extends the TARC Process Evaluation logic model by adding the intended effects of APS services on clients, perpetrators, and communities/systems as well as classifying those effects as occurring in the short, intermediate, or long-term. An abbreviated version of the Comprehensive APS Logic Model is provided in Figure 1 below.

Figure 1 – Comprehensive APS Logic Model – Abbreviated Version

CONTEXT	INPUTS/RESOURCES	ACTIVITIES	OUTPUTS	OUTCOMES
<ul style="list-style-type: none"> Allegations of maltreatment – abuse, neglect and exploitation (ANE) – of older adults and adults with disabilities are reported to APS agencies. APS agencies and partners provide protection from harm, and address causes of ANE, while respecting clients right and preferences. APS programs are state- or county-administered, resulting in wide variation in APS practices across the U.S. 	<ul style="list-style-type: none"> APS Staff Consultative Experts Community partners Operational Supports Funding Guiding legal and ethical principles 	Intake <ul style="list-style-type: none"> Conduct intake screening Accept or refer the case 	Intake <ul style="list-style-type: none"> Cases accepted for investigation or referred to the appropriate organization(s) 	Client <ul style="list-style-type: none"> Satisfaction with services Safety/risk of maltreatment Well-being Perpetrator <ul style="list-style-type: none"> Recidivism Community/System <ul style="list-style-type: none"> Public awareness of maltreatment and APS Public health Financial costs of maltreatment Public policy
		Investigation <ul style="list-style-type: none"> Assess the client Gather evidence Consult with supervisors and partners Determine results of investigation Make service recommendation(s) 	Investigation <ul style="list-style-type: none"> Identified client needs Emergency/priority services and legal protective actions Findings/Case Disposition: re: allegations of maltreatment Identified additional service needs 	
		Post-Investigation Services <ul style="list-style-type: none"> Involve the client in case planning and decision-making Obtain agreement and implement service plan Refer/coordinate with partners for service delivery to client Monitor status of client and services 	Post-Investigation Services <ul style="list-style-type: none"> Client in appropriate living arrangement Client and perpetrator service-connected and engaged Client socially-connected and engaged Legal/criminal justice actions resolved 	
		Quality Assurance <ul style="list-style-type: none"> Document investigation/service Review/approve for closure Conduct QA process 	Quality Assurance <ul style="list-style-type: none"> Documentation accurate and complete Investigation closed 	

To inform the design of the APS Client Outcomes Study, we obtained guidance and feedback from content experts within ACL. We also formed a Technical Expert Panel (TEP) consisting of 10 experts in the APS field, including federal experts, researchers, APS practitioners, and APS program leaders. Several TEP members held leadership roles at NAPSA.

STUDY DESIGN

The purpose of this APS Client Outcomes Study was to examine if and how APS programs make a difference in the lives of clients with regard to their satisfaction, safety/risk, and well-being. There were three sets of research questions for this study:

1. **Satisfaction.** What changes do clients report as a result of receiving APS services? How satisfied are clients with the APS services they receive? To what extent do clients report APS helps them achieve their goals? To what extent do clients report APS supports their right to self-determination?
2. **Safety/Risk.** To what extent do APS programs affect client risk of maltreatment? How do APS programs intervene to reduce risk of maltreatment (or increase safety)? What factors help or hinder APS efforts to reduce client risk of maltreatment?
3. **Well-Being.** To what extent do APS programs affect client well-being (e.g., quality of life, financial, physical health, etc.)? How do APS programs intervene to improve client well-being? What factors help or hinder APS efforts to improve client well-being?

In addition, the research team assessed/included self-determination as a major process measure for the study, because APS stakeholders emphasized its critical importance to APS work with clients. Self-determination refers to the major guiding premise that older adults have a right to decide what is best for themselves and which, if any, APS services they want to receive/participate in. Self-determination is addressed

within the set of research questions addressing satisfaction. This study is not expected nor intended to address all aspects of APS, APS client outcomes, or gaps in the literature.

Methods

The APS Client Outcomes Study followed a mixed-methods approach that included, (1) primary data collection with APS clients, APS workers, and APS state and county leaders, and (2) secondary data analysis using the NAMRS dataset, a national dataset populated by states on a voluntary basis with system level data about each state APS services as well as specific data on all cases referred for APS services. The primary data collection included (1) a brief, anonymous APS Client Questionnaire completed by APS clients; (2) a brief, anonymous Client Data Form completed by APS workers; (3) a brief, Monthly COVID Pulse survey completed by APS leaders; and (4) virtual site visits, including semi-structured interviews with APS clients, semi-structured focus groups with APS workers, and semi-structured interviews with APS state and county leaders. The secondary data analysis of NAMRS data examined predictors of APS client recurrence, which occurs when a client returns to APS after their case closes. Analyses of both primary and secondary data assessed the influence of client characteristics, perpetrator characteristics, client-perpetrator relationship characteristics, APS program characteristics, and state characteristics on APS client outcomes.

Sampling

Primary data collection for the study followed a multi-stage sampling procedure conducted at the state, county, and client level. In the first stage of sampling, we selected a stratified random sample of nine states using a national sampling frame that included all 50 states and the District of Columbia. In the second stage of sampling, we randomly sampled and enrolled three counties from within each of the nine states that agreed to participate in the study. For survey data collection, we used a census approach to selecting clients into the study. The survey component invited participation of all APS clients in participating counties who received at least an APS investigation and whose case closed between March 1, 2021 and September 30, 2021. For virtual site visits, we selected a subset of four states, 12 counties, in which we invited state/agency leadership, workers, and clients to participate in semi-structured interviews and focus groups. The four states were purposively sampled to provide a diverse representation of APS programs and geographic locations from among all nine states participating in the APS Client Outcomes Study.

Procedures

From March 1, 2021 through September 30, 2021, the team conducted survey data collection with APS workers and clients. During this time, APS workers completed the Client Data Form and distributed the Client Questionnaire to all clients whose cases were closing and who received at least an APS investigation. The Client Questionnaire captured client opinions about their experience with APS and the impact APS had on their life. The Client Data Form, completed by APS workers and matched to the Client Questionnaire, captured additional information about APS clients and their cases. Additionally, the study team emailed a survey web-link to the Monthly COVID Pulse to APS program leaders at the beginning of each month during the data collection period. The purpose of the Monthly COVID Pulse was to collect data that would allow the research team to describe the impact of the COVID-19 pandemic on APS policies and procedures

during the study period and to statistically control for these factors when analyzing client outcomes.

Between May and August 2021, the team conducted additional data collection through virtual site visits. All site visit activities were conducted via web-conference or phone call due to safety concerns associated with traveling and visiting in person during the COVID-19 pandemic. Each interview and focus group was conducted by two members of the research team: a lead interviewer or moderator and a notetaker. The team

It is noteworthy that, despite the fact that this study was conducted during a pandemic, and data collection was postponed for a year to allow APS practices to stabilize somewhat and minimize undue burden on programs, no states dropped out of the study once data collection began.

conducted 60-minute interviews with individual APS leaders, 90-minute focus groups with APS workers, and 45-minute interviews with individual APS clients. Immediately after every interview and focus group, the lead interviewer/moderator and notetaker held a debriefing meeting to discuss and document key themes and points of interest from the discussion. Following each debriefing, audio recordings were downloaded and transcribed for analysis.

The research team maintained communications with all APS programs that participated in the study throughout the data collection period. We accomplished this through three main activities. First, we generated monthly reports including summary statistics and visualizations describing the amount and quality of

data received from each county. Second, we conducted monthly conference calls with APS leaders in each state and county to discuss and troubleshoot any challenges they faced collecting data. Third, we produced a monthly newsletter, distributed it to APS leaders and workers in counties participating in the study, that summarized data collection progress to date, listed questions and answers that emerged from across APS programs over the previous month, and included featured sections. These activities helped foster a strong and effective partnership between the research team and participating APS programs, which was a major strength of the study. It is noteworthy that, despite the fact that this study was conducted during a pandemic, and data collection was postponed for a year to allow APS practices to stabilize somewhat and minimize undue burden on programs, no states dropped out of the study once data collection began.

Approvals and Human Subjects Protections

This study was approved by an IRB-of-Record and four state-level IRBs that required state-specific review and approval. The study was also approved by the U.S. Office of Management and Budget (OMB Control Number 0985-0065). Participation in the APS Client Outcomes Study was completely voluntary and risks were minimal. The Client Questionnaire and Client Data Form were completed and submitted anonymously. For counties that participated in virtual site visits, all participants experienced a detailed informed consent process and provided signed informed consent to participate before beginning an interview or focus group. A small, one-time stipend of \$1,000 was given to each county as an acknowledgement of their time to collect survey data. A small incentive was provided in the form of a \$20 gift card for each APS client and a \$40 gift card for each APS worker for their participation in an interview or focus group. There were no adverse events reported to the research team or IRB for any study participants, at any time, during the study.

