



Office of The Ulster County Comptroller

Medical Examiner's Office Analysis

Revised March 15, 2019

The Medical Examiner's Office ("Office") is a division of the Ulster County Department of Health and Mental Health. It is tasked with performing examinations, often including autopsies, in order to investigate, verify, and certify the "deaths of persons dying from criminal violence, accident, suicide, sudden death without a physician present, in prison or in any suspicious or unusual manner."¹ An autopsy will typically yield information sufficient to "establish the cause and manner of death [and] may also assist in the grieving process, uncover familial disease, provide evidence for settlement of death benefits, and aid in adjudication of criminal cases."²

This report follows up on our prior analysis in 2018 regarding the uptick in the Medical Examiner's budget from 2015-2017. All statistics included within the previous report have been updated to reflect information available from 2018 in order to examine the effectiveness of recent structural changes to the Office.

Changes in Structure and Expenses

Purpose of the Medical Examiner's Office Restructuring

According to the Commissioner of Health and Mental Health for Ulster County, the Office underwent restructuring in 2016 to meet operational and service delivery expectations set by the County Executive. The Executive at that time required the Office to provide 24/7 coverage and reduce the time it took to produce autopsy reports. A 60-day window was targeted for the production of autopsy reports, barring extenuating circumstances.

Office Expenditures

The actual expenditures of the Medical Examiner's Office have been on the rise since 2015. The Office's expenses are displayed in the following table and accompanied by a breakdown of the types of costs. The specific cost drivers within the three segments identified (Contractual, Personal Services, and Employee Benefits) are explained in later sections.

¹ See *gen* "Medical Examiner Division." Available at <http://ulstercountyny.gov/health/medical-examiner-division> (accessed on February 1, 2018)

² See *gen* "Frequently Asked Questions/ Information for Families," by the Ulster County Department of Health. Available at <http://ulstercountyny.gov/sites/default/files/FAQ%20INFORMATION%20FOR%20FAMILIES%20rev.pdf> (accessed on February 1, 2018)

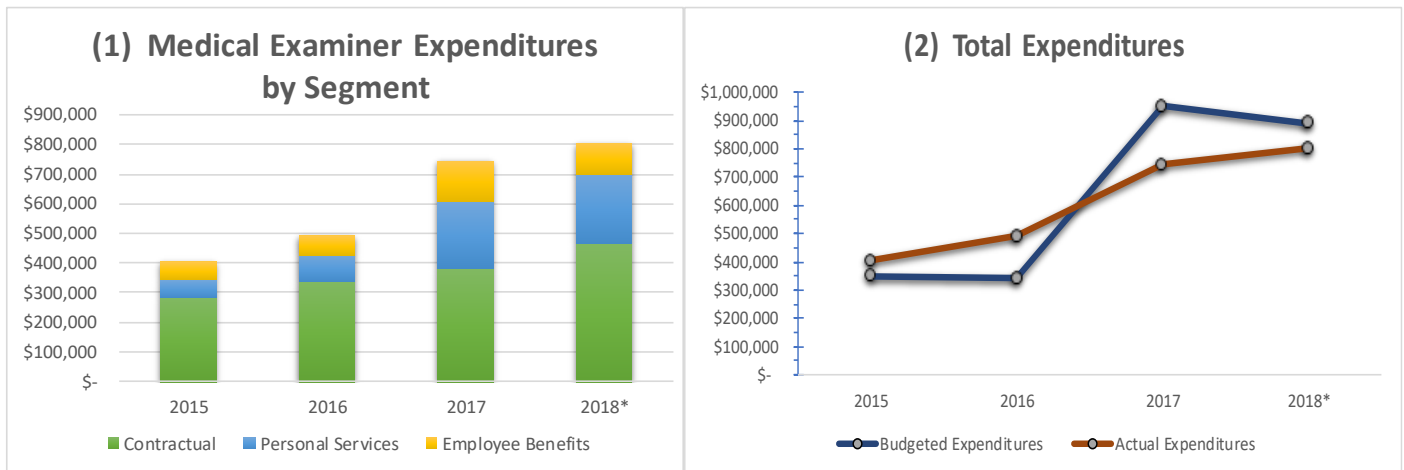


Medical Examiner Actual Expenditures				
Account Description	2015	2016	2017	2018*
Contractual	281,774	339,874	384,673	462,265
Personal Services	63,794	85,581	224,470	237,152
Employee Benefits	58,844	66,339	135,371	103,176
GRAND TOTAL	\$ 404,412	\$ 491,794	\$ 744,514	\$ 802,593

