

Quality Assurance and Performance Improvement (QAPI) in Healthcare for Older Adults: Constipation

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WHY: Constipation is one of the most common complaints among older adults. The prevalence of constipation in older adults living at home is approximately 30-40%, while those in long term care facilities report rates of constipation up to 80% (Nebhinani & Suthar, 2017). Females report constipation more than men; constipation is more prevalent in non-whites and is less common in Asians and those following a Western Diet (Vazquez Roque & Bouras, 2015; Gandell, Straus, Bundookwala, Tsui, & Alibhai, 2013).

Physical changes in aging affect the developmental risk of constipation in older adults. Changes over time such as decreased mobility, a more sedentary lifestyle with lack of exercise, diets low in fiber, and changes in fluid intake all predispose older adults to a higher constipation risk. Gastrointestinal changes such as a blunted urge to defecate can also increase the risk of constipation in older adults. Psychological changes are interactive with bowel function and can affect the gastrointestinal system by affecting the bowel muscles. Medications used to treat common health conditions, such as opioids, antidepressants, antihypertensives, and iron supplements may also contribute to constipation.

BEST APPROACH: The best approach to begin changing bowel elimination is to perform a complete history, a psychological assessment, and a physical examination. Assess for complaints of decrease in stool frequency. Has there been a decrease in stools from 5 to less than 3 in a week, for example? Is there a change in stool consistency? Is there pain with defecation? Are there complaints of abdominal pain, nausea, dyspepsia, gas, or genitourinary complaints? Complete a diet history and ask if there have been any changes in diet and/or fluid intake. A psychological/social assessment should include any life changing events such as family deaths, or change in mood, specifically depression, and also include a functional assessment noting any changes in function, mobility, or activity level. The physical should be complete and include a detailed abdominal and rectal examination.

MORE ON THE TOPIC:

Best practice information on care of older adults: <https://consultgeri.org>.

Agachan, F., Chen, T., Pfeifer, J., Reissman, P., & Wexner, S. D. (1996). A constipation scoring system to simplify evaluation and management of constipated patients. *Diseases of the Colon and Rectum*, 39(6), 681-685.

Emmanuel, A., Mattace-Raso, F., Neri, M. C., Petersen, K. U., Rey, E., & Rogers, J. (2017). Constipation in older people: A consensus statement. *International Journal of Clinical Practice*, 71(1). doi: 10.1111/ijcp.12920

Gandell, D., Straus, S. E., Bundookwala, M., Tsui, V., & Alibhai, S. M. H. (2013). Treatment of constipation in older people. *CMAJ: Canadian Medical Association Journal*, 185(8), 663-670. doi: 10.1503/cmaj.120819

Heaton, K. W., & Lewis, S. J. (1997). Stool form scale as a useful guide to intestinal transit time. *Scandinavian Journal of Gastroenterology*, 32(9), 920-924. doi: 10.3109/00365529709011203. Bristol Stool Chart (based on Heaton, K. W., & Lewis, S. J. article): <https://www.continence.org.au/pages/bristol-stool-chart.html>

Nebhinani N, & Suthar N. (2017). Constipation in elderly patients with psychiatric disorders. *Journal of Geriatric Mental Health*, 4(1), 11-17. doi: 10.4103/jgmh.jgmh_46_16

Simren, M., Palsson, O. S., & Whitehead, W. E. (2017). Update on Rome IV Criteria for Colorectal Disorders: Implications for clinical practice. *Current gastroenterology reports*, 19(4), 15. doi: 10.1007/s11894-017-0554-0

Varma, M. G., Wang, J. Y., Berian, J. R., Patterson, T. R., McCrea, L., & Hart, S. L. (2008). The Constipation Severity Instrument: A validated measure. *Diseases of the Colon and Rectum*, 51(2), 162-172.

Vazquez Roque, M., & Bouras, E. P. (2015). Epidemiology and management of chronic constipation in elderly patients. *Clinical Interventions in Aging*, 10, 919-930. doi: 10.2147/CIA.S54304

Implementing the Plan Do Study Act Model (PDSA) for Performance Improvement related to Constipation

Plan: Identify an opportunity and plan what needs to be changed. What needs to be done to improve the implementation of evidence-based pressure injury guidelines? Select the appropriate interventions and identify indicators for evaluation.

Develop a monitoring tool, which includes assessment of the following:

- Use the ROME criteria for constipation: Recurrent abdominal pain, an average at least 1 day per week in the last 3 months associated with 2 or more of the following criteria:
 - o Related to defecation
 - o Associated with change in frequency of stool
 - o Associated with change in stool form (consistency)
- Common complaints or observation of constipation:
 - o A decrease in the number of weekly bowel movements (usually to three or less) or bowel movements becoming infrequent
 - o A change in the consistency of the bowel movements; stools can become hard, dry, and problematic to pass
 - o Pain with defecation
 - o Abdominal pain, nausea, dyspepsia, and gas
 - o Soiled undergarments with small amounts of liquid stool indicating stool may have backed up into the rectum
- Associated medical conditions- CVA, DM, Depression, IBS, Hypothyroidism
- Diet- weight loss, changes in appetite, use of nutritional supplements, fluid intake, eating patterns/intake
- Activity- inactivity, sedentary life style
- Medications- iron supplements, analgesics, NSAIDS, opioids, antidepressants, anticholinergics, and diuretics
- Neurological assessment- back, spine, assess deep tendon reflexes and muscle strength
- Lab testing:
 - o Urinalysis- rule out urinary tract infection
 - o Complete Blood Count- rule out anemia
 - o Chemistry- rule out electrolyte imbalance – hypokalemia/hypercalcemia
 - o Thyroid function- rule out hypothyroidism
- Abdominal assessment:
 - o Distention
 - o Bowel sounds
 - o Perineum exam- hemorrhoids, fissures, infection
 - o Digital rectal exam- evaluate rectal tone
 - o Pain, bleeding, nausea, vomiting, and failure to thrive
 - o Family history of colorectal cancer

Do: Complete a gastrointestinal assessment as part of a constipation prevention program. Conduct a review of clinical practice guidelines related to constipation prevention. Record observations noting problems and unexpected outcomes as you collect data identified in the plan.

Study: Collect the data; evaluate data for patterns and trends. Identify opportunities for improvement using statistical process control tools such as pareto charts, histograms and other graphs. Assemble a team of practitioners to help analyze data.

Act: Make any recommendations or modifications based on all assessment data to ensure improvement and implementation of Clinical Practice Guideline interventions.