

# Overview of the pancreatitis episode of care

State of Ohio

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## 1. CLINICAL OVERVIEW AND RATIONALE FOR DEVELOPMENT OF THE PANCREATITIS EPISODE

### 1.1 Rationale for development of the pancreatitis episode of care

Acute pancreatitis is one of the most common gastrointestinal diseases with an incidence of 44 per 100,000 population in the U.S.<sup>1</sup> Each year pancreatitis accounts for more than 270,000 hospital admissions and an estimated spend of over \$2.5 billion.<sup>2</sup> Acute pancreatitis ranges in severity: mild cases typically resolve in a few days and have mortality rates below one percent; severe cases often incur complications and have a mortality rate between 10 and 30 percent.<sup>3</sup>

The wide range in severity and potential complications means that early risk stratification is needed in order to develop a patient-appropriate treatment plan.<sup>4</sup> Guidelines recommend that computed tomography (CT) scans and magnetic resonance imaging (MRI) be performed only when complications are suspected or when there is insufficient clinical improvement.<sup>5,6</sup> With high rates of recurrence (40 percent within 6 years), it is important for the treating clinician to identify and

<sup>1</sup> Banks, P. A. (2002). Epidemiology, natural history, and predictors of disease outcome in acute and chronic pancreatitis. *Gastrointestinal Endoscopy*, 56(6), S226-S230.

<sup>2</sup> Tenner, S., Baillie, J., DeWitt, J., & Vege, S. S. (2013). American College of Gastroenterology guideline: management of acute pancreatitis. *American Journal of Gastroenterology*, 108(9), 1400-1415.

<sup>3</sup> Besselink, M. G., van Santvoort, H. C., et al. (2009). Timing and impact of infections in acute pancreatitis. *British Journal of Surgery*, 96(3), 267-273.

<sup>4</sup> Carroll, J. K., Herrick, B., Gipson, T., & Lee, S. P. (2007). Acute pancreatitis: diagnosis, prognosis, and treatment. *Am Fam Physician*, 75(10), 1513-20.

<sup>5</sup> Arvanitakis, M., Delhay, M., et al. (2004). Computed tomography and magnetic resonance imaging in the assessment of acute pancreatitis. *Gastroenterology*, 126(3), 715-723.

<sup>6</sup> Zaheer, A., Singh, V. K., Qureshi, R. O., & Fishman, E. K. (2013). The revised Atlanta classification for acute pancreatitis: updates in imaging terminology and guidelines. *Abdominal Imaging*, 38(1), 125-136.

address the underlying cause of pancreatitis.<sup>7</sup> For example, endoscopic retrograde cholangiopancreatography (ERCP) should be performed in patients with gallstone pancreatitis with ongoing biliary obstruction.<sup>2</sup> Patients with gallstones in the gallbladder are recommended to have a cholecystectomy prior to discharge.<sup>8</sup> Unique patient needs will necessitate variation in treatment; however, practice variation due to reasons not related to the patient may lead to sub-optimal patient outcomes, higher than necessary costs, or both.

From October 2014 to September 2015 in Ohio, there were approximately 5,600 pancreatitis episodes among Medicaid beneficiaries, which represented an estimated \$38 million in spend. Within this spend, there was significant variability across providers with approximately \$1,700 separating the 25<sup>th</sup> and 75<sup>th</sup> percentiles. The average length of hospital stay was 3.8 days, slightly below the national average of 5-6 days in 2012.<sup>8</sup> Although follow-up care is recommended, only 38 percent of episodes among Ohio Medicaid beneficiaries had a follow-up visit with a clinician within a month after discharge. Ohio Medicaid patients with pancreatitis also experience recurrent events; 15 percent of episodes had a readmission within 30 days (compared to a 30-day readmission rate of 14 percent for a commercial insurance population in 2011<sup>9</sup>) and 31 percent of episodes had an emergency department (ED) visit within 30 days of discharge.

Implementing the pancreatitis episode of care will incentivize evidence-based, guideline-concordant care through an outcomes-based payment model. Alongside other episodes of care and patient centered medical homes, the pancreatitis episode will contribute to a model of care delivery that benefits patients through improved care quality and clinical outcomes and a lower overall cost of care.

## **1.2 Clinical overview and typical patient journey for a pancreatitis procedure**

As depicted in Exhibit 1, a pancreatitis episode is triggered by the diagnosis of acute or chronic pancreatitis in the inpatient or observation care setting. Patients typically present to the ED with a sudden onset of upper abdominal pain and, often, nausea and