SURVEYS

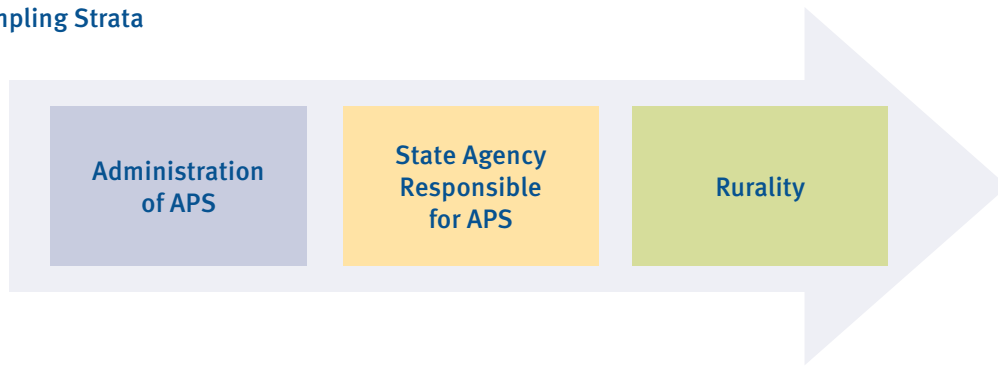
A total of nine states participated in the APS Client Outcomes Study. These states represented all four U.S. Census Regions of the country and six of nine U.S. Census Divisions. States were selected using three strata (illustrated in Figure 2) representing important factors that differentiate APS programs at the state-level. We used these strata to capture important variation in the states included in the study. The three strata, and levels or categories within each stratum, included:

- *Administration of APS Program:* (1) state-administered, and (2) county-administered systems.
- *State Agency Responsible for APS Program (applies*

only to state-administered APS programs): (1) aging agency, and (2) other agency, including states with bifurcated systems where older adults and adults with disabilities are handled as separate client populations.

- *State Rurality:* (1) low rural states - below the 33rd percentile (of all states) for percentage of the state population living in rural areas (i.e., 0.0-16.0 percent), (2) mid rural states - between the 33rd and 67th percentile for percentage of the state population living in rural areas (i.e., 16.7-33.6 percent), and (3) high rural states - above the 67th percentile for percentage of the state population living in rural areas (33.7-61.3 percent).

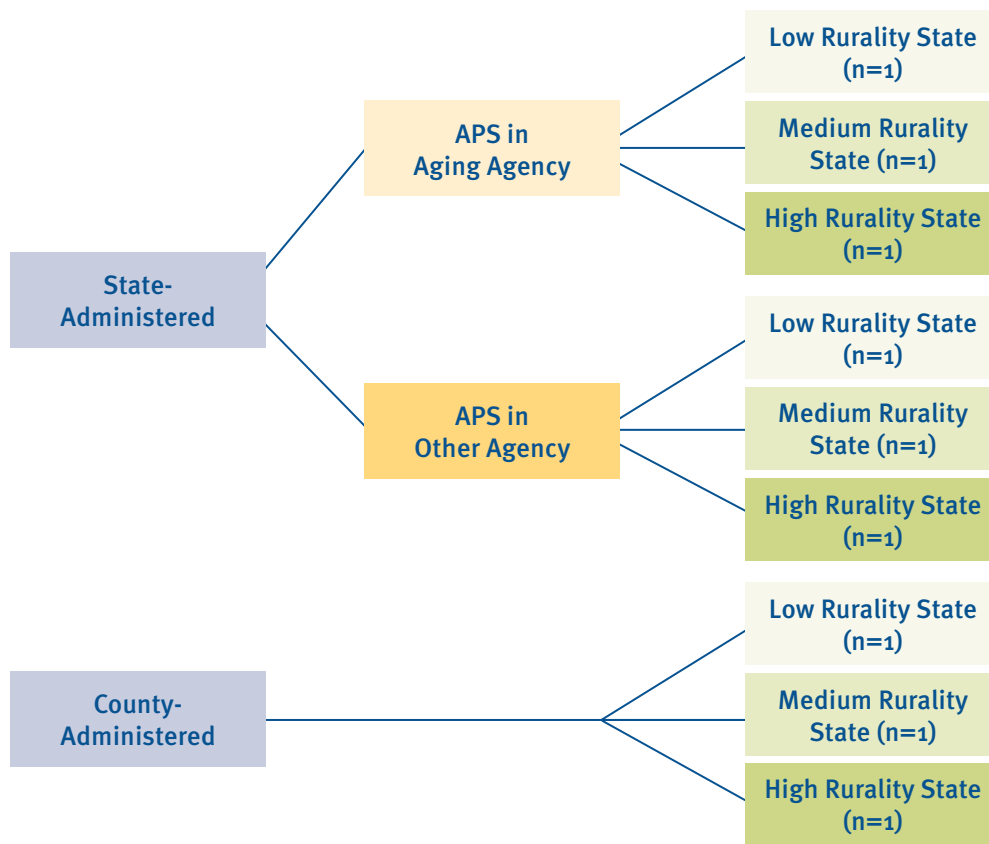
Figure 2. Sampling Strata



The three strata produced nine possible combinations for categorizing states in the sampling frame. One state from each of the nine possible categorizations participated in the study (illustrated in Figure 3). The

sampling approach was designed to capture the diversity of APS programs by sampling disproportionately, rather than generating a sample that was proportional or representative of APS programs nationally.

Figure 3. Application of Sampling Strata to Select States



At the county-level, three counties in each of the nine states participated in the study, totaling 27 counties. The county-level sampling procedure used one stratum representing rurality at the county-level. The three levels

or categories with the stratum, included: (1) mostly rural counties — 50 to 100 percent of the county population living in rural areas, (2) suburban counties — 11 to 49 percent of the county population living in rural areas,

and (3) mostly urban counties — 0 to 10 percent of the county population living in rural areas. One mostly rural county, one suburban county, and one mostly urban county from each state participated in the study.

During the data collection period (i.e., March 1, 2021 through September 30, 2021), APS workers submitted a total of 2,669 completed Client Data Forms for cases that closed during the data collection period, and APS clients or proxies submitted a total of 299 completed Client Questionnaires, for an overall response rate of about 11.2 percent. State-specific response rates ranged from a low of 6 percent to a high of 26 percent.

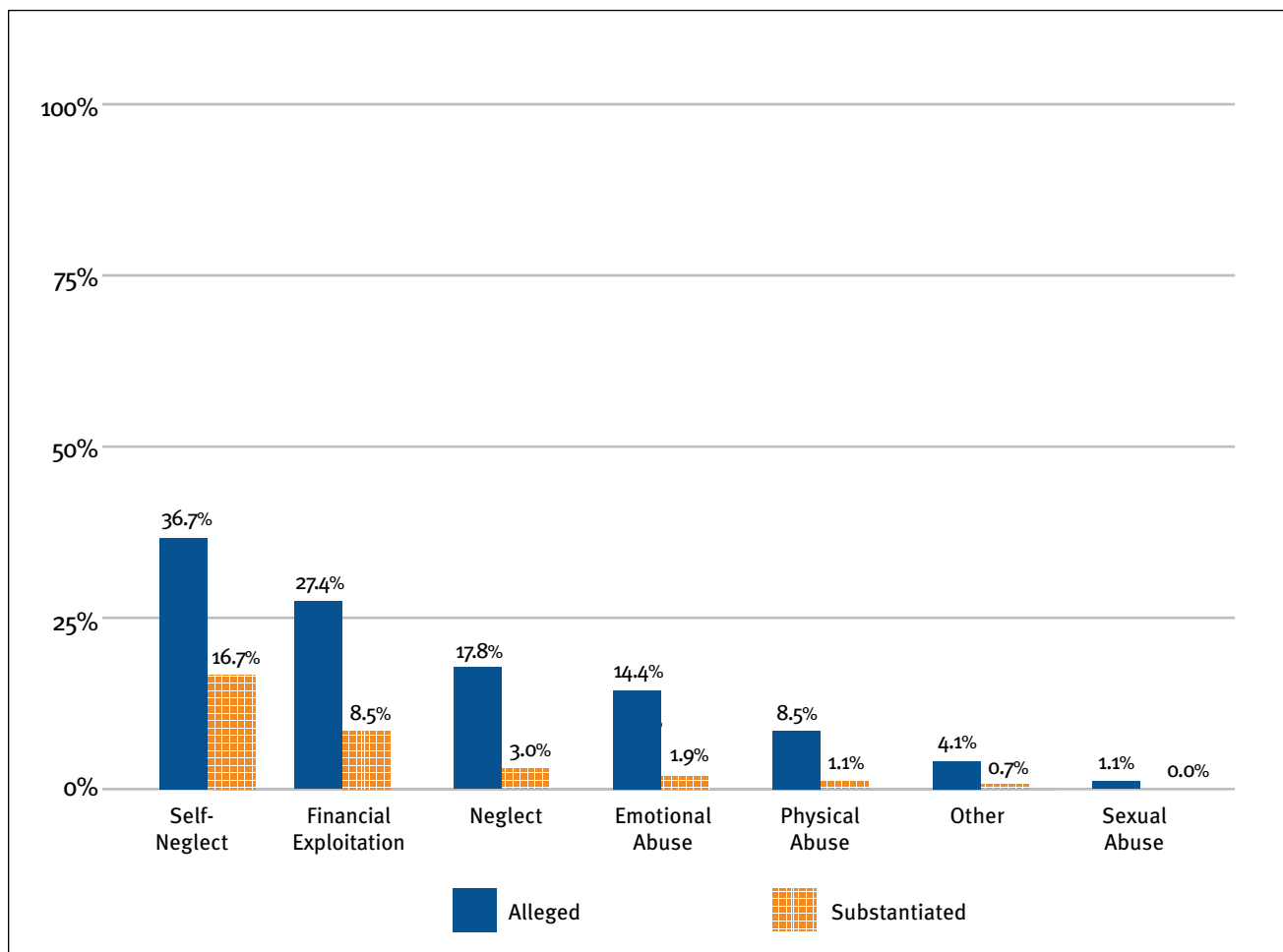
The results presented below are based on the final analytic sample of clients for whom we received data

for both the Client Data Form and the Client Questionnaire (N=272). The results need to be considered with the overall response rate in mind. These results are not representative of all APS clients.

