Figure 1. Evidence-based medicine pharmacist tracking tool

Q1: Date?

Q2: Pharmacist?

- Q3: Setting?
- O Inpatient
- O Outpatient

Q4: Initiator (who started the learning)?

- O G1
- **O** G2
- **O** G3
- O PharmD student
- O PharmD resident
- O PharmD faculty
- O Medical student
- **O** Physician faculty
- O Other _____

Q5: Learner(s)?

- 🛛 G1
- 🛛 G2
- 🛛 G3
- Medical student
- PharmD student
- PharmD resident
- Physician faculty
- Inpatient our outpatient team

Q6: Patient seen by pharmacy?

- O Yes
- O No

Q7: Verbal or written communication?

- O Verbal
- O Written
- O Both

Q8: Focus per patient (include: medical condition(s), patient population(s), and/or drug class(es) discussed)

Q9: Resource(s) used, referred to, and/or recommended?

- Guideline
- □ Primary literature
- □ Tertiary literature (ie. review articles)
- Depint-of-care reference (ie. DynaMed, UptoDate, Micromedex)
- □ Expert opinion

Q10: EBM skill(s) taught?

- □ Ask converting the need for information into an answerable question
- □ Acquire tracking down the best evidence with which to answer that question
- Appraise critically appraising that evidence for its validity, impact, and applicability
- □ Apply applying the evidence in clinical decision making

Q11: Approximate time spent?

- □ 5 minutes or less
- □ 5-10 minutes
- □ 10-15 minutes
- 15-20 minutes
- 20-25 minutes
- 25-30 minutes
- □ 30-35 minutes
- □ 35-40 minutes
- □ 40-45 minutes
- □ 45-50 minutes
- □ 50-55 minutes
- □ 55-60 minutes
- \Box > 60 minutes, but < 90 minutes
- \Box > 90 minutes, but < 120 minutes
- □ > 120 minutes
- Q12: Milestone(s) taught?
- □ Applies critical thinking skills in patient care
- Provides cost-conscious medical care
- Emphasizes patient safety
- Locates, appraises, and assimilates evidence from scientific studies related to the patient's health problems
- Demonstrates self-directed learning
- □ Cares for patients with chronic conditions

Q12a: MK -2: Applies critical thinking skills in patient care

- Recognizes that an in- depth knowledge of the patient and a broad knowledge of sciences are essential to the work of family physicians
- Demonstrates basic decision making capabilities
- Demonstrates the capacity to correctly interpret basic clinical tests and images
- □ Synthesizes information from multiple resources to make clinical decisions
- Begins to integrate social and behavioral sciences with biomedical knowledge in patient care
- □ Anticipates expected and unexpected outcomes of the patients' clinical condition and data
- Recognizes and reconciles knowledge of patient and medicine to act in patients' best interest
- □ Recognizes the effect of an individual's condition on families and populations
- □ Integrates and synthesizes knowledge to make decisions in complex clinical situations
- □ Uses experience with patient panels to address population health
- □ Integrates in-depth medical and personal knowledge of patient, family and community to decide, develop, and implement treatment plans
- Collaborates with the participants necessary to address important health problems for both individuals and communities

Q12b: SBP-1: Provides cost-conscious medical care

- Understands that health care resources and costs impact patients and the health care system
- Knows and considers costs and risks/benefits of different treatment options in common situations
- Coordinates individual patient care in a way that is sensitive to resource use, efficiency, and effectiveness
- Partners with patients to consistently use resources efficiently and cost effectively in even the most complex and challenging cases
- Role models and promotes efficient and cost-effective use of resources in the care of patients in all settings