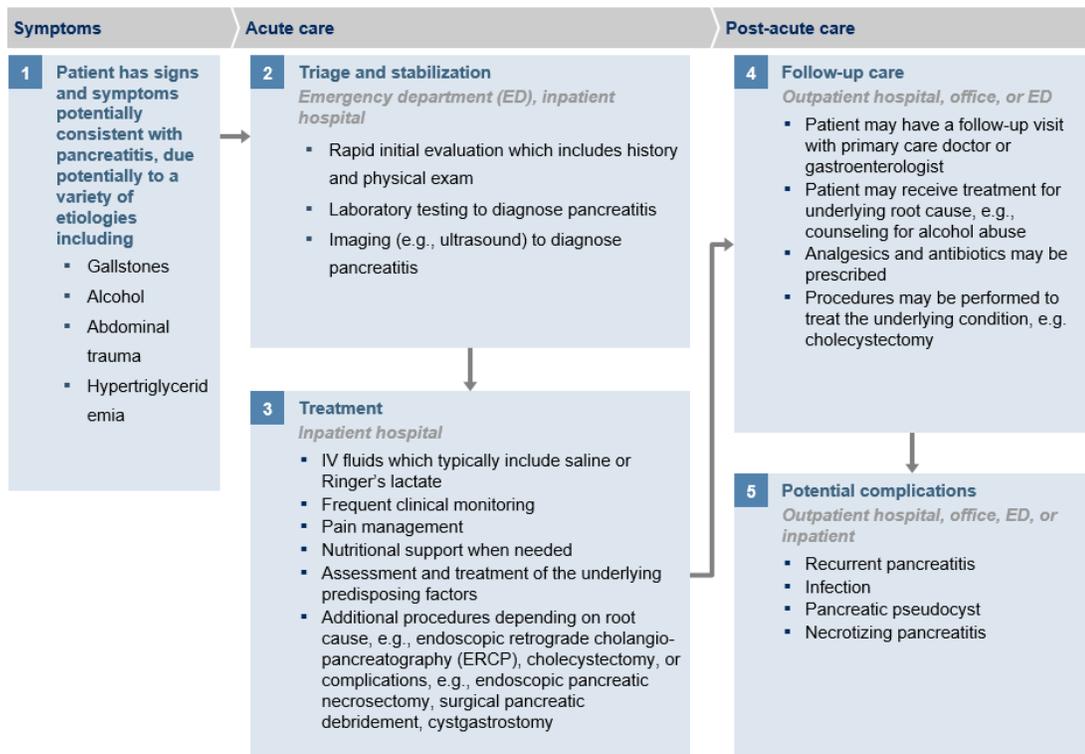
<sup>7</sup> Lund, H., Tønnesen, H., Tønnesen, M. H., & Olsen, O. (2006). Long-term recurrence and death rates after acute pancreatitis. *Scandinavian Journal of Gastroenterology*, 41(2), 234-238.

<sup>8</sup> Yadav, D., O'Connell, M., & Papachristou, G. I. (2012). Natural history following the first attack of acute pancreatitis. *American Journal of Gastroenterology*, 107(7), 1096-1103.

<sup>9</sup> Hines, A. L., Barrett, M. L., Jiang, H. J., & Steiner, C. A. (2014). Conditions with the largest number of adult hospital readmissions by payer, 2011.

vomiting. The ED clinician stabilizes the patient; conducts a history and physical examination; often orders an initial laboratory evaluation, including amylase and lipase levels; orders radiologic imaging that may include ultrasonography, computed tomography (CT) or magnetic resonance imaging (MRI); confirms a pancreatitis diagnosis; and works up the underlying cause. According to the American College of Gastroenterology, a patient is diagnosed with acute pancreatitis when two of the following three findings are present: 1) abdominal pain consistent with the disease, 2) serum amylase and/or lipase at least three times the upper limit of normal, and 3) characteristic findings from abdominal imaging.<sup>2</sup>

### EXHIBIT 1 – PANCREATITIS PATIENT JOURNEY



Source: Working Group International Association of Pancreatology (IAP)/American Pancreatic Association (APA) Acute Pancreatitis Guidelines. "IAP/APA evidence-based guidelines for the management of acute pancreatitis." *Pancreatology* 13.4 (2013): e1-e15.; Tenner, Scott, et al. "American College of Gastroenterology Guideline: Management of acute pancreatitis." *American Journal of Gastroenterology* 108.9 (2013): 1400-1415.

Patients are typically admitted to the inpatient facility or observation room and receive treatment including oral food restriction, fluid replacement, nutritional support, pain relief, and antibiotics. Appropriate treatment also requires monitoring the patient's hemodynamics, serum amylase levels, and volume status. Patients with critical illness may require more aggressive management, intubation, and admission to an intensive care unit (ICU). For patients with biliary tract and/or gallstone

disease, early procedural treatments such as endoscopic retrograde cholangiopancreatography (ERCP) and cholecystectomy are recommended to prevent recurrent attacks and potential complications.

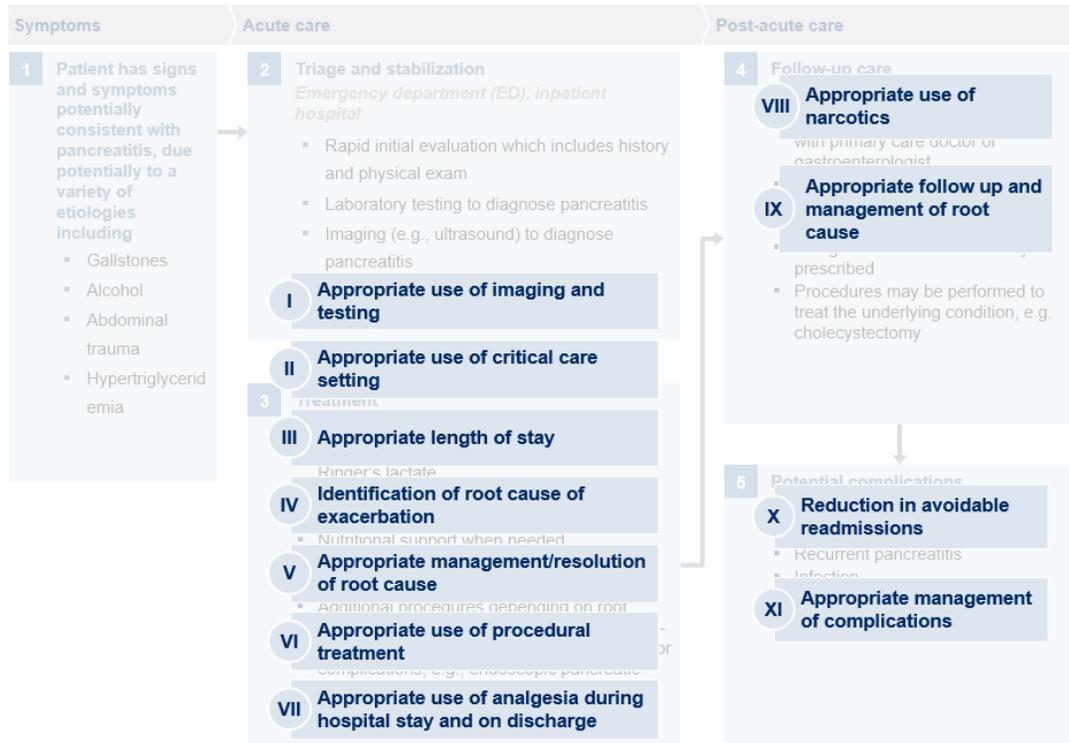
After acute conditions are addressed and/or resolved, the patient is discharged and receives follow-up care in the outpatient setting. Some patients may have recurrent symptoms or develop complications (e.g., pancreatic pseudocyst, necrotizing pancreatitis) leading to additional ED visits and potential readmissions.

