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The Role of the Opioid Crisis in Elder Abuse

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THE ROLE OF THE OPIOID CRISIS IN ELDER ABUSE

An Analysis of Maine Adult Protective Services Investigations, 2015-2018 Investigation Characteristics and Common Themes



Muskie School of Public Service Cutler Institute for Health and Social Policy

THE ROLE OF THE OPIOID CRISIS IN ELDER ABUSE

An Analysis of Maine Adult Protective Services Investigations,

2015-2018

Investigation Characteristics and Common Themes November 2020

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Prepared for

Office of Behavioral Health Maine Department of Health and Human Services

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The opinions, findings, and conclusions or recommendations are those of the authors and do not necessarily reflect those of Maine DHHS, CDC, SAMHSA, or the University of Southern Maine.

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Executive Summary

As the opioid crisis has deepened over the past twenty years, its impact on individuals and families, including older adults, has grown. News stories across the country have described instances of older adults who have been abused or exploited by family members and others with opioid use disorder. To find out how the opioid crisis might be impacting elder abuse, neglect, and exploitation in Maine, Cutler Institute research staff at the Muskie School of Public Service conducted a mixed methods analysis of 2015-2018 Maine Adult Protective Services (APS) investigations to determine:

- Did opioid-related investigations increase over time?
- Do investigations involving opioid misuse or abuse differ from investigations that don't involve opioids?
- What themes or features of cases involving opioid misuse or abuse by clients and/or perpetrators emerge from the data?

Key Findings

- The annual number of opioid-related investigations increased 2015-2018, but the rate of increase was parallel to the general increase of elder abuse investigations over the time period. Opioid-related investigations ranged between 2.5-2.9% of all elder abuse investigations over the time period.
- Clients in opioid-related investigations tended to be younger than clients in non-drug-related investigations. Forty percent of clients in Opioid-related investigations were 60-69 years old compared to twenty-three percent of clients in Non-drug-related investigations.
- Opioid-related investigations were more likely to have three or more allegations and include an allegation of exploitation compared to Non-drug-related investigations.
- Common themes in the opioid-related investigations included:
 - Clients with opioid prescriptions also exhibited signs of substance use disorder (SUD) or opioid use disorder (OUD).
 - Clients with opioid prescriptions had difficulties managing their prescriptions, including taking too much or too little, or needing to hide their medication to keep them away from family members or others.
 - Clients with opioid prescriptions encountered barriers to obtaining the medications such as not being able to have their pharmacy deliver them, having to travel to appointments for pill counts, or being denied access to an opioid medication due to the behavior of a family member.

- In exploitation investigations, there were instances of the perpetrator stealing the client's money or property to purchase drugs elsewhere as well as instances of stealing the client's money and the client's opioid prescription.
- Client use of opioids can put them at risk of exploitation through impaired physical and cognitive ability.

Potential Strategies to Mitigate the Role of Opioid Misuse in Elder Abuse Cases

Improving Medication Management

Opioid medication mismanagement, either on the part of the client themselves or the caregiver, led to overmedication, falls, confusion, and vulnerability to abuse and exploitation. Even when taken appropriately, the altered cognitive state or sedation brought on by opioid medications also put older adults at risk of abuse and exploitation by others. A comprehensive medication review can reveal potential drug interactions as well as multiple prescriptions for the same medication that may not be apparent in any single provider's medical record. It also provides an opportunity to educate patients on how to properly use, store, and dispose of their medications.

Addressing SUD, OUD, and other risks in older adults

The finding of APS clients exhibiting SUD and OUD behaviors while also being prescribed opioids, plus the many instances of clients who were not able to take their medications properly and ending up overmedicating or in some cases overdosing, suggests a need to use a reliable, validated age-specific risk assessment tool to help determine if an opioid is the best medication for an older adult in a given circumstance.

Improving communications: Elder Abuse Task Forces

In Maine, there may be an opportunity to increase or enhance communication with older adults about OUD and treatment options through the Elder Abuse Task Forces (EATFs) around the State. EATFs educate their communities about elder abuse and provide advocacy for victims. These multidisciplinary teams often have representation from law enforcement, public health, Maine APS, Area Agencies on Aging, housing authorities, Maine Legal Services for the Elderly, domestic violence t advocates, and financial services personnel who come together to meet the needs of elder abuse victims in their communities. Adding representatives from the SUD or OUD treatment community to these EATFs could provide another way to connect victims of elder abuse who have opioid medication mismanagement issues or OUD to available services.

Older Adults & Opioid Use

Opioid use has increased dramatically since 2000, and rates of opioid misuse, abuse, and diversion have followed suit^{-1, 2, 3} According to the Centers for Disease Control and Prevention, opioid prescribing rates peaked in 2012 with 255 million prescriptions for a rate of 81.3 opioid prescriptions per 100 people.⁴ To address the growing problem of opioid misuse and abuse, states changed prescribing policies and guidelines to help decrease the number of opioid prescriptions and number of opioid pills per prescription. As a result of these changes and a growing awareness of the opioid crisis, the national opioid prescribing rate declined to 51.4 prescriptions per 100 people in 2018. Over the same period, Maine's prescribing rate went from 89.7 to 48.1 prescriptions per 100 people.⁵ In 2016, the National Safety Council identified Maine as one of six states making progress in strengthening laws and

regulations addressing the opioid crisis.⁶

While there has been progress in decreasing the overall prescribing rate and number of opioid pills available per prescription, opioid prescriptions among older adults continues to be high compared to younger populations (see Table to the right).

Older adults are more likely to experience events or have illnesses that cause chronic pain than younger adults. Joint pain, postsurgical pain, chronic disease, shingles, and degenerative spine disease or arthritis are common causes of chronic pain in older adults.⁷ Chronic pain can impact an individual's ability to perform activities of daily living such as bathing, dressing, shopping, and preparing meals, thereby Nationally, 15% of the population has at least one opioid prescription. However, adults age 65 and older have the highest opioid prescription medication use (25%).*

	Percent of population with
Age group (years)	at least one opioid prescription
0-14	1
15-19	9
20-24	
25-34	15
35-44	18
45-54	20
55-64	24
45-54 55-64 65+	25

increasing dependence on others for these needs. Eleven percent of adults age 65 to 84 and sixteen percent of adults age 85 and older report having "high impact" pain, defined as chronic pain limiting life or work activities on most days or every day in the past 6 months.⁸

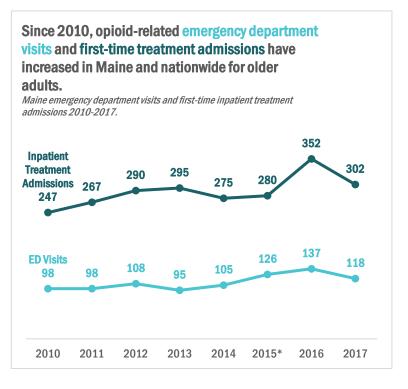
^{*} Source: https://www.cdc.gov/drugoverdose/pdf/pubs/2019-cdc-drug-surveillance-report.pdf

Pain management in older adults presents a challenge for physicians as the opioid medications that effectively relieve pain carry additional risks for older patients. Opioids remain in the body of an older adult longer than in a younger adult, even when the medication is taken properly; the depressive effects of opioids can increase fall risk in an already frail adult; opioid medication can slow or depress respiration leading to a lack of oxygen in the brain and impair cognitive and decision making ability.⁹ In addition, older

adults have often been excluded from clinical trials of medications, creating a lack of information on age-appropriate dosing and interactions with medications taken for the chronic diseases experienced by many older adults.¹⁰

As opioid use has increased among older adults, so has misuse, dependence and opioid use disorder. **Nationally, first-time treatment admissions for opioid use disorder (OUD) for adults age 65 and older nearly doubled between 2010 and 2017.** Maine saw increases in these admissions but not to the same degree (see Chart to right⁺).¹¹

Research shows that older adults with OUD are more likely to obtain prescription opioids through physicians compared to younger adults with OUD who are more likely to obtain them through peers,



family, or theft. Almost half of adults age 65 and older who misused opioids received their opioids from physicians.¹² These findings support the need for prescribers to carefully monitor their older patients who use opioid pain medications for signs of misuse or abuse, including early refill requests and doctor shopping to obtain multiple opioid prescriptions, and the need to educate older adults and their caregivers on the risks of opioid use and signs of misuse.