Q12c: SBP-2: Emphasizes patient safety

- Understands that medical errors affect patient health and safety, and their occurrence varies across settings and between providers
- □ Understands that effective team based care plays a role in patient safety
- Recognizes medical errors when they occur, including those that do not have adverse outcomes
- Understands the mechanisms that cause medical errors
- □ Understands and follows protocols to promote patient safety and prevent medical errors
- D Participate in effective and safe hand-offs and transitions of care
- Uses current methods of analysis to identify individual and system causes of medical errors common to family medicine
- Develops individual improvement plan and participates in system improvement plans that promote patient safety and prevent medical errors
- Consistently engages in self-directed and practice improvement and activities that seek to identify and address medical errors and patient safety in daily practice
- Fosters adherence to patient care protocols amongst team members that enhance patient safety and prevent medical errors
- Role models self-directed and system improvement activities that seek to continuously anticipate, identify and prevent medical errors to improve patient safety in all practice settings, including the development, use, and promotion of patient care protocols and other tools

Q12d: PBLI-1: Locates, appraises, and assimilates evidence from scientific studies related to the patient's health problems

- Describes basic concepts in clinical epidemiology, biostatistics, and clinical reasoning
- □ Categorizes the design of a research study
- Identifies pros and cons of various study designs, associated types of bias, and patientcentered outcomes
- □ Formulates a searchable question from a clinical question
- □ Evaluates evidence-based point-of-care resources
- Applies a set of critical appraisal criteria to different types of research, including synopses of original research findings, systematic reviews and meta-analyses, and clinical practice guidelines
- □ Critically evaluates information from others, including colleagues, experts, and pharmaceutical representatives, as well as patient-delivered information
- □ Incorporates principles of evidence-based care and information mastery into clinical practice
- Independently teaches and assesses evidence-based medicine and information mastery techniques

Q12e: PBLI-2: Demonstrates self-directed learning

- Acknowledges gaps in personal knowledge and expertise and frequently asks for feedback
- □ Uses feedback to improve learning and performance
- □ Incorporates feedback and evaluations to assess performance and develop a learning plan
- □ Uses point-of-care, evidence-based information and guidelines to answer clinical questions
- Identifies own clinical information needs based, in part, on the values and preferences of each patient
- Demonstrates use of a system or process for keeping up with relevant changes in medicine
- Completes ABFM MOC requirements for residents
- □ Consistently evaluates self and practice, using appropriate evidence- based standards, to implement changes in practice to improve patient care and its delivery
- Regularly seeks to determine and maintain knowledge of best evidence supporting common practices, demonstrating consistent behavior of regularly reviewing evidence in common practice areas
- □ Initiates or collaborates in research to fill knowledge gaps in family medicine
- □ Integrates MOC into ongoing practice assessment and improvement
- Role models continuous self-improvement and care delivery improvements using appropriate, current knowledge and best-practice standards
- □ Has a self-assessment and learning plan that demonstrates a balanced and accurate assessment of competence and areas for continued improvement

Q12f: PC-2: Cares for patients with chronic conditions

- Recognizes chronic conditions
- Accurately documents a clinical encounter on a patient with a chronic condition, and generates a problem list
- Recognizes that chronic conditions have a social impact on individual patients
- □ Establishes a relationship with the patient as his or her personal physician
- □ Collects, organizes and reviews relevant clinical information
- Recognizes variability and natural progression of chronic conditions and adapts care accordingly
- Develops a management plan that includes appropriate clinical guidelines
- □ Uses quality markers to evaluate the care of patients with chronic conditions
- □ Understands the role of registries in managing patient and population health
- Consistently applies appropriate clinical guidelines to the treatment plan of the patient with chronic conditions
- **D** Engages the patient in the self-management of his or her chronic condition
- Clarifies the goals of care for the patient across the course of the chronic condition and for his or her family and community
- Begins to manage the conflicting needs of patients with multiple chronic conditions or multiple co-morbidities
- Leads care teams to consistently and appropriately manage patients with chronic conditions and co-morbidities
- Facilitates patients' and families' efforts at self-management of their chronic conditions, including use of community resources and services
- Personalizes the care of complex patients with multiple chronic conditions and comorbidities to help meet the patients' goals of care
- Continually uses experience with patients and evidence-based medicine in population management of chronic condition patients