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Support for MACRA Physician-focused Payment Model Technical Advisory Committee: Illinois Gastroenterology Group and SonarMD, LLC PRT Data Request	
Q1	**How many Medicare patients have IBD? How many have Crohn's Disease? Has there been an increase in the number of patients over time (i.e. the last 4 years?)**
	As shown in Table 1, in 2015 an estimated 145,000 Medicare fee-for-service beneficiaries had a diagnosis of IBD. This represents 0.48% of the Medicare fee-for-service population. Between 2012 and 2015 estimates of the number of beneficiaries with an IBD diagnosis increased by 9%. During this same time period the number of beneficiaries with Crohn's Disease increased by 8%, from an estimated 69,000 beneficiaries in 2012 to 74,000 beneficiaries in 2014.
Q2	**What comorbidities are associated with IBD and with Crohn's Disease? Make sure to look at behavioral health (e.g. depression).**
	Analyses were conducted to determine the extent to which Medicare beneficiaries with IBD had any of 27 chronic conditions identified by the Medicare CCW.* This analysis found that approximately 5% of beneficiaries with IBD did not have any of these conditions. Approximately 20% had either one or two of these conditions. Of note, about two-thirds of beneficiaries with IBD also had a diagnosis of hypertension. One-half of beneficiaries had a diagnosis of anemia or hyperlipidemia. Nearly one-third of beneficiaries with IBD also had a diagnosis of depression. The prevalence of other chronic conditions is shown in Table 2B.
Q3	**What are expenditures and utilization associated with IBD and Crohn's Disease, broken out by service area?**
	Part A, B, and D expenditures for beneficiaries with inflammatory bowel disease were estimated at $2,268 PBPM. Of this total, $1,020 were associated with Part A costs, $842 were associated with Part B costs, and $405 were associated with Part D costs. Additional information on expenditures, broken out by service area as well as for Crohn's disease and ulcerative colitis separately, may be found in Table 3.
Q4	**What proportion of all Medicare costs is accounted for by IBD and Crohn's?**
	IBD accounts for an estimated 1.25% of Medicare fee-for-service expenditures. Crohn's Disease and ulcerative colitis account for 0.64% and 0.62%, respectively, of Medicare FFS expenditures. More detailed information is contained in Table 4.

*The 27 chronic conditions tracked in the CCW include: Alzheimer's disease, Senile Dementia, Acute Myocardial Infarction, Anemia, Asthma, Atrial fibrillation, Breast cancer, Colorectal cancer, Endometrial cancer, Lung Cancer, Prostate Cancer, Cataracts, Congestive Heart Failure, Chronic Kidney Disease, COPD, Depression, Diabetes, Glaucoma, Hip fracture, Hyperlipidemia, Benign Prostatic Hyperplasia, Hypertension, Hypothyroidism, Ischemic Heart Disease, Osteoporosis, Rheumatoid Arthritis/Osteoarthritis, Stroke/TIA.

Table 1: Percent of Medicare beneficiaries with Inflammatory Bowel Disease, including Crohn's Disease and Ulcerative Colitis, 2015

	Total Medicare Beneficiaries		Beneficiaries with IBD		Beneficiaries with Crohn's Disease		Beneficiaries with Ulcerative Colitis	
Calendar Year	N	Percent	N	Percent of Medicare Benes	N	Percent of Medicare Benes	N	Percent of Medicare Benes
2012	30,220,880	100%	133,280	0.44%	68,880	0.23%	64,400	0.21%
2013	30,513,200	100%	136,800	0.45%	69,880	0.23%	66,920	0.22%
2014	30,416,740	100%	136,280	0.45%	70,960	0.23%	65,320	0.21%
2015	30,489,500	100%	145,220	0.48%	74,260	0.24%	70,960	0.23%

Source: Medicare Parts A and B Research Identifiable Files and Master Beneficiary Summary Chronic A/B and Chronic Condition Files, 5 percent sample. Beneficiary counts have been adjusted to reflect the 100 percent population.

Notes: Population consists of Medicare fee-for-services beneficiaries with Part A and B coverage for the 12-month period, beneficiaries who are not eligible on the basis of ESRD, and who are residents of the 50 states or District of Columbia.

Beneficiaries are determined to have Crohn's disease if one or more inpatient or skilled nursing facility claims OR two or more hospital outpatient or carrier claims are identified with the following diagnosis codes: ICD-9 550.0, 555.1, 555.2, 555.9 OR ICD-10 K50.

