IMPROVING HEALTH CARE CAPACITY IN IMMUNO-ONCOLOGY: A GLOBAL QUALITY COLLABORATIVE

Supported by: Bristol-Myers Squibb(38385509) and Pfizer and EMD Serono(34709947)
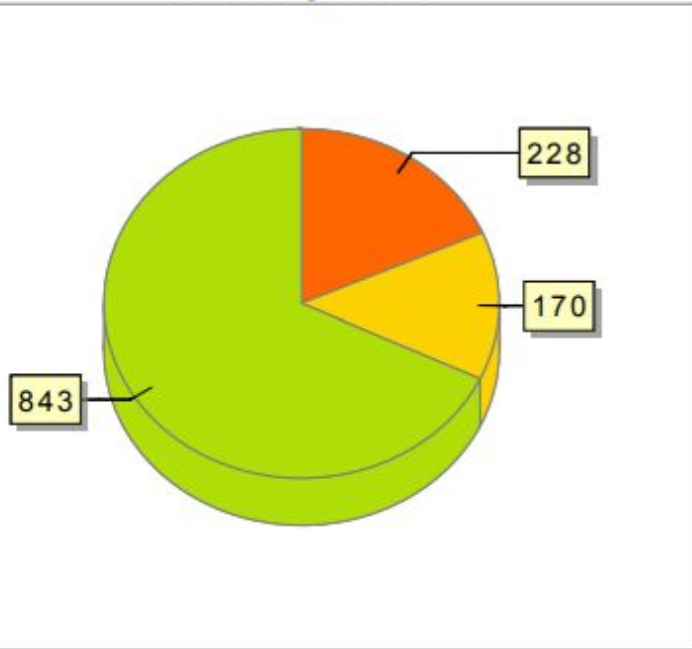
Launch Date – April to October 2018-2019

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Activity Report Card

On Time Launch	Logistics	Met Objectives	Participation Goals	Target Participation	Participation To Date
Met √	Met √	Met √	Partially Met √	1,625	Starts – 843 Completers – 228 Certificates - 170

Components		Status	
Module #1		Launched 4.26.18 – 2.8.19	
Module #2		Launched 8.21.18 - Ended 2.8.19	
Module #3		Launched 12.23.18 - Ended 2.8.19	
Collaborative Calls		Cancelled – See Slide 11	
Level 5 Comparison with EHR Data Conducted by RealCME		Due 3.4.19	
Final Reports		Due 3.15.19	

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√RealCME | A HealthCourse Company

ACTIVITY DASHBOARD

Participation
- Completed — 228
- Claimed Credit — 170
- Started — 843

Profession Participation Starts
- Nurse — 196
- Other Healthcare Professional — 87
- Physician Assistant — 77
- Other — 23
- MD — 320
- Pharmacist — 25
- Nurse Practitioner — 40
- Patient — 33
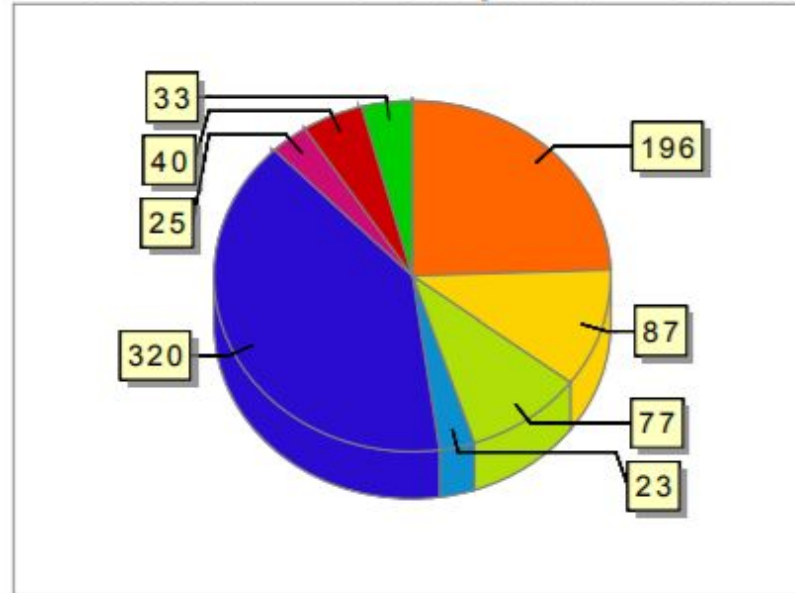
Legend: Nurse, Other Healthcare Professional, Physician Assistant, Other, MD, Pharmacist, Nurse Practitioner, Patient

