



Office of The Ulster County Comptroller

Medical Examiner's Office Analysis

April 18, 2018

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

While analyzing the Ulster County Budget, the Comptroller observed anomalies in the financing of the Medical Examiner's Office. The Office's costs of operations increased considerably over the period from 2015 to 2017. The Comptroller recognizes that the Medical Examiner's Office underwent significant restructuring – particularly between 2016 and 2017 – that had a significant impact on its actual expenditures. This report will analyze operational adjustments and expense variances over the period of 2015-2017 in order to relay the effectiveness of these changes to both the public and policymakers.

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 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.

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)



Office Expenditures

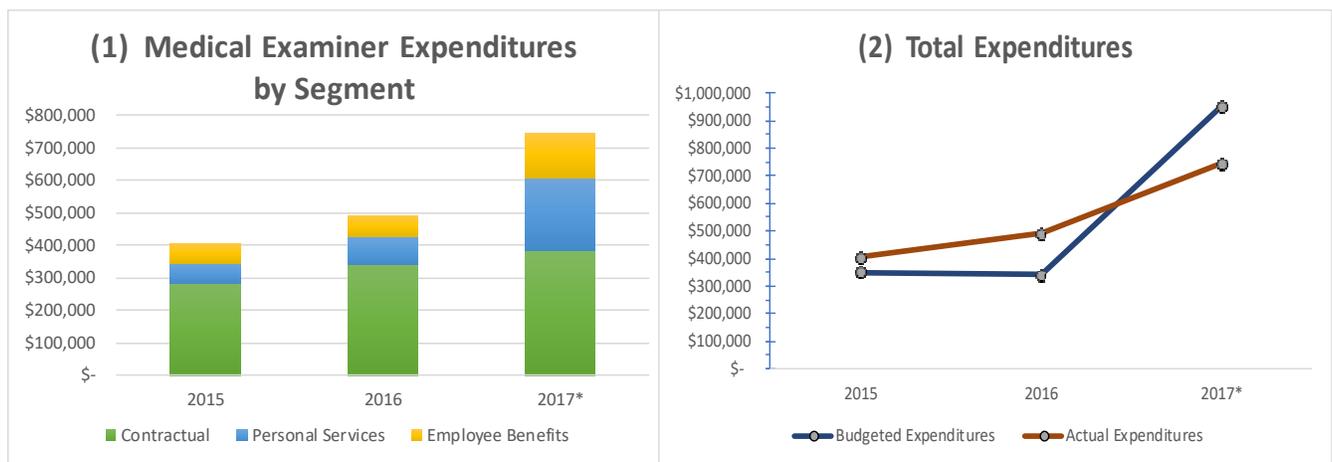
The actual expenditures of the Medical Examiner’s Office have been on the rise since 2015. The Office’s expenses are displayed in the table below and accompanied by a breakdown of the types of costs. The specific cost drivers within the three segments identified (Contractual, Personal Services, and Employee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

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

*2017 actual expenses as of March 13, 2018 per Ulster County Financial Systems

The most significant increase in total costs was incurred by the Office over the period of its restructuring. In 2017, the total expenditures of the Office were \$744,514 – or 151.39% of 2016 costs.

The diagrams below show (1) the actual expenditures by segment of the Medical Examiner’s Office from 2015 through 2017 and (2) actual versus budgeted expenditures over the same period:



*2017 actual expenses as of March 13, 2018 per Ulster County Financial Systems

In the first chart, each expenditure type is stacked to illustrate its respective portion of total expenses over the three-year period. All expenditure areas (i.e. Contractual, Personal Services, and Employee Benefits) increased from 2015 to 2017, while the total number of autopsy reports completed by the Office remained relatively steady. In the second chart, we see that actual expenses have outpaced budgeted figures for two of the last three years.



Explanation of Changes in Personal Expenditures

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

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

*2017 actual expenses as of March 13, 2018 per Ulster County Financial Systems

In 2015, the Medical Examiner’s Office employed one part-time medical examiner and one part-time deputy medical examiner. The primary growth of Personal Service Expenditures 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.

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*
Forensic Services	\$ 125,350	\$ 185,715	\$ 286,222
Laboratory Services	71,422	69,920	41,698
Professional Services	28,781	26,471	33,148
Other Misc Contractual	56,221	57,768	23,605
Total Contractual Expenditures	\$ 281,774	\$ 339,874	\$ 384,673

*2017 actual expenses as of March 13, 2018 per Ulster County Financial Systems

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 \$337k 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 they have grown 54.12% from 2016 to 2017.

