WAPI's 18th Annual Interdisciplinary CME Conference

1/1/2020	CME PRACTICE GAP ANALYSIS

Describe identified Quality/practice Gap:

We identified quality/practice Gap from our survey in the following areas

- New drugs and/or drug therapies
- New therapeutic and management approaches
- Refresher on difficult clinical problems
- New Advances in Clinical treatment

Based on this criterion our CME committee had decided on the below topics

1. Personalizing HIV treatment and prevention in 2020 - Rena Patel MD ,Mph
2. The current landscape for viral hepatitis and non-alcoholic fatty liver disease in the united states - Channa Jayasekara MD
3. Testicular cancer 101 - Rohan Sharma MD
4. Personalized treatment of early stage breast cancer - Swathi Namburi MD
5. Updates on travel medicine- Francis Riedo MD
6. Women and veins - Kathy Gibson MD
7. MSK ultrasound - Atul Gupta MD
8. Selecting disease-modifying anti-rheumatic drugs for rheumatoid arthritis - Amish J Dave MD
9. Managing inflammatory bowel disease in the era of personalized medicine - Tim Zisman MD
10. Role of IR in treatment of progressive Parkinson's disease – Sanjiv Parikh MD
11. Targeted therapies in neurology - Leo Wang MD
12. Making a difference in diabetes: evaluating etiology and facing fears and falsehoods - Janet Leung MD
13. Planning for the worst: code status, POLST, and advance care planning - Hope Wechkin, MD
14. Case of HELLP syndrome - Sanjiv Parikh, MD
15. Personal approach to healthy living - Happy Walia DDS
16. Sleep hygiene - Ashish Trivedi MD

How did you identify this Quality/Practice Gap? *Each Speaker further elaborated the Practice Gap Analysis*

PERSONALIZING HIV TREATMENT AND PREVENTION IN 2020 - Rena Patel MD ,MPH
Describe the problems or gaps in practice this activity will address:
What are you trying to change?
Despite the availability of effective antiretroviral therapy, many cases of HIV infection continue to be diagnosed at advanced stages, as evidenced by low CD4 cell counts. Nationally, the proportion of patients who receive AIDS diagnoses at or within 12 months of their HIV diagnosis in 2010 was 32% (299). Since 2006, CDC has recommended efforts to increase HIV testing by streamlining the consent process and expanding opt-out testing to all health-care settings, including those serving persons at risk for STDs (122). HIV testing facilitates early diagnosis, which reduces the spread of disease, extends life expectancy, and reduces costs of care. However, rates of testing remain low: CDC estimates that in 2008, only 45% of adults aged 18–64 years had ever been tested (300), and that during 2006–2009 approximately 41% of persons with newly diagnosed HIV infection had never been previously tested (301). Comprehensive HIV treatment services are usually not available in facilities focusing primarily on STD treatment (e.g., STD clinics). In such settings, patients with a new diagnosis of HIV infection or those with an existing diagnosis of HIV infection who are not engaged in regular on-going care should be linked promptly to a health-care provider or facility experienced in caring for HIV-infected patients (70). Providers working in STD clinics should be knowledgeable about the treatment options available in their communities, educate

HIV-infected persons about their illness, and link these patients to HIV-related care and support services. Provision of care also should include behavioral and psychosocial services, especially for alcohol and drug addiction and for mental health problems.

What is the problem?

The following are specific recommendations that apply to testing for HIV infection.
HIV screening is recommended for all persons who seek evaluation or treatment for STDs. This testing should be performed at the time of STD diagnosis (e.g., early syphilis, gonorrhea, and chlamydia) in populations at high risk for HIV infection.
HIV testing must be voluntary and free from coercion. Patients must not be tested without their knowledge.
Opt-out HIV screening (notifying the patient that an HIV test will be performed, unless the patient declines) is recommended in all health-care settings.
Specific signed consent for HIV testing should not be required. General informed consent for medical care is considered sufficient to encompass informed consent for HIV testing.
Use of Ag/Ab combination tests is encouraged unless persons are unlikely to receive their HIV test results.
Preliminary positive screening tests for HIV infection must be followed by additional testing to definitively establish the diagnosis.
Providers should be alert to the possibility of acute HIV infection and perform an antigen/antibody immunoassay or HIV RNA in conjunction with an antibody test. Persons suspected of recently acquired HIV infection should be referred immediately to an HIV clinical-care provider.

How did you assess and/or measure these issues?

How was the educational need/practice gap for this activity identified? Place an X by each source utilized to identify the need for this activity.
Attach copies of documentation for each source indicated (REQUIRED)
* please make sure when selecting your needs assessment data and references that you highlight applicable components.