Survey Results

Clients who completed a Client Questionnaire were mostly female, non-Hispanic White, and averaged about 71 years old. In terms of maltreatment type and disposition, the most common alleged and substantiated maltreatment types for these clients were self-neglect, financial exploitation, and neglect.

Figure 4. Alleged and Substantiated Maltreatment Types

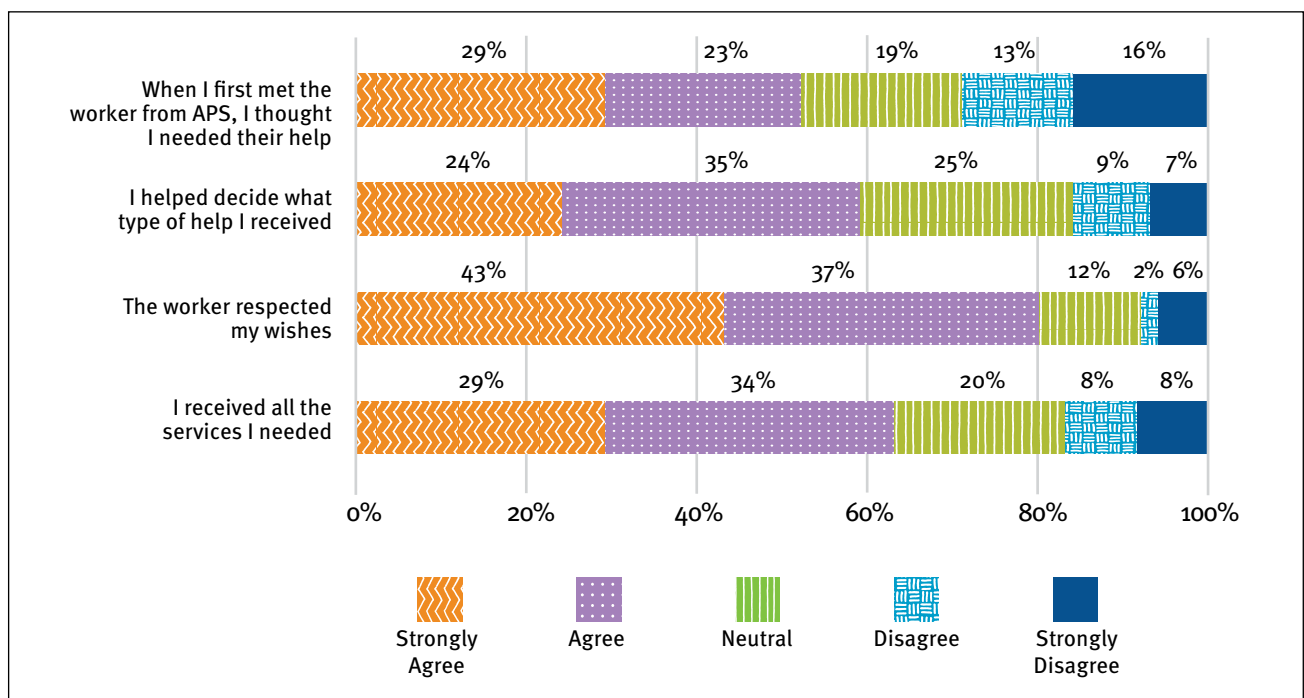


Notes: Percentages sum to more than 100 percent since clients may have more than one type of alleged or substantiated maltreatment type.

About one-third of all clients surveyed experienced maltreatment that was substantiated. According to APS workers, nearly four out of five of these clients were fully engaged with the APS investigation and APS services. At the time of case closure, services had been delivered and/or maltreatment was no longer occurring for about one-third of clients. It is important to note that APS clients may elect to decline or discontinue services at any point.

About half (52.4 percent) of all clients responding agreed that they needed help from APS when they first met the APS worker. Regarding their experiences working with APS, most clients agreed that they helped decide the type of help they received (58.8 percent), that the worker respected their wishes (80.8 percent), and that they received all the services they needed (63.5 percent).

Figure 5: Self-Reported Client Experiences with APS

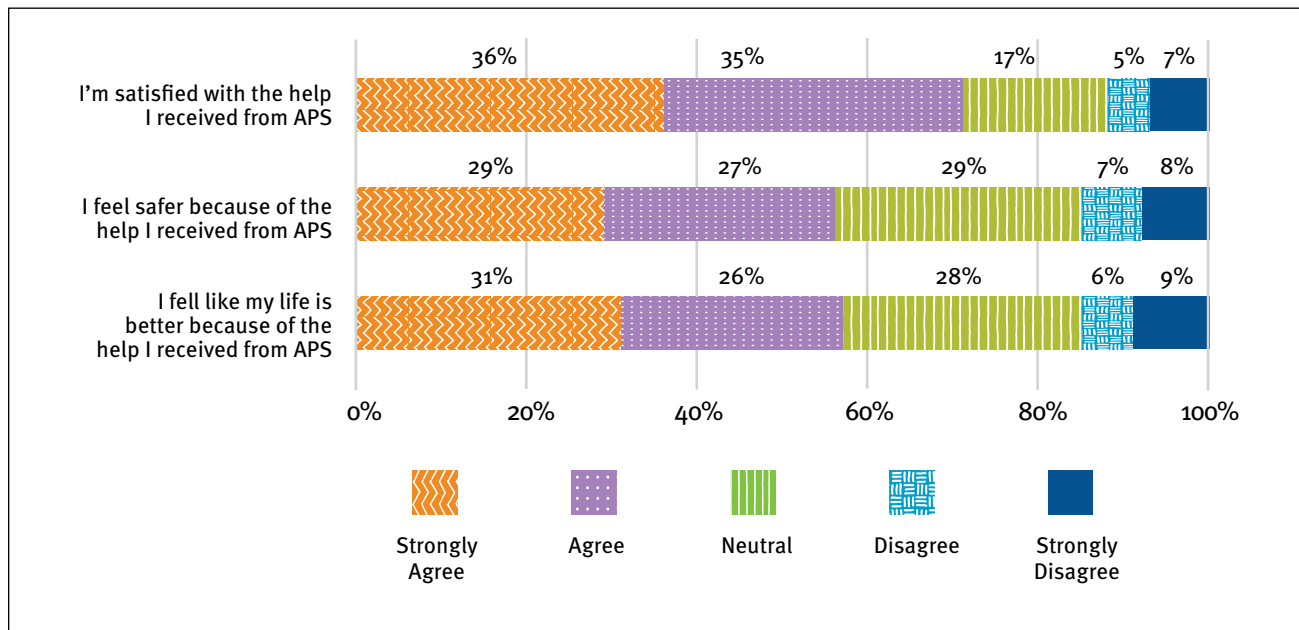


Overall, most clients were satisfied with APS and reported that it made a positive difference in their life. About 71.1 percent of all clients were satisfied with the help they received from APS, 56.1 percent felt safer because of the help they received from APS, and 56.9 percent felt like their life was better because of the help they received from APS.

We also calculated these statistics for two subgroups of clients. Among clients who reported that they felt they needed APS services and whose worker reported they fully participated in the APS process (n=105), about 79.1 percent said they were satisfied with the

help they received from APS, 70.5 percent said they felt safer because of the help they received from APS, and 72.4 percent said they felt like their life was better because of the help they received from APS. Among clients who stated they at first did not agree that they needed APS help and whose worker reported they did not fully participate in the APS process (n=32), about 65.6 percent reported that they were satisfied with the help they received from APS, 37.5 percent reported that they felt safer because of the help they received from APS, and 34.4 percent reported that they felt like their life was better because of the help they received from APS.