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.

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*
Retirement	\$ 10,963	\$ 12,675	\$ 35,023
Social Security/FICA	4,704	6,370	16,841
Health Insurance	43,177	47,294	83,507
Total Employee Benefit Expenditures	\$ 58,844	\$ 66,339	\$ 135,371

*2017 actual expenses as of March 13, 2018 per Ulster County Financial Systems

When payroll rises, both retirement and Social Security/FICA benefits generally grow as well. Health insurance costs have been escalating on the whole; however, the large escalation of these costs seen in 2017 is due to the addition of a benefitted employee.

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. For 2014, a total of 96 deaths required the filing of an autopsy report – 90 of those reports took over 60 days to be issued from the date of death. The autopsy statistics for 2015 and 2016 indicated an increase in the number of reports needed to be completed, but yielded similar results as far as lag time and the percentage of report completion taking over 60 days. As compared to 2016, the 2017 statistics show that average report lag time was reduced by over 101 days, and the percentage of reports that took over 60 days to complete dropped by 56%. This statistical improvement shows, at least in part, that the reconstitution of the Office proved to offer greater efficiencies as far as the timeliness of the completion of reports.

Autopsy Completion Statistics				
Year	2014	2015	2016	2017
# of Reports over 60 day lag	90	136	135	49
Total Deaths Requiring Report	96	142	148	142
% of Reports over 60 day lag	94%	96%	91%	35%
Annual Average Time Lag (days)	126.5	118.2	152.0	50.5

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. The following chart shows the number of calls received and the number of site visits annually from 2014 through 2017:

Total Calls & Visits				
Year	2014	2015	2016	2017
Calls Received	319	388	386	401
Site Visits	38	46	40	120



Cost Per Autopsy

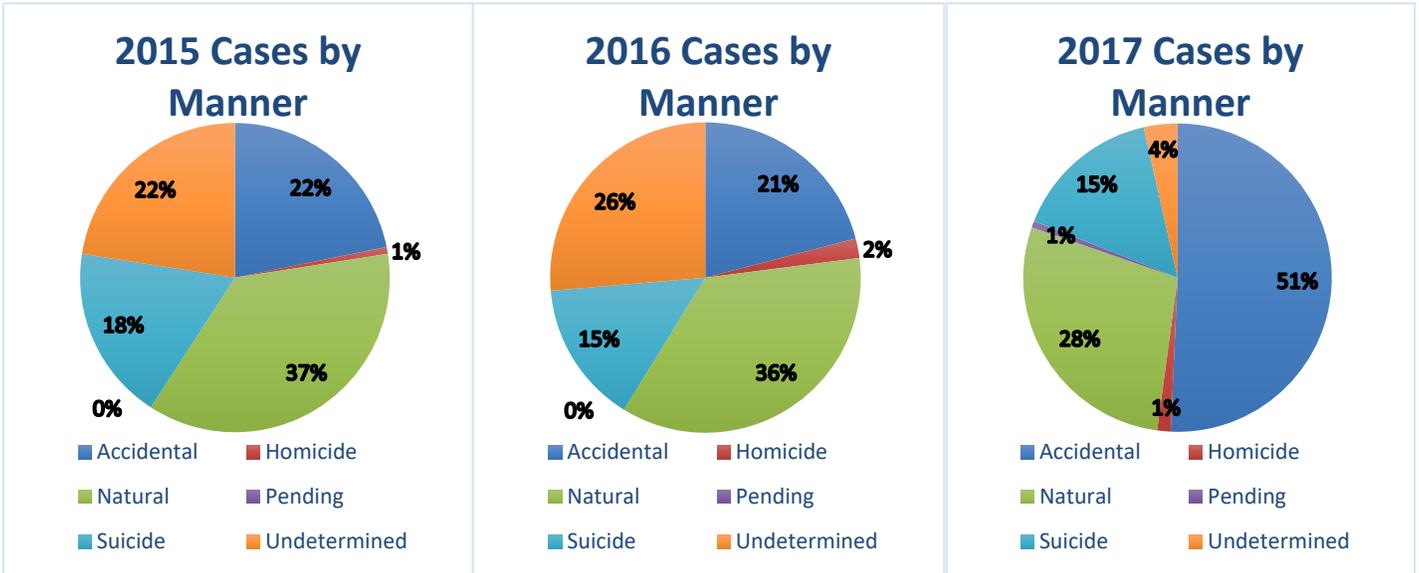
If we take the cost of operating the Medical Examiner’s Office and divide it by the total number of autopsy reports completed for each year, an annual increase in the calculated cost per autopsy is shown. The following chart shows an increase in the ratio of expenditures to the number of autopsy reports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

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

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 2017:



*142 total autopsy reports

*148 total autopsy reports

*142 total autopsy reports

**Data for all charts is current as of March 13, 2018

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, 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.