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Describe the needs of learners underlying the gaps in practice:

What are the causes of the gaps in practice? Check all that apply

x	Lack of awareness of the problem,		Poor self-efficacy,
x	Lack of familiarity with the guideline,		Inability to overcome the inertia of previous practice, and
	Non-agreement with the recommendations,		Presence of external barriers to perform recommendations
	Other		

Why does the gap exist? Check all that apply

x	Lack of Knowledge competence		Lack of time to assess or counsel patients
	Performance-based.		Cost / Insurance/reimbursement issues
	Lack of consensus on professional guidelines		Patient Compliance Issues
	Other:		

What do learners need to be able to know or do to be able to address the gaps in practice?

Explain your CME Objectives here
The Knowledge gap can be reduced by

Recognize currently recommended options for initial HIV treatment regimens.
Recognize currently recommended options for HIV prevention; and
Drug-drug interactions and other management considerations for a non-HIV specialist.

THE CURRENT LANDSCAPE FOR VIRAL HEPATITIS AND NON-ALCOHOLIC FATTY LIVER DISEASE IN THE UNITED STATES - Channa Jayasekara MD

Describe the problems or gaps in practice this activity will address:

What are you trying to change?

Chronic viral hepatitis
Chronic viral hepatitis B and C affect over 5 million people in the United States, with an estimated 40-80% of this population unaware of their infection. This epidemiologic profile is also dynamic owing to phenomena such as immigration and the opiate epidemic. Significant intra-population disparities additionally lead to disproportionately high morbidity and premature mortality from consequent cirrhosis and liver cancer in specific groups. Key among the reasons for these negative outcomes are sub-optimal disease screening, linkage to care, and referral for treatment despite significant advances in treatment of chronic hepatitis B and particularly hepatitis C. In addition, promising research on functional cure of chronic hepatitis B may portend a dramatic transformation of this disease's epidemiology as with the recent developments in hepatitis C therapeutics.

Non-alcoholic fatty liver disease
With the decline in hepatitis C prevalence, non-alcoholic fatty liver disease is expected to be the predominant liver disease worldwide. It is already the fastest rising (and by some estimates the leading) etiology of primary liver cancer and leading indication for liver transplantation in the United States. The vast majority of patients with NAFLD are unaware of their diagnosis and population-level screening for NAFLD and its risk stratification vis-à-vis fibrosis assessment is woefully inadequate. Protocols for systematic and cost-effective disease screening, risk stratification metrics and modalities, are active areas of research. There is finally an intensive clinical research effort to identify therapeutic targets, with the first agent in over a decade, obeticholic acid, slated to receive FDA approval in March 2020.

What is the problem?

This lecture focuses on practicing clinicians thus I will not emphasize the basic and translational research efforts on this condition.

Chronic viral hepatitis B and C: The CDC and USPSTF have clear guidelines on screening patients for chronic viral hepatitis B and C. For hepatitis B, there exists a grade B recommendation to screen all persons "at high risk for infection" whereas for hepatitis C, there exists a grade B recommendation to screen all persons "at high risk for infection" and "adults born between 1945 and 1965". A revision to the latter guideline to include all individuals aged >18 years is in the public comment phase. It is expected that increased screening will lead to improved referral to care, and for the highly effective treatments widely available, thus mitigating late stage complications such as cirrhosis and primary liver cancer. Finally, several states including Washington have embarked on efforts to eliminate hepatitis C within a 10-15-year time horizon. The vast majority of infected individuals however remain unaware of their infection due to non-systematic screening, with marked additional drop-offs noted between screening and referral to care, and between referral to care and referral for treatment. Clinician education on the epidemiology, interpretation of serologies, clinical course, screening guidelines, treatment options, and treatment outcomes, are intended to improve case detection and referral for appropriate care.

Non-alcoholic fatty liver disease: There are no national guidelines on screening for non-alcoholic fatty liver disease and just one agent anticipated to be FDA approved as an adequate (if imperfect) treatment. However it is imperative for clinicians to identify the telltale risk factors for this condition, perform a judicious assessment, and ensure counseling on specific highly effective interventions such as therapeutic weight loss, optimal glycemic control. Further higher-level evaluations such as fibrosis assessments are widely available and should not be the purview of sub-specialists given the massive disease burden. Clinician education on cooperative and systematic approaches to case identification, risk stratification, and management will be discussed.

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What do learners need to be able to know or do to be able to address the gaps in practice?

