NOVEMBER 2016

ANALYSIS OF SELECTED ERIE COUNTY MEDICAID DATA

JANUARY 1, 2016-OCTOBER 31, 2016 AND SELECTED PRIOR PERIODS

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Hon. Mark C. Poloncarz, Esq.
Erie County Executive
95 Franklin Street, 16th Floor
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Dear County Executive Poloncarz:

In 2013, 2014 and 2015, The Office of the Medicaid Inspector General for Erie County ("MIG Team") provided you[1] with an analysis of Erie County's Medicaid data. After those reports were released, you met with the MIG Team on several occasions and asked that the team follow-up on certain issues brought up in those reports. Additionally, you asked that we discuss new topics and suggested other areas you believed were appropriate for our analysis. This report, the fourth in this series, addresses the ideas discussed at meetings over the past several years.

In May 2013, after approval from the New York State Office of Medicaid Inspector General ("OMIG"), the MIG Team received training on and access to New York State's Medicaid Data Warehouse ("MDW"). The software used to access the MDW is provided by the Salient Management Company ("SALIENT"). The MDW contains the individual transaction records for all Medicaid claims data in New York State, although the MIG Team only has access to data for Erie County recipients. The MIG Team has complete access to all Medicaid claims data in Erie County on a real-time basis.

This database is covered by the legal and regulatory provisions of the Health Insurance Portability and Accountability Act ("HIPAA"). Much of the data is confidential in nature and cannot be released under this federal law. However, amalgamations of data are allowed as long as individual privacy is not breached. OMIG and other State and local agencies required the MIG Team to agree to sign and adhere to three separate non-disclosure agreements when accessing this data.

Access to this Medicaid information allows Erie County, specifically the MIG Team, to focus audit work on areas of high or low usage, patterns of unusual usage or high Medicaid cost. This will help Erie County and New York State better manage its Medicaid costs.

[1] In this document, "you" and "your" refer to the County Executive. "We" and "our" refer to the MIG Team.

MEDICAID INSPECTOR GENERAL FOR ERIE COUNTY

Since September 1, 2012, operating under agreements with OMIG, the MIG Team has completed or is in the process of completing thirty (30) audits. These audits cover more than $89.7 million in Medicaid payments. The results of those audits have been submitted to OMIG, as per the agreements, for follow-up and action by the State.

As of October 31, 2016, we are trained to perform and authorized to perform audits on the following types of Medicaid vendors:

- Ambulette Transportation
- Assisted Living Programs
- Durable Medical Equipment
- Long-Term Home Healthcare
- Pharmacy
- Taxi Transportation

The MIG Team continues to work on a variety of projects and cooperate with OMIG and law enforcement agencies as required and/or necessary. Under the County's agreements with OMIG and other State agencies, the MIG Team is restricted from commenting on ongoing or recently completed Medicaid audits while OMIG reviews the results and considers State action.

The MIG Team, which features three employees, is funded through the State under a 2012 agreement.

As of September 1, 2016, the MIG team has completed and OMIG has reviewed and released the below 15 projects. All of the below audits are positive audit reports. Copies of the letters closing each audit are available for review on the Erie County website at http://www2.erie.gov/medicaid/.

Tops Market #210	Springcreek Pharmacy, Inc.
Tops Market # 213	Black Rock Pharmacy, Inc.
HMB Pharmacy Management LLC	South Park Pharmacy
Parkview Health Services of New York	Genesee Valley Group Health Association
Bailey Prescription Center, Inc.	Family Pharmaceutical Service
Buffalo Pharmacies, Inc.	BPNY Acquisition Group
JARE, LLC d/b/a Fillmore Pharmacy	Aries Transportation Service
Liberty Communications, Inc.	

MEDICAID

Our previous report discussed Medicaid funding within New York State and Erie County. The September 2013 report can be found at: http://www2.erie.gov/exec/sites/www2.erie.gov.exec/files/uploads/MIG%20Report.pdf.

Our report from 2014 can be found at: http://www2.erie.gov/medicaid/sites/www2.erie.gov.medicaid/files/uploads/Erie%20County%20Mig%20Report%20on%20Medicaid%20dated%20November%205%2C%202014%20.pdf

The report from 2015 can be found at: http://www2.erie.gov/medicaid/sites/www2.erie.gov.medicaid/files/uploads/pdfs/Erie%20County%20Mig%20Report%20on%20Medicaid%20dated%20November%2012%202015%20.pdf

The Federal government mandates that state Medicaid covers a core of services. States can cover or provide optional services if they so choose.

TABLE 1. Mandated and Optional State Medicaid Health Care Services[2]

Mandatory Services: States Must Cover	Optional Services: States May Cover
• Inpatient and outpatient hospital services • Physician, midwife, and certified nurse practitioner services • Laboratory and x-ray services • Nursing home and home health care for individuals over the age of 21 • Early and periodic screening, diagnosis, and treatment (EPSDT) for children under age 21 • Family planning services and supplies • Rural health clinic/federally qualified health center services	• Diagnostic, screening, preventive, rehabilitative services • Clinic services • Intermediate care facilities for the mentally retarded (ICFs/MR) • Prescribed drugs and prosthetic devices • Optometrist services and eyeglasses • Nursing facility services for children under age 21 • Transportation services (may be covered, must be assured) • Physical and occupational therapy • Home and community-based care to certain persons with chronic impairments • Dental services (for adults)

New York State covers nearly all the optional services for Medicaid.[2]

APPLYING FOR MEDICAID IN ERIE COUNTY

Qualifying for Medicaid in New York is subject to a number of rules and conditions. Income eligibility is a basic criterion

[2] From Salient HHS, "Overview of Medicaid for Salient Users" dated October 2012, Page 34.

Medicaid is a flexible program. Individuals have qualified for Medicaid in New York State despite making more than the Federal 2016 Annual Poverty Guideline. The Patient Protection and Affordable Care Act of 2010 ("ACA") creates a national Medicaid minimum eligibility level that covers most Americans with household income up to 133% of the federal poverty level. This amount is $32,319 for a family of four in 2016.