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.

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.

Findings and Recommendations

The Comptroller identifies the contract with Westchester Medical Center to be a significant component of escalating costs to the Medical Examiner's Office. The County's forensic services expenditures for 2016 were \$185,715 when pathology services were billed on an "as-performed" basis. The County's current contract for forensic services requires payment of the salary of a full-time forensic pathologist at a yearly rate of \$337,000. These observations prompt the Comptroller to recommend to the Office, as well as the Ulster County Legislature's Public Health and Social Services and Ways and Means Committees, to compare costs between "as-performed" versus "fixed rate" pathology services, conduct a review of the current agreement with Westchester Medical Center, evaluate its impact on overall contractual expenses, and reconsider its terms upon expiration. An examination of this nature should be conducted annually to assure that the needs of the County are accurately represented if forensic pathologist services are to remain on contract.

Alternatively, the Comptroller has identified several counties that staff forensic pathologists "in-house" for the performance of autopsies. For example, our neighbors in Dutchess County employ a full-time forensic pathologist as its Chief Medical Examiner.⁵ See the following table comparing each Medical Examiner's Office for Ulster and Dutchess Counties:

⁵ See *gen* "Dutchess County Adopted Budget 2018," by the Dutchess County Executive and Budget Office. Available at <http://www.dutchessny.gov/CountyGov/Departments/Budget/2018-Budget/2018-Adopted-Budget.pdf>



	Ulster County (2017)	Dutchess County (2017)**
Autopsies Required	142	285
Site Visits Made	120	390
Total Expenses of Department	\$744,514	\$1,002,053
Average Annual Bond Payment	\$0	\$307,320
Total ME Expense	\$744,514	\$1,309,373
Calculated Cost Per Autopsy*	$(\$744,514 \div 142) =$ \$5,243 per autopsy	$(\$1,309,373 \div 285) =$ \$4,594 per autopsy
Cases	247	932
Calculated Cost Per Case*	$(\$744,514 \div 247) =$ \$3,014 per case	$(\$1,309,373 \div 932) =$ \$1,405 per case

*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
 **Autopsy, Site Visit, Case, and Total Expense Figures were provided through correspondence with the Dutchess County Medical Examiner's Office during April 2018

As seen in the chart above, the “in house” approach by Dutchess County allows them to deliver services at a lower per autopsy cost even though Dutchess performs approximately double the autopsies and more than triple the site visits of Ulster County. Based on departmental feedback to our DRAFT report, we have included additional figures to reflect the costs associated with the Dutchess County Medical Examiner’s facility. The building’s construction, acquisition of land, and renovations to a nearby county records center were jointly funded by a \$4,328,458 bond and available monies of \$639,398. The bond is payable over 20 years at 4% interest, resulting in an average annual payment of \$307,320 in accordance with Dutchess County Bond Resolution No. 2011185 of 2011. Inclusive of this expense, Dutchess’ total cost per autopsy is \$4,594, which is still less than Ulster’s. Moreover, once the bond is paid, Dutchess’ cost per autopsy will further decrease, as the authorizing resolution projects “significant cost savings over 25 years of nearly \$3 million.”

The benefits to the Ulster County Medical Examiner’s Office due to bringing the performance of autopsies “in house” may be further realized in two ways: (1) the salaries of pathologists on public payroll are significantly lower than those found in private hospital settings, and (2) the Office could potentially reduce the hours that were increased during restructuring by sharing job responsibilities amongst employees. Based on this information, as well as further discussions with the County Legislature, County Executive’s staff, and Department of Health and Mental Health, the Ways and Means Committee has planned an in-depth analysis of the Westchester Medical contract for autopsy related services and the relevant issues highlighted in this report to determine the best interest of the taxpayer. We commend the Committee and its members for their attention to this matter and look forward to finalizing our analysis with the assistance of the Executive and his staff.

The Office of the Comptroller appreciates the professional courtesy extended by the Department of Health and Mental Health in responding to our inquiries as part of the completion of this report.