### **1.3 Potential sources of value within the pancreatitis patient journey**

Within the pancreatitis episode of care, providers have several opportunities to improve the quality of care and reduce unnecessary spend associated with the episode (see Exhibit 2). For example, providers may be able to manage less complicated cases without utilizing the ICU, thereby limiting the resources required during inpatient management. Providers can conduct clinically appropriate workups to identify the underlying cause of the pancreatitis and limit the use of potentially unnecessary CT scans and MRI. Providers can adhere to clinical guidelines to limit complications. For example, if the underlying etiology is a gallstone blockage, interventions such as ERCP or cholecystectomy may be performed to prevent recurrence and infection.<sup>2</sup> If the case is severe, enteral nutrition is strongly recommended to prevent infectious complications and parenteral nutrition should be avoided.<sup>10</sup> Providers can also ensure appropriate discharge planning and timely follow-up to decrease the likelihood of post-discharge readmissions and ED visits. In general, these practices can improve quality while reducing the overall spend for a pancreatitis episode.

<sup>10</sup> Yi, F., Ge, L., et al. (2012). Meta-analysis: total parenteral nutrition versus total enteral nutrition in predicted severe acute pancreatitis. *Internal Medicine*, 51(6), 523-530.

## EXHIBIT 2 – PANCREATITIS SOURCES OF VALUE



## 2. OVERVIEW OF THE PANCREATITIS EPISODE DESIGN

### 2.1 Episode Trigger

The pancreatitis episode is triggered in one of two ways: either by an inpatient admission or observation care with a primary diagnosis of pancreatitis or by an inpatient admission or observation care with a primary diagnosis of a relevant condition coupled with a secondary diagnosis of pancreatitis. See Tables 1A and 1B in the Appendix for the list of pancreatitis trigger diagnosis codes and the list of trigger codes for relevant conditions and Exhibit 3 for spend profiles.

### 2.2 Principal Accountable Provider

The principal accountable provider (PAP) is the person or entity best positioned to influence the patient journey and the clinical decisions made throughout the course of the episode. For the pancreatitis episode the PAP is the facility where the patient was admitted for pancreatitis. This is because multiple different providers (e.g., an emergency department clinician, gastroenterologist, and/or a hospitalist) may be

critical to delivering appropriate care for the patient throughout his or her medical journey, and the facility is in the best position to manage and coordinate the care from the different providers (see Exhibit 4 for the distribution of average spend by PAP).

### **2.3 Episode Duration**

The episode begins when a patient presents to the ED with pancreatitis requiring inpatient admission or observation care and ends 30 days after discharge. The use of a single “post-trigger window” for this episode is to account for follow-up visits and complications of pancreatitis that may occur up to 30 days after the initial admission (i.e., “trigger window”).

### **2.4 Included Services**

The episode model is designed to address the spend for care and services directly related to the diagnosis, treatment, and recovery phase of the patient journey. Each period of the patient journey, or episode “window,” has a distinct claim inclusion logic derived from two major criteria: 1) that the type of included care and services must correspond to that period of the patient journey and 2) that the included care and services are understood to be directly or indirectly influenced by the PAP during that period.

The pancreatitis episode is comprised of two distinct windows for the purpose of spend inclusions: a trigger window and a post-trigger window. During the trigger window—the initial hospital stay during which pancreatitis is diagnosed—all professional, outpatient and inpatient claims on facility medical services, and relevant medications are included. During the post-trigger window (one through 30 days following discharge), immediate complications (e.g., pseudocyst, necrosis, electrolyte abnormalities), acute recurrence of pancreatitis (including any associated ED visits or hospitalizations), specific imaging and testing (e.g. abdominal CT scan), specific medical and surgical procedures (e.g. ERCP, cholecystectomy), specific medications (e.g., narcotics), and related follow-up care (e.g., follow-up appointments, medication management) are included.

The total episode spend is calculated by adding up the spend amounts on all of the individual claims that were included in each of the episode windows.

## 2.5 Episode Exclusions and Risk Factors

To ensure that episodes are comparable across patient panels select risk factors and exclusions are applied before assessing PAP performance. In the context of episode design, risk factors are attributes (e.g., age) or underlying clinical conditions (e.g., obesity or congestive heart failure) that are likely to impact a patient’s course of care and the spend associated with a given episode. Risk factors are selected via a standardized and iterative risk-adjustment process which gives due consideration to clinical relevance, statistical significance, and other contextual factors. Based on the selected risk factors, each episode is assigned a risk score. The total episode spend and the risk score are used to arrive at an adjusted episode spend on which providers are compared to each other. See Table 3 in the Appendix for a list of potential risk factors for the pancreatitis episode and analysis of these risk factors is in Exhibit 7.

