



Inpatient Quality Indicator 18 (IQI 18) Gastrointestinal Hemorrhage Mortality Rate

March 2021

Hospital-Level Indicator

Type of Score: Rate

Prepared by:

Agency for Healthcare Research and Quality

U.S. Department of Health and Human Services

www.qualityindicators.ahrq.gov

DESCRIPTION

In-hospital deaths per 1,000 discharges with a principal diagnosis of gastrointestinal hemorrhage; or a secondary diagnosis of esophageal varices with bleeding along with a qualifying associated principal diagnosis, for patients age 18 years and older. Excludes obstetric discharges, cases in hospice care at admission, discharges with a procedure for liver transplant, and transfers to another hospital.

[NOTE: The software provides the rate per hospital discharge. However, common practice reports the measure as per 1,000 discharges. The user must multiply the rate obtained from the software by 1,000 to report in-hospital deaths per 1,000 hospital discharges.]

NUMERATOR

Number of deaths (DISP=20) among cases meeting the inclusion and exclusion rules for the denominator.

DENOMINATOR

Discharges for patients age 18 years or older with either:

- a principal ICD-10-CM diagnosis code for gastrointestinal hemorrhage (*MRTGIHD**)
- a secondary ICD-10-CM diagnosis code for esophageal varices with bleeding (*FTR6GV**) when there is an underlying disease as the principal ICD-10-CM diagnosis (*FTR6QD**)

DENOMINATOR EXCLUSIONS

Exclude cases:

- any procedure code for liver transplant (**LIVERTRP***)
- transferring to another short-term hospital (DISP=2)
- cases in hospice care at admission (PointOfOriginUB04=F)
- MDC 14 (pregnancy, childbirth, and puerperium)
- with an ungroupable DRG (DRG=999)
- with missing discharge disposition (DISP=missing), gender (SEX=missing), age (AGE=missing), quarter (DQTR=missing), year (YEAR=missing) or principal diagnosis (DX1=missing)

* See below for code list

Gastrointestinal hemorrhage diagnosis codes: (MRTGIHD)

I8501	Esophageal varices with bleeding	K3182	Dieulafoy lesion (hemorrhagic) of stomach and duodenum
I8511	Secondary esophageal varices with bleeding	K50011	Crohn's disease of small intestine with rectal bleeding
K2211	Ulcer of esophagus with bleeding	K50111	Crohn's disease of large intestine with rectal bleeding
K226	Gastro-Esophageal laceration-hemorrhage syndrome	K50811	Crohn's disease of both small and large intestine with rectal bleeding
K250	Acute gastric ulcer with hemorrhage	K50911	Crohn's disease, unspecified, with rectal bleeding
K252	Acute gastric ulcer with both hemorrhage and perforation	K51011	Ulcerative (chronic) pancolitis with rectal bleeding
K254	Chronic or unspecified gastric ulcer with hemorrhage	K51211	Ulcerative (chronic) proctitis with rectal bleeding
K256	Chronic or unspecified gastric ulcer with both hemorrhage and perforation	K51311	Ulcerative (chronic) rectosigmoiditis with rectal bleeding
K260	Acute duodenal ulcer with hemorrhage	K51411	Inflammatory polyps of colon with rectal bleeding
K262	Acute duodenal ulcer with both hemorrhage and perforation	K51511	Left sided colitis with rectal bleeding
K264	Chronic or unspecified duodenal ulcer with hemorrhage	K51811	Other ulcerative colitis with rectal bleeding
K266	Chronic or unspecified duodenal ulcer with both hemorrhage and perforation	K51911	Ulcerative colitis, unspecified with rectal bleeding
K270	Acute peptic ulcer, site unspecified, with hemorrhage	K5521	Angiodysplasia of colon with hemorrhage
K272	Acute peptic ulcer, site unspecified, with both hemorrhage and perforation	K5701	Diverticulitis of small intestine with perforation and abscess with bleeding
K274	Chronic or unspecified peptic ulcer, site unspecified, with hemorrhage	K5711	Diverticulosis of small intestine without perforation or abscess with bleeding
K276	Chronic or unspecified peptic ulcer, site unspecified, with both hemorrhage and perforation	K5713	Diverticulitis of small intestine without perforation or abscess with bleeding
K280	Acute gastrojejunal ulcer with hemorrhage	K5721	Diverticulitis of large intestine with perforation and abscess with bleeding
K282	Acute gastrojejunal ulcer with both hemorrhage and perforation	K5731	Diverticulosis of large intestine without perforation or abscess with bleeding
K284	Chronic or unspecified gastrojejunal ulcer with hemorrhage	K5733	Diverticulitis of large intestine without perforation or abscess with bleeding
K286	Chronic or unspecified gastrojejunal ulcer with both hemorrhage and perforation	K5741	Diverticulitis of both small and large intestine with perforation and abscess with bleeding

K2901	Acute gastritis with bleeding	K5751	Diverticulosis of both small and large intestine without perforation or abscess with bleeding
K2921	Alcoholic gastritis with bleeding	K5753	Diverticulitis of both small and large intestine without perforation or abscess with bleeding
K2931	Chronic superficial gastritis with bleeding	K5781	Diverticulitis of intestine, part unspecified, with perforation and abscess with bleeding
K2941	Chronic atrophic gastritis with bleeding	K5791	Diverticulosis of intestine, part unspecified, without perforation or abscess with bleeding
K2951	Unspecified chronic gastritis with bleeding	K5793	Diverticulitis of intestine, part unspecified, without perforation or abscess with bleeding
K2961	Other gastritis with bleeding	K625	Hemorrhage of anus and rectum
K2971	Gastritis, unspecified, with bleeding	K6381	Dieulafoy lesion of intestine
K2981	Duodenitis with bleeding	K920	Hematemesis
K2991	Gastroduodenitis, unspecified, with bleeding	K921	Melena
K31811	Angiodysplasia of stomach and duodenum with bleeding	K922	Gastrointestinal hemorrhage, unspecified