*2018 actual expenses as of March 12, 2019, per Ulster County's financial management system

Total actual expenditures of the Office nearly doubled from 2015-2018, growing \$398,181 over this timeframe.

The diagrams below show (1) the actual expenditures by segment of the Medical Examiner's Office from 2015 through 2018 and (2) actual versus budgeted expenditures over the same period:



*2018 actual expenses as of March 12, 2019 per Ulster County Financial Systems

In the first chart, each expenditure type is stacked to illustrate its respective portion of total expenses over the four-year period. Contractual and Personal Services (as represented by the green and blue segments, respectively) grew from 2015-2018, while Employee Benefits (as shown in yellow) increased from 2015-2017 before decreasing in 2018. The total number of autopsy reports completed by the Office remained steady from 2015-2017 but jumped about 20% from 2017 to 2018. In the second chart, we see that actual expenses exceeded budgeted amounts in 2015 and 2016; however, actual expenditures for the last two years were lower than what was budgeted.



Explanation of Changes in Personal Service Expenditures

The following chart details Personal Services before and after the restructuring of the Office:³

Personal Service Expenditures	2015	2016	2017	2018*
Full-Time Deputy Medical Examiner (MI)	\$ -	\$ -	\$ 60,027	\$ 66,342
Chief Forensic Investigator	-	1,897	-	-
Part-Time Medical Examiner	38,260	50,188	77,704	80,670
Part-Time Deputy Medical Examiner	25,534	33,496	51,861	53,727
Other Part-Time Salary (non benefit)	-	-	34,878	36,413
Total Personal Service Expenditures	\$ 63,794	\$ 85,581	\$ 224,470	\$237,152

*2018 actual expenses as of March 12, 2019, per Ulster County's financial management system

In 2015, the Medical Examiner's Office employed one part-time medical examiner and one part-time deputy medical examiner. The primary growth behind Personal Services for 2016 was attributed to adjustments to the salaries and hours worked for the Office's two part-time employees. On October 1, 2016, the part-time medical examiner's hourly wages dropped from \$87.89 to \$49.81 while bi-weekly hours worked surged from 17 to 60. Similarly, on the same date, the part-time deputy medical examiner's hourly wages decreased from \$58.66 to \$56.99 while bi-weekly hours worked jumped from 17 to 35. Altogether, these modifications had the combined effect of approximately doubling the expenditures related to these positions. This increase in staffing hours was one of the initial actions made by the Office to reach its goal of 24/7 personnel availability to facilitate site visits at any time.

The aforementioned changes to the two existing part-time staff members were maintained in 2017. Two additional personnel added during 2017 included a full-time deputy medical examiner for medicolegal investigations and a (non-benefitted) part-time deputy medical examiner. These alterations continued the efforts initiated in 2016 to have 24/7 staffing of the Office. However, forensic pathology services were not performed "in-house" (i.e. by a salaried, county-employed pathologist on staff) and remained a contractual expenditure. The hike in Personal Service expenditures from 2017-2018 are due to hourly rate increases.

Explanation of Changes in Contractual Expenses

The next chart shows the breakdown of Contractual Expenditures before and after the restructuring of the Office:

Contractual Expenditures	2015	2016	2017	2018*
Forensic Services	\$ 125,350	\$ 185,715	\$ 286,222	\$ 337,000
Laboratory Services	71,422	69,920	41,698	52,030
Professional Services	28,781	26,471	33,148	43,293
Other Misc Contractual	56,221	57,768	23,605	29,942
Total Contractual Expenditures	\$ 281,774	\$ 339,874	\$ 384,673	\$462,265

*2018 actual expenses as of March 12, 2019, per Ulster County's financial management system

³ "Personal Services" are employment contract related costs, which include part-time and regular pay for the Office.