Specialty Participation Starts
- Internal Medicine — 68
- Hematology/Oncology — 83
- Family Medicine/General Practitioner — 110
- Oncology — 218
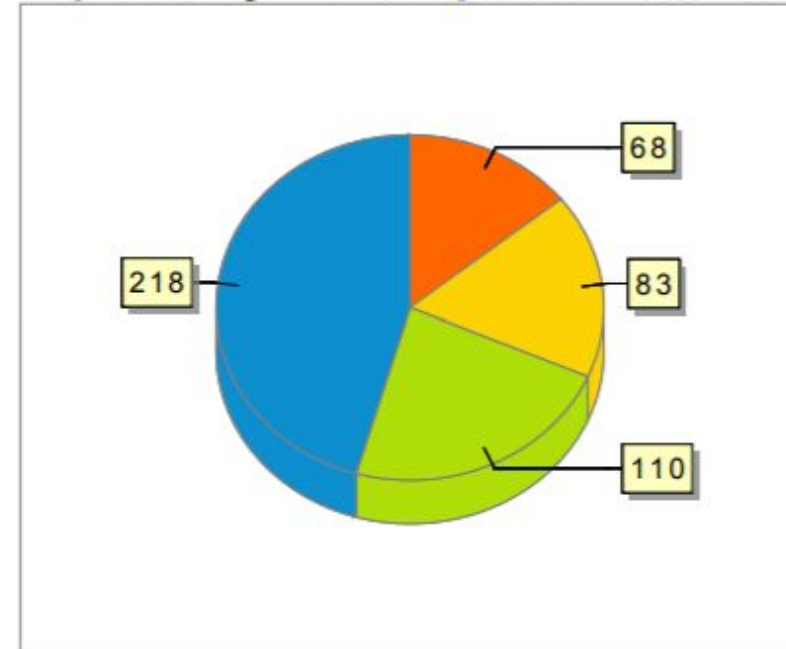
Legend: Internal Medicine, Hematology/Oncology, Family Medicine/General Practitioner, Oncology

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ACTIVITY DASHBOARD

	Activity	Launched	Chair	Participants	Content Completions	Certificates
1	Improving Healthcare Delivery in Immuno-Oncology: A Global Quality Improvement Initiative-Module 1	4/26/2018	Joseph Jacobson, MD	602	137	90
2	Improving Healthcare Delivery in Immuno-Oncology: A Global Quality Improvement Initiative-Module 2	8/21/2018	Joseph Jacobson, MD	108	48	38
3	Improving Healthcare Delivery in Immuno-Oncology: A Global Quality Improvement Initiative-Module 3	12/20/2018	<p>Joseph Jacobson, MD
 &nbsp;</p>	133	43	42

Learning Objectives

Learning Objectives	Participants	Pre Test Average Score	Post Test Average Score	Percent Change
Create approaches to monitor and manage immune-related adverse events (irAEs) resulting from treatment with immune checkpoint inhibitors	158	49%	78%	59%
Describe foundational principles of quality improvement as they relate to healthcare	158	32%	80%	150%
Develop optimum treatment strategies using checkpoint inhibitors to treat a variety of tumor types	158	42%	76%	81%
Discuss best practices related to shared decision making in clinical practice	42	37%	86%	133%

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MODULE #1 DASHBOARD

Questions	Pre Test Responders	Pre Test Average Score	Post Test Responders	Post Test Average Score	Percent Change
The Blueprint PD-L1 IHC Assay Comparison Project was designed to provide information on the correlation between four PD-L1 assays. Which of the following was least aligned with the others regarding tumor cell staining of PD-L1?	205	33%	120	76%	130%
Based on results from the CheckMate 067 study by Larkin et al evaluating the use of nivolumab +/- ipilimumab, which of the following irAEs are most likely to have the latest median time to onset?	205	45%	120	72%	60%
Which of the following questions is a key part of the Model for Improvement, used to help structure QI initiatives in healthcare?	205	21%	120	74%	252%

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MODULE #1 DASHBOARD

Questions	Pre Test Responders	Pre Test Average Score	Post Test Responders	Post Test Average Score	Percent Change
A 70-year-old woman, former smoker, was diagnosed with high-grade, muscle-invasive bladder cancer and multiple lung metastases. Her performance status (PS) is 0 and her creatine clearance (CrCl) is within normal limits. She is started on gemcitabine/cisplatin but is found to have disease progression after 3 cycles. Which of the following is the most appropriate treatment at this time?	203	43%	120	70%	63%
A 63-year-old patient of yours is diagnosed with metastatic NSCLC. Laboratory testing reveals no actionable mutations and PD-L1 testing shows 75% positivity. Which of the following is the best treatment option for this patient?	205	49%	120	77%	57%

MODULE #2 DASHBOARD

Questions	Pre Test Responders	Pre Test Average Score	Post Test Responders	Post Test Average Score	Percent Change
In which part of the Plan-Do-Study-Act (PDSA) cycle of quality improvement is a Fishbone diagram typically used?	60	50%	42	76%	52%
Which of the following is a component of shared decision making?	60	37%	42	86%	133%
What result on PD-L1 testing (ie, tumor proportion score [TPS]) supports the use of atezolizumab in metastatic NSCLC?	60	32%	42	69%	116%
A 61-year-old woman with metastatic Merkel cell carcinoma who is being treated with first-line avelumab presents to her oncologist for a checkup. The patient reports 6-8 stools per day, which is an increase of 4-6 stools over her usual bowel habits. She has no history of strointestinal disease. Workup rules out infection and other potential causes of colitis. Which of the following correctly identifies the grade and recommended management of this adverse event?	60	43%	42	74%	72%

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MODULE #3 DASHBOARD

Questions	Pre Test Responders	Pre Test Average Score	Post Test Responders	Post Test Average Score	Percent Change
Which of the following is a key ingredient to sustaining change in a QI initiative?	57	54%	43	98%	81%
5 A 65-year-old man with a 25 pack-year smoking history presents with symptoms of chest pain, dyspnea, and chronic cough. Workup identifies a mass in his left lung. Pathology identifies adenocarcinoma (NSCLC), with PD-L1 tumor proportion score (TPS) 55% and no EGFR, ALK, BRAF, or ROS1 mutations or rearrangements. His performance status is 1. According to guidelines, which of the following checkpoint inhibitors might be appropriate for first-line treatment of this patient?	57	64%	43	98%	53%
7 A 59-year-old with metastatic melanoma who is being treated with a checkpoint inhibitor presents reporting moderate dyspnea and worsening cough. Examination identifies focal congestion of the right lung fields, temperature of 37° C, normal sinus rhythm, and a resting O2 saturation of 90% on room air. Blood tests identify C-reactive protein (CRP) within normal limits and a normal white blood cell count. A chest computed tomography (CT) scan is performed, the results of which identify inflammation in approximately 50% of lung parenchyma. You diagnose this patient with immune-related pneumonitis. Based on these findings, what approach to the initial management of this patient might be appropriate?	57	78%	43	98%	26%

AIMS, PROGRESS AND IMPACT

Project Aim(s)	1) provide education that closes professional practice gaps aligned with key quality measures in immuno-oncology, enable and support clinicians as they implement the quality strategies within their own institutions, and assess the real-world impact of the initiative at the practice and health system levels
Progress to Date	45% (based on deliverables; see slide 8 for details)
Project Impact *impact relative to the aims*	Aim/Goal #1 - Based upon pre/post test analysis there has been a **significant change** in the respondents ability to:
	Identify key components needed to structure a QI initiative	130% ⬆
	Assess key clinical trial data	102% ⬆
	Identify the most common AEs associated with checkpoint inhibitors	49% ⬆
	Selection of optimal treatment based upon patient characteristics	54% ⬆