By contrast, an episode is excluded from a patient panel when the patient has clinical factors that suggest she has experienced a distinct or different journey (e.g., organ transplant) and/or which drive significant increases in spend relative to the average patient (e.g., active cancers and HIV). In addition, there are several “business-related” exclusions. These exclusions are factors relating to reimbursement policy (e.g., whether a patient sought care out of state), the completeness of spend data for that patient (e.g., third party liability or dual eligibility), and other topics relating to episode design and implementation (e.g. overlapping episodes) during the comparison period. Episodes that have no exclusions are known as “valid” episodes and are the episodes that are used for provider comparisons.

For the pancreatitis episode, both business and clinical exclusions apply. Several of the business and clinical exclusions are standard across most episodes while others relate to the scope of the episode design. As the episode is intended to capture acute inpatient pancreatitis, the episode-specific clinical exclusions are: claims with procedures or diagnoses indicating trauma, accident, cardiopulmonary resuscitation (CPR) or respiratory arrest. A complete list of business and clinical exclusions (including non-episode specific clinical exclusions), along with clinical risk factors, is in Table 2 in the Appendix and analysis of these exclusions is in Exhibit 6.

## 2.6 Quality Metrics

To ensure the episode model incentivizes quality care, the episode has select quality metrics. These are calculated for each PAP meeting the minimum threshold for valid episodes.

The pancreatitis episode has six quality metrics. Two quality and four utilization metrics. Two metrics are linked to performance assessment, meaning that performance thresholds on these metrics must be met for the episodes to be eligible

for positive incentive payments within the episode model. Four of the metrics are for informational purposes only. The metrics tied to positive incentive payments are the percentage of episodes with narcotics usage during the episode window and the percentage of episodes with a follow-up visit in the post-trigger window. Informational metrics include the percentage of episodes with a readmission for pancreatitis in the post-trigger window, the percentage of episodes with cholecystectomy performed during the index admission, the percentage of episodes with a CT-scan in the post-trigger window, and the percentage of episodes with a related ED visit in the post-trigger window. A complete list of quality metrics is provided in Table 4 in the Appendix and analysis of these quality metrics is in Exhibit 5.

### 3. APPENDIX: SUPPORTING ANALYSES

**Table 1A – Episode primary triggers**

Trigger group	Diagnosis code	Code type	Description
<b>Acute pancreatitis</b>	5770	ICD-9	Acute pancreatitis
	0723	ICD-9	Mumps pancreatitis
	B252	ICD-10	Cytomegaloviral pancreatitis
	B263	ICD-10	Mumps pancreatitis
	K850	ICD-10	Idiopathic acute pancreatitis
	K851	ICD-10	Biliary acute pancreatitis
	K852	ICD-10	Alcohol induced acute pancreatitis
	K853	ICD-10	Drug induced acute pancreatitis
	K858	ICD-10	Other acute pancreatitis
	K859	ICD-10	Acute pancreatitis, unspecified
<b>Chronic pancreatitis</b>	5771	ICD-9	Chronic pancreatitis
	K860	ICD-10	Alcohol-induced chronic pancreatitis
	K861	ICD-10	Other chronic pancreatitis

**Table 1B – Episode contingent triggers**

Contingent trigger group	Example
Pancreatitis symptoms	Abdominal pain, epigastric pain, nausea, vomiting
Pancreatitis findings	Acidosis, fever, altered mental status, hypernatremia
Pancreatic-related disorders	Pancreatic pseudocyst, neoplasm of head of pancreas
Potential etiologies	Gallstones, alcohol, hyperlipidemia

**Table 2 – Potential episode exclusions**

Exclusion type	Episode exclusion	Description	Relevant time period
Business exclusion	Dual	An episode is excluded if the patient had dual coverage by Medicare and Medicaid	During the episode window
	FQHC/RHC	An episode is excluded if the PAP is classified as a federally qualified health center or rural health clinic	During the episode window
	Incomplete episodes	An episode is incomplete if the total episode spend is less than the spend from the minimum services required to treat an episode	During the episode window
	Inconsistent enrollment	An episode is excluded if the patient has gaps in full Medicaid coverage	During the episode window
	Long Admission	An episode is excluded if the patient has one or more hospital admissions for a duration greater than 30 days	During the episode window
	Long Term Care	An episode is excluded if the patient has one or more long-term care claim detail lines which overlap the episode window	During the episode window
	No DRG	An episode is excluded if a DRG-paid inpatient claim is missing the APR-DRG and severity of illness	During the episode window
	Multi Payer	An episode is excluded if a patient changes enrollment between FFS and an MCP or between MCPs	During the episode window
	No PAP	An episode is excluded if the PAP cannot be identified	During the episode window
	Out of state	An episode is excluded if the PAP operates out of state	N/A

Exclusion type	Episode exclusion	Description	Relevant time period
	Third party liability	An episode is excluded if third-party liability charges are present on any claim or claim detail line or if the patient has relevant third-party coverage at any time	During the episode window
Standard clinical exclusion	Age	An episode is excluded if the patient is 65 years old or older	N/A
	Cardiac arrest	An episode is excluded if the patient has a diagnosis of cardiac arrest	During the episode window
	Cancer Treatment	An episode is excluded if the patient has a diagnosis of cancer and procedures for active management of cancer	During the episode window or up to 90 days before the start of the episode
	Coma	An episode is excluded if the patient has a diagnosis of coma during the episode	During the episode window or up to 365 days before the start of the episode
	Cystic Fibrosis	An episode is excluded if the patient has a diagnosis of cystic fibrosis during the episode	During the episode window or up to 365 days before the start of the episode
	Death	An episode is excluded if the patient has a discharge status of “expired” on any inpatient or outpatient claim	During the episode window
	ESRD	An episode is excluded if the patient has a diagnosis or procedure for end stage renal disease	During the episode window or up to 365 days before the start of the episode
	HIV	An episode is excluded if the patient has a diagnosis of HIV	During the episode window or up to 365 days before the start of the episode
	Left Against Medical Advice	An episode is excluded if the patient has a discharge status of “left against medical advice”	During the episode window
	Meningitis and encephalitis	An episode is excluded if the patient has a	During the episode window