Beneficiaries are determined to have ulcerative colitis if one or more inpatient or skilled nursing facility claims OR two or more hospital outpatient or carrier claims are identified with the following diagnosis codes: ICD-9 556.0, 556.1, 556.2, 556.3, 556.4, 556.5, 556.6, 556.8, 556.9 OR ICD-10 K51.

Table 2A: Number of Chronic Conditions among Medicare Fee-for-Service Beneficiaries with Inflammatory Bowel Disease, 2015

Number of Chronic Conditions	All IBD		Crohn's Disease		Ulcerative Colitis	
	N	%	N	%	N	%
0	6,980	4.8%	4,180	5.6%	2,800	4.0%
1	12,340	8.5%	6,760	9.1%	5,580	7.9%
2	16,080	11.1%	8,980	12.1%	7,100	10.0%
3	17,980	12.4%	9,720	13.1%	8,260	11.6%
4	19,380	13.4%	9,580	12.9%	9,800	13.8%
5	16,640	11.5%	8,640	11.6%	8,000	11.3%
6	13,980	9.6%	7,000	9.4%	6,980	9.8%
7	11,300	7.8%	5,760	7.8%	5,540	7.8%
8	9,780	6.7%	4,620	6.2%	5,160	7.3%
9	6,440	4.4%	2,960	4.0%	3,480	4.9%
10+	15,160	10.5%	6,360	8.6%	8,800	12.4%

Source: Medicare Parts A and B Research Identifiable Files and Master Beneficiary Summary Chronic A/B and Chronic Condition Files, 5 percent sample. Beneficiary counts have been adjusted to reflect the 100 percent population.

Notes: Population consists of Medicare fee-for-services beneficiaries with Part A and B coverage for the 12-month period, beneficiaries who are not eligible on the basis of ESRD, and who are residents of the 50 states or District of Columbia.

Beneficiaries are determined to have ulcerative colitis if one or more inpatient or skilled nursing facility claims OR two or more hospital outpatient or carrier claims are identified with the following diagnosis codes: ICD-9 556.0, 556.1, 556.2, 556.3, 556.4, 556.5, 556.6, 556.8, 556.9 OR ICD-10 K51.

Beneficiaries are determined to have Crohn's disease if one or more inpatient or skilled nursing facility claims OR two or more hospital outpatient or carrier claims are identified with the following diagnosis codes: ICD-9 550.0, 555.1, 555.2, 555.9 OR ICD-10 K50.

Chronic conditions are identified as per CCW specifications, and may be accessed at: https://www.ccwdata.org/web/guest/condition-categories

Table 2B: Presence of Selected Chronic Conditions among Medicare Fee-for-Service Beneficiaries with Inflammatory Bowel Disease, 2015

Chronic Condition	**All IBD** (N=145,220)		**Crohn's Disease** (N=74,260)		**Ulcerative Colitis** (N=70,960)	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
Atrial Fibrillation	15,820	10.9%	6,660	9.0%	9,160	12.9%
Alzheimer's/Senile Dementia	14,620	10.1%	5,980	8.1%	8,640	12.2%
Alzheimer's	5,240	3.6%	2,140	2.9%	3,100	4.4%
Acute Myocardial Infarction	2,260	1.6%	1,020	1.4%	1,240	1.8%
Anemia	66,820	46.0%	36,000	48.5%	30,820	43.4%
Asthma	23,780	16.4%	11,860	16.0%	11,920	16.8%
Female/Male Breast Cancer	6,260	4.3%	2,640	3.6%	3,620	5.1%
Cataract	30,840	21.2%	14,320	19.3%	16,520	23.3%
Heart Failure	25,840	17.8%	12,020	16.2%	13,820	19.5%
Chronic Kidney Disease	39,540	27.2%	20,400	27.5%	19,140	27.0%
Chronic Obstructive Pulmonary	27,260	18.8%	13,740	18.5%	13,520	19.1%
Colorectal Cancer	3,600	2.5%	1,940	2.6%	1,660	2.3%
Depression	43,260	29.8%	24,240	32.6%	19,020	26.8%
Diabetes	39,480	27.2%	18,980	25.6%	20,500	28.9%
Endometrial Cancer	900	0.6%	360	0.5%	540	0.8%
Glaucoma	15,180	10.5%	6,680	9.0%	8,500	12.0%
Hip/Pelvic Fracture	2,000	1.4%	800	1.1%	1,200	1.7%
Hyperlipidemia	74,800	51.5%	33,560	45.2%	41,240	58.1%
Benign Prostatic Hyperplasia	14,520	10.0%	6,420	8.7%	8,100	11.4%
Hypertension	95,220	65.6%	46,180	62.2%	49,040	69.1%
Acquired Hypothyroidism	29,020	20.0%	14,220	19.2%	14,800	20.9%
Ischemic Heart Disease	48,280	33.3%	22,000	29.6%	26,280	37.0%
Lung Cancer	2,220	1.5%	1,140	1.5%	1,080	1.5%
Osteoporosis	18,040	12.4%	9,300	12.5%	8,740	12.3%
Prostate Cancer	5,320	3.7%	2,240	3.0%	3,080	4.3%
Rheumatoid	60,400	41.6%	30,240	40.7%	30,160	42.5%
Stroke	7,920	5.5%	3,720	5.0%	4,200	5.9%

