

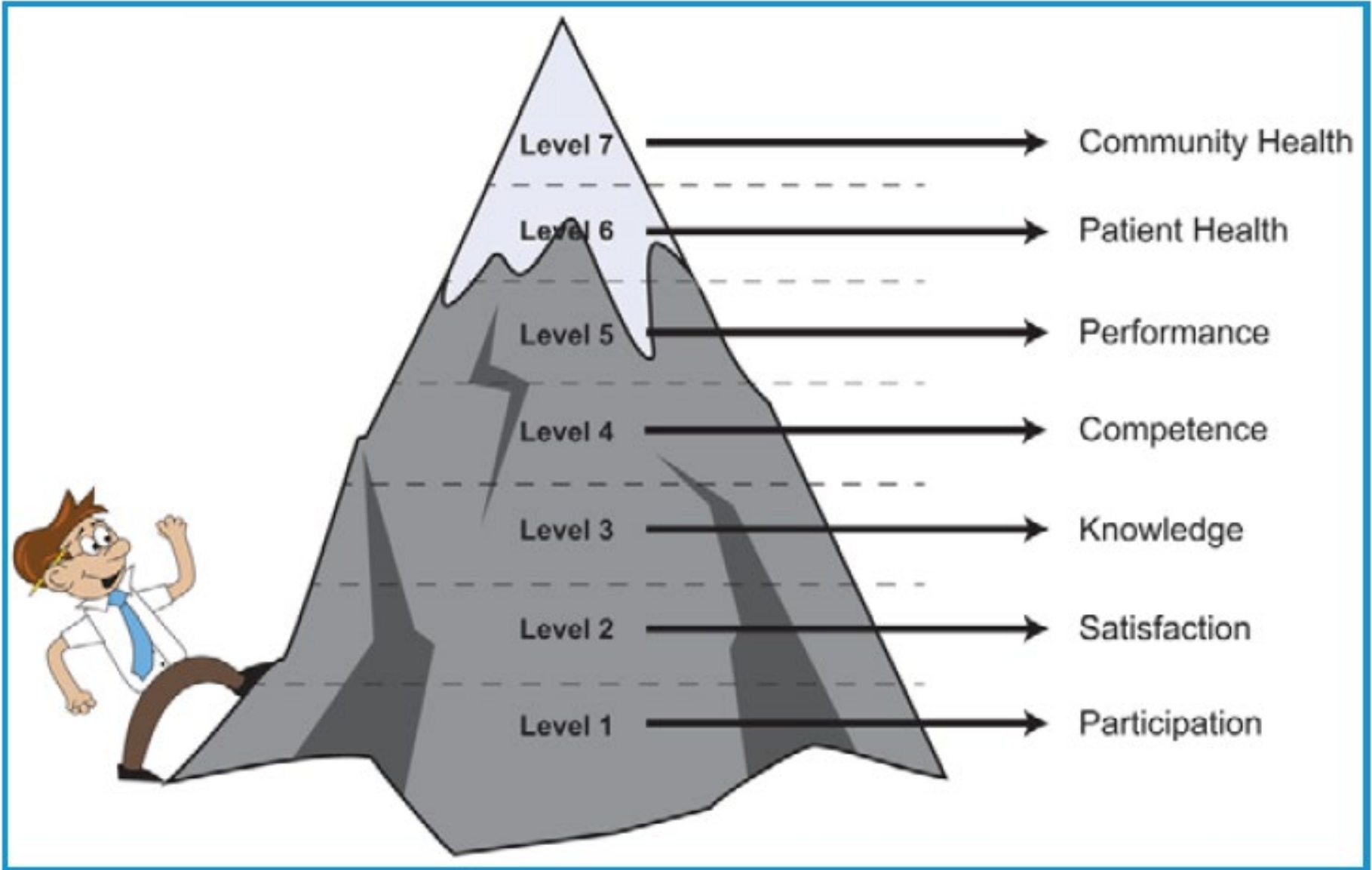


**ISMA**

INDIANA  
STATE  
MEDICAL  
ASSOCIATION

# Evaluation & Higher Level Outcomes Assessment

# Outcomes Assessment



# Outcomes Assessment

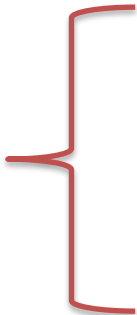
MSV RESOURCE 5-2012

## Methods for Measuring Outcomes

### Moore's Expanded Outcomes Framework for Assessing Learners and Evaluating Instructional Activities

Outcomes Framework	Miller's Framework	Description	Sources of Data
LEVEL 1 Participation		Number of learners who participate in the educational activity	Attendance records On line tracking of action within an activity
LEVEL 2 Satisfaction		Degree to which expectations of participants were met regarding the setting and delivery of the educational activity	Questionnaires/surveys completed by attendees after an educational activity
LEVEL 3A Learning: Declarative Knowledge	Knows	The degree to which participants state what the educational activity intended them to know	<i>Objective:</i> Pre and post tests of knowledge <i>Subjective:</i> Self-reported of knowledge gain
LEVEL 3B Learning: Procedural Knowledge	Knows how	The degree to which participants state <i>how</i> to do what the educational activity intended them to know how to do	<i>Objective:</i> Pre and post tests of knowledge <i>Subjective:</i> Self reported gain in knowledge (e.g., reflective journal.)
LEVEL 4 Competence	Shows how	The degree to which participants show in an educational setting how to do what the educational activity intended them to be able to do	<i>Objective:</i> Observation in educational setting (e.g., checklists, online peer assessment and EHR chart stimulated recall.) <i>Subjective:</i> Self reported competence, intention to change
LEVEL 5 Performance	Does	The degree to which participants do what the educational activity intended them to be able to do in their practice	<i>Objective:</i> Observed performance in clinical setting, patient charts, administrative databases <i>Subjective:</i> Self-report of performance
LEVEL 6 Patient Health		The degree to which the health status of patients improves due to changes in practice behavior of participants	<i>Objective:</i> Health status measures recorded in patient charts or administrative databases <i>Subjective:</i> Patient self-report of health status
LEVEL 7 Community Health		The degree to which the health status of a community of patients changes due to changes in the practice behavior of participants	<i>Objective:</i> Epidemiological data and reports <i>Subjective:</i> Community self-report

HIGHER LEVEL



# Outcomes Assessment

- Higher level outcomes start at level 5.
- Start with the end in mind. Work backwards from “what do you want to measure”
- You can't improve what you can't measure.
- Think outside of the box:
  - Evaluation to subset of learners
  - Focus group
  - Simulation
  - Patient Surveys
  - Quality Improvement/Hospital Data or State Data

# Outcomes Assessment

Outcome Assessed	Scenario	Data Produced
Patient Health/ Community Health (Level 6-7)	100 Physicians attending the activity belong to 3 hospital systems serving a community. From their EHR systems, they each input data on the 5 metrics for 200 patients pre-, and 200 patients post-CE activity (400 patients total)	200,000 Data Points
Performance/ Patient Health (Level 5-6)	100 Physicians attending the activity input data on 5 metrics related to obesity for 20 chart audited patients pre-, and 20 patients post-CE activity (40 patients total)	20,000 Data Points
Knowledge/ Competence (Level 3-4)	100 Physicians attending the activity answer 10 pre-, and 10 post-questions that are based on the course content (20 questions total)	2,000 Data Points
Satisfaction (Level 2)	100 Physicians attending the activity answer 5 questions on their perspectives of the course content and quality	500 Data Points
Participation (Level 1)	100 Physicians attend a CE activity on Obesity	100 Data Points

# Core Accreditation Criteria

## PART A

### CME Mission and Program Improvement:

Mission

Program Analysis (formerly C12)

Program Improvements (formerly C13)

