Advisory Board

2018 Outpatient Shift Market Update

ROAD MAP

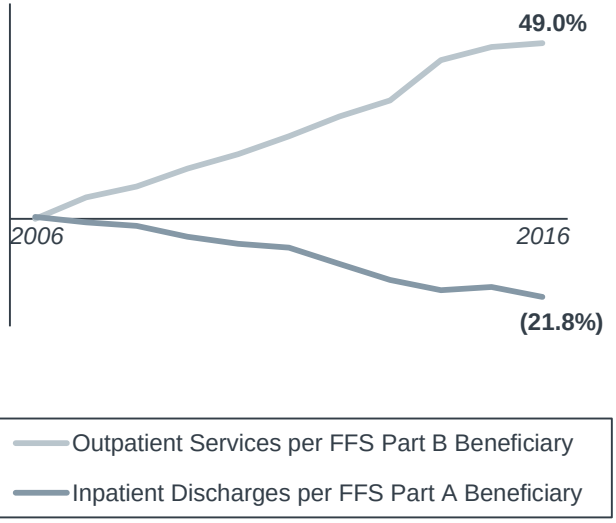
1. Unpacking Outpatient Shift
2. Lessons Learned from Outpatient Shift Testing
3. What's Ahead and How to Prepare

Outpatient Shift a Pressing Concern

Eroding IP Volumes, Leaving Excess Bed Capacity and Complex Cases

Medicare Volume Growth

Cumulative Percent Change



15%

Decline in IP share of revenue, 2010-2015

16%

Decline in IP bed utilization rate, 1975-2014[1]

23%

Increase in share of IP admissions to adults with MCC[2], 2003-2014

1) Change in estimated percentage of staffed beds that are occupied.
2) Multiple Chronic Conditions

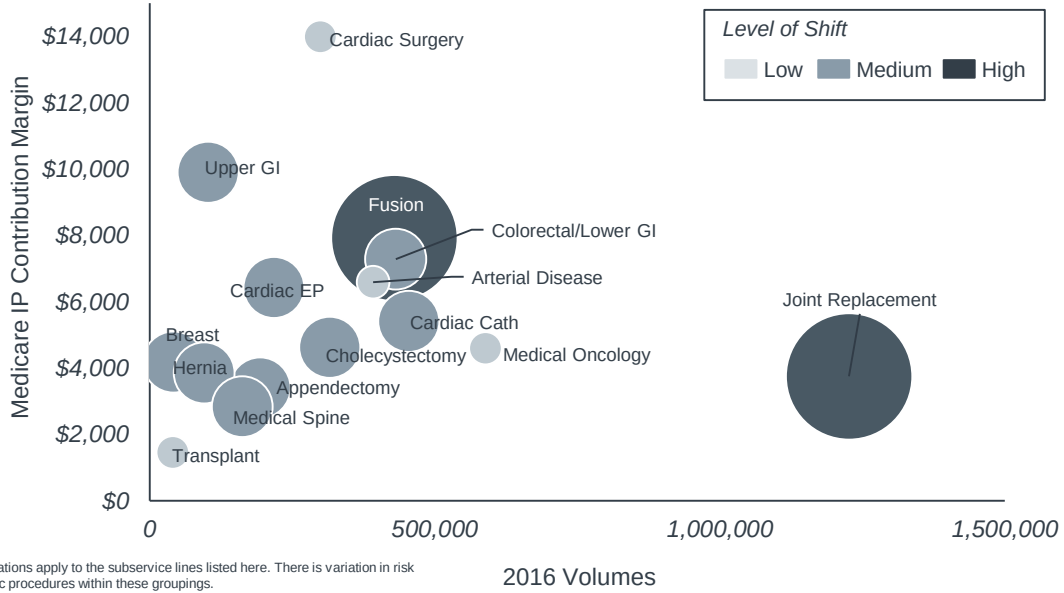
Source: "Report to the Congress: Medicare Payment Policy," MedPAC, March 2018, available at: http://www.medpac.gov/docs/default-source/reports/mar18_medpac_ch3_sec.pdf?sfvrsn=0, CMS; Hospitals, beds, and occupancy rates, by type of ownership and size of hospital: United States, selected years 1975–2014, CDC, available at https://www.cdc.gov/nchs/data/hus/2016/089.pdf; Trends and Projections in Hospital Stays for Adults With Multiple Chronic Conditions, 2003–2014 , HCUP, available at https://www.hcup-us.ahrq.gov/reports/statbriefs/sb183-Hospitalizations-Multiple-Chronic-Conditions-Projections-2014.pdf; Service Line Strategy Advisor research and analysis

