

# Colonoscopies Close to Home: Family Medicine Providers Reduce Screening Disparity



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# Background

- Colon cancer is the third most common and the third most lethal cancer worldwide. In 2020, there have been almost 150,000 new colon cancer diagnoses in the USA.
- Colonoscopies are a vital screening tool in modern primary care and are considered the gold standard screening tool for colon cancer prevention. This is because direct visualization of the colon is accompanied by removal of polyps and other lesions of suspicion. Importantly, screening colonoscopies are associated with a 65% risk reduction in colorectal cancer resulting in death. Colonoscopies are thus distinguished as a life-saving screening nethod (Doubeni, Corely, & Quinn, 2018).
- Colonoscopy access is challenged by scheduling wait time, poverty, and proximity to referral centers. Rural Americans experience all three barriers at higher rates than the average American. As such, rural Americans experience a significantly lower rate of colonoscopy screening (Bennett et. al., 2011).
- In the USA, only 2.6% of family physicians (FP) provide colonoscopy to their patients, but this rate is close to 5% in rural areas. The quality and safety of FP colonoscopy has been repeatedly shown to have equivalent to specialty provider colonoscopy (Evans, Cole, & Norris, 2015).

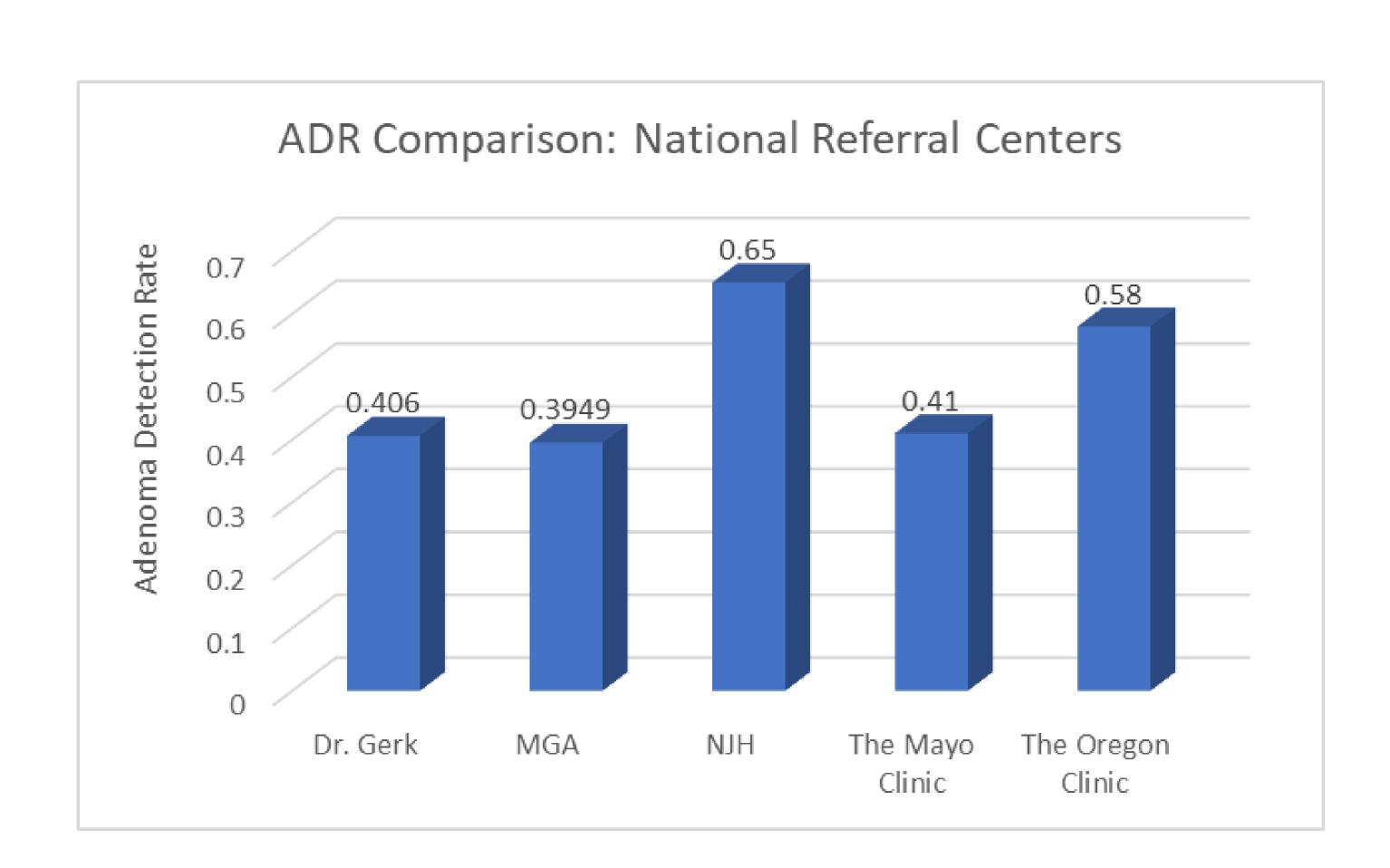
# Initiative Description

• This quality improvement initiative (QII) aims to investigate the true adenoma detection rate (ADR) of one colonoscopy and endoscopy certified family medicine physician in Sterling, CO. These data are compared to the reported ADRs by specialties nationally and by urban referral centers per published and nationally reported data.

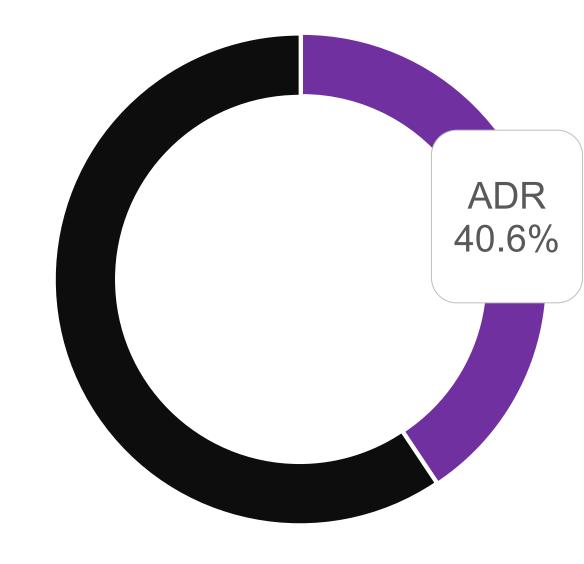
## Investigation Design

- •Initial chart review of all 31 colonoscopies performed over a 4-month period (October 2020-Jan 2021) was performed post operatively and assessed for number of detected adenomas separated into tubular/ tubulovillous and sessile serrated adenomas.
- •Adenoma detection rate (ADR), widely considered the relevant standard for colonoscopy quality, was assessed. Other parameters such as presence of carcinoma in situ and indication for colonoscopy were additionally reported.

