



# Commercial vs. Medicare Pricing for Clinical Lab Tests in 2012

Presentation at American Clinical Laboratory Association 2014 Annual Meeting  
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# Avalere Health

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- Avalere Health delivers research, analysis, insight & strategy to leaders in healthcare policy and business
- 180+ policy and industry experts with backgrounds in government, academia and research organizations, managed care, industry and healthcare delivery, financial services and professional societies
- Capabilities in market strategy, policy analysis, data analytics, modeling & scoring, evidence reviews, due diligence, qualitative research
- Research published by leading foundations and journals

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- Vice President at Avalere Health
- Primary focus is using data to help shape business and policy strategies
- Previously with JPMorgan



# Objective

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- The American Clinical Laboratory Association (ACLA) engaged Avalere to investigate the differences that may exist between the Medicare Clinical Lab Fee Schedule (CLFS) and commercial reimbursement for a wide range of clinical lab tests
  - Avalere is conducting a survey of ACLA members to identify possible reasons for Medicare vs. commercial pricing differences
  - Avalere also obtained average commercial prices for 27 lab tests in 2012
- This deck contains preliminary results of a quantitative evaluation of the price differences that existed between commercial and Medicare reimbursement for a distinct set of lab tests in 2012
  - Avalere is in the process of completing a more thorough analysis of the pricing differences



# Overview of Data Findings

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- Overall, the average commercial price for routine tests is higher than the average Medicare price for the same tests in both hospital and non-hospital settings
  - These 15 routine tests represented nearly 46 percent of Medicare spending on clinical lab tests in 2012
- The average non-hospital commercial price for non-routine tests is lower than the average Medicare price for the same group of tests, although the average hospital commercial price for these tests is higher than Medicare
  - These 12 non-routine tests only represented 1 percent of Medicare spending on clinical lab tests in 2012
- In many markets, commercial prices are below Medicare prices for lab tests performed in non-hospital settings, but above Medicare prices for outpatient hospital lab tests
  - Pricing differential likely represents market power of hospital outpatient labs
- Prices appear to be linked to overall size of market
  - On average, larger markets tend to have lower average commercial prices, although the relationship is far from perfect
- Wide variation across different MSAs when comparing Medicare and commercial prices
  - It may be difficult to determine which commercial lab rate should be used if Medicare decided to lower reimbursement, as many smaller markets have commercial rates well above the current Medicare level

# Methodology

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- Avalere analyzed data for 27 separate clinical lab tests from the 2012 MarketScan database on prices paid by commercial insurers in over 450 separate Metropolitan Statistical Areas (MSAs) in the US
  - MarketScan data provides the actual allowed amount at the mean, median, 25<sup>th</sup> & 75<sup>th</sup> percentile for each market
  - Data is collected mostly from self-insured employers; over 56 million covered lives in total MarketScan database
  - Data was calculated separately for lab tests billed by outpatient hospitals versus outpatient non-hospitals
    - No inpatient data is included in analysis
  - Not every MSA has data on every lab test included in the analysis
- Avalere compared these prices to the Medicare fee schedule amount specific to each MSA
  - Avalere linked the MSA to the carrier price for the same test in that region
  - These 27 tests represented nearly 50 percent of all Medicare payments to clinical labs in 2012



