

COVID-19 Dramatizes the Value of Rediscovering the Power of House Calls



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I work with a practice called Housecall Doctors P.C. in Highland, IN, which has treated more than 6,500 homebound patients over the last decade. We're an interdisciplinary care team that goes beyond primary care to ensure access to specialty treatments. As a team, we deliver care where it is often unavailable, and the results have been remarkable. Within a 12-month period ending last August, we treated more than 1,000 patients, reduced emergency department usage by 77%, and cut hospital readmissions by 50%. Moreover, patient satisfaction scores increased from 17% to 84% after implementation of the program.

COVID-19 has caused some physicians, insurance companies, and even the federal government to take special notice of the power of care models that reach out to patients. CMS issued new rules at the onset of the pandemic to allow home health agencies (HHAs) to provide services to Medicare beneficiaries through telehealth and to treat patients in their homes who are suspected of contracting COVID-19 or who have a condition that makes them more susceptible to the virus. They also allow for more flexibility on who is eligible to receive home healthcare and which clinicians are allowed to deliver care.

This crisis could have a silver lining if it prompts us to create a smarter model: while hospitals treat the most acute cases, more sick patients could be treated in their homes, where they recover better and quicker. With buy-in from CMS and a growing number of insurance companies, I am optimistic that more practices like ours will open. My hope is that with the new CMS rules, and the innovation being spurred by this pandemic, more physicians will take up this powerful model of care in their own areas.

All it takes is a team of clinicians working together to get it started in your community. COVID-19 will undoubtedly change how we deliver care. I hope that we can take this as an opportunity to form new partnerships, cross specialty lines, and, in a sense, rediscover our roots in bringing care into people's homes. ■

The Impact of Type 2 Diabetes on Colorectal Cancer Detection



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Type 2 diabetes appears to have an effect on adenoma detection rates for colorectal cancer (CRC), even after controlling for multiple variables. Early interventions to prevent and treat diabetes and to increase screening rates for CRC may improve patient outcomes.

According to recent estimates, colorectal cancer (CRC) ranks as the fourth most common cancer in the United States and the second most lethal. Colonoscopy screening has been considered the gold standard for CRC screening because it enables clinicians to view the entire colon and to detect and remove polyps during the same procedure to reduce subsequent risks of CRC. Despite the effectiveness of CRC screening, the American Cancer Society projects that more than 50,000 people in the U.S. die annually from the disease.

"Beyond the established risk factors for CRC like advanced age, smoking, and a familial history of the disease, recent studies have suggested that people with diabetes have a higher risk of developing CRC when compared to those without the disease," says Joshua D. Miller, MD, MPH. Studies have been conducted to address the association between diabetes and adenoma detection rate (ADR), but results from these clinical trials have been mixed. "We need a better understanding of the role of type 2 diabetes in colorectal adenoma-carcinoma progression since diabetes affects nearly 10% of the U.S. population, or over 33 million Americans," adds Dr. Miller.

A New Analysis

For a study published in *Scientific Reports*, Dr. Miller and colleagues conducted a retrospective review of initial screening colonoscopies while attempting to control for confounding variables. In addition, the authors analyzed the effect of anti-diabetes medications and glycemic control as measured by fasting plasma glucose (FPG) on the day of the colonoscopy and within 12 months of the procedure. Of the 2,865 screening colonoscopies assessed in the study population, 282 were performed on patients who had type 2 diabetes. Of these, 9.8% had type 2 diabetes and 2.4% had type 1 diabetes. Patients with diabetes were often treated with more than one medication.

"Our data showed that patients with diabetes had a significantly higher prevalence of adenomas and advanced adenomas than those without it," Dr. Miller says. In a multivariable analysis, the study demonstrated that type 2 diabetes was associated with an increased ADR (odds ratio, 1.49), along with other factors, including smoking, older age, higher BMI, and male sex (Table). Type 2 diabetes

was not significantly associated with advanced ADR after taking multiple confounding variables into consideration. However, other factors were significantly associated with an increased advanced ADR, including older age, male sex, smoking, and increased BMI. For patients with type 2 diabetes, those not taking diabetes medications were more likely to have an adenoma than those taking these therapies (odds ratio, 2.38).

