Becoming a Medical Specialist and a Lifelong Learner:
Residency, Fellowship, and Continuing Medical Education

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UCSF Osher Mini Medical School for the Public
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Topics for Tonight

- **Graduate Medical Education (GME)**
  - **Residents**
  - **Fellows**
  - **Advanced fellows (not yet formally accredited)**

- **Lifelong Learning**
  - **Continuing Medical Education (CME)**
  - **Maintenance of Certification (MOC)**

What is Postgraduate Training?
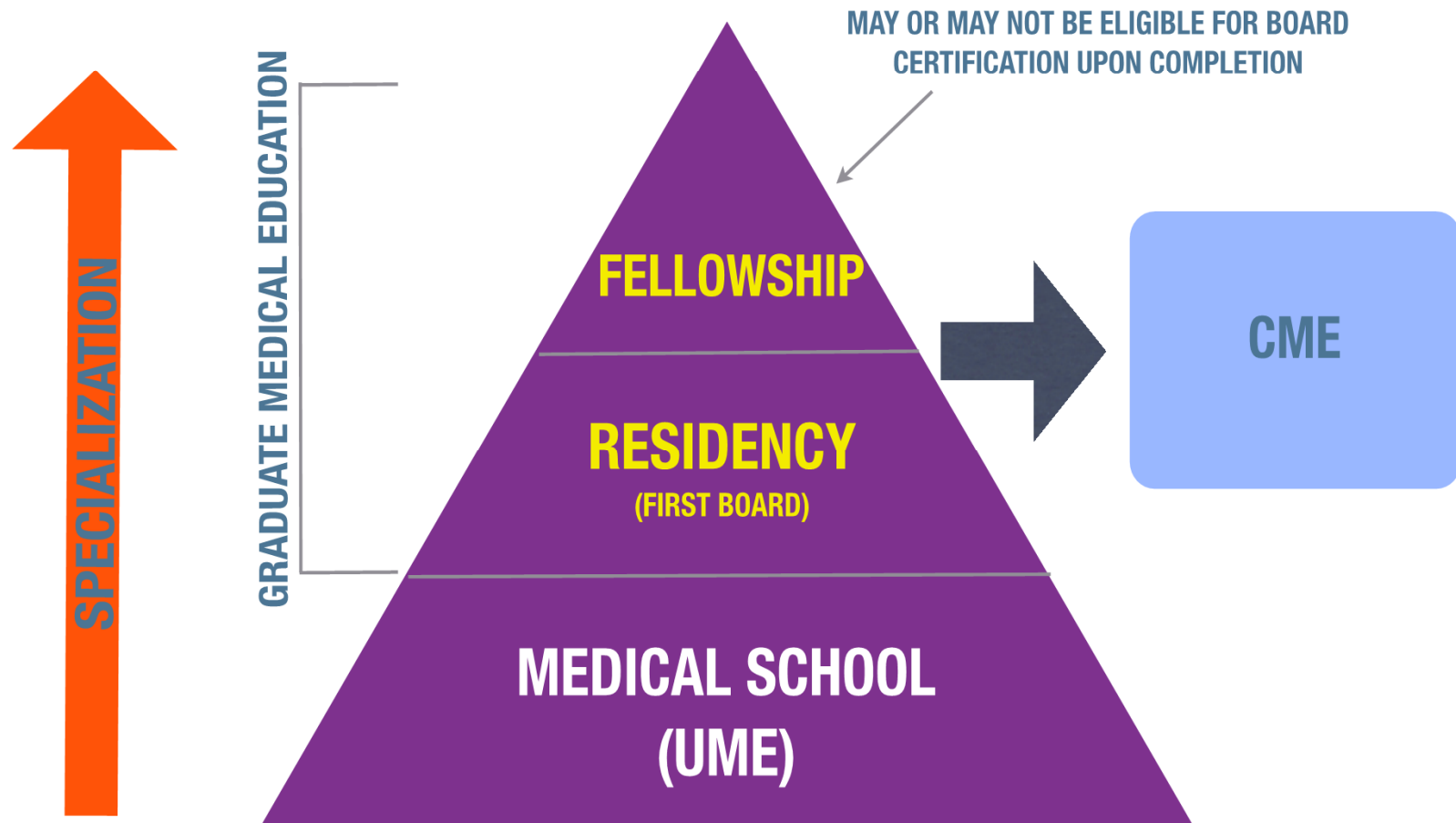
Specialties of Medicine

- Allergy & Immunology
- Anesthesiology
- Colon and Rectal Surgery
- Dermatology
- Emergency Medicine
- Family Medicine
- Internal Medicine
- Medical Genetics and Genomics
- Neurological Surgery
- Nuclear Medicine
- Obstetrics & Gynecology
- Ophthalmology
- Orthopaedic Surgery
- Otolaryngology