# Medicare Vs. Commercial Prices for Lower-Priced Tests

HCPCS	Description	Medicare National Limit	Commercial Mean Price			Claims volume distribution	
			Overall	Hospital	Non- hospital	Hospital	Non- hospital
36415	Routine venipuncture	3.00	5.64	7.93	4.57	31.9%	68.1%
85610	Prothrombin time	5.56	13.18	20.09	6.67	48.5%	51.5%
82570	Assay of urine creatinine	7.33	8.35	14.04	6.82	21.2%	78.8%
85025	Complete cbc w/auto diff wbc	11.02	20.26	32.61	11.15	42.4%	57.6%
87086	Urine culture/colony count	11.43	17.73	30.80	10.99	34.0%	66.0%
80048	Metabolic panel total ca	11.98	31.51	49.36	13.92	49.6%	50.4%
84439	Assay of free thyroxine	12.77	16.91	30.21	11.81	27.7%	72.3%
83036	Glycosylated hemoglobin test	13.75	17.06	29.16	13.18	24.3%	75.7%
80053	Comprehen metabolic panel	14.97	32.14	57.91	14.85	40.1%	59.9%
80061	Lipid panel	18.44	22.36	37.81	17.27	24.8%	75.2%
82728	Assay of ferritin	19.30	25.43	41.14	18.67	30.1%	69.9%
82746	Assay of folic acid serum	20.82	22.31	37.13	17.14	25.9%	74.1%
82607	Vitamin B-12	21.35	23.98	38.83	18.42	27.2%	72.8%
84443	Assay thyroid stim hormone	23.80	33.63	52.55	22.64	36.7%	63.3%
82542	Column chromatography quant	25.57	69.48	79.66	67.26	17.9%	82.1%
<b>Average</b>		<b>11.82</b>	<b>19.14</b>	<b>32.62</b>	<b>12.11</b>	<b>34.3%</b>	<b>65.7%</b>

Source: Avalere Health analysis of 2012 Medicare National Clinical Lab Fee Schedule and 2012 Lab Procedure Amount Paid Analysis from Marketscan Commercial Database. Average weighted by commercial volume.



# Medicare Vs. Commercial Prices for Higher-Priced Tests

HCPCS	Description	Medicare National Limit	Commercial Mean Price			Claims volume distribution	
			Overall	Hospital	Non- hospital	Hospital	Non- hospital
87536	Hiv-1 quant&revrse trnscrip	120.52	115.75	170.18	92.30	30.1%	69.9%
88230	Tissue culture lymphocyte	165.01	165.92	231.54	125.85	37.9%	62.1%
88262	Chromosome analysis 15-20	176.54	236.74	312.11	157.35	51.3%	48.7%
88264	Chromosome analysis 20-25	176.54	297.93	330.69	225.24	68.9%	31.1%
88237	Tissue culture bone marrow	178.90	278.42	306.99	212.67	69.7%	30.3%
87906	Genotype dna/rna hiv	182.32	195.90	365.50	144.52	23.3%	76.7%
87900	Phenotype infect agent drug	184.62	220.87	188.36	237.42	33.7%	66.3%
86352	Cell function assay w/stim	192.43	194.28	199.07	184.15	67.9%	32.1%
88261	Chromosome analysis 5	250.32	420.40	480.43	235.30	75.5%	24.5%
87901	Genotype dna hiv reverse t	364.64	301.01	424.58	245.06	31.2%	68.8%
87902	Genotype dna/rna hep c	364.64	320.67	429.13	253.74	38.2%	61.8%
87903	Phenotype dna hiv w/culture	692.10	548.58	689.30	514.01	19.7%	80.3%
<b>Average</b>		<b>168.09</b>	<b>188.79</b>	<b>265.63</b>	<b>134.58</b>	<b>41.4%</b>	<b>58.6%</b>

**On average, non-hospital mean prices for low and high cost lab tests are in-line to slightly below Medicare prices; hospital mean prices are nearly always above Medicare prices**

Source: Avalere Health analysis of 2012 Medicare National Clinical Lab Fee Schedule and 2012 Lab Procedure Amount Paid Analysis from Marketscan Commercial Database. Average weighted by commercial volume.