Forensic Services include performance of the autopsy itself. As mentioned above, these services remained under contract during 2017 instead of employing an “in-house” forensic pathologist. The most recent contract for forensic services is with Westchester Medical Center and contains a fixed salary of \$337,000 per year for the staffing of a full-time pathologist (i.e. regardless of the volume of autopsies actually performed).⁴ Due to the timing of this contract, total expenses are not fully represented in the 2017 Forensic Services value in the chart above. The high fixed dollar amount associated with this contract has increased the actual costs of forensic services, as shown by the \$151,285 growth from 2016-2018.

Laboratory Services are related to facility usage, toxicology, histology, and various other testing. Facility usage costs declined in 2017 because toxicology and histology testing were largely being conducted at the same facility as the autopsy (i.e. Westchester Medical Center). *Professional Services* encompass the removal and transport of decedents, as well as their placement in various funeral homes. *Other Miscellaneous Contractual Expenses* represent the storage of corpses, medical supplies, and other operational costs such as telephone service and travel. The expenditures associated with each service rose from 2017-2018.

Explanation of Changes in Employee Benefit Expenses

The following chart displays Employee Benefit Expenditures before and after the restructuring of the Office:

Employee Benefit Expenditures	2015	2016	2017	2018*
Retirement	\$ 10,963	\$ 12,675	\$ 35,023	\$ 34,762
Social Security/FICA	4,704	6,370	16,841	17,756
Health Insurance	43,177	47,294	83,507	50,658
Total Employee Benefit Expenditures	\$ 58,844	\$ 66,339	\$ 135,371	\$103,176

*2018 actual expenses as of March 12, 2019 per Ulster County Financial Systems

When payroll rises, *Social Security/FICA* benefits grow as well. *Retirement* costs generally have a direct correlation to personal services; however, there was a slight decrease from 2017-2018, which can likely be attributed to a lower rate in retirement contributions by the County to the State. *Health Insurance* costs have been escalating on the whole; however, the large escalation of these costs seen in 2017 was due to the addition of a benefitted employee, and the subsequent decrease in 2018 seems to be related to an employee opting out of health insurance coverage.

⁴ This salary is not entirely reflected within the 2017 calendar year, as the contract runs from 5/1/17-4/30/18 (i.e. one-third of this contracted expense will be incurred in 2018).



Changes in Output and Other Efficiencies

Autopsy Report Lag Time

One of the reasons cited for the restructuring of the Medical Examiner's Office was to bring the lag time regarding the completion of autopsy reports up to the best standards of service delivery per the County Executive's directive. The autopsy statistics for 2015 and 2016 demonstrated a similar number of deaths that required a report and yielded similarly deficient figures related to annual average lag time, as well as percentage of reports taking over 60 days to complete. Since 2016, the data shows that annual average report lag time and the number/percentage of reports that took over 60 days to complete have substantially decreased. This statistical improvement shows the Office has become more efficient as far as the timeliness of the completion of reports.

Autopsy Completion Statistics				
Year	2015	2016	2017	2018
# of Reports over 60 day lag	136	135	50	14
Total Deaths Requiring Report	142	148	142	173
% of Reports over 60 day lag	96%	91%	35%	8%
Annual Average Time Lag (days)	118	152	51	30

Number of Calls Received and Site Visits

The hiring of the full-time deputy for medicolegal investigations and part-time deputy, as well as increasing working hours of existing part-time employees, bolstered the Office's capability to attend more death scenes – tripling the number of site visits over the period of restructuring between 2016 and 2017. Notably, the number of site visits dropped dramatically from 2017 to 2018, seeming especially low when compared to other metrics such as calls received and autopsies performed. The following chart shows the number of calls received and the number of site visits annually from 2015 through 2018:

Total Calls & Visits				
Year	2015	2016	2017	2018
Calls Received	388	386	401	267
Site Visits	46	40	120	79