## PART B

### Educational Planning and Evaluation

Educational Needs

Design to Change

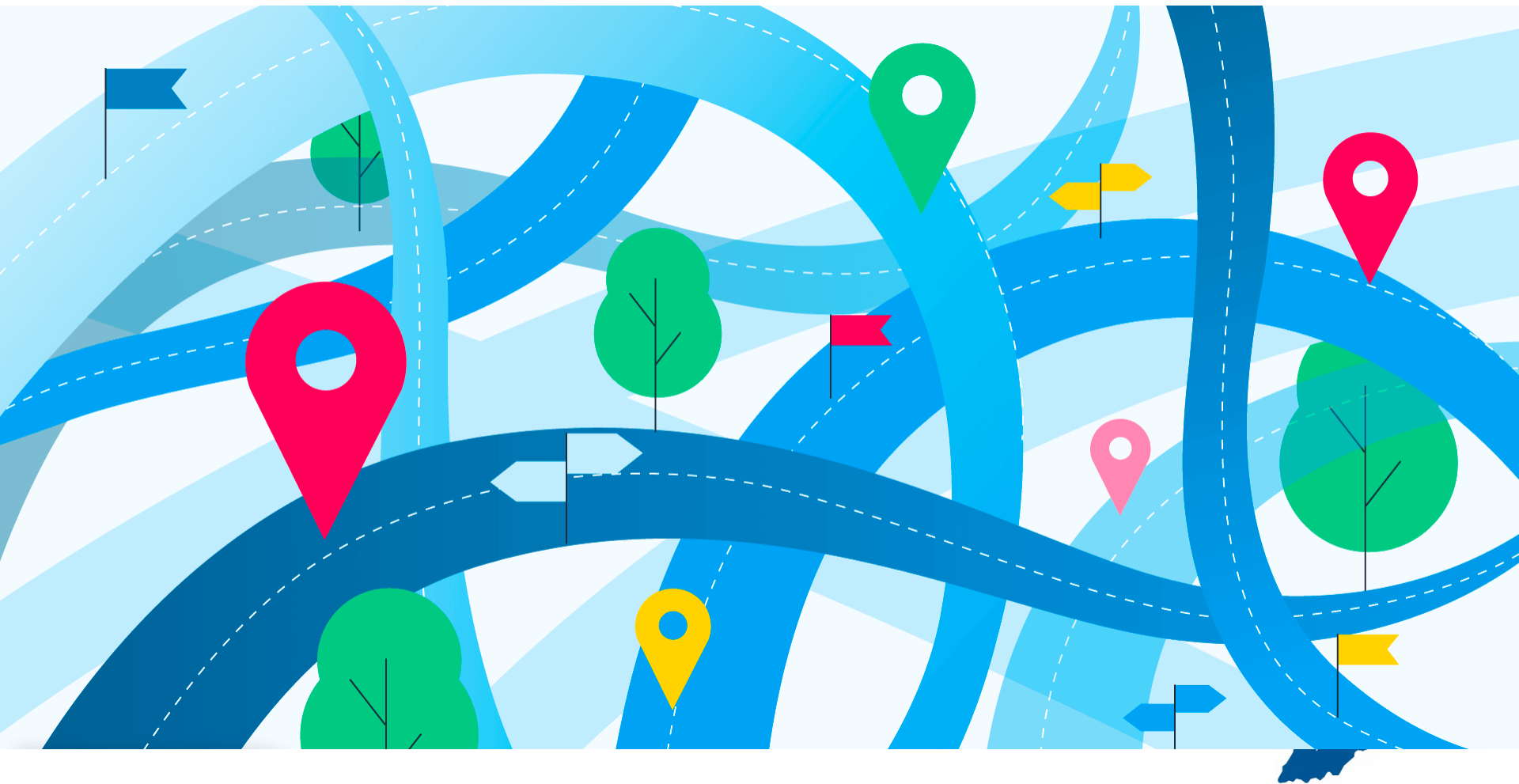
Appropriate Formats

Competencies

Analyzes Change (formerly Criterion 11)

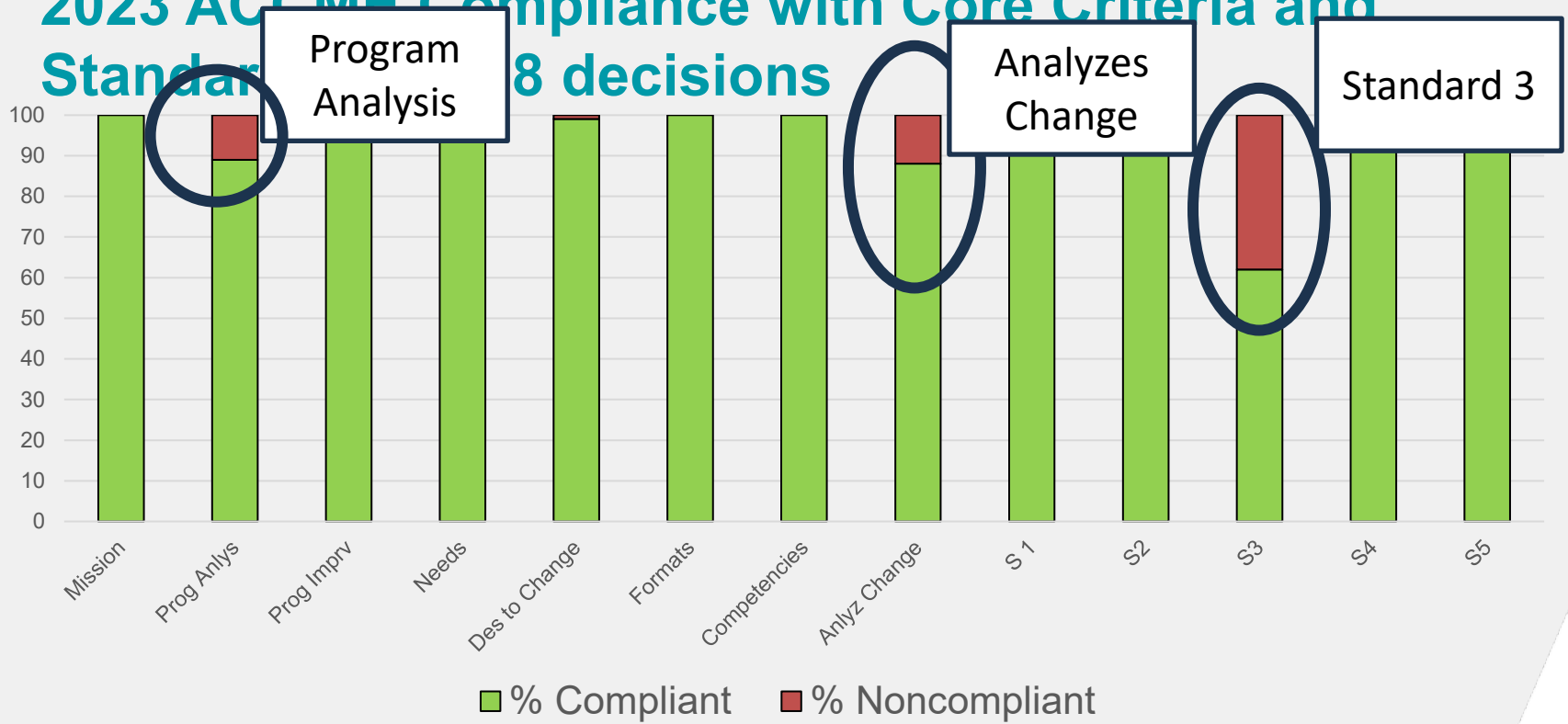
# Core Accreditation Criteria

## Our Roadmap



# 2023 ACCME Compliance with Core Criteria and Standards

## 8 decisions





	ORGANIZATION Mission: Expected Results (C1)							Program Analysis (C12)		Program Improvements (C13)		Educaitional Needs (C2)		Designed to Change (C3)		Appropriate Formats (C5)		Competencies (C6)		Analyzes Change (C11)		Standard 1 – Ensure Content is Valid		Standard 2 – Prevent Commercial Bias (C7-SCS1/C10)		Standard 3 – Identify, Mitigate & Disclose Relevant Relationships (C7-SCS 1, 2 & 6)		Standard 4 – Manage Commercial Support Appropriately (C8)		Standard 5 – Manage Ancillary Activities (C9)		Accreditation Statement Policy		CME Activity and Attendance Records Retention				
1	C	NC	C	C	C	C	C	C	NC	C	C	NC	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	
2	C	NC	C	C	C	C	NC	C	NC	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	
3	C	C	C	C	C	C	C	C	C	C	NC	NC	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
4	C	NC	C	C	C	C	C	NC	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
5		C						C																														
6	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
7	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
8								C																														
9		NC						NC																														



# PDSA Cycle – Improvement Science



We're aware of a problem. We have come up with a possible solution...



