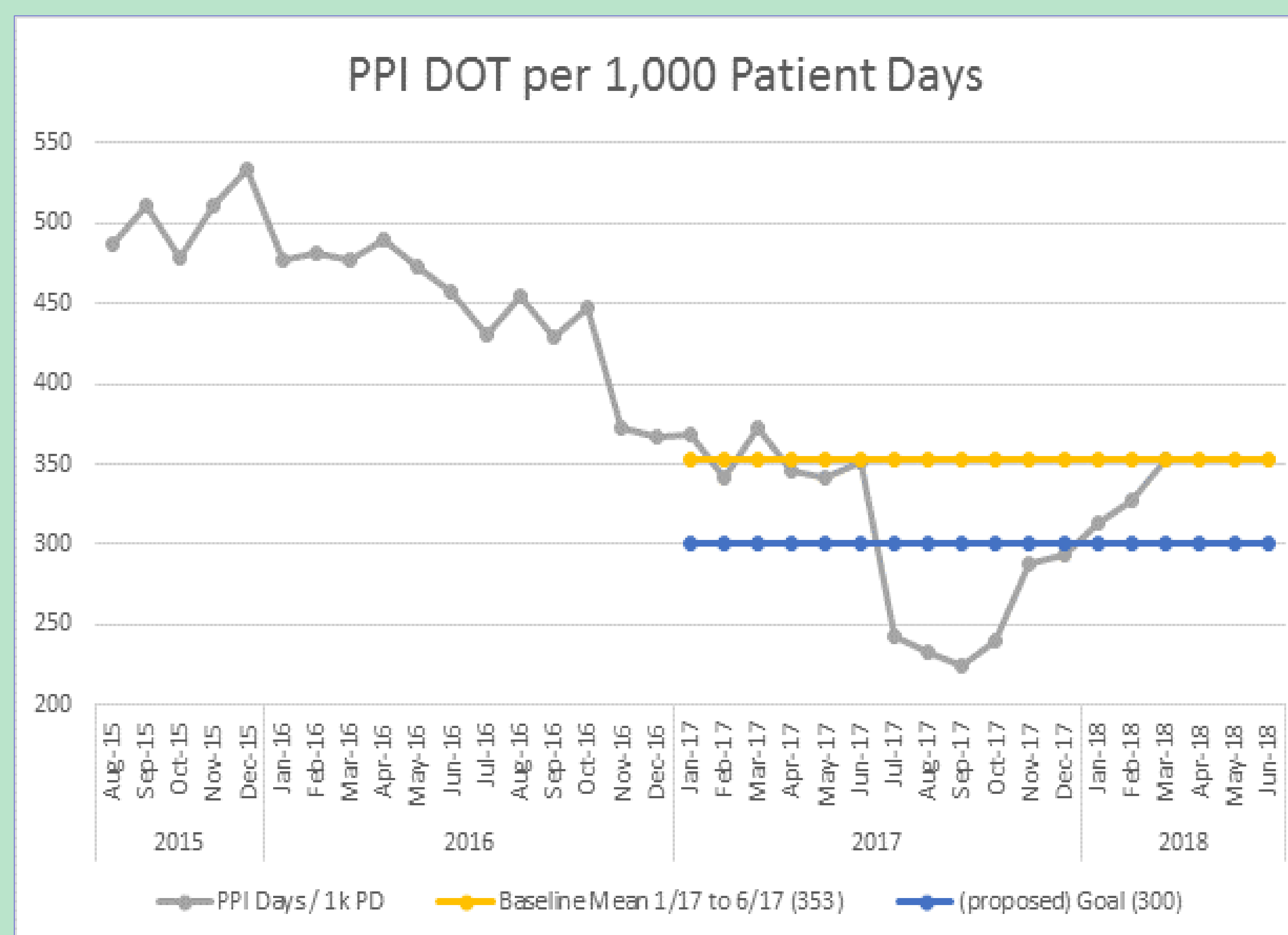
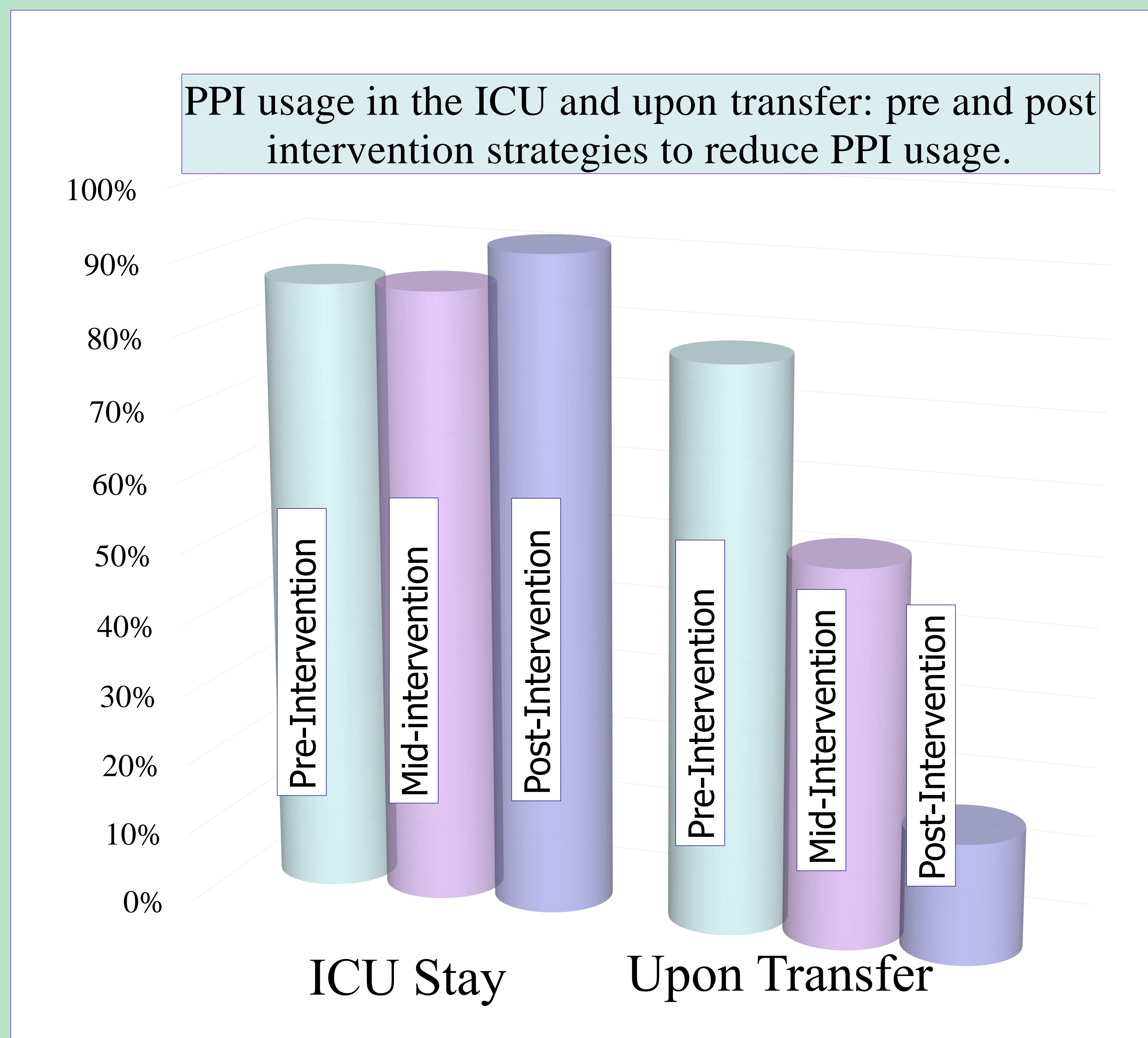


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Background: New evidence shows a significant and costly relationship between PPI usage and *Clostridium difficile* (*C. diff*) infections and death. A gap between literature and clinical practice was noticed as PPI were perceived as innocuous and widely ordered. In changing practice utilizing an evidence based approach, the risk of complications is decreased with the health and wellbeing of the patient optimized.

Methods:

- Baseline data was obtained on patients prescribed PPI during their ICU stay and then those who remained on PPI after transfer were followed.
- The data demonstrated a very low rate of discontinuation upon transfer.
- Clinical staff and providers received new information regarding risks of PPI, especially in the ICU setting. Nursing and pharmacy developed three different fact sheets that were distributed via email, unit postings, and PowerPoint presentation for three months running.
- Daily interdisciplinary rounding changed within one month, with the use of PPI being questioned for appropriate use, instead of the prior assumed benefit.
- Prior to transfer, nurses were encouraged to once again review the appropriateness of a PPI and if it could be discontinued.



Results: Baseline data: **March 2017**

- 86% PPI usage in the ICU
- 79% PPI carried on upon transfer

Post interventions **June 2017:**

- 86% PPI usage in the ICU
- 53% PPI carried on upon transfer.

Post interventions **August 2017:**

- 92% PPI usage in the ICU
- 17% carried on upon transfer.

Conclusion:

A nurse expert empowered the interdisciplinary team with new evidence, inspiring a practice change. Sustainability is supported by rewriting order sets to eliminate automatic ordering, identifying appropriate conditions prior to prescribing, and daily rounding with an emphasis on correct usage.

Further information:

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Xie Y, Bowe B, Li T, et al. (2017). Risk of death among users of Proton Pump Inhibitors: a longitudinal observational cohort study of United States veterans, *British Medical Journal*, 2017;7.

U.S. Food and Drug Administration (2012). FDA Drug Safety Communication: *Clostridium difficile* associated diarrhea can be associated with stomach acid drugs known as proton pump inhibitors (PPIs). Retrieved from <https://www.fda.gov/Drugs/DrugSafety/ucm290510.htm>

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