Exclusion type	Episode exclusion	Description	Relevant time period
		diagnosis of meningitis or encephalitis	
	Multiple Sclerosis	An episode is excluded if the patient has a diagnosis of multiple sclerosis	During the episode window or during 365 days before the start of the episode
	Paralysis	An episode is excluded if the patient has a diagnosis of paralysis	During the episode window or up to 365 days before the start of the episode
	Transplant	An episode is excluded if a patient has received an organ transplant	During the episode window or up to 365 days before the start of the episode
	Tuberculosis	An episode is excluded if the patient has a diagnosis of tuberculosis	During the episode window
Episode-specific clinical exclusion	Accident	Patient is diagnosed with accident	During the episode or up to 7 days before the start of the episode
	Cardiopulmonary resuscitation (CPR)	Patient is diagnosed with Cardiopulmonary resuscitation	During the episode window
	Central nervous system infection	Patient is diagnosed with Central Nervous System infection	During the episode or up to 365 days before the start of the episode
	Respiratory arrest	Patient is diagnosed with respiratory arrest	During the episode or up to 7 days before the start of the episode
	Trauma	Patient is diagnosed with trauma	During the episode or up to 7 days before the start of the episode

**Table 3 – Potential episode risk factors**

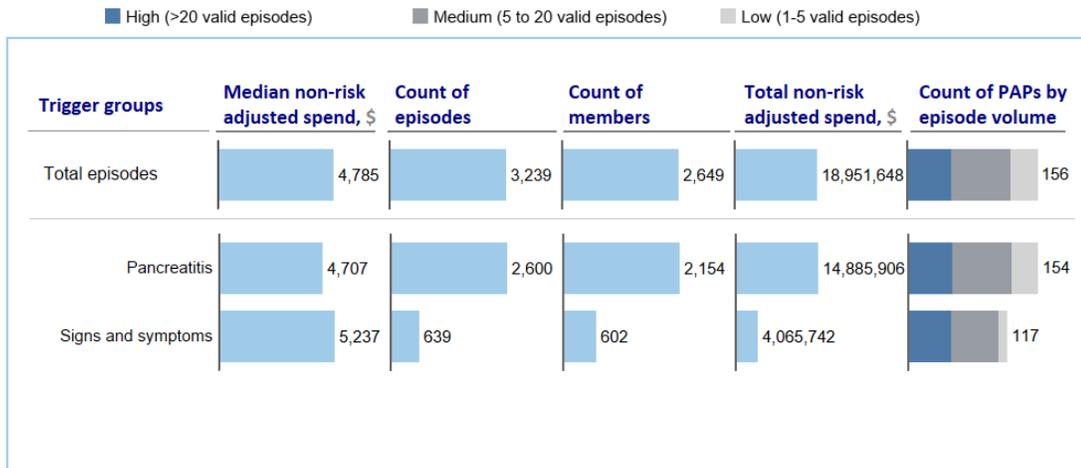
Risk factor	Description	Relevant time period
<b>Anemia</b>	Patients diagnosed with anemia	During 365 Days Prior To Episode Start And During Episode Window
<b>Artery Disease</b>	Patients diagnosed with artery disease	During 365 Days Prior To Episode Start And During Episode Window
<b>Cholecystitis</b>	Patients diagnosed with cholecystitis	During 7 Days Prior To Episode Start And During Episode Window
<b>Chronic kidney disease</b>	Patients diagnosed with chronic kidney disease	During 365 Days Prior To Episode Start And During Episode Window
<b>Coagulation</b>	Patients diagnosed with coagulation	During 365 Days Prior To Episode Start And During Episode Window
<b>Congenital anomalies</b>	Patients diagnosed with congenital anomalies	During 365 Days Prior To Episode Start And During Episode Window
<b>DKA/HHS</b>	Patients diagnosed with dka/hhs	During 7 Days Prior To Episode Start And During Episode Window

Risk factor	Description	Relevant time period
<b>Gallstone</b>	Patients diagnosed with gallstone	During 7 Days Prior To Episode Start And During Episode Window
<b>GI infection</b>	Patients diagnosed with gi infection	During 7 Days Prior To Episode Start And During Episode Window
<b>Heart Disease</b>	Patients diagnosed with heart disease	During 365 Days Prior To Episode Start And During Episode Window
<b>Intestinal obstruction</b>	Patients diagnosed with intestinal obstruction	During 365 Days Prior To Episode Start And During Episode Window
<b>Nervous System Disorders</b>	Patients diagnosed with nervous system disorders	During 365 Days Prior To Episode Start And During Episode Window
<b>Nutritional Immunity Metabolic disorder</b>	Patients diagnosed with nutritional immunity metabolic disorder	During 365 Days Prior To Episode Start And During Episode Window
<b>Pancreatic cyst/pseudocyst</b>	Patients diagnosed with pancreatic cyst/pseudocyst	During 7 Days Prior To Episode Start And During Episode Window
<b>Peritonitis</b>	Patients diagnosed with peritonitis	During 365 Days Prior To Episode Start And During Episode Window
<b>Posthemorrhagic anemia</b>	Patients diagnosed with posthemorrhagic anemia	During 365 Days Prior To Episode Start And During Episode Window