- Pathology
- Pediatrics
- Physical Medicine & Rehabilitation
- Preventive Medicine
- Plastic Surgery
- Preventive Medicine
- Psychiatry & Neurology
- Radiology (includes Radiation Oncology)
- Surgery
- Thoracic Surgery
- Urology

Specialties and Subspecialties of Medicine

Residency Programs	Fellowship Programs
Internal Medicine	Cardiology Rheumatology Hematology/Oncology
Pediatrics	Pediatric Critical Care Pediatric Nephrology General Pediatrics
Radiology	Abdominal Imaging Cross-Sectional Imaging Pediatric Radiology
Ophthalmology	Uveitis Retina Glaucoma
Neurological Surgery	Functional Neurosurgery Spine

What is a Resident or Fellow?

- **Med School Graduate**
- **Doctor (Medical License)**
- **Care Provider**
- **Team Member**
- **Learner**
- **Scholar**
- **Teacher**
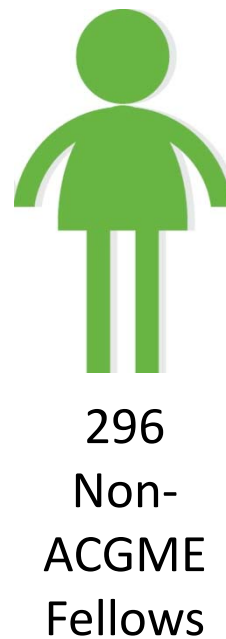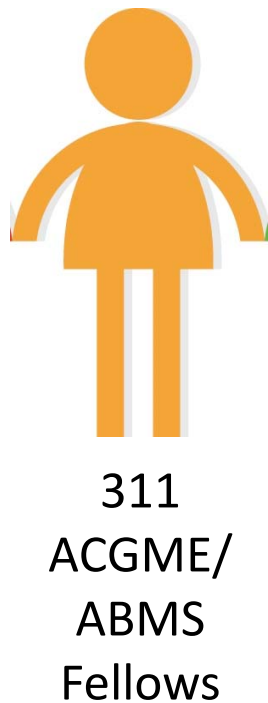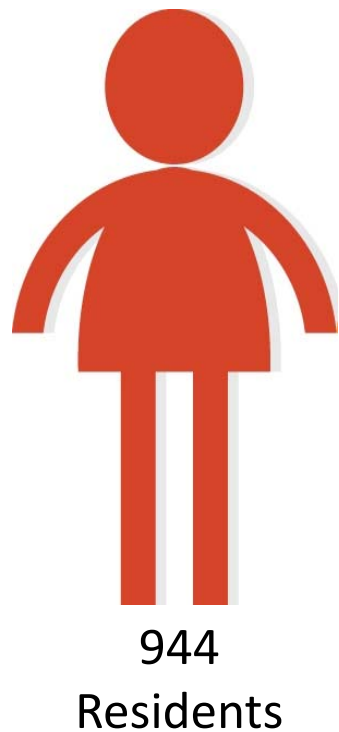- **Patient Advocate**
- **Community Advocate**

Education versus Service

Supervision versus Autonomy

2017-2018
UCSF Residents and Fellows

944 Residents

311 ACGME/ ABMS Fellows

296 Non-ACGME Fellows

▲ 27 Residencies

▲ 63 ACGME/ABMS Fellowships

▲ 93 Non-ACGME Fellowships

Oversight and Quality: ACGME and UCSF

- Requirements
  1. Institutional
  2. Common Program
  3. Program
- Review Committees
  - Length of training
  - How many trainees
  - What they have to learn
  - How they have to learn
  - Program personnel
  - Well-being
  - Evaluation and assessment
  - How is the program doing

Sponsoring Institution
Designated Institutional Official
Rotations and Sites
Faculty
Work Hours
Learning Environment

ACGME

Accreditation Council for Graduate Medical Education

Continuous Improvement

The "Next Accreditation System"