Shift Threatening Many Remaining IP Profit Centers

Several Profitable, High Volume Services Facing High Risk of Shift

IP Service Volume, Contribution Margin and Risk of OP Shift

Larger Bubble Indicates Greater Risk of Shift[1,2,3,4]



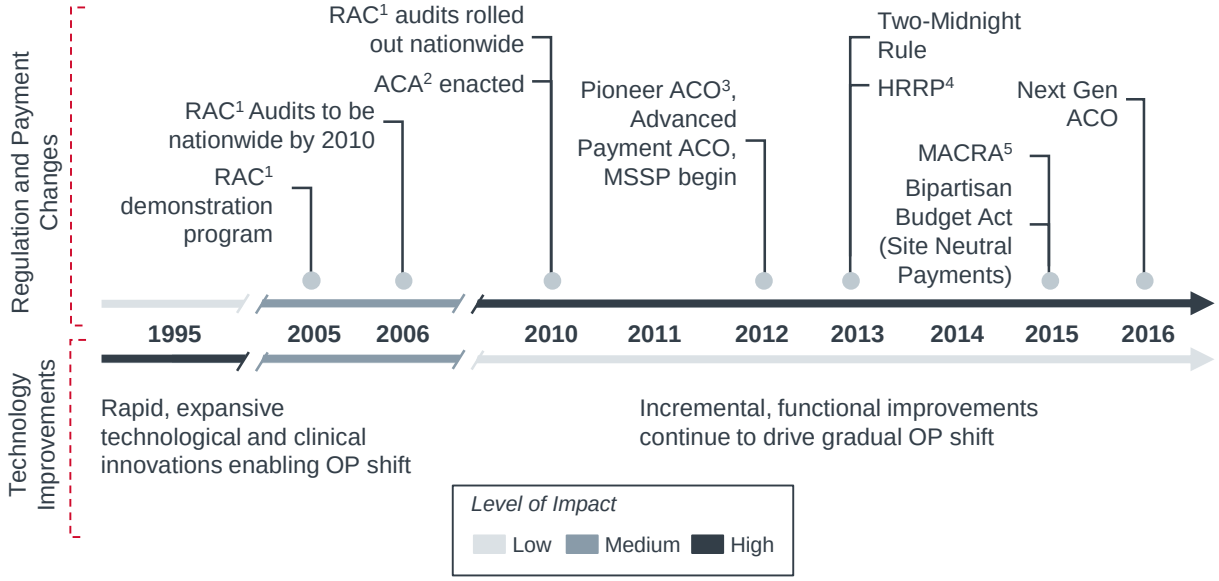
1) At-risk designations apply to the subservice lines listed here. There is variation in risk among specific procedures within these groupings.
2) Risk indicates likelihood of shift within the next 5 years.
3) Volumes are 2016 estimated volumes from Advisory Board Market Scenario Planner tool
4) IP contribution margin data is national 50th percentile pulled from Advisory Board Hospital Benchmark Generator.