# MSA-level Analysis Demonstrates High Variability in Commercial Lab Prices for Lower-Priced Tests

HCPCS	Description	Medicare National Limit	% of MSAs with Median Commercial Price Above Medicare		% of MSAs with 25 <sup>th</sup> Percentile Commercial Price Above Medicare	
			Hospital	Non-hospital	Hospital	Non-hospital
36415	Routine venipuncture	3.00	94.9%	88.9%	86.8%	67.0%
85610	Prothrombin time	5.56	97.0%	50.2%	86.2%	25.9%
82570	Assay of urine creatinine	7.33	79.2%	30.6%	47.0%	15.2%
85025	Complete cbc w/auto diff wbc	11.02	94.1%	37.7%	73.5%	19.2%
87086	Urine culture/colony count	11.43	89.1%	30.8%	64.6%	15.8%
80048	Metabolic panel total ca	11.98	95.7%	37.7%	82.4%	19.6%
84439	Assay of free thyroxine	12.77	84.0%	36.2%	60.8%	22.9%
83036	Glycosylated hemoglobin test	13.75	81.4%	39.1%	60.2%	22.7%
80053	Comprehen metabolic panel	14.97	96.2%	36.8%	78.8%	22.5%
80061	Lipid panel	18.44	81.0%	39.9%	57.2%	24.3%
82728	Assay of ferritin	19.30	86.0%	32.4%	59.6%	18.8%
82746	Assay of folic acid serum	20.82	81.8%	31.2%	53.7%	16.8%
82607	Vitamin B-12	21.35	77.4%	30.4%	52.8%	17.2%
84443	Assay thyroid stim hormone	23.80	87.1%	35.8%	65.5%	21.3%
82542	Column chromatography quant	25.57	80.1%	70.0%	57.6%	29.5%

Source: Avalere Health analysis of 2012 Medicare National Clinical Lab Fee Schedule and 2012 Lab Procedure Amount Paid Analysis from Marketscan Commercial Database



# MSA-level Analysis Also Demonstrates High Variability in Commercial Lab Prices for Higher-Priced Tests

HCPCS	Description	Medicare National Limit	% of MSAs with Median Commercial Price Above Medicare		% of MSAs with 25 <sup>th</sup> Percentile Commercial Price Above Medicare	
			Hospital	Non-hospital	Hospital	Non-hospital
87536	Hiv-1 quant&revrse trnscrip	120.52	64.3%	25.8%	46.7%	16.7%
88230	Tissue culture lymphocyte	165.01	59.2%	32.3%	46.9%	21.9%
88262	Chromosome analysis 15-20	176.54	62.0%	21.5%	41.0%	13.2%
88264	Chromosome analysis 20-25	176.54	66.8%	45.6%	48.4%	29.6%
88237	Tissue culture bone marrow	178.90	75.2%	46.3%	50.0%	28.2%
87906	Genotype dna/rna hiv	182.32	53.3%	24.2%	49.3%	18.2%
87900	Phenotype infect agent drug	184.62	30.8%	16.4%	22.7%	10.4%
86352	Cell function assay w/stim	192.43	29.8%	17.0%	22.6%	13.6%
88261	Chromosome analysis 5	250.32	35.0%	11.7%	25.5%	9.4%
87901	Genotype dna hiv reverse t	364.64	46.1%	18.8%	32.7%	12.3%
87902	Genotype dna/rna hep c	364.64	49.2%	23.7%	31.4%	15.3%
87903	Phenotype dna hiv w/culture	692.10	27.3%	8.2%	21.1%	7.1%