Beginning in January of 2014, the ACA provided a new and simplified method for calculating eligibility for Medicaid and some other programs. The new method uses modified adjusted gross income ("MAGI"). MAGI replaces a process that used income deductions that are different in each state and often differed by eligibility group. The new method uses an individual's MAGI, deducts 5% (called a "disregard") and compares that number to the income standards. An applicant's Adjusted Gross Income ("AGI") is easily found: it's on their most currently filed federal income tax return.[3]

For those filing a 2015 1040-EZ, the AGI is found on line 4. For those filing a form 1040 in 2015, the Adjusted Gross Income is found on line 37.[4]

Pregnant females, children, disabled persons, and others may be eligible for Medicaid if their income is above these levels and they have medical bills. Individuals who are certified blind or disabled, or age 65 or older who have more resources may also be eligible.

Medicaid covers some costs retroactively. Medicaid may retroactively cover the health care expenses for up to three (3) months prior to the application month, if the individual would have been eligible during the retroactive period. Coverage generally stops at the end of the month in which a person no longer meets the eligibility requirements.[5]

TABLE 2. Selected poverty guidelines as a percentage of the Federal poverty level [6]

Selected 2016 Annual Poverty Guidelines				
Family Size	100%	133%	150%	200%
1	11,880.00	15,800.00	17,820.00	23,760.00
2	16,020.00	21,307.00	24,030.00	32,040.00
3	20,160.00	26,813.00	30,240.00	40,320.00
4	24,300.00	32,319.00	36,450.00	48,600.00
5	28,440.00	37,825.00	42,660.00	56,880.00
The full table of 2016 Poverty Guidelines is attached as Appendix A.				

[3] From the Department of Health and Human Services website. WWW.Medicaid.gov
[4] From the Internal Revenue Service website. www.irs.gov
[5] New York State Department of Health website. http://www.health.ny.gov/
[6] US Department of Health and Human Services website. http://www.hhs.gov/

In New York State, the Minimum Wage is $9.00 per hour as of December 31, 2015.[7] Individuals earning minimum wage who work 40 hours per week for 50 weeks per year earn an annual wage of $18,000.

As an example, a family of two children and two adults, with both adults working 40 hours per week for 50 weeks at the New York State Minimum Wage as of July 1, 2016, would have an income of $36,000.00. With no other income or adjustments to their AGI, the Disregard would be $1,800. ($36,000 X 5%) In this example the MAGI would be $34,200 and this family would not qualify for Medicaid under the current guidelines.

The ACA ensures that no one would lose health coverage as a result of converting to the MAGI rules.[8] This family could be covered under Medicaid should special circumstances apply, or covered under the Medicaid adult coverage group, or they would be able to purchase insurance with the benefit of a premium tax credit and possible cost-sharing reductions through the health plan marketplace run by New York State.

If someone believes they qualify for Medicaid, or they wish to purchase insurance through the health plan marketplace run by New York State, they should apply online through the NY State of Health (www.nystateofhealth.ny.gov).

MEDICAID DATA FOR ERIE COUNTY

TABLE 3. Total Erie County Medicaid cost, for the years 2013 through 2015, and from January 1, 2016 through October 31, 2016.

Medicaid Costs For The Years 2013 - 2016				
	2013	2014	2015 [A]	2016 [B C]
Medicaid Costs	$ 1,494,882,895	$ 1,641,112,506	$ 1,779,884,241	$ 1,422,094,946
Erie County's Portion of Medicaid	$ 217,880,408	$ 211,425,799	$ 203,562,478	$ 205,528,355
A The Medicaid costs for 2015 are subject to change.				
B Medicaid costs for 2016 are for the period January 1, 2016 through October 31, 2016 and are incomplete.				
C Erie County's portion of Medicaid costs for 2016 are for the entire fiscal year.				

[7] New York State Department of Labor website. www.labor.ny.gov
[8] US Department of Health and Human Services website. http://www.hhs.gov/

The Medicaid cost data in Table 3 for the years 2013 and 2014 differ from those published in the November 2014 report. Medicaid claims must be initially submitted within 90 days of the date of service, but claims must be **finally** submitted within two (2) years. The figures from previous years differ by less than 2% and are the results of final adjustments.

Erie County's Medicaid payments are calculated on a weekly basis. The year 2013 had 53 weekly payments, while the years 2012, 2014 and 2015 have the typical 52 weekly payments. The additional payment made in 2013 accounts for the majority of the increase in total Medicaid payments for that year.

In 2013, Erie County realized over $1.8 million in savings due to additional payments, referred to as the enhanced Federal Medical Assistance Percentage ("FMAP"). The County's final costs in 2014 are expected to be reduced by $5.7 million from the 2014 adopted budget figure of $217,160,208, also due to additional enhanced FMAP funding. Table 3 reflects these additional payments.

Erie County's portion of Medicaid costs in the proposed 2017 budget is $203,834,038.

The FMAP Percentage

The reason for the drop in Medicaid costs to Erie County is the ACA. The ACA changed the calculation of the FMAP percentage.

The Medicaid program is jointly funded by states and the federal government and in the case of New York State, the county governments. In states that choose to participate, the federal government pays at least half the cost of providing needed services to program beneficiaries. The federal share of those costs is determined by the FMAP. The Social Security Act requires the Secretary of Health and Human Services to calculate and publish the FMAPs each year.[9]

The FMAP is calculated annually using a formula set forth in federal statute. The FMAP is inversely proportional to a state's average personal income relative to the national average. States with lower average personal incomes have higher FMAPs. Personal income data is lagged, so data used for FY 2015 is based on 2011-2013.

The ACA provides an FMAP of 100 percent for the period 2014-2016 and at least 90 percent thereafter for the cost of covering newly eligible low-income adults. The costs of administration are generally matched at 50 percent, although some administrative activities receive a higher federal matching rate.