AIMS, PROGRESS AND IMPACT

Project Aim(s)	2) provide, for the first time, evidence of the impact of a scalable, immersive online simulation-based QI solution and peer-to-peer support on a specific set of quality measures which can address the enormous workforce retraining challenge facing oncology practices in their transition to value-based care.
Progress to Date	50%
Project Impact *impact relative to the aims*	Aim/Goal #2 – Based upon the execution of the pilot program the learning have shown that the original suppositions were flawed in the application to scaling in the following areas:
	Getting participant engagement in the collaborative calls was more difficult than originally anticipated. The original idea for these calls was to make them available only to learners who had engaged in the activities, to discuss issues about quality improvement, including potential challenges that they may be having with implementing quality improvement initiatives in their institutions. When it became apparent that we were experiencing challenges with learner recruitment we broadened the target audience to include all learners in prIME Oncology's database with an interest IO education. The faculty co-chairs for the project were helpful with multiple marketing campaigns and accommodating regarding date changes for the calls. Despite our best efforts, using targeted email, LinkedIn, twitter and direct outreach by staff and faculty, we were not successful in generating sufficient interest in these calls from our learner population. Ultimately, the decision was made to cancel these calls.

Targets, barriers, And feedback

Target HCP Population	1,625
HCPs Impacted to Date	843
Target Patient Population	2,031,250 Based upon an estimate of 1,625 participants treating 25 patients per week x 50 weeks
Patients Impacted to Date	1,053,750
Barriers Encountered	It seems that clinicians not involved in the practice leadership have a lack of interest in implementing quality programs in their practice. In the US and in EU most healthcare institutions have a department that covers QI-related projects and clinicians will typically follow the guidelines and pathways that emanate from that department Not having an outside institution involved with the project made it difficult to identify the challenges to integrating the quality components into practice, as we had no insight into the learners day-to-day practice.
Positive Feedback	▪ *I would like to give my sincere thanks for those involved in continuous education for their expertise, the time involved in providing and sharing their knowledge.* ▪ *Good review of Quality Improvement activity*

PROJECT STATUS

Component	Weight Assigned	Progress to Date	% Component Completion	% to Completion
Module #1 Launch - 4/26/18	15%	Completed	100%	15%
Module #2 Launch – 8.21.18	15%	Completed	100%	15%
Module #3 Launch – 12.23.18	15%	Completed	100%	15%
Collaboratives Calls #1 Anticipated Date - September 2018	5%	Cancelled	0%	0%
Collaborative Calls #2 Anticipated Date - January 2019	5%	Cancelled	0%	0%
Collaborative Calls #3 Anticipated Date - March 2019	5%	Cancelled	0%	0%
Real World Data Comparison September 2019	15%	In Progress	5%	15%
Final Report Anticipated Date - September 2019	15%	In Progress	5%	15%
Publication/Presentation H1 2020	10%	Planned	0%	0%
				75%

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MODULE #1 - LAUNCHED

Improving Health Care Delivery in Immuno-Oncology
A Global Quality...

View Activity

PRIMARY AUDIENCE:
Physicians, physician assistants, nurse practitioners, registered nurses, and other healthcare providers

RELEVANT TERMS:
Immunotherapy, Quality Improvement

∨ COURSE FACULTY

Joseph Jacobson, MD
Joseph Jacobson, MD
Chief Quality Officer
Dana Farber Cancer Institute

Timothy Gilligan, MD
Timothy Gilligan, MD
Vice-Chair for Education
Cleveland Clinic Taussig Cancer Institute

prIME Improving Healthcare Delivery in Immuno-Oncology: A Global Quality Improvement Initiative- Module 1

Curriculum:
A Global Quality Improvement Initiative in Immuno-Oncology

Credits:
1.5 *AMA PRA Category 1 Credit(s)™*

Launch Date:
26-Apr-18

Expiration Date:
26-Apr-19

Module #2 - Launched

Online Activity

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PRIMARY AUDIENCE:
Physicians, physician assistants, nurse practitioners, registered nurses, and other healthcare providers

RELEVANT TERMS:
Immunotherapy, Quality Improvement

⌄ COURSE FACULTY

Joseph Jacobson, MD

Joseph Jacobson, MD
Chief Quality Officer
Dana-Farber Cancer Institute
Boston, Massachusetts, United State