Cost Per Autopsy

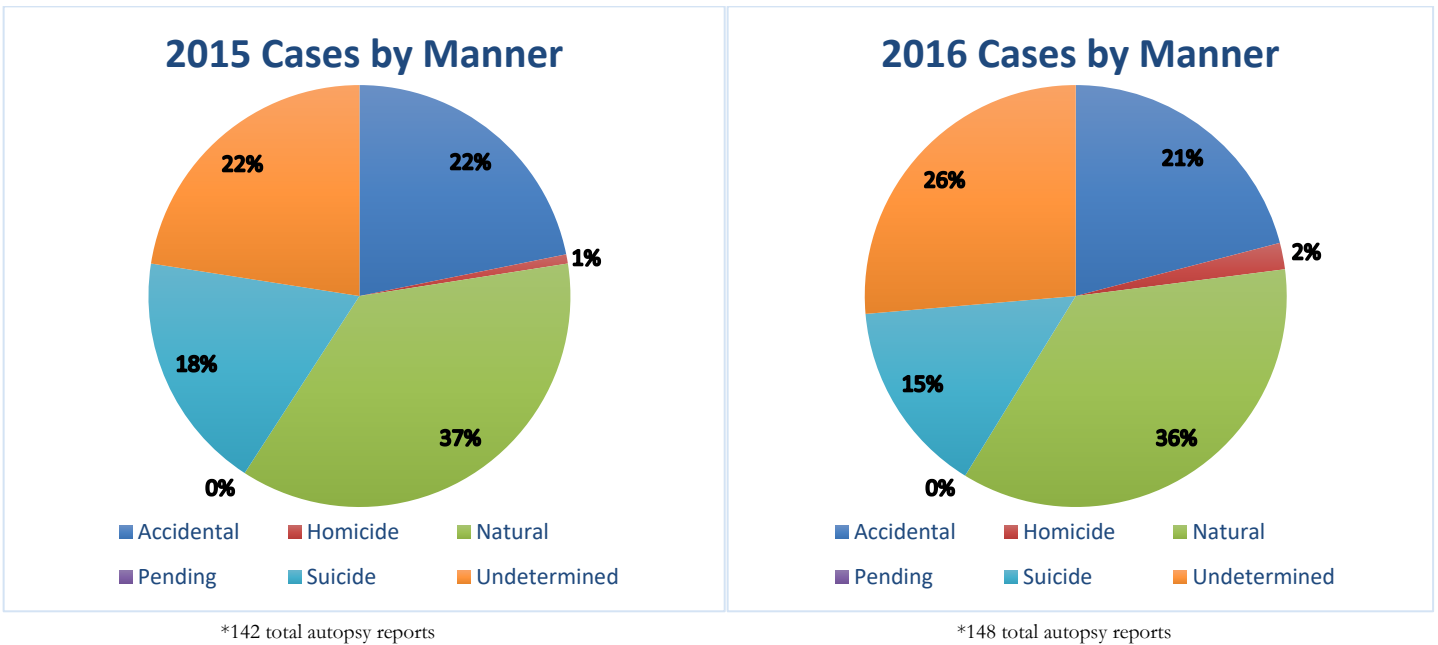
If we take the cost of operating the Medical Examiner’s Office and divide it by the total number of autopsy reports completed for each year, an annual increase in the calculated cost per autopsy is shown from 2015-2017. The following chart shows the ratio of expenditures to the number of autopsy reports completed for the last four years:

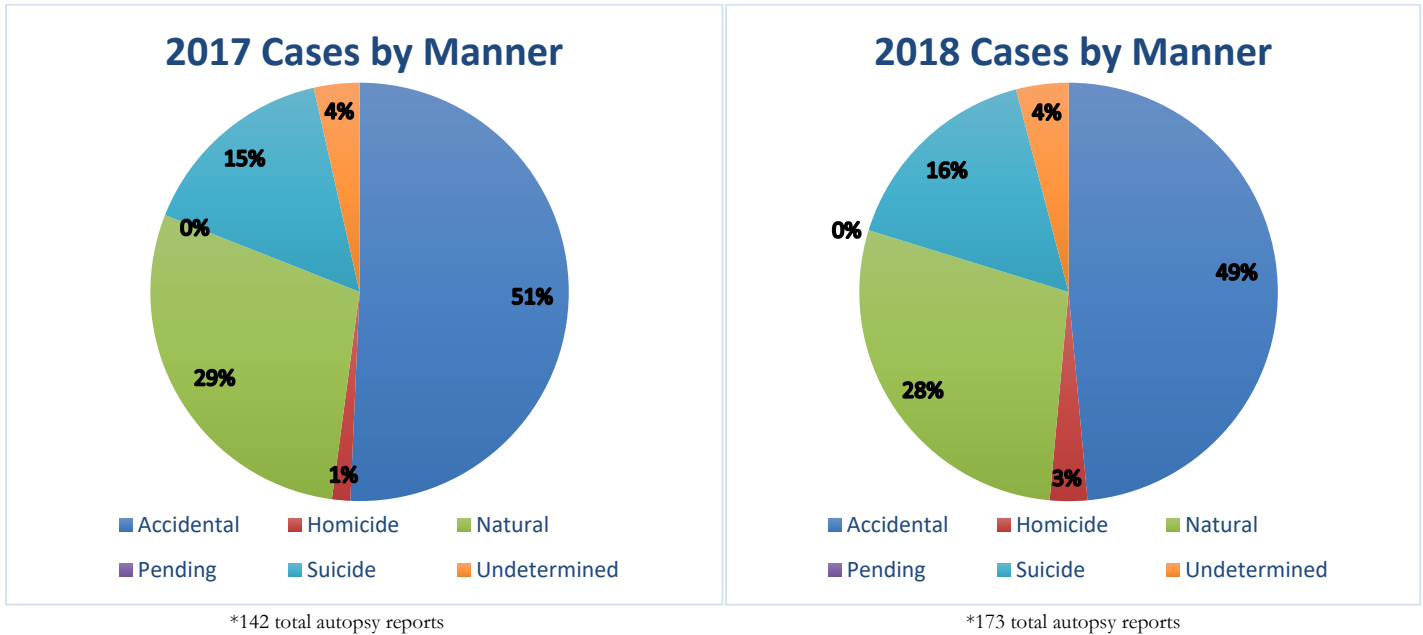
Cost Per Autopsy				
	2015	2016	2017	2018
Total Actual Expenditures	\$ 404,412	\$ 491,794	\$ 744,514	\$ 802,593
Total Autopsy Reports Completed	142	148	142	173
Calculated Cost Per Autopsy	\$ 2,848	\$ 3,323	\$ 5,243	\$ 4,639

Note: This calculation is not the true cost of performing an autopsy; rather it is demonstrative of the changing cost and output of the Medical Examiner’s Office

Performance in Reporting Manner of Death

The following pie charts show the percentage of autopsy reports by manner of death for each year between 2015 and 2018:





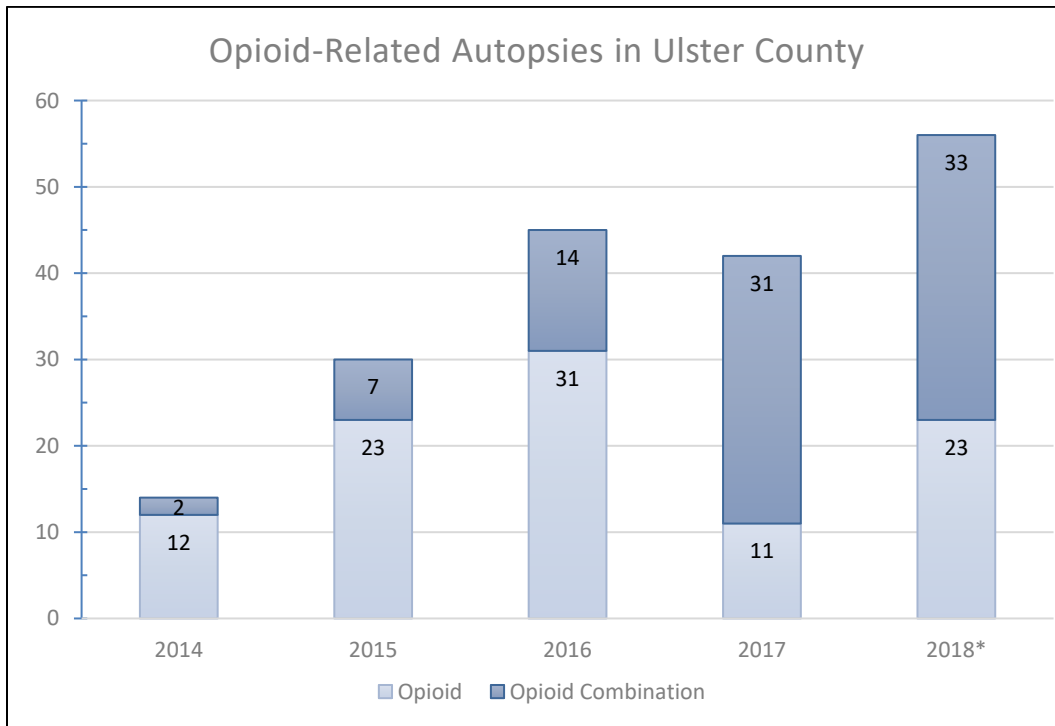
**Data for all charts is current as of March 12, 2019

