

Risks of Long Term Proton Pump Inhibitor (PPI) Use

Available data indicates that long term use of PPI therapy is associated with vitamin and mineral malabsorption (calcium, iron, magnesium, and vitamin B12) and an increased risk of fractures, bacterial (two-fold increase in risk of clostridium difficile-associated diarrhea) and parasitic infections and other potential gastrointestinal issues. Moreover, a recent study has suggested an association between the long-term use of PPIs and chronic kidney disease, while other studies have suggested an association with the risk of developing dementia in elderly patients. With approximately 20% of patients in the United States having a diagnosis of gastroesophageal reflux disease, and an increasing number of patients taking proton pump inhibitors, patients on long-term therapy might require additional monitoring.

American Gastroenterological Society (AGA) clinical practice on long-term use of proton pump inhibitors can be found here:

[https://www.gastrojournal.org/article/S0016-5085\(17\)30091-4/pdf](https://www.gastrojournal.org/article/S0016-5085(17)30091-4/pdf)

American College of Gastroenterology (ACG) guidelines for the management of GERD can be found here:

<https://journals.lww.com/ajg/pages/articleviewer.aspx?year=2022&issue=01000&article=00014&type=Fulltext>

Intervention Summary

The following table shows a summary of the proposed intervention topics and the number of potential patients that may be targeted by each intervention. The number of potential patients is based on the most recent ICER. The actual number of targeted patients for each intervention will be based on the ICER for the month the intervention is performed.

Outcomes assessment will be completed 180 days after the intervention is performed.

Proposed Intervention Topic	MCO	Pediatric (Age 18 and below)	Adult
<ol style="list-style-type: none"> 1. Include patients (all ages) taking a PPI for at least 60 days in the last 120 days. 2. Exclude patients with a diagnosis of Zollinger-Ellison syndrome, erosive esophagitis, or Barret’s esophagitis in the last 730 days. 3. Exclude patients with long term NSAID or aspirin therapy (> 30 days in the last 90 days) 	6325	18	180
<ol style="list-style-type: none"> 1. Include patients (all ages) taking a PPI for at least 60 days in the last 120 days that have a diagnosis of peptic ulcer disease in the last 365 days. 2. Exclude patients with long term NSAID or aspirin therapy (> 30 days in the last 90 days) 	568	0	3



TEXAS
Health and Human
Services

[TODAY]

[adrs1]
[adrs2]
[adrs3]
[adrs4]

DEAR [tadrs1]:

In compliance with the OBRA '90 federal legislation, state Medicaid agencies are mandated to conduct Retrospective Drug Utilization Review Programs (RDUR). We hope that this retrospective DUR may assist you in optimizing your Medicaid patient's drug therapy. One way to achieve this goal is to identify potential drug therapy problems that may place patients at risk, particularly if multiple providers are identified. This RDUR program is informational in nature and allows you to incorporate the information provided into your continuing assessment of the patient's drug therapy requirements.

During a recent review of pharmacy claims data over the past 3 months, it was noted that the following patients, for which at least one claim is associated with your provider number, have received a proton pump inhibitor (PPI) for at least 60 days.

[namelist]

Available data indicates that long term use of PPI therapy is associated with vitamin and mineral malabsorption (calcium, iron, magnesium, and vitamin B12) and an increased risk of fractures, bacterial (two-fold increase in risk of clostridium difficile-associated diarrhea) and parasitic infections and other potential gastrointestinal issues. Moreover, a recent study has suggested an association between the long-term use of PPIs and chronic kidney disease, while other studies have suggested an association with the risk of developing dementia in elderly patients.

