



Healthcare procedures on the move

How and where to capitalize
on the ongoing shift of care
outside of hospital settings

Introduction

Driven by policy makers, payers, patients—and investors—today more and more types of care in the US are delivered outside of traditional hospitals and in health centers, including physician offices, patient homes, and ambulatory surgery centers (ASCs). The trend is accelerating, creating new opportunities and risks—payments for procedures conducted outside the hospital can be upwards of 40 percent lower. It takes rigorous research and planning to identify the best opportunities in each market and in each type of care.

There are many good reasons for these site-of-service shifts. For payers, including CMS, procedures carried on outside the hospital setting represent a savings opportunity. Hospital-based providers, however, risk declining revenue if they shift services outside of the hospital without either receiving value-based incentives for reducing cost of care or backfilling hospital volume with higher-acuity services. Patients like the convenience, lower cost, and quality of service—ASCs and other care sites outside of hospitals consistently receive higher patient satisfaction scores than hospitals¹. Investors see a growth opportunity: they're funding digital health, expansion of ambulatory and home care chains, and investing in providers that have appetite to enter into value-based care models that are incentivized to shift volumes outside of the hospital. Investors view value-based care as an

opportunity to gather greater return through accepting greater risk.

How can healthcare systems, physicians, and investors make the most of these shifts? As they look to pursue partnerships, deploy resources, and adapt to the changing healthcare ecosystem, providers, healthcare systems, and investors must understand local market dynamics and quantify how and where care has shifted, and by specialty. In this paper, we evaluate key services that have shifted in cardiology, ENT, gastroenterology, general surgery, orthopedics, radiology, and urology and compare how shifts have differed across the top 100 metropolitan statistical areas in the US. Our findings answer the following critical questions for providers, payers, and investors:

01

What services can be successfully shifted outside of the hospital?

02

In which markets have services shifted and where have they not?

03

What factors may be driving this difference in site-of-service shift maturity by market?

04

How and where should stakeholders strategize and invest for mature versus immature markets?

¹ The Leapfrog Group, Washington DC (April 7, 2022)

Understanding shifts in services and markets

Discussions around services shifting in healthcare have been active for more than a decade, although specifics around what services have shifted and where remain elusive. Our analysis aims to answer these questions and place boundaries around what specific services are currently shifting and in which markets. For this paper, we established the place of service shift barrier as the hospital walls and focused on services that are often conducted within the walls of the hospital² (e.g., hospital outpatient, hospital inpatient, emergency department) as well as outside in ambulatory care settings³ (e.g., office, ambulatory surgery center, urgent care). Additional site-of-service shifts not explored in this paper but relevant to the overall trend are occurring from inpatient (IP) to hospital outpatient (HOPD) settings, in diagnostics across hospital, commercial, and clinical labs, and within post-acute care shifting to hospice and home care.



Service selection

Our analysis used 2021-2022 clearing house claims⁴ from the top 100 largest metropolitan statistical areas (MSAs) by population in the U.S. This includes all large to mid-sized cities in the U.S. and their surrounding suburban areas such as New York, Chicago, Cleveland, Denver, etc. We used that data to identify services that nationwide show a split between hospital and non-hospital sites of service. Services were rolled up into Clinical Classifications Software (CCS) procedure categories defined by the Healthcare Cost and Utilization Project (HCUP), a Federal-State-Industry partnership sponsored by the Agency for Healthcare Research and Quality. CCS categories for site-of-service analysis were narrowed down using the following parameters:

- Between 20 percent and 80 percent of claims are conducted outside of the hospital.
- There is an average volume by market of at least 1,000 claims, and all markets are represented.

- Procedure categories that are roll-ups of “all other procedures” are excluded.
- Trauma and emergent procedures are excluded due to their non-elective nature.
- Low-volume and high-acuity service lines are excluded.

After all parameters were applied, the analysis narrowed down to 32 CCS categories⁵ with significant volume across all markets where cases have begun meaningfully shifting from inside of the hospital to other care sites. The identified categories align to seven service lines: cardiology, otolaryngology (ENT), gastroenterology, general surgery, orthopedics, radiology, and urology. Key procedures include diagnostic tests such as echocardiograms, cardiac stress tests, and various ultrasounds, as well as lower-acuity procedures such as colonoscopies, breast biopsies, and arthroplasties.