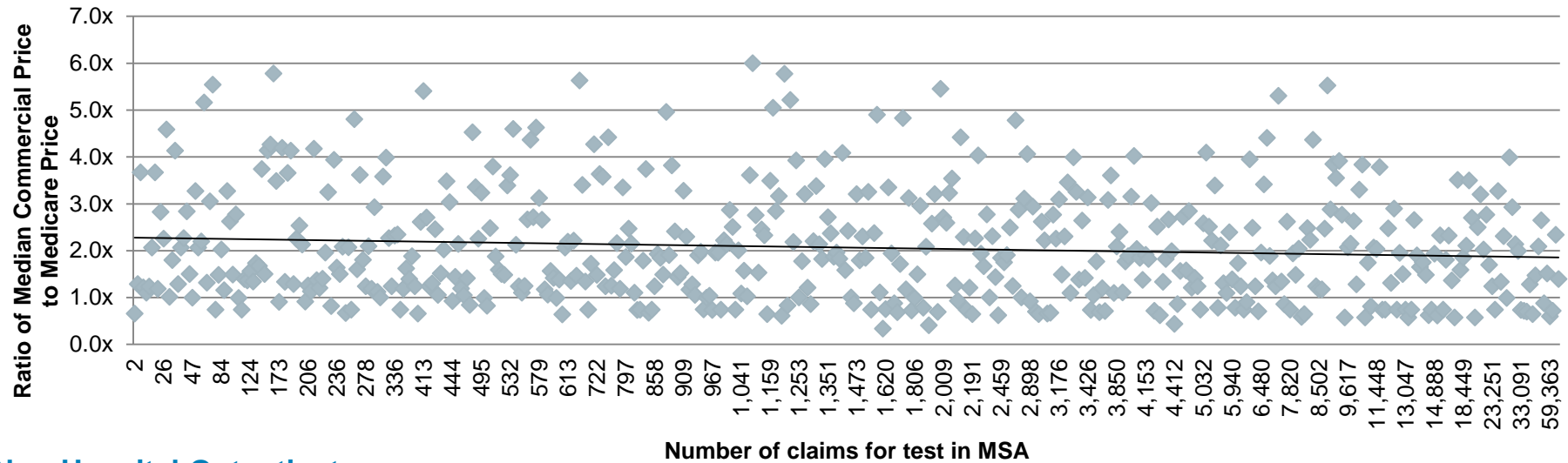
**Commercial prices for lab tests at non-hospital locations in many MSAs are at or below Medicare prices**

# Commercial Prices Loosely Tied to Total Market Volume

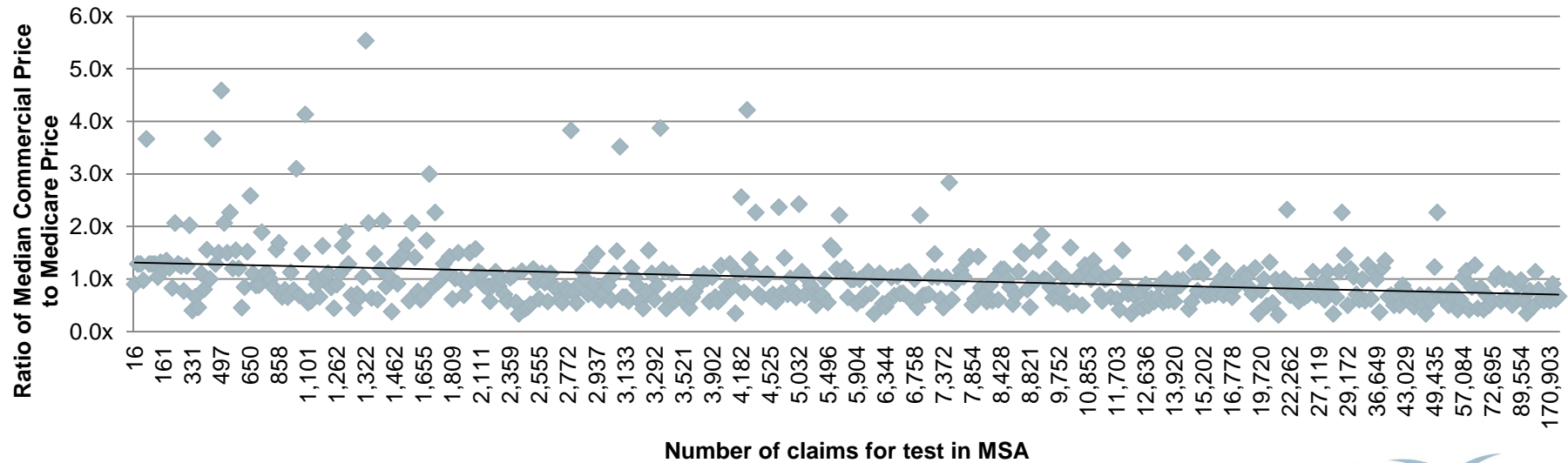
## HCPCS 80061: LIPID PANEL

(each dot represents one MSA)

