AMERICAN COLLEGE OF PHYSICIAN ADVISORS

SPECIAL TOPICS IN CONTEMPORARY UTILIZATION MANAGEMENT:

OBSERVATION-TO-INPATIENT RATIO AND PATIENT CLASS MIX

Ryan Greiner, MD, ACPA-C

In collaboration with the ACPA Observation Committee

INTRODUCTION

Healthcare finance leaders and Utilization Management (UM) departments have grappled for decades to resolve the ever-elusive question of what their health system Observation rate should be. Finance naturally wants a target that can be predictable and dependable for the purposes of budgeting and generally views the Observation volume and rate from the 15,000-foot view. UM is tasked to continually answer for the month-to-month and quarter-to-quarter natural variation in the Observation rate. UM views the Observation volume and rate at a much more granular level, understanding the nuance driven by hospital type, payer mix, hospitalized populations, and seasonal variations. Despite the inability to quote an industry wide target, there are informative ways to analyze your Observation rate and gain insight into the effectiveness of your UM processes and provide greater confidence in the Observation rate range that your health system settles into.

THE FOUR KEYS TO THE OIR AND PCM

Healthcare systems treat a wide variety of patient populations including medical, psychiatric, obstetric, pediatric, newborns and neonates, adult, and surgical patients. Within these systems, there are a wide variety of hospitals, each with their individual focus and distinct populations. Payers can vary by locality and geographic region. Payers use different definitions of medical necessity and contract provisions vary from health system to health system. The key to developing a reliable and accurate metric for the Observation-to-Inpatient Ratio (OIR) and Patient Class Mix (PCM) is to understand these nuances by evaluating each hospital in the health system as a distinct unit, including/excluding the appropriate patient populations from the calculation of the OIR and PCM, considering the influence of special patient populations, and recognizing the impact of payer mix. The following sections explain these four keys to effectively estimating useful and informative OIRs and PCMs. .

KEY 1: IMPACT OF PAYER MIX ON MEDICAL NECESSITY FOR INPATIENT LEVEL OF CARE

Research on payer billing trends has shown significant increases in Observation hospitalizations and Observation length of stay over time and across all payers. A comparative decrease in Inpatient hospitalizations has also been found. Although these studies utilize slightly different outcome measures to describe these trends, the largest increases have been seen in the Medicare Advantage (MA)

ACPA MISSION

To promote and enhance the instrumental role of physician advisors across the continuum of healthcare through education and professional development.

ACPA VISION

To be the professional home of physician advisors where industry standards are set through education, certification, mentorship, innovation, and advocacy.

AMERICAN COLLEGE OF PHYSICIAN ADVISORS

program and Traditional Medicare. Commercial Observation hospitalizations have increased to a much lesser extent, suspected due to already high baseline Observation rates. The result is a hierarchy of an increasing OIR and PCM Observation skew as you move from Traditional Medicare to MA to commercial payers. This hierarchy and its associated payer classification must be understood on a health system and hospital specific basis to ensure accurate budgeting of the OIR and PCM.

Zhao et al. (2023) analyzed a 5% sample of Traditional Medicare claims spanning 2001 to 2009, of patients hospitalized with only Observation services or who were initially hospitalized as Observation and subsequently converted to Inpatient.[1] Over this period there was a 105.8% increase in the total Observation patients, inclusive of a 131.3% increase in those hospitalized with only Observation services, and a 52.5% increase for those hospitalized as Observation and subsequently converted to Inpatient. Accounting for growth in the Medicare population by standardizing the rate to 1,000 beneficiaries, there was a 62% increase in Observation hospitalizations with a decrease of 16.2% in single midnight Inpatient stays and a 16.6% decrease of Inpatient stays with any length of stay. Length of stay for Observation patients increased by 21% from 19 to 23 hours and the percent of Observation patients with a length of stay greater than 48 hours increased to 12.5% from 3.5%, a 254.8% increase. Anecdotal experience suggests this trend has continued since this study period.

Feng et al (2012) found similar trends in evaluating Traditional Medicare claims from 2007 to 2009. They found a 34% increase in the ratio of Observation to Inpatient stays per 1,000 Inpatient hospitalizations from 86.9 to 116.6.[2] There was a 7% increase in the Observation length of stay from 26.2 to 28.2. The older the patient, the longer the length of stay, with those 85+ years of age staying on average 30.68 hours (2009) compared to those 65 to 74 years of age at 26.5 hours (2009). Black, Hispanic, and Asian patients had longer Observation length of stays compared to White patients. There were also regional variations in the number of Observation stays per 1,000 beneficiaries with the Western, Northeastern and Pacific regions being lower than the Midwest and Southern regions. The variation was more than seven-fold in 2009 ranging from 0.8 to 5.9 Observation stays per 1000 beneficiaries. This variation remains unexplained, particularly in the context of the national standard set by the Centers for Medicare and Medicaid Services (CMS) for medical necessity for Inpatient hospitalization.

Although there has been a shift towards Observation hospitalization and increasing Observation length of stay across all healthcare payers, MA and commercial payers showed the highest shift when compared to government payers. As of 2022, approximately 50% of Medicare beneficiaries were enrolled in MA plans representing a 337% increase from 2006 through 2022.[3,4] From 2011 to 2022, the share of new MA enrollees switching from Medicare to MA accelerated from 61% to 80%. Lind et al. (2019) conducted a retrospective review of claims via the OptumLabs Data Warehouse from 2004 to 2014, inclusive of 4.4 million Inpatient stays lasting up to two days and 3.5 million Observation stays. There was a 133% increase in the number of Observation stays per 1,000 enrollees for MA plans and an increase of 8% for commercial plans. Not surprisingly, the shifts in Observation length of stay for both commercial and MA enrollees was also notable. Observation stays with a length of stay of two or more days increased 99% for commercial plans (from 10.1% to 20.1%) and 327% for MA plans

ACPA MISSION

To promote and enhance the instrumental role of physician advisors across the continuum of healthcare through education and professional development.