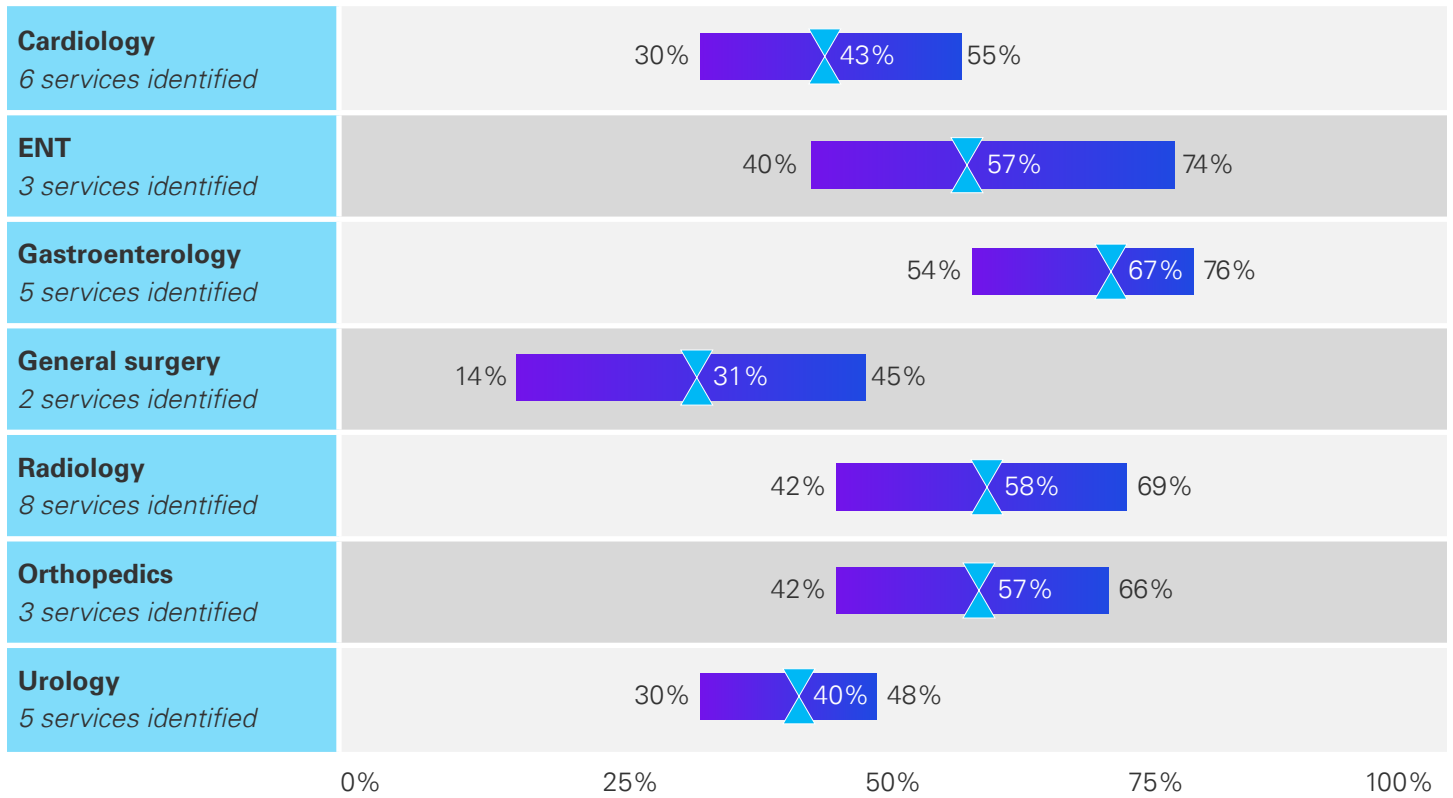
² Place of Service codes 19, 21, 22, 23

³ Place of Service codes 11, 20, 24

⁴ Source: Compile Enhanced Claims Dataset (2022)

⁵ Clinical Classifications Software (CCS) categories are developed and maintained by the Healthcare Cost and Utilization Project (HCUP).