The FMAP for New York State for the federal government's past fiscal year (October 1, 2015 through September 30, 2016) is 50%[10]. New York State shares the lowest FMAP percentage in

[9] An Overview of the Federal Medicaid Matching Rate (FMAP), The Henry J. Kaiser Family Foundation. http://www.kff.org.
[10] US Department of Health and Human Services website. http://www.hhs.gov/

the nation with thirteen (13) other states. The highest FMAP percentage in 2016 is 74.17% for the state of Mississippi.[11] This means that despite the large cost of New York's Medicaid program, by percentage, the state is receiving a lower federal contribution than many other states.

Beginning in 2014, ACA establishes highly enhanced FMAPs for the cost of services to low-income adults with incomes up to 138% of the Federal Poverty Level ("FPL") who are not currently covered. The federal government will pick up 100% of such costs in 2014 through 2016, phasing down to 90% in 2020 and beyond. The Enhanced FMAP for New York State is 65% for this same period.[12]

This enhanced FMAP percentage has resulted in an increased reimbursement to Erie County, and as a result, a lower County share of the total Medicaid cost.

There is an Enhanced FMAP for CHIP ("eFMAP") used in the Children's Health Insurance Program ("CHIP") and in the Medicaid program for certain children for expenditures for medical assistance. New York State's eFMAP for 2016 is 88%.[13]

[11] US Department of Health and Human Services website. http://www.hhs.gov/
[12] US Department of Health and Human Services website. http://www.hhs.gov/
[13] US Department of Health and Human Services website. http://www.hhs.gov/

Medicaid Expenditures by Billed Provider

Reviewing Medicaid costs by billed provider (such as dentist, pharmacy, laboratory, etc.) offers an opportunity to see where Medicaid spends its funds.

The State has moved more individuals to Managed Care since 2011, with costs shown below demonstrating that progression. Managed Care has also largely assumed the responsibilities for the cost categories of Pharmacy, Dental, and Laboratory Costs, as the trends for those categories show.

TABLE 4. Medicaid expenditures by Medicaid category

Medicaid Costs by Billed Provider Type				
	2012	2013	2014	2015
Capitation Provider	$ 570,886,944	$ 637,398,348	$ 771,904,229	$ 896,425,465
Home Health Agency	335,680,926	331,377,389	342,416,102	347,626,303
Long Term Care Facility	185,833,112	186,028,854	188,741,738	180,325,212
Multi Type Provider	143,248,943	138,253,073	142,307,636	150,119,644
Hospital	87,657,086	83,075,266	78,513,092	77,690,621
Diagnostic and Treatment Center	51,054,731	46,297,026	43,719,478	47,946,691
Transportation	13,948,610	14,621,387	15,979,481	25,490,681
Pharmacy	26,157,292	20,083,795	21,282,048	22,164,108
Physician & Chiropractor	11,303,598	13,364,085	14,077,861	10,719,038
Nurse	9,792,172	10,386,950	8,862,219	7,588,857
Child Care Institution	6,065,963	6,423,403	6,586,607	7,076,959
Dentist	11,104,381	3,742,066	3,321,913	3,108,114
Medical Appliance Dealer	3,128,982	2,600,781	2,235,423	2,339,503
Laboratory	359,903	256,007	282,165	443,931
Optician	353,775	323,964	311,653	314,914
Clinical Psychologist & Clinical Social Worker	193,234	156,185	142,173	132,047
Physician Group	81,330	125,554	129,442	121,743
Podiatrist	153,182	145,002	125,158	96,133
Optometrist	101,282	97,061	72,507	78,139
Therapist & Therapy Groups	112,482	126,700	101,581	76,140
Totals	$1,457,217,930	$1,494,882,895	$1,641,112,506	$1,779,884,241

TABLE 5. Additional descriptions for selected Medicaid categories

Additional Descriptions for Selected Categories [A]	
DURABLE MEDICAL EQUIPMENT	Durable medical equipment used to describe any medical equipment used in the home to aid in a better quality of living. Examples are items such as: iron lungs, oxygen tents, Nebulizers, CPAP, catheters, hospital beds, and wheelchairs and blood glucose monitors.
HOME HEALTH AGENCY	Home Health Care includes skilled nursing care, physical therapy, occupational therapy, and speech therapy, medical social services and home health aide services. Home Health Agencies may also teach patients (or family members or friends) how to care for a patient.
PHARMACY	Cost of pharmaceuticals. As of October 2011 pharmacy costs were assumed by managed care providers for those clients enrolled in all managed care programs (Certain limited exceptions apply).
CAPITATION PROVIDER	A healthcare plan that allows payment of a flat fee for each patient it covers. Under a capitation, an HMO or managed care organization pays a fixed amount of money for its members to the health care provider.
LONG TERM CARE FACILITY	Long-term care facilities include nursing homes, rehabilitation facilities, inpatient behavioral health facilities, and long-term chronic care hospitals. Any facility that provides rehabilitative, restorative, and/or ongoing skilled nursing care to patients or residents in need of assistance with the activities of daily living.
DIAGNOSTIC AND TREATMENT FACILITY	A facility that performs tests to identify the nature or cause of a medical problem.
MULTI TYPE PROVIDER	A provider that falles into more than one category. For example, a medical practice that is composed of a therapist and a clinical social worker.
A Descriptions provided by the "Center for Medicaid and Medicare Services" at CMS.gov.	

Erie County Medicaid Expenditures by Age and Race

The number of persons on Medicaid in Erie County and the claims incurred on behalf of those persons dictate Medicaid costs. The New York State Medicaid database allows for the tracking of Medicaid clients based upon the zip code of the Medicaid patient. For the twelve zip codes with the largest number of Medicaid recipients, that data is provided in Table 6.

TABLE 6.