Understanding the epidemiology of viral hepatitis and non-alcoholic fatty liver disease in the United States, including specific population sub-groups
Understanding the interpretation of viral serologies
Be knowledgeable of current therapeutics for hepatitis B and C and Washington State's effort to eliminate hepatitis C by 2030
Learn about novel therapeutic targets for hepatitis B and for non-alcoholic fatty liver disease

TESTICULAR CANCER 101 - Rohan Sharma MD

Describe the problems or gaps in practice this activity will address:

What are you trying to change?

The American Cancer Society's estimates for testicular cancer in the United States for 2020 are:
About 9,610 new cases of testicular cancer diagnosed
About 440 deaths from testicular cancer
The incidence rate of testicular cancer has been increasing in the US and many other countries for several decades. The increase is mostly in seminomas. Experts have not been able to find reasons for this. Lately, the rate of increase has slowed.
Testicular cancer is not common: about 1 of every 250 males will develop testicular cancer at some point during their lifetime.
The average age at the time of diagnosis of testicular cancer is about 33. This is largely a disease of young and middle-aged men, but about 6% of cases occur in children and teens, and about 8% occur in men over the age of 55.
Because testicular cancer usually can be treated successfully, a man's lifetime risk of dying from this cancer is very low: about 1 in 5,000. If you would like to know more about survival statistics, see Testicular cancer survival rates.

What is the problem

The American Cancer Society relies on information from the SEER* database, maintained by the National Cancer Institute (NCI), to provide survival statistics for different types of cancer.
The SEER database tracks 5-year relative survival rates for testicular cancer in the United States, based on how far the cancer has spread. The SEER database, however, does not group cancers by AJCC TNM stages (stage 1, stage 2, stage 3, etc.). Instead, it groups cancers into localized, regional, and distant stages:
Localized: There is no sign that the cancer has spread outside of the testicles.
Regional: The cancer has spread outside the testicle to nearby structures or lymph nodes.
Distant: The cancer has spread to distant parts of the body, such as the lung, liver, or distant lymph nodes.

A thorough understanding of below factors helps in treating testicular cancer
Knowledge of Causes, Risk factors and Prevention –
Early detection, Diagnosis and staging
Treatment and After treatment

How did you assess and/or measure these issues?

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What do learners need to be able to know or do to be able to address the gaps in practice?

Much can be improved by
Identifying current screening recommendations for testicular cancer
Knowledge of Basic Classification and Treatment recommendations for testicular cancer
Understanding Toxicity and Survivorship Concerns for testicular cancer patients

PERSONALIZED TREATMENT OF EARLY STAGE BREAST CANCER - Swathi Namburi MD

Describe the problems or gaps in practice this activity will address:

What are you trying to change?

Most breast cancers are found in women who are 50 years old or older, but breast cancer also affects younger women. About 11% of all new cases of breast cancer in the United States are found in women younger than 45 years of age. While breast cancer diagnosis and treatment are difficult for women of any age, young survivors may find it overwhelming.
Breast cancer is the most common cancer in women, no matter which race or ethnicity.
It is the most common cause of death from cancer among Hispanic women.
It is the second most common cause of death from cancer among white, black, Asian/Pacific Islander, and American Indian/Alaska Native women.

What is the problem?

Early detection and treatment is still the best strategy for a better cancer outcome. Have a medical checkups and mammograms on a regular basis. The American Cancer Society recommends women ages 40 to 44 should have a choice to start yearly screening mammograms if they would like. Women ages 45 to 54 should have a mammogram each year, and those 55 years and over should continue getting mammograms every 1 to 2 years.
Reduce risk of breast cancer by modifying Lifestyle related Breast Cancer Risks
Genetic Counseling and Testing for Breast Cancer Risk
Deciding Whether to Use Medicine to Reduce Breast Cancer Risk
Tamoxifen and Raloxifene for Lowering Breast Cancer Risk
Aromatase Inhibitors for Lowering Breast Cancer Risk
Preventive Surgery to Reduce Breast Cancer Risk

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What do learners need to be able to know or do to be able to address the gaps in practice?

The learners will learn how to reduce this gap by
Understanding Role of chemotherapy in early stage breast cancer.
Use of genomic predictors to personalize therapy
Understanding about Personalization of HER2 directed therapy in early stage breast cancer

WOMEN AND VEINS - Kathy Gibson MD

Describe the problems or gaps in practice this activity will address:

What are you trying to change?

Women can experience a vascular problem called deep vein thrombosis (DVT), DVT can permanently damage the veins resulting in long-term leg pain, swelling, skin changes and possibly leg sores. This condition is known as the post-thrombotic syndrome.
DVT can also break off and travel to the lungs, resulting in a pulmonary embolus (PE), which can be fatal.
Certain women are at greater risk for developing DVT, especially those on contraceptives.
Pelvic-derived lower extremity varicosities are more common than most clinicians appreciate. In general, nonsaphenous venous reflux occurs in about 10% of patients. More than one third of this group has varicosities that arise from the pelvis1. In a recent study, 1350 patients with lower extremity varicosities were evaluated with both duplex ultrasound and CT venography to ascertain the source of reflux. A pelvic reflux source was noted in 8.6% of patients2. In another study, 741 female patients with varicose veins from two separate clinics were evaluated with duplex and transvaginal ultrasound. These studies found a pelvic reflux source in 19.5% of patients in one group and 21.5% in the other. Approximately 80% of the pelvic reflux patients were noted to have reflux in the gonadal vein3. Multiple additional studies show similar results leading to the conclusion that approximately one in every five female patients will have lower extremity varicosities as a result of pelvic venous disease.

What is the problem?

Several specific potential risk factors for a fatal outcome from a COC-induced PE were identified. Recognition of these in combination with a high suspicion of VTE in COC users may reduce the risk of a fatal outcome.
Pelvic venous disease classically presents with a constellation of symptoms that have been described as pelvic congestion syndrome However, many patients are sometimes unaware that they have vaginal varicosities and may not provide this history. It is, therefore, very important that an assessment of
the vaginal region be performed during the lower extremity ultrasound examination.

How did you assess and/or measure these issues?

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What do learners need to be able to know or do to be able to address the gaps in practice?				
Explain your CME Objectives here Be able to differentiate between types of contraception and their risks of venous thromboembolic events. Describe the typical presentation of a woman with symptomatic pelvic venous reflux (pelvic congestion syndrome). Outline treatment options for patients with symptomatic varicose veins				

MSK ULTRASOUND - Atul Gupta MD

What are you trying to change?
describe below the current state. Sports injuries are common in younger adults and children. More than 3.5 million children and teens are injured as part of an organized sports or physical activity each year, estimates Stanford Children's Health. One-third of all injuries in children are related to sports, too. The most common sports injuries in children are sprains and strains. Contact sports, like football and basketball, account for more injuries than noncontact sports, like swimming and running. A 2016 study Trusted Source found that 8.6 million people, ages 5 to 24, have a sports injury every year in the United States. Researchers note males ages 5 to 24 make up more than half of all sports injury episodes. The lower body is most likely to be injured (42 percent). The upper extremities make up 30.3 percent of injuries. Head and neck injuries combine for 16.4 percent of sports injuries. Ultrasonography is a rapidly developing area of sports medicine that has many different applications, which can be used in the clinic, training room, and even on the sidelines. It can be used for diagnostic as well as treatment purposes..
What is the problem?
Describe the desired state. Sport and exercise medicine (SEM) physicians are increasingly using musculoskeletal ultrasound (MSK US) in their clinical practice. In sports medicine, ultrasound is useful for diagnostic purposes, as it facilitates evaluation of various musculoskeletal structures. For example, a doctor may use ultrasound to look at the Achilles tendon or calf muscle to assess for tears. Ultrasound can be used to look for fluid around or within a structure as an indication of inflammation, tendonitis, or bursitis. This concept can be applied to most muscles, tendons, and bursa throughout the body. A sports medicine physician may also be able to look at a structure as it progresses through a range of motion. Additionally, some physicians have proposed the use of ultrasound to evaluate for fractures and stress fractures of various bones. In addition to its diagnostic uses, ultrasound can be used during procedures to allow for direct visualization of the target structure being injected. When used in this way, the needle can be visualized as it is directed into the target during the procedure. This can be extremely helpful to make sure that a medicine or injectable is placed directly into the area that is causing pain. Ultrasound has the advantages of being quickly accessible, relatively inexpensive, and highly accurate in experienced hands. Additionally, there is no risk of radiation and no need for injected contrast material, as in some other imaging studies. A sports medicine physician may use the device in a variety of ways, and the examples mentioned here highlight just a few of the potential applications of ultrasound technology

How did you assess and/or measure these issues?

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What do learners need to be able to know or do to be able to address the gaps in practice?

Explain your CME Objectives here
A better understanding of use of ultrasound in sports medicine can be achieved by understanding

- the place for ultrasonography within the spectrum of care for musculoskeletal pathologies.
- when to consider regenerative medicine therapies for musculoskeletal pathologies.
- when to order an MRI versus an ultrasound for musculoskeletal pathologies.

SELECTING DISEASE-MODIFYING ANTI-RHEUMATIC DRUGS FOR RHEUMATOID ARTHRITIS - Amish J Dave MD

Describe the problems or gaps in practice this activity will address:

What are you trying to change?