ACPA VISION

To be the professional home of physician advisors where industry standards are set through education, certification, mentorship, innovation, and advocacy.

(from 4.5% to 19.2%).[5] This further suggests that MA and commercial plans were increasingly pushing for longer Observation stays and fewer Inpatient stays of less than or equal to two midnights. MA plans' Observation policies have been catching up with commercial payers. Although the reasons for the shifts are outside of the scope of this article, the authors have speculated that non-clinical factors were a driving force, namely increased scrutiny of short Inpatient stays by Medicare leading to a spillover effect with managed plans, amplified by the financial incentives of managed plans to scrutinize inpatient level of care.

The shifts towards increasing Observation hospitalizations with longer length of stay produces a hierarchy of increasing OIR and PCM Observation skew across payer class. Payer contracts drive varying definitions of medical necessity for inpatient care and prior to 2024, the lack of clarity around MA plans' requirement to follow the Medicare Two-Midnight Rule. This produced two paradigms of medical necessity approaches: Traditional Medicare and commercial. MA generally followed the commercial paradigm. These two paradigms produced different OIR and PCM. Medicaid and Managed Medicaid plans fell into either one of these paradigms based on state specific approaches to their Medicaid program and the proportion of Managed Medicaid plans.

The commercial paradigm is typically grounded in one of two published medical necessity tools: InterQual and MCG. These are commercially available clinical decision support tools that define clinical criteria for Inpatient versus Observation hospitalization. MCG has additional decision support around care management. Nearly all commercial payers use one of these tools, and the typical health system-payer contract, and more explicitly their denial letters, references them to define when an Inpatient or Outpatient claim should be submitted. Payers have varying degrees of adherence to these tools when a pre-claim or post-claim denial moves to adjudication, but their use is a frequent tool for denying Inpatient level of care. Of note, MCG remains an independent commercial product, however in 2022 the licensing agent of InterQual, Change Healthcare, was purchased by UnitedHealthcare. Because of contractual requirements around these medical necessity tools, the result is a higher OIR and PCM Observation skew when compared to Traditional Medicare. Medical necessity in this paradigm, beyond payer medical necessity tools, can be nuanced. Prior to 2024 and the updated CMS guidance around MA plans and the Two-Midnight Rule, a typical approach was to utilize the payer's medical necessity tool to determine medical necessity for Inpatient level of care within a typical observation period, defined as two midnights or 48 hours. Once a patient continues to be hospitalized outside of that period, the physician advisor review became critical. Evaluating the rationale for continued hospitalization, the clinical care being consistent with standard practice, and the ability to formulate an argument that a physician would consider ongoing hospitalization necessary and reasonable, could have supported a change to Inpatient level of care.

The Traditional Medicare paradigm is based in the Two-Midnight Rule (and its exceptions) established in 2013 by CMS. The Two-Midnight Rule dictates a very low threshold for Inpatient level of care. Essentially, if the patient is going to cross

ACPA MISSION

To promote and enhance the instrumental role of physician advisors across the continuum of healthcare through education and professional development.

ACPA VISION

To be the professional home of physician advisors where industry standards are set through education, certification, mentorship, innovation, and advocacy.

AMERICAN COLLEGE OF PHYSICIAN ADVISORS

a second midnight and the attending physician determines (and documents) the patient needs ongoing medical care in the hospital, the patient is considered an Inpatient. Custodial or convenience stays are not considered to be medically necessary for hospitalization. Put another way, if the patient is going to cross a second midnight and is not custodial, they are more likely to be an Inpatient. CMS has historically been deferential to the treating physician determinations for the need for ongoing hospitalization past two midnights. There are exceptions to the Two-Midnight Rule and explanations regarding this topic have been widely published. The most impactful exception is the surgical Medicare Inpatient-Only list, which requires all surgeries on that list to be billed under Medicare Part A regardless of length of stay. The impact of the Two-Midnight Rule and its exceptions resulted in a lower OIR and less PCM Observation skew for the Traditional Medicare paradigm, when compared to the commercial paradigm.

Prior to January 1st 2024, many MA plans generally operated under the commercial paradigm despite the consensus that they were required to follow the Two-Midnight Rule and associated exceptions. The consensus derives from the clear expectation from CMS that MA plans can be no more restrictive in benefits than Traditional Medicare. Anecdotal experience in the UM community was that most insurance companies chose to de-emphasize this particular CMS mandate and relied on internal policies and commercial tools for medical necessity determinations, i.e. the commercial paradigm. Their denial letters and peer-to-peer conversations supported this observation. Operating under the commercial paradigm resulted in a higher OIR and PCM skew to Observation. Following a CMS Office of Inspector General (OIG) investigation into the MA plans, CMS, as part of the 2024 Medicare Advantage and Part D Final Rule (4201-F), published the requirement for MA plans to follow CMS guidance on Inpatient medical necessity, specifically the Two-Midnight Rule. The result of these changes shifted the MA OIR and PCM closer to that of Traditional Medicare. However, as many leaders in the UM space can attest, the MA plans have not been fully compliant with the Rule and thus we see Observation rates that are still higher than Traditional Medicare, but below what was seen when MA plans operated under the commercial paradigm. This discrepancy is partially driven by 4201-F leaving an opening for MA auditing. Whereas contracted CMS auditors are instructed to presume a hospitalization has met the Inpatient Rule if they cross two midnights, termed the Two-Midnight Presumption, MA plans are still allowed to audit, retrospectively, any hospital admission regardless of length of stay. This loophole requires MA plans to recognize the Two-Midnight Benchmark vis-a-vis the Two-Midnight Expectation, but not the Presumption. CMS's 2026 Final Rule, outlined in 4208-F, theoretically closes this loophole by removing an MA plan's ability to retrospectively audit an account that they had previously authorized for Medicare Part A payment. The work around may be for the MA plans to stop issuing concurrent or pre-claim authorizations and push accounts to post-claim submission to determine authorization.