By analyzing the historical variance of manner of deaths, we see that 22% and 26% of cases in 2015 and 2016, respectively, were classified as “undetermined” (shown in orange in the charts above). In 2017 and 2018, the percentage of “undetermined” cases was reduced to 4%, indicating a potential increase in performance quality from 2015. The charts show significant shifts in the occurrence of two manners of death reported from 2016-2017: (1) a reduction in “natural” deaths (shown in green) and (2) the percentage of “accidental” deaths (shown in dark blue) more than doubled. Although there was an uptick in the total number of autopsy reports from 2017-2018, no major statistical changes in the manner of deaths reported were noticed across the same period.

The specific conditions surrounding a death may determine which tests need to be conducted upon the deceased by law. However, due to the complexity and vast array of possible conditions surrounding a death, tests are largely conducted at the discretion of the pathologist performing the autopsy. Therefore, a direct correlation between manner of death and cost of testing cannot be made with confidence.



The following chart shows the escalating number of reported opioid-related deaths in Ulster County during from 2014 through 2018:



*Data is current as of March 12, 2019

Conclusion

Pros and Cons to the Taxpayer

The restructuring of the Medical Examiner’s Office improved its capability to attend more death scenes by providing a 24/7 service. Reorganization of the Office also allocated more hours to staff for reporting and archiving autopsy findings. The most recent forensic services contract with Westchester Medical Center coincided with more precise reporting on manners of death (i.e. reduction of the number of “undetermined” classifications), as well as much more timely autopsy reports. Regarding these observations, the Comptroller believes this contract may have delivered greater outcomes as compared to past contractual performance.

However, the overall restructuring has resulted in heightened costs to the Office – and thus, the taxpayer. Additionally, while there has been a significant increase in staffing levels, it appears that responsibilities and workload have remained substantially the same, which may result in operational inefficiencies.



For general comparative purposes, the chart below contrasts the expenses and performance related to the Medical Examiner's Offices for both Dutchess and Ulster County:

	Ulster County (2018)	Dutchess County (2018)**
Autopsies Required	173	315
Site Visits Made	79	454
Total Expenses of Department	\$802,593	\$1,125,145
Average Annual Bond Payment***	\$0	\$307,320
Annual Departmental Revenues	\$525	\$66,891
Net ME Cost to County	\$802,068	\$1,365,574
Calculated Cost Per Autopsy*	$(\$802,068 \div 173) =$ \$4,636 per autopsy	$(\$1,365,574 \div 315) =$ \$4,335 per autopsy

*Note: This calculation is not the true cost of performing an autopsy or per case; rather it is demonstrative of the cost and output of the Medical Examiner's Office.

**Autopsies, Site Visits, and Total Expenses were provided through correspondence with the Dutchess County Medical Examiner's Office during March 2019.

***As bond payments only last for a finite period of time, the calculated cost per autopsy in Dutchess County will be reduced accordingly once the bond is fully paid.