Currently nearly 2% of Americans have rheumatoid arthritis and appropriate diagnosis and initiation of disease-modifying anti-rheumatic drug within the first three months of symptom onset is now standard-of-care as per the American College of Rheumatology. Washington State is one of the worst states in the nation per the 2015 American College of Rheumatology Workforce Survey in terms of number of practicing rheumatologists to patient need. As such, in many parts of Washington State, patients can face delays of up to one year to be seen by a rheumatologist. Surrounding states, including Idaho, Wyoming, Montana, Oregon, and Alaska have similar deficits in number of rheumatologists. As such, primary care providers are managing patients with inflammatory polyarthritis, including rheumatoid arthritis, for lengthy periods of time in our region. In this talk, we aim to focus on common rheumatologic conditions (such

as rheumatoid arthritis and psoriatic arthritis) seen by primary care providers and provide them with medical knowledge about diagnosis and treatment of these medical conditions.

What is the problem?

Early treatment for rheumatoid arthritis should involve patients with this autoimmune condition being diagnosed and begun on steroid-sparing disease-modifying anti-rheumatic drug therapy (DMARD) within three months of symptom onset. Primary care providers should understand what initial labs to send off for patients with inflammatory polyarthritis and how to distinguish between crystalline and non-crystalline inflammatory polyarthritis. Patients and providers should understand the incidence and prevalence (epidemiology) of rheumatoid factor (RF), anti-nuclear antibody (ANA), anti-citric citrullinated antibody (CCP), and HLA-B27 antigen studies in making a diagnosis of inflammatory polyarthritis. Primary care providers should understand the role of corticosteroids and biologic and non-biologic DMARDs in short-term and long-term management of rheumatoid arthritis and other inflammatory polyarthropathies. Primary care providers also should understand risks of infection and malignancy associated with DMARD therapy for common autoimmune conditions. Basic knowledge about risks of biologic and non-biologic DMARD therapies with pregnancy, as well as risks of corticosteroids with glycemic control in diabetes is also important.

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Other:

What do learners need to be able to know or do to be able to address the gaps in practice?

It can be addressed by making sure the prescribing physician knows

1. Outline the roles of the rheumatologist and primary care provider in diagnosing rheumatoid arthritis
2. Describe the mechanisms of action of biologic and non-biologic disease-modifying anti- rheumatic drugs used to treat rheumatoid arthritis
3. Discuss differences in outcomes and extraarticular manifestations of rheumatoid arthritis in patients with seropositive and seronegative rheumatoid arthritis

MANAGING INFLAMMATORY BOWEL DISEASE IN THE ERA OF PERSONALIZED MEDICINE - Tim Zisman MD

Describe the problems or gaps in practice this activity will address:

What are you trying to change?

Inflammatory bowel disease (IBD) is growing on a worldwide scale and is a chronic, frequently progressive condition that affects approximately 1.6 million people in the United States. Substantial room for improvement in the care of patients with IBD is needed. The outcomes of patients with IBD are diminished by multiple factors, including uncertainty about approaches to diagnosis, assessment, and treatment, as well as, a lack of knowledge about available therapies. To meet the persistent challenges associated with IBD management, health care professionals must be knowledgeable about the evidence-based and expert-recommended strategies for the treatment of patients with IBD to avoid disease flares, prevent structural damage and disability, and restore quality of life

Current therapies for IBD have not, yet, been able to prevent the need for surgical intervention in more than 50% of patients with IBD. Education for clinicians who manage patients with moderate-to-severe IBD about the immunopathophysiology of IBD and the latest available options to individualize IBD treatment can reduce the use of corticosteroids and need for hospitalizations or surgery, resulting in improved quality of life for these patients.

What is the problem?

Care of the inflammatory bowel disease (IBD) patient presents unique challenges, as decisions regarding therapy must consider numerous distinct characteristics of each patient. Beyond the dichotomy between Crohn's disease (CD) and ulcerative colitis (UC), which may be difficult to ascertain in some patients, several distinct phenotypes exist within these diseases. IBD can be categorized by existing severity, location and extent, and potential for complications. It may be further categorized according to responsiveness to medical therapy. A number of individualized markers of disease, however, may allow for better prediction of response to therapy and disease course. Decisions for therapy must also be tailored to the comorbidities or risks of an individual patient, such as the risk of hepatosplenic T-cell lymphoma among men younger than 35 years.1 As such, IBD constitutes an opportunity for personalized medicine, and strategies should be tailored to maximize the success of the current treatment, minimize loss of response to therapy or relapses in the future, and address the risks associated with specific medications for given patients.