Erie County Medicaid Clients by Year and Residing Zip Code				
Zip Code	2013	2014	2015	2016 [A]
14215	21,891	24,064	25,300	25,133
14213	14,977	17,276	18,034	17,495
14207	14,975	16,563	17,613	17,523
14211	14,592	16,050	17,001	16,983
14206	8,174	9,021	9,542	9,432
14201	7,035	7,667	8,091	7,748
14218	7,342	8,204	8,803	9,004
14210	6,745	7,369	7,826	7,763
14212	6,731	7,572	8,195	8,294
14225	7,050	8,271	9,087	9,067
14220	6,706	7,412	7,893	7,699
14150	7,025	8,333	9,041	8,848
Top Twelve Total	123,243	137,802	146,426	144,989
Overall Total	238,814	268,332	286,145	278,473
Percentage of the top twelve to the Overall Total	52%	51%	51%	52%

[A] 2016 data covers the period January 1, 2016 through October 31, 2016.

The data in Table 6 for the years 2013 through 2014 differ from those published in the November 2014 report. Medicaid claims must be initially submitted within 90 days of the date of service, but claims must be **finally** submitted within two (2) years. The figures from previous years differ by less than 2% and are the results of final adjustments.

Our reports from 2014 and 2015 indicate that the number of persons on Medicaid has been steadily growing at an average rate of more than four percent (4%) per year. This trend continues.

Table Six shows that in 2015, the top four zip codes contain about twenty-eight percent (28%) of the County's Medicaid population. Not surprisingly, these zip codes are concentrated in the City of Buffalo. The seventh-largest zip code is the City of Lackawanna, the tenth-largest is Cheektowaga, and the twelfth-largest zip code is the City of Tonawanda and part of the Town of Tonawanda.

Medicaid clients by race and census data are shown in Table 7.

TABLE 7.

Race / Ethnicity [AB]	2015 Medicaid Clients
White	137,322
Black/African American	82,077
Hispanic/Latino [A]	26,304
Asian/Pacific Islander	14,791
American Indian/Alaska Native	2,066
Not Available/More Than One Race	23,585
Total	286,145
2015 US Census estimate for Erie County	922,578
Percentage of the Population on Medicaid [C]	31%
A - The US Census considers Hispanic origin to be an ethnicity and not a race. Hispanics may be of any race. Please see http://www.census.gov/.	
B - Medicaid clients self-identify for race / ethnicity.	
C - Population estimates are from the U.S. Census Bureau. WWW.census.gov/.	

Table 7 shows that as of the end of 2015, about 31% of all Erie County residents are covered by Medicaid.

Our 2015 prediction was that by the year 2021, one third of Erie County residents will qualify for Medicaid. We stand by that prediction.

Appendix B is a map of Medicaid recipients, broken out by zip code. Appendix C is a map showing changes in the number of Medicaid clients by zip code from 2010 to 2015. Erie

County's Department of Environment and Planning, the Geographic Information Systems team, was key to the development of these maps. We appreciate their assistance.

Medicaid clients by race and age are shown in Table 8.

TABLE 8.

Unique Erie County Medicaid Recipients by Age and Race					
Race / Ethnicity / Age [B]	2010	2013	2014	2015	2016 [A]
Age (65 and Over)					
White	17,496	15,229	15,184	15,456	14,559
Black/African American	4,806	3,727	3,850	4,033	4,062
Hispanic/Latino	1,219	1,000	1,072	1,122	1,155
Asian/Pacific Islander	663	732	806	876	915
American Indian/Alaska Native	136	120	132	126	123
Not Available/More Than One Race	855	713	732	763	761
Age (21-64)					
White	57,220	58,841	70,979	76,895	73,917
Black/African American	37,021	36,289	39,034	41,101	40,934
Hispanic/Latino	10,063	10,380	11,161	12,112	11,947
Asian/Pacific Islander	4,055	5,314	6,257	7,021	6,997
American Indian/Alaska Native	861	1,008	1,012	1,044	1,048
Not Available/More Than One Race	3,701	4,071	8,181	10,773	10,232
Age (0-20)					
White	26,519	40,482	43,952	44,971	42,352
Black/African American	24,940	36,044	36,774	36,943	35,860
Hispanic/Latino	8,053	12,274	12,633	13,070	12,466
Asian/Pacific Islander	2,718	5,451	6,319	6,894	6,983
American Indian/Alaska Native	555	874	884	896	859
Not Available/More Than One Race	4,004	6,265	9,370	12,049	13,303
Totals	204,885	238,814	268,332	286,145	278,473
[A] - 2016 data covers the period January 1, 2016 through October 31, 2016 and is incomplete.					
[B] - Medicaid clients self-identify for race and ethnicity.					

Since 2010, the race/ethnic group with the largest increase in Medicaid recipients is White. The age group with the largest increase is the 21-64 age group, just barely edging out the age group of 0-20.

In 2016, more than 40% of all Medicaid clients are children. (Persons under the age of 21) In 2010, the percentage of children on Medicaid was 33%.

The change, by race / ethnicity in Medicaid clients from 2010 through 2015 is shown in Table 9.

TABLE 9.

Medicaid Clients by Race					
Race / Ethnicity [B]	2010	2013	2014	2015	% Increase from 2010 to 2015
White	101,235	114,552	130,115	137,322	36%
Black/African American	66,767	76,060	79,658	82,077	23%
Hispanic/Latino	19,335	23,654	24,866	26,304	36%
Asian/Pacific Islander	7,436	11,497	13,382	14,791	99%
American Indian/Alaska Native	1,552	2,002	2,028	2,066	33%
Not Available/More Than One Race	8,560	11,049	18,283	23,585	176%
Total	204,885	238,814	268,332	286,145	40%

[A] - 2015 data is not final.

[B] - Medicaid clients self-identify for race and ethnicity.

The largest increase in individuals, by race / ethnicity since 2010 has been seen by Whites. A breakdown of Medicaid costs by client race, age and ethnicity is shown in Table 10.