Exhibit 1: Percent of services being conducted outside of the hospital¹ by Market Interquartile Range (IQR)





Market comparison

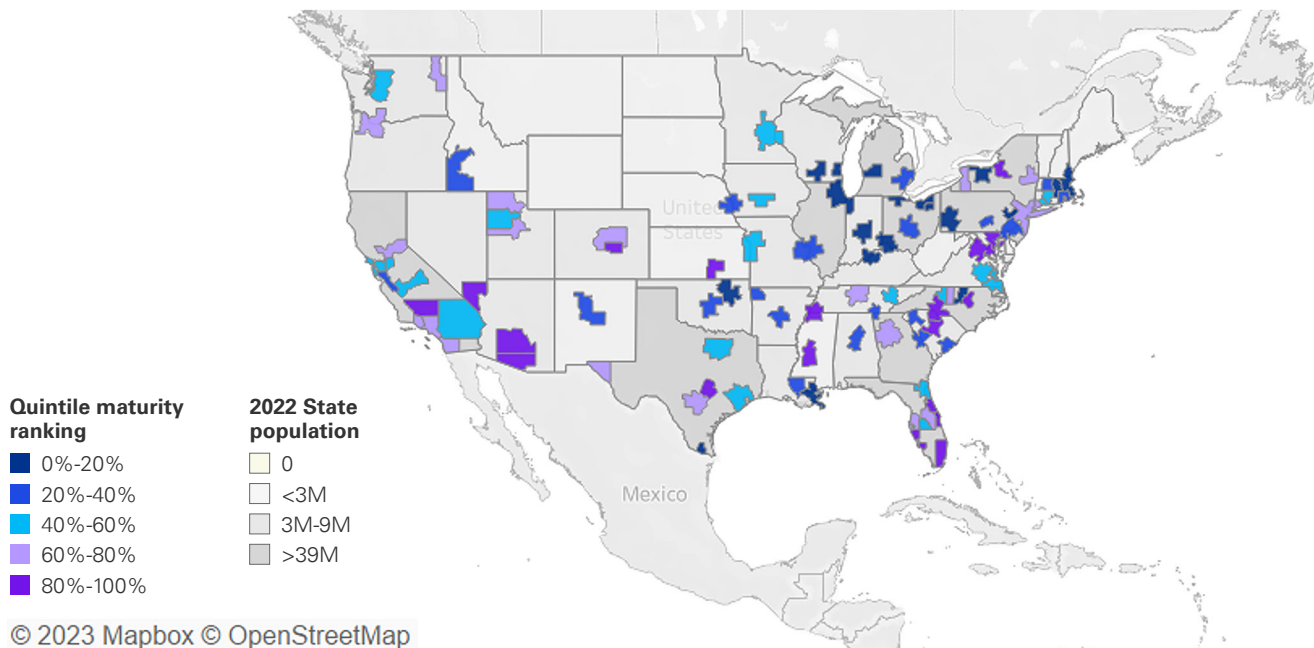
For each of the services identified, volumes have been meaningfully shifted outside of hospital settings, but our analysis demonstrated that the degree to which shifts across services have occurred differs significantly across markets. Our analysis identified a spectrum of markets where some MSAs have moved the majority of identified services to non-hospital settings while others still perform almost all cases in the hospital. One example is cardiac stress tests. The top quartile of MSAs analyzed conduct more than 66 percent of cardiac stress tests outside of the hospital, typically in the office setting. However, the bottom quartile of MSAs analyzed conduct less than 17 percent outside of the hospital. Two markets that represent this trend for cardiac stress trends are Houston and Indianapolis, where 81 percent of stress tests are conducted out of the hospital in Houston while only 8 percent are conducted out of the hospital in Indianapolis.

Similar large ranges across markets occur in many other services, including echocardiograms, tonsillectomies, breast biopsies, arthroscopies, radiation oncology, electroencephalograms (EEG), and mammograms. For the most part, these ranges are consistent across procedures and service lines where markets that have not shifted one service have not shifted others either.

Aggregating claims from the top 100 largest MSAs across the 32 services identified, our analysis plotted each market on a spectrum from least to most mature from a perspective of shifting services outside of the hospital. Some of the most mature markets include Austin, Las Vegas, and Memphis, with up to 75 percent of all identified services occurring outside of the hospital. On the other end of the spectrum, immature markets include Cleveland, Madison, WI, and New Orleans, with less than 30 percent occurring outside of the hospital.