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	Lack of consensus on professional guidelines		Patient Compliance Issues
	Other:		

What do learners need to be able to know or do to be able to address the gaps in practice?

- Need to have a proper understanding of the natural history and complications of IBD and how they impact treatment approach.
- Be knowledgeable of considerations in selecting therapy for patients with IBD
- Aware of strategies to optimize short- and long-term response to medication in IBD

ROLE OF IR IN TREATMENT OF PROGRESSIVE PARKINSON'S DISEASE - Dr. Sanjiv Parikh MD

What are you trying to change?

Patients at late stage Parkinson's disease (PD) develop several motor and nonmotor complications, which dramatically impair their quality of life. These complications include motor fluctuations, dyskinesia, unpredictable or absent response to medications, falls, dysautonomia, dementia, hallucinations, sleep disorders, depression, and psychosis.
Dopamine replacement with levodopa was first shown to reduce clinical signs and symptoms of Parkinson's disease (PD) in the 1960s [1], and since then has been the mainstay of PD treatment [2,3]. However, the majority of patients who respond to levodopa eventually experience a narrowing of the therapeutic window, resulting in motor complications, including "Off" time (when medication has worn off and parkinsonian symptoms re-emerge) and levodopa-induced dyskinesias [2]. These complications can be a major source of distress and disability for patients and are difficult to treat [4,5]. "Off" time is of particular interest, as this is arguably the biggest contributor to functional impairment in patients with advancing PD [6–9]. Hence, the ability to reduce "Off" time without an associated increase in dyskinesia is an important goal of therapy development.

What is the problem?

Describe the desired state.

Levodopa–carbidopa intestinal gel (LCIG) delivered continuously via percutaneous endoscopic gastrojejunostomy (PEG-J) tube has been reported, mainly in small open-label studies, to significantly alleviate motor complications in Parkinson's disease (PD). A prospective open-label, 54-week, international study of LCIG is ongoing in advanced PD patients experiencing motor fluctuations despite optimized pharmacologic therapy. Pre-planned interim analyses were conducted on all enrolled patients (n = 192) who had their PEG-J tube inserted at least 12 weeks before data cutoff (July 30, 2010). Outcomes include the 24-h patient diary of motor fluctuations, Unified Parkinson's Disease Rating Scale (UPDRS), Clinical Global Impression-Improvement (CGI-I), Parkinson's Disease

Questionnaire (PDQ-39), and safety evaluations. Patients (average PD duration 12.4 yrs) were taking at least one PD medication at baseline. The mean (±SD) exposure to LCIG was 256.7 (±126.0) days. Baseline mean "Off" time was 6.7 h/day. "Off" time was reduced by a mean of 3.9 (±3.2) h/day and "On" time without troublesome dyskinesia was increased by 4.6 (±3.5) h/day at Week 12 compared to baseline. For the 168 patients (87.5%) reporting any adverse event (AE), the most common were abdominal pain (30.7%), complication of device insertion (21.4%), and procedural pain (17.7%). Serious AEs occurred in 60 (31.3%) patients. Twenty-four (12.5%) patients discontinued, including 14 (7.3%) due to AEs. Four (2.1%) patients died (none deemed related to LCIG). Interim results from this advanced PD cohort demonstrate that LCIG produced meaningful clinical improvements. LCIG was generally well-tolerated; however, device and procedural complications, while generally of mild severity, were common.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3661282/

How did you assess and/or measure these issues?

How was the educational need/practice gap for this activity identified? Place an X by each source utilized to identify the need for this activity.
Attach copies of documentation for each source indicated (REQUIRED)
* please make sure when selecting your needs assessment data and references that you highlight applicable components.

	Method	Example of required document
	Previous participant evaluation data	Copy of tool and summary data
	Research/literature review	Abstract(s) or articles
X	Expert Opinion	Summary
	Target audience survey	Copy of tool and summary data
	Regulatory body requirements	Requirements summary
	Data from public health sources	Abstract, articles, references
	Other (describe)	

Describe the needs of learners underlying the gaps in practice:

What are the causes of the gaps in practice? Check all that apply

X	Lack of awareness of the problem,		Poor self-efficacy,
X	Lack of familiarity with the guideline,		Inability to overcome the inertia of previous practice, and
	Non-agreement with the recommendations,		Presence of external barriers to perform recommendations
	Other		

Why does the gap exist? Check all that apply

X	Lack of Knowledge competence		Lack of time to assess or counsel patients
	Performance-based.		Cost / Insurance/reimbursement issues
	Lack of consensus on professional guidelines		Patient Compliance Issues
	Other:		

What do learners need to be able to know or do to be able to address the gaps in practice?