^{*} Chart Source: https://www.hcup-us.ahrq.gov/faststats/OpioidUseServlet

^{*}In October 2015, the ICD-10-CM diagnostic coding system was implemented which resulted in a spike in recorded opioid-related ED and inpatient use in that quarter. Subsequent quarters showed less of an impact of the change in coding. For more information on this change please see <u>https://www.hcup-us.ahrq.gov/datainnovations/ICD-10CaseStudyonOpioid-RelatedIPStays042417.pdf</u>

^{4 |} Muskie School of Public Service | The Role of the Opioid Crisis in Elder Abuse

Possible Connections between the Opioid Crisis & Elder Abuse

Elder abuse takes many forms and occurs regardless of economic situation, gender, ethnicity, or living arrangement. Although elder abuse is a complex phenomenon with no single cause, individual risk factors for victims of abuse include functional dependence or disability, poor physical health, cognitive impairment, poor mental health, and low income or socioeconomic status.^{13, 14} The physical and cognitive effects of opioid use, misuse, and abuse among older adults can exacerbate many of these risk factors.

Risk factors influencing perpetrators of abuse include mental illness, substance misuse or abuse, and dependence on the older adult.^{15, 16} Substance use, in particular, has been associated with different types of abuse. Substance use among perpetrators is associated more with financial exploitation, physical abuse, and emotional abuse than other types of abuse, and perpetrators with substance use problems are more likely to commit multiple forms of abuse.^{17, 18, 19}

As opioid use, misuse, and abuse has increased over time, it is possible that the risk of older adults experiencing self-neglect, caregiver neglect, exploitation and other forms of elder abuse increased as well. Anecdotally, Adult Protective Services (APS) investigators across the country have noted a substantial increase in the number of investigations of abuse and exploitation related to the opioid crisis.²⁰

Elder abuse investigations involving opioid misuse by either the perpetrator or the client can present challenges for investigators in that additional assessments, including behavioral assessments, may be required to determine the client's needs, how the opioid use affects any underlying conditions or activities of daily living abilities, as well as safety issues for the client, investigator, and others. In 2018, the National Adult Protective Services Association (NAPSA) interviewed State APS administrators across the country to learn how the opioid

KEY DEFINITIONS*

Abuse: The infliction of injury, unreasonable confinement, intimidation or cruel punishment that causes or is likely to cause physical harm or pain or mental anguish; sexual abuse or sexual exploitation; financial exploitation; or the intentional, knowing or reckless deprivation of essential needs. The definition of abuse includes acts and omissions.

Neglect: A threat to an adult's health or welfare by physical or mental injury or impairment, deprivation of essential needs or lack of protection from these.

Exploitation: The illegal or improper use of an incapacitated or dependent adult or that adult's resources for another's profit or advantage.

*22 MRSA §3472, available at <u>https://www.mainelegislature.org/legis/statutes/22/</u> <u>title22sec3472.html</u> crisis had been affecting APS supervisors, investigators, and clients. Through reviewing case studies of opioid-related investigations and interviewing State APS personnel, NAPSA documented an increased level of effort and time needed by investigators to address all the issues surrounding cases that involve opioids, especially to coordinate referrals to appropriate services and law enforcement.²¹ The complexities presented by opioid use, misuse, and abuse in cases of elder abuse warrants further investigation to understand how often it occurs and to develop appropriate and effective responses that address both the elder abuse and, where possible, the opioid misuse as well.

Elder Abuse & Maine Adult Protective Services

In Maine, the Adult Protective Services Act authorizes the State to investigate allegations of abuse and render assistance to vulnerable adults who "because of incapacitation or dependency, are unable to manage their own affairs or to protect themselves from abuse, neglect or exploitation."²²

To respond to cases of abuse, Maine APS, within the Office of Aging and Disability Services (OADS), must first determine if the alleged victim is either dependent or incapacitated. Maine statute defines "dependent adult" as an adult who has a physical or mental condition that substantially impairs the adult's ability to adequately provide for that adult's daily needs. Dependent adults include residents of nursing and assisted living facilities, as well as adults, regardless of where they live, who are wholly or partially dependent on others for care or support due to having significant limitations in mobility, vision, hearing, or emotional or mental functioning.²³

An "incapacitated adult" is an adult who is unable to receive and evaluate information or make or communicate informed decisions to such an extent that the adult lacks the ability to meet essential requirements for physical health, safety or self-care, even with reasonably available appropriate technological assistance.²⁴

Not all victims of abuse, neglect, or exploitation can be served by APS as it only has authority to intercede in cases where the adult meets the threshold of incapacity or dependence. In addition, APS' statutory authority is limited to those cases where danger or significant risk of danger exists. If the allegations

Dependent adult

An adult who has a physical or mental condition that substantially impairs the adult's ability to adequately provide for that adult's daily needs.

Incapacitated adult

An adult unable to receive and evaluate information or make or communicate informed decisions to such an extent that the adult lacks the ability to meet essential requirements for physical health, safety or self-care, even with reasonably available appropriate technological assistance. of abuse, neglect or exploitation or circumstances do not present a substantial risk of danger, APS may not intercede. In addition, if a client is dependent but not incapacitated, APS is limited in what it is able to provide to the person unless they are willing to accept services. For more information on the Maine APS intake, supervisory review, investigation, and disposition process, please see the *2010-2014 Adult Protective Services General Population Report*.[‡] While APS serves adults over age 18, for the purposes of this report, we limit our findings to elder abuse of adults age 60 and older.

The annual number of elder abuse investigations by Adult Protective Services (APS) increased from 1,844 in State Fiscal Year (SFY) 2010 to 2,176 in SFY 2017.^{25,26} This increase can be partially explained by population trends and increased education and awareness of elder abuse in the community and among mandatory reporters. However, with the connections between substance use problems and elder abuse, another possible factor affecting these trends is the current opioid crisis.

[‡] Available at <u>https://www.maine.gov/dhhs/oads/about-us/data-reports</u>.

^{7 |} Muskie School of Public Service | The Role of the Opioid Crisis in Elder Abuse

The Role of the Opioid Crisis in Elder Abuse in Maine

A first step in understanding the impact of the opioid crisis on elder abuse, neglect, and exploitation is determining the scope of the problem. To that end, Cutler Institute research staff at the Muskie School of Public Service conducted an analysis of Maine Adult Protective Services Information System (MAPSIS) data to determine the role of opioid use, misuse, and abuse in elder abuse, neglect, and exploitation investigations in Maine. For the purposes of this report, we use the term "elder abuse" to encompass physical, emotional, and sexual abuse, caretaker neglect, financial exploitation, and selfneglect. This baseline information can inform efforts to develop effective strategies for serving some of the most vulnerable older adults who are not otherwise able to care for themselves.

Research Questions

- 1. Did elder abuse investigations involving opioid misuse or abuse increase during 2015-2018?
- 2. Do investigations involving opioid misuse or abuse differ from investigations that don't involve opioids?
- 3. What themes or features of cases involving opioid misuse or abuse by clients and/or perpetrators emerge from the data?

Data Source

The Cutler Institute obtained a MAPSIS data extract for calendar years 2015-2018 from Maine DHHS. MAPSIS includes key data points such as client age, gender, marital status, living arrangement, and geographic location as well as the date investigations were opened and closed, allegation type, and investigation disposition. The data also include information regarding perpetrators such as their relationship to the client and whether they live with the client. The perpetrator data are not as complete as other data, and in some cases, such as for investigations of self-neglect, there is no perpetrator of abuse. Perpetrator data was analyzed when possible.

APS investigators also compile notes during investigations to document their interactions with clients and other individuals relevant to the investigation and to describe actions taken and their outcomes. These text fields are rich sources of information about the investigations and often provide details that are missed in the data fields. For example, MAPSIS data fields may indicate a client has a prescription for oxycodone and that there is an allegation of exploitation, but the data points do not indicate that a perpetrator has stolen the client's medication; this type of detail is often described in the investigation case notes.