We've put our plan into action...

Did our plan work in addressing the problem?

We're applying what we've learned, and we're starting again...

# Plan



- 1) We're aware of a problem (Gap/Need).
- 2) We have come up with a possible solution and designed it to change (c, p, po).
- 3) We will measure success.

# PLAN

## MISSION STATEMENT

- The provider has a CME mission statement that includes **expected results** articulated in terms of *changes in competence, performance, or patient outcomes* that will be the result of the program.

(formerly Criterion 1)

# PLAN

What do we want to achieve?

- Competence
- Performance
- Patient Outcomes

Do you have to plan for all three?

## ISMA Mission Statement

### EXPECTED RESULTS

- ISMA focuses on the enhancement of the CME learner's competence, and on occasion, practice performance.
- The ISMA expects the learner to 1) report greater confidence in their ability to apply and demonstrate the competence they have gained; 2) show improvement or positive impact on practice performance.

# PLAN

- ✓ **WHAT DO WE NEED?**
- ✓ **WHAT DO WE WANT TO CHANGE?**
- ✓ **HOW DO WE KNOW WE WERE SUCCESSFUL?**

## **NEEDS:**

- House of Delegates (HOD) Adopted Resolutions
- ISMA Physician Leadership
- Licensure Requirement



# PLAN

## House of Delegates (HOD) Adopted Resolutions

**NEED:** ISMA facilitate and encourage its member physicians to be actively engaged in the legislative process.

**GAP:** Physician who know the healthcare landscape to advocate for changes to how physicians can practice, and how patients can be treated.

**CHANGE:** Competence, Performance

**MEASURE for SUCCESS:** Increase in physicians actively engaging in advocacy efforts

# PLAN

## ISMA Physician Leadership

**NEED:** Strategic Priority: Promote tools and best practices to help physicians connect their patients with resources to address the social drivers of health.

**GAP:** Physicians are not aware of resources available to connect patients

**CHANGE:** Competence, Performance

**MEASURE for SUCCESS:** Increase in physicians who connect patients with resources to address social drivers of health.

# PLAN

## Licensure Requirements

**NEED:** Decrease prescribing. Two hours of continuing medical education required to obtain or renew a Controlled Substances Registration (CSR).

**GAP:** Opioid use epidemic, prescribing rates too high

**CHANGE:** Competence, Performance

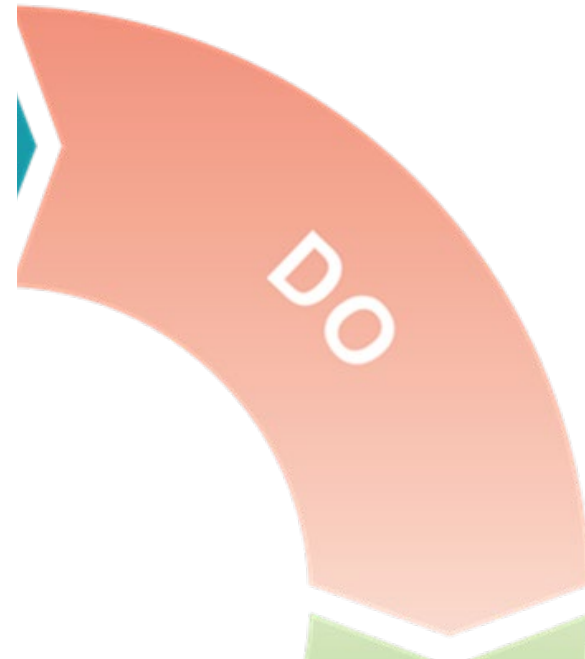
**MEASURE for SUCCESS:** Decrease in unnecessary prescribing.

**We've put our  
plan into action.**

**Run the test.**

**Collect data.**

**Describe what  
happens.**



# House of Delegates (HOD) Adopted Resolutions

## Ran the test.

- “Physician Advocacy Bootcamp program”
- 5-month hybrid live webinar & in person session
- Measure competence, performance.

	AVG	SA	AGREE	DISAGREE	SD	N/A	TOTAL
The content flowed well from one topic to the next.	73.78	85.00%	15.00%	0.00%	0.00%	0.00%	20
The course was organized in a manner that helped me understand the underlying concepts.	75.93	85.00%	15.00%	0.00%	0.00%	0.00%	20
The instructors presented the concepts clearly.	81.98	90.00%	10.00%	0.00%	0.00%	0.00%	20
The instructors were prepared for the class.	85.21	90.00%	10.00%	0.00%	0.00%	0.00%	20
Overall content fulfilled the session goals/objectives.	79.2	85.00%	15.00%	0.00%	0.00%	0.00%	20
Speaker & Planning Committee financial conflicts of interest and mitigation were disclosed before		80.00%	15.00%	0.00%	0.00%	5.00%	20
The activity was presented objectively and was free of commercial bias.		90.00%	10.00%	0.00%	0.00%	0.00%	20

The content help understand personally learn in this course.

