IMPROVING DEPRESSION SCREENING IN PATIENTS WITH IBD – A QUALITY IMPROVEMENT INITIATIVE Sanfratello, Natalie R.¹; Gaitan, Erika³; LeBron, Alana³; Wasan, Sharmeel²





Boston University School of Medicine Barry M. Manuel Continuing Medical Education Office

Background

Disparities in adherence to health maintenance recommendations have been well-documented in patients with IBD. Approaches to identify and address major depression in this population remain under-described.

Methods

- Conducted at Boston Medical Center Crohn's and Colitis Program where approximately 59% of patients are underserved.
- We obtained demographic and screening data from the electronic health record (EHR).
- Employed the Institute for Healthcare Improvement's Model for Improvement as the methodological framework for implementation.
- Clinicians and staff contributed to a process map and driver diagram gap analysis undertaken to identify root causes and barriers to screening.
- Patient focus groups and individual provider interviews were conducted as part of the gap analysis.
- Analyzed data using descriptive statistics and statistical process control charts (SPC charts) using QI Charts.



Contact: Natalie Sanfratello, MPH | <u>nsanfrat@bu.edu</u>

1. Continuing Medical Education, Boston University School of Medicine, Boston, MA, United States. 2. Boston Medical Center, Boston, MA, United States. 3. Health Resources in Action, Boston, MA, United States.

Diagram

Ideal state process map: MA-Driven Screening Process

"I have one patient who doesn't want to get out of bed because of her depression, so she misses all her infusion appointments. So, I think it's just a vicious cycle." - BMC IBD Clinician

Quality Improvement Aim

Improve the percentage of patients in the Boston Medical Center Crohn's and Colitis Program with a current PHQ-2 score (within the last 6 months) from 18% to 65% by June 30, 2022.

Interventions

PHQ2 Score

MA Training Materials

PDSA 1 – Tune-up Clinic

	reventable Illnesses ations on file -
There is n	no immunization history on file for this patientVaricella (Chicken Pox - Live Vaccine) - Check Varicella Zoster Virus IgG. If negative consider vaccination. Can be considered in patients on "low dose" suppression (prednisone -20mg/day, MTX, 6-MP. azathioprine) but not on biologics. Can administer > 4 weeks prior to starting biologics.
Herpes Zo	oster (Shingles - Non-Live Recombinant Vaccine (RZV)) - Recommended for patients taking low-dose Immunosuppressive therapy and persons anticipating Immunosuppression.
	endations regarding the use of RZV in patents already on higher does immunosuppression have not yet been made by the CDC.
	a and Pertussis (Non-Live Vaccine) - Vaccinate with Tdap if not given within last ten years, or Td = 2 years.
	(Non -Live Vaccine) - One dose annually to all patients during flu season. Avoid intranasal live vaccine in immunosuppressed patients.
	n-Live Vaccine) - Related to cervical and anal cancer. Three doses approved for females and males ages 9-26 (regardless of immunosuppression). A (Non-Live Vaccine) - Safe to administer to at-risk patients regardless of immunosuppression.
Hepatits B	B (Non-Live Vaccine) - Check hepatitis B surface antigen, hepatitis B surface antibody, hepatitis B core antibody before initiating anti-TNF therapy. If non-immune consider vaccination series with non-live B vaccine, 3 doses. If active viral Infection or core Ab positive, check PCR and withhold anti-TNF therapy until active infection is excluded or treated appropriately.
Meningoo	coccal Meningitis (Non-Live Vaccine) - Vaccinate at-risk patients (college students, military recruits) if not previously vaccinated regardless of immunosuppression.
	s later followed by P8V23 booster after 5 years.
Covid Vac Bone Heal	
	0 25-OH Level - Berial monitoring of vitamin D levels, supplement deficient.
disease bu	nsity Assessment - Assess bone density if the following conditions are present: 1. Steroid use > 3 months; 2. Inactive disease but past chronic steroid use of at least 1 year within the past 2 years; 3. Inactive ut maternal history of osteoporosis; 4. Inactive disease but malnourished or very thin; 5. Inactive disease but amenorrhea; 6. Post menopausal women; regardless of disease status.
Cancer Pre Colon Car	
5	ervical Cancer Screening - Annue PAF smess * Immunocompromised
	kin Cancer Screening - Annual visual exam of skin by dermatologist if immunocompromised and recommend sun exposure precautions.
Miscellane Anatomic	eous: : locaton and activity
Smoking (Cessation - Discuss at every visit
	al Assessment - B12 ileal disease or resection, iron panel. Assess for risk of malnutrition (B12, Iron, and Albumin). al Health - Screen and address mental health co-morbidities.
	reening: Over the last two weeks, how often have you been bothered by the following problems?
1. Li	-t0 Not at all
	+1 Several days +2 More than half the days
2 Б	+3 Nearly every day Feeling down, depressed or hopeless
2.10	+0 Not at all +1 Several days
	+2 More than half the days +3 Nearly every day
PHQ-2 sco	ore obtained by adding score for each question (total points). PHQ2 > = 3 is depression threshold
Oot	Phrase Checklist
Δ	2 – MA-Driven Screening
	z – MA-Driven Scieening
- nton	Question 4 in the "Annual Debouievel Health Concerning" section of Enja
	Question 1 in the "Annual Behavioral Health Screening" section of Epic rooming tab
ii uie	
	1 Please check "√" your answer:
	Little interest or pleasure in Feeling down, depressed or hopeless
	Over the past 2 weeks, doing things
	how often have you been bothered by any
	of the following O1 Several Days O1 Several Days
	problems? O2 More than half the days O3 Nearly every day O3 Nearly every day
_	
	Annual Behavioral Health Screening - Appual Behavioral Health Screening
<u> </u>	Annual Behavioral Health Screening - Appual Behavioral Health Screening PHQ-2 DEPRESSION SCALE