TABLE 10.

2015 Medicaid Cost and Client Summary			
Race / Ethnicity / Age [B]	Medicaid Clients[A]	Medicaid Cost [A]	Average Cost Per Client
White	137,322	$ 1,021,427,050	$ 7,438
Black/African American	82,077	459,689,157	5,601
Hispanic/Latino	26,304	133,741,293	5,084
Asian/Pacific Islander	14,791	58,302,154	3,942
American Indian/Alaska Native	2,066	10,420,765	5,044
Not Available/More Than One Race	23,585	96,303,822	4,083
Totals	286,145	$ 1,779,884,241	$ 6,220
65 and over	22,376	$ 301,950,053	$ 13,494
21 - 64	148,946	1,123,767,647	7,545
0 - 20	114,823	354,166,542	3,084
Totals	286,145	$ 1,779,884,241	$ 6,220

[A] - 2015 data is not final.

[B] - Medicaid clients self-identify for race and ethnicity.

Whites as a group account for the highest average cost per Medicaid Client. When age becomes a factor, the highest average cost per Medicaid client is for those persons 65 years of age and older.

The average cost per Medicaid client from 2012 through 2015 is presented in Table 11. Interestingly, the average cost per White client has fallen since 2012, while the average cost for other races has risen for that same period.

TABLE 11.

Medicaid Average Cost Per Client for the Years 2015 through 2012				
	2015	2014	2013	2012
Race / Ethnicity / Age [B]	Average Cost Per Client	Average Cost Per Client	Average Cost Per Client	Average Cost Per Client
White	$ 7,438	$ 7,605	$ 7,913	$ 8,074
Black/African American	5,601	5,555	5,443	5,423
Hispanic/Latino	5,084	4,955	4,850	4,838
Asian/Pacific Islander	3,942	3,889	3,673	3,612
American Indian/Alaska Native	5,044	4,707	4,506	4,507
Not Available/More Than One Race	4,083	4,367	5,388	5,506
[A] - 2015 data is not final.				
[B] - Medicaid clients self-identify for race and ethnicity.				

Table 12 gives some indication as to why this is so. Since 2012, White Medicaid clients have increased the most, while White Medicaid costs have increased the least, on a percentage basis.

TABLE 12.

2012-2015 Changes in Medicaid Clients and Client Costs by Race				
	Numeric Change	Percentage Change	Cost Change	Percentage Change
White	29,513	27%	150,985,993	17%
Black/African American	11,299	16%	75,880,186	20%
Hispanic/Latino	4,785	22%	29,634,521	28%
Asian/Pacific Islander	5,027	51%	23,035,470	65%
American Indian/Alaska Native	262	15%	2,289,868	28%
Not Available/More Than One Race	13,512	134%	40,840,274	74%

One possible explanation for why the cost per Medicaid clients for Whites has fallen, while other races have climbed would be a reduction in the number of Medicaid claims filed. We performed that analysis, and Table 13 below provides that information.

From 2012 through 2015, the number of claims per Medicaid client did not significantly change for Whites, or for any of the other groups. The number of claims filed does not explain this difference. We have included 2008 data in Table 13 because it was before the ACA was passed. The passage of the ACA has not appreciably changed the number of claims filed per person.

TABLE 13.

Medicaid Average Claims Per Recipient						
Race / Ethnicity [B]	2008	2010	2012	2014	2015	2016 [A]
White	34.1	34.6	34.1	31.7	34.4	25.7
Black/African American	26.5	28.0	26.1	23.2	24.3	18.5
Hispanic/Latino	23.3	24.3	23.3	21.5	23.1	17.5
Asian/Pacific Islander	15.6	16.1	15.3	14.4	14.9	11.8
American Indian/Alaska Native	28.0	25.9	20.8	21.1	22.6	16.3
Not Available/More Than One Race	24.8	25.3	23.5	22.8	24.5	18.3
Overall Claims Per Recipient	29.7	30.4	29.1	26.4	28.1	21.1
[A] - 2016 data is for the period January 1, 2016 through October 31, 2016, and is incomplete.						
[B] - Medicaid clients self-identify for race and ethnicity.						

The only possible explanation is that the cost per Medicaid claim for Whiles has fallen, while the cost per Medicaid claim for other races has risen. This topic will be explored further in our 2017 Medicaid report.

Medicaid Clients Compared by County

Table 14 below compares Erie County's Medicaid clients and total population with that of neighboring counties. The difference between our figure in Table 7 and Table 14 is explained by the use of 2015 census data and 2016 Medicaid client data. We used only 2015 data to calculate our 31% figure.

Appendix D shows twenty-six (26) counties with a higher percentage of Medicaid clients than Erie County, and twenty-nine (29) counties with a lower percentage. Six other counties have the same percentage of clients to population as Erie County.

Using the 2015 census as a guide, seven counties have a higher population than Erie County. Of those seven, four have a higher percentage of Medicaid clients than Erie County.

Table 14.

Total 2015 Population and 2016 Medicaid Clients by County in New York State			
County	2015 Census	Medicaid Clients [A]	Percentage of Each County's Population on Medicaid
Chautauqua	130,779	44,474	34%
Cattaraugus	77,922	24,326	31%
Orleans	41,582	12,948	31%
Monroe	749,600	221,579	30%
Allegany	47,462	13,745	29%
Erie [B]	922,578	265,270	29%
Niagara	212,652	60,223	28%
Genesee	58,937	14,120	24%
Wyoming	41,013	9,602	23%
A - Enrollment as of September 21, 2016. These figures are not final.			
B - Erie County's 2015 population is 922,578 as per the US Census. Erie County's 2015 Medicaid clients numbered 286,145.			

PRESCRIPTIONS IN ERIE COUNTY PAID THROUGH MEDICAID

The MIG Team can analyze prescriptions paid through Medicaid by the type of drug, prescribing medical professional, Medicaid patient, number of refills and other criteria. The MIG Team uses this data to determine the most commonly filled prescriptions.