"Continuous"
Observations

Promote Innovation

Assure Improvement has
Occurred and is Sustained

Identify Areas
for Improvement

Assess and address the
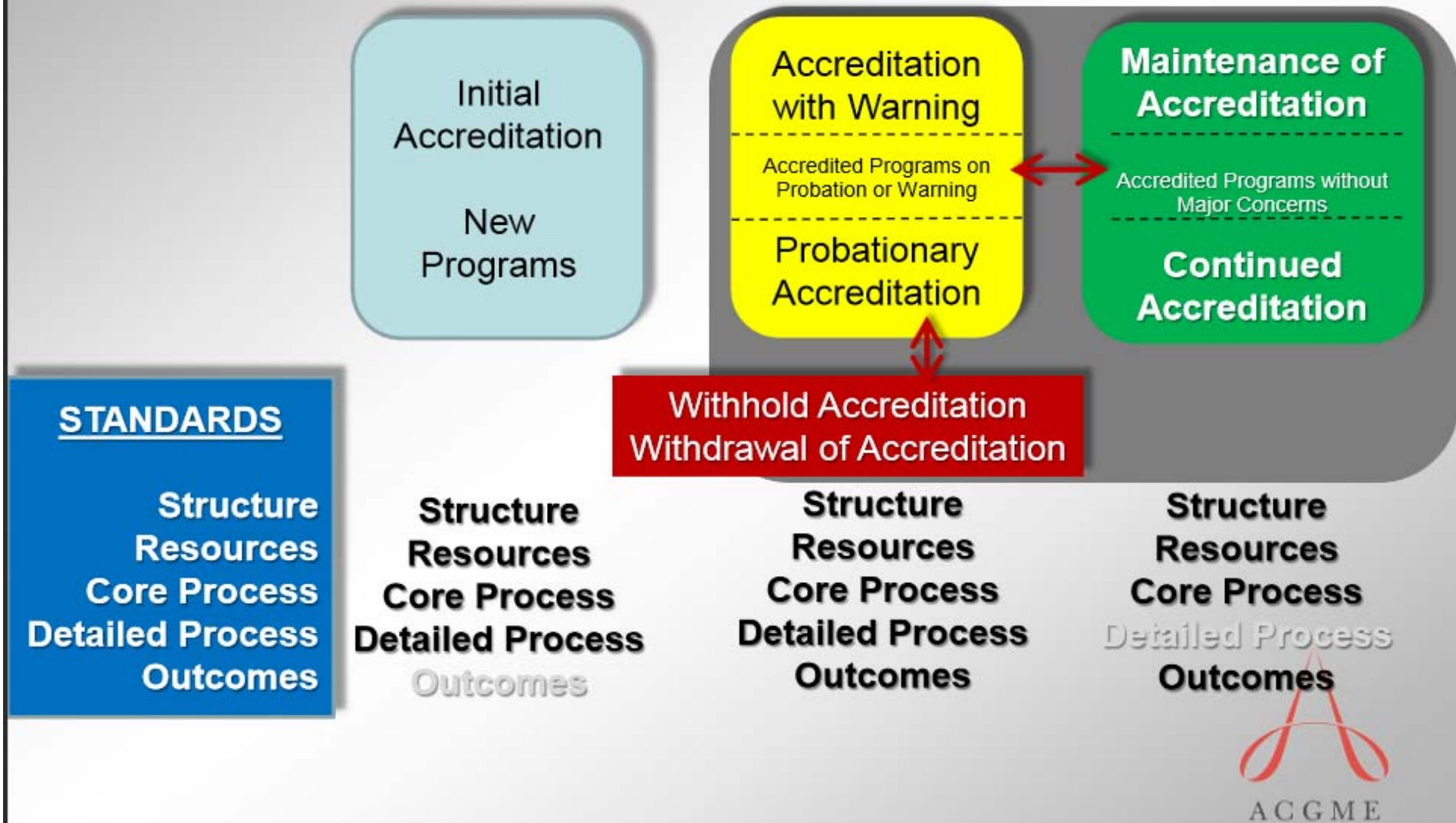reasons for the areas needing improvement

(Diagnosis and Treatment)

ACGME

The Building Blocks of the ACGME Accreditation System

Program Self Study Visits – 10 years

Institutional Self Study Visits– 10 years

Additional Site Visits as Needed

Continuous RRC Oversight and Accreditation Core Program Oversight of Subspecialties Sponsor Oversight for All

Clinical Learning Environment Review (CLER) Visits every 18 months

Outcome Data for Annual Review

- **Program attrition**
- **Program changes**
- **Scholarly activity (faculty and trainees)**
- **Board pass rate (from Boards)**
- **Clinical experience (case logs, survey data)**
- **Resident survey**
- **Faculty survey**
- **Milestone reporting**

Categories of Accreditation

Initial Accreditation

New Programs

Accreditation with Warning

Accredited Programs on Probation or Warning

Probationary Accreditation

Maintenance of Accreditation

Accredited Programs without Major Concerns

Continued Accreditation

Withhold Accreditation
Withdrawal of Accreditation

STANDARDS

Structure
Resources
Core Process
Detailed Process
Outcomes

Structure
Resources
Core Process
Detailed Process
Outcomes

Structure
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Core Process
Detailed Process
Outcomes

Structure
Resources
Core Process
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Outcomes

ACGME

GME Principles

- **Excellence in quality of care of today's patients**
- **Excellence in quality of care of patients cared for by today's residents in the future**
- **Excellence in professionalism through faculty modeling:**
  - **Effacement of self-interest in a humanistic environment**
  - **Joy of curiosity, problem-solving, intellectual rigor, discovery**
- **Commitment to well-being of residents, faculