

ACOI Mastery Curriculum Development Update

Minority Health

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Everyone has a vision...



Acknowledgements

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Why a Mastery Curriculum Project?

Osteopathic Medicine
as an Agent of
Change



Systems Philosophy of Two Corporations



“Go with the flow...”



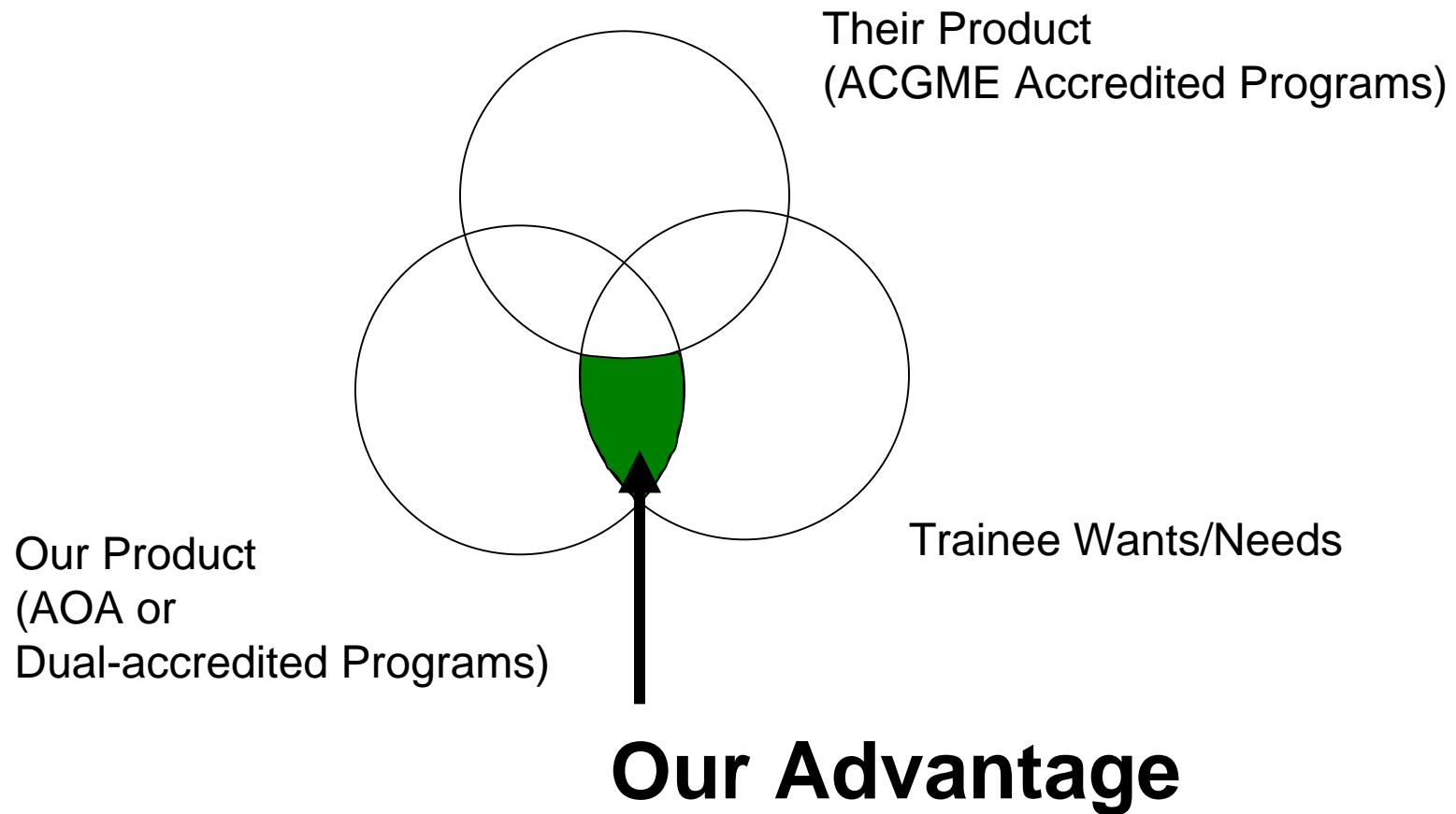
TOYOTA

“Challenge everything...”

(Kaizen)

Defining the ACOI Advantage

“The Value Added”



Why a Mastery Curriculum Project?

- Failure to plan for the future of healthcare and this profession will cause us to be reactive to change rather than allowing us to define and plan our future
- Our graduates must be better prepared than us
 - We are obligated to help them achieve such a goal
- Demands for developing and incorporating competency-based education are upon us

Why a Mastery Curriculum Project?

Learning Opportunities

- Program fill rates
 - Graduates may not select our programs because they are not perceived as being of adequate 'quality'
- What exactly is 'quality' to a medical student?
 - 'Quality' may mean a program doesn't have the learning structure that a resident desires
- What kind of learning opportunities exist for our graduates?
 - We need to incorporate as many learning preferences as possible to create a balanced curriculum perceived as having 'quality' to a diverse group of learners

Why a Mastery Curriculum Project?