Source: Medicare Parts A and B Research Identifiable Files and Master Beneficiary Summary Chronic A/B and Chronic Condition Files, 5 percent sample. Beneficiary counts have been adjusted to reflect the 100 percent population.

Notes: Population consists of Medicare fee-for-services beneficiaries with Part A and B coverage for the 12-month period, beneficiaries who are not eligible on the basis of ESRD, and who are residents of the 50 states or District of Columbia.

Beneficiaries are determined to have ulcerative colitis if one or more inpatient or skilled nursing facility claims OR two or more hospital outpatient or carrier claims are identified with the following diagnosis codes: ICD-9 556.0, 556.1, 556.2, 556.3, 556.4, 556.5, 556.6, 556.8, 556.9 OR ICD-10 K51.

Beneficiaries are determined to have Crohn's disease if one or more inpatient or skilled nursing facility claims OR two or more hospital outpatient or carrier claims are identified with the following diagnosis codes: ICD-9 550.0, 555.1, 555.2, 555.9 OR ICD-10 K50.

Chronic conditions are identified as per CCW specifications, and may be accessed at: https://www.ccwdata.org/web/guest/condition-categories

Table 3: Medicare Part A, B, and D Utilization and Expenditures, Fee-for-Service Beneficiaries with Inflammatory Bowel Disease, 2015						
	All IBD	Crohn's Disease	Ulcerative Colitis	All IBD	Crohn's Disease	Ulcerative Colitis
Beneficiaries	**Number**					
Number of beneficiaries	145,220	74,260	70,960			
Months of eligibility	1,742,640	891,120	851,520			
Utilization	**Events per 1,000 Months**			**Total Number of Events**		
All physician visits	1,116	1,132	1,100	1,945,120	1,008,660	936,460
Primary care physicians	327	328	325	569,400	292,620	276,780
Physician specialists	605	606	604	1,054,200	540,200	514,000
Other practitioners	149	160	137	259,080	142,580	116,500
Other providers	36	37	34	62,440	33,260	29,180
Outpatient ED visits	88	109	66	153,000	96,880	56,120
Inpatient hospital stays	70	69	71	122,680	61,900	60,780
Acute inpatient hospital	65	64	66	113,040	56,600	56,440
Other inpatient hospital	6	6	5	9,640	5,300	4,340
Skilled nursing facility stays	16	10	21	27,120	9,100	18,020
Home health visits	435	369	505	758,800	328,620	430,180

Table 3: Medicare Part A, B, and D Utilization and Expenditures, Fee-for-Service Beneficiaries with Inflammatory Bowel Disease, 2015

	All IBD	Crohn's Disease	Ulcerative Colitis	All IBD	Crohn's Disease	Ulcerative Colitis
Part B Reimbursement	**Per Beneficiary Per Month (PBPM)**			**Total Reimbursement ($)**		
All Physician	$ 69	$ 69	$ 69	$ 120,059,999	$ 61,082,287	$ 58,977,712
Primary care	$ 20	$ 20	$ 21	$ 35,222,389	$ 17,725,348	$ 17,497,041
Physician specialists	$ 39	$ 38	$ 40	$ 68,114,999	$ 34,281,099	$ 33,833,900
Other practitioners	$ 7	$ 8	$ 7	$ 12,629,665	$ 6,918,576	$ 5,711,089
Other provider	$ 2	$ 2	$ 2	$ 4,092,946	$ 2,157,265	$ 1,935,681
Outpatient hospital	$ 313	$ 342	$ 283	$ 545,768,405	$ 305,103,752	$ 240,664,653
Outpatient emergency department	$ 29	$ 34	$ 23	$ 49,914,525	$ 30,261,025	$ 19,653,500
Imaging and tests	$ 70	$ 68	$ 72	$ 122,210,086	$ 60,822,880	$ 61,387,207
Part B drugs	$ 108	$ 124	$ 92	$ 188,160,580	$ 110,199,289	$ 77,961,291
Biologics and infusions	$ 84	$ 108	$ 57	$ 145,335,816	$ 96,982,275	$ 48,353,541
Other Part B services	$ 151	$ 153	$ 149	$ 262,977,705	$ 136,371,027	$ 126,606,678
Part A Reimbursement	**Per Beneficiary Per Month ($ PBPM)**			**Total Reimbursement ($)**		
Inpatient hospital	$ 770	$ 685	$ 859	$ 1,342,419,659	$ 610,559,223	$ 731,860,436
Skilled Nursing Facility	$ 162	$ 104	$ 223	$ 282,146,085	$ 92,561,748	$ 189,584,338
Home Health	$ 74	$ 63	$ 86	$ 129,786,173	$ 56,418,474	$ 73,367,699
Hospice	$ 14	$ 9	$ 18	$ 23,552,946	$ 8,013,863	$ 15,539,083
Total Reimbursement	**Per Beneficiary Per Month ($ PBPM)**			**Total Reimbursement ($)**		
Part A	$ 1,020	$ 861	$ 1,187	$ 1,777,904,863	$ 767,553,308	$ 1,010,351,555
Part B	$ 842	$ 880	$ 802	$ 1,467,334,750	$ 784,570,707	$ 682,764,043
Part D	$ 405	$ 510	$ 296	$ 706,465,716	$ 454,048,723	$ 252,416,993
Total A, B &D	$ 2,268	$ 2,251	$ 2,285	$ 3,951,705,330	$ 2,006,172,738	$ 1,945,532,591

Source: Medicare Parts A, B and D Research Identifiable Files, 5 percent sample. Estimates have been adjusted to reflect the 100 percent population.

Notes: Population consists of Medicare fee-for-services beneficiaries with Part A and B coverage for the 12-month period, beneficiaries who are not eligible on the basis of ESRD, and who are residents of the 50 states or District of Columbia.

Beneficiaries are determined to have ulcerative colitis if one or more inpatient or skilled nursing facility claims OR two or more hospital outpatient or carrier claims are identified with the following diagnosis codes: ICD-9 556.0, 556.1, 556.2, 556.3, 556.4, 556.5, 556.6, 556.8, 556.9 OR ICD-10 K51.

Beneficiaries are determined to have Crohn's disease if one or more inpatient or skilled nursing facility claims OR two or more hospital outpatient or carrier claims are identified with the following diagnosis codes: ICD-9 550.0, 555.1, 555.2, 555.9 OR ICD-10 K50.

Infusions were identified as records with the following HCPCS codes: 90760, 90761, 90765, 90766, 96413, 96415.

Biologics were identified as records with the following HCPCS codes: J1745, J0135, J1602, J3380, J2323, J0717.

Table 4: Medicare Fee-for-Services Spending on Beneficiaries with Inflammatory Bowel Disease as a proportion of all Medicare Fee-for-Service Spending, 2015

	Medicare Fee-for-Service Expenditures ($)				Spending as a % of Medicare Expenditures		
	All Beneficiaries	Beneficiaries with IBD	Beneficiaries with Crohn's	Beneficiaries with Ulcerative Colitis	Beneficiaries with IBD	Beneficiaries with Crohn's	Beneficiaries with Ulcerative
Part A	$ 125,392,874,001	$ 1,777,904,863	$ 767,553,308	$ 1,010,351,555	1.42%	0.61%	0.81%
Part B	$ 131,082,823,259	$ 1,467,334,750	$ 784,570,707	$ 682,764,043	1.12%	0.60%	0.52%
Part D	$ 59,363,490,447	$ 706,465,716	$ 454,048,723	$ 252,416,993	1.19%	0.76%	0.43%
Total	$ 315,839,187,707	$ 3,951,705,330	$ 2,006,172,738	$ 1,945,532,591	1.25%	0.64%	0.62%

Source: Medicare Parts A, B and D Research Identifiable Files, 5 percent sample. Estimates have been adjusted to reflect the 100 percent population.

Notes: Population consists of Medicare fee-for-services beneficiaries with Part A and B coverage for the 12-month period, beneficiaries who are not eligible on the basis of ESRD, and who are residents of the 50 states or District of Columbia.

Beneficiaries are determined to have ulcerative colitis if one or more inpatient or skilled nursing facility claims OR two or more hospital outpatient or carrier claims are identified with the following diagnosis codes: ICD-9 556.0, 556.1, 556.2, 556.3, 556.4, 556.5, 556.6, 556.8, 556.9 OR ICD-10 K51.