Esophageal varices with bleeding: (FTR6GV)

I8511 Secondary esophageal varices with
bleeding

Qualifying diagnoses associated with a diagnosis of esophageal varicies with bleeding: (FTR6QD)

B180	Chronic viral hepatitis B with delta-agent	K718	Toxic liver disease with other disorders of liver
B181	Chronic viral hepatitis B without delta-agent	K719	Toxic liver disease, unspecified
B182	Chronic viral hepatitis C	K7200	Acute and subacute hepatic failure without coma
B188	Other chronic viral hepatitis	K7201	Acute and subacute hepatic failure with coma
B189	Chronic viral hepatitis, unspecified	K7210	Chronic hepatic failure without coma
B190	Unspecified viral hepatitis with hepatic coma	K7211	Chronic hepatic failure with coma
B1910	Unspecified viral hepatitis B without hepatic coma	K7290	Hepatic failure, unspecified without coma
B1911	Unspecified viral hepatitis B with hepatic coma	K7291	Hepatic failure, unspecified with coma
B1920	Unspecified viral hepatitis C without hepatic coma	K730	Chronic persistent hepatitis, not elsewhere classified
B1921	Unspecified viral hepatitis C with hepatic coma	K731	Chronic lobular hepatitis, not elsewhere classified
B199	Unspecified viral hepatitis without hepatic coma	K732	Chronic active hepatitis, not elsewhere classified
B651	Schistosomiasis due to schistosoma mansoni [intestinal schistosomiasis]	K738	Other chronic hepatitis, not elsewhere classified
B652	Schistosomiasis due to schistosoma japonicum	K739	Chronic hepatitis, unspecified
B658	Other schistosomiasis	K740	Hepatic fibrosis
B659	Schistosomiasis, unspecified	K741	Hepatic sclerosis
C220	Liver cell carcinoma	K742	Hepatic fibrosis with hepatic sclerosis
C221	Intrahepatic bile duct carcinoma	K743	Primary biliary cirrhosis
C222	Hepatoblastoma	K744	Secondary biliary cirrhosis
C223	Angiosarcoma of liver	K745	Biliary cirrhosis, unspecified
C224	Other sarcomas of liver	K7460	Unspecified cirrhosis of liver
C227	Other specified carcinomas of liver	K7469	Other cirrhosis of liver
C228	Malignant neoplasm of liver, primary, unspecified as to type	K751	Phlebitis of portal vein
C229	Malignant neoplasm of liver, not specified as primary or secondary	K752	Nonspecific reactive hepatitis
C787	Secondary malignant neoplasm of liver and intrahepatic bile duct	K753	Granulomatous hepatitis, not elsewhere classified
C7B02	Secondary carcinoid tumors of liver	K754	Autoimmune hepatitis
C861	Hepatosplenic T-cell lymphoma	K7581	Nonalcoholic steatohepatitis (NASH)
D015	Carcinoma in situ of liver, gallbladder and bile ducts	K7589	Other specified inflammatory liver diseases

D376	Neoplasm of uncertain behavior of liver, gallbladder and bile ducts	K759	Inflammatory liver disease, unspecified
I81	Portal vein thrombosis	K760	Fatty (change of) liver, not elsewhere classified
I820	Budd-Chiari syndrome	K761	Chronic passive congestion of liver
K7011	Alcoholic hepatitis with ascites	K762	Central hemorrhagic necrosis of liver
K702	Alcoholic fibrosis and sclerosis of liver	K763	Infarction of liver
K7030	Alcoholic cirrhosis of liver without ascites	K765	Hepatic veno-occlusive disease
K7031	Alcoholic cirrhosis of liver with ascites	K766	Portal hypertension
K7040	Alcoholic hepatic failure without coma	K767	Hepatorenal syndrome
K7041	Alcoholic hepatic failure with coma	K7681	Hepatopulmonary syndrome
K709	Alcoholic liver disease, unspecified	K7689	Other specified diseases of liver
K710	Toxic liver disease with cholestasis	K769	Liver disease, unspecified
K7110	Toxic liver disease with hepatic necrosis, without coma	K77	Liver disorders in diseases classified elsewhere
K7111	Toxic liver disease with hepatic necrosis, with coma	K830	Cholangitis
K712	Toxic liver disease with acute hepatitis	K9182	Postprocedural hepatic failure
K713	Toxic liver disease with chronic persistent hepatitis	Q265	Anomalous portal venous connection
K714	Toxic liver disease with chronic lobular hepatitis	Q266	Portal vein-hepatic artery fistula
K7150	Toxic liver disease with chronic active hepatitis without ascites	T8642	Liver transplant failure
K7151	Toxic liver disease with chronic active hepatitis with ascites	T8643	Liver transplant infection
K716	Toxic liver disease with hepatitis, not elsewhere classified	T8649	Other complications of liver transplant
K717	Toxic liver disease with fibrosis and cirrhosis of liver		

Liver transplant procedure codes: (LIVERTRP)

0FY00Z0 Transplantation of liver, allogeneic, open approach

0FY00Z1 Transplantation of liver, syngeneic, open approach

0FY00Z2 Transplantation of liver, zooplastic, open approach