### Hospital Outpatient



### Non-Hospital Outpatient



Source: Avalere Health analysis of 2012 Medicare National Clinical Lab Fee Schedule and 2012 Lab Procedure Amount Paid Analysis from Marketscan Commercial Database

# Boise vs. New York City: Size Matters

CPT	Description	Boise, Idaho					New York City				
		Commercial prices					Commercial prices				
		Outpatient hospital	Non-hospital	Medicare	price		Outpatient hospital	Non-hospital	Medicare	price	
		Claims	Median price	Claims	Median price		Claims	Median price	Claims	Median price	
36415	Routine venipuncture	7,897	17.00	15,236	3.33	3.00	148,566	4.68	588,612	1.80	3.00
80048	Metabolic panel total ca	1,011	31.20	557	13.30	11.98	36,584	24.00	36,437	5.60	9.05
80053	Comprehen metabolic panel	4,774	35.28	5,020	16.62	14.97	106,578	33.17	204,899	8.38	13.54
80061	Lipid panel	2,160	36.80	6,634	17.84	16.07	70,497	28.64	353,333	11.74	18.97
82542	Column chromatography quant	71	47.35	83	72.84	25.57	1,499	72.84	3,522	25.34	25.57
82570	Assay of urine creatinine	174	15.12	678	8.14	7.33	8,168	10.21	43,129	4.54	7.33
82607	Vitamin B-12	224	70.40	526	23.70	21.35	16,837	29.77	89,269	13.21	21.35
82728	Assay of ferritin	299	40.00	599	21.42	19.30	15,865	35.21	64,037	11.93	19.30
82746	Assay of folic acid serum	125	54.40	286	23.11	20.82	10,335	26.90	62,279	12.88	20.82
83036	Glycosylated hemoglobin test	747	24.60	2,738	10.99	9.90	31,231	19.46	177,915	8.50	13.75
84439	Assay of free thyroxine	784	33.60	3,235	14.17	12.77	30,095	19.16	143,507	7.90	12.77
84443	Assay thyroid stim hormone	2,076	36.00	3,055	24.73	22.28	52,286	51.97	114,179	14.72	23.80
85025	Complete cbc w/auto diff wbc	5,206	28.80	4,207	12.23	11.02	146,179	24.06	277,038	6.81	11.02
85610	Prothrombin time	1,329	14.40	510	6.37	5.56	34,858	14.00	41,840	3.44	5.56
87086	Urine culture/colony count	236	38.18	2,143	12.69	11.43	26,968	22.45	81,215	7.07	11.43
87536	Hiv-1 quant&revrse trnsrpt	5	316.00	48	133.78	120.52	2,387	193.14	5,364	74.54	120.52
88230	Tissue culture lymphocyte	2	280.48	3	165.01	165.01	392	99.82	998	50.93	29.10
88237	Tissue culture bone marrow	7	388.45	1	289.71	178.90	385	108.22	241	102.00	36.43
88262	Chromosome analysis 15-20	2	377.90	2	207.43	176.54	911	257.31	1,253	109.19	176.54

**Market dynamics play a large role when comparing Medicare and Commercial prices for lab tests**

Source: Avalere Health analysis of 2012 Medicare National Clinical Lab Fee Schedule and 2012 Lab Procedure Amount Paid Analysis from Marketscan Commercial Database