TABLE 15. Most commonly filled prescriptions*

The Medicaid Drugs in Erie County with the Most Filled Prescriptions are:				
	2013	2014	2015	2016 [A]
1	Hydrocodone-Acetaminophen	Hydrocodone-Acetaminophen	Hydrocodone-Acetaminophen	Ibuprofen
2	Ibuprofen	Ibuprofen	Ibuprofen	Omeprazole
3	Omeprazole	Omeprazole	Omeprazole	Hydrocodone-Acetaminophen
4	Lisinopril	Lisinopril	Lisinopril	Atorvastatin Calcium
5	Aspirin	Metformin HCL	Atorvastatin Calcium	Lisinopril
6	Ventolin HFA	Ventolin HFA	Ventolin HFA	Metformin HCL
7	Metformin HCL	Atorvastatin Calcium	Metformin HCL	Ventolin HFA
8	Amlodipine Besylate	Amlodipine Besylate	Amlodipine Besylate	Amlodipine Besylate
9	Levothyroxine Sodium	Levothyroxine Sodium	Levothyroxine Sodium	Levothyroxine Sodium
10	Amoxicillin	Aspirin	Gabapentin	Gabapentin
11	Loratdine	Amoxicillin	Aspirin	Asprin
12	Atorvastatin Calcium	Gabapentin	Amoxicillin	Amoxicillin
All Prescriptions Filled	2,418,830	2,644,861	2,998,951	2,380,290
Just Above Scripts Filled	489,760	544,758	637,545	503,692
Percent of Total	20.25%	20.60%	21.26%	21.16%
[A] The 2016 data includes all prescriptions filed between January 1, 2016 and October 31, 2016. The 2016 data is not final.				

*generic drug names

For the first time since 2008, Hydrocodone is NOT the most prescribed Medicaid drug in Erie County. Considering how abused this particular medication can be, such a drop is significant.

Hydrocodone–Acetaminophen is a controlled substance. It was also the most prescribed drug in 2008, 2009, 2010, 2011 and 2012. Hydrocodone-Acetaminophen, also known as Vicodin or Lortab, is one of the most abused prescription drugs in the U.S.

When presented with a draft of this document, you asked if we could determine why this drop occurred. We believe there are several reasons:

- The I-STOP Program
- Physician and Pharmacist Education on Opioid Abuse
- The Publicity Surrounding the Abuse of Hydrocodone and Other Opioids

In August of 2013, New York State implemented the I-STOP Program. The I-STOP program requires that most prescribers consult with a database of prescriptions written for Schedule II, Schedule II and Schedule IV drugs when writing prescriptions. Hydrocodone is a Schedule II drug. I-STOP allows for better understanding of a patient's controlled substance utilization based on recent controlled substance prescription history.[14]

Educating medical professionals on opioid abuse has been an ongoing effort since opioids became a highly prescribed drug. This education became formalized in June of 2016 when Governor Cuomo and legislative leaders announced an agreement to combat heroin and opioid abuse in New York State. A significant portion of this agreement was ongoing education for prescribers and pharmacists on the risks of addiction. Three hours of continuing education is now required every three years on addiction and pain management. [15]

The number of deaths due to opioid abuse in Erie County has jumped dramatically. In 2014, opioid abuse resulted in 128 deaths. In early 2016, Erie County was on track for a record of over 500 opioid deaths.[16] We believe the publicity surrounding these deaths has an impact on physicians, pharmacists and addicts alike.

Early in the first quarter of 2016, a prominent pain-management clinic in Erie County was temporarily shut down. You asked if the shut-down of this clinic was the cause of the drop in Hydrocodone prescriptions. The answer is no. That particular clinic did not have a large number of Medicaid clients.

To confirm that the reduction in prescriptions did not mask a separate problem, that of an increase in drug strength proscribed, we compared the drug strength proscribed for the first half of 2015 with that proscribed for the first half of 2016. For hydrocodone-acetaminophen and certain other related substances, there was no significant change in the drug strength proscribed from the first half of 2015 to the first half of 2016.

In the process of researching the above items, we discovered that the drug with the largest increase in prescriptions from 2015 to 2016 was Vitamin D. As individuals age, their ability to absorb Vitamin D through their skin diminishes. The US Department of Health and Human Services estimates that 40% of all individuals over the age of 65 suffer from a deficiency in Vitamin D. [17]

[14] From the New York State Department of Health website – www.health.ny.gov.
[15] From the New York State Department of Health website – www.health.ny.gov.
[16] Erie County Opioid Abuse Task Force
[17] From the Department of Health and Human Services - https://ods.od.nih.gov/factsheets/VitaminD-HealthProfessional/

The pharmaceutical drugs shown in Table 15 and their commonly prescribed purpose are reported in Table 16 below:

TABLE 16. Indications for commonly prescribed medications.

Drug Name	Commonly prescribed for:
Amlodipine Besylate	High blood pressure treatment
Amoxicillin	Infection treatment (Antibiotic)
Aspirin	Over the counter pain reliever
Atorvastatin Calcium	Elevated cholesterol treatment
Clonazepam	Epilepsy treatment and treatment for bipolar disease and panic attacks
Gabapentin	Anti-epileptic medication and treatment for some kinds of nerve pain
Hydrochlorothiazide	Treatment for high blood pressure, also osteoporosis and is a diuretic
Hydrocodone-Acetaminophen	Treatment for moderate to severe pain
Ibuprofen	Over the counter pain reliever
Levothyroxine Sodium	Treatment for thyroid deficiency
Lisinopril	High blood pressure treatment
Loratadine	Treatment for allergies
Metformin HCL	Treatment for type two diabetes or pre-diabetics
Omeprazole	Treatment for acid reflux
Ventolin HFA	Treatment for asthma or allergies

ILLNESS AND ERIE COUNTY MEDICAID RECIPIENTS

The MDW contains data not only on Medicaid costs, but also contains data on the health conditions treated. The Diagnosis Class of the health conditions treated for Erie County Medicaid clients for the years 2013 and 2014 and the period January 1, 2015 through June 30, 2015 and the Medicaid funds spent to treat those conditions are shown in Table 17.