Assessing Implications

Results suggest that type 2 diabetes is significantly associated with an increased risk of detecting at least one adenoma. In addition, two potentially modifiable variables were detected in increased BMI and smoking, both of which were significantly associated with increased ADR and advanced ADR.

"Early interventions for preventing type 2 diabetes, attention to glycemic control, and prescribing medications that treat the disease and its secondary complications may reduce risks for developing colonic adenomas," says Dr. Miller. "Such efforts

may also contribute to better CRC prevention. Clinicians should be aware of the association between diabetes and colorectal adenomas and perhaps recommend more frequent CRC screening in appropriate patients with diabetes. We should seize every opportunity to encourage patients to make lifestyle changes that can help reduce their risks for both CRC and diabetes."

Of note, Dr. Miller and colleagues are conducting a prospective study in which patients with diabetes who are undergoing an initial screening colonoscopy will have their fasting insulin, C-peptide, and A1C levels measured prior to the procedure. "Our goal is to collect data on the biochemical components of diabetes and CRC," says Dr. Miller. "We hope to establish the extent to which insulin resistance and/or hyperinsulinemia or other factors contribute to the increased risk of developing adenomas in a diverse patient group. This information may provide data on the specific pathways of diabetes and CRC progression and potentially help inform treatment decisions in the future." ■

Table Key Comparisons

The table below depicts the adenoma detection rate (ADR) on initial screening colonoscopy performed on patients with type 2 diabetes and non-diabetes patients. It describes confounding factors associated with an increased risk of colonic neoplasia.

Variables	Levels	Odds Ratio
Type 2 Diabetes	Type 2 Diabetes vs Non-Diabetes	1.49
BMI	Every 1 Unit Increase in kg/m ²	1.02
Smoke	Current vs Never	1.44
	Current vs Quit	1.22
Age	Every 1-year Increase in Age	1.05
Sex	Male vs Female	1.96
	Black/AA vs White/EA	0.79
Race	Asian vs White/EA	1.12
	Other vs White/EA	0.86
Ethnicity	Hispanic vs Non-Hispanic	0.90
Family History of CRC	History vs No History	1.02
Aspirin Use	Yes vs No	0.94
Quality of Colonoscopic Prep	Good vs Excellent	1.31
	Fair vs Excellent	1.00
Fellow Involvement	Undocumented vs Excellent	1.01
	Yes vs No	0.94
Insurance	Commercial vs Medicare	1.21
	Commercial vs Medicaid	0.84
	Commercial vs Self-Pay	0.60

Abbreviations: AA, African ancestry; CRC, colorectal cancer; EA, European ancestry.

Source: Adapted from: Ottaviano LF, et al. *Sci Rep*. 2020;10(1):7793.

MEDPAGE TODAY'S

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To Wear a Mask Is to Be Brave. To Trust Your Doctors Is to Be Brave

By Abubakr Chaudhry, MD

The pandemic is a lie. I will not wear someone else's fear. This is all fake news. It is remarkable to see these statements littered across the news and social media. Individuals with a fairly decent level of understanding and intelligence pandering to these ideas just go to show how strong anti-science culture has become.

On January 19, the first American would test positive for the novel coronavirus. By early February, the hysteria would start to set in and social media would start increasing speculative reporting. By late February, the stress and arguments about who should take responsibility began to boil over. Then there was the increase in fear among healthcare exposure rates, conflicting case fatality reports, and frustrations with the CDC on the flip-flopping in guidelines.

We became tired of the complaining, fear, and misinformation, so we decided to pen a guideline for our hospital. Georgia went on lockdown April 3. Throughout March and April, the world seemed to trust us as the scientific community to lead them through this crisis.