Methods

The research team used a mixed methods design to analyze investigations opened between January 1, 2015 and December 31, 2018 for APS clients aged 60 and older. To identify investigations with inappropriate opioid use, the team first developed a list of search terms related to opioid use (names of prescription or illicit opioids), misuse, and abuse (see Appendix), and searched the MAPSIS data tables and notes fields for investigations that included one or more of the terms. **Out of over 9,000 investigations opened during the time period, 2,429 investigations contained one or more of the search terms.**

As noted previously, prescription opioid use among older adults is not uncommon and can be an appropriate method of pain management. To determine if cases with matching search terms represented opioid misuse or abuse, the research team developed a note review process. Opioid misuse or abuse was identified in the client, perpetrator, or other person relevant to the investigation. The notes were reviewed and graded for opioid involvement by the following criteria:

- **Opioid-related:** The investigation notes clearly stated an opioid misuse or abuse issue in the client, perpetrator, or other person. Opioid drug names were specified in the notes or were described as pain medications, pain killers, opioids, or narcotics.
- **Other Illicit Drug-related:** The investigation notes indicated illicit drug use but did not specify the type of drug. The team found a number of investigations

specifying cocaine, crack, and methamphetamines in the review and included them in this catch-all category. This information was valuable to collect as aspects of this type of activity likely overlap in opioid misuse or abuse activity such as drug seeking or exploitation as well as addiction treatment and management. It is possible that the illicit drug involvement included opioids, but they were unnamed and we could not confirm drug type based on the information available in the record.

- **Unlikely Drug-related:** The investigation notes did not describe prescription opioid misuse or other illicit drug use or misuse. The notes may have included information on alcohol abuse or other behavioral health issues.
- **Disproven Drug-related:** The investigation notes did not contain any references to opioid misuse or other illicit drug use, and there were no references to any other substance use disorders or other behavioral health issues.
- **Undetermined:** The investigation notes may have suggested opioid or other illicit drug involvement but did not provide any details of the case, or if they did, the information was presented in a way that the research team was unable to conclude opioid or other illicit drug involvement or not.

This review process identified **approximately 225 (9%) of the 2,429 investigations with search terms as being Opioid-related.** The Table to the right shows the number of investigations meeting the different criteria indicating opioid or drug involvement.

Quantitative Analysis

To compare investigations involving opioids or other illicit drugs to investigations without drug involvement, the investigations that were determined as either Unlikely Drug-related or Disproven Drug-related were combined with the 6,748 investigations that did not contain any opioid search terms into a new Non-drug-related comparison group. The 292 investigations flagged as Undetermined were excluded entirely from any further analysis. Using statistical software SPSS 26 and Microsoft Excel 2016, Opioid-related (N=225) and Other Illicit Drug-related investigations (N=315) were compared to the Non-drug-related investigations (N=8,637). Chi-square tests of independence were

Results of the MAPSIS investigation notes review:

Opioid-related	225	9%
Other Illicit Drug-related	315	13%
Unlikely Drug-related	648	27%
Disproven Drug-related	949	39%
Undetermined	292	12%
Total investigations with search terms reviewed	2,429	100%

performed to examine the relation between drug-related status and investigation characteristics. While most investigations involve unique individuals, it is possible that an individual had multiple investigations opened over the time period.

Quantitative measures included:

- Trend in the number and percent of opioid-related investigations over time
- Duration of investigation
- Demographic features of clients such as age, gender, living arrangement, and urban or rural residence
- Number and type of allegations
- Disposition of the investigation, i.e. substantiated, unsubstantiated, or undetermined
- Investigation closure reason, i.e. in substantiated abuse cases, client accepts or declines APS services

Quantitative Findings

Trends in the Number of Investigations

The number of Opioid-related, Other Illicit Drug-related and Non-drug-related investigations increased over the study period, 2015-2018. However, there was not an observed spike in the percentage of Opioid-related and Other Illicit Drug-related over time (see Table below).

investigations remained consistent over time.					
	CY2015	CY2016	CY2017	CY2018	Total
Opioid-related	39	48	61	77	225
	2.9%	2.6%	2.5%	2.5%	2.5%
Other Illicit Drug-related	67	72	72	104	315
	3.7%	3.9%	3.0%	3.3%	3.4%
Non-drug-related	1,715	1,710	2,278	2,934	8,637
	94.2%	93.4%	94.5%	94.2%	94.1%
Total Investigations	1,821	1,830	2,411	3,115	9,177

The percentage of Opioid-related and Other Illicit Drug-related investigations remained consistent over time.

Geographic Distribution of Investigations

The county distribution of drug-related investigations was compared to the county distribution of the population aged 60+ with the expectation that the distributions would be parallel. A few counties varied from this expectation. For example, **Cumberland and Androscoggin counties had notably lower shares of drug-related investigations compared to their share of population aged 60+.** Aroostook and **Kennebec counties had higher shares of drug-related investigations compared to their share of population aged 60+** (see Table on the next page). This finding provides support that the opioid crisis is not limited to urban centers and that rural areas are experiencing its effects as well.

The distribution of drug-related investigations by county was lower in Androscoggin and Cumberland counties and higher in Aroostook and Kennebec counties compared to their share of older adults.

	Opioid-related and Other Illicit Drug- related Investigations _{N=540}	Percent of Population Aged 60+ [§] Total Population=368,460
Androscoggin	3.5%	6.9%
Aroostook	10.3%	5.8%
Cumberland	12.4%	19.5%
Franklin	1.9%	2.5%
Hancock	6.2%	4.8%
Kennebec	15.5%	8.9%
Knox	1.7%	3.5%
Lincoln	1.7%	3.4%
Oxford	3.9%	4.6%
Penobscot	12.2%	10.4%
Piscataquis	3.5%	1.6%
Sagadahoc	2.1%	2.8%
Somerset	5.2%	3.9%
Waldo	2.1%	3.2%
Washington	3.1%	2.8%
York	14.7%	15.2%

§ American Community Survey 2018 5-year estimates,

https://data.census.gov/cedsci/table?q=United%20States&t=Age%20and%20Sex&g=0100000US 0400000US23&tid=ACSDP 1Y2017.DP05&hidePreview=true retrieved October 12, 2020.

Opioid-related and Non-drug-related Investigations

Opioid-related investigations tended to occur along major traffic routes (dark green areas) while Non-drug-related investigations were more widely dispersed throughout the State (light green areas).



Opioid-related and Other Illicit Drug-related investigations compared to Non-drug-related investigations

Demographics

There were no statistically significant differences between Opioid-related, Other Illicit Drug-related investigations, and Non-drug-related investigations in urban/rural geographic distribution across the State, client gender and marital status (see Table below). **

There were no significant differences between Opioid-related, Other Illicit Drugrelated, and Non-drug-related investigations in urban/rural distribution, client gender, or marital status.

				Isolated	Clie Gend		Marital	Status ^{‡‡}
	Urban	Large Rural City/Town	Small Rural Town	Small Rural Town	Female	Male	Married	Not Currently Married
Opioid-related N=215	37%	31%	20%	13%	62%	38%	19%	66%
Other Illicit Drug-related N=315	42%	22%	19%	18%	58%	42%	17%	77%
Non-drug-related N=8,275	46%	20%	18%	17%	61%	38%	21%	67%

However, there were some differences of note in client age and living arrangement.

^{**}Note: There were several investigations that did not have complete demographic data. Sample sizes in this table reflect the number of investigations with data in these demographic categories.

⁺⁺ Client gender data in MAPSIS does not include options other than female or male.

[#] Not Currently Married includes widowed, divorced, separated, and never married. Marital Status Unknown is not shown in this table.

Client Age

Clients in Opioid-related and Other Illicit Drug-related investigations were more likely to be younger

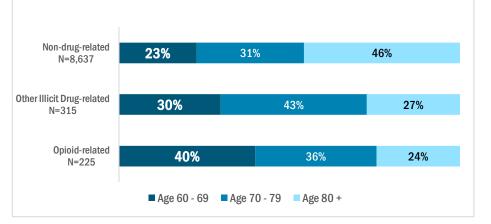
(ages 60-69) than those in Non-drug-related investigations (p<.001 for both groups).