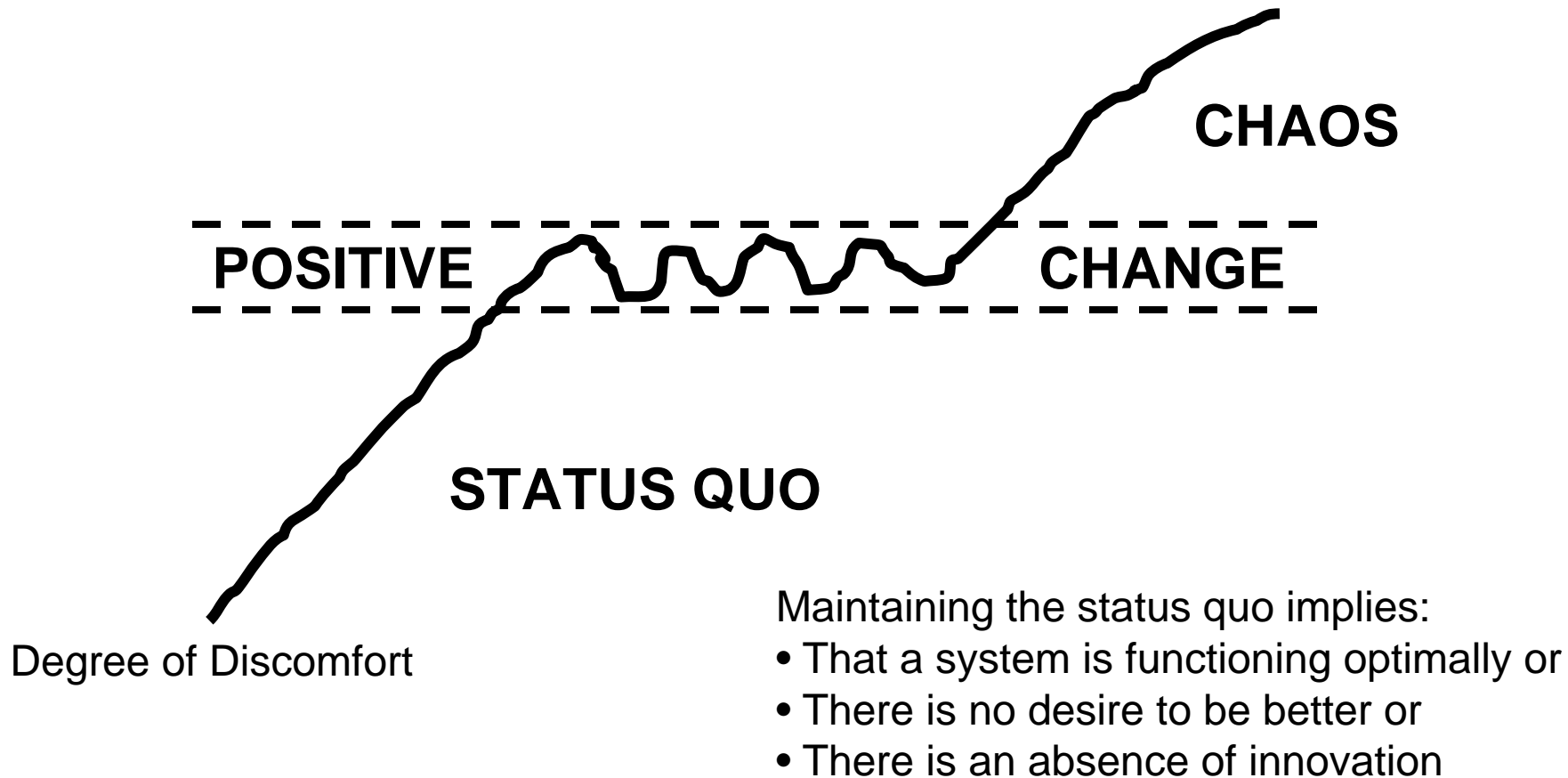
Learning Opportunities

Based upon the Myers-Briggs Type Indicator

– Learner preferences (John W. Pelley, PhD)

- Individual versus Group
- Fact versus Concept
(Lecture versus Problem solving)
- Data versus Values
(Presentation versus Interactive group)
- **Structured versus Unstructured**
(Concrete versus Experiential)

Creating Positive Change



Status Quo Bias

- The tendency not to change an established behavior unless the incentive to change is compelling
- Inaction that preserves the status quo even when changing the status quo through action is likely to lead to the best outcomes

Dangers of Status Quo



Saturn V Rocket



Nuclear Weapons

When the degree of discomfort falls, no positive change occurs. Under such conditions we can actually witness a loss of capability, often through technological drift and expert attrition

Project History

Developing the ACOI
Mastery Curriculum



2005 Congress
Concept Presentation
The Competency Quagmire
(Tucson)

Stage set for a new competency-based curriculum with introduction of the “Top 10” Mastery Education Concept during the Trainer’s Congress

Introduced the issue of maintenance of certification and the capability concept as a measurement of mastery

2006 Congress
Creating an IM
Core Competency Plan
(Stone Mountain)

Progressed from concepts to specific issues impacting the development of a new curriculum

Introduced the generational learning impact upon education and methods to use programs already in existence to promote competency-based education

2007 Congress
Bridging the Gap to Make
Competency-based
Education a Reality
(St. Petersburg)

Progressed to specific components of competency-based education and training program design/modification

Introduced strategic planning, curriculum design, portfolios, and assessment within a competency-based education environment

Clinical Practice focus group initiated through live meeting (ACOI Boston)