Figure 6: Self-Reported Client Outcomes



Comparison of Self-Neglect Clients to Clients with Other Maltreatment Types

Self-neglect clients pose unique challenges to APS, since reducing or removing safety risks associated with self-neglect depends on client decisions and actions to improve their own safety. For other types of maltreatment, APS actions focus on reducing or removing the threat of maltreatment by a perpetrator. We conducted bivariate analyses to compare self-neglect clients to clients with other maltreatment types because of this important distinction. Specifically, we conducted two sets of independent group t-tests, comparing clients with a report of self-neglect to those with no report of self-neglect and comparing clients with substantiated self-neglect to clients with no substantiated self-neglect. The t-test procedure compared group mean scores for nine factors. Table 1 presents the results from this analysis. The table shows the mean score for each group, t-test value, and significance level, by factor.

The results show that clients with reported self-neglect

(mean=2.78) were significantly more likely to report that they helped decide what type of help they received compared to clients with other types of reported maltreatment (mean=2.45) ($p < 0.05$). This was also true for clients with substantiated self-neglect (mean=2.93) compared to clients with no substantiated self-neglect (mean=2.53) ($p < 0.05$). These findings may suggest that APS workers recognized the added importance of self-determination for self-neglect clients and intervened with greater emphasis on involving them in choices about the type of help they received. Despite this finding, APS workers were significantly more likely to rate clients with substantiated self-neglect as resistant to the APS investigation (mean=0.21 versus 0.42, $p < 0.05$) and services (mean=0.29 versus 0.58, $p < 0.05$) compared to clients who did not have substantiated self-neglect. This result may suggest that self-neglect clients are more resistant to APS than clients with other types of maltreatment, for example, because of a belief that their actions do not threaten their personal safety, concern or anger at APS intervening in their lives, or fears that APS may remove them from their homes.

Table 1. Group Means for Self-Neglect Clients Compared to Clients with Other Maltreatment Types, by Disposition

Factor	Reported No (n=152)	Reported Yes (n=119)	t-value/ sig.	Substantiated No (n=225)	Substantiated Yes (n=45)	t-value/ sig.
When I first met the worker from APS, I thought I needed their help	2.35	2.40	-0.28	2.32	2.60	-1.21
I helped decide what type of help I received	2.45	2.78	-2.30*	2.53	2.93	-2.19*
The worker respected my wishes	3.14	3.10	0.34	3.11	3.19	-0.39
I received all the services I needed	2.69	2.68	0.04	2.65	2.86	-0.98
I'm satisfied with the help I received from APS	2.83	2.95	-0.80	2.85	3.05	-0.91
I feel safer because of the help I received from APS	2.61	2.68	-0.46	2.58	2.93	-1.62
I feel like my life is better because of the help I received from APS	2.60	2.68	-0.55	2.59	2.89	1.41
Level of client engagement with APS investigation	0.21	0.29	-1.31	0.21	0.42	-2.25*
Level of client engagement with APS services	0.30	0.38	-0.96	0.29	0.58	-2.19*

Notes: APS client self-reported factors on their experiences with APS and the impact of APS on their lives were scored on a five-point scale (i.e., 0=strongly disagree; 1=disagree; 2=neutral; 3=agree; 4=strongly agree). APS worker reported factors on level of client engagement were scored on a three-point scale (i.e., 0=fully engaged; 1=resistant but cooperated; 2=fully resistant). The table displays the average score for each group, by factor.

Impact of the COVID-19 Pandemic

It is important to note that as a consequence of unfortunate timing, this study was conducted during the COVID-19 pandemic, at a time when many APS programs adjusted policies and procedures in order to continue to provide vital APS services, but in a way that served clients safely. This shift from delivering standard APS under normal conditions to modified APS during a public health pandemic was an important factor to account for in this study. Accordingly, the research team adapted the study design in several ways (with OMB approval). First, we delayed data collection for one year, in hopes that the pandemic would resolve or to allow enough time for APS programs to adapt to delivering APS during a public health pandemic. When, after a year, the pandemic continued, although APS agencies reported approaching a “new normal” of service delivery, we

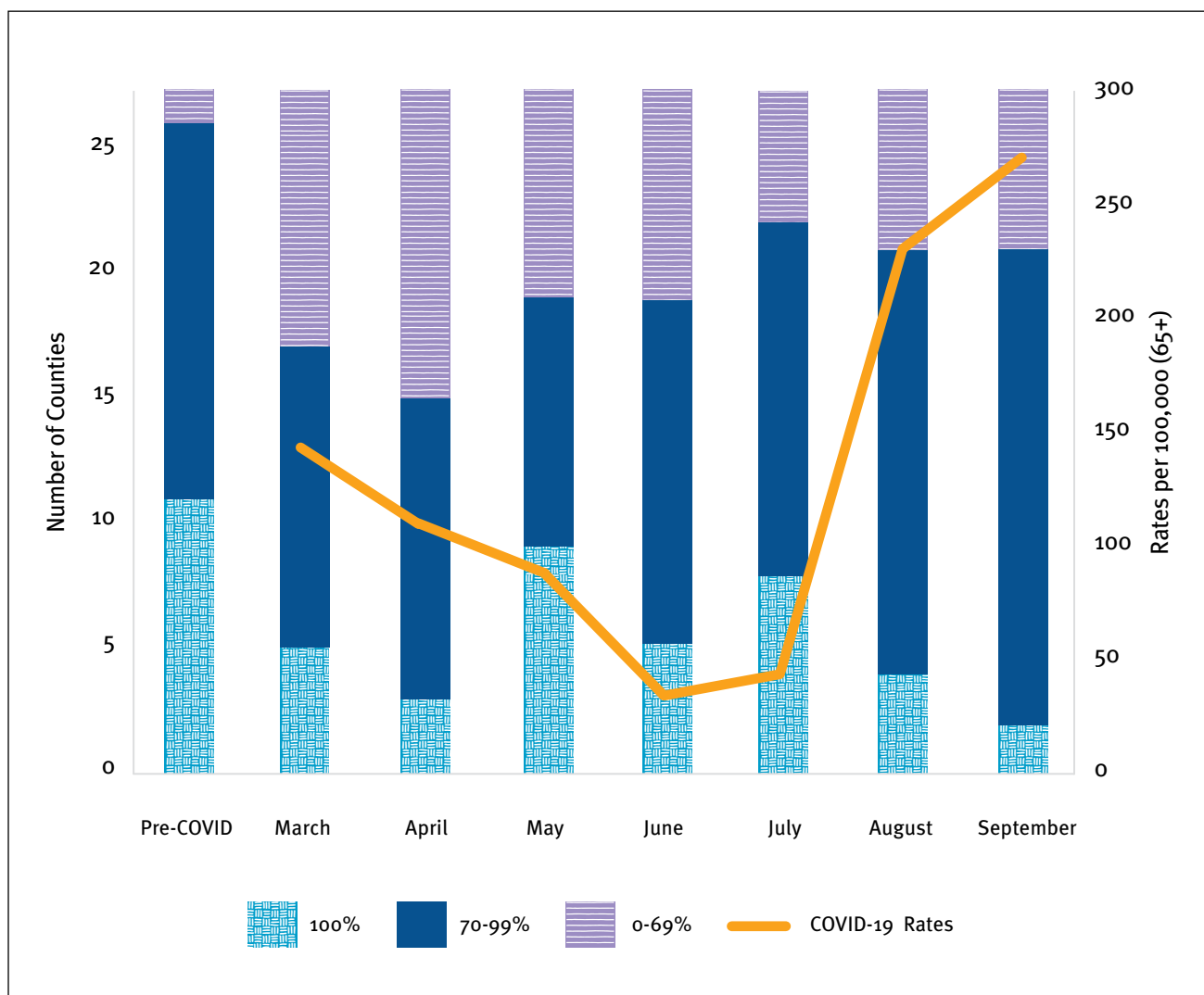
lic health pandemic was an important factor to account for in this study. Accordingly, the research team adapted the study design in several ways (with OMB approval). First, we delayed data collection for one year, in hopes that the pandemic would resolve or to allow enough time for APS programs to adapt to delivering APS during a public health pandemic. When, after a year, the pandemic continued, although APS agencies reported approaching a “new normal” of service delivery, we

conducted data collection while adding a survey called the Monthly COVID Pulse. The purpose of the Monthly COVID Pulse was to collect data that would allow the research team to describe the impact of the COVID-19 pandemic on APS policies and procedures during the study period and to statistically control for these factors when analyzing client outcomes.

The impact of the COVID-19 pandemic on APS policies and procedures differed across counties and over time. As shown in Figure 7, before the COVID-19 pandemic, 26 out of 27 counties that participated in the study provided APS services in-person to the vast majority of clients (i.e., 70 percent or more). By March 2021, the month marking the beginning of data collection for the

APS Client Outcomes Study, just 17 of 27 counties were providing this level of in-person APS services. Counties reported subsequent changes in in-person visit rates as the data collection period progressed, with an apparent increase of in-person visits during the early summer months when COVID infection rates were declining. By the last month of data collection, although counties reported increased rates of in-person visits, in-person visits had not returned to pre-pandemic levels. Figure 7 shows a count of participating counties providing different rates of in-person APS visits across the months of this study, along with the corresponding monthly COVID-19 infection rates in the U.S. for adults ages 65 years and older (orange line).