Living Arrangement

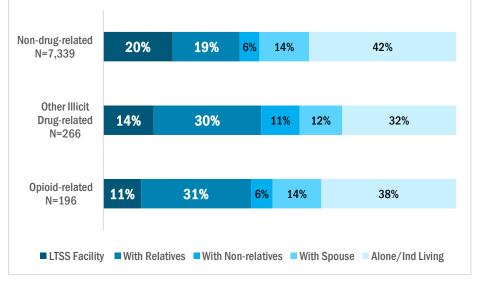
Clients in Opioid-related or Other Illicit Drug-related investigations were less likely to be living in an LTSS facility and more likely to live with relatives than clients in Nondrug-related investigations

(p<.001).^{§§} For this measure, the following types of facilities and group living situations were combined into one LTSS facility category to reflect dependency on facility-based personnel for care: adult family care homes; assisted living facilities; nursing facilities; group homes; and institutions for adults with mental illness. There were clients in all three investigation categories who were either in hospitals or shelters, experiencing homelessness, or whose housing arrangements were unknown, but due to small numbers, these are not reflected in the Chart to the right.

Clients in Opioid-related and Other Illicit Drug-related investigations tended to be **younger** than in Non-drug-related investigations.



Clients with drug-related investigations were more likely to live with relatives and less likely to live in LTSS facilities.



^{\$§} Note: There were several investigations that did not have living arrangement data recorded in MAPSIS. The sample sizes of the categories on this figure reflect the number of investigations with living arrangement data.

Investigation Characteristics

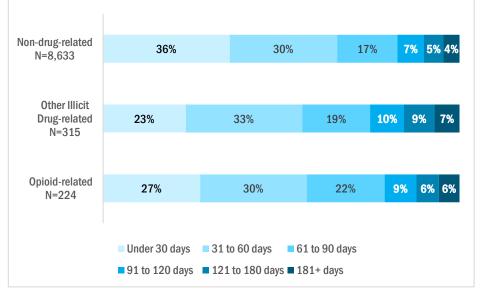
Investigation Length

Opioid-related or Other Illicit Drug-related investigations were more likely to take longer to resolve compared to Non-drugrelated investigations (p<.05).*** This may indicate an increased level of complexity in these cases.

Number of Allegations per Investigation

Elder abuse investigations often entail multiple allegations within a single investigation. Opioid-related investigations are more likely to have three or more allegations within a single investigation compared to Non-drug-related investigations (p<.001).⁺⁺⁺ This finding may support previous research that found perpetrators with substance use issues are more likely to commit multiple forms of abuse.²⁷ It also may indicate an increased complexity of these types of investigations as suggested by NAPSA case studies on opioid-related investigations.²⁸

Drug-related investigations were more likely to take longer to resolve than Non-drug-related investigations.





Opioid-related investigations were more likely to have 3 or

^{***} Note: There were several investigations that did not have complete length of investigation data recorded in MAPSIS. The sample sizes of the categories on this figure reflect the number of investigations with length of investigation data. ⁺⁺⁺ Note: There were several investigations that did not have allegation data recorded in MAPSIS. The sample sizes of the categories on this figure reflect the number of investigations with allegation data.

Type of Allegation

The frequency of types of allegations was similar across the different types of investigations with the exception of exploitation. **Nearly half of Opioidrelated investigations had allegations of exploitation compared to less than one-third of Non-drug-related investigations.**

See <u>Appendix</u> for the distribution of allegation types across investigations (p<.01).

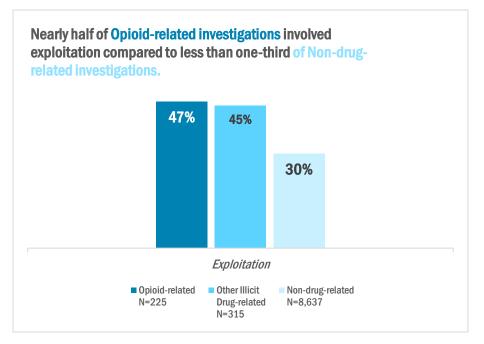
Investigation allegation disposition

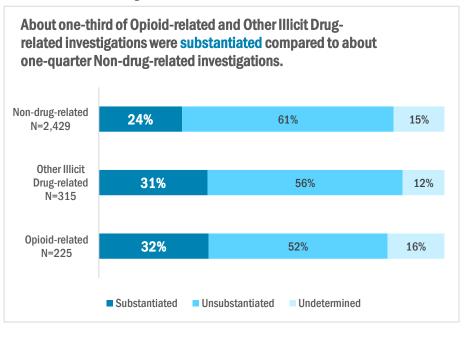
The disposition of APS abuse investigations fall into three categories, Substantiated,

Unsubstantiated, and Undetermined. Across the different types of investigations analyzed, **drug-related investigations tended to have a higher rate of substantiation than Non-drug-related investigations.**

About one-third of Opioid-related and Other Illicit Drug Related investigations were substantiated, compared to about one-quarter of Non-drug-related investigations (p<.001).

Looking at allegation disposition by type of allegation, **allegations of caregiver neglect in Opioid-related**





investigations were more likely be substantiated than in Non-drug-related

investigations (p=.015). Allegations of financial exploitation were substantiated more often in both Opioid-related and Other Illicit Drug-related investigations compared to Non-drug-related investigations, but this finding reached significance only for the Other

Illicit Drug-related investigations (Opioid-related p=.09; Other Illicit Drug-related p=.016). See <u>Appendix</u> for a complete listing of investigation disposition by type of allegation.

Case closure reason

When APS investigators close an investigation, they can identify the reason for case closure in MAPSIS. Over ninety percent of investigations are closed due to one of the following reasons:

- Unsubstantiated
- Substantiated Danger Resolved
- Substantiated Client Refused Service
- Insufficient Evidence
- Investigation No Longer Warranted

There are five other options investigators can choose in MAPSIS, including Substantiated – Continue Service, Deceased, Court Study Completed, Court Study Request Withdrawn, Client Moved out of State, and Other, but combined, these categories comprise less than 10% of investigations.

While many older adults with the capacity to make their own decisions welcome the assistance of Maine APS to access services such as MaineCare coverage for long term services and supports, it is not uncommon for APS investigators to encounter clients who refuse any help offered. These older adults may fear a perceived intrusion into their lives, a loss of independence, or a disruption of a relationship with a family member even if that family member is the abuser. This analysis found that **both Opioid-related and Other Illicit Drug-related investigations (7% of both groups) were more likely closed as "Substantiated – Client Refused Services" compared to Non-drug-related investigations (4%) (p<.01 for both Opioid-related and Other Illicit Drug-related investigations).**

This finding may indicate an increased level of difficulty in providing acceptable services to older adults with confirmed allegations of abuse who may be misusing or abusing opioids and other drugs themselves or whose family members misuse or abuse opioids or other drugs. In the qualitative thematic analysis, there were descriptions of clients who declined APS assistance to obtain suitable housing or facility placement because they did not want to stop using substances as well as clients who declined assistance because they believed their family member would get in trouble as a result.

Perpetrator Information in MAPSIS

Unlike other data points in MAPSIS, information on perpetrators was included in less than half of the investigations. Although this data is not as complete, there were two findings of note.

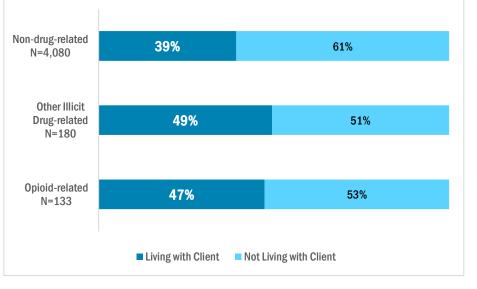
Perpetrator living with client

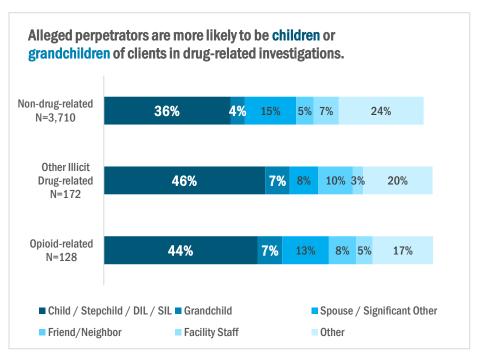
Of the investigations that included perpetrator information, the perpetrator was more likely to be living with the client in drug-related investigations than in Non-drug-related investigations, although this finding was significant only for Other Illicit Drug-related investigations (p<.05). This finding might indicate a higher likelihood of perpetrators in drug-related investigations having an easier target of opportunity to exploit through stealing either medication, money, or property.