## Quality Improvement Evaluation



Dr. Gerk's 4-month Adenoma
Detection Rate





Witkins et. al, 2009- Meta-analytical ADR by specialty

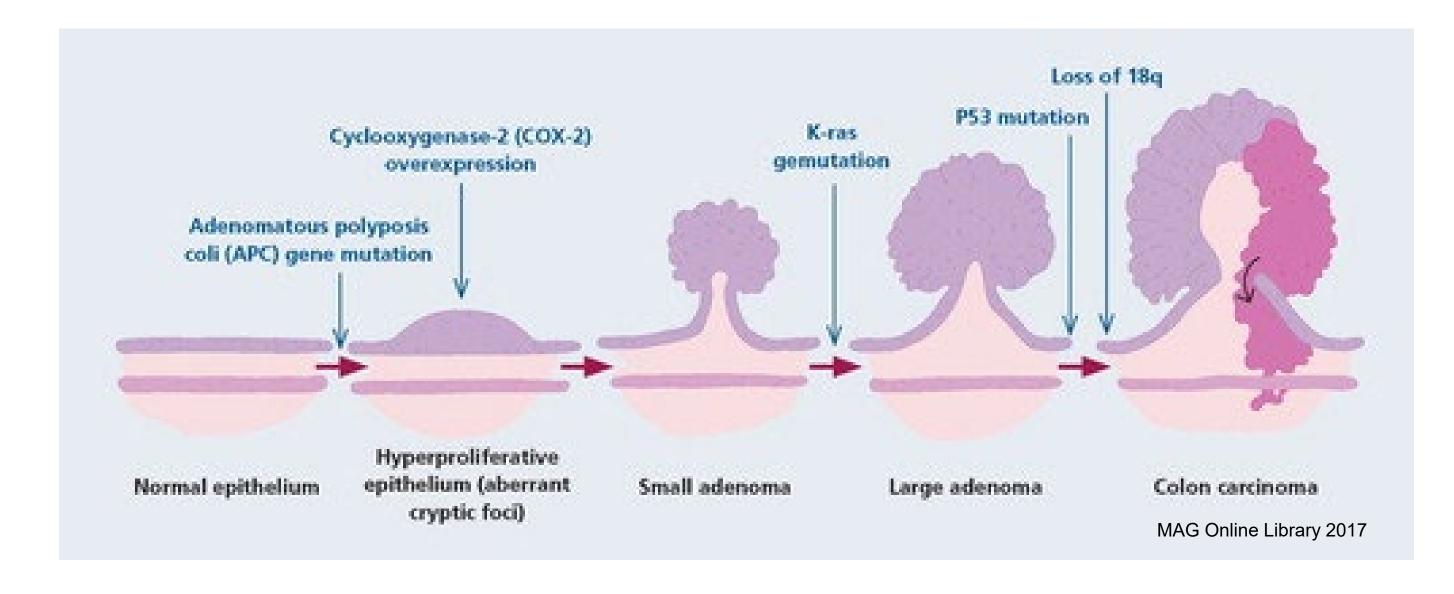
Surgical, 0.342

Family Medicine, 0.317

Gastroenterologist , 0.324

0.00 0.10 0.20 0.30 0.40 0.50

Adenoma Detection Rate



#### Discussion

- Dr. Gerk's ADR over a 4-month period demonstrates consistency with national provider averages at major referral centers (figure 1) and is additionally greater than all ADRs by specialty as reported by national indicators of colonoscopy quality and safety (Wilkins et. al., 2009).
- This ADR concurs with other data suggesting that rural PCPs perform colonoscopies effectively and safely (Evans, Cole, & Norris, 2011). Safe, geographically proximal colonoscopies with trusted providers can improve the life saving benefit of colonoscopies by improving access to these procedures in rural communities.
- Increased rates of colonoscopy training in family medicine residencies may reduce the disparity in colon cancer screening among rural Americans thereby reducing risk of colorectal cancer death in over 19% of Americans.

#### Conclusions

- These data are incomplete in that they represent about 1/3 of total colonoscopies performed by Dr. Gerk in 2020.
- Currently, further chart review is being performed such that total annual ADR data may be reported to a national census of ADRs by PCPs. This will provide critical, updated colonoscopy performance measure data to the medical community.

## References

Doubeni CA, Corley DA, Quinn VP, et al Effectiveness of screening colonoscopy in reducing the risk of death from right and left colon cancer: a large community-

based study Gut 2018;67:291-298.

Wilkins T, LeClair B, Smolkin M, et al. Screening colonoscopies by primary care physicians: a meta-analysis [published correction appears in Ann Fam Med. 2009 Mar-Apr;7(2):181]. Ann Fam Med. 2009;7(1):56-62. doi:10.1370/afm.939

Evans D, Cole AM, Norris T. Colonoscopy in rural communities: a systematic review of the frequency and quality. Rural and Remote Health 2015; 15: 3057. Available: <a href="https://www.rrh.org.au/journal/article/3057">www.rrh.org.au/journal/article/3057</a>

Bennett KJ, Pumkam C, Bellinger JD, Probst JC. Cancer screening delivery in persistent poverty rural counties. Journal of Primary Care and Community Health 2011; 2(4): 240-249.