Figure 7: Number of Counties by Percentage of In-Person Visits: Pre-COVID and March-September 2021



Multivariate Analysis: Predicting Client Outcomes with Survey Data

The purpose this multivariate analysis was to identify factors that predict client satisfaction with APS and the extent to which a client reports feeling safer, and that their life is better, as a result of APS. The main multivariate analyses used Bayesian logistic regression, or ordered logistic regression. These models use multilevel methods to properly account for clustering in the data (i.e., nesting of clients within counties, within states). We modeled the data using the full,

five-point ordinal scale from the client survey (i.e., strongly disagree, disagree, neutral, agree, strongly agree) for ratings of satisfaction, safety, and well-being using ordered logistic regression. This approach allowed us to incorporate the most detailed version of the outcome variables to detect small differences in client opinions about the impact APS had on their life. We also combined the ratings to create a binary indicator for any level of agreement (i.e., agree, strongly agree) or otherwise (i.e., neutral, disagree, strongly disagree) to model the data using logistic regression.

Table 2: Multivariate Model Results for Self-Reported Client Outcomes

Factor	OLRM: Satisfaction	OLRM: Safety	OLRM: Well-Being	LRM: Satisfaction	LRM: Safety	LRM: Well-Being
When I first met the worker from APS, I thought I needed their help	0.15*	0.18**	0.18**	1.40**	1.35***	1.32**
I helped decide what type of help I received		0.36***	0.19*		1.56***	
The worker respected my wishes	0.78***	0.23**		1.78**		
I received all the services I needed	1.36***	0.73***	0.77***	3.96***	1.83***	2.12***
Previous APS investigation in the past year (ref=no)						2.45***
Maltreatment no longer occurring at/near case closure (ref=no)				2.05*		
Self-neglect (ref=no)		-0.51*				
Financial exploitation (ref=no)	-0.63**	-0.60**	-0.54**			
Other maltreatment (ref=no)				2.79*		
County % of clients who received in-person visits pre-COVID	-0.75***	-0.67***	-0.45***			

Notes: Ordered logistic regression model (OLRM) coefficients expressed as adjusted log odds; logistic regression model (LRM) coefficients expressed as adjusted odds ratios; “Other maltreatment” includes all maltreatment types other than physical abuse, sexual abuse, emotional abuse, neglect, self-neglect, financial exploitation, and abandonment; Green cells indicate positive relationships (i.e., higher ratings or presence of factors are associated with higher ratings on self-reported client outcomes); Orange color table cells indicate negative relationships (i.e., higher ratings or presence of factors are associated with lower ratings on self-reported client outcomes); *p < 0.05 **p < 0.01 ***p < 0.001.

Results from across the multivariate models showed that four key factors independently predicted a client feeling satisfied, safer, and/or that their life was better because of the help they received from APS. All four factors are related to the client and his or her opinions about their experience working with APS. These factors included: (1) the client agreeing that they received all the services they needed, (2) the client agreeing they needed help from APS when they first met the worker, (3) the client agreeing they helped decide what type of help they received from APS, and (4) the client agree-

ing the worker respected their wishes. Table 2 lists factors that were found to significantly predict client outcomes across models.

The findings emphasize the importance of services, client readiness to participate in APS, client self-determination and involvement in the APS process, and the role of the client-worker relationship in achieving successful client outcomes. Based on these key findings, future efforts to improve APS client outcomes should focus on addressing these four factors.

VIRTUAL SITE VISITS

The purpose of the virtual site visits was to capture the views and opinions of various APS stakeholders to better understand key characteristics of APS program design and operations and to explore and explain the impact of APS programs on client safety, satisfaction, and well-being. Virtual site visits were conducted from May to August 2021 in four out of the nine states that participated in the APS Client Outcomes Study. In total, the research team conducted interviews with four leaders of state APS agencies, interviews with 11 leaders of county-level APS agencies, 12 focus groups (with a total of 36 APS workers), and individual interviews with 10 APS clients. All interviews and focus groups were audio recorded, transcribed, and coded for key themes and salient findings.

Perspectives on Outcomes: Views of APS Program Leaders and APS Workers

APS program leaders and workers overwhelmingly reported that APS makes a positive difference in the lives of clients. They further explained that their main focus is to work with clients to improve client safety by creating plans and taking actions to remove or reduce the client's risk of maltreatment. However, improving the

client's well-being was also cited as an important focus of APS, and APS workers often accomplished improvements in well-being by helping arrange other services for the client (e.g., cleaning/homemaker services), helping enroll clients in benefits programs (e.g., Medicaid), and/or providing tangible support, when possible (e.g., bus vouchers, home appliances or furniture). APS program leaders and workers emphasized the importance of client self-determination, adding that in some cases, clients aren't willing to address safety issues or may have other barriers that get in the way. In such cases, the APS worker often shifts their primary focus to client well-being, in order to leave the client's situation a little better than it was when they opened the case so that the client may be willing to contact APS in the future when they need help. APS program leaders and workers tended to describe satisfaction as the least important of the three outcomes, and in some cases expressed that it might not be an appropriate outcome at all for APS.

APS program leaders and workers also discussed a wide range of factors that can impact client outcomes, including factors at the environmental level (i.e., state policies and regulations), organizational level (i.e., APS program policies and practices), family level, worker level, and client level. Table 3. summarizes these factors at multiple levels of influence.

Table 3: Barriers and Facilitators that Impact Client Outcomes

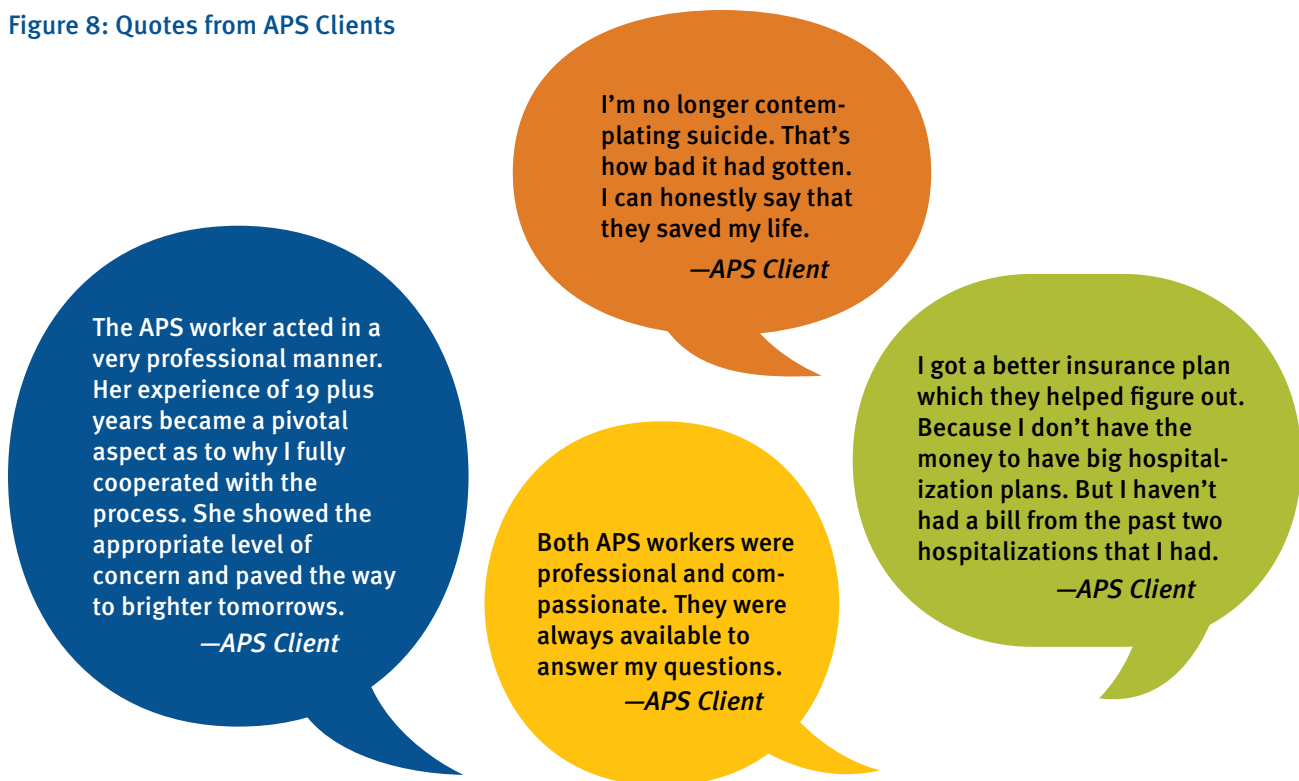
Level of Influence	Factors that Impact Client Outcomes
Environment	Support and funding for APS
	Relationships with law enforcement, courthouse, judges, circuit court, etc.
	Funding for support services/availability of support services
	Waiting lists for benefits/services
	Rules that limit the role of APS to investigation only
	Access to services/rural community
	Frequent changes to APS rules and regulations
	State policies and regulations
APS Organization	Limited time/high caseloads
	Safety assessment/safety plan
	Collaboration and communication with community partners
	Leadership support
	Worker autonomy
	Ability to help perpetrator (e.g., family member)
APS Worker	Respectfulness/understanding
	Level of engagement with client
	Availability and responsiveness
	Follow-through
	Rapport
	Patience
Family	Family influence/cooperation
	Availability of informal supports (family, friends, neighbors, etc.)
	Family member perpetrator
	Cultural background
	Substance abuse/mental health
Client	Right to self-determination
	Trust of APS worker; rapport
	Mistrust of government entities
	Level of acceptance of APS
	Denial/acceptance of the problem
	Client honesty
	Readiness to change
	Willingness to participate in APS investigation
	Willingness to receive services
	Cognitive state/decision-making ability
	Changes in health
	Self-neglect
	Substance abuse/mental health
Personal beliefs	