Perpetrator relationship

The relationship between the client and perpetrator was recorded in less than half of the investigations 2015-2018. While children in all types of investigations make up the largest group of alleged perpetrators, they







comprise a higher proportion of alleged perpetrators in both Opioid-related and Other Illicit Drug-related investigations compared to Non-drug-related investigations. This finding was significant only for the Other Illicit Drug-related investigations (p=.035). Grandchildren make up only 4% of alleged perpetrators in Non-drug-related investigations, but they make up 7% of alleged perpetrators in both Opioid-related and Other Illicit Drug-related investigations. Again, this finding was significant only for the Other Illicit Drug-related investigations (p=.021).^{##}

Qualitative Thematic Analysis

Case notes of the 225 Opioid-related investigations were analyzed for common themes using NVivo 12 Pro software. All of the notes were reviewed by two members of the research staff to insure interrater reliability. All 225 cases were reviewed regardless of whether the elder abuse allegation(s) were ultimately substantiated or not, as the issues surrounding opioid involvement may or may not impact the actual abuse allegation(s) but may still impact the client's health or safety. This analysis can inform both APS investigator responses, as well as responses from the larger community of health and long term services and supports providers, law enforcement, treatment programs, and policymakers aiming to decrease opioid misuse or abuse.

Qualitative Findings

Client experience with prescription or illicit opioid use

Clients in over half of the 225 Opioid-related investigations were using opioid medication by prescription. Among these investigations, themes related to the opioid crisis emerged including clients with prescriptions for opioids who also had substance use disorder (SUD) issues including OUD, potential opioid medication management issues, or clients experiencing barriers to accessing their opioid medication due to prescribing policy or family members with SUD issues.

Qualitative analysis included themes around:

- Client experience with opioid use, misuse, or abuse
- Perpetrator experience with opioid use, misuse, or abuse
- Other relevant person's experience with opioid use, misuse, or abuse
- Impact of opioid use, misuse, or abuse on the client's finances, environment, health, or relationships
- APS activities such as discussion of the risks of opioid use, misuse, or abuse

^{##} Note: Perpetrator relationships not shown are: brother/sister, other family member, facility staff, LTSS/provider staff, and unknown/missing; therefore, percentages shown do not add up to one hundred.

Client use, misuse or abuse of opioids: Themes in order of prevalence in case notes

Theme Examples Client exhibits SUD/OUD behaviors *Client tried to find new providers to prescribe opioid medications.* 0 Client has a *Client drank alcohol while taking an opioid medication.* 0 prescription for an Client wanted an opioid medication for pain and to be on hospice care, but hospice was 0 opioid, but also has not medically warranted. SUD issues, including • Client had a prescription for an opioid medication and sold the pills for cash or active or history of exchanged them for alcohol. OUD or illicit drug • Client admitted to becoming addicted to their pain medication. use Client was in active treatment for opioid addiction and was also prescribed an opioid 0 medication for pain. Reliant on others for dosing o Client's caregiver was responsible for dispensing medication but was unreliable at this task. *Client's caregiver who dispensed the medication was in recovery for OUD.* 0 Facility dispensed medication to client who, when asked, ranked their pain a 10 out of 0 10 but showed no sign of being in pain. Client's caregiver withheld medication based on personal judgement of client's pain 0 **Potential opioid** level. medication o Client's caregiver managed the medications, including hiding them, so that the client did management issues not take too much. leading to under or overmedication Client does not understand or cannot follow dosing instructions Client did not remember taking the medication and took multiple doses. 0 Client received one week's medication in a large packet and could not figure out how to 0 take them. *Opioid medication contributed to client's confusion or sedation.* 0 Client's cognitive ability impacted their ability to follow dosing instructions leading to 0 overdose situations.

Client use, misuse or abuse of opioids: Themes in order of prevalence in case notes

Client mismanagement of opioid medication	 Client hides medication to prevent others from stealing it Clients hid medications in cars or unmarked bottles in the home. Client gives alleged perpetrator opioid medication Client allowed perpetrator to take client's hospice medications. Client gave family member client's pain medication when the family member asked for it.
Barriers to client accessing prescription opioid medication	 Client behavior such as missing appointments Client with late-stage cancer found traveling to the doctor for a regular pill count too difficult and stopped going. Client missed OUD treatment appointments, and treatment was discontinued Opioid prescribing and delivery system policy issues Client's local pharmacy could not deliver opioids Client's caregivers could not pick-up opioids on behalf of the client. Providers must comply with federal law and conduct pill counts before prescriptions can be refilled, but client found these visits cumbersome. Behavior of another person such as a family member or caregiver taking the clients' medication Client's family member took client's opioid medication at home while client was in the hospital. The client's provider discontinued prescribing the medication. Client's opioid medication was stolen, and the provider is now prescribing a medication without street value.

Client use, misuse or abuse of opioids: Themes in order of prevalence in case notes

Client denies opioid misuse or abuse in self or alleged perpetrator	 Client denies opioid misuse or abuse in alleged perpetrator despite contrary information in the notes Client denied family member took client's opioid medication but was unable to explain how their oxycodone pills were missing. Client blamed accusations of drug abuse on family member's friends, not the family member, although other members described the family member's long term heroin addiction. When investigator asked client if their family member had a drug addiction, the client said their family member's drug problem was behind them, yet the client's medication was missing.
	 Client denies opioid misuse or abuse despite contrary information in the notes Client tested positive for OUD treatment medication but said they do not know how it got into their system. Client denied their medication made them foggy and resented the doctor for taking it away. Client ordered an opioid medication off the internet but did not have a prescription for it and denied being addicted to it.

Perpetrator experience with opioid misuse or abuse

Out of the 225 Opioid-related investigations, **nearly half described substance use issues among the alleged perpetrators including active OUD and/or illicit opioid use such as stealing or selling medications.** Again, all 225 investigations were reviewed regardless of whether the allegations were substantiated. Therefore, the term "alleged perpetrator" is used.

Alleged perpetrator opioid use, misuse, or abuse of opioids: Themes in order of prevalence in case notes

Theme	Examples
History of or active	 Alleged perpetrator has history of or active OUD Client's family member had been in and out of drug rehab programs. Client's family member had drug problems in the past, and the client provided money when possible.
OUD or receiving OUD treatment	 Alleged perpetrator is in treatment for OUD Client's family member attended an OUD treatment clinic. Client's family member went to an OUD treatment clinic and last used heroin years ago. Client's family member missed too many OUD treatment appointments and MaineCare stopped paying for them.
Illicit opioid activity involving a client's	 Alleged perpetrator stealing client's opioid prescription Client's family member stole client's medication after surgery. Client's family member had a history of stealing client's pain medication. Caregiver stole client's hospice medication. Client's pill counts were routinely off compared to what they should have been for the given dosing schedule.
opioid prescription	 Alleged perpetrator exhibiting drug seeking behavior Client's family member called the client's doctor to request a refill of pain medication that had been allegedly stolen but was unwilling to discuss a police report. Client's family member routinely called for a refill of client's pain medication on the day it was due despite it being an as-needed dose.

Other relevant person's experience with opioid misuse or abuse

Out of the 225 Opioid-related investigations, **approximately fifteen percent involved individuals with opioid misuse or abuse problems who were not identified as alleged perpetrators of the elder abuse allegations.** For example, a girlfriend of an alleged perpetrator was addicted to heroin, but the alleged perpetrator was not identified in the notes as having an addiction. While not identified as alleged perpetrators, these individuals may present a risk to safety for the older adults and have the potential to become perpetrators in the future. Other individuals identified in this category are the client's friends or family members who may have recently overdosed. In some of these cases, the notes described clients becoming depressed and turning to opioids themselves to self-medicate.

Other individual opioid use, misuse or abuse of opioids: Themes in order of prevalence in case notes

Theme	Examples
History of or active OUD, receiving OUD treatment, or participating in illicit opioid activity	 Other individuals are identified as current drug users or having had SUD/OUD in the past. Client's family members were alleged drug dealers and living in the same home. Unidentified individuals frequented the client's home looking for drugs. Client's family member's friend was addicted to heroin.
Overdose	 Other individuals experience an overdose or died from an overdose Client's family member passed away from an overdose prior to the investigation. Client's family member who was also a caregiver died of an overdose during the investigation. Client's family member mismanaged own medication and overdosed.

Impact of opioid use, misuse, or abuse on the client's finances, home environment, health, or relationships

Finances

One hundred five (47%) of the 225 Opioid-related investigations involved allegations of exploitation such as stealing money or property from the client.

