MCRH is supporting MICAH QN members to complete the following courses from the **Institute for Healthcare Improvement**. Upon completion, attendees will receive a Basic Certificate in Patient Safety and Quality. To receive the Certificate, the following 13 Open School courses: *QI 101–Q105*, *PS 101–105*, *TA 101*, *PFC 101*, and *L 101* must be completed. 17.75 continuing education credits are available for nurses, physicians, and pharmacists who earn the certificate of completion for all 13 courses.

MICAH QN members who wish to participate in taking the course with their MICAH QN peers in a cohort, should follow the suggested timeframes.

- QI 101 – Q1 105 – completion by October 8th, 2021
- PS 101 – PS 105 – completion by November 5th, 2021
- TA 101, PFC 101, and L 101 – completion by December 3rd, 2021

To register, please complete this Qualtrics survey, by September 10th, 2021 with your contract information: https://msu.co1.qualtrics.com/jfe/form/SV_85MyRcuL1vDk15I.

IHI Basic Certificate in Quality and Safety – Improvement Capability Courses		
Course	Course Lessons	Lesson Objectives
QI 101: Introduction to Patient Safety and Quality	Health and Healthcare Today The Institute for Medicine's Aims for Improvement Changing Systems with the Science of Improvement	Describe how the rapid evolution of medical science and technology is changing health care. Describe common challenges for health care systems around the world. List examples of the need for improvement in health care in regard to quality and access. List the six dimensions of health care outlined by the Institute of Medicine (IOM) in 2001, which should be the focus of improvement efforts. Give specific examples of how organizations have overcome significant quality challenges related to one or more of the IOM aims. Conduct your own research on the quality and safety of a local hospital or health care system. Explain how "pure" and "applied science" differ and the challenges of applied science as they relate to health care. Describe the contributions to improvement science of W. Edwards Deming and Walter Shewhart. List the four components of Deming's System of Profound Knowledge. Apply the "lens of profound knowledge" to improve a system.

QI 102: How to Improve with the Model for Improvement	An Overview of the Model for Improvement Setting an Aim Choosing Measures Developing Changes Testing Changes	State the three fundamental questions that are the basis of the Model for Improvement. Identify the processes that make up the Plan-Do-Study-Act (PDSA) cycle. Describe how a health care team has used the Model for Improvement to bring about improvements in a clinical setting. Use the Model for Improvement to begin your own personal improvement project. State why it's important to set an aim statement at the start of an improvement project. Identify the key elements of an effective aim statement. Develop an effective aim statement for your own personal improvement project. Explain why measurement is important in improvement. Identify three kinds of measures: process measures, outcome measures, and balancing measures. List some of the differences between measurement for improvement and measurement for academic research. Explain the basics of displaying data for improvement. Develop effective measures for your own personal improvement project. State and use the five approaches to coming up with a change. Explain how to use change concepts to come up with good ideas to test. Identify some good changes to test for your own personal improvement projec Explain the importance in improvement work of conducting iterative small-scale tests of change. Describe what happens during each stage of PDSA testing (i.e., what happens during "plan," "do," "study," and "act"). Use a PDSA worksheet to plan and conduct a small test of change for your own personal improvement project.
QI 103: Testing and Measuring Changes with PDSA Cycles	How to Define Measures and Collect Data How to Use Data for Improvement How to Build your Degree of Belief Over Time	Explain how to develop operational definitions for a family of measures. Identify the elements of a complete data collection plan. Discuss the use of sampling for collecting data for quality improvement Explain the difference between static and dynamic displays of data. State the value of plotting data over time, on a run chart. Explain how to stratify data, according to specific variables, for additional learning. Explain the purpose of using iterative test cycles to refine a change and grow degree of belief that a change is an improvement. Describe how to strategically adjust the size and scope of PDSA test cycles over time. Explain how to conduct multiple PDSA cycles at the same time and why this can be useful to accelerate improvement.
QI 104: Interpreting Data: Run Charts,	How to Display Data on a Run Chart	Explain the value of tracking and plotting data over time. List the basic elements of an an effective run chart. Draw a run chart, such as by using IHI's run chart template.

Control Charts and other Measurement Tools	How to Learn from Run Charts and Control Charts Histograms, Pareto Charts, and Scatter Plots	Describe the difference between common cause and special cause variation. Apply four rules to identify non-random variation in the data on a run chart. Explain the purpose of a Shewhart (or control) chart. Draw and interpret a histogram. Draw and interpret a Pareto chart. Draw and interpret a scatter plot
QI 105: Leading Quality Improvement	The Four Phases of a Quality Improvement Project Change Psychology and the Human Side of Improvement Working with Interdisciplinary Team Members	Describe the four phases of an improvement project. Explain how visual tools, such as driver diagrams, can help at different phases of improvement. List several tasks associated with each of the four phases of an improvement project. Describe the ultimate goal of a successful improvement project: spread. Assess your own tolerance for change. List common barriers to change according to Herbert Kaufman. Describe tactics for overcoming common barriers to change within health care. Understand who should be on a clinical improvement team, i.e., what types of knowledge and skills should be represented among your teammates. Describe the typical roles and values of several different types of health professionals, e.g., physicians, nurses, pharmacists, and administrators. Explain several tactics for strengthening communication and teamwork to help make a clinical improvement project successful in the real world. Explain how writing a charter and using a PDSA (Plan-Do-Study-Act) tracking worksheet for your project can help facilitate teamwork.