Beneficiaries are determined to have Crohn's disease if one or more inpatient or skilled nursing facility claims OR two or more hospital outpatient or carrier claims are identified with the following diagnosis codes: ICD-9 550.0, 555.1, 555.2, 555.9 OR ICD-10 K50.

Physician-Focused Payment Model Technical Advisory Committee
LOI: Environmental Scan & Relevant Literature

SonarMD, LLC.
Letter Dated: 11/7/2016
Letter Received: 11/7/2016

Project Sonar (PS) is an Intensive Medical Home model for patients with chronic disease. Project Sonar relies on patient engagement and guideline driven risk assessment, clinical decision support based on specialty society guidelines, and constant feedback to all participants to achieve its goals. The key components of the PS model includes: attribution of patients based on type of chronic disease; clinical biopsychosocial risk assessment; deployment of Clinical Decision Support Tools designed to capture data fields from MIPS derived measures; patient reported outcomes measures; a monthly care management payment; and downside risk if the actual expenditures exceed projected expenditures. This model hopes to improve patient satisfaction, provider satisfaction, and disease-specific outcome-based quality metrics.

Expected participants include primary care and specialty practices who provide team-based care involving physicians, physician assistants, nurse practitioners, Nurse Case Managers and other clinical personnel as necessary. Initial deployment will encompass 20 Gastroenterology practices, 1000+ Gastroenterologists in 13 states. SonarMD envisions PS would be expanded to other chronic diseases (in addition to Inflammatory Bowel Disease).

Sheet	Table	Contents
Environmental Scan	Table 1	Key documents include journal articles on medical home models, press releases, evaluations of the Medical Home Demonstration, and a report from AHRQ
Relevant Literature	Table 2	Relevant and related literature materials.

Table 1. Environmental Scan

Key words: Project Sonar; Intensive Medical Home; Intensive Medical Home specialty care; Intensive Medical Home chronic diseases; Inflammatory bowel treatment

Organization	Title	Date
American Gastroenterological Association (AGA)	AGA Public Comment: Medicare Program; Merit-Based Incentive Payment System (MIPS) and Alternative Payment Model (APM) Incentive Under the Physician Fee Schedule, and Criteria for Physician-Focused Payment Models	6/27/2016

Purpose/Abstract

Background: AGA has worked to provide CMS with MACRA-related guidance over the last year by submitting formal comments on several occasions.

Summary: AGA outlines their general concerns as the following: (1) quality payment programs should be flexible and responsive to physician and patient concerns; (2) small practices should not be unfairly disadvantaged. AGA continues to discuss advanced alternative payment models, physician focused payment models, incentives for participation in advanced alternative payment models, MIPs general provisions and requirements, MIPs category measures and activities: quality performance, MIPs category measures and activities: resource use performance category, MIPs category measures and activities: clinical practice improvement activity, and MIPs category measure and activities: advancing care information performance category. AGA also highlights existing gastroenterology efforts proving the value of specialty APMs and mention the following examples: AGA's Colonoscopy Bundled Payment, the Gastroesophageal Reflux Disease (GERD) Episode Payment, Obesity Bundled Payment, *Project Sonar*, and the Medical Home Neighbor.

Additional Notes/Comments

Proposed rule: https://www.federalregister.gov/documents/2016/11/04/2016-25240/medicare-program-merit-based-incentive-payment-system-mips-and-alternative-payment-model-apm

Project Sonar is mentioned in this AGA Public Comment Response -- See pg. 8 of the letter

Table 1. Environmental Scan

Key words: Project Sonar; Intensive Medical Home; Intensive Medical Home specialty care; Intensive Medical Home chronic diseases; Inflammatory bowel treatment

Organization	Title	Date
Clinical Gastroenterology and Hepatology: Perspectives in Clinical Gastroenterology and Hepatology	Shifting Away From Fee-For-Service: Alternative Approaches to Payment in Gastroenterology	4/1/2016

Purpose/Abstract

Background: Fee-for-service payments encourage high-volume services rather than high-quality care. Alternative payment models (APMs) aim to realign financing to support high-value services. The 2 main components of gastroenterological care, procedures and chronic care management, call for a range of APMs. The first step for gastroenterologists is to identify the most important conditions and opportunities to improve care and reduce waste that do not require financial support.

Summary: The authors describe examples of delivery reforms and emerging APMs to accomplish these care improvements. A bundled payment for an episode of care, in which a provider is given a lump sum payment to cover the cost of services provided during the defined episode, can support better care for a discrete procedure such as a colonoscopy. Improved management of chronic conditions can be supported through a per-member, per-month (PMPM) payment to offer extended services and care coordination. For complex chronic conditions such as inflammatory bowel disease, in which the gastroenterologist is the principal care coordinator, the PMPM payment could be given to a gastroenterology medical home. For conditions in which the gastroenterologist acts primarily as a consultant for primary care, such as noncomplex gastroesophageal reflux or hepatitis C, a PMPM payment can support effective care coordination in a medical neighborhood delivery model. Each APM can be supplemented with a shared savings component. Gastroenterologists must engage with and be early leaders of these redesign discussions to be prepared for a time when APMs may be more prevalent and no longer voluntary.

Additional Notes/Comments

Table 1. Environmental Scan

Key words: Project Sonar; Intensive Medical Home; Intensive Medical Home specialty care; Intensive Medical Home chronic diseases; Inflammatory bowel treatment

Organization	Title	Date
Gastroenterology	An Episode Payment Framework for Gastroesophageal Reflux Disease: Symptomatic Gastroesophageal Reflux Disease, Dysplastic and Nondysplastic Barrett's Esophagus, and Anti-Reflux Surgical and Endoscopic Interventions	4/1/2016

Purpose/Abstract

Background; Developing a model for an episode of care can help gastrointestinal (GI) practices—whether solo or large, community, or academic, GI only, or focused-factory (eg, GI, anesthesia, pathology, surgery, and nutrition)—participate in an APM. The episode of care model puts the patient at the center of all activity related to their particular diagnosis, procedure, or health care event, rather than on a physician's specific services. The model is designed to engage specialists in the movement toward fee for value, while facilitating improved outcomes and patient experience and a reduction in unnecessary services and overall costs. It encourages and incents communication, collaboration, and coordination across the full continuum of care, and creates accountability for the patient's entire experience and outcome.

Summary: This article outlines a collaborative approach involving multiple stakeholders for practices to assess their ability to participate in and implement an APM for gastroesophageal reflux disease (GERD), a condition commonly encountered by gastroenterologists and other physicians.

Additional Notes/Comments

Table 1. Environmental Scan

Key words: Project Sonar; Intensive Medical Home; Intensive Medical Home specialty care; Intensive Medical Home chronic diseases; Inflammatory bowel treatment

Organization	Title	Date
Gastroenterology	An Episode Payment Framework for Gastroesophageal Reflux Disease	4/1/2016

Purpose/Abstract

Background: As part of a continuing effort to help providers improve care quality under the Roadmap to the Future of GI, the American Gastroenterological Association Institute created an episode payment model for the treatment of gastroesophageal reflux disease. An episode payment model is a method of reimbursement in which payments to health-care providers are related to the predetermined expected costs of a grouping, or "bundle," of related health-care services.

Summary: This model aims to reward providers for identifying efficiency gains, effectively coordinating patient care, and improving the quality of care provided. Included in the episode framework are patients with esophageal and extra esophageal syndromes, including those with Barrett's esophagus with or without dysplasia but excluding Barrett's esophagus-associated adenocarcinoma. The episode addresses medical as well as surgical options for the management of GERD, but does not include the costs of surgery or the costs of complications requiring surgical intervention.

Additional Notes/Comments

Table 1. Environmental Scan

Key words: Project Sonar; Intensive Medical Home; Intensive Medical Home specialty care; Intensive Medical Home chronic diseases; Inflammatory bowel treatment

Organization	Title	Date
Centers for Medicare and Medicaid Services	Evaluation of CMS' FQHC APCP Demonstration (Second Report)	7/1/2015

Purpose/Abstract

Background: In December 2009 President Obama directed the Department of Health and Human Services to implement a three-year demonstration to support federally qualified health centers (FQHC) with the delivery of advanced primary care. At the end of the demonstration, these organizations would earn the recognition of Patient Centered Medical Home by the National Committee of Quality Assurance. The goals of the demonstration are to improve the safety, effectiveness, efficiency, timeliness, and quality of care; patient access to care; adherence to evidence-based guidelines; care coordination and care management; and patient experiences with care.

Summary: RAND is providing two interim reports and a third, final report on the demonstration evaluation. This report is the second in the series and presents methodological advances, successful evolution of our data sets, and information describing the demonstration and the characteristics of the sites, clinicians, staff, administrators, and beneficiaries associated with those sites, as well as the description of the FQHC comparison sites. It addresses three key policy questions. Briefly, Key Policy Question 1 asks about the effects of the demonstration on NCQA recognition and other measures of practice change. Key Policy Question 2 asks whether demonstration sites deliver better beneficiary processes and outcomes than comparison sites. Key Policy Question 3 asks which practice-site and beneficiary characteristics are associated with observed changes in structures, processes, and outcomes.