# OIG Study Used Lowest Price to Calculate Savings

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- The Office of Inspector General (OIG) published a report in June 2013 that found that Medicare could have saved \$910 million in 2011 if it had paid at the lowest price available from either Medicaid or three Federal Employee Health Benefit (FEHB) plans<sup>1</sup>
  - This would have reduced Medicare payments to clinical labs by 38 percent
  - OIG focused on 20 high-volume lab tests
- OIG recommended that the Centers for Medicare & Medicaid Services (CMS) seek legislation to establish lower payment rates for lab tests as well as consider seeking legislation to institute copayments for Medicare lab tests
  - CMS noted at the time that it was evaluating whether it already has authority to lower payment rates
  - CMS has since announced they intend to revisit the prices for all clinical laboratory tests<sup>2</sup>
- Interestingly, Medicaid was rarely had the lowest price for many of the tests; instead the lowest in the sample was usually the median price of one of the three FEHB plans
  - Many FEHB plans use the pricing negotiated for their entire network, not just federal employees
  - This suggests FEHB prices are a reflection of market characteristics, including size of market, number of competitors, and location of services
    - Unclear if FEHB prices included amounts paid to hospital labs as well as freestanding labs

<sup>1</sup> Department of Health and Human Services Office of the Inspector General. "Comparing Lab Test Payment Rates: Medicare Could Achieve Substantial Savings". June 2013. Available online at <https://oig.hhs.gov/oei/reports/oei-07-11-00010.pdf>

<sup>2</sup> Medicare Physician Fee Schedule 2014 Final Rule

# Market Dynamics Likely Played A Role in OIG Study

HCPCS 80053: Comprehensive Metabolic Panel

## OIG Study Findings—Ohio 2011 Prices<sup>1</sup>

State	Medicare	Medicaid	FEHB1	FEHB2	FEHB3
Ohio	14.87	14.17	11.12	6.19	5.00

## Avalere Commercial Study Findings—Ohio 2011 Prices<sup>2</sup>

MSA	Hospital Outpatient		Non-Hospital	
	Median	Mean	Median	Mean
Akron, OH	73.28	71.44	5.00	6.38
Canton-Massillon, OH	59.07	64.12	5.00	6.64
Cincinnati-Middletown, OH-KY-IN	30.87	42.13	5.00	7.59
Cleveland-Elyria-Mentor, OH	95.39	86.96	5.65	7.72
Columbus, OH	25.09	52.46	7.12	9.88
Dayton, OH	108.59	88.68	5.00	5.67
Huntington-Ashland, WV-KY-OH	70.91	92.87	11.00	13.70
Lima, OH	84.24	103.41	5.00	7.46
Mansfield, OH	131.19	118.66	5.73	8.30
Parkersburg-Marietta-Vienna, WV-OH	52.60	68.03	11.35	14.15
Sandusky, OH	49.62	81.33	5.73	8.54
Springfield, OH	87.64	83.86	5.00	7.55
Steubenville-Weirton, OH-WV	100.20	95.11	10.41	10.62
Toledo, OH	49.23	62.83	6.83	19.14
Wheeling, WV-OH	89.59	101.91	6.20	10.87
Youngstown-Warren-Boardman, OH-PA	47.09	67.06	5.00	6.01
Non-MSA, OH	108.93	100.04	7.12	19.14

<sup>1</sup> Department of Health and Human Services Office of the Inspector General. "Comparing Lab Test Payment Rates: Medicare Could Achieve Substantial Savings". June 2013

<sup>2</sup> Avalere Health analysis of 2011 Lab Procedure Amount Paid Analysis from Marketscan Commercial Database



# What Causes the Variation in Prices?

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- There are multiple theories to explain the variation in lab prices
  - **Insurance networks:** Non-hospital labs may negotiate with private payers to accept lower rates in exchange for becoming a 'preferred' or 'exclusive' provider
  - **Reimbursement methodology:** Some labs, particularly hospital-based, may be reimbursed as a percent of charges rather than via a fee schedule
  - **Administrative/billing requirements:** Some payers may seek lower prices in exchange for fewer administrative requirements
- OIG also cites “changes in technology used in performing lab tests” when explaining the variation in prices from the FEHB plans
  - However, new technology for the same test should be available in all markets
- Avalere continues to conduct research on behalf of ACLA to better understand this variation in prices
  - ACLA member responses to Avalere survey will provide critical input