2008 Congress
No programming
(San Diego)

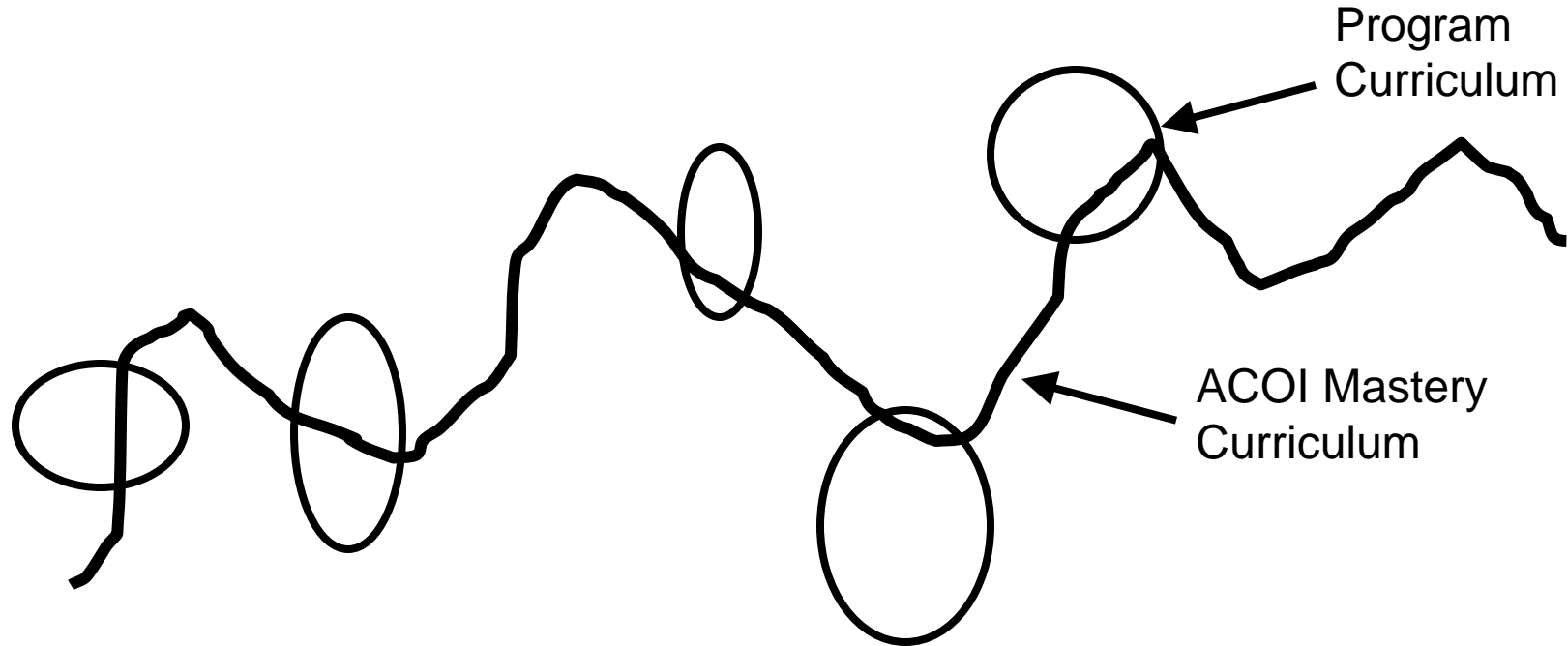
Minority Health, Women’s Health, Palliative Care and Medical Ethics focus groups initiated through conference calls and emails

2008 Marco Island
ACOI Focus Group
Curriculum Development Workshop

The ACOI Mastery Curriculum is a thread for us to weave throughout our programs, linking us more closely together, while still permitting each program to excel based upon its own strengths and approach to education

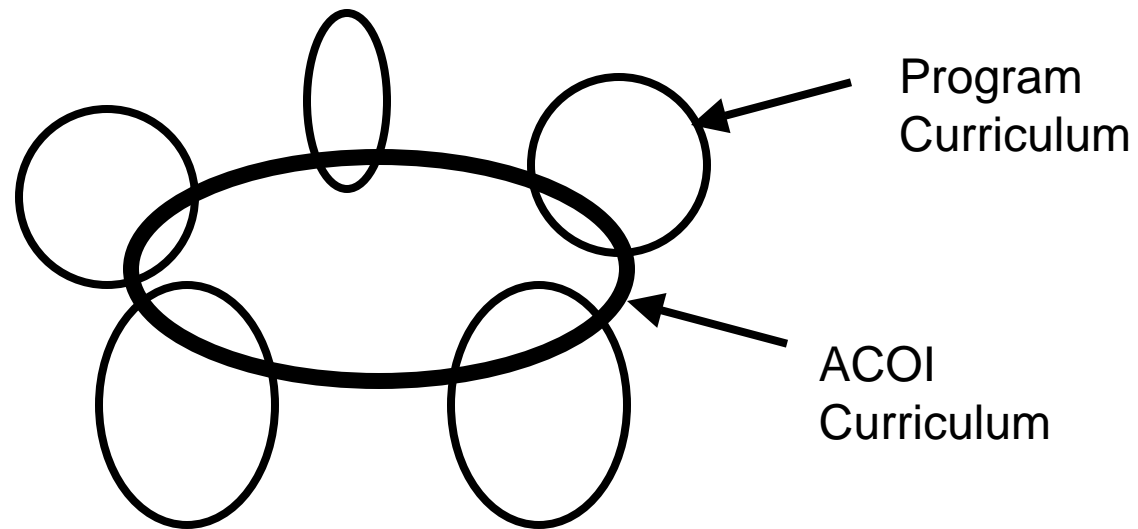
Introduced learning styles, gap analysis, and progressive learning via checkpoints