Perspectives on Outcomes: Views of APS Clients

APS clients described primarily positive views of APS, and some shared negative views as well. Clients who shared positive views characterized APS workers as helpful, professional, courteous, concerned, knowledgeable, compassionate, kind, always available to answer questions, empathetic, sincere, polite, friendly, non-threatening, understanding, wise, comforting, and wonderful. They shared stories of APS workers resolving their safety issues, arranging legal support, getting them enrolled in better insurance coverage, arranging supportive services to help with things like cleaning and chores around the house, and helping them obtain household items like new furniture.

Clients who shared negative views most often said that they didn't need help or didn't want help from APS, that the presence of APS caused stress with a family member (likely the alleged or substantiated perpetrator of the client's maltreatment), or that they were unhappy with APS' determination about their case. Occasionally, clients shared negative views about things like insufficient welfare benefits or services that APS arranged for them, not having enough time with APS before their case closed, or difficulty in reaching the APS worker/lack of worker follow-up (e.g., didn't receive a final report or explanation of the APS worker's final determination about their case). Rarely, clients said the APS worker didn't care about their case or didn't treat them respectfully.

Figure 8: Quotes from APS Clients



A key theme that emerged from the virtual site visits was that achieving positive client outcomes hinges on the client's willingness to participate in APS, which is largely influenced by the APS worker's ability to engage and develop strong rapport with the client. Since

this is such a critical key to successful client outcomes, further research, policy and program improvement efforts could focus on strategies for increasing client readiness to participate in APS and supporting workers in building strong relationships with their APS clients.

NATIONAL ADULT MALTREATMENT REPORTING SYSTEM

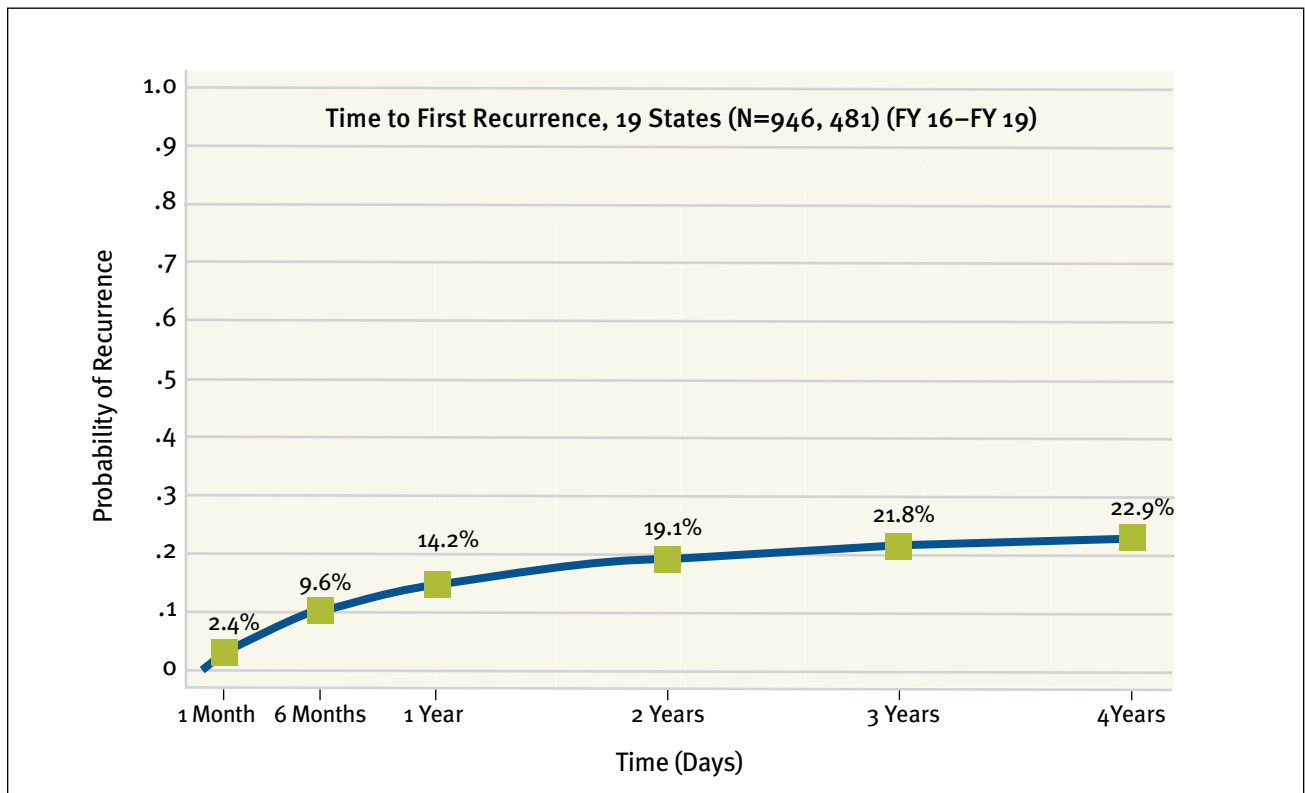
The purpose of the NAMRS analysis was to examine data representing the population of APS cases across states to identify predictors of recurrence, which occurs when an APS client returns to APS for additional services (e.g., another incident, investigation, or other services) after their initial case closes. The analysis combined four years of NAMRS data with state-level data from three additional sources. The APS Technical Assistance Resource Center (TARC) provided state-level information on APS programs, including whether each was state- or county-administered, as well as the age and disability requirements for APS eligibility in each program. The American Community Survey (ACS) 5-Year Estimates provided the percentage of the population living in poverty at both state and county levels, and

the 2010 Decennial Census provided the percentage of the population living in a rural area, at the state and county levels. The merged dataset created from these sources was used to examine predictors of recurrence at multiple levels of influence (i.e., client characteristics, perpetrator characteristics, client-perpetrator relationship characteristics, APS program characteristics, and state characteristics).

Recurrence

In the NAMRS dataset, APS clients can be tracked over time using a unique and deidentified client code. This client code is attached to all APS investigations for

Figure 9: Probability of Recurrence by Time Since Initial Episode Closure



a particular client. In some cases, clients can have multiple ongoing investigations. For the purpose of this study, we defined recurrence to require some amount of time separating when the initial case closes and the recurrent case opens. To impose this rule in the analysis, we combined investigations that overlap in time to form single episodes.

The initial analytic sample included 19 states that submitted NAMRS Case Component data for Federal Fiscal Year (FFY) 2016 through 2019. These states provided sufficient data on key variables that were necessary for analyzing recurrence (e.g., client code, report date, case closure date). These data represented 1,211,360 APS episodes for 946,477 unique APS clients and 100,119 unique perpetrators.

Overall, about one in five of these APS clients experienced recurrence at some point during the four-year period. The likelihood of recurrence increased steadily in the short and intermediate term following case closure, then stayed relatively flat after two years.

Overall, about one in five of these APS clients experienced recurrence at some point during the four-year period.

Multivariate Analysis

The purpose of the multivariate analysis was to identify the factors associated with greater likelihood of clients returning to APS after their initial episode closes. The main multivariate analyses used Bayesian logistic regression to predict 12-month recurrence in a multi-state model, combining observations for 11 states with enough data on key covariates in the analysis, and in separate single-state models (not shown). The multi-state model used multilevel methods to properly account for clustering in the data (i.e., clients within states). Figure 9 shows the likelihood of recurrence increased steadily in the short and intermediate term following case closure, then stayed relatively flat after two years.

Results from the multivariate models indicated that no client demographics consistently predicted recurrence, except for gender. Women were slightly more likely to experience recurrence than men, which could be due to gender differences in risk of maltreatment, help seeking behavior, or greater longevity. The presence of most maltreatment types increased the chance of recurrence. In particular, reported self-neglect was associated with the greatest likelihood of recurrence across maltreatment types. This may be due to the unique considerations of self-neglect cases. For other types of maltreatment, APS investigates and takes actions to reduce or remove the risk of maltreatment to the client by one or more other people. For self-neglect cases, removing or reducing maltreatment requires client behavior change, which can be more challenging to accomplish. Additionally, clients with longer episodes were less likely to experience recurrence. This may be because allowing more time for the APS process can help more fully reduce the risk of maltreatment and the need to return to APS.