Source: Advisory Board Market Scenario Planner, Advisory Board Hospital Benchmark Generator; Service Line Strategy Advisor research and analysis

A Perfect Storm to Accelerate Outpatient Shift

Regulation Era a Second Wind to Technology Innovation's Impact

Major Milestones Impacting OP Shift



1) Recovery Audit Contractor, demo continued until 2008
2) Affordable Care Act
3) Accountable Care Organization
4) Hospital Readmission Reduction Program, began in 2013 as a permanent program
5) Medicare Access and CHIP Reauthorization Act

Source: A History of the RAC Program, available at: http://medicareintegrity.org/wp-content/uploads/2015/02/RAC_Timeline_v4.pdf, Timeline of the health care law, CNN, available at: https://www.cnn.com/2012/06/28/politics/supreme-court-health-timeline/index.html, Aiming for Fewer Hospital U-turns: The Medicare Hospital Readmission Reduction Program, available at: https://www.kff.org/medicare/issue-brief/aiming-for-fewer-hospital-u-turns-the-medicare-hospital-readmission-reduction-program, Origins and Future of Accountable Care Organizations, available at: https://www.brookings.edu/wp-content/uploads/2016/06/Impact-of-Accountable-CareOrigins-052015.pdf, Service Line Strategy Advisor research and analysis

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Stages Evident in Key Procedures' Historic Trends

Shift Stage

1 Early Movers

Little to no shift potential remaining; any activity is limited to growth in the physician office setting

2 Decelerating Shifters

Procedures continuing to shift to the HOPD or freestanding settings, but with minimal shift year to year

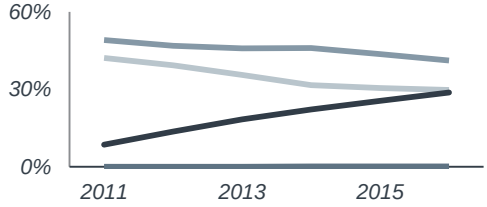
3 Active Movers

Still moving IP to HOPD or HOPD to freestanding with substantial room for shift remaining

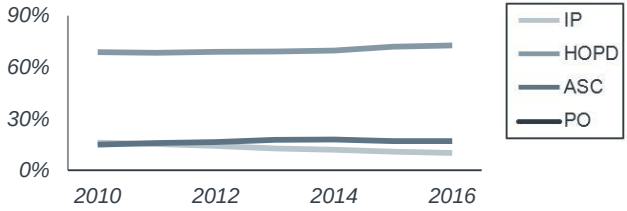
Procedure Example

Share (%) By Site of Care

Perc Peripheral Arterial Intervention



Lap Hernia Repair



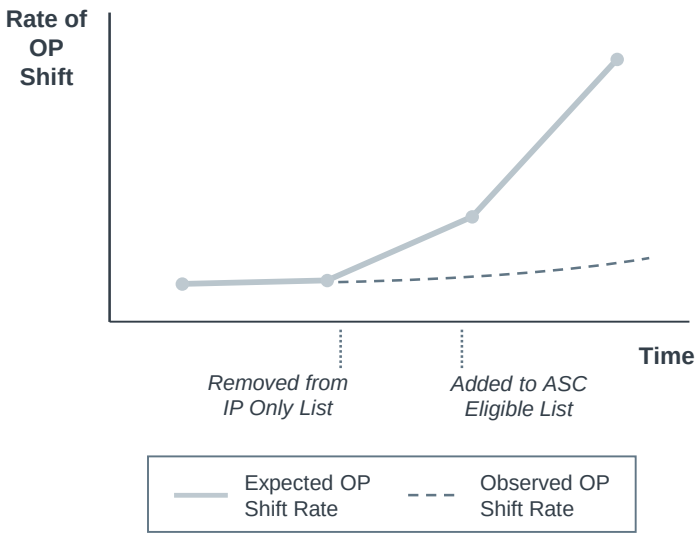
Pacemaker Implant

Source: CMS Physician/ Supplier Procedure Summary Master File CY 2005-2016, CMS, Service Line Strategy Advisor research and analysis