Timothy Gilligan, MD

Timothy Gilligan, MD
Vice-Chair for Education
Cleveland Clinic Taussig Cancer Institute
Cleveland, Ohio, United States

Improving Healthcare Delivery in Immuno-Oncology: A Global Quality Improvement Initiative-Module 2

Curriculum:
A Global Quality Improvement Initiative in Immuno-Oncology

Credits:
0.75 *AMA PRA Category 1 Credit(s)*™

Launch Date:
21-Aug-18

Expiration Date:
21-Aug-19

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MODULE #3 - LAUNCHED

Curriculum:
A Global Quality Improvement Initiative in Immuno-Oncology

Credits:
0.75 AMA PRA Category 1 Credit(s)™

Launch Date:
20-Dec-18

Expiration Date:
20-Dec-19

START COURSE

PRIMARY AUDIENCE:
Physicians, physician assistants, nurse practitioners, registered nurses, and other healthcare providers

RELEVANT TERMS:
Immunotherapy, Quality Improvement

∨ COURSE FACULTY

Joseph Jacobson, MD

Timothy Gilligan, MD

Joseph Jacobson, MD

Timothy Gilligan, MD

Improving Healthcare Delivery in Immuno-Oncology: A Global Quality Improvement Initiative-Module 3

HEMATOLOGY-ONCOLOGY

https://realcme.realcme.com/learner/course/2125

FACULTY

Co-Chairs

Timothy Gilligan, MD
Co-Director of the Excellence in Healthcare Communication
Cleveland Clinic
Cleveland, Ohio

John B.A.G Haanen, MD, PhD
Professor of Translational Immunotherapy of Cancer
University of Leiden
Netherlands Cancer Institute
Amsterdam, Netherlands

Joe Jacobson, MD
Chief Quality Officer
Associate Professor of Medicine, Harvard Medical School
Dana-Farber Cancer Institute
Boston, Massachusetts

AGENDA

Goals of the initiative

Provide education that closes professional practice gaps aligned with key quality measures in immuno-oncology, enable and support clinicians as they implement the quality strategies within their own institutions, and assess the real-world impact of the initiative at the practice and health system levels

Provide, for the first time, evidence of the impact of a scalable, immersive online simulation-based QI solution and peer-to-peer support on a specific set of quality measures which can address the enormous workforce retraining challenge facing oncology practices in their transition to value-based care.

Components of the initiative:

This initiative will include 2 main components, CME-certified activities and follow-up, "collaborative calls"

Series of 3 CME-certified activities

- These activities will have learners become clinicians in a virtual health system, and work through the journey of the health system to improve the quality of care in its oncology practice(s), specifically related to the use of immunotherapy. Through the activities learners will be quizzed on their knowledge/skills/confidence related to the use of immunotherapy: treatment initiation for treatment-naïve and treatment-experienced patients, appropriate use of biomarker testing, identifying and managing irAEs; related to shared decision making; and regarding the principles and practice of quality improvement.

AGENDA

Series of 6 "collaborative calls" for learners (3 for US and 3 for EU learners)

-These live calls will be staggered over the latter part of the initiative and will allow learners the opportunity to interact with the co-chairs. These calls will be somewhat structured, to provide additional information related to the CME-certified activities, but will also allow learners to ask questions and provide information related to quality improvement measures they may be participating in at their "real" institutions.

note: since the first set of collaborative calls is not slated to take place until September 2018, we will follow up on the details of these calls in a later planning meeting.

IMPLEMENTATION DETAILS

Task	Due Date	Status
Faculty Recruitment	January-February 2018	Complete
Faculty calls to discuss content and assign responsibilities and timeline	February 2018; June 2018	Complete
Collaborative Calls	Q1/Q2 2019	Cancelled
First Module	4/26/2018	Cancelled
Second Module	8/21/18	Cancelled
Third Module	12/23/18	Cancelled
Marketing		
Marketing Materials - Flyer	4/12/18	Cancelled
Email campaign initiates	4/25; 6/6; 7/11; 8.16; 10/10 and 11/21	Cancelled
Advertising	4/26/18	Cancelled