Explain your CME Objectives here
The latest treatment for progressive Parkinson's disease can be learning
Treatments of progressive Parkinson's disease.
Understanding role of Dopa Gel pump via dedicated Gastrojejunostomy tube in treatment of Parkinson's disease
Understanding Efficacy of Dopa Gel

TARGETED THERAPIES IN NEUROLOGY - Leo Wang MD

Describe the problems or gaps in practice this activity will address:

What are you trying to change?

Understanding genetic or molecular mechanism behind a specific disease and how the targeted therapy can achieve the goal previously not obtainable.

Recent advances in the field of precision medicine has helped to improve outcome in the diseases such as hereditary amyloid neuropathy, spinal muscular atrophy, refractory autoimmune neurological conditions such as NMO, myasthenia gravis.

What is the problem?

Recent advances in disease treatment based on molecular / genetic level pathology

Until now, treatment for diseases covered in today's discussion were primarily nonspecific or heavily symptomatic without any diseases modification or specific target towards the underlying disease mechanism. Even though existing treatments were unable to achieve some of the described goals, the success rate was less than satisfactory, or improvement was marginal. Significant number of cases were described as refractory with minimal or no treatment option. Some of the treatments, even being nonspecific, carried side effects and risks.

How did you assess and/or measure these issues?

How was the educational need/practice gap for this activity identified? Place an X by each source utilized to identify the need for this activity.
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Describe the needs of learners underlying the gaps in practice:

What are the causes of the gaps in practice? Check all that apply

x	Lack of awareness of the problem,		Poor self-efficacy,
	Lack of familiarity with the guideline,	x	Inability to overcome the inertia of previous practice, and
	Non-agreement with the recommendations,	x	Presence of external barriers to perform recommendations
	Other		

Why does the gap exist? Check all that apply

	Lack of Knowledge competence		Lack of time to assess or counsel patients
	Performance-based.		Cost / Insurance/reimbursement issues
	Lack of consensus on professional guidelines		Patient Compliance Issues
x	Other: New era of medicine with no prior treatment.		

What do learners need to be able to know or do to be able to address the gaps in practice?

Explain your CME Objectives here. A better understanding can me achieved by -
Discuss Basic Pathology behind disease -
Describe Therapeutic development based on pathology
Analyze Cost and efficacy of treatment

MAKING A DIFFERENCE IN DIABETES: EVALUATING ETIOLOGY AND FACING FEARS AND FALSEHOODS - Janet Leung MD

Describe the problems or gaps in practice this activity will address:

What are you trying to change?

The prevalence of diabetes worldwide is predicted to increase by 69% in adults in developing countries between 2010 and 2030. 1 Between 2010 and 2030, diabetes prevalence is expected to increase by 72% in India, from 7.6% to 9.1%, with an estimated 87 million diabetic adults by year 2030

1. Data from the U.S. National Health Interview Survey from 1997–2008 showed that age- and sex-adjusted prevalence of type 2 diabetes in the U.S. was higher in Asian Americans (4.3–8.2%) than in whites (3.8–6.0%) and most notably, Asian Indians had the highest odds of diabetes
2. A population-based study of U.S. Asian Indians found diabetes prevalence in adults was 17% compared to 8% in non-Hispanic whites, 13% in non-Hispanic blacks, 10% in Hispanic Latinos and 15% in Native Americans/Alaskan natives
3. Dampening the spread of diabetes across the South Asian population has significant health and economic implications.

This increasing prevalence of diabetes in South Asians is multifactorial – due to both biologic and lifestyle factors, with urbanization and immigration playing a large role. South Asians have increased visceral adiposity and insulin resistance, impaired β-cell function, and a genetic predisposition to diabetes which culminates in a markedly increased risk of diabetes.

4. Additionally, urbanization across Asia is leading to decreased physical activity, increased intake of dietary fats and processed foods and increased mental stress which amplify the effects of insulin resistance and abdominal obesity.

What is the problem?

Asians have an increased incidence of CAD and cerebrovascular disease but a lower incidence of PAD, which is not entirely understood. In terms of microvascular complications, compared to Caucasians, South Asians have an increased incidence of retinopathy and nephropathy but a lower incidence of neuropathy which is also not well understood. Research is underway to understand the biologic mechanisms and genetic polymorphisms that are playing a role in the development of these diabetes complications. Given the great economic and health burden of diabetes and its complications in South Asians, the focus should be on prevention. Lifestyle modification and metformin therapy have been proven to prevent or delay diabetes in South Asians. Several ongoing studies are investigating the effectiveness of different culturally appropriate lifestyle interventions. 159–161 We are optimistic that the results of these studies will help to foster changes in public health and health policy and thereby help to reduce the incidence of diabetes and its complications in the South Asian community worldwide.

How did you assess and/or measure these issues?

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Describe the needs of learners underlying the gaps in practice:

What are the causes of the gaps in practice? MAKING A DIFFERENCE IN DIABETES: EVALUATING ETIOLOGY AND FACING FEARS AND FALSEHOODS

x	Lack of awareness of the problem,		Poor self-efficacy,
x			

	Lack of familiarity with the guideline,		Inability to overcome the inertia of previous practice, and
	Non-agreement with the recommendations,		Presence of external barriers to perform recommendations
	Other		

Why does the gap exist? MAKING A DIFFERENCE IN DIABETES: EVALUATING ETIOLOGY AND FACING FEARS AND FALSEHOODS

x	Lack of Knowledge competence		Lack of time to assess or counsel patients
	Performance-based.		Cost / Insurance/reimbursement issues
	Lack of consensus on professional guidelines		Patient Compliance Issues
	Other:		

What do learners need to be able to know or do to be able to address the gaps in practice?

A better Understanding of diabetes by below means will help in better control.
Compare how risk factors for diabetes in South Asian populations differ from US (with majority Caucasian ethnicity)
Discuss when to consider evaluating for T1DM in adult onset diabetes, T2DM in childhood onset diabetes, and pancreatic (Type 3c) diabetes
Outline misconceptions patient (and their communities) have about T1DM and T2DM and how that can affect management

PLANNING FOR THE WORST: CODE STATUS, POLST, AND ADVANCE CARE PLANNING - Hope Wechkin, MD

Describe the problems or gaps in practice this activity will address:

What are you trying to change?

While 70% of Americans say that they would prefer to die at home, in fact 70% of Americans die outside the home. While 83% say that it's important to put their wishes regarding end-of-life care in writing, in fact only 23% of Americans have put their wishes in writing. And finally, 92% of American adults say that it's important to discuss their wishes regarding end-of-life care, but only 32% have actually had such a conversation with either their family members or their health care providers.

In discussing the POLST form and other advance care planning documents, I will discuss practical approaches that physicians can employ when assisting patients in completing these documents, as well as some nuances that arise in these complex discussions. We will examine different combinations of choices on the POLST form, when they might be clinically appropriate, and will discuss advance directives for dementia care.

What is the problem?

Ideally all patients with a limited life expectancy, or whose death would not be surprising should it occur in the next year -- either because of age, advanced illness, or both -- will have had discussions with their surrogate decision makers regarding their wishes for end-of-life care. And all physicians will be equipped to facilitate these discussions at a basic level. Preferences regarding end-of-life care as indicated on the POLST form will be both readily accessible and routinely checked. Medical providers will have a clear understanding of the difference between palliative care and hospice care, and preferences indicated on the POLST form aid them in directing their patients toward the system of care for which they are medically eligible and is in alignment with goals of care.

In addition, advance care planning will be incorporated into office visits of both primary and specialty providers, and these providers will know how to bill properly for these services. Finally, patients will never be given POLST forms to complete on their own without accompanying discussion(s) that are clear, patient-focused, and informed by relevant data.

How did you assess and/or measure these issues?

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Describe the needs of learners underlying the gaps in practice: What are the causes of the gaps in practice? Check all that apply

	What are the causes of the gaps in practice? Check all that apply		
X	Lack of awareness of the problem,		Poor self-efficacy,
	Lack of familiarity with the guideline,	X	Inability to overcome the inertia of previous practice, and
	Non-agreement with the recommendations,	X	Presence of external barriers to perform recommendations
	Other		

Why does the gap exist? Check all that apply

X	Lack of Knowledge competence	X	Lack of time to assess or counsel patients
	Performance-based.	X	Cost / Insurance/reimbursement issues
X	Lack of consensus on professional guidelines		Patient Compliance Issues
	Other:		

What do learners need to be able to know or do to be able to address the gaps in practice?

A better understanding by learning
Options for care in section B of the POLST form based on location of care.
Identifying the survival-to-discharge rate of out-of-hospital cardiac arrest.
Identifying a tool for advance care planning for patients with dementia.

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WAPI, an organization that is driven by the consensus of its members that has the following mission:

To provide an umbrella organization to bring together American Physicians, Dentists and Allied Healthcare Professionals of Indian Origin, defining Indian in the broad sense of Indian Ancestry; to provide a conduit to strive to be an exemplary strong ethnic group of professionals with a mission to serve the community by their expertise, cultural heritage and charitable work; to provide high educational and social services to its members. We envision this to be a collegial organization with actively participating members, who believe in its mission and are willing to further its cause.