I think [student] gave really meaningful feedback to the students about their encounters and really made an effort to include specific suggestions on how they could have changed their counseling. It's great she also reinforced the things they did well.

Had good, direct feedback for students (real, medical suggestions for ROS) as well as good practical experience related to clinical rotations. Soft spoken and often drowned out by standardized patient.

Good introduction: made student feel welcome, comfortable and made it a less formal setting. Good how you started by saying “what do you think well or not well?” This is a great way to hear their perspective on their experience and helps you target where you can focus your teaching... When the student did something well, you often said “you did a great job there.” Try to help them understand WHY they did it well by further explaining... At the end, I recommend asking the student to give a summary of what they can do next time to improve their H&P skills; this helps solidify the teaching points made.

## Measure Competence

- Survey after each session.
- Feedback from faculty during role play exercise

## Measure Performance

- Physicians' engagement in advocacy efforts post program.
- Physicians self report performance

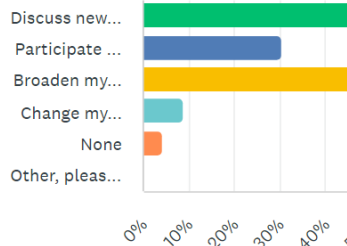
# ISMA Physician Leadership

## Ran the test.

- “Exploring Best Practices to Address Social Drivers of Health”
- Multiple live webinars, introduced ISMA Drive for Five App: One-stop SDOH mobile toolbox for physicians.
- Measure competence, performance.

Which of the following actions will you take a...

Answered: 23 Skipped: 0



Residency Program	Specialty	Total Resident	Total Faculty	Clinic Type	Date of Presentation	Follow-up date	Patient Total	Average Patient Age	SDOH Identified	SDOH Screening Tool Used	Resource Used from Drive for Five Mobile App
Indiana School of Medicine	Emergency Medicine	3	1	Hospital	1/29/2024	2/12/2024	30	1 yrs. - 79 yrs.	12 - food insecurity, 5 - financial burden, 4 - substance abuse, 3 - mental health, 3 - utilities, 1 - housing security, 1 - health insurance, 1 - family communication	Health Lead, My Hunger Vital Signs, conversation	Printed resource from website, provided father with resources, multiple patients seeking food, housing, prescription, mental health assistance were provided resources from Indiana 211 and instructions were added to their discharge instructions. Others such as smoking cessation, insurance, social work, family counseling were instructed how to find Indiana 211 online. 211 was the most highly utilized resource from this residency group.
Indiana School of Medicine	Family Medicine	13	2	Hospital	1/30/2024	2/12/2024	31	25 yrs. - 97 yrs.	7 - substance use, 7 - financial, 6 - caregiver support services, 4 - transportation, 2 - food insecurity, 2 - brain health, 2 - mental health care, 1 - housing assistance	Your Current Life Situation was used for one patient, and the rest none were used	Indiana 211 and Eldercare locator
Union	Family	9	2	Hospital	1/19/2024	1/30/2024	30	2 yrs. - 69 yrs.	5 - social support,	PHQ9, ASQ, GAD7,	Addictions.com, no other resource was

Exploring Best Practices to Address Social

## Measure Competence

- Survey after each session.

