

# U.S. Health Care Services

## Barclays Healthcare Payors, Providers, & Supply Chain Summit

24 September 2018

### U.S. Health Care Service

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# Healthcare Services Ratings and Valuation Summary

Healthcare Services Stock Ratings / Price Targets									
<u>Drug Distributors</u>	<u>Company Name</u>	<u>Rating</u>	<u>9/24/2018 Price</u>	<u>Price Target</u>	<u>% to Current Price</u>	<u>Projected P/E Multiple</u>	<u>Period</u>	<u>Barclays EPS</u>	<u>Consensus EPS</u>
ABC	AMERISOURCEBERGEN	EW	\$89.57	\$95	6%	13.0x	2019	\$7.28	\$7.29
CAH	CARDINAL HEALTH	EW	\$53.91	\$58	8%	11.0x	2019	\$5.28	\$5.24
MCK	MCKESSON	EW	\$132.64	\$150	13%	11.0x	2019	\$14.01	\$14.08
<u>PBM/Specialty Pharmacy</u>									
DPLO	DIPLOMAT PHARMACY	OW	\$19.12	\$24	26%	22.0x	2019	\$1.07	\$1.06
ESRX	EXPRESS SCRIPTS HOLDING C	EW	\$94.40	\$83	-12%	8.0x	2019	\$9.82	\$9.54
<u>Retail Pharmacy</u>									
WBA	WALGREENS BOOTS ALLIANC	EW	\$72.20	\$77	7%	12.0x	2019	\$6.74	\$6.63
<u>Medical/Dental/Vet Distributors</u>									
ALGN	ALIGN TECHNOLOGIES	OW	\$388.96	\$420	8%	67.0x	2019	\$6.25	\$6.25
HSIC	HENRY SCHEIN	EW	\$83.67	\$73	-13%	16.0x	2019	\$4.55	\$4.47
OMI	OWENS AND MINOR	UW	\$16.82	\$12	-29%	7.0x	2019	\$1.67	\$1.63
PDCO	PATTERSON COMPANIES	UW	\$25.10	\$20	-20%	13.0x	2019	\$1.50	\$1.53
XRAY	DENTSPLY SIRONA	EW	\$38.09	\$41	8%	18.0x	2019	\$2.25	\$2.33
<u>Healthcare IT</u>									
CERN	CERNER CORP	EW	\$63.78	\$70	10%	25.0x	2019	\$2.80	\$2.79
<u>Diversified Managed Care</u>									
ANTM	ANTHEM	OW	\$273.23	\$275	1%	16.0x	2019	\$17.00	\$17.11
CI	CIGNA	OW	\$203.24	\$228	12%	15.0x	2019	\$15.25	\$15.20
UNH	UNITEDHEALTH GROUP	OW	\$267.36	\$265	-1%	18.0x	2019	\$14.30	\$14.40
<u>Government Managed Care</u>									
CNC	CENTENE	OW	\$142.98	\$158	11%	18.0x	2019	\$8.59	\$8.35
HUM	HUMANA	OW	\$340.61	\$370	9%	21.0x	2019	\$17.40	\$17.16
MOH	MOLINA HEALTHCARE	EW	\$151.78	\$125	-18%	21.0x	2019	\$6.00	\$6.82
WCG	WELLCARE	OW	\$307.48	\$325	6%	24.0x	2019	\$13.50	\$13.38
<u>Hospitals</u>									
						<u>Projected EV Multiple</u>		<u>Barclays EBITDA</u>	<u>Consensus EBITDA</u>
CYH	COMMUNITY HEALTH	UW	\$3.41	\$3	-12%	8.0x	2019	\$1,543	\$1,555
HCA	HCA HOLDINGS	OW	\$133.37	\$150	12%	8.5x	2019	\$9,400	\$9,293
THC	TENET HEALTHCARE	EW	\$28.10	\$35	25%	7.0x	2019	\$2,691	\$2,653
UHS	UNIVERSAL HEALTH SERVICE	EW	\$126.74	\$135	7%	8.5x	2019	\$1,861	\$1,872

Source: Barclays Research Estimates

Stock Rating: OW = Overweight; EW= Equal Weight; UW = Underweight. Industry View is Neutral.

For full disclosures on each covered company, including details of our company-specific valuation methodology and risks, please refer to <http://publicresearch.barcap.com>

# Pharma Supply Channel: Branded Drug Inflation Trends

Branded Drug Price Inflation Trends - Top 500 Drugs by Sales														
2014 Month	# of Branded Price Changes	Avg. % Change	2015 Month	# of Branded Price Changes	Avg. % Change	2016 Month	# of Branded Price Changes	Avg. % Change	2017 Month	# of Branded Price Changes	Avg. % Change	2018 Month	# of Branded Price Changes	Avg. % Change
Jan	130	8.3%	Jan	114	9.0%	Jan	112	8.4%	Jan	134	7.4%	Jan	156	7.4%
Feb	12	8.9%	Feb	8	6.7%	Feb	5	7.7%	Feb	15	7.0%	Feb	10	7.9%
Mar	6	6.7%	Mar	13	7.9%	Mar	7	7.6%	Mar	5	7.6%	Mar	2	11.5%
<b>1Q14</b>	<b>148</b>	<b>8.0%</b>	<b>1Q15</b>	<b>135</b>	<b>7.9%</b>	<b>1Q16</b>	<b>124</b>	<b>7.9%</b>	<b>1Q17</b>	<b>154</b>	<b>7.3%</b>	<b>1Q18</b>	<b>168</b>	<b>9.0%</b>
Apr	32	8.7%	Apr	31	10.0%	Apr	25	7.6%	Apr	17	6.9%	Apr	11	6.4%
May	8	10.3%	May	19	9.5%	May	10	9.2%	May	13	7.7%	May	--	--
Jun	33	8.0%	Jun	30	24.0%	Jun	34	7.8%	Jun	23	5.6%	Jun	1	4.0%
<b>2Q14</b>	<b>73</b>	<b>9.0%</b>	<b>2Q15</b>	<b>80</b>	<b>14.5%</b>	<b>2Q16</b>	<b>69</b>	<b>8.2%</b>	<b>2Q17</b>	<b>53</b>	<b>6.7%</b>	<b>2Q18</b>	<b>12</b>	<b>5.2%</b>
Jul	63	7.6%	Jul	42	8.7%	Jul	37	6.7%	Jul	25	5.2%	Jul	12	6.1%
Aug	19	8.5%	Aug	13	7.9%	Aug	8	7.8%	Aug	2	4.6%	Aug	--	--
Sep	8	9.1%	Sep	13	7.0%	Sep	3	7.3%	Sep	3	4.5%	Sep	--	--
<b>3Q14</b>	<b>90</b>	<b>8.4%</b>	<b>3Q15</b>	<b>68</b>	<b>7.9%</b>	<b>3Q16</b>	<b>48</b>	<b>7.3%</b>	<b>3Q17</b>	<b>30</b>	<b>4.8%</b>	<b>3Q18</b>	<b>12</b>	<b>6.1%</b>
Oct	21	8.3%	Oct	16	7.0%	Oct	8	4.5%	Oct	6	5.7%	Oct	--	--
Nov	16	8.2%	Nov	7	9.6%	Nov	1	6.0%	Nov	2	7.7%	Nov	--	--
Dec	16	8.5%	Dec	24	8.4%	Dec	17	7.9%	Dec	17	7.7%	Dec	--	--
<b>4Q14</b>	<b>53</b>	<b>8.3%</b>	<b>4Q15</b>	<b>47</b>	<b>8.3%</b>	<b>4Q16</b>	<b>26</b>	<b>6.1%</b>	<b>4Q17</b>	<b>25</b>	<b>7.0%</b>	<b>4Q18</b>	<b>0</b>	<b>0.0%</b>
<b>2014</b>	<b>364</b>	<b>8.4%</b>	<b>2015</b>	<b>330</b>	<b>9.6%</b>	<b>2016</b>	<b>267</b>	<b>7.4%</b>	<b>2017</b>	<b>262</b>	<b>6.5%</b>	<b>2018</b>	<b>192</b>	<b>6.7%</b>