Since 2024, the medical necessity approach under the MA program is now mandated to follow the Two-Midnight Rule, with further refinement coming in 2026. This has now produced three paradigms of medical necessity, Traditional Medicare, MA, and commercial. The Two-Midnight Rule is the primary differentiator to the

ACPA MISSION

To promote and enhance the instrumental role of physician advisors across the continuum of healthcare through education and professional development.

ACPA VISION

To be the professional home of physician advisors where industry standards are set through education, certification, mentorship, innovation, and advocacy.

commercial paradigm. The Two-Midnight Presumption is the primary differentiator between Medicare and MA. Unhindered by the Two-Midnight Presumption, MA plans employ physician medical directors to evaluate the record, the plan of care, and then judge the need for ongoing hospitalization past the second midnight. Intensity of services and acuity of illness are the primary drivers of their determinations. Given the subjectivity of these assessments, variation between medical director determinations on similar cases is a consistent experience of physician advisors conducting peer-to-peers. Utilizing physician advisor secondary reviews to evaluate Observation stays prior to crossing the second midnight is the key strategy to maximal capture of Inpatient revenue. An additional approach is to refer for physician secondary review any utilization management nurse (UMRN) screening recommendation for a change from Inpatient to Observation. This approach mirrors the payer approach and ensures more nuanced discernment of the severity of illness and intensity of services to support Inpatient medical necessity.

These paradigms are general rules designed to create a foundation for consistent and reliable approaches by physician advisors and UM programs in determining medical necessity. They are not designed to be absolute and UM programs should analyze and report on denial patterns by individual payers to determine which resonate with which paradigm. If a payer denies an "insignificant" number of Inpatient claims with a low terminal denial rate, it makes sense to shift the medical necessity approach to Traditional Medicare, which has a more concrete approach to medical necessity. If the opposite is true, utilizing a more nuanced paradigm may be prudent. The goal is for health system leadership to find an acceptable balance between pursing Inpatient revenue and tolerating a specific degree of terminal denials and avoidable write offs.

With the CMS rule change in 2024, there are now essentially three medical necessity paradigms – Traditional Medicare, MA, and commercial – representing a hierarchy of increasing OIR and PCM Observation skew. Understanding these paradigms and their differences allows for further segmenting your OIR and PCM by paradigm type and individual payer, providing increasingly more useful data. Utilizing denials data to assign a payer to each paradigm will maximize Inpatient revenue and minimize avoidable right offs. As health systems get more granular through this type of segmented analysis and paradigm application, the ability to discern useful OIR and PCM targets become more realistic, and more reliable targets can be proposed and achieved.

KEY 2: IMPACT OF HOSPITAL CHARACTERISTICS

The second key is understanding the differences between the hospitals in your system and the impact they have on the OIR and PCM. Because of the lack of unified definitions of how to classify hospitals, there remains a paucity of publications describing the characteristics and subsequent comparative analysis between hospital types, particularly as it relates to services, patient demographics, payer mix, and utilization rates. For example, the term "community hospital" has different definitions depending on the source of information. The American Hospital Association (AHA) defines all hospitals that are not federal hospitals, as community hospitals. This would include teaching, academic, tertiary, smaller urban hospitals,

ACPA MISSION

To promote and enhance the instrumental role of physician advisors across the continuum of healthcare through education and professional development.

ACPA VISION

To be the professional home of physician advisors where industry standards are set through education, certification, mentorship, innovation, and advocacy.

and rural hospitals. Teaching hospitals are not considered community hospitals by many health associations and hospital rating organizations. Further differentiation can be defined as urban versus rural, which often dictates the size, services, and specialties available.

For the purposes of this analysis, a community hospital is defined as a hospital that requires referral relationships with larger tertiary centers, such as academic medical or Level 1 trauma centers. Often, community hospitals are "satellite" facilities within a larger integrated network where the tertiary facility serves as the site of more complex procedures, diagnostic capabilities, and sub-specialty services. In other circumstances, rural independent hospitals depend on relationships with multiple tertiary centers to ensure access for transfers and referrals for patients that cannot be cared for under the inherent service limitations of smaller hospitals. Regardless of how a health system classifies the individual hospitals in their system, understanding the hospital characteristics that impact the OIR and PCM will assist in more accurate budgeting and forecasting.

A community hospital with lower acuity patients, lower case mix index, and an overall healthier patient population with access to preventative care, may have a higher volume of low-risk elective surgical procedures, hospitalizations for less complex, acute medical conditions, and more transfers to tertiary facilities due to a lack of sub-specialty care and invasive procedural expertise for sicker patients that present to their Emergency Departments (EDs). These characteristics will often produce a higher OIR and PCM Observation skew, as patients are shifted to higher acuity facilities.