Exhibit 2. Market Maturity Percentile by MSA based on percent of services being conducted outside of the hospital

Market total calculated as average out of hospital percentage across all 32 identified services. Top 100 MSA averages were summarized below as percentiles.



03

Driving forces

The market forces driving care out of the hospital to lower-cost settings are stronger than the forces influencing care to be delivered in higher-cost hospitals in mature markets. The following five market forces are influencing the shift of these procedures to lower-cost settings.

1 Payer concentration and market power

Payer profits are dependent on effectively managing the total cost of care for members. In markets where payers have strong market share and alignment with providers, they can influence reimbursement model changes and increase provider adoption of risk-sharing and value-based payment models that incentivize providers to treat patients in the most appropriate, low-cost settings.

2 Private equity (PE) funding

PE firms are investing in independent outpatient facilities and physician groups and looking to unlock value from risk-based payment models and accelerating the shift of procedures outside hospitals.

3 Cost of capital

Inflation and rapidly rising capital costs are driving health systems to consider rationalizing services, re-thinking investments, and shifting care to lower-cost outpatient settings rather than building new inpatient facilities.



4 Consumer trends

Healthcare consumers, especially those who are insured by high-deductible health plans, want to receive care in convenient locations that have lower out-of-pocket costs. Additionally, the pandemic drove consumers to avoid hospitals, specifically emergency departments, to stop the spread of COVID-19.

5 New technology

Telehealth and remote-patient monitoring are eliminating the need for more and more emergency department visits. In addition, new technologies and equipment are allowing many procedures to be conducted on an outpatient basis rather than requiring an overnight stay in the hospital, which can significantly reduce total cost of the encounter.

On the other end of the spectrum, immature markets may have the following three market forces influencing a larger portion of procedures to continue to be delivered inside hospitals:

1 Payer concentration and market power

Health systems and hospitals that have large employed and tightly aligned physician networks supporting leading market share positions have more negotiating power with payers for fee-for-service contracts and influence in where care is delivered. Health systems receive higher reimbursement rates if they bill for services in hospital-based outpatient departments compared to freestanding outpatient clinics as they receive payment for both a technical fee and professional fee component. Therefore, employed, salaried physicians can drive more revenue by delivering care within hospital-based outpatient departments.

2 Demographics and higher-acuity patients

The aging population, longer lifespans, and unhealthy behaviors leading to worsening and multiple chronic conditions drive care delivery to remain in high-acuity hospital settings in case complications arise.

3 Centers of excellence

Certain consumers have a preference for brands over price of services. That can result in service line centers of excellence, academic medical centers, and/or highly regarded hospital-employed physicians driving certain procedural volumes to remain at hospitals that achieve this distinction or brand loyalty.








Implications for providers, payers, and investors

The market differences identified by the site-of-service analysis will have different implications for providers and payers in how they are able to successfully implement value-based care models, invest in ambulatory assets, and pursue growth. For investors, market maturity in site-of-service shifts will impact different value drivers for new market entry investment theses.

Key implications for payers, investors, and providers in mature and immature markets

	Mature markets	Immature markets
 Payer	Focusing on initiatives that drive enrollment growth, improve quality of care, and expand VBC models	Work with provider organizations to initiative VBC incentives and begin shifting services out of hospitals
 Investor	Invest in specialties with value based care (VBC) potential and enter into more risk-bearing arrangements	Invest in fee-for-service (FFS) specialties with high procedural volume for short-term opportunities; for longer-term gains, work with payers/providers to shift services out of the hospital
 Provider	Reduce total cost of care via risk-based capitation models and shifting additional services out of hospitals	Invest in ambulatory assets by partnering with physician groups; begin exploring VBC arrangements to prepare for future shifts in care

Provider strategy

Immature markets are likely still driven by fee-for-service (FFS) models of reimbursement. In FFS models, health systems and hospitals are incentivized to keep volume concentrated in hospitals as these volumes generate facility revenue that would be lost or reduced in sites of service outside of the hospital. However, these models often pit health systems against payers that wish to drive volumes to lower-cost settings.

Strategies for providers in immature markets include:

- Invest in ambulatory assets through acquisitions or joint ventures so that as volumes shift outside of the hospital, a portion of facility revenue is retained.
- Partner with physician groups on technology, care-management capabilities, and capital equipment. This can allow key procedures and diagnostics to be conducted in office settings to strengthen referral relationships and capture downstream volumes.