Source: Barclays Research; PriceRx

# Introducing Barclays Generic Launch Pipeline Thru 2022

## Five-Year Generic Pipeline Increments (\$ BLN)

ANDA Exclusivities*		Traditional			
Year	Launch/Pipeline	ANDA (\$ bil)	Biologics	505(b)	Total
*within total ANDAs					
2003	\$10.3	\$14.4	--	--	\$14.4
2004	\$6.5	\$10.6	--	--	\$10.6
2005	\$7.9	\$9.6	--	--	\$9.6
2006	\$13.7	\$16.2	--	--	\$16.2
2007	\$5.7	\$8.5	--	--	\$8.5
2003-2007 Total	\$44.1	\$59.3	--	--	\$59.3
2008	\$8.7	\$14.8	--	--	\$14.8
2009	\$9.0	\$17.0	--	--	\$17.0
2010	\$17.3	\$18.7	--	--	\$18.7
2011	\$9.5	\$18.2	--	--	\$18.2
2012	\$15.6	\$29.0	--	--	\$29.0
2008-2012 Total	\$60.0	\$97.7	--	--	\$97.7
2013	\$6.2	\$14.7	--	--	\$14.7
2014	\$13.4	\$17.1	--	--	\$17.1
2015	\$13.4	\$22.9	\$0.8	\$0.0	\$23.7
2016	\$23.7	\$23.9	\$5.0	\$9.6	\$38.5
2017	\$10.5	\$13.7	\$0.0	\$0.8	\$14.5
2013-2017 Total	\$67.3	\$92.3	\$5.8	\$10.4	\$108.5
2018E	\$13.9	\$19.9	\$9.7	\$0.0	\$29.6
2019E	\$15.4	\$20.8	\$3.2	\$10.1	\$34.1
2020E	\$4.6	\$6.4	\$3.4	\$7.6	\$17.4
2021E	\$2.8	\$3.1	\$5.2	\$0.0	\$8.3
2022E	\$2.9	\$13.7	\$17.6	\$0.0	\$31.3
2018-2022 Total	\$39.7	\$64.0	\$39.1	\$17.7	\$120.8

Source: Barclays Research Estimates

# PBM Industry: Mail-Order and Specialty Rx Dominate Profits

## PBM Profit Pools

### PBM Profit Breakdown 2000-2015

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Retail Profit (rebill spread)	13%	12%	11%	10%	8%	7%	6%	6%	5%
Mail Order Profit (dispensing)	32%	33%	35%	39%	43%	47%	50%	52%	53%
Specialty Profit (dispensing)	1%	1%	2%	3%	5%	7%	9%	11%	13%
Claims Processing Fees	8%	8%	8%	7%	6%	5%	5%	4%	4%
Branded Mfr Rebates / Rebate administration	40%	38%	36%	33%	29%	27%	24%	21%	18%
Clinical Programs/Other	7%	8%	8%	8%	7%	7%	7%	7%	7%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>98%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

### PBM Profit Breakdown 2000-2015 (cont.)

	2009	2010	2011	2012	2013	2014	2015	2016	2017
Retail Profit (rebill spread)	4%	4%	4%	3%	3%	2%	1%	1%	1%
Mail Order Profit (dispensing)	55%	57%	59%	62%	63%	63%	63%	63%	63%
Specialty Profit (dispensing)	14%	15%	16%	17%	19%	22%	23%	24%	25%
Claims Processing Fees	3%	3%	2%	2%	2%	1%	1%	1%	1%
Branded Mfr Rebates / Rebate administration	16%	14%	12%	10%	9%	9%	9%	9%	8%
Clinical Programs/Other	8%	8%	8%	7%	5%	4%	3%	2%	2%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: Barclays Research Estimates

# Medicare Part D Annual Market Share

PDP Membership	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 YTD
CVS	1,584,702	1,205,714	3,424,160	4,009,412	4,264,741	4,123,364	4,536,856	5,475,393	5,557,881	6,114,851
UnitedHealth Group	4,304,516	4,543,634	4,865,167	4,231,467	5,204,377	5,184,288	5,369,006	5,168,022	5,364,993	5,361,603
Humana	1,937,721	1,678,970	2,537,054	2,997,961	3,196,740	3,853,667	4,433,906	4,835,429	5,187,133	4,898,737
Express Scripts	108,068	147,541	394,644	1,689,702	2,786,669	2,671,946	2,683,547	2,722,031	2,778,355	2,506,139
Aetna	345,055	611,605	428,849	480,590	2,174,433	1,581,625	1,472,037	2,075,400	2,086,644	2,212,087
WellCare Health Plans	747,352	767,781	981,880	874,255	799,415	1,447,377	1,040,122	1,014,838	1,161,446	1,066,225
Cigna	305,817	562,096	540,826	1,268,246	1,194,527	1,192,977	1,485,062	979,150	825,570	772,258
Rite Aid	0	0	0	0	0	114,070	619,584	386,931	402,385	561,165
Anthem	1,228,343	869,358	724,112	637,683	545,096	569,915	484,256	468,975	450,737	455,525
Magellan, Inc	0	0	0	0	0	0	0	63,476	122,580	100,564
Other (Prime, etc)	7,047,311	7,540,396	4,983,772	3,877,593	2,670,650	2,800,697	2,144,873	1,815,300	1,485,741	1,474,355
Total Market	17,608,885	17,927,095	18,880,464	20,066,909	22,836,648	23,539,926	24,269,249	25,004,945	25,423,465	25,523,509