Additional Notes/Comments

First Annual Report (Feb 2015)

Table 1. Environmental Scan

Key words: Project Sonar; Intensive Medical Home; Intensive Medical Home specialty care; Intensive Medical Home chronic diseases; Inflammatory bowel treatment

Organization	Title	Date
Blue Cross Blue Shield	Press Release -- Blue Cross And Blue Shield Of Illinois Pioneers First Specialty Intensive Medical Home Program	10/14/2014

Purpose/Abstract

Background: Blue Cross and Blue Shield of Illinois, in partnership with the Illinois Gastroenterology Group, launched the first intensive medical home program of the state in 2014. The program focuses on managing and coordinating the care of the highest risk patients that need treatment of chronic diseases. In the BCBSIL/IGG Specialty Intensive Medical Home (IMH), these are the highest risk, multi-chronic patients with Crohn's disease, an inflammatory bowel disease that causes a high incidence of complications.

Summary: IGG has already developed their own care management tool, Project Sonar, to enhance communications with their IMH patients with Crohn's Disease. This project uses a Secure Patient Portal and Smartphone Technology to create a 'Sonar System' which communicated with patients to assess how well they are doing in between visits. Patients enrolled in Project Sonar will receive monthly secure communications which will include a set of selected questions designed to tell staff how the patients are doing. The answers to the questions produce a "Sonar Score," a numerical value which correlates with symptom intensity. The slope of this score is then plotted over time to reveal trends. This monitoring can lead to intervention by the physician earlier than a patient would have initiated it. IGG is regionally expanding and now covers most of the Chicagoland Metropolitan Area with physicians practicing at 13 Hospitals, 6 Accredited/Licensed Ambulatory Surgery Centers (ASCs) and 12 Offices.

Additional Notes/Comments

http://www.prnewswire.com/news-releases/blue-cross-and-blue-shield-of-illinois-pioneers-first-specialty-intensive-medical-home-program-279159191.html

Table 1. Environmental Scan

Key words: Project Sonar; Intensive Medical Home; Intensive Medical Home specialty care; Intensive Medical Home chronic diseases; Inflammatory bowel treatment

Organization	Title	Date
Clinical Gastroenterology Hepatology	Practice Management: The Road Ahead -- Win-Win-Win Approaches to Healthcare Cost Control Through Physician-led Payment Reform	3/1/2014

Purpose/Abstract

Background: Policymakers and health plans have been focusing only on two options to help reduce costs: One option is to cut patient benefits, such as refusing to cover certain services or increasing patient cost-sharing. The other option is to cut payment rates to physicians and other providers. The author discusses a third option for policymakers and health plans to consider. The third option that remains is to redesign patient care to eliminate unnecessary and harmful services and improve patient health. However, physicians cannot redesign care to improve quality and reduce costs unless there are major changes in current healthcare payment systems.

Summary: This article highlights a strong and cogent argument for having physicians lead the effort from moving from fee-for-service to value based reimbursement. The author discusses how the FFS system is a major barrier to higher-value healthcare; how pay-for-performance, value-based purchasing and shared savings will not solve the problem; how accountable payment models can help improve quality and lower costs; opportunities for gastroenterologists; and how physical leadership is essential.

Additional Notes/Comments

Table 1. Environmental Scan

Key words: Project Sonar; Intensive Medical Home; Intensive Medical Home specialty care; Intensive Medical Home chronic diseases; Inflammatory bowel treatment

Organization	Title	Date
Department of Health and Human Services	Coordinating Care for Adults With Complex Care Needs in the Patient-Centered Medical Home: Challenges and Solutions	1/1/2012

Purpose/Abstract

Background: Patients who have complex health needs require both medical and social services and support from a wide variety of providers and caregivers, and the patient-centered medical home (PCMH) offers a promising model for providing comprehensive, coordinated care. Smaller practices, however, face particular challenges in coordinating care for these patients.

Summary: This paper explores the current landscape of PCMHservices for patients with complex needs, details five programs that have addressed the challenges of caring for these patients, and offers programmatic and policy changes that can help smaller practices better deliver services to all patients, including those with the most complex health needs.