One of the most powerful and interesting findings from the multivariate models was the association between case closure reason and recurrence. The finding highlighted that recurrence is not necessarily good or bad. The multi-state recurrence model found that clients whose cases closed due to reasons like clients declining to participate in APS were more likely to experience recurrence than clients whose cases closed because APS completed its investigation. This could be interpreted as a positive finding in that recurrence in such cases could mean a second opportunity for APS to engage with clients who previously declined services. The multi-state model also found that clients whose cases closed because the APS investigation was completed and the protective services case was also completed were more likely to experience recurrence than clients whose case closed due only to a completed APS investigation. This could also be viewed positively, since recurrence could mean that clients with higher needs/complex cases, who require longer-term help, are more likely to come back to APS for that help in the future. These findings highlight the ambiguity surrounding the concept of recurrence in the APS field and the need for further research to determine the circumstances in which recurrence is favorable, or not, for APS systems and clients.

Table 4: Multivariate Model Results for Recurrence

Factor	All States (N=345,776) (PPP=0.536)	Factor is statistically significant and direction of effect is consistent across all single-state models
Client Age		
59 and Younger (ref)	–	–
60-74	0.941***	No
75-84	0.919***	No
85 and Older	0.876***	No
Client Gender		
Male (ref)	–	–
Female	1.020**	Yes
Client Race/Ethnicity		
Hispanic or Race Other than White (ref)	–	–
Non-Hispanic, White	1.030***	No
Maltreatment Type: Self-Neglect		
No (ref)	–	–
Yes	1.132***	No
Maltreatment Type: Neglect or Abandonment		
No (ref)	–	–
Yes	1.097***	No
Maltreatment Type: Physical or Sexual Abuse		
No (ref)	–	–
Yes	1.061***	No
Maltreatment Type: Emotional Abuse		
No (ref)	–	–
Yes	1.050***	No
Maltreatment Type: Exploitation		
No (ref)	–	–
Yes	1.058***	No
Two or More Maltreatment Types		
No (ref)	–	–
Yes	1.004	No
Maximum Maltreatment Disposition		
No Substantiated (ref)	–	–
Any Substantiated	1.031***	Yes
Episode Duration (Months)	0.989***	No

Continued on page 21

Continued from page 20

Factor	All States (N=345,776) (PPP=0.536)	Factor is statistically significant and direction of effect is consistent across all single-state models
Case Closure Reason		
Investigation Completed (ref)	–	–
Investigation Completed and Protective Services Case Completed	1.104***	No
Other Reason (e.g., protective services closed or not completed, investigation unable to be completed non-specific, investigation unable to be completed due to client refusal)	1.089***	Yes
State: Percentage of APS Reports Accepted for Investigation	0.999*	N/A
State: Number of APS Investigations per Investigator	1.000	N/A

Notes: PPP=posterior predictive probability; N/A=not applicable, state-level factor only included in the multi-state model; Coefficients expressed as adjusted odds ratios; Multi-state model excludes states that do not substantiate maltreatment; *p < 0.05 **p < 0.01 ***p < 0.001. The PPP value is based on a statistical comparison of the observed data and expected data for the model. Large differences, indicated by a small PPP value, would suggest poor model fit. We sought models that were substantively meaningful and included as many key variables as possible, but also that fit the data well using a PPP threshold of 0.25 or greater (Asparouhov & Muthén, 2021).

DISCUSSION

Each of the analyses described above yielded important and distinct evidence about APS client outcomes. However, some common themes emerged from across methods. The purpose of this section is to discuss key findings that emerged from considering results across the survey, virtual site visit, and NAMRS recurrence analyses conducted for the APS Client Outcomes Study. This section also discusses important lessons learned from the study that may inform the design and implementation of future APS research.

Most APS clients are satisfied with APS and feel like they're safer and/or their life is better because of the help they received from APS. Most clients who completed a Client Questionnaire shared positive views of APS and the impact of APS on their life. Importantly, the survey results need to be considered with the overall response rate in mind (i.e., about 11.2 percent). These results are not representative of all APS clients. Similarly, most clients who participated in an interview with the research team shared positive views of APS and the impact it had on their lives. Clients who shared negative views most often said that they didn't need help or didn't want help from APS, that the presence of APS caused stress with a family member, or that they were unhappy with APS' determination about their case. Rarely, clients said the APS worker didn't care about their case or didn't treat them respectfully.

Positive APS client outcomes are driven primarily by clients' recognizing they need help, strong client-worker relationships, and clients receiving all the services they need. Results from the survey data show that APS clients are most likely to experience positive outcomes when they agree that they needed help from APS when they first met the worker, when they feel they've received all the services they needed, and when they agree they had a role in deciding the help they received and that their wishes were respected. These findings were strong-

ly supported by reports during the virtual site visits. APS program leaders and workers overwhelmingly reported that APS makes a difference in the lives of clients. APS leaders and workers highlighted client-centered approaches to presenting APS as non-threatening, engaging the client on their terms based on "where they are", being responsive to client needs and wishes, and providing whatever help they can to improve client safety and quality of life.

Self-neglect poses unique challenges to achieving positive client outcomes. APS clients with alleged or substantiated self-neglect represent a large proportion of the APS client population. Self-neglect was the most common type of alleged or substantiated maltreatment reported for APS clients across the survey data, virtual site visit data, and NAMRS data used for this study. Results across all methods of the APS Client Outcomes Study suggest that when clients face self-neglect issues, it poses unique challenges to achieving positive client outcomes. In the survey data, alleged or substantiated self-neglect was significantly associated with less agreement with feeling safer because of help from APS. In the NAMRS data, self-neglect was most likely to predict recurrence among all maltreatment types in the multi-state model and across most single-state models. In interviews and focus groups, APS leaders and workers noted that self-neglect clients are typically less willing or able to work with APS, are more difficult to work with because of resistance to making behavior changes that can improve their safety, and tend to be less satisfied with APS, overall. Future APS research should identify strategies that are most effective for engaging self-neglect clients throughout the APS process, and examine the impact of those strategies on client outcomes.

Recurrence can occur for different reasons and is not necessarily a bad thing. Using NAMRS data from selected states, our study found that about one out

of every five APS clients experienced recurrence at some point over a four-year period. This means the vast majority of APS clients did not experience recurrence during the four-year period. Recurrence happens for a variety of reasons that aren't necessarily good or bad. Although the semi-structured interview and focus group guides for the virtual site visits did not specifically address recurrence, some APS leaders and workers commented that repeat reports for the same clients can be a positive outcome. They explained that this is because repeat reports indicate the community is recognizing and reporting maltreatment, and trusts that APS may be able to provide help. The survey data supports this, as clients who experienced recurrence were significantly more likely than other clients to agree their life was better because of the help they received from APS. This could be due to a need for longer-term support among some clients, who need more than one interaction with APS to address their needs.

APS responded to the COVID-19 pandemic by adapting policies and procedures to reduce contagion; some evidence suggests this made it more difficult for APS programs to achieve positive client outcomes. APS leaders and workers consistently agreed that the COVID-19 pandemic changed how their APS programs operated. In particular, APS workers were often not allowed to visit clients in-person unless the clients were at high risk of maltreatment. Overall, APS leaders and workers tended to agree that the trickle-down effects of these program changes were negative for client outcomes. They reported that due to the COVID-19 pandemic, clients were at an increased risk of “falling through the cracks”, were more resistant to APS, were less willing to venture into the community for help or services to address basic needs, and had greater exposure to alleged perpetrators (e.g., cohabitation with alleged perpetrator with limited options for alternate housing). Notably, the survey data suggested that the more that counties reduced in-person visits with APS clients due to the COVID-19 pandemic, the less likely their clients were to be satisfied, feel safer, or that their life was better because of help from APS. This finding was not consistent across models, but warrants further

research. In particular, future research is needed to identify the types of APS cases that benefit the most from face-to-face contact and those that might be effectively triaged into phone-based, or other distance methods of APS intervention.

To date, there have been few studies of APS client outcomes, and none to our knowledge that capture and consider the perspectives of APS leaders, workers, and clients from states and counties throughout the U.S. Given the lack of previous research evidence about APS client outcomes, this study provides important lessons that may help guide the design and implementation of future APS research, including:

APS programs are eager for research and, even during a demanding time, effectively participated in the study. There was a strong willingness among APS programs across the U.S. to participate in the APS Client Outcomes Study at each stage of the research process. Participation in the APS Client Outcomes study was completely voluntary and offered modest incentives. Yet, over one hundred APS program staff members committed their time to ongoing coordination and communication with the research team, participation in training to learn the data collection procedures, and collecting and submitting data for thousands of APS clients over a seven-month period. The partnership between the research team and participating APS programs was a major strength of this study.