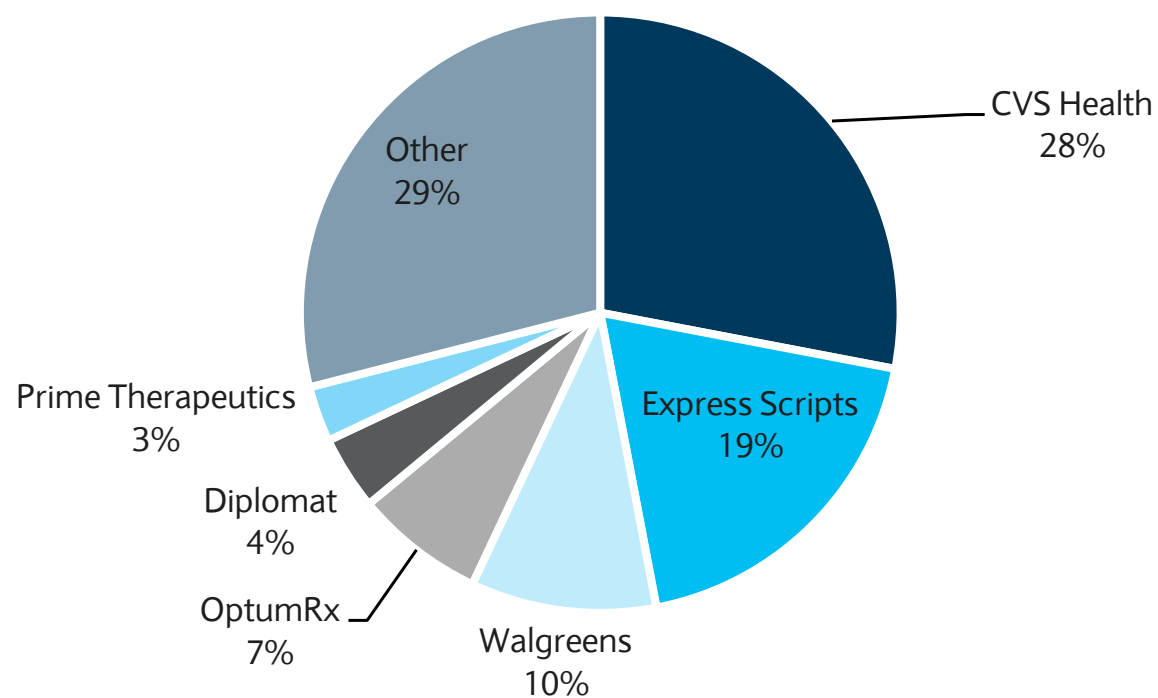
Yr/Yr% Change	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 YTD
CVS	--	-23.9%	184.0%	17.1%	6.4%	-3.3%	10.0%	20.7%	1.5%	10.6%
UnitedHealth Group	--	5.6%	7.1%	-13.0%	23.0%	-0.4%	3.6%	-3.7%	3.8%	0.0%
Humana	--	-13.4%	51.1%	18.2%	6.6%	20.5%	15.1%	9.1%	7.3%	-4.7%
Express Scripts	--	36.5%	167.5%	328.2%	64.9%	-4.1%	0.4%	1.4%	2.1%	-9.5%
Aetna	--	77.2%	-29.9%	12.1%	352.5%	-27.3%	-6.9%	41.0%	0.5%	6.4%
WellCare Health Plans	--	2.7%	27.9%	-11.0%	-8.6%	81.1%	-28.1%	-2.4%	14.4%	-6.4%
Cigna	--	83.8%	-3.8%	134.5%	-5.8%	-0.1%	24.5%	-34.1%	-15.7%	-5.3%
Rite Aid	--	--	--	--	--	--	443.2%	-37.5%	4.0%	52.1%
Anthem	--	-29.2%	-16.7%	-11.9%	-14.5%	4.6%	-15.0%	-3.2%	-3.9%	1.0%
Magellan, Inc	--	--	--	--	--	--	--	--	93.1%	-15.5%
Other (Prime, etc)	--	7.0%	-33.9%	-22.2%	-31.1%	4.9%	-23.4%	-15.4%	-18.2%	-0.2%
Total Market	--	1.8%	5.3%	6.3%	13.8%	3.1%	3.1%	3.0%	1.7%	1.1%