Additional Notes/Comments

Table 2. Relevant Literature

Key words: Project Sonar; Intensive Medical Home; Intensive Medical Home specialty care; Intensive Medical Home chronic diseases; Inflammatory bowel treatment

Journal	Title	Date
Inflammatory Bowel Diseases: Official Journal of the Crohn's & Colitis Foundation of America, Inc.	P-208 Project Sonar: Improvement in Patient Engagement Rates Using a Mobile Application Platform	3/1/2016

Purpose/Abstract

Background: Project Sonar (PS) is a community-based registry and disease management program developed by the Illinois Gastroenterology Group (IGG) to improve clinical and economic outcomes in patients with Inflammatory Bowel Disease (IBD). PS integrates monthly patient-reported health-related quality of life (HRQoL) information using a subset of questions from the Crohn's Disease Activity Index (CDAI) sent via a Patient Portal (PP) producing a monthly "Sonar Score." These scores are then joined by clinical data fields delivered through electronic medical record derived Clinical Decision Support tools (CDS). This combined data is analyzed against payer provided-claims data to provide comprehensive performance information to physicians and practice administrators on practice patterns. In an effort to improve portal-based patient response rates PS deployed the SonarMD Platform (SMDP), a mobile application platform developed by SonarMD, LLC which uses smartphone technology to improve patient engagement instead of an internet browser-based PP.

Methods: Patient surveys were developed using 5 questions derived from the Crohn's Disease Activity Index in an effort to obtain HRQoL scores. The sum of the values on these questions results in a Sonar Score (SS) which produces a quantifiable assessment of HRQoL. SSs are monitored for individual scores as well as the slope of change over time, which allows for the development of care management algorithms that drive therapeutic interventions. The PP was used to send these surveys from January 2014 through May 2015. Due to an unacceptable PP response rate, the SMDP was developed. It was deployed in June 2015. Patient response rates were compared for 3 month periods using each of the 2 methods.

Results: The total number of surveys sent during the final 3 months of the PP was 514. Of these there were 142 responses and 372 nonresponses resulting in a patient response rate for the PP averaged 27.6%. The total number of surveys sent in the first 3 months using the SMDP was 507. Of these there were 336 responses and 171 nonresponses resulting in a patient response rate for the SMDP of 66.27%. Since the SMDP platform automatically calculates the SS at the time the patient answers the survey, patients receive immediate algorithm derived responses and staff time spent communicating results with enrollees was significantly reduced as a result.

Conclusions: Project Sonar provides a unique opportunity to combine electronic medical records, healthcare claims/resource utilization data, and patient reported outcomes to predict treatment failure and target appropriate therapy in a community-based setting. Since patient participation is critical to the success of PS, the cloud-based SMDP's superior performance improved the patient response rate over the patient portal from 27.6% to 66.27%. It also resulted in significant savings in staff time and the opportunity for providing immediate algorithm-derived patient responses.

Additional Notes/Comments

Table 2. Related Literature

Key words: Project Sonar; Intensive Medical Home; Intensive Medical Home specialty care; Intensive Medical Home chronic diseases; Inflammatory bowel treatment

Journal	Title	Date
Surgical Innovation	Specialty-specific trends in the prevalence and distribution of outpatient surgery: implications for payment and delivery system reforms	12/1/2014

Purpose/Abstract

Background: With nearly 53 million ambulatory procedures performed annually, future efforts to achieve greater value in surgical care should include a focus on outpatient surgery. To inform such efforts, a better understanding of specialty-specific trends in outpatient surgery is required.
Objective: To assess the prevalence and distribution of outpatient surgery across specialties.
Design: Repeated cross-sectional.
Measures: Using all-payer data from Florida (1998-2008), we identified physicians who performed one or more procedures. We assigned a specialty to each physician based on his procedure mix. After measuring the proportion of procedures performed on an outpatient basis, we assessed for specialty-specific changes over time in this proportion. Finally, we determined the frequency with which individual specialties used surgery centers for their outpatient care.
Results: More than two thirds (67.8%) of all surgical procedures are carried out on an outpatient basis. The popularity of outpatient surgery has grown among many specialties over the past decade, including several (urology, gastroenterology, plastic surgery, and ophthalmology) that perform most of their cases in outpatient settings. Within surgical disciplines, overall trends in the use of outpatient surgery are strongly associated with the specialty's affinity for freestanding ambulatory surgery centers (Pearson's correlation coefficient = 0.76; $P < .001$).
Conclusions: A majority of surgeons in many specialties now provide predominantly outpatient care. Incorporating these findings into the design of future payment and delivery system reforms will help ensure adequate surgeon exposure to the efficiency gains that evolve from them.

Additional Notes/Comments