**Table 4 – Episode quality metrics (PAP level)**

Metric	Description	Time frame
<b>Narcotics usage</b>	Percent of valid episodes with a filled prescription for narcotics	During the episode window
<b>Follow-up care</b>	Percent of valid episodes with a relevant follow-up visit	During the post-trigger window
<b>Readmission</b>	Percent of valid episodes with relevant readmissions	During the post-trigger window
<b>Repeat ED visit</b>	Percent of valid episodes with a relevant ED visit	During the post-trigger window
<b>Cholecystectomy performed</b>	Of the valid episodes with a cholecystectomy performed during the episode window, the percent of valid episodes with a cholecystectomy performed during the trigger window	N/A
<b>CT Scan</b>	Percent of valid episodes with a CT scan in the post-trigger window	During the post-trigger window

### EXHIBIT 3 – SPEND AND VOLUME BY TRIGGER GROUPS<sup>1</sup>

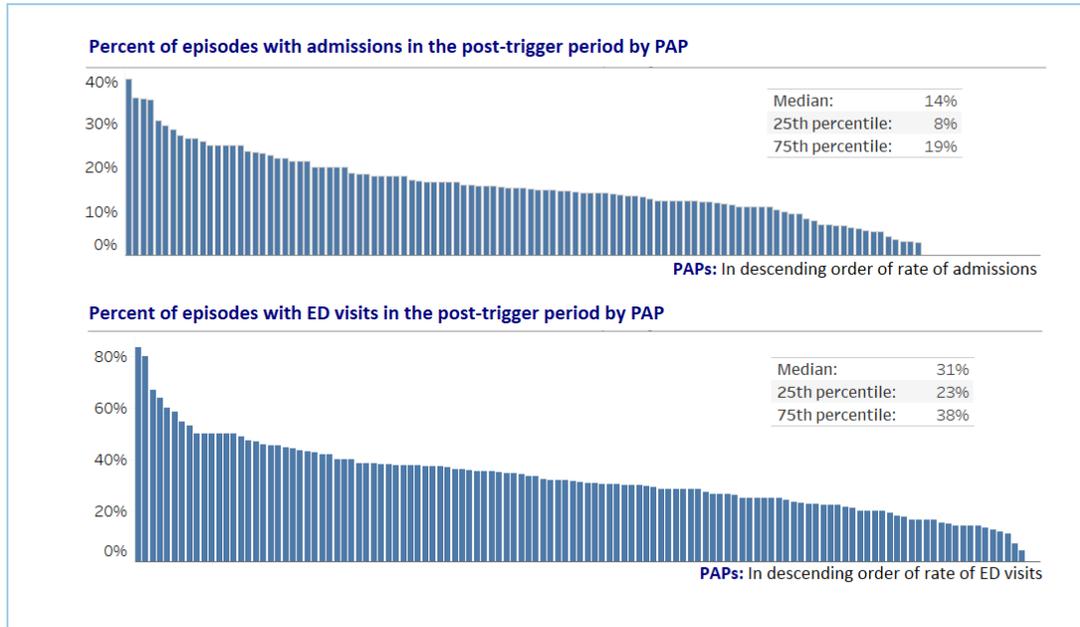


1. For valid episodes (3,239 episodes) across 156 PAPs; valid episodes do not include episodes with business (e.g., third-party liability, dual eligibility) or clinical exclusions (e.g., cancer, ESRD); count of PAPs includes valid PAPs (e.g.  $\geq 5$  valid episodes) and invalid PAPs (e.g.  $< 5$  valid episodes)

2. Low volume is defined as PAPs with less than five valid episodes, Medium volume as PAPs with five to 20 valid episodes and High volume as PAPs with more than 20 valid episodes

SOURCE: OH claims data, episodes ending between 10/1/2014 and 9/30/2015

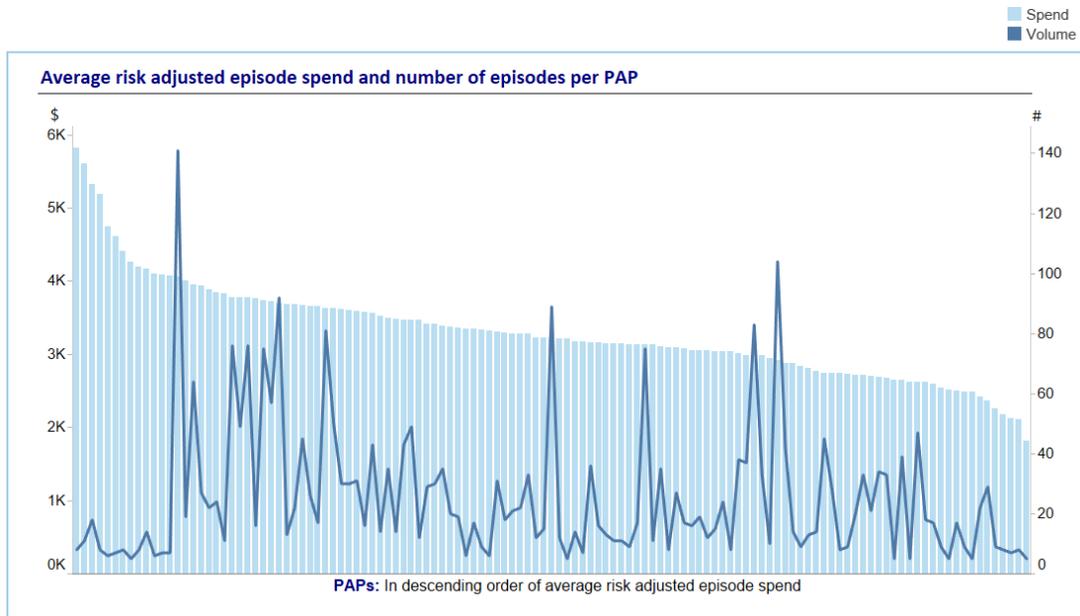
## EXHIBIT 4 – VARIATION IN ADMISSION RATES AND ED VISIT RATES BY PAP<sup>1</sup>