Given that this type of allegation was more common among Opioid-related investigations than Non-drug-related investigations, themes around this allegation were explored further in the case notes. There were many different exploitation scenarios presented in the cases including instances where the alleged perpetrator stole money or property in order to purchase opioid drugs, stole the client's money and opioid prescription, or took advantage of a client who had OUD or was impaired by opioid prescription use. There were several investigations where the alleged perpetrator exploited the client in order to pay for or attend opioid treatment programs themselves.

It appears that **medication management issues contributed to the exploitation vulnerability of older adults.** For example, in cases where an alleged perpetrator stole the client's opioid medication or exploited an older adult who was incapacitated by opioid use, it is possible that a more secure system of storing and administering the opioid medication could reduce the risk of exploitation.

Theme	Examples
Stealing with drug use	 Alleged perpetrator steals client's money and buys opioid drugs elsewhere Client's friend stole large sums of money to buy heroin. Client's family member stole checks to pay drug dealer. Client's friend ran up charges on the client's credit card and tested positive for OUD treatment medication without a prescription. Alleged perpetrator steals client's money and prescription opioids The client's family member misused the client's bank account and stole client's opioid medication. The client's family member routinely stole client's Social Security check and medications.

Impact of opioid use, misuse or abused on client's finances: *Themes in order of prevalence in case notes*

	 Client's home was frequented by others who stole client's money and prescription pain medication.
Client at risk for exploitation due at least in part to opioid use	 Alleged perpetrator steals client's money, property, or sources of support while client is using opioids, either by prescription or illicitly Client had active OUD and client's family member stole money while they were incapacitated. Client's dementia and prescribed opioid medication use led to confusion and inability to manage own finances. When client drank alcohol and used prescribed opioids, others stole client's money and medications. Client showed signs of impairment due to drugs, and perpetrators stole client's money.
Exploitation for drug treatment	 Alleged perpetrator steals client's money, property or sources of support to pay for own drug treatment Client's family member stole money from client to pay for two family members' drug treatment. Client's caregiver used client's vehicle to get to drug treatment. Client "gives" money to perpetrator to pay for perpetrator's drug treatment Client paid for family member's OUD treatment even though the family member could have qualified for MaineCare.

Home Environment

The 225 Opioid-related investigations were reviewed for references to the client's home environment to find themes around the impact of the opioid use, misuse, or abuse on the client's living situation. The notes were coded as either: 1) unstable housing such as being at risk for eviction, homelessness, or inadequate access to a needed level of care; 2) unsafe housing such as living in squalor or having limited utilities such as heat; and 3) housing that did not pose concern in the investigation. **Approximately twenty percent of the Opioid-related investigations had unstable or unsafe housing situations related to opioid use or misuse.** Below are some of the common themes.

Impact of opioid use, misuse, or abuse on client's home environment: *Themes in order of prevalence in case notes*

Theme	Examples
Client's housing situation is unstable, at risk of changing without appropriate alternatives.	 Housing options may be limited for clients who use opioids or other substances. Potential facility would not accept client on OUD treatment medication; client had wait weeks for placement until they were tapered off the medication. Client needed care, but their active OUD made facility placement difficult.
	 Alleged perpetrator activity puts the client at risk for eviction or foreclosure. Client's family member opened credit cards in client's name, ran up large balances, paid drug dealers, and the client's home went through
	 foreclosure. Client's family member who abused opioids was living with client against the residence policy, putting the client at risk for eviction.
Client's housing situation is unsafe	 Alleged perpetrator opioid use or misuse makes the housing unsafe. Client's family member asked for client's prescribed opioid medication and when client refused, caused damage to the house. Client's family members abused opioids in client's home and allowed other drug users to use it as a shelter.
	 Client's use of opioids causes unsafe housing situations Client's opioid and alcohol use decreased their ability to care for the home by depleting resources and causing impairment.

Client Health

Many older adults with APS investigations have significant health issues. In this analysis, **approximately one-tenth of the Opioid-related investigations described health impacts directly related to opioid use, misuse, or abuse.** Three themes arose: 1) increased risk to client health due to overmedicating; 2) decreased access to pain medication leading to increased functional limitations; and 3) caregiver medication management issues.

Impact of opioid use, misuse, or abuse on client health: Themes in order of prevalence in case notes

Theme	Examples
Medication mismanagement leads to increased risk of falls, confusion, and overdose.	 Concurrent alcohol use with opioid medication Client drank alcohol with opioid medication leading to a fall and self-neglect. Client drank alcohol with opioid medication, leading to a fall and broken bones. Client receives too much opioid medication Client mixed up medications and took too much leading to increased confusion. Client accidentally overdosed on pain medication. Client's family member regularly gave the client pain medication instead of as needed which led to the client falling.
Decreased access to opioid pain medication leads to decreased function.	 Prescriber decreases or stops opioid pain medication. The client's caregiver said an emergency room doctor saw the client's long term hydrocodone use, labeled the client as a drug seeker, and the medication was reduced and cut off. The caregiver said the client could no longer do daily activities like cooking, cleaning, and driving due to pain. Client's prescribed opioid medication dose was cut in half, and the client said it was tough to function with their level of pain. Client's doctor stopped prescribing an opioid medication out of concern the client was at risk for self-harm, but the client then was in so much pain they could no longer walk to the grocery store or do other physical tasks.

Caregiver issues with medication	 Caregiver has OUD and does not provide proper care. Client felt they could not have a surgery because they would not be able to have appropriate pain medication available during recovery due to a family member's OUD and abusive behavior.
management	 Caregiver knowingly gives the wrong medication Caregiver gave the client an antianxiety medication instead of opioid pain medication even though the client was on hospice and in obvious pain.

Relationships

As noted earlier, elder abuse cases can involve complex relationships with older adults who are reluctant to seek law enforcement remedies against their family members. Older adults who experience abuse are sometimes more fearful of being left without any support than of the abuse. In our thematic analysis of the 225 Opioid-related investigations, there were a few instances of clients who refused help who specifically noted that they did not want to get a family member with OUD or SUD "in trouble." A few clients said that they did not want to have APS involved because their family member was already working on trying to get sober. This particular finding indicates a need for client education about the type of services APS can provide to help mitigate the opportunity for abuse to take place such as medication or financial management assistance. It also suggests an opportunity for the development of a mechanism to refer perpetrators, especially family members, to available OUD services.

APS Investigator Response in Opioid-related Investigations

Finally, the case notes were analyzed for instances where an APS investigator discussed opioid medication risks and OUD treatment options with the client and/or family members. Out of the 225 Opioid-related investigations, there were just a few investigations where the investigator made a note of discussing the risks of taking too much of a medication or drinking alcohol with a medication. Many of these discussions focused on proper medication management, but in the absence of the client wanting assistance, there appeared to be little more that the investigator could offer. There were also a few investigations where the APS investigator shared contact information for OUD and addiction treatment programs.

Potential Strategies to Mitigate Opioid Misuse in Elder Abuse

Findings show that opioid and other drug-related investigations increased during 2015 through 2018 along the same upward trend as all elder abuse investigations. Although it is good news that these types of investigations are not spiking as a percentage of elder abuse investigations, the general increase in their occurrence will continue to present challenges for Maine APS investigators. Unfortunately, there is no widely documented approach to handling the complexities of opioid-related APS investigations. However, several key findings from the quantitative and qualitative analyses suggest opportunities for Maine APS to work with other agencies, advocates, or service providers to mitigate the role of opioid misuse or abuse in elder abuse investigations.

Medication mismanagement: An opportunity to improve communication between investigators, clients, caregivers, family members, and prescribers

Opioid medication mismanagement, either on the part of the client themselves or the caregiver, led to overmedication, falls, confusion, and vulnerability to abuse and exploitation. Even when taken appropriately, the altered cognitive state or sedation brought on by opioid medications also put older adults at risk of abuse and exploitation by others. This finding, along with the few documented discussions APS investigators had with clients regarding the risks of opioid use and misuse, presents an opportunity to improve communication between investigators, clients, caregivers, family members, and prescribers about the risks of opioid misuse, abuse, and mismanagement among older adults.