The COVID-19 pandemic caused delays and adjustments to the study procedures. The onset of the COVID-19 pandemic coincided with the original planned start date for data collection (i.e., March 1, 2020). This led to a one-year delay to allow enough time to begin data collection when either, (1) the COVID-19 pandemic fully resolved and APS programs returned to normal operations, or (2) APS programs adapted sufficiently to the new normal of delivering APS during a public health pandemic to have the necessary bandwidth to participate fully in the study. Approaching the end of the one-year delay, it was clear that the impact of COVID-19 would continue at least partly through the data collection period. As such, we adjusted the data collection protocol to a remote model to support APS workers'

and client' safety, and added new data collections that enabled us to describe the impact of COVID-19 on APS programs and services and account for the potential impact of these changes on APS client outcomes. Results from our analyses suggest that the COVID-19 pandemic has had an important impact on how APS programs operate and their ability to achieve positive client outcomes.

APS client participation in the study was low and there were differences between those who participated and those who did not. During the design phase of the study, we heard very clearly from APS stakeholders that the study should capture the 'voice' of the client. This strong recommendation was a key reason we developed the Client Questionnaire. We did anticipate some challenges in reaching APS clients, historically a rather hidden population, to complete the survey, and, accordingly, implemented a number of creative strategies at different stages of the study to address this concern.

In particular, when, in the first two months of data collection, we achieved only a 7.5 percent response rate, the research team introduced three new options for APS workers to use in order to improve the response rate. These three options were designed to maximize the chances that a client would complete and submit a Client Questionnaire, while staying within the parameters of the approved study protocols. The three options included:

- An option for clients to call the research team directly and answer the Client Questionnaire over the phone, instead of completing and submitting it online or by mail;
- For cases where workers made in-person visits to clients at or near the time of case closure, hand delivering the Client Questionnaire (as per the original study design), instead of mailing it (an adjustment made to the data collection procedure in response to the COVID-19 pandemic);
- Encouraging APS workers, or others in a centralized role (e.g., administrative assistants), to make a follow-up call to clients or proxies, within three to five days after mailing or hand-deliv-

ering the Client Questionnaire, to remind each client or proxy to complete and submit it.

These new options resulted in an increase in the Client Questionnaire response rate to a monthly high of 16.9 percent. Nevertheless, the COVID-19 pandemic, which initially posed particular risk for older adults and those with health conditions, likely had a negative effect on participation. Consequently, despite strong efforts, we achieved a final response rate for the Client Questionnaire of 11.2 percent, which was about one-third of the initial target. We also conducted about half of the number of client interviews that we had targeted. Of note, our non-response analysis revealed significant differences between clients who responded to the Client Questionnaire and clients who did not. In particular, clients who responded to the Client Questionnaire were more likely than nonrespondents to be described by APS workers as fully engaged with the APS investigation and/or services. Clients reported by APS workers as having received services and/or no longer at risk of maltreatment were also more likely to complete a Client Questionnaire. These differences do limit the generalizability of the findings. The findings should not be generalized beyond those who responded to the Client Questionnaire. Future APS studies may benefit from our strategies to maximize client participation and should explore other ways to invite broader APS client participation in research.

NAMRS, as a relatively new data system, has limitations but shows promise as a research tool. The APS Client Outcomes Study is the first time to our knowledge that NAMRS has been used for research of this kind. The study demonstrated that NAMRS can be a valuable research tool for the field of APS, but also that researchers who use NAMRS must give careful and systematic consideration to differences in state APS programs, patterns of missing data due to the optional nature of NAMRS (i.e., states voluntarily submit information to NAMRS and can choose to provide data for certain data fields, or not), and rules for validly merging data across datafiles that comprise the NAMRS dataset. Researchers who use NAMRS for future analyses should anticipate

spending considerable time and attention in assessing, cleaning, processing and preparing NAMRS data to suit their specific research needs and questions. Additional examination and analysis of NAMRS data by independent researchers, and dissemination of the findings, is likely to encourage states to continue and expand their participation in populating NAMRS.

APS programs are designed and operated differently, and APS research should carefully describe and account for these differences. It's often said that, "if you've seen one APS program, you've seen one APS program." This is due to the decentralized development of APS thus far. APS programs are not subject to federal rules and regulations and there is no single set of standards or practices that

define APS across all jurisdictions. This may change gradually over time through mechanisms like minimum requirements for APS that may be included in federal funding programs or greater adoption of the National Voluntary Consensus Guidelines for State APS Systems (ACL, 2020). However, APS program variation was an important consideration for this study. We described these differences through the findings from virtual site visits and statistically controlled for these differences using multilevel models with state- and county-level covariates in the survey data and NAMRS analyses. Future APS client outcomes research should also carefully describe and account for these differences when studying multiple APS programs.

CONCLUSION

The purpose of the APS Client Outcome Study was to examine if and how APS programs make a difference in the lives of clients with regard to their satisfaction, safety/risk, and well-being. The study used multiple methods, including secondary data analysis of the NAMRS dataset and primary data collection from various APS program respondents and APS clients in nine states, 27 counties, across the country.

Overall, results from this study present a positive view of APS. The vast majority of clients reported that they were satisfied with APS, most clients reported that APS improved their safety, and most clients reported that overall, APS improved their life. Key predictors of positive client outcomes highlight the importance of services, client readiness to participate in APS, client self-determination and involvement in the APS process, and the role of the client-worker relationship in achieving successful client outcomes. Further APS research, policy and program improvement efforts could focus on strategies for increasing client readiness to participate in APS, supporting APS workers in building

strong relationships with their clients, and connecting APS clients to the services they need. APS leaders, workers, and clients overwhelmingly expressed that APS makes a positive difference in the lives of clients. They shared valuable insights into the design and operations of the APS programs and the key barriers and facilitating factors to achieving positive client outcomes. These factors also highlighted the importance of client self-determination and the APS worker's ability to engage and develop strong rapport with clients. Finally, the recurrence analysis identified key predictors of recurrence, including gender, maltreatment type and disposition, case closure reason, episode duration, and percentage of APS reports accepted for investigation. These findings may be useful to APS programs to better recognize and serve clients with an increased likelihood of returning to APS after their cases close. Additionally, further research is needed to determine the circumstances in which recurrence is favorable or not, and how to most appropriately frame the concept of recurrence in APS.

REFERENCES

- Administration for Community Living. “Voluntary Consensus Guidelines for State APS Systems.” Retrieved from <https://acl.gov/programs/elder-justice/final-voluntary-consensus-guidelines-state-aps-systems>. October 16, 2020.
- Adult Protective Services Technical Assistance Resource Center. “Evaluation.” Retrieved from <https://apstarc.acl.gov/Information-Research/Evaluation.aspx>.
- Asparouhov, T., & Muthén, B. (2021) Advances in Bayesian Model Fit Evaluation for Structural Equation Models, *Structural Equation Modeling: A Multidisciplinary Journal*, 28:1, 1-14, DOI: 10.1080/10705511.2020.1764360 <https://www.statmodel.com/download/BayesFit.pdf>.
- Blenkner, M., Bloom, M., & Nielsen, M. (1971). A research and demonstration project of protective services. *Social Casework*, 52(8), 483-499.
- Booker, J. G., Breaux, M., Abada, S., Xia, R., & Burnett, J. (2018). Assessment of older adults’ satisfaction with adult protective services investigation and assistance. *Journal of Elder Abuse & Neglect*, 30(1), 64-74.
- Dong, X., Simon, M., & Evans, D. (2013). Elder self-neglect is associated with increased risk for elder abuse in a community-dwelling population: Findings from the Chicago Health and Aging Project. *Journal of Aging and Health*, 80-96.
- Ernst, J. S., & Smith, C. A. (2012). Assessment in adult protective services: Do multidisciplinary teams make a difference? *Journal of Gerontological Social Work*, 55, 21-38.
- Heath, J. M., Kobylarz, F. A., Brown, M., & Castaño, S. (2005). Interventions from home-based geriatric assessments of adult protective service clients suffering elder mistreatment. *Journal of the American Geriatrics Society*, 53, 1538–1542.
- Lachs, M. S., Williams, C. S., O’Brien, S., Pillemer, K. A., & Charlson, M. E. (1998). The mortality of elder mistreatment. *JAMA*, 280(5), 428-432.
- Lachs, M. S., Williams, C., O’Brien, S., & Pillemer, K. (2002). Adult protective service use and nursing home placement. *The Gerontologist*, 42(6), 734–739.
- Lithwick, M., Beaulieu, M., Gravel, S., & Straka, S. M. (2000). The mistreatment of older adults: Perpetrator-victim relationships and interventions. *Journal of Elder Abuse & Neglect*, 11, 95-112.
- Roberto, K. A., Teaster, P. B., & Duke, J. O. (2004). Older women who experience mistreatment: Circumstances and outcomes. *Journal of Women & Aging*, 16(1/2), 3–16.