Building a Stronger Relationship



The ACOI Mastery Curriculum is a potential thread for us to weave throughout our programs

Building a Stronger Relationship



This core curriculum can link us more closely together, while still permitting each program to excel based upon its own strengths and approach to education

This link will be increasingly important with the rapid growth of the specialty, especially in new and different kinds of settings

The ACOI Mastery Curriculum

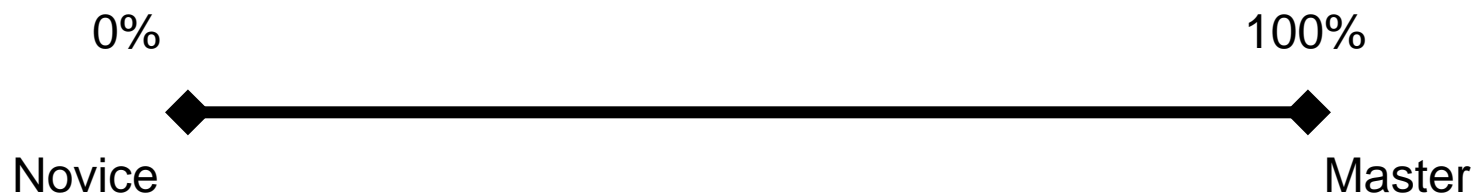
- Should serve as a lesson plan for program directors AND a learning plan for residents
 - Recommending specific goals by specific times
 - Recommending specific means of assessment
- Should provide a mechanism for
 - Monitoring trainee progress
 - Monitoring program performance
 - Promoting program quality
 - Impacting healthcare and health policy
 - Accessing funding as an organization or as programs

Do's and Don'ts for this Project

- DON'T create new programs just to teach and assess the seven competencies
 - Use what already exists whenever possible
 - Share best practices
 - Find existing modules to teach
 - Find existing assessment tools to evaluate
- DO create programs to produce a new or better product
 - Make them reasonable
 - Make the doable

Gap Analysis

- Published by Hershey Bell, MD for student/resident development within the competency domains
- Recognizes range of novice to master
 - Learner self rates on a 0-100% scale
 - Steps are identified toward achieving mastery



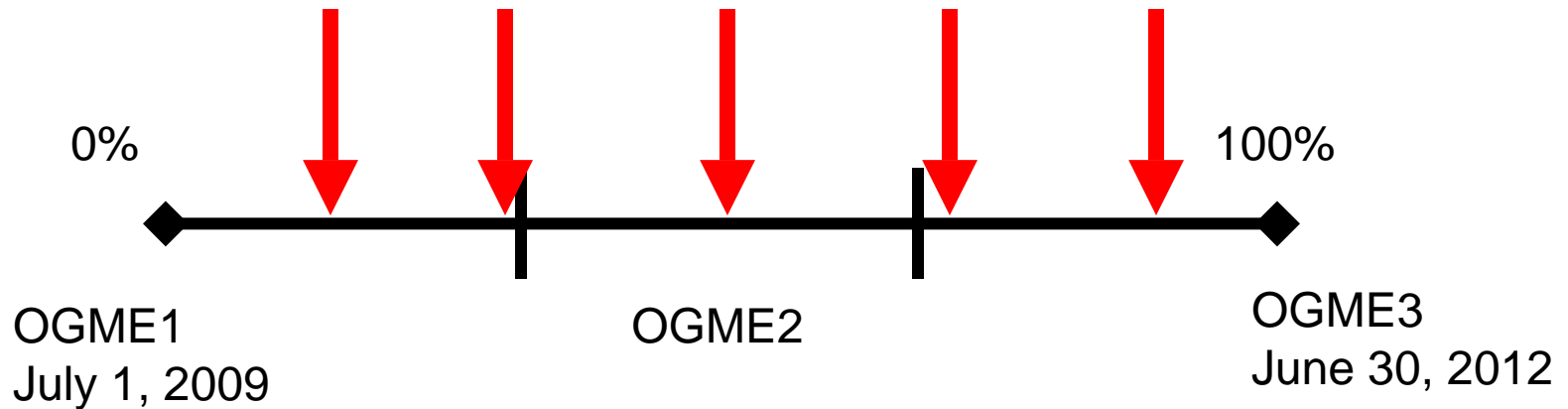
Gap Analysis

- Modified for curriculum development
 - What should the ideal new internist ‘look like’ at program completion?
 - What is necessary for a trainee to achieve this ideal status? (mastery)
 - Create ‘checkpoints’ along the path to resident mastery of a topic

Checkpoints

- Predetermined objectives created to demonstrate resident progress toward mastery of goals for practice identified by each task force or committee

Gap Analysis Approach



You do not wake up the day after medical school graduation as an internist...
You develop into an internist over three years.

What are key points (indicated by red arrows) in that development process?