By April, we saw our algorithms were working, and we had some of the best outcomes in the state. People were adhering to the guidelines by staying home. Businesses had shut down, the spread was contained, and we could see the light at the end of the proverbial tunnel. Then, on April 24—with 892 deaths and 22,147 infected in GA—the lockdown restrictions were eased in our state. We were one of the last to close but the first to reopen. We knew the world needed to open; we just didn't know our world would open like this. I remember wondering why we couldn't mandate masks, contact tracing, and social distancing when we reopened. The virus became political.

When I started writing this, I was upset at a social media comment I read from a friend that read, "This pandemic is a joke, I will not wear a mask because I will not wear their fear." Now, I see that he was afraid and uninformed. People, in general, are still afraid, if not of the virus, then of loneliness, poverty, or even subjugation. When people exhibit these fears, and if their voices are loud, the politicians must bend to their will. If our politicians are afraid and their voices alleviate our fears, then we bend to their will. My point is, it is OK to be afraid. I am a pulmonary and critical care doctor, my wife is a pediatric intensivist, we have a small child, and we are afraid. But to wear a mask is to be brave. To social distance is to be brave. To trust your doctors is to be brave. To those with doubts, know that you are correct in your feeling that the system is broken. I don't know how to fix it, but I know that it has to be done soon. Help us get through this so we can build a better world: a world built from understanding, not from fear.

Abubakr Chaudhry, MD is a pulmonary and critical care physician.

In Case You Missed It Type 2 Diabetes May Negatively Impact Bone Density in Youth

Type 2 diabetes may negatively impact bone density around the age of peak bone mass, according to a study published in *Diabetes Care*. Researchers compared bone health in youth with type 2 diabetes to control patients with obesity or healthy weight. The analysis included youth (56% African American; 67% female) aged 10 to 23 with type 2 diabetes (180 patients), obesity (BMI >95th; 226 patients), or healthy weight (BMI <85th; 238 patients). The researchers observed age-dependent differences in areal bone mineral density (aBMD) and lean BMI z scores between the three groups. In children, aBMD and lean BMI z scores were greater in the type 2 diabetes group versus the obese group, while among adolescents and young adults, aBMD and lean BMI z scores were lower in the type 2 diabetes group versus the obese group. aBMD was approximately 0.5 standard deviations lower for a given lean BMI z score in the type 2 diabetes group and the obese group versus healthy-weight control patients. aBMD also was lower in those with greater visceral fat. "Results from this study suggest that type 2 diabetes in youth may have a detrimental effect on bone accrual during the critical window of peak bone mass attainment irrespective of obesity status," the authors write.

Recent Diabetes + Weight Loss Tied to Pancreatic Cancer Risk

Recent-onset diabetes accompanied by weight loss is associated with a substantially increased risk for developing pancreatic cancer, according to a study published in *JAMA Oncology*. Investigators used data from 112,818 women participating in the Nurses' Health Study and 46,207 men participating in the Health Professionals Follow-Up Study to evaluate the association of diabetes duration and recent weight change with the subsequent risk for pancreatic cancer. The study team identified 1,116 incident cases of pancreatic cancer. Participants with recent-onset diabetes had a higher age-adjusted risk for pancreatic cancer (hazard ratio [HR], 2.97), as did those with long-standing diabetes (HR, 2.16), compared with participants without diabetes. Participants who reported 1 to 4 pounds of weight loss had a higher age-adjusted risk for pancreatic cancer (HR, 1.25), as did those with 5 to 8 pounds of weight loss (HR, 1.33) and those with more than an 8-pound weight loss (HR, 1.92) compared with those with no weight loss. Participants with recent-onset diabetes plus weight loss of 1 to 8 pounds had still higher risk (HR, 3.61), as did those with more than 8 pounds of weight loss (HR, 6.75) compared with those with neither exposure. "Individuals with recent-onset diabetes accompanied by weight loss have a high risk for developing pancreatic cancer and may be a group for whom early detection strategies would be advantageous," the authors write. ■