It's A Marathon, Not A Sprint

You Have Time to Prepare– Particularly for Shift to ASCs

Expected vs. Observed Outpatient Shift Rates



OP Shift Slower Than Expected

83%

Percent of procedures with less than 10% shift to ASC after 5 years eligibility[1]

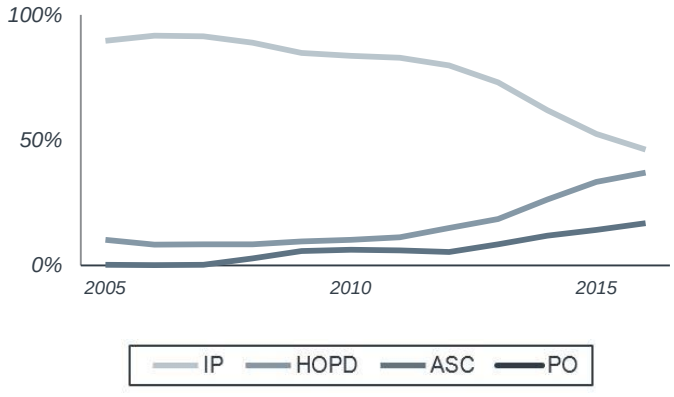
1) Only includes procedures approved for ASC setting between 2005-2016, with at least 5 years of available data

Source: CMS Physician/ Supplier Procedure Summary Master File CY 2005-2016, CMS, Service Line Strategy Advisor research and analysis.

New CMS Rules Don't Trigger Immediate Shifts

Gradual OP Shift Followed Partial Knee Arthroplasty Removal From IP List

Share (%) Medicare Volumes By Site of Care
Partial Knee Arthroplasty, 2005-2016



HOPD Eligible: 2002 **ASC Eligible:** 2008

PKA Begins to Move Outpatient

54%

Proportion of all Medicare PKA cases performed outpatient, 2016

-11%

Decline in inpatient Medicare PKA cases, 2005-2016

17%

Proportion of all Medicare PKA cases performed in ASC, 2016

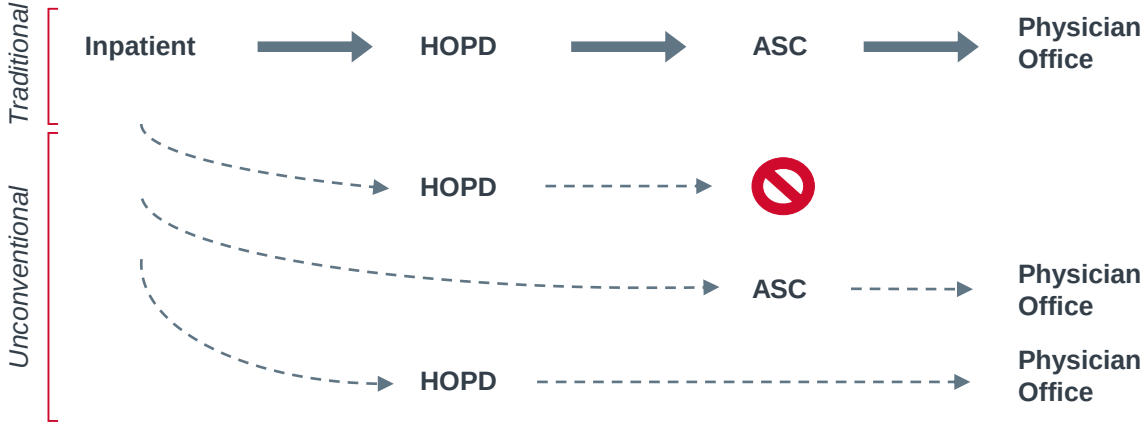
Total Knee Arthroplasty (TKA) was first proposed by CMS for removal from the IP only list in 2012 for CY 2013.