Gap Analysis Approach

- The bad news
 - Very little exists to define what the ‘checkpoints’ should be
- The good news
 - Significant latitude exists for us to define the ‘checkpoints’
 - And modify them as we learn

Mastery-based Education

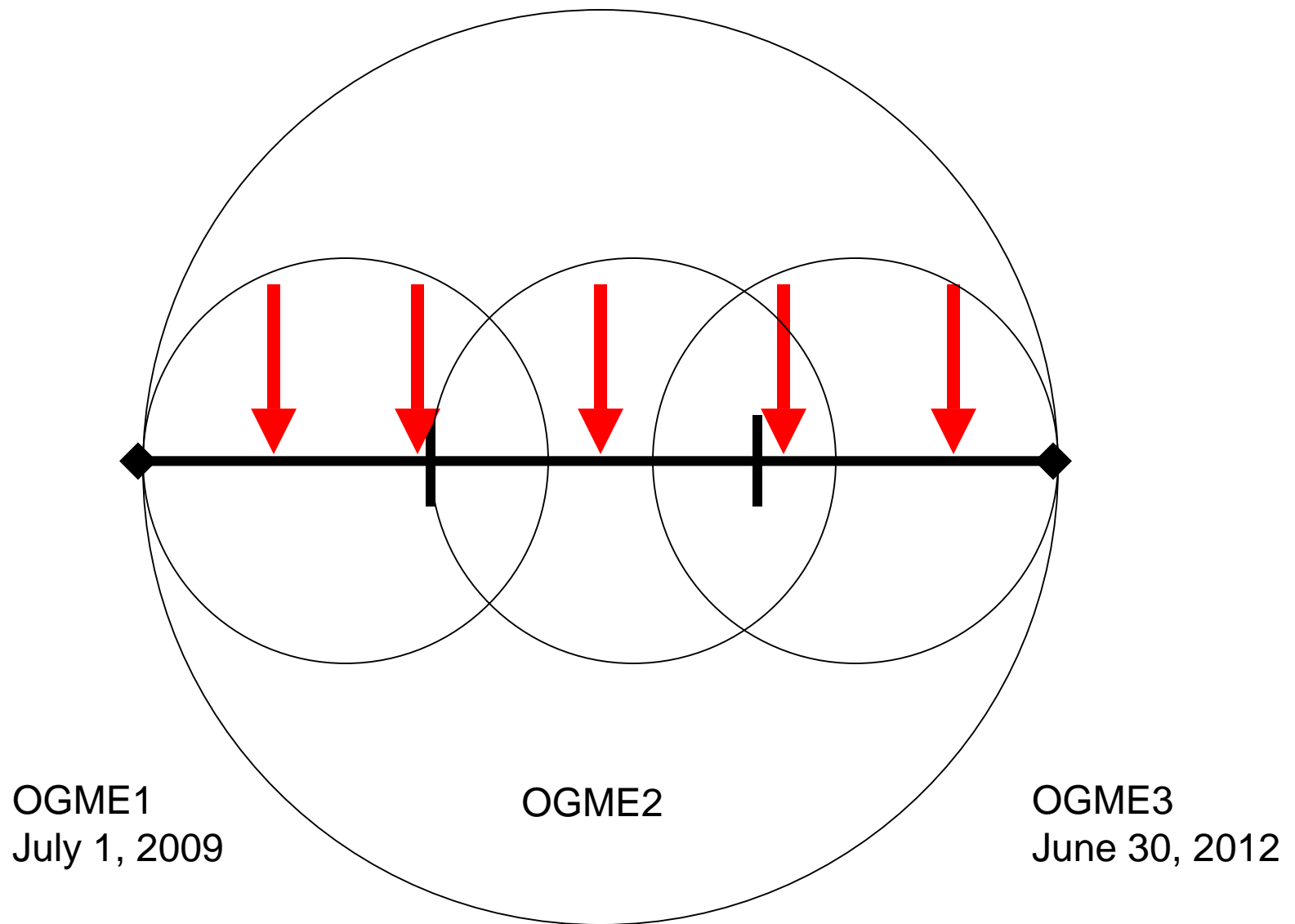
(Competency-based education)

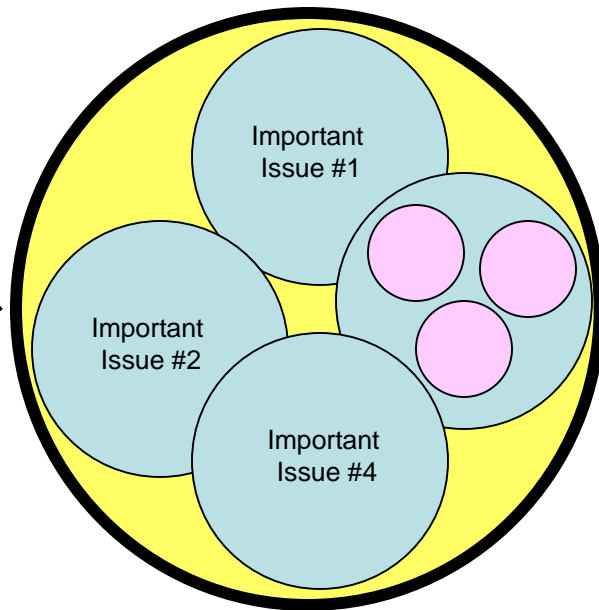
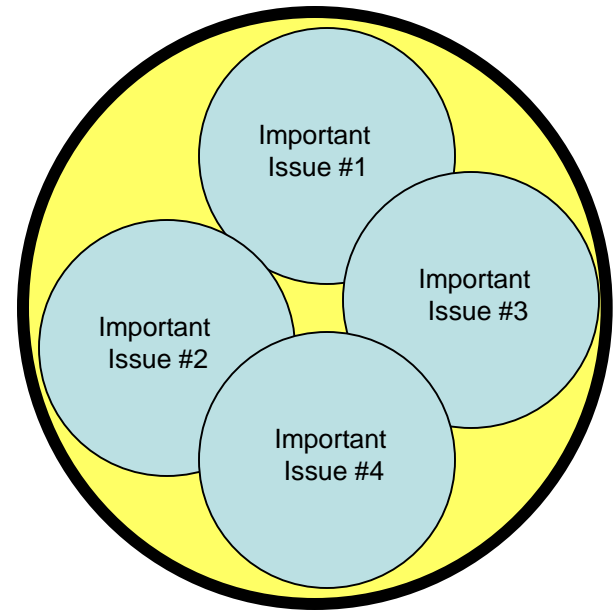
- Checkpoints
 - Tell the learner what they need to know
 - Tell them when they need to know it
 - Tell the assessor what they need to do
 - Tell the learner how they are progressing
 - Tell them if they need to focus on any areas to reach mastery