Older adults often have multiple providers and may receive their medications, including opioids, from multiple sources. A comprehensive review can reveal potential drug interactions as well as multiple prescriptions for the same medication that may not be apparent in any single provider's medical record. It also provides an opportunity to educate patients on how to properly use, store, and dispose of their medications. One evidence-based medication review and reconciliation program is the "Brown Bag Medication Review," developed by the Agency for Healthcare Research and Quality.²⁹ In this program, an older adult brings all of their prescription, over-the-counter, vitamin,

supplemental, and herbal medications to a primary care visit for a medication review that follows a specific protocol where drug therapy problems can be identified and prescription regimens can be modified accordingly.

Although the Brown Bag program was designed to take place in a primary care setting, an Area Agency on Aging in Maricopa County, Arizona, was able to implement the program successfully through a partnership with the Maricopa County Public Health Department. Older adults were able to bring their medications in a "brown bag" and have their medications reviewed by a licensed pharmacist, and results were followed up with the client's providers. Participants also received an educational presentation on proper medication storage, disposal, and other community resources. Given our findings on medication mismanagement, Maine APS might consider forming a similar partnership with Maine's Area Agencies on Aging or the Office of Behavioral Health to enable APS clients to participate in a Brown Bag Medication Review to reduce the risks of medication mismanagement among clients who use opioid medications.

SUD, OUD, and other risks for older adults: Prescribing guidelines and prescriber-patient conversations about safety

Related to medication mismanagement is the finding that clients with Opioid-related investigations were prescribed opioids while also exhibiting SUD or OUD behaviors. Although it is not clear if these behaviors were apparent before or after a client received their prescription, this finding suggests that prescribers of opioid medications may have to go beyond following the prescribing guidelines in terms of limiting pill quantity and duration of treatment and have in-depth conversations with their patients about how they will safely use, store, and dispose of their medications.

Starting in 2017, prescribers in Maine have been required to check the Prescription Monitoring Program prior to prescribing opioid medications and to conduct a risk assessment of the patient to determine if the benefits of the medication outweigh the risks of use. The finding of APS clients exhibiting SUD and OUD behaviors while also being prescribed opioids, plus the many instances of clients who were not able to take their medications properly and ending up overmedicating or in some cases overdosing, suggests a need to use an age-specific risk assessment to help determine if an opioid is the best medication for a given circumstance. The STOPP/START tools (Screening Tool of Older Person's Prescriptions/Screening Tool to Alert doctors to Right Treatment), are a validated, reliable screening tools that reduce potentially inappropriate prescribing and adverse drug events specifically for older adults.³⁰ Older adults may be reluctant to share information with their doctors that would indicate a loss of ability to care for themselves, including proper use, storage and disposal of medications. An age-specific, reliable screening tool could provide prescribers more accurate information about how well older adults are able to manage opioid prescriptions.

Age-specific treatment options: Generationally based

The finding that clients in Opioid-related investigations tended to be younger than in Non-drug-related investigations suggests a potential need for age-specific treatment options for 60-69-year-olds, the Baby Boomer generation. In general, treatment options specifically targeting older adults are rare, but research indicates older adults may have better outcomes with long term substance abuse treatment that includes chronic disease management, as these conditions impact the individual's need for ongoing pain management.³¹ Multi-disciplinary approaches to pain management that include both pharmaceutical and non-pharmaceutical treatments, and cognitive behavioral, physical and occupational therapies can improve pain management and reduce inappropriate opioid use by older adults.^{32, 33} Increasing the availability of age-specific SUD and OUD treatment options and improving pain management could help older adults to stop using opioid prescriptions while maintaining adequate pain relief, thereby reducing the availability of these medications to steal or abuse.

Fear of consequences: Investigation approaches to develop trust and safety

The finding that clients in Opioid-related investigations refused APS services more often than in Non-drug-related investigations points to the complexity of these investigations. Clients were afraid that they would be moved out of their home against their will, that their opioid medication would be discontinued, or that their family member would get in trouble if the client accepted services or even talked to the APS investigator. These perceptions are not necessarily unique to Opioid-related investigations, but they do present a challenge for investigators who are trying to stop the abuse from happening and to offer assistance for clients to access services for which they qualify but are not receiving.

To help combat fears of losing access to opioid medications among their clients, the Maricopa County Area Agency on Aging developed a new strategy when talking about medication management. Case workers had found that when they started a medication management discussion by discussing the opioid medication first, their clients were reluctant to participate. However, if the case workers started a more general discussion of how the client uses and stores all of their medications, the discussions were more fruitful. The case workers were able to develop a rapport with the client and discuss how proper storage of all medications can keep grandchildren or pets safer in the home as well as keep the client safe from others who might steal the medication.

Improved communications through Elder Abuse Task Forces

In Maine, there may be an opportunity to increase or enhance communication with older adults about OUD and treatment options through the Elder Abuse Task Forces (EATFs) around the State. EATFs educate their communities about elder abuse and provide advocacy for victims. These multidisciplinary teams often have representation from law enforcement, public health, Maine APS, Area Agencies on Aging, housing authorities, Maine Legal Services for the Elderly, domestic violence and sexual assault advocates, and financial services personnel who come together to meet the needs of elder abuse victims in their communities. Adding representatives from the SUD or OUD treatment community to these EATFs could provide another way to connect victims of elder abuse who have opioid medication mismanagement issues or OUD to available services.

Improved data collection and monitoring efforts for opioid or other drug use in elder abuse investigations

Lastly, to assist with tracking and research activities in the future, improved data collection on inappropriate opioid or other drug use in elder abuse investigations could help Maine APS monitor trends in these types of investigations more easily. Adding a data field to the APS tracking database to reflect the inappropriate opioid use, either by the client or the alleged perpetrator, would enable these investigations to be flagged for internal review or consultation with a multidisciplinary team, such as an existing EATF.

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²¹ Benson, (2018), p. 3.

²² 22 MRSA §3471, available at <u>https://www.mainelegislature.org/legis/statutes/22/title22sec3471.html</u>
 ²³ 22 MRSA §3472, available at <u>https://www.mainelegislature.org/legis/statutes/22/title22sec3472.html</u>
 ²⁴ Ibid.

²⁵ Office of Aging and Disability Services, Maine Department of Health and Human Services (2016). *Adult Protective Services General Adult Population July 1, 2009 through June 30, 2014.*

²⁶ Office of Aging and Disability Services, Maine Department of Health and Human Services (2017). *Adult Protective Services State Fiscal Year* 2017, *July* 1, 2016 *through June* 30, 2017.

²⁷ Conrad et al., (2016), p. 376.

²⁸ Benson, (2018), p. 3.

²⁹ Weiss, B. D., Brega, A. G., LeBlanc, W. G., Mabachi, N. M., Barnard, J., Albright, K., Cifuentes, M., Brach, C., & West, D. R. (2016). Improving the effectiveness of medication review: guidance from the health literacy universal precautions toolkit. *Journal of the American Board of Family Medicine: JABFM*, 29(1), 18–23. <u>https://doi.org/10.3122/jabfm.2016.01.150163</u>

³⁰ Gallagher, P., Ryan, C., Byrne, S., Kennedy, J., & O'Mahony, D. (2008). STOPP (Screening Tool of Older Person's Prescriptions) and START (Screening Tool to Alert doctors to Right Treatment). Consensus validation. *International journal of clinical pharmacology and therapeutics*, 46(2), 72–83. <u>https://doi.org/10.5414/cpp46072</u> ³² Jamison, R. N., Ross, E. L., Michna, E., Chen, L. Q., Holcomb, C., & Wasan, A. D. (2010). Substance misuse treatment for high-risk chronic pain patients on opioid therapy: a randomized trial. *Pain*, *150*(3), 390–400.