Tertiary and academic medical centers, operating as a health system hub with the full spectrum of subspecialty services, advanced diagnostic, higher risk procedures, and more complex patients, will have a lower OIR and less PCM Observation skew. However, there is some differentiation between these types of hospitals. Advanced heart failure, oncology, and transplant programs are not universally available at all tertiary hospitals as they typically are at academic medical centers. The consistent complexity of patients in these facilities often produces a lower OIR and less PCM Observation skew, as well as less variability in the month-to-month OIR and PCM. Seasonal variations based on specialized care are more typical of these types of facilities. Stonko et al in a cross-sectional observation study of 10,684 trauma hospitalizations from July 2013 to June 2016 at a Level 1 trauma center found a peak incidence of trauma hospitalizations from April to later October.6 Hultman et all found that hospitalizations at a single regional burn center (Summer of 2009 through Spring of 2010) were highest in spring.[7] These types of facilities should anticipate these variations as they monitor their OIR and PCM.

Seasonal hospitalization patterns in all types of hospitals often exhibit significant variability based on type of presenting condition. This has the potential to shift the OIR and skew the PCM. Respiratory illnesses such as community-acquired pneumonia and asthma show a marked increase in hospitalizations during the winter and spring months, likely due to colder temperatures and higher incidence of respiratory infections. Similarly, acute cardiovascular diseases like acute heart failure,

ACPA MISSION

To promote and enhance the instrumental role of physician advisors across the continuum of healthcare through education and professional development.

ACPA VISION

To be the professional home of physician advisors where industry standards are set through education, certification, mentorship, innovation, and advocacy.

myocardial infarction, and aortic dissection also peak in winter, with the lowest hospitalizations in summer.[8] [9] [10] [11] [12] Neurologic conditions such as meningitis, encephalitis, and ischemic stroke also demonstrate seasonal variation, with some conditions peaking in specific seasons. Mood disorders show seasonality as well, with mood disorders peaking in winter and summer.[13] [14] Finally, emergency general surgery hospitalizations including acute appendicitis, cholecystitis, and diverticulitis, tend to be higher in the summer months.[15]

Sites of elective surgery can also have an impact on the OIR and PCM. The opening of Ambulatory Surgery Centers (ASCs) has been associated with a decline in hospital-based outpatient surgery rates. For example, the utilization of ASCs for orthopedic surgeries increased from 31% to 34% between 2013 and 2018.[16] From 2019 to 2022, the volume of ASC total knee arthroplasty and total hip arthroplasty increased by 327%. This change in utilization removed $235 million and $137 million in Inpatient and Outpatient hospital-based revenue.17 This shift has the potential to lower the OIR and cause a PCM Inpatient skew as more complex or higher risk surgeries with sicker patients are cared for in a hospital setting and lower risk procedures are diverted to ASCs.[18]

The COVID-19 pandemic further accelerated the transition to outpatient surgery centers. The American College of Surgeons advocated for the expansion of outpatient surgery to conserve hospital resources, leading to an increase in outpatient surgery center procedures during the pandemic.19 In Florida, approximately 90% of elective anesthetics were ambulatory by the end of 2022.[20]

Understanding the distinct hospital characteristics and seasonality variations in utilization does not necessarily change the health system budgeting process but helps to understand why different hospitals within a health system will have different OIR and PCMs. Developing an enterprise level UM program negates concerns of hospital specific approaches as the medical necessity paradigms and resultant Utilization Review (UR) process are implemented uniformly across the entire health system. This will produce more confidence in the natural variation of Observation rates of individual hospitals.

KEY 3: TRUE OBSERVATIONS AND TRUE INPATIENTS

The third key to developing a reliable and accurate metric for the OIR and PCM is only counting Observation patients that have an Inpatient opportunity (True Observation) or Inpatients that could be Observation under the appropriate circumstances (True Inpatients). This does not mean that a health system should not monitor these populations, but they should be evaluated separately to avoid the bias and skew resulting from their inclusion.

Many large health systems operate inpatient psychiatric units. All patients in these units are "Inpatients". Finance will often include Inpatient hospitalizations to psychiatric units as part of their volume and mix assessment. Given all hospitalizations to psychiatric units are Inpatient, (e.g., there are no Observation cases), it would be inappropriate to include this volume in the OIR or PCM as it would skew the result to Inpatient. These patients would not be considered True Inpatients.

ACPA MISSION

To promote and enhance the instrumental role of physician advisors across the continuum of healthcare through education and professional development.

ACPA VISION

To be the professional home of physician advisors where industry standards are set through education, certification, mentorship, innovation, and advocacy.

AMERICAN COLLEGE OF PHYSICIAN ADVISORS

With the significant and rapid rise of mental health patients presenting to EDs, coupled with the decreasing capacity of inpatient and outpatient psychiatric resources, medical/surgical units have started to be utilized to care for these patients until a suitable discharge location can be secured. Among children and young adults, the proportion of mental health-related ED visits nearly doubled from 2011 to 2020, with suicide-related visits increasing fivefold, especially among adolescents.[21] [22] In adults, mental health-related ED visits rose by over 40% from 2009 to 2015, now accounting for more than 10% of ED visits in some age groups[23] [24] Although Medicare does have psychiatric Diagnosis Related Groups (DRGs) and conceivably would allow for Medicare Part A billing for psychiatric patients who are hospitalized, treated, and discharged from a hospital, this is not a common billing practice. Managed plans typically will not accept an Inpatient claim for a psychiatric diagnosis from a non-psychiatric hospital or unit. The result is an increase in psychiatric patients being hospitalized in medical/surgical units as Outpatients with Observation services awaiting placement to psychiatric facilities. Given this patient population cannot be hospitalized as Inpatient to a medical/surgical unit, including them in the in the OIR or PCM would inappropriately skew the result to Observation. These are not True Observation patients.

Newborn and neonatology hospitalizations are typically counted as part of the top line Inpatient volume and thus would be included in the OIR and PCM. However, given there are no Observation hospitalizations in this population, if included as part of the OIR or PCM, the result will skew Inpatient. Newborn and neonatology would not be considered True Inpatients.

Emergency Department Observation is a contemporary approach to ED care for specific patients that are anticipated to have an extended stay in the ED, but with the intent to discharge from the ED when specific care points are met. Specifically, there is no anticipation for hospitalization either as an Observation or Inpatient. This is distinct from ED Observation units or other short stay units operated by the ED where patients are being evaluated in the traditional "Observation" approach, with potential for Inpatient hospitalization. The ED Observation patients are in ED beds and stay in ED beds for the duration of their care. Classically, these are mental health or substance use patients, but there are likely practices that have expanded beyond these populations. Facilities that implement this practice typically have a unique Observation class in their electronic medical record used only for ED Observation that is distinct from the hospitalized Observation class. ED Observation is not a universal practice in EDs across the country or even within a particular market or city. There are compliance considerations to this practice. Given Observation is a service, there must be medical necessity for putting a patient into Observation. "Observing" an intoxicated patient with suicidal ideation until they have cleared in order re-evaluate their mental health status is unlikely sufficient to meet the CMS definition of medical necessity for Observation services. Typically, the patient is just "sleeping it off" in the ED. Although, Observation discharges have not historically been the focus of CMS auditors, they could be, and compliance departments should routinely perform self-audits to ensure compliance. The managed plans do pay for ED Observation, but there has

ACPA MISSION

To promote and enhance the instrumental role of physician advisors across the continuum of healthcare through education and professional development.

ACPA VISION

To be the professional home of physician advisors where industry standards are set through education, certification, mentorship, innovation, and advocacy.

been increasing scrutiny of this practice and denials for ED Observation care are not infrequent. Regardless, given these patients do not have an intent for hospitalization and are discharged from the ED, they are a distinct population that should not be included in calculating a health system's OIR or PCM because it will skew to Observation. ED Observation patients are not True Observation patients.

KEY 4: SPECIAL POPULATIONS

Special populations are those populations that are comprised of True Observation and True Inpatient or have unique clinical management and hospitalization patterns. The unique characteristics of their healthcare utilization may bias the OIR and skew the PCM. Although there are other populations that introduce bias, the obstetric and pediatric populations are most significant. Health systems should monitor the typical financial metrics associated with these groups, but their distinct OIM and PCM should be reviewed separately from the larger included populations.

Obstetric hospitalizations have a particularly complex set of characteristics that can shift the OIR and PCM in both directions. Specifically, the volume of obstetric triage and delivery hospitalizations has the potential to produce different OIR and PCMs depending on the size of the obstetric program. Handley et al evaluated 34 million births from 2010 to 2018 and found that 56.8% were born in high volume obstetric hospitals and 37.4% at low volume hospitals.25 With the Newborns' and Mothers' Health Protection Act mandating that health insurance plans cover at least a 48-hour hospital stay following a vaginal delivery and a 96-hour stay following a cesarean section, the large volume hospitals will drive more Inpatient hospitalizations through obstetric intrapartum care. This has the potential to nudge the OIR lower and shift the PCM towards Inpatient when compared to facilities that have a lower obstetric population.

Obstetric triage is another clinical activity that can have various impacts in different hospitals depending on the size of the obstetric population and program. Triage is a systematic process used in healthcare settings to assess and prioritize the care of pregnant women who present with various symptoms or concerns. The primary goal of obstetric triage is to quickly and efficiently determine the need for hospitalization or outpatient follow up. Obstetric triage is somewhat analogous to ED care, but with robust protocols designed for the pregnant patient. The decision to hospitalize following triage has implications for the OIR and PCM. The American College of Obstetrician and Gynecology's Committee on Obstetric Practice opinion article on Hospital-Based Triage of Obstetric Patients (2016) noted that obstetric triage volume typically exceeds overall birth volume by 20 to 50%.26 Although there are no specific published studies on disposition of triage as it relates to Observation or Inpatient, hospitals should be able to analyze triage dispositions, payer mix, and through a medical necessity tiered system, produce a more reliable OIR and PCM for this population.

Pediatric hospital care has shown longitudinal shifts in level of care hospitalizaton patterns. In an observational study evaluating pediatric Observation stay trends from 2010 to 2019, Tian et al found that Observation hospitalizations increased 23.6% (2010) to 34.3% (2019).27 Macy et al found similar trends from 2004 to 2009, with an increase from 37% to 41%, with fewer than 25%

ACPA MISSION

To promote and enhance the instrumental role of physician advisors across the continuum of healthcare through education and professional development.

ACPA VISION

To be the professional home of physician advisors where industry standards are set through education, certification, mentorship, innovation, and advocacy.

converting to Inpatient status.[28] A retrospective cohort study of Observation and Inpatient stays for pediatric patients in 2010 showed an Observation discharge status assigned to 33.3% of patients.[29] They noted wide variation in the use of Observation, ranging from 2% to 45%. A study of pediatrics hospitalizations in 2017 found Observation discharges ranged from 0.0% to 60.3%.[30] The result is a uniquely high OIR and PCM Observation skew for pediatric hospitalizations and depending on the size of the pediatric hospital program, the impact can be distinct enough to warrant separate analysis.

Trends in Medicaid coverage for pediatric and obstetric patients is one driver for the increasing OIR and PCM Observation skew. The decline in employer-based private insurance coverage, increasing enrollment in Medicaid and the State Children's Health Insurance Program (SCHIP), and the subsequent shift to Medicaid Managed Care Organizations (MCOs) has created new dynamics.[31] [32] [33] According to the American College of Obstetricians and Gynecologists in 2025, more than 40% of obstetric care is provided by the Medicaid program.20 A 2023 American Academia of Pediatrics (Kusma et al) policy statement reported that approximately 50% of all US children receive care through Medicaid and/or the Children's Health Insurance Program (CHIP).[34]

In 1991, only 9.5% of Medicaid beneficiaries were in MCOs, but by 1996, this number had risen to 40.1% and by 2009, 71% of Medicaid recipients were enrolled in MCOs, primarily driven by states' efforts to control Medicaid expenditures.35 36 Carlson et al found that 81.1% of pediatric Medicaid patients were enrolled in MCOs as of 2019. This information is supported by the American Academy of Pediatrics, which noted the increase in the proportion of Medicaid-enrolled children in comprehensive managed care plans from 67.8% in 2013 to 81.1% in 2019.37 Specific data on the percent of obstetric patients enrolled in MCOs has been elusive. In a 2023 Georgetown University McCourt School of Public Policy Center for Children report of maternal health in 12 states, only Illinois, New Mexico, and Washington posted the number of pregnant enrollees in specific MCOs.[38] The consensus is MCO participation for pregnant women is consistent with overall MCO participation for the overall Medicaid population. MCOs often follow the commercial paradigm, and the contracts are often more restrictive in determining medical necessity, with policy manuals and denial letters referencing published medical necessity criteria in determining Inpatient or Observation level of care. The result is a higher OIR and PCM Observation skew.

SUMMARY

The complexities of developing an accurate OIR and PCM expectation cannot be underestimated and results in an inability to quote a uniform national target for hospital Observation rates. In some respects, if you've seen one hospital, you've seen one hospital. However, health systems can get increasingly closer to a more reliable and accurate OIR and PCM by following the four keys: Understanding payer dynamics and the associated medical necessity paradigms; recognizing the unique characteristics of the hospitals in a health system; including only True Observation and True Inpatients in the analysis; and separately evaluating populations that bias towards Inpatient or

ACPA MISSION

To promote and enhance the instrumental role of physician advisors across the continuum of healthcare through education and professional development.

ACPA VISION

To be the professional home of physician advisors where industry standards are set through education, certification, mentorship, innovation, and advocacy.

Observation. By following the four keys, health systems will have a more accurate real time and longitude metric to evaluate the standardization and consistency of the UM process and allow for more accurate budgeting.

RESOURCES

1. Zhao L., Schur C., Kowlessar N., Lind K. D. (2013). Rapid growth in Medicare hospital observation services: What's going on? Retrieved from http://www.aarp.org/content/dam/aarp/research/public_policy_institute/health/2013/rapidgrowth-in-medicare-hospital-observation-services-AARP-ppi-health.pdf

2. Feng Z, Wright B, Mor V. Sharp rise in Medicare enrollees being held in hospitals for observation raises concerns about causes and consequences. Health Aff (Millwood). 2012 Jun;31(6):1251-9. doi: 10.1377/hlthaff.2012.0129. PMID: 22665837; PMCID: PMC3773225.

3. Trish E, Valdez S, Ginsburg PB, Randall S, Lieberman SM. Substantial Growth In Medicare Advantage And Implications For Reform. Health Aff (Millwood). 2023 Feb;42(2):246-251. doi: 10.1377/hlthaff.2022.00668. PMID: 36745825.

4. Xu L, Welch WP, Sheingold S, De Lew N, Sommers BD. Medicare Switching: Patterns Of Enrollment Growth In Medicare Advantage, 2006-22. Health Aff (Millwood). 2023 Sep;42(9):1203-1211. doi: 10.1377/hlthaff.2023.00224. PMID: 37669490.

5. Lind KD, Noel-Miller CM, Sangaralingham LR, Shah ND, Hess EP, Morin P, Fernanda Bellolio M. Increasing Trends in the Use of Hospital Observation Services for Older Medicare Advantage and Privately Insured Patients. Med Care Res Rev. 2019 Apr;76(2):229-239. doi: 10.1177/1077558717718026. Epub 2017 Jul 8. PMID: 29148348; PMCID: PMC6388413.

6. Stonko DP, Dennis BM, Callcut RA, Betzold RD, Smith MC, Medvecz AJ, Guillamondegui OD. Identifying temporal patterns in trauma admissions: Informing resource allocation. PLoS One. 2018 Dec 3;13(12):e0207766. doi: 10.1371/journal.pone.0207766. PMID: 30507930; PMCID: PMC6277067.

7. Hultman CS, Tong WT, Surrusco M, Roden KS, Kiser M, Cairns BA. To everything there is a season: impact of seasonal change on admissions, acuity of injury, length of stay, throughput, and charges at an accredited, regional burn center. Ann Plast Surg. 2012 Jul;69(1):30-4. doi: 10.1097/SAP.0b013e31823f3df0. PMID: 22627496.

8. Davis RE, Enfield KB. Respiratory hospital admissions and weather changes: a retrospective study in Charlottesville, Virginia, USA. Int J Biometeorol. 2018 Jun;62(6):1015-1025. doi: 10.1007/s00484-0181503-9. Epub 2018 Feb 7. PMID: 29417216.

9. Lieberman D, Lieberman D, Friger MD. Seasonal variation in hospital admissions for communityacquired pneumonia: a 5-year study. J Infect. 1999 Sep;39(2):134-40. doi: 10.1016/s01634453(99)90005-1. PMID: 10609531.

ACPA MISSION

To promote and enhance the instrumental role of physician advisors across the continuum of healthcare through education and professional development.

ACPA VISION

To be the professional home of physician advisors where industry standards are set through education, certification, mentorship, innovation, and advocacy.

10. Kimes D, Levine E, Timmins S, Weiss SR, Bollinger ME, Blaisdell C. Temporal dynamics of emergency department and hospital admissions of pediatric asthmatics. Environ Res. 2004 Jan;94(1):7-17. doi: 10.1016/s0013-9351(03)00046-x. PMID: 14643281.

11. Nakai M, Iwanaga Y, Sumita Y, Miyamoto Y. Impact of seasonal variation on hospital admission and inhospital mortality of acute cardiovascular diseases: a contemporary nationwide database study. Ann Epidemiol. 2023 Sep;85:100-107.e3. doi: 10.1016/j.annepidem.2023.05.010. Epub 2023 May 18. PMID: 37209929.

12. Aronson D. Environmental factors, winter respiratory infections and the seasonal variation in heart failure admissions. Sci Rep. 2021 May 28;11(1):11292. doi: 10.1038/s41598-021-90790-7. PMID: 34050240; PMCID: PMC8163784.

13. Hamedani AG, Thibault D, Willis AW. Seasonal Variation in Neurologic Hospitalizations in the United States. Ann Neurol. 2023 Apr;93(4):743-751. doi: 10.1002/ana.26579. Epub 2022 Dec 25. PMID: 36515177; PMCID: PMC10956618.

14. Amr M, Volpe FM. Seasonal influences on admissions for mood disorders and schizophrenia in a teaching psychiatric hospital in Egypt. J Affect Disord. 2012 Mar;137(1-3):56-60. doi: 10.1016/j.jad.2011.12.039. Epub 2012 Jan 12. PMID: 22244374.

15. Zangbar B, Rhee P, Pandit V, Hsu CH, Khalil M, Okeefe T, Neumayer L, Joseph B. Seasonal Variation in Emergency General Surgery. Ann Surg. 2016 Jan;263(1):76-81. doi: 10.1097/SLA.0000000000001238. PMID: 25876008.

16. Wang KY, Puvanesarajah V, Marrache M, Ficke JR, Levy JF, Jain A. Ambulatory Surgery Centers Versus Hospital Outpatient Departments for Orthopaedic Surgeries. J Am Acad Orthop Surg. 2022 Mar 1;30(5):207-214. doi: 10.5435/JAAOS-D-21-00739. PMID: 35143432.

17. Seo HH, Shimizu MR, Buddhiraju A, Afzal S, RezazadehSaatlou M, Kwon YM. Utilization and Reimbursements of Primary Total Joint Arthroplasty in Ambulatory Surgical Centers: Analysis of Medicare Part A and B Databases. J Arthroplasty. 2025 Jun;40(6):1445-1451. doi: 10.1016/j.arth.2024.11.043. Epub 2024 Nov 23. PMID: 39586409.

18. Hollenbeck BK, Dunn RL, Suskind AM, Strope SA, Zhang Y, Hollingsworth JM. Ambulatory Surgery Centers and Their Intended Effects on Outpatient Surgery. Health Serv Res. 2015 Oct;50(5):1491-507. doi: 10.1111/1475-6773.12278. Epub 2015 Jan 22. PMID: 25645136; PMCID: PMC4600358.

19. Shariq OA, Bews KA, Etzioni DA, Kendrick ML, Habermann EB, Thiels CA. Performance of General Surgical Procedures in Outpatient Settings Before and After Onset of the COVID-19 Pandemic. JAMA Netw Open. 2023 Mar 1;6(3):e231198. doi: 10.1001/jamanetworkopen.2023.1198. PMID: 36862412; PMCID: PMC9982689.

20. Epstein RH, Dexter F, Fahy BG. Since the COVID-19 pandemic, approximately 90% of elective anesthetics have been ambulatory: A retrospective analysis of statewide data in Florida from 2010 through 2022. J Clin Anesth. 2024 Nov;98:111596. doi: 10.1016/j.jclinane.2024.111596. Epub 2024 Sep 2. PMID: 39226831.

ACPA MISSION

To promote and enhance the instrumental role of physician advisors across the continuum of healthcare through education and professional development.

ACPA VISION

To be the professional home of physician advisors where industry standards are set through education, certification, mentorship, innovation, and advocacy.

AMERICAN COLLEGE OF PHYSICIAN ADVISORS

21. Bommersbach TJ, McKean AJ, Olfson M, Rhee TG. National Trends in Mental Health-Related Emergency Department Visits Among Youth, 2011-2020. JAMA. 2023 May 2;329(17):1469-1477. doi: 10.1001/jama.2023.4809. PMID: 37129655; PMCID: PMC10155071.