Evaluation and the Mastery Curriculum

- Meaningful use of the 4-point Likert Scale
 - 1 Fails to meet requirement
 - Unable to achieve the objective as stated at the required checkpoint
 - 2 Needs improvement
 - Partially achieves the objective as stated at the required checkpoint
 - 3 Meets requirement (Mastery)
 - Achieves the objective as stated at the time of the required checkpoint
 - 4 Exceeds requirement
 - Achieves the objective before the required checkpoint or exceeds the requirements of the objective

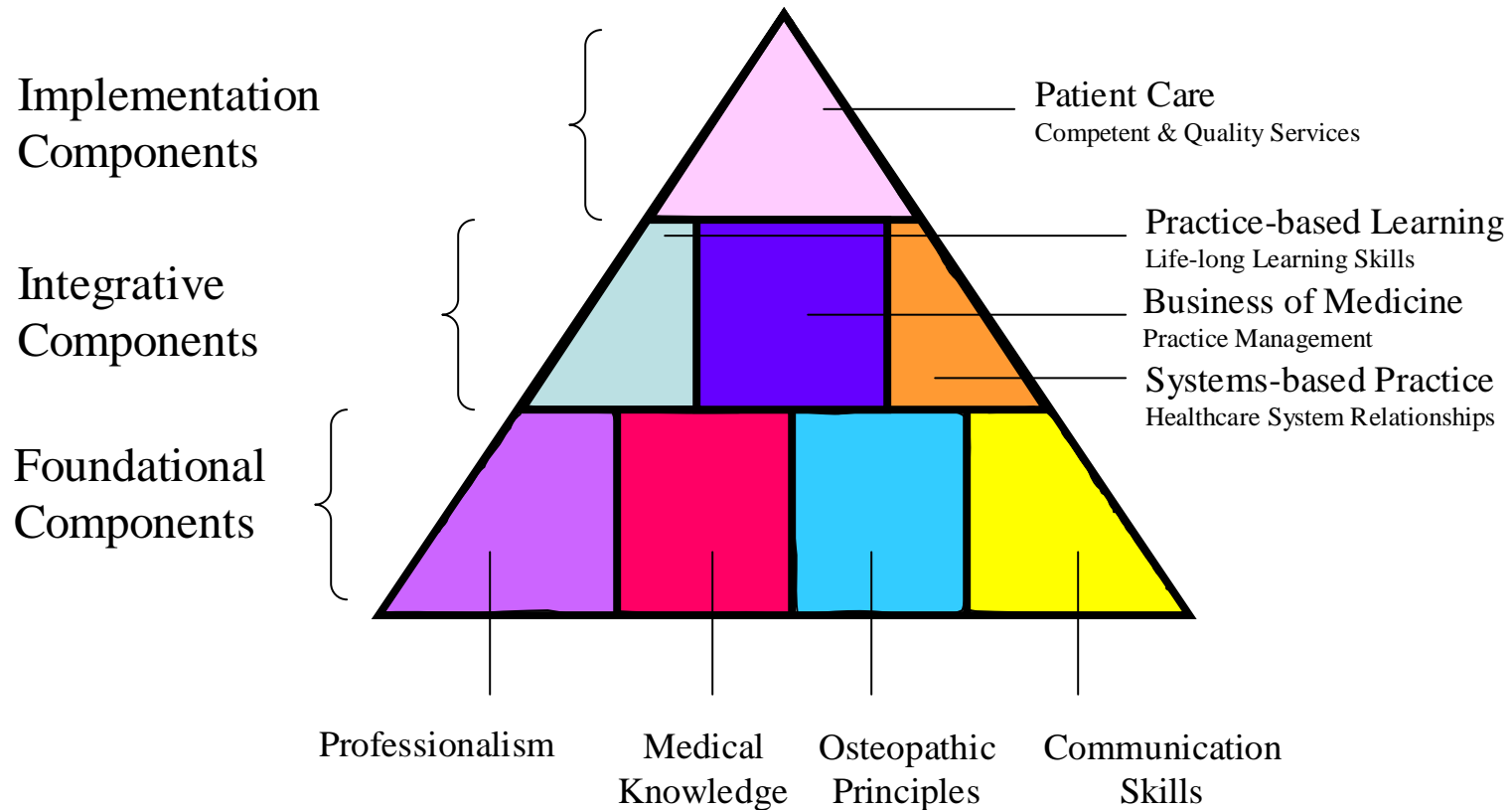
Creating Checkpoints



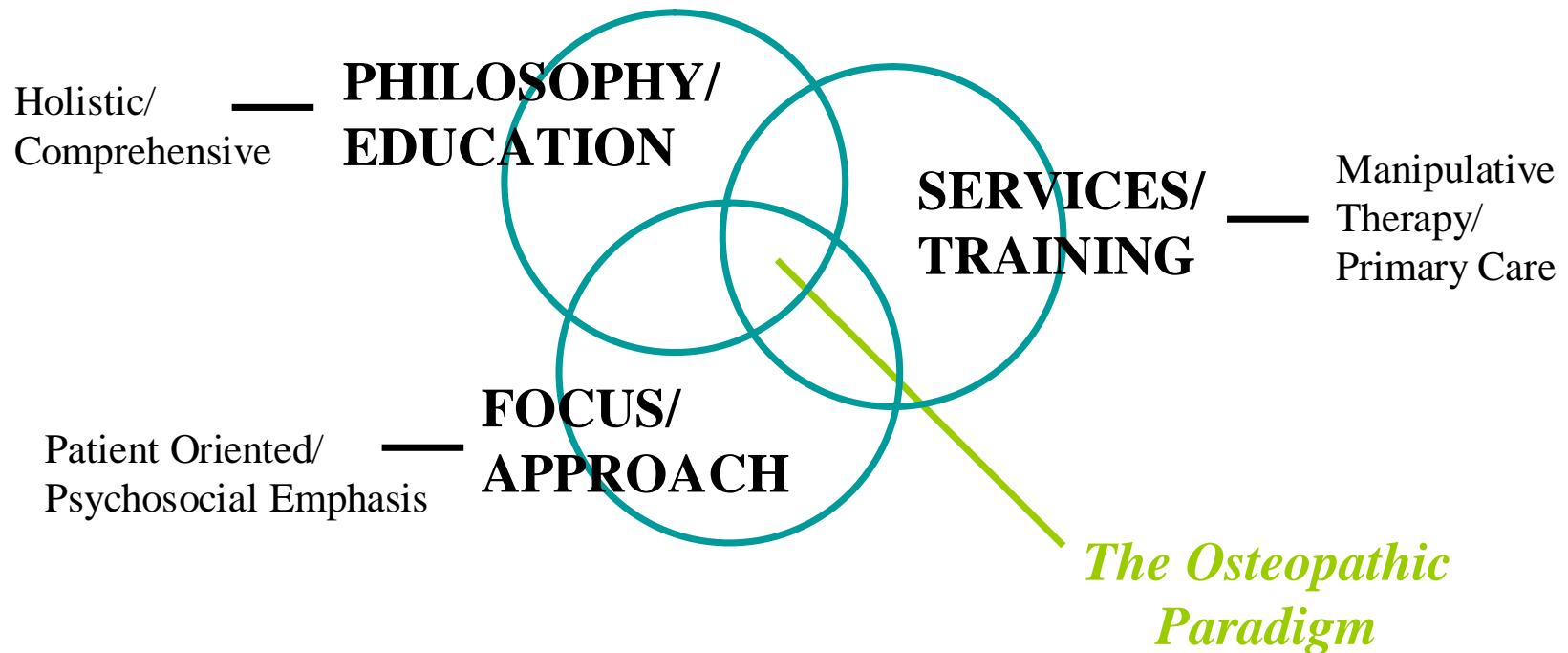


Key Aspects
Knowledge, Skills, or
Attitudes needed to
deal with the
important issues in
practice

The Competency Pyramid



Think the D.O. Difference



Summary

Steps Toward Creating the Curriculum

- CORE ELEMENTS are identified as a group
 - These are ‘big picture’ topics or major issues within the charge of the task force
 - They are poorly measurable
- KEY ASPECTS are identified within each CORE ELEMENT as a group
 - These are important and specific components of the CORE ELEMENTS representing goals for knowledge attainment, skill development, or attitudinal growth
 - They are potentially measurable
- At least one OBJECTIVE is associated with each KEY ASPECT by individuals
 - These are clearly stated desirable outcomes
 - They are measurable
- A CHECKPOINT is assigned to each objective by individuals
 - These determine at what point in training assessment should occur
- The final steps are completed as individuals
 - How best to measure mastery (what tool is required)
 - Identifying or creating a repository of resources for programs to use for teaching

Focus Groups

- Special Interests
 - Clinical Practice
 - SBP, PBL competencies
 - Medical Ethics
 - P competency
 - Minority Health
 - C, PC, SBP competencies
 - Women's Health
 - MK, PC, SBP, PBL competencies
 - Palliative Care
 - MK, PC, C, P, SBP, PBL competencies
- Disease Management
 - Top 10 Acute Conditions
 - All competencies
 - Top 10 Chronic Conditions
 - All competencies
- Medical Procedures (?)
 - Top 10 procedures
- Specialties (?)