1. For valid episodes (3,155 episodes) across PAPs with 5 or more valid episodes (123); valid episodes do not include episodes with business (e.g., third-party liability, dual eligibility) or clinical exclusions (e.g., cancer, ESRD); valid PAPs are clinicians with five or more episodes during 10/1/2014 to 9/30/2015 period. Valid episodes for invalid PAPs (those with less than five valid episodes) are not included in this analysis.

SOURCE: OH claims data, episodes ending between 10/1/2014 and 9/30/2015

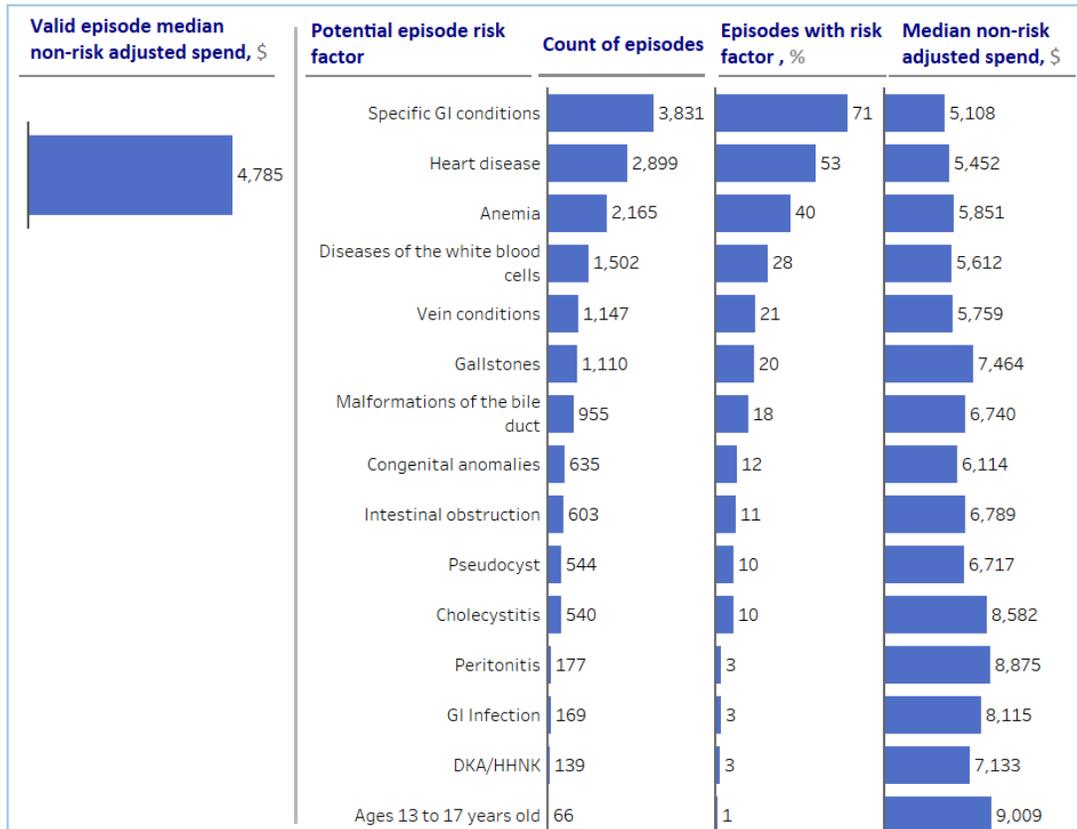
## EXHIBIT 5 – DISTRIBUTION OF RISK-ADJUSTED AVERAGE EPISODE SPEND AND COUNT BY PAP<sup>1</sup>



<sup>1</sup> For valid episodes (3,155) across PAPs with 5 or more valid episodes (123); valid episodes for PAPs with 4 or less episodes are not included in this analysis; valid episodes do not include those with business (e.g., third-party liability, dual eligibility) or clinical exclusions (e.g., cancer, ESRD)