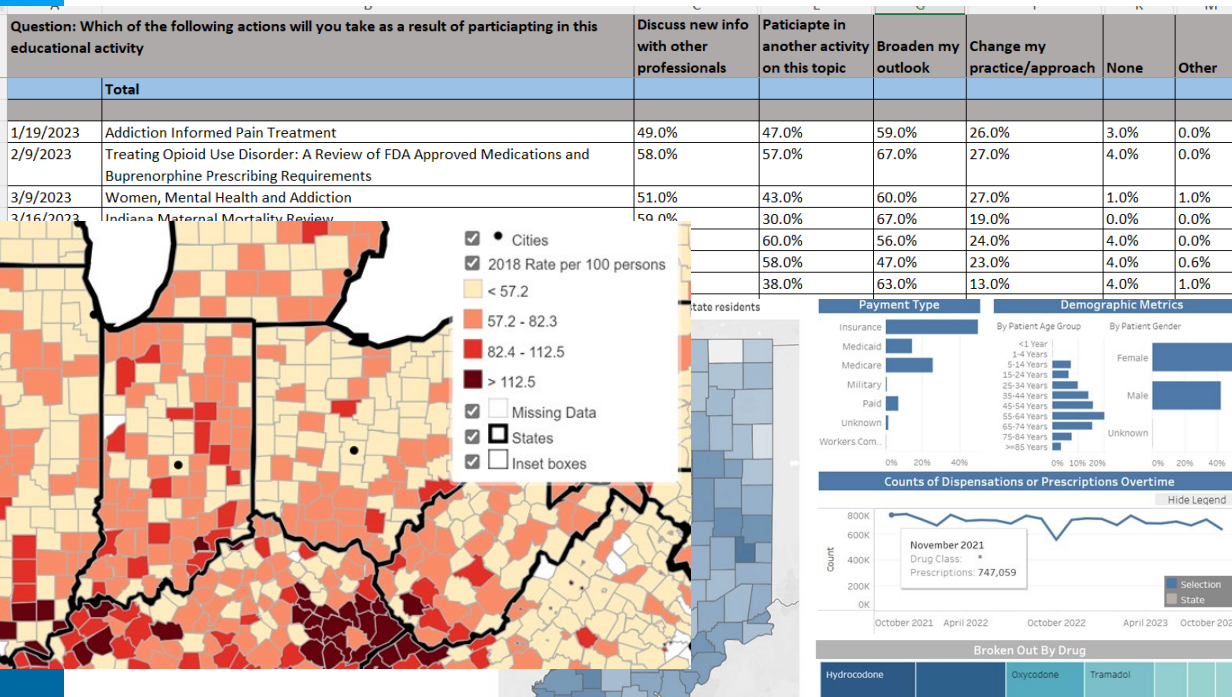
## Measure Performance

- Physician PI Project

# Licensure Requirements

Ran the test.

- “ISMA Opioid Series”
- 12-month live webinars.
- Measure competence, performance.



## Measure Competence

- Survey after each session.

## Measure Performance

- State and National Data

# Core Accreditation Criteria

## PART A

### CME Mission and Program Improvement:

Mission

Program Analysis (formerly C12)

Program Improvements (formerly C13)

## PART B

### Educational Planning and Evaluation

Educational Needs

Design to Change

Appropriate Formats

Competencies

Analyzes Change (formerly Criterion 11)



# Study

## Analyzes Change

- The provider **analyzes changes** in learners ***(competence, performance, or patient outcomes)*** achieved as a result of the **overall program's** activities/educational interventions.

(formerly Criterion 11)

# Study

**Did our plan  
work in addressing  
the problem?**

**Analyze Data.**

**Compare Outcomes.**

**Summarize what you  
learned.**



# Study

## Analyzes Change

- How often do you want/need to look at your data?
- How do you break down your data?
- Who should be involved in gathering the data?
- Who should be involved in evaluating the data?
- What changes are you tracking/measuring?

# Common noncompliance issues in Analyzes Change

01

Measuring for change in knowledge ONLY

02

Not implementing an overall program analysis

03

Providing description of process only

04

Not coming to a conclusion on change in overall program analysis

# STUDY

## House of Delegates (HOD) Adopted Resolutions

### “Physician Advocacy Bootcamp Program”

- What did we learn? (what went well, what did not)
  - Measure competence, performance.

#### Activity Summary:

- Intent to change was measured by survey completion.
- Competence was measured by role play activities at the end of the cohorts and faculty feedback.

	AVG	SA	AGREE	DISAGREE	SD	N/A	TOTAL
The content flowed well from one topic to the next.	73.78	85.00%	15.00%	0.00%	0.00%	0.00%	20
The course was organized in a manner that helped me understand the underlying concepts.	75.93	85.00%	15.00%	0.00%	0.00%	0.00%	20
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The instructors were prepared for the class.	85.21	90.00%	10.00%	0.00%	0.00%	0.00%	20
Overall content fulfilled the session goals/objectives.	79.2	85.00%	15.00%	0.00%	0.00%	0.00%	20
Speaker & Planning Committee financial conflicts of interest and mitigation were disclosed before		80.00%	15.00%	0.00%	0.00%	5.00%	20
The activity was presented objectively and was free of commercial bias.		90.00%	10.00%	0.00%	0.00%	0.00%	20

I think I really understand	The content helped me better understand	72.85	70.00%	85.00%	85.00%	75.00%	85.00%	80.00%	and 16
I personally learned something new in this course.		65.48%	65.00%	70.00%	55.00%	68.75%	75.00%	68.75%	
Had good practical experience related to clinical rotations. Soft spoken and often drowned out by standardized patient.			13	14	11	11	12	11	

Good introduction: made student feel welcome, comfortable and made it a less formal setting. Good how you started by saying “what do you think well or not well?” This is a great way to hear their perspective on their experience and helps you target where you can focus your teaching... When the student did something well, you often said “you did a great job there.” Try to help them understand WHY they did it well by further explaining... At the end, I recommend asking the student to give a summary of what they can do next time to improve their H&P skills; this helps solidify the teaching points made.

# STUDY

## “Physician Advocacy Bootcamp Program”

- **Were we successful?**
  - Did we: *Increase in physicians actively engaging in advocacy efforts?*
    - Several physicians ran for ISMA district positions
    - One physician ran for state public office

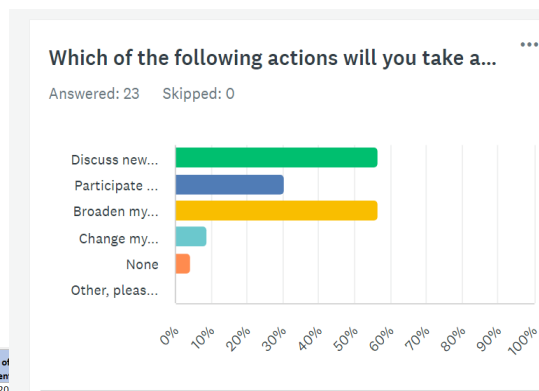
## ISMA Physician Leadership

### “Exploring Best Practices to Address Social Drivers of Health”

- What did we learn? (what went well, what did not)
  - Measure competence, performance.