Funded by an independent educational grant from Pfizer.

Click here if patient declines to answer

lust decline this question and rest of THRIVE separately in Ep

Boston Medical Center HEALTH SYSTEM

• Outcome	Measure:	The



/aricella (Chicker Herpes Zoster (Shingles) MMR Pneumonia PCV13 Pneumococcal Pneumonia PSV23 Influenza Diphtheria and Pertussis Hepatitis A Covid-19 BOSTON MEDICAL^{*}

Bone Health	Date(s) Completed	Cancer Prevention	Date(s) Completed	Miscellaneous	Date(s) Completed
Vitamin D 25-OH Level		Colon Cancer Screening		Anatomic Location and Activity	
Bone Density Assessment		Annual Cervical Cancer Screening		Smoking Cessation	
Prescription of Calcium & Vitamin D		Annual Skin Cancer Screening		Nutritional Assessment	
				Behavioral Health	

Patient Tracking Cards

Smoking Smokeless Tobacco Alcohol Preferred Language	y/Details Current Every E Unknown Not on File English	Day Smoker, 3 ppd. 45 pack-years		
Most Recent Beha	avioral Scores	from encounters over the	e past 3	865 da
Thoughts that you would PHQ2 Score PHQ-9 Score (10-14 = M Single Alcohol Score	oderate; >/= 15 =	d, or of hurting yourself in some way Severe)	2/1/21 1! 4 13! 1!	9/29/20 1! 5 7 —
Single Drug Screen Score	2		1!	_
Single Drug Screen Score Depression Screen		Office Visit from 2/1/2021 in Gen		nal Medi
	ning: d be better off	Office Visit from 2/1/2021 in Gen (!) 1		 nal Medi
Depression Screen	ning: d be better off self in some way			nal Medi
Depression Screen Thoughts that you would dead, or of hurting your PHQ2 Score PHQ-9 Score (10-14 = M	ning: d be better off self in some way oderate; >/= 15 en < 15 and) (Men < 15 and	(!) 1 4		nal Medi



- PHQ-2 screening rates and had low show rates.

Discussion

- depression.

1. Byrne G, Rosenfeld G, Leung Y, et al. Prevalence of Anxiety and Depression in Patients with Inflammatory Bowel Disease. Can J Gastroenterol Hepatol. 2017;2017:6496727.



Resources in Action

Results

e percentage of patients with an up-to-date PHQ-2 Score

• PDSA 1 Process Measure: Appointment booking rate and show rate at Tune-Up Clinic

• PDSA 1, a multidisciplinary care ('Tune-Up) clinic in October and December 2021, did not improve

• PDSA 2, The MA-driven screening process, deployed in March 2022, improved screening rates from 18% at baseline in August 2021 to 88% after three months of implementation.

 Since beginning, 62% of eligible patients were already followed by another mental health professional or received a referral to and made an appointment with the GI psychologist.

• Patients with IBD have higher rates of depression compared to the general population and those who are underserved have an even higher prevalence¹.

• Instituting PHQ-2 screening as part of the vital signs is an easy way to identify patients at risk for

• Patients identified at risk were referred to a GI psychologist in the practice to help improve mental health, however not every clinic has access to a GI psychologist. All practices should determine their referral practices prior to implementation of PHQ-2 Screening.