SOURCE: OH claims data with episodes ending between 10/01/2013 and 09/30/2015

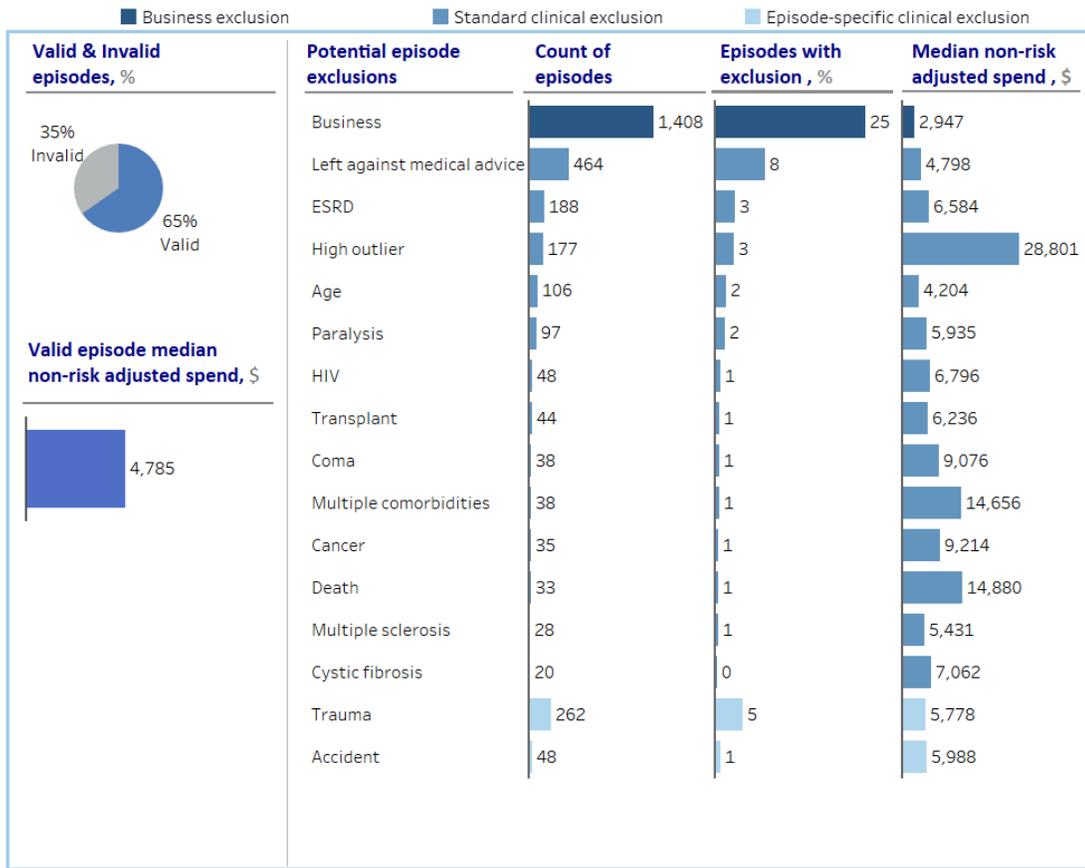
**EXHIBIT 6 – EPISODE COUNT AND SPEND BY EPISODE RISK FACTOR<sup>1</sup>**



1. Showing all statistically significant risk factors by number of episodes with risk factor
2. For episodes with this risk factor

SOURCE: OH claims data, episodes ending between 10/1/2014 and 9/30/2015

### EXHIBIT 7 – EPISODE COUNT AND SPEND BY EPISODE EXCLUSION<sup>1</sup>

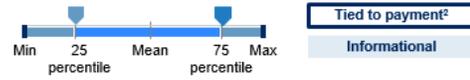


1 Showing all exclusions; 5,561 total episodes across all PAPs

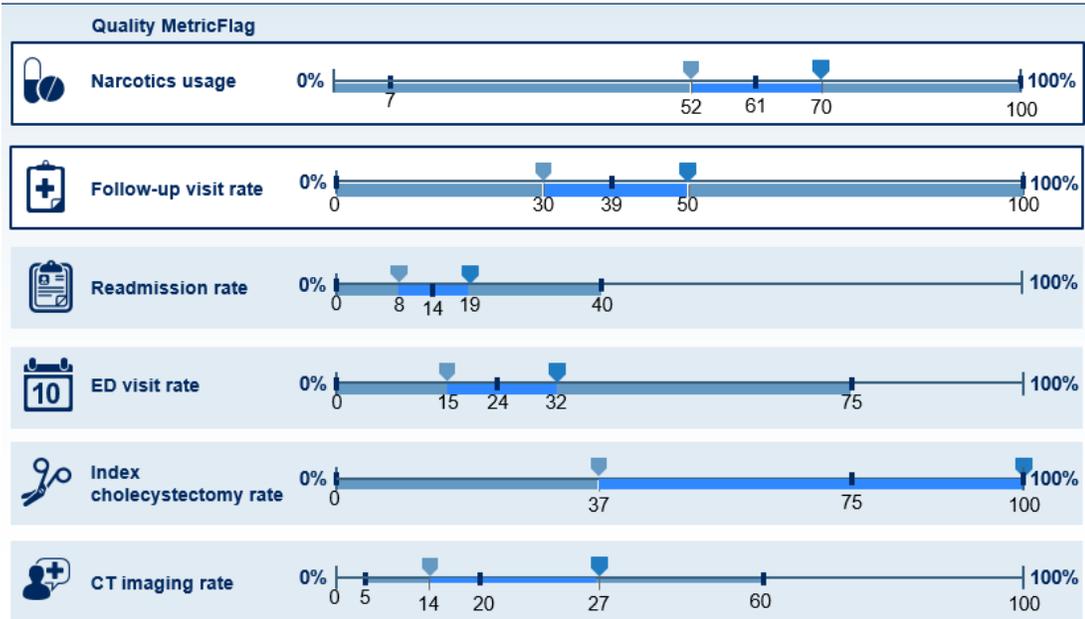
2 For episodes with this exclusion; one episode can have multiple exclusions

SOURCE: OH claims data, episodes ending between 10/1/2014 and 9/30/2015

## EXHIBIT 8 - PAP PERFORMANCE ON EPISODE QUALITY METRICS<sup>1</sup>



### Quality metrics



<sup>1</sup> For valid episodes (3,155 episodes) across 123 valid PAPs; valid episodes do not include episodes with business (e.g., third-party liability, dual eligibility) or clinical exclusions (e.g., cancer, ESRD); count of PAPs includes valid PAPs (e.g. >= 5 valid episodes)

<sup>2</sup> Valid PAPs are physicians with five or more episodes during 10/1/2014 to 9/30/2015 period

SOURCE: OH claims data, episodes ending between 10/1/2014 and 9/30/2015