- Evaluate initial value-based care arrangements with payers that incentivize initial volumes shifts through shared savings, quality bonuses, or favorable professional rates for service carve outs. Mature markets have likely adopted some value-based care models of reimbursement or have payer concentration that have incentivized independent or aligned providers to shift volumes out of the hospital. Mature markets will continue to shift services and will likely lead the way in identifying new services for lower-acuity settings. In response, health systems will need to shift their business models to generate value from population health and managed care to take advantage of the lower total cost of care in mature markets.

Strategies for providers in mature markets include:

- Enter risk-based capitation models with payers for Medicare Advantage, managed Medicaid, or commercially insured lives to receive a percent of premium revenue in exchange for reducing total cost of care for at-risk patients.
- Build networks across the continuum of care through acquisition or partnership to facilitate care management and coordination capabilities.

Payer strategy

Payers have the most incentive to shift services outside of the hospital to lower cost of care and capture a higher percent of premium. Payers operating in immature markets can achieve significant upside by shifting services out of the hospital. However, immature markets may have provider or consumer dynamics that have limited the ability for payers to shift services.

Strategies for payers in immature markets include:

- Pursue joint ventures and partnerships with independent providers in select specialties to help them build or expand care offerings in alternative sites of care.
- Align with providers that are investing in ambulatory assets through more favorable rates to further incentivize care shifts.
- Create value-based care programs that reward physicians in select specialties for shifting identified services to the office or ASC setting.

Payers in mature markets are the best positioned for growth and to continue investing in value-based care arrangements. Increased premiums retained from lowered patient costs can be reinvested in other strategic initiatives to expand benefits, develop more advanced care coordination capabilities, and diversify lines of business.

Strategies for payers in mature markets include:

- Pursue enrollment growth through offering diversified benefits and decreasing premiums across commercial, Medicare Advantage, and managed Medicaid lines of business.
- Expand value-based care models to shift more risk to providers in the markets that have successfully moved services outside of the hospital.
- Identify additional services that could shift outside of the hospital to office, ASC, or home health sites of care through technology investments and research.

Investor strategy

Market maturity has significant impact on healthcare acquisitions for investors. Healthcare investor activity in the last few years has been concentrated on physician groups, risk-bearing platforms, and management-service organizations. For these acquisitions, the deal theses, value drivers, potential upside opportunity, and potential risks are all impacted by site-of-service shift maturity. In immature markets, there is significant upside for investors to shift services outside the hospital where independent physician organizations will earn higher professional fees and pick up facility revenue if they own ambulatory assets. However, immature markets pose potential risks from provider concentration that could make efforts to shift services more challenging as they could disrupt referral relationships with health systems.

Strategies for investors in immature markets include:

- Pursue assets in fee-for-service specialties where procedural volume is expected to be high, such as ophthalmology, orthopedics, and urology.
- Partner with payers to shift services out of the hospital.
- Invest in technology and equipment to give physician assets the capabilities to perform procedures and diagnostics in the office setting.

In mature markets, physician assets would be very attractive, particularly for short-term investments. Assets in mature markets will likely have ambulatory assets and conduct volumes at other sites of care. They will be well positioned to increase the number of services that are performed out of the hospital and enter into value-based care arrangements to capture additional upside opportunity.

Strategies for investors in mature markets include:

- Pursue assets with value-based care potential in specialties such as primary care, cardiology, women's health, and nephrology.
- Shift assets to risk-bearing arrangements to capture percent of premium or shared savings for reducing total cost of care.
- Partner with payers to identify other services that can be shifting, and secure favorable professional rates to perform these services in office or ASC settings.

Site of service shifts outside of the hospital walls continue to be a significant macro trend across U.S. healthcare. However, market conditions and characteristics have created a divide in market maturity where some geographies have remained hospital based while others have rapidly shifted to ambulatory care settings. Although challenges exist in the least-mature markets, there are tailored strategies that can be applied to markets of all shapes and sizes as the diversity of services in play provides interested parties with fertile investment ground, and as healthcare consumers continue to insert themselves into their own care and demand shifts to lower-cost care settings, our expectation is over the next few years the hospital walls will continue to lower.