22. Kalb LG, Stapp EK, Ballard ED, Holingue C, Keefer A, Riley A. Trends in Psychiatric Emergency Department Visits Among Youth and Young Adults in the US. Pediatrics. 2019 Apr;143(4):e20182192. doi: 10.1542/peds.2018-2192.

23. Santillanes G, Axeen S, Lam CN, Menchine M. National trends in mental health-related emergency department visits by children and adults, 2009-2015. Am J Emerg Med. 2020 Dec;38(12):2536-2544. doi: 10.1016/j.ajem.2019.12.035. Epub 2019 Dec 20. PMID: 31902702.

24. Brathwaite D, Waller AE, Gaynes BN, Stemerman R, Deselm TM, Bischof JJ, Tintinalli J, Brice JH, Bush M. A 7 Year Summary of Emergency Department Visits by Patients With Mental Health Disorders. Front Psychiatry. 2022 Feb 9;13:831843. doi: 10.3389/fpsyt.2022.831843. PMID: 35222127; PMCID: PMC8863870.

25. Handley SC, Passarella M, Herrick HM, Interrante JD, Lorch SA, Kozhimannil KB, Phibbs CS, Foglia EE. Birth Volume and Geographic Distribution of US Hospitals With Obstetric Services From 2010 to 2018. JAMA Netw Open. 2021 Oct 1;4(10):e2125373. doi: 10.1001/jamanetworkopen.2021.25373. PMID: 34623408; PMCID: PMC8501399.

26. https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2016/07/hospital-basedtriage-of-obstetric-patients

27. Tian Y, Hall M, Ingram ME, Hu A, Raval MV. Trends and Variation in the Use of Observation Stays at Children's Hospitals. J Hosp Med. 2021 Nov;16(11):645-651. doi: 10.12788/jhm.3622. PMID: 34328847.

28. Macy ML, Hall M, Shah SS, Harding JP, Del Beccaro MA, Hain PD, Hronek C, Alpern ER. Pediatric observation status: are we overlooking a growing population in children's hospitals? J Hosp Med. 2012 Sep;7(7):530-6. doi: 10.1002/jhm.1923. Epub 2012 Feb 27. PMID: 22371384.

29. Fieldston ES, Shah SS, Hall M, Hain PD, Alpern ER, Del Beccaro MA, Harding J, Macy ML. Resource utilization for observation-status stays at children's hospitals. Pediatrics. 2013 Jun;131(6):1050-8. doi: 10.1542/peds.2012-2494. Epub 2013 May 13. PMID: 23669520.

30. Gay JC, Hall M, Morse R, Fieldston ES, Synhorst D, Macy ML. Observation Encounters and Length of Stay Benchmarking in Children's Hospitals. Pediatrics. 2020 Nov;146(5):e20200120. doi: 10.1542/peds.2020-0120. Epub 2020 Oct 6. PMID: 33023992.

31. Newacheck PW, Hughes DC, Cisternas M. Children and health insurance: an overview of recent trends. Health Aff (Millwood). 1995 Spring;14(1):244-54. doi: 10.1377/hlthaff.14.1.244. PMID: 7657210.

ACPA MISSION

To promote and enhance the instrumental role of physician advisors across the continuum of healthcare through education and professional development.

ACPA VISION

To be the professional home of physician advisors where industry standards are set through education, certification, mentorship, innovation, and advocacy.

32. DeVoe JE, Tillotson CJ, Marino M, O'Malley J, Angier H, Wallace LS, Gold R. Trends in Type of Health Insurance Coverage for US Children and Their Parents, 1998-2011. Acad Pediatr. 2016 Mar;16(2):192-9. doi: 10.1016/j.acap.2015.06.009. Epub 2015 Aug 18. PMID: 26297668; PMCID: PMC4758913.

33. Hudson JL, Selden TM. Children's eligibility and coverage: recent trends and a look ahead. Health Aff (Millwood). 2007 Sep-Oct;26(5):w618-29. doi: 10.1377/hlthaff.26.5.w618. Epub 2007 Aug 16. PMID: 17702792.

34. Kusma JD, Raphael JL, Perrin JM, Hudak ML; COMMITTEE ON CHILD HEALTH FINANCING. Medicaid and the Children's Health Insurance Program: Optimization to Promote Equity in Child and Young Adult Health. Pediatrics. 2023 Nov1;152(5):e2023064088. doi: 10.1542/peds.2023-064088. PMID: 37860840.

35. Deal LW, Shiono PH. Medicaid managed care and children: an overview. Future Child. 1998 SummerFall;8(2):93-104. PMID: 9782652.

36. Duggan M, Hayford T. Has the shift to managed care reduced Medicaid expenditures? Evidence from state and local-level mandates. J Policy Anal Manage. 2013;32(3):505-35. doi: 10.1002/pam.21693. PMID: 23814802.

37. Carlson KM, Berman SK, Price J; COMMITTEE ON CHILD HEALTH FINANCING. Guiding Principles for Managed Care Arrangements for the Health of Newborns, Infants, Children, Adolescents and Young Adults. Pediatrics. 2022 Aug 1;150(2):e2022058396. doi: 10.1542/peds.2022-058396. PMID: 35909156.

38. https://ccf.georgetown.edu/2023/10/16/medicaid-managed-care-maternal-mortality-reviewcommittees-and-maternal-health-a-12-state-scan/

ACPA MISSION

To promote and enhance the instrumental role of physician advisors across the continuum of healthcare through education and professional development.

ACPA VISION

To be the professional home of physician advisors where industry standards are set through education, certification, mentorship, innovation, and advocacy.