Market Share	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018 YTD
CVS	9.0%	6.7%	18.1%	20.0%	18.7%	17.5%	18.7%	21.9%	21.9%	24.0%
UnitedHealth Group	24.4%	25.3%	25.8%	21.1%	22.8%	22.0%	22.1%	20.7%	21.1%	21.0%
Humana	11.0%	9.4%	13.4%	14.9%	14.0%	16.4%	18.3%	19.3%	20.4%	19.2%
Express Scripts	0.6%	0.8%	2.1%	8.4%	12.2%	11.4%	11.1%	10.9%	10.9%	9.8%
Aetna	2.0%	3.4%	2.3%	2.4%	9.5%	6.7%	6.1%	8.3%	8.2%	8.7%
WellCare Health Plans	4.2%	4.3%	5.2%	4.4%	3.5%	6.1%	4.3%	4.1%	4.6%	4.2%
Cigna	1.7%	3.1%	2.9%	6.3%	5.2%	5.1%	6.1%	3.9%	3.2%	3.0%
Rite Aid	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%	2.6%	1.5%	1.6%	2.2%
Anthem	7.0%	4.8%	3.8%	3.2%	2.4%	2.4%	2.0%	1.9%	1.8%	1.8%
Magellan, Inc	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.5%	0.4%
Other (Prime, etc)	40.0%	42.1%	26.4%	19.3%	11.7%	11.9%	8.8%	7.3%	5.8%	5.8%
Total Market	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: CMS

# Specialty Pharmacy Market Share (2016)

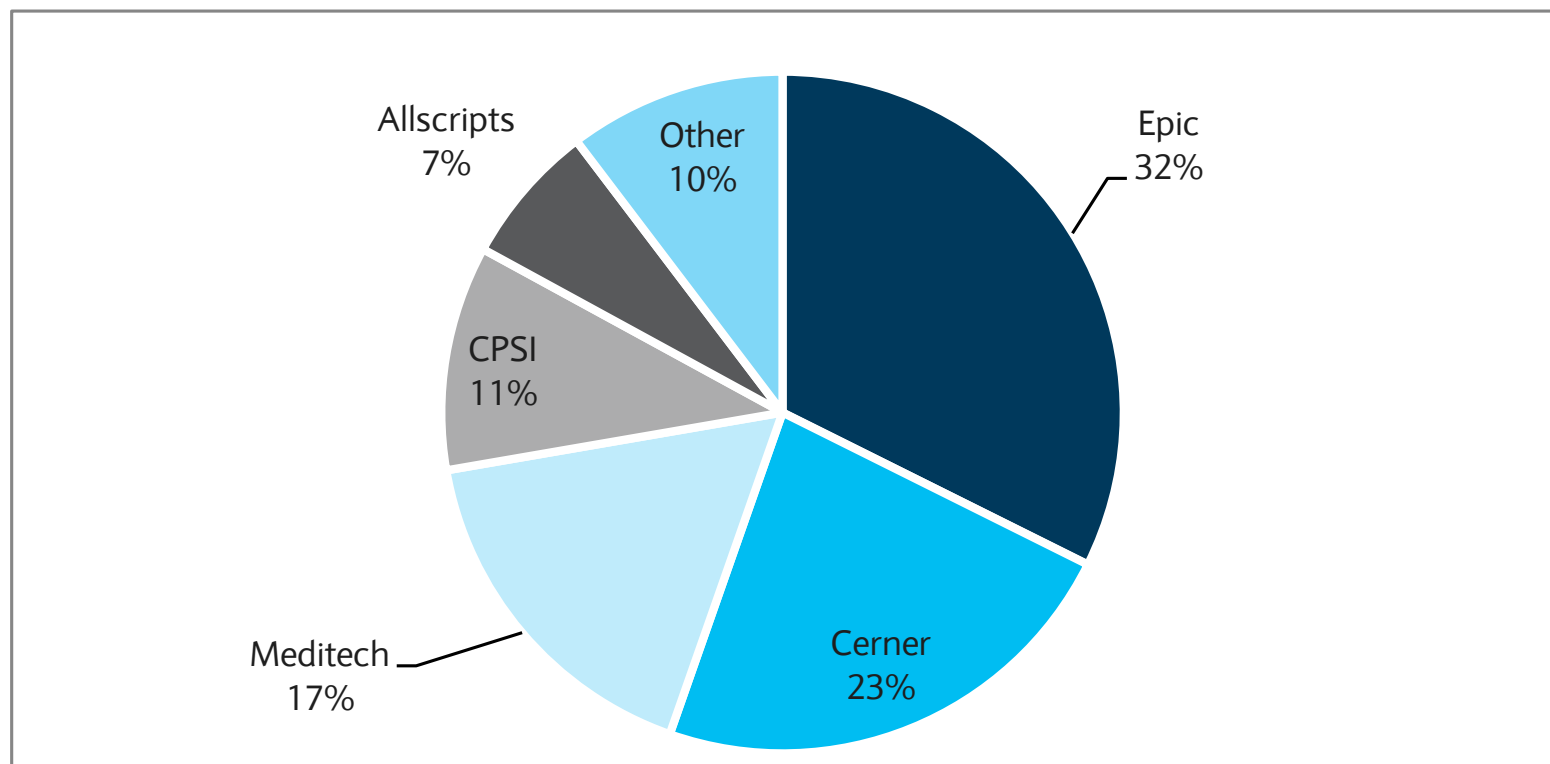
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Source: Barclays Research; Company Documents

# Healthcare IT Electronic Health Record Market Share

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Source: HIMSS Analytics; Barclays Research



# Managed Care Product Mix & Population Trends

MA Summary Preliminary vs. Final Rates												
	2009	2010	2011 *	2012	2013	2014	2015	2016	2017	2018	2019	7 Yr Avg.
Preliminary	4.80%	0.50%	1.28%	0.70%	2.30%	(2.34)%	(1.90)%	1.70%	3.00%	2.80%	4.35%	0.89%
Final	4.24%	0.81%	0.00%	(0.16)%	2.80%	2.96%	(3.40)%	4.20%	3.12%	2.70%	NA	1.75%
Change	(0.56)%	0.31%	(1.28)%	(0.86)%	0.50%	5.30%	(1.50)%	2.50%	0.12%	(0.10)%	NA	0.85%

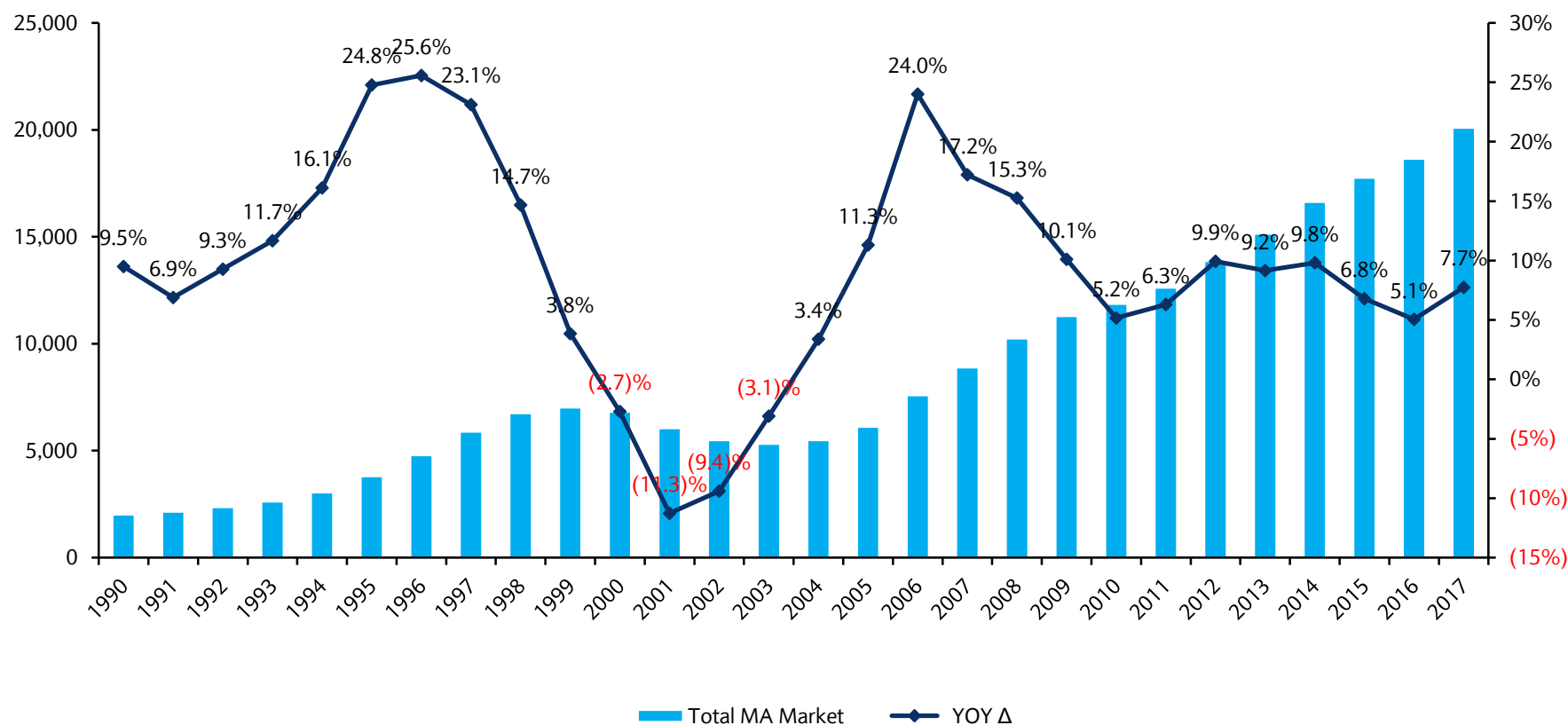
\* - 2011 change due to legislation passed subsequent to 45 day notice

Medicare Population Trends (MM)											
Enrollment	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18E	Dec-19E	5 Yr - Dec-22E	10 Yr - Dec-27E	
Medicare Eligible (CMS)	50.8	52.5	54.1	55.6	57.3	60.2	62	64	70	83	
Medicare Advantage	13.9	15.1	16.6	17.8	18.7	20.1	21	23	27	38	
PENETRATION RATE	27.3%	28.8%	30.7%	31.9%	32.6%	30.4%	34.4%	35.4%	38.5%	45.8%	
YOY Growth	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16	Dec-17	Dec-18E	Dec-19E	5 Yr - Dec-22E	10 Yr - Dec-27E	
Medicare Eligible (CMS)	3.7%	3.3%	3.0%	2.8%	3.0%	5.2%	3.0%	3.0%	3.0%	3.0%	
Medicare Advantage	9.9%	9.2%	9.8%	6.8%	5.1%	7.7%	6.0%	6.0%	6.0%	6.0%	

Source: Barclays Research Estimates; Company documents

# Medicare Advantage Membership

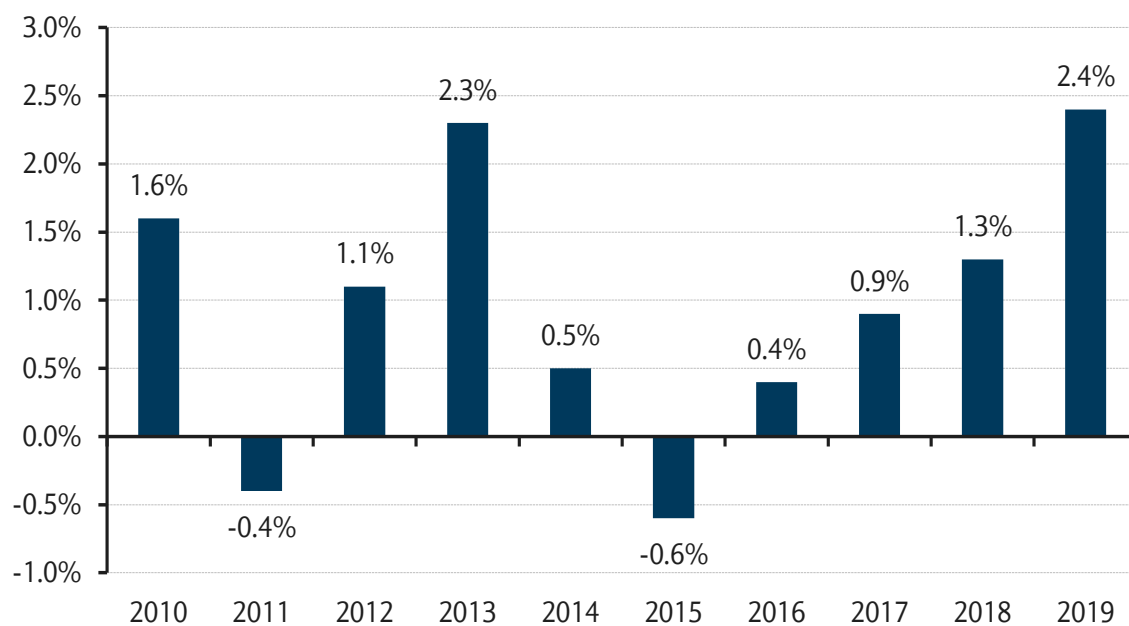
Medicare Advantage Membership 1990-2017 ('000)



Source: CMS

# Medicare Inpatient Hospital Annual Rate Updates

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Source: CMS

# Same Store Adjusted Admissions

Same Store Adjusted Admissions																		
	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18
CYH	-5.3%	-1.2%	0.0%	2.7%	2.5%	-0.2%	0.1%	-1.2%	1.3%	-0.6%	-1.5%	-1.4%	-1.4%	-2.5%	-2.3%	-0.9%	-1.9%	-0.2%
HCA	-0.3%	2.2%	4.1%	5.6%	6.8%	4.9%	3.6%	2.9%	3.1%	1.6%	1.3%	1.5%	1.6%	1.3%	0.3%	2.3%	1.8%	2.8%
LPNT	-1.9%	2.0%	4.5%	5.0%	4.3%	1.8%	0.1%	-1.1%	0.0%	-1.9%	-1.8%	-0.7%	0.5%	-0.8%	-1.4%	-0.1%	-2.2%	0.5%
QHC									0.8%	-2.5%	-3.0%	-3.5%	-0.8%	-0.2%	0.2%	0.6%	1.1%	-1.8%
THC	0.3%	4.0%	4.9%	4.5%	5.9%	2.3%	0.7%	0.3%	2.2%	0.5%	1.4%	-0.5%	-2.5%	-1.4%	-2.2%	1.3%	0.6%	-0.2%
UHS (acute)	-0.5%	3.6%	4.1%	5.5%	5.7%	5.7%	5.1%	4.8%	7.8%	3.9%	4.6%	4.7%	5.1%	6.0%	3.5%	7.3%	2.3%	1.9%
UHS (psych)	2.3%	4.4%	5.4%	6.8%	6.0%	4.2%	1.6%	0.2%	1.4%	-0.3%	1.3%	2.1%	2.4%	3.7%	1.1%	2.5%	1.6%	1.2%
Acute Average	-0.9%	2.5%	3.8%	5.0%	5.2%	3.1%	1.9%	1.0%	2.4%	0.1%	0.3%	0.3%	0.7%	0.9%	-0.1%	1.9%	0.5%	0.6%

Same Store Adjusted Admissions - Y/Y Growth																		
	Mar-14	Jun-14	Sep-14	Dec-14	Mar-15	Jun-15	Sep-15	Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18
CYH	-1bps	14bps	40bps	94bps	79bps	10bps	1bps	-39bps	-12bps	-4bps	-16bps	-2bps	-27bps	-19bps	-8bps	5bps	-5bps	22bps
HCA	3bps	11bps	30bps	66bps	72bps	27bps	-5bps	-27bps	-37bps	-33bps	-24bps	-15bps	-15bps	-2bps	-9bps	8bps	2bps	15bps
LPNT	30bps	27bps	59bps	89bps	61bps	-2bps	-44bps	-61bps	-43bps	-37bps	-19bps	4bps	6bps	11bps	4bps	6bps	-27bps	13bps
QHC													-16bps	23bps	32bps	41bps	19bps	-16bps
THC	28bps	47bps	54bps	50bps	56bps	-17bps	-42bps	-42bps	-37bps	-18bps	7bps	-8bps	-47bps	-19bps	-36bps	18bps	31bps	12bps
UHS (acute)	10bps	16bps	5bps	55bps	62bps	21bps	10bps	-7bps	21bps	-18bps	-5bps	-1bps	-27bps	21bps	-11bps	26bps	-28bps	-41bps
UHS (psych)	17bps	-10bps	-4bps	44bps	37bps	-2bps	-38bps	-66bps	-46bps	-45bps	-3bps	19bps	10bps	40bps	-2bps	4bps	-8bps	-25bps
Acute Average	14bps	17bps	31bps	66bps	61bps	6bps	-20bps	-40bps	-26bps	-26bps	-10bps	0bps	-17bps	8bps	-4bps	15bps	-2bps	-3bps

Source: Company Documents

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