³³ Makris, U. E., Abrams, R. C., Gurland, B., & Reid, M. C. (2014). Management of persistent pain in the older patient: a clinical review. *JAMA*, *312*(8), 825–836. <u>https://doi.org/10.1001/jama.2014.9405</u>

³¹ Lehman, S.W. & Fingerhood, M. (2018). Substance use disorders in later life. *New England Journal of Medicine*, 379, 2351-2360. <u>https://www.nejm.org/doi/10.1056/NEJMra1805981</u>

Appendix

Maine and National opioid-related emergency department visits and first-time treatment hospital admissions

Since 2010, opioid-related emergency department visits and first-time treatment admissions have increased in Maine and nationwide for older adults.							ssions		
		2010	2011	2012	2013	2014	2015*	2016	2017
Maine	ED Visits	98	98	108	95	105	126	137	118
	Inpatient Treatment Admissions	247	267	290	295	275	280	352	302
Nationwide	ED Visits	43	49	60	63	67	86	111	118
	Inpatient Treatment Admissions	193	233	239	231	248	295	392	407

Source: https://www.hcup-us.ahrq.gov/faststats/OpioidUseServlet

*In October 2015, the ICD-10-CM diagnostic coding system was implemented which resulted in a spike in recorded opioid-related ED and inpatient use in that quarter. Subsequent quarters showed less of an impact of the change in coding. For more information on this change please see <u>https://www.hcup-us.ahrq.gov/datainnovations/ICD-10CaseStudyonOpioid-RelatedIPStays042417.pdf</u>

Search terms used to find opioid-related investigations in the MAPSIS database

Search Term	Includes
12-step	
ABSTRAL	
ACTIQ	
Addict	Addicted
Alcohol	Alcohol and Other Drugs
AOD	
ARYMO	
AVINZA	
BELBUCA	
Blackout	
bought drugs	
BUPRENORPHINE	

BUTALBCODEIN	
BUTORPHANOL	
BUTRANS	
buy drugs	
buys drugs	
cocaine	
CODEINE	DHCODEINE, DIHYDROCODEINE
Codepend	Codependence, Codependency, Codependent
coke	
CONZIP	
crack	
crystal meth	
Dealer	
DEMEROL	
Detox	
DIHYDROCOD	
DILAUDID	
DISKETS	
DOLOPHINE	
Drug abuse	
Drug house	
drug misuse	
drug problem	
Drug treatment	
Drug use	
DUI	
DURAGESIC	
EMBEDA	
Enabling	
ENDOCET	
ENDODAN	
EXALGO	
FENTANYL	
FENTORA	
getting high	
got high	
Halfway house	
Heroin	
HYCET	
HYDROCODONE	
HYDROMORPHONE	

HYSINGLA	
IBUDONE	
illicit	
Intoxicated	
Intoxication	
Junkie	
KADIAN	
LAZANDA	
LEVORPHANOL	
LORCET	
LORTAB	
Medication-assisted	
treatment	
MEPERIDINE	
meth head	
Methadone	
METHADOSE	
methamphetamine	
MORPHABOND	
MS CONTIN	
naloxone	
Narcan	
Narcotic	
needle	
NORCO	
NUCYNTA	
OPANA	
Opiate	
Opioid	
OPIUM	
OUI	
Overdose	
OXAYDO	
ΟΧΕCTΑ	
oxycodone	
OXYCONTIN	
OXYMORPHONE	
paraphernalia	
PENTAZOCINE	
PERCOCET	
PERCODAN	

PRIMLEV	
Recovery	
Rehab	
Relapse	
REPREXAIN	
ROXICET	
ROXICODONE	
Suboxone	
Substance	
SUBSYS	
SUD	
SYNALGOS	
syringe	
TAPENTADOL	
TRAMADOL	
TREZIX	
Twelve step	
Twelve-step	
ULTRACET	
ULTRAM	
VICODIN	
VICOPROFEN	
Withdrawal	
XARTEMIS	
XODOL	
ХТАМРZA	
XYLON	
ZAMICET	
ZOHYDRO	

Thematic Coding Framework

WHO HAS THE OPIOID PROBLEM?				
CLIENT	PERPETRATOR	OTHER		
 Substance Use Disorder Has active OUD Has history of OUD Receives OUD Tx (Methadone, Suboxone, or Naltrexone) Drug seeking/doctor shopping Has overdosed 	Substance Use Disorder • Has active OUD • Has history of OUD • Receives OUD Tx (Methadone, Suboxone, or Naltrexone) • Has overdosed	 Substance Use Disorder Has active OUD Has history of OUD Receives OUD Tx (Methadone, Suboxone, or Naltrexone) Has overdosed 		
 Family history of OUD Abuses alcohol Abuses benzodiazepine 	 Family history of OUD Abuses alcohol Abuses benzodiazepine 	 Family history of OUD Abuses alcohol Abuses benzodiazepine 		
Opioid Use Opioid use WITH Rx Illicit opioid use ¹ Selling/dealing opioids Barriers in accessing opioid Rx ² 	Opioid Use Illicit opioid use ¹ Selling/dealing opioids 	Opioid Use • Illicit opioid use ¹ • Selling/dealing opioids		
 Rx Misuse/Mismanagement Doesn't understand effects or instructions Reliant on others for dosing Incorrect dosage, accidental Incorrect dosage, on purpose Hiding medication 	Rx Misuse/Mismanagement • Withholding medication ² • Stealing someone's Rx opioids	 Rx Misuse/Mismanagement Withholding medication ² Stealing someone's Rx opioids 		
 NOTES: Client Includes any opioid used without a prescription (e.g. pills, heroin, fentanyl, etc.) Policy issues, can't drive to pick up their own prescription, etc. 	 NOTES: Perpetrator and Other 1. Includes any opioid used without a prescription (e.g. pills, heroin, fentanyl, etc.) 2. Includes: preventing client to take medications as intended, caretaker's fear client will become addicted, the appropriateness of the prescription, concern of comorbid alcohol use, etc. 			

HOW HAS OPIOID PROBLEM EFFECTED CLIENT?

IMPACT

Client's Health Compromised ¹

Client's Finances

- Theft of cash or belongings
- Unauthorized use of client's bank accounts (ATM and/or CC)
- Loss of property ownership or control
- Can't access financial resources

Relationship Issues

- Kinship care
- Estrangement from family
- Client doesn't want to get perpetrator in trouble

Client's Environment

- Housing poses no concerns
- Squatters in client's home
- Unstable housing situation ²
- Unsafe living conditions/squalor ³

NOTES: Impact

- **1.** Includes: Increased fall risk cognitive impairment, poor hygiene, nutrition, etc. due to client or caretaker's OUD
- **2.** Includes: Homelessness, risk of eviction due to behavior (SA, OUD, violence), unstable housing situation (e.g. couch surfing), not enough \$ for rent, family dynamic causing loss of housing, etc.
- **3.** Includes: Physical condition of housing and surroundings e.g. trash impeding access to home, home interior squalid or in serious disrepair, hoarding, and issues related to plumbing/heating/electrical systems

WHAT WAS THE OUTCOME OF APS INVESITGATION?

OUTCOME

APS Activities

- Client denies opioid problem in self and/or perpetrator
- Client denies elder abuse allegation
- Client is afraid of being moved without consent
- Investigator discusses risks of opioid misuse

Improved Situation

- Client's Environment
- Client's Finances
- Client's Health
- Client's Relationships

Additional quantitative analysis results

Allegation Disposition by Type of Allegation¹²

Allegation disposition rates in	Allegation disposition rates in Opioid-related and Other Illicit Drug-related				
investigations compared to No	on-drug-related in	vestigations			
Caretaker Neglect Allegations					
	Substantiated	Unsubstantiated	Undetermined		
Opioid-related N=85	25%*	61%	14%		
Other Illicit Drug-related N=96	22%	65%	14%		
Non-drug-related N=2,731	14%	74%	12%		
Physical Abuse Allegations					
Opioid-related N=29	34%	45%	21%		
Other Illicit Drug-related N=28	29%	61%	11%		
No-drug-related N=701	22%	61%	17%		
Emotional Abuse Allegations					
Opioid-related N=33	30%	61%	9%		
Other Illicit Drug-related N=40	23%	63%	15%		
Non-drug-related N=1,057	20%	63%	17%		
Exploitation Allegations					
Opioid-related N=105	28%	50%	23%		
Other Illicit Drug-related N=143	29%*	57%	14%		
Non-drug-related N=2,591	20%	62%	18%		
Self-neglect Allegations					
Opioid-related N=90	37%	49%	14%		
Other Illicit Drug-related N=111	41%	50%	9%		
Non-drug-related N=3,475	31%	54%	15%		
Safety Issues/At Risk Allegations					
Opioid-related N=139	36%	49%	15%		
Other Illicit Drug-related N=186	35%	54%	11%		
Non-drug-related N=5,207	28%	59%	13%		

*p-value < .05

¹² Note: there were investigations of sexual abuse during the time period, but the numbers were too small to report in this analysis.