#### Activity Summary:

- Competence was measured by survey completion.
- Performance was measured by performance improvement project.
- Four offices, min. 30 patients, which SDOH concern addressed, which screening tool was used, age of patient and which resource was offered. 99 interactions.



Residency Program	Specialty	Total Resident	Total Faculty	Clinic Type	Date of Present					
Reid Health	Family Medicine	5	3	Hospital	2/2/20					
Indiana School of Medicine	Emergency Medicine	3	1	Hospital	1/29/2024	2/12/2024	30	1 yrs. - 79 yrs.	12 - food insecurity, 5 - financial burden, 4 - substance abuse, 3 - mental health, 3 - utilities, 1 - housing security, 1 - health insurance, 1 - family communication	Health Lead, My Hunger Vital Signs, conversation
Indiana School of Medicine	Family Medicine	13	2	Hospital	1/30/2024	2/12/2024	31	25 yrs. - 97 yrs.	7 - substance use, 7 - financial, 6 - caregiver support services, 4 - transportation, 2 - food insecurity, 2 - brain health, 2 - mental health care, 1 - housing assistance	Your Current Life Situation was used for one patient, and the rest none were used
Union	Family	9	2	Hospital	1/19/2024	1/30/2024	30	2 yrs. - 69 yrs.	5 - social support,	PHQ9, ASQ, GAD7,

Exploring Best Practices to Address Social Drivers of Health (Ju... 0)

# STUDY

## “Exploring Best Practices to Address Social Drivers of Health”

- **Were we successful?**
  - Did we: *Increase number of physicians who connect patients with resources to address social drivers of health?*
    - Several practices implemented the new tool when seeking resources for patients.
    - The top five SDOH factors identified among the patients were transportation, housing, food insecurity, financial burden, and substance abuse.
    - Physicians reported they enjoy using the app and feel more prepared and confident when screening patients



# STUDY

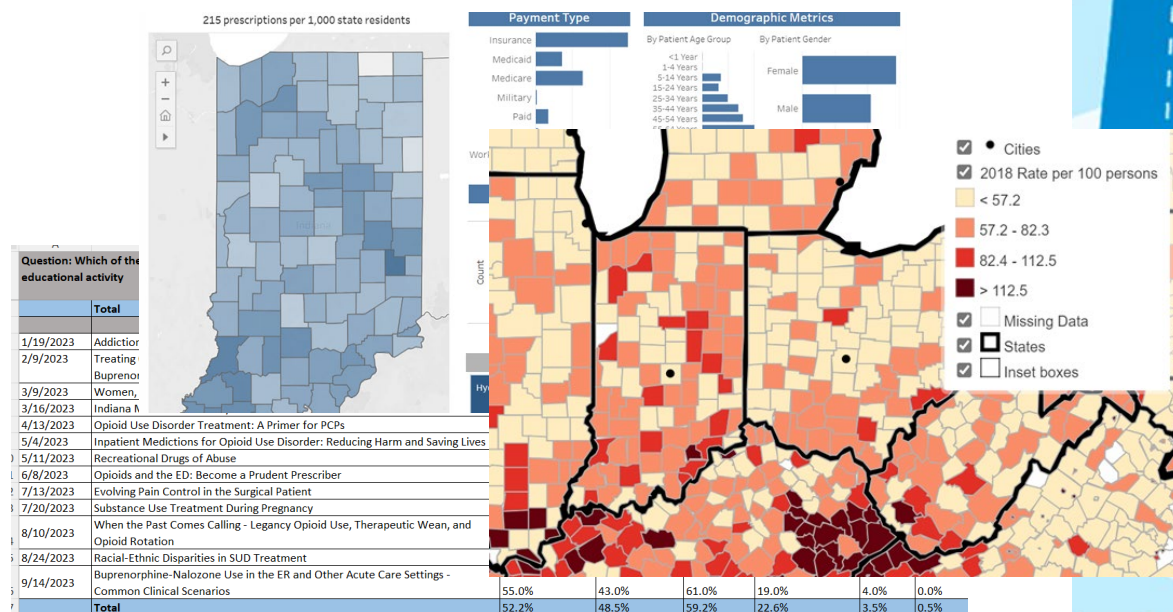
## Licensure Requirements

### “ISMA Opioid Series”

- What did we learn? (what went well, what did not)
- Were we successful?
  - Measure competence, performance.

#### Activity Summary:

- Competence was measured by survey completion and embedded questions.
- Performance was measured by State and National Data.



# STUDY

## “ISMA Opioid Series”

- **Were we successful?**
  - Did we: *Decrease unnecessary prescribing.*
    - We delivered over 50 hours of Opioid CME content in the past four years around opioid prescribing and abuse to educate physicians on the importance of alternatives to prescribing opioids to reduce prescribing rates. There are approximately 18,000 actively practicing licensed physicians in the state of Indiana and ISMA has approximately 9,000 physician and student members.

# STUDY

## “ISMA Opioid Series”

- **Were we successful?**
  - Did we: *Decrease unnecessary prescribing.*
    - During the past four years we have had a total of 11,681 learner interactions with the opioid content. This included 2,350 physician interactions and 550 non-physician interactions with our live webinar content, as well as 8,102 physician and 679 non-physician interactions with our ISMA Online mobile app content.