TABLE 17. Medicaid funds spent to treat health conditions.

Erie County Medicaid Costs by Diagnosis Class			
DIAGNOSIS CLASS	2014	2015	2016 [A]
SIGNS, SYMPTOMS, AND ILL-DEFINED CONDITIONS	$ 1,075,660,595	$ 1,177,479,323	$ 880,770,649
MENTAL DISORDERS ALL DSMIII C	211,977,332	244,900,815	281,926,970
CIRCULATORY SYSTEM DISEASES	65,607,587	68,517,845	55,534,873
DISEASES OF THE NERVOUS SYSTEM	40,758,880	45,502,081	47,853,896
NATURE OF INJURY, ADVERSE EFFECTS AND POISONING	35,011,665	31,737,627	15,403,349
DISEASES OF THE MUSCULOSKELETAL SYSTEM	23,184,748	21,519,548	14,445,539
DISEASES OF THE RESPIRATORY SYSTEM	22,649,581	21,624,817	15,114,957
SUPPLE CLASS/DESC OF PATIENT STATUS AND OTHER HLTH	18,553,037	20,094,926	8,440,442
ENDOCRINE, NUTRITIONAL, METABOLIC	22,270,756	21,296,940	14,636,277
INFECTIVE AND PARASITIC DISEASE	13,061,935	13,475,703	11,282,412
GENITOURINARY SYSTEM DISEASES	13,023,165	11,915,090	6,976,603
DIGESTIVE SYSTEM DISEASES	13,716,339	15,069,810	9,460,277
LIVEBORN INFANTS ACCORDING TO TYPE OF BIRTH	11,973,252	11,553,766	6,870,362
NEOPLASMS	9,436,466	8,218,581	5,006,330
DELIVERY AND COMPLICATIONS OF PREGNANCY	8,890,613	7,416,724	4,649,998
REASON FOR SPECIAL ADMISSIONS AND EXAMS	7,248,575	7,828,593	4,771,504
DISEASES OF THE SKIN AND SUBCUTANEOUS TISSUE	5,825,190	5,424,892	2,867,500
CONGENITAL ANOMALIES	5,026,285	5,429,359	3,828,095
CERTAIN CAUSES OF PERINATAL MORBIDITY AND MORALITY	5,009,556	4,133,564	1,321,197
DISEASES OF BLOOD & BLOOD FORM	6,324,668	5,797,507	4,598,180
NOT AVAILABLE	3,462,879	4,499,583	4,200,663
EXTERNAL CAUSE OF INJURY	170,064	160,843	99,207
Totals	$ 1,618,843,167	$ 1,753,597,937	$ 1,400,059,280
A - 2016 data is for the period January 1, 2016 through October 31, 2016, and is incomplete and subject to change.			

As the figures in Table 17 do not include certain expenses, such as Durable Medical Goods items such as wheelchairs, canes and eyeglasses, the totals for Table 17 will always be less than the total Medicaid Costs shown in Table 3.

Table 17 shows that the first category, "Signs, Symptoms and Ill-Defined Conditions" has increased since 2014. Although not shown in Table 17 for reasons of space, the category also increased from every year from 2012 to the present.

"Signs, Symptoms and Ill-Defined Conditions" is a difficult category to analyze. Medical professionals use this category to; for example, record an illness that goes away on its own, or for services before a diagnosis is determined, or for patients who may suffer from more than one malady.

The second largest category, "Mental Disorders", was discussed in our 2014 report. Our 2015 report discussed "Endocrine, Nutritional and Metabolic Conditions".

Some categories with a general description of each are presented in Table 18.

TABLE 18. General description of selected Diagnosis Classes

International Statistical Classification of Diseases and Related Health Problems and Selected Descriptions [A]	
Disease Group	Description
SIGNS, SYMPTOMS, AND ILL-DEFINED CONDITIONS	Unknown conditions, transient symptoms and not otherwise specified diseases
MENTAL DISORDERS ALL DSMIII C	Disorders of psycological development, also dimentia and addiction
CIRCULATORY SYSTEM DISEASES	Diseases of the blood-producing and transporting organs
NATURE OF INJURY, ADVERSE EFFECTS AND POISONING	Injuries to the body, such as broken bones, poisoning and gunshot wounds
ENDOCRINE, NUTRITIONAL, METABOLIC	Diabetes and other metabolic disorders
SUPPLE CLASS/DESC OF PATIENT STATUS AND OTHER HLTH	When some circumstance or problem is present which influences the person's health status but is not in itself a current illness or injury.
GENITOURINARY SYSTEM DISEASES	Diseases that affect the male or female reproductive systems
INFECTIVE AND PARASITIC DISEASE	Diseases generally recognized as communicable or transmissible
NEOPLASMS	Various types of cancers
CONGENITAL ANOMALIES	Diseases that affect or result from chromosomal or genetic issues

[A] Data from the world Health Organization website. http://apps.who.int/classifications/icd10/browse/2010/en

MEDICAID AND THE ZIKA VIRUS

The Zika virus is primarily a mosquito-borne disease. Zika virus infection during pregnancy can lead to serious health consequences. The Zika virus can be passed from a pregnant woman to her fetus, and infection during pregnancy can lead to serious birth defects. These defects can include problems with brain development, defects of the eye, hearing deficits and impaired growth.[18]

In June of 2016, the Department of Health and Human Services issued a bulletin on how to address the Zika virus. Included in the bulletin are services a state may choose to cover under Medicaid.[19]

Treatment of those with the Zika virus is supported by services available through the Medicaid program. This includes the treatment of intellectual, developmental and hearing and speech disabilities. Children born with serious Zika related disabilities may require long-term care. Medicaid provides the state with options to cover these services. [20]

Some additional services may also be covered by Medicare. At the discretion of managed care plans, non-medical services to combat the spread of the Zika virus may be covered. Options such as spraying to control mosquitos and other environmental modifications are possible. [21]

As of June 30, 2016, there are no Zika-related costs charged to Medicaid in Erie County.