How KPMG can help

The KPMG healthcare strategy practice serves provider, payer, and private-equity players from strategy development through implementation and across all phases of the M&A lifecycle. We have helped clients of all types evaluate, pursue, and succeed in value-based care arrangements. The ability to choose how and where to play will be increasingly important as the shift to value continues. KPMG has the expertise as well as a proprietary set of tools and methodologies to help healthcare organizations continue to innovate with confidence and further their growth strategies.

Within your local market or across multiple markets, KPMG has the capabilities to assess the overall market's site of service maturity, benchmark specific provider site of service maturity relative to the broader market, as well as drill down into specific service lines or sites of service to evaluate growth opportunities and impact within both value based and fee-for-service models. Beyond the analysis outlined in this paper that focuses on the shift of services outside of the hospital walls, site of service shifts can be documented across a broader continuum including inpatient to HOPD, HOPD to ASC, and ASC to office.

Appendix

Index of CCS Categories included in analysis and market interquartile ranges:

Index of CCS Categories included in analysis and market interquartile ranges. Percentiles represent the percent of services being conducted outside of the hospital at the market level. For instance, in the first row for Arterio or Venogram: 25 out of the 100 markets conduct 6.9 percent or less of these procedures outside of the hospital. Another 25 markets conduct between 6.9 percent and 16.3 percent, another 25 markets conduct between 16.3 percent and 26.2 percent, and the 25 most mature markets conduct 26.2 percent or more of these procedures outside of the hospital.

Service line	CCS category	Percent of services being conducted outside of the hospital ¹ by Market Interquartile Range (IQR) ²		
		25 th	50 th	75 th
Cardiology	Arterio or venogram (not heart and head)	6.20%	16.30%	26.20%
	Cardiac stress tests	16.80%	41.80%	66.20%
	Contrast aortogram	12.40%	26.00%	46.20%
	Diagnostic ultrasound of heart (echocardiogram)	19.50%	40.30%	55.40%
	Electrocardiogram	30.60%	41.70%	53.90%
	Electrographic cardiac monitoring	76.10%	91.80%	97.10%
ENT	Myringotomy	45.00%	66.60%	80.20%
	Plastic procedures on nose	42.20%	61.50%	76.00%
	Tonsillectomy and/or adenoidectomy	27.80%	47.50%	69.30%
Gastroenterology	Colonoscopy and biopsy	51.60%	71.30%	80.10%
	Esophageal dilatation	47.20%	63.70%	73.90%
	Hemorrhoid procedures	64.40%	80.60%	88.70%
	Proctoscopy and anorectal biopsy	59.30%	71.80%	82.50%
	Upper gastrointestinal endoscopy, biopsy	38.20%	54.00%	64.40%
General surgery	Breast biopsy and other diagnostic procedures on breast	12.70%	45.10%	64.10%
	Lumpectomy, quadrantectomy of breast	4.70%	14.30%	25.10%
Orthopedics	Arthroplasty other than hip or knee	36.00%	48.00%	61.00%
	Arthroscopy	34.50%	54.50%	70.50%
	Excision of semilunar cartilage of knee	44.00%	63.20%	75.80%
Radiology	Therapeutic radiology	29.90%	58.30%	79.30%
	Diagnostic ultrasound of abdomen or retroperitoneum	26.60%	46.40%	60.50%
	Diagnostic ultrasound of head and neck	56.40%	69.60%	83.80%
	Electroencephalogram (EEG)	12.20%	34.00%	55.10%
	Magnetic resonance imaging	33.40%	54.80%	71.90%
	Mammography	26.40%	68.90%	82.40%
	Other diagnostic radiology and related techniques	52.40%	66.00%	76.90%
	Other diagnostic ultrasound	50.50%	66.10%	74.70%
Urology	Diagnostic procedures, male genital	66.50%	82.70%	89.70%
	Extracorporeal lithotripsy, urinary	12.60%	27.90%	39.90%
	Genitourinary incontinence procedures	10.90%	20.50%	37.60%
	Transurethral excision, drainage, or removal urinary obstruction	43.60%	52.60%	62.60%
	Ureteral catheterization	5.90%	12.80%	28.10%

¹ Place of Service codes 19, 21, 22, 23

² Markets included are top 100 metropolitan statistical areas in the U.S.

Source: Compile Enhanced Claims Dataset (2022)

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DASD-2023-13332