American Gastroenterological Society (AGA) clinical practice on long-term use of proton pump inhibitors can be found here:

[https://www.gastrojournal.org/article/S0016-5085\(17\)30091-4/pdf](https://www.gastrojournal.org/article/S0016-5085(17)30091-4/pdf)

American College of Gastroenterology (ACG) guidelines for the management of GERD can be found here:

<https://journals.lww.com/ajg/pages/articleviewer.aspx?year=2022&issue=01000&article=00014&type=Fulltext>

The enclosed historical profile is provided for your evaluation and consideration. In presenting this information to you, we recognize that the management of each patient's drug therapy depends upon an assessment of the patient's entire clinical situation about which we are not fully aware. It is also possible that your license number may have been inadvertently assigned to the claim as an error at the pharmacy during the billing process. Some prescribed medications as well as some recommended laboratory monitoring or physical examinations may not appear on the patient's profile because they may have been privately purchased or were not billable to Medicaid Services.

The success of the DUR program is enhanced by the two way exchange of information. Therefore, at your convenience, we would appreciate learning of your assessment of this information and of any action taken in response to this notice. Although your participation in this program is voluntary, we find your feedback helpful in adjusting our program to address clinically important problems. We thank you for reviewing this information and caring for Texas Medicaid patients. *Please submit your response using the online provider response portal or complete the enclosed response form*

Administered by Kepro
PO Box 3570
Auburn, AL 36831
(800)225-6998 x3033 Fax (833) 470-0598



TEXAS
Health and Human
Services

and fax it to (833) 470-0598. The online provider response portal can be accessed at <https://forms.office.com/r/CXGEADqkRd> or by scanning the QR code listed below.



At the bottom of this letter are the specific prescriptions attributed to you by the dispensing pharmacy. In addition, if multiple prescribers are involved in the therapy mentioned above, each will receive this information. Thank you for your professional consideration.

Sincerely,
Medicaid Drug Use Review Board

References:

1. Fashner J and Gitu AC. Diagnosis and Treatment of Peptic Ulcer Disease and H. pylori Infection. Am Fam Physician 2015; 15:236-242. Accessed June 14, 2024.
2. Chey WD, Leontiadis GI, Howden CW, Moss SF. American College of Gastroenterology Guideline: Treatment of Helicobacter pylori Infection. Am J Gastroenterol 2017;112:212-38.
3. Lanza FL, Chan FKL, Quigley EM et al. Guidelines for prevention of NSAID-related ulcer complications. Am J Gastroenterol 2009;104:728-38.
4. Katz PO, Gerson LB, Vela MF. Guidelines for the diagnosis and management of gastroesophageal reflux disease. Am J Gastroenterol 2013;108:308-328.
5. FDA Safety Communication: Possible increased risk of fractures of the hip, wrist, and spine with the use of proton pump inhibitors, Food and Drug Administration; Update: March 23, 2011. Accessed June 14, 2024.
6. Jameson RL, Schneider JL, Zhao W, Corley, DA. Proton pump inhibitor and histamine 2 receptor antagonist use and vitamin B12 deficiency. JAMA 2013;310:2435-42. Accessed June 14, 2024.
7. Chen J, Yuan YC, Leontiadis, GI, & Howden CW. Recent safety concerns with proton pump inhibitors. J Clin Gastroenterol 2012; 46:93-114.
8. Gomm W, von Holt K, Thomé F, et.al. Association of Proton Pump Inhibitors with Risk of Dementia. JAMA Neurol. Published online February 15, 2016. Accessed June 14, 2024.
9. Lazarus B, Chen Y, Wilson FP, et.al. Proton Pump Inhibitor Use and the Risk of Chronic Kidney Disease. JAMA Intern Med. 2016;176(2):238-46.
10. Freedberg DE, Kim LS, Yang Y. American Gastroenterological Association. Clinical Practice Update: The Risks and Benefits of Long-Term Use of Proton Pump Inhibitors: Expert Review and Best Practice Advice from the American Gastroenterological Association. Gastro 2017;152:706-715.
11. Katz PO, Dubar, KB, Schnoll-Sussman, et al. ACG Clinical Guideline for the Diagnosis and Management of Gastroesophageal Reflux Disease. Am J Gastroent;2022: 117(1):27-56.

Administered by Kepro
PO Box 3570
Auburn, AL 36831
(800)225-6998 x3033 Fax (833) 470-0598



PRESCRIBER RESPONSE

All information used to generate the enclosed letter, including Prescriber identification, was obtained from Pharmacy Claims Data. If there appears to be an error in the information provided, please note the discrepancy. Thank you for your cooperation. As a reminder, the response can be submitted using the online provider response portal. The online provider response portal can be accessed at https://forms.office.com/r/CXGEADqkRd or by scanning the QR code listed below.



1. This patient **is** under my care:

- I have reviewed the information and will continue without change.
however, I did not prescribe the following medication(s)
and has an appointment to discuss drug therapy.
however, has not seen me recently.
however, I was not aware of other prescribers.
I have reviewed the information and modified drug therapy.
I have not modified drug therapy because benefits outweigh the risks.
I have tried to modify therapy, however the patient refuses to change.
I have tried to modify therapy, however symptoms reoccurred.

2. This patient **is not** under my care:

- however, I did prescribe medication while covering for other MD or in the ER.
but has previously been a patient of mine.
because the patient recently expired.
and has never been under my care.

3. I have reviewed the enclosed information and found it:

very useful useful neutral somewhat useful not useful.

4. Please check here if you wish to receive reference information on the identified problem. (Please provide a fax number if available - - .)

Comments:

Three horizontal lines for entering comments.

[adrs1] Case# [case_no]
Letter Type [letter_type]
[alert_msg]
[criteria]

References:

1. Fashner J and Gitu AC. Diagnosis and Treatment of Peptic Ulcer Disease and H. pylori Infection. Am Fam Physician 2015; 15:236-242. Accessed June 14, 2024.
2. Chey WD, Leontiadis GI, Howden CW, Moss SF. American College of Gastroenterology Guideline: Treatment of Helicobacter pylori Infection. Am J Gastroenterol 2017;112:212-38.
3. Lanza FL, Chan FKL, Quigley EM et al. Guidelines for prevention of NSAID-related ulcer complications. Am J Gastroenterol 2009;104:728-38.
4. Katz PO, Gerson LB, Vela MF. Guidelines for the diagnosis and management of gastroesophageal reflux disease. Am J Gastroenterol 2013;108:308-328.
5. FDA Safety Communication: Possible increased risk of fractures of the hip, wrist, and spine with the use of proton pump inhibitors, Food and Drug Administration; Update: March 23, 2011. Accessed June 14, 2024.
6. Jameson RL, Schneider JL, Zhao W, Corley, DA. Proton pump inhibitor and histamine 2 receptor antagonist use and vitamin B12 deficiency. JAMA 2013;310:2435-42. Accessed June 14, 2024.
7. Chen J, Yuan YC, Leontiadis, GI, & Howden CW. Recent safety concerns with proton pump inhibitors. J Clin Gastroenterol 2012; 46:93-114.
8. Gomm W, von Holt K, Thomé F, et.al. Association of Proton Pump Inhibitors with Risk of Dementia. JAMA Neurol. Published online February 15, 2016. Accessed June 14, 2024.
9. Lazarus B, Chen Y, Wilson FP, et.al. Proton Pump Inhibitor Use and the Risk of Chronic Kidney Disease. JAMA Intern Med. 2016;176(2):238-46.
10. Freedberg DE, Kim LS, Yang Y. American Gastroenterological Association. Clinical Practice Update: The Risks and Benefits of Long-Term Use of Proton Pump Inhibitors: Expert Review and Best Practice Advice from the American Gastroenterological Association. Gastro 2017;152:706-715.
11. Katz PO, Dubar, KB, Schnoll-Sussman, et al. ACG Clinical Guideline for the Diagnosis and Management of Gastroesophageal Reflux Disease. Am J Gastroent;2022: 117(1):27-56.