MEDICAID CLIENTS AND IMMIGRATION

In early 2016, we discussed with you, ideas for inclusion in this report. One idea was the impact of immigration on Medicaid. Immigration as a topic has been an issue in the 2016 Presidential Campaign and a subject of interest within the Erie County Legislature.

Medicaid does not cover individuals in the United States illegally. Medicaid can cover non-United States citizens who are here legally. Citizenship status is tracked and verified when an individual applies for Medicaid.[22]

Non-native status stays with an individual for their entire life. A person can be non-native and a US citizen. A person who came to the US in the 1970's or 1980's, from Europe as an example, and became a US citizen, is still considered a non-native, even though that person has been in the US for more than thirty years.

[18] http://www.hhs.gov/zika
[19] http://www.hhs.gov/zika
[20] http://www.hhs.gov/zika
[21] http://www.hhs.gov/zika
[22] https://www.medicaid.gov

TABLE 19. – Selected Erie County Population Data

2016 Total Medicaid Clients - June 30, 2016	261,344
2016 Total Foreign Born Medicaid Recipients - June 30, 2016	32,018
Percentage of Foreign Born Medicaid Clients to Total Medicaid Clients	12%
Percentage of Erie County Residents on Medicaid	31%

The "Personal Responsibility and Work Opportunity Reconciliation Act" or "PRWORA" specifically denies Medicaid benefits to undocumented immigrants, except for payment for limited emergency services. PRWORA also limits benefits to some immigrants who later become US citizens. Certain immigrants who become US citizens are required to wait five years before receiving Medicaid benefits.[23]

TABLE 20. – Analysis of Non-Native Medicaid Clients for 2016

Analysis of Non-Native Medicaid Clients - 2016	
Female Clients	16,340
Male Clients	15,644
Total [A]	31,984
Age 18 or Less	6,963
Clients above the Age of 18 and Below the Age of 60	21,089
Age 60 or More	3,966
	32,018
A - Thirty-Four clients declined to respond / responses were illegible.	

[23] US Department of Health and Human Services website

TABLE 21. – Top Ten Non-Native and Poverty Zip Code Data – 2016

Rank	Zip Codes with the Largest Medicaid Population	Zip Codes for Non-Native Born Medicaid Recipients [A]	Zip Codes for the Highest Percentage of Residents Living in Poverty [A]
1	14215	**14213**	**14213**
2	**14213**	14228	14201
3	**14207**	14068	**14207**
4	14211	**14207**	14211
5	14206	14226	14208
6	14201	14212	14203
7	14218	14051	14212
8	14210	14201	14204
9	14212	14214	14215
10	14225	14202	14214
	Zip Codes in **Bold Type** appear in all three columns.		
A - From the Erie County Department of Social Services.			

Zip Codes 14207 and 14213 are located primarily within the City of Buffalo.

Our Medicaid data does not include the country of origin for non-native individuals. We were asked if it was possible to determine the country or area of origin for non-native individuals on Medicaid. We do believe there is a significant overlap between foreign-born Medicaid clients and Erie County social services clients in need of an interpreter. We requested and received data from Social Services on clients who had need of interpreters, and the languages spoken by those interpreters. That data is presented in Table 22. We do not know if Table 22 is representative of foreign born Medicaid clients. We do know that the persons represented in Table 22 are only a fraction of the total non-native population in Erie County.

TABLE 22. – Languages needing Interpretation within Erie County Social Services

Languages and Social Services Clients		
Languages	Primary Speakers	Regions the Language is Spoken
Arabic	281	North Africa and most of the Middle East
Burmese	243	Burma and Southern Asia
Karen	201	Burma and Tibet
Nepali	134	Nepal, Burma and India
Swahili	133	Eastern and Southeastern Africa
Somali	117	Somalia and Ethiopia
Karenni	61	Burma and Thailand
Spanish	31	Central America and the Caribbean
Tigrinya	30	Eritrea and Ethiopia
French	30	Caribbean and Africa
Dari	20	Afghanistan

Significant portions of the data in this section on immigration came from Erie County's Department of Social Services. We thank them for their assistance and cooperation.

CONCLUSION

- ✓ If current trends continue, more than a third of Erie County residents will be on Medicaid by the year 2021.

- ✓ The total number of County residents on Medicaid has risen due to the ACA, with more than 31% of Erie County residents' health insurance now being provided by Medicaid.

- ✓ The percentage of clients on Medicaid in Erie County places Erie County in approximately in the middle of all New York counties when comparing Medicaid clients to overall population. Twenty-six (26) counties in New York State have a higher percentage of Medicaid clients than Erie County, and twenty-nine (29) counties have a lower percentage. Six other counties have the same percentage of clients to population as Erie County

- ✓ Hydrocodone–Acetaminophen has fallen from the number one prescribed Medicaid medication in Erie County to number three. This is a positive sign in the fight against opioid abuse, but Hydrocodone–Acetaminophen still remains one of the most abused drugs in the United States.

- ✓ In 2016, there are more Whites on Medicaid in Erie County than Blacks/African-Americans, Hispanics/Latinos and Asians/Pacific Islanders combined.

- ✓ More than 40% of all the persons on Medicaid in Erie County are children. (Persons under the age of 21).

- ✓ Immigrants comprise only about 12% of those persons on Medicaid in Erie County. Those individuals are here legally. Medicaid confirms the citizenship status of all Medicaid applicants.

Erie County gratefully acknowledges the cooperation and assistance of OMIG and Erie County looks forward to working on additional projects with OMIG.