IHI Basic Certificate in Quality and Safety – Patient Safety Courses		
Course	Course Lessons	Lesson Objectives
PS 101: Introduction to Patient Safety	Understanding Medical Errors and Patient Safety Responding to Errors and Harm A Call to Action – What YOU Can Do	Discuss the rates of medical errors and preventable harm to patients in health care. List at least three reasons why medical errors occur. Describe the impact of medical errors on patients and families. Describe why blaming and punishing individuals are not productive responses to error and unintended events. Identify the reasons why people tend to blame and punish individuals after an adverse event. Explain why systematic learning from error and unintended events is the best response to ensuring patient safety.
PS 102: From Error to Harm	The Swiss Cheese Model Understanding Unsafe Acts	Summarize the relationship between error and harm. Describe the Swiss cheese model of accident causation.

	A Closer Look at Harm	Define latent error and its role in causing harm. Compare and contrast the different types of unsafe acts as defined by James Reason, which can lead to preventable patient harm. Define lapses, slips, violations, and mistakes as they pertain to safety in health care. Define harm in health care. Explain how effective safety systems can reduce harm. Discuss three types of injury to patients that are not typically included in the definition of harm.
PS 103: Human Factors and Safety	Understanding the Science of Human Factors Changes Based on Human Factors Design Principles Using Technology to Mitigate the Impact of Error	Define the science of human factors. Discuss patterns in human thought that make people prone to error. Give examples of factors that contribute to error in your everyday life and in health care. Describe how changes to processes can mitigate the effects of factors that contribute to error. Define the basic concepts of simplification, standardization, constraints and forcing functions, and redundancies. Explain why the previously mentioned strategies are critical to patient safety. Describe how technology can reduce errors in health care. Explain how the interface between humans and machines can also lead to errors. Explain why the design and testing are important to ensure technology performs reliably and consistently.
PS 104: Teamwork and Communication in a Culture of Safety	Why are Teamwork and Communication Important? How Can you Contribute to a Culture of Safety? Basic Tools and Techniques for Effective Communication	Explain how teams in health care can make care safer or less safe. List several common types of adverse events in health care that occur due to miscommunication. Explain why effective communication takes planning. Identify examples of effective and ineffective teamwork and communication Describe the elements of a culture of safety. Identify ways you can foster a culture of safety in your day-to-day work. List questions you can ask to assess the culture of an organization. Explain the concept of critical language and how to use it with a team. Describe the "two challenge" rule. Describe how to conduct an effective briefing. Identify the steps of the SBAR technique. Explain why "repeating back" can improve communication with patients and colleagues.
PS 105: Responding to Adverse Events	Responding to an Adverse Event: A Step-by-Step Approach When and How to Apologize for Patients	Explain why communicating after adverse events is difficult but essential. Describe four immediate steps you should take when something goes wrong in a patient's care. Give an example of a compassionate way to share bad news with a patient. Identify common reasons why patients file lawsuits against health care providers. Explain the importance of apologizing after something goes wrong. Describe the structure and content of an effective apology.

	The Impact of Adverse Events on Caregivers: The Second Victim Learning from Errors Through Root Cause Analysis	Practice crafting an effective apology. Explain the concept of the second victim in health care. Describe the impact of adverse events on providers: what they may feel, and what they may need. Describe barriers to second victims getting the support they need. List resources that are available to support caregivers after adverse events. Explain the importance of seeking answers after adverse events and near misses. Describe why it's more effective to look for systems problems after errors than to blame individuals. List who should be on a root cause analysis team. List five steps for conducting a root cause analysis.

IHI Basic Certificate in Quality and Safety – Triple Aim for Populations		
Course	Course Lessons	Lesson Objectives
TA 101: Introductions to the Triple Aim for Populations	Improving Population Health Providing Better Care Lowering Costs of Care	Define population health and its relationship to health care. Explain why the Triple Aim is defining health care improvement efforts around the world. Explain the major contributors to population health Explain why health care influences only a small percentage of premature deaths. Discuss the continuum from providing health care to individuals to providing health care to a population. Distinguish between cost and value in health care. Discuss the potential for the IHI Triple Aim to improve health while reducing costs of health care. Describe the ethical case for resource stewardship in health care.

IHI Basic Certificate in Quality and Safety – Person and Family Centered Care Course		
Course	Course Lessons	Lesson Objectives
PFC 101: Introductions to Person and Family Centered Care	Patient-Provider Partnerships for Health Understanding Patients as People Skills for Patient-Provider Partnerships	Describe the traditional model of patient-provider relationships. List at least two reasons why the traditional model is unsuitable for promoting health in many health care situations. Describe the partnership model of patient-provider relationships. Discuss the influence of social conditions, faith and culture, and trust on patient-provider relationships. Explain how implicit bias affects patient-provider interactions. Describe how curiosity and humility can help providers understand patients' lives. Define the four components of empathy. Discuss the difference between asking patients, "What's the matter?" and "What matters to you?"

		Describe Ask-Tell-Ask and Teach Back methods of effective communication.

IHI Basic Certificate in Quality and Safety – Leadership		
Course	Course Lessons	Lesson Objectives
L 101: Introductions to Healthcare Leadership	What Makes a Leader? Practical Skills for Leading Teams Strategies to Sustain Your Health Care Leadership Journey	Describe leadership as an action, not a formal position of authority. Explain the importance of gathering objective data about a problem and seeking solutions. Discuss the importance of engaging stakeholders at different levels of an organization's hierarchy to address systems problems. Describe how different personality types can present a challenge to teamwork. Describe several different kinds of approaches leaders use to persuade others to make changes. Develop persuasive appeals to different types of people based on power, logic, and emotions. Explain the concept of achieving a 'workable level of unity' and several tactics to help a team achieve this. Explain why authentic curiosity is an essential leadership trait. List several ways to expand your social network in health care. Explain the importance of having support from peers and colleagues in health care.