# STUDY

## “ISMA Opioid Series”

- **Were we successful?**
  - Did we: *Decrease unnecessary prescribing.*
    - Indiana Prescription Drug Monitoring Program data from November 2021 through September 2023 indicates 110,000 less prescriptions dispensed for controlled substances.
    - The Centers for Disease Control and Prevention (CDC) also reported prescribing rates from 2018 to 2020 in their U.S. Opioid Dispensing Rate Maps. Those maps indicate a decrease year over year.

# PDSA Cycle – Improvement Science



- **We're applying what we've learned**
- **Making changes**
- **And we're starting again**

## Program Improvements

- The provider **identifies, plans and implements** the **needed or desired changes** in the overall program (eg, planners, teachers, infrastructure, methods, resources, facilities, interventions) that are **required to improve** on ability to meet the CME mission.

# REFLECTION

## Program Analysis

- The provider gathers data or information and conducts a **program-based analysis** on **the degree** to which the **CME mission of the provider has been met** through the conduct of **CME activities/educational interventions**.

# REFLECTION

## Program Analysis

Using **data, information, and analysis** from **Analyzes Change**, the provider is asked to step back and review its CME mission statement. **Reflect** on if it has been successful in achieving what it outlined as expected results related to learner or patient outcome change? If not, why not?



# Common noncompliance issues in Program Analysis

1

Narrative limited to process

2

Conclusions not based on data

3

Analysis, with no assessment of degree to which mission has been met

# REFLECTION

## Program Analysis (C12)

### Reflection

What did we (ISMA) say we wanted to do in our mission?

- Enhance the CME learner's competence, and on occasion, practice performance.
  - Report greater confidence in their ability to apply and demonstrate the competence they have gained;
  - Show improvement or positive impact on practice performance.

# RELECTION

**We know it went well so far, right?**

**NEXT:** Utilized “bucket questions when possible:

– **Which of the following actions will you take as a result of participating in this education activity:**

- Discuss new information with other professionals
- Participate in another activity on this topic
- Broaden my outlook
- Change my practice/approach

– **If yes to this selection – describe change.**

# RELECTION

We know it went well so far, right?

**NEXT:** Utilized “bucket questions when possible:

## OVERALL PROGRAM ANALYSIS 2020 - 2023

**Q2: This activity will assist in the improvement of my (mark all that apply):**

Answer Choices	OVERALL	CURRENT	RESPONDENTS	PREVIOUS	RESPONDENTS
Competence	76.50%	43.13%	8459	43.43%	3001
Performance	51.76%	29.74%	5834	31.35%	2166
Patient outcomes	39.19%	27.13%	5322	25.22%	1743
			<b>19615</b>		<b>6910</b>

**Q3. Which of the following actions will you take as a result of participating in this educational activity (mark all that apply):**

Answer Choices	OVERALL	CURRENT	RESPONDENTS	PREVIOUS	RESPONDENTS
Discuss new information with other professionals	52.9%	26.46%	5260	34.02%	2809
Participate in another activity on this topic	41.9%	23.66%	4703	21.81%	1801
Broaden my outlook	52.3%	31.64%	6289	25.71%	2123
Change my practice/approach	25.6%	15.26%	3033	15.65%	1292
None	4.9%	2.68%	533	1.37%	113
Other, please specify	2.3%	0.30%	61	1.45%	120
			<b>19879</b>		<b>8258</b>



## What other information did we learn from Analyzing Change?

- We were successful and increasing the number of physicians that are activity advocating, however we want to increase that number even more.
- We were successful at developing a tool that physicians can use at their fingertips to find SDOH resources patients need.
- We were successful at decreasing the prescribing in the state of Indiana - we want to have a greater impact.

# Study

## After describing this analysis in detail in the self study, finish by summarizing:

- An overall analysis of this information gives ISMA confidence that we have met our mission to increase learner competence and have shown improvement or positive impact on practice performance.



## Program Analysis: Case Study

- In its self-study report the provider describes:
  - It reviews data on learner change from across all its CME activities on an annual basis, at the end of Q3.
  - This information is developed into a report for its CME committee divided into the key therapeutic areas addressed by the program.
  - Based on the success in changing learner competence and performance, feedback is provided to the program team in support of the next year's needs assessment, which is conducted in Q4.
- Has the provider met the expectations of Program Analysis?



## Program Analysis: Case Study

- In its self-study report the provider describes:
  - It reviews data on learner change from across all its CME activities on an annual basis, at the end of Q3.
  - This information is developed into a report for its CME committee divided into the key therapeutic areas addressed by the program.
  - Based on the success in changing learner competence and performance, feedback is provided to the program team in support of the next year's needs assessment, which is conducted in Q4.
- Has the provider met the expectations of Program Analysis?

NO

## Analyzes Change – Case Study

The CME Coordinator distributes an evaluation form for each activity asking learners for feedback. It asks learners to rate the speaker. It also asks learners “Will you make any changes in your practice as a result of this activity?” Yes/No

Is the provider obtaining data on changes in learner competence, performance or patient outcomes?

## Analyzes Change – Case Study

The CME Coordinator distributes an evaluation form for each activity asking learners for feedback. It asks learners to rate the speaker. It also asks learners “Will you make any changes in your practice as a result of this activity?” Yes/No

Is the provider obtaining data on changes in learner competence, performance or patient outcomes?

**NO**

## Program Analysis

The provider gathers data or information and conducts a program-based analysis on the degree to which the CME mission of the provider has been met through the conduct of CME activities/educational interventions.  
(formerly Criterion 12)