Source CMS Physician/ Supplier Procedure Summary Master File CY 2005-2016, CMS, Service Line Strategy Advisor research and analysis

You Can't Assume a Standard OP Shift Trajectory

Trends Show Multiple Unique Paths Across Sites of Care

Procedures' OP Shift Pathways



62%

Percent of procedures that followed traditional path, 2005-2016

38%

Percent of procedures that followed unconventional path, 2005-2016

Source: CMS Physician/ Supplier Procedure Summary Master File CY 2005-2016, CMS, Service Line Strategy Advisor research and analysis.

Five Forces Broadly Impact Outpatient Shift

Outpatient Shift Drivers and Definitions

National

More Localized

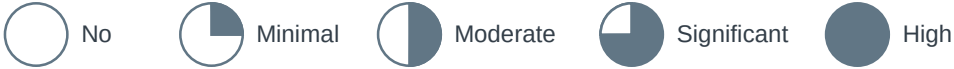
Force		Description
1	**Clinical Feasibility**	The extent to which a procedure can be done and has been proven to be safe in alternative care settings
2	**Regulation**	The extent to which regulations allow for or impact the shift of care to a new setting
3	**Physician Comfort**	The extent to which physicians are comfortable performing cases in other care settings, once proven to be safe
4	**Payment**	The extent to which payments incentivize providers to perform cases in a certain setting
5	**Patient Preference**	The extent to which patients prefer a certain site of care

Source: Service Line Strategy Advisor research and analysis.

Forces' Level of Influence Varies By Service Line

Forces' Impact on Outpatient Shift by Service Line

Service Line	Clinical Feasibility	Physician Comfort	Regulation	Payment	Patient Preference
CV					
General Surgery					
Spine					
Oncology[1]					
Orthopedics					



1) Surgical oncology

Source: Service Line Strategy Advisor research and analysis.

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What's Ahead for Outpatient Shift?

Expect Disruption for Several Ortho and Spine Cases

Outpatient Shift Watch List – Regulations to Watch

Priority	Procedure	What to Watch
Short Term	Total Hip Arthroplasty (THA)	Removal from the inpatient only list
	Partial Hip Arthroplasty (PHA)	Removal from the inpatient only list
	Total Knee Arthroplasty (TKA)	Addition to the ASC eligible list
	Total Disc Arthroplasty	Addition to the ASC eligible list
Mid Term	Total Ankle Arthroplasty (TAA)	Removal from the inpatient only list
	Revision TAA	Removal from the inpatient only list
	Total Shoulder Arthroplasty	Removal from the inpatient only list
	Shoulder Hemiarthroplasty	Removal from the inpatient only list
	Cervical Posterior Fusion	Removal from the inpatient only list
Long Term	Lumbar Fusion Combined	Removal from the inpatient only list
	Thorax Spine Fusion	Removal from the inpatient only list
	PCI	More shift to the OP setting and eventually freestanding

Source: Service Line Strategy Advisor research and analysis

Assess Services' Risk of Outpatient Shift

	Force	Questions to Consider	Indicator	Y/N?
National	**Clinical Feasibility**	Will new technology innovations shift care outpatient?	Clinical trials	
		Are new innovations proven safe and effective?	FDA approvals, clinical studies	
	Regulation	Will CMS approve the procedure for HOPD or freestanding settings?	CMS rules	
More Localized		Will state regulators encourage shifting care outpatient?	State policies	
	Physician Comfort	Are our physicians comfortable performing cases in HOPD or freestanding settings?	Volumes by site	
		Do physicians have the appropriate infrastructure to perform cases OP?	Existing facilities' comprehensiveness	
	Payment	Is reimbursement favorable for outpatient sites of care?	Per case payments by care site by payer	
		Are our payers steering patients to lower cost care sites?	Pre-authorizations, online calculators	
	Patient Preference	Are our patients price sensitive?	High HDHPs	
		Will consumers prefer a more convenient OP site?	High wait times, patient travel patterns	

Level of Risk Based on Number of "Y's"

< 3 Low **4-6** Moderate **>7** High

Source: Service Line Strategy Advisor research and analysis

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