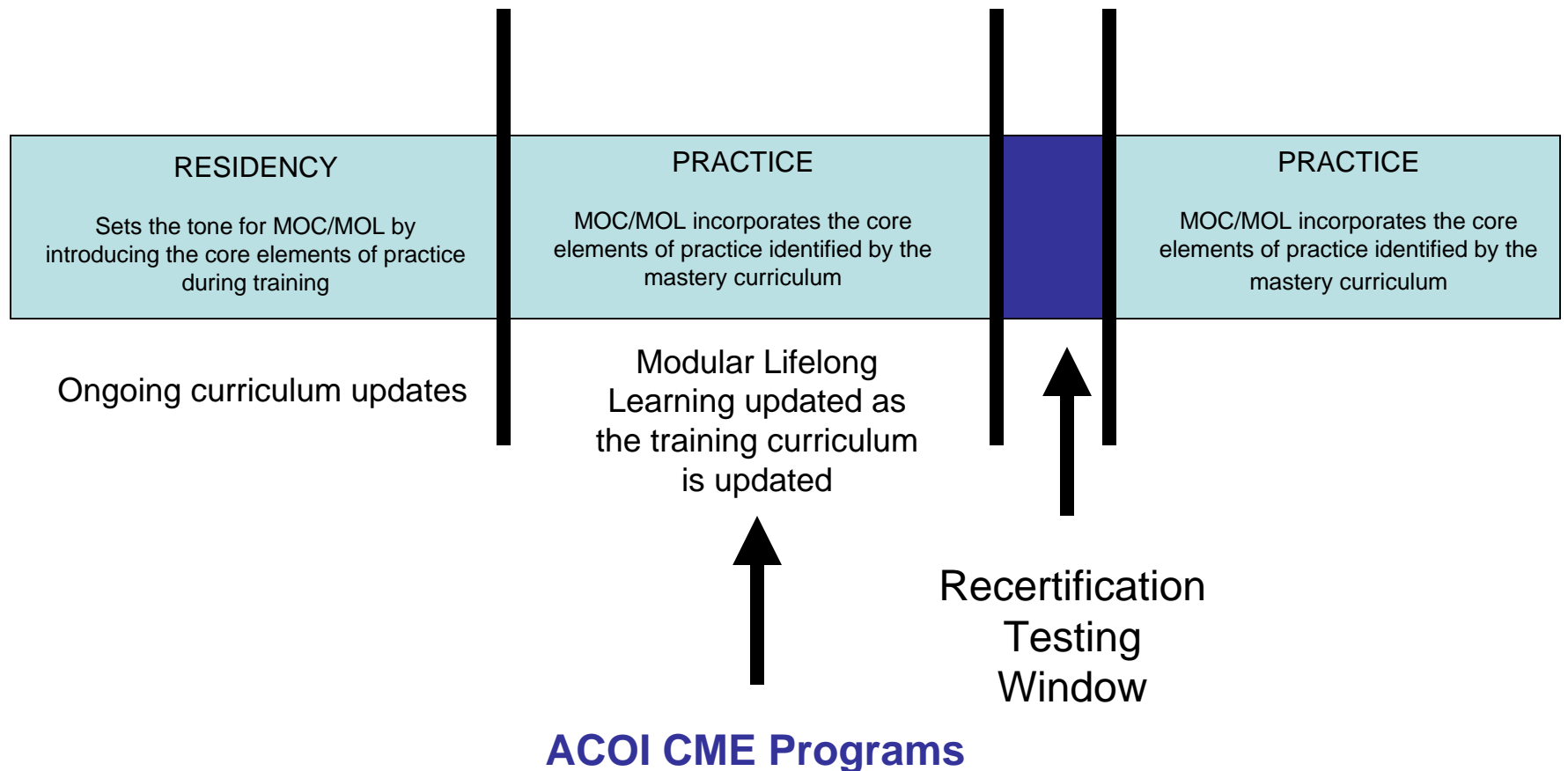
Progress Report

(subjective status)

Focus Group	Projected Completion*
Clinical Practice	2/1/2010
Minority Health	5/1/2009
Women's Health	2/1/2010
Medical Ethics	5/1/2010
Palliative Care	9/1/2009
Common Acute Conditions	5/1/2011
Common Chronic Conditions	5/1/2011
Medical Procedures	2/1/2012

*for vetting by the Council on Education and Evaluation-additional refinement needed

Relationship of the ACOI Mastery Curriculum to Maintenance of Licensure/Maintenance of Certification



Future Needs

- Financial
 - Grant source(s) and submission(s) for funding
 - Development of a realistic project budget
- Operational
 - Curriculum retreat to train facilitators for each condition specific workgroup within the disease management focus groups
 - Semi-annual live meetings with focus groups/workgroups
 - Semi-annual videoconference/teleconference with focus groups/workgroups
 - As needed conference calls and email communications
 - Consideration to the needs of combined programs (IM-EM)
- Resource
 - Faculty development support
 - PhD educators to review and refine focus group/workgroup documents
 - Development of objectives and assessment tools

The Toyota Production Model

“Lean Production”

Application of TPM to Graduate Medical Education:

- Examine education as a process across systems
- Eliminate waste from the system

- | | |
|-------------------------------|------------------------------|
| 1) Overproduction | • Trainer-centered education |
| 2) Waiting | • Time-based training |
| 3) Conveyance | • Training fragmentation |
| 4) Overprocessing | • Poorly defined outcomes |
| 5) Excess inventory | • Service-driven operations |
| 6) Unnecessary movement | • Non-value added activities |
| 7) Defects | • Poor feedback/evaluation |
| 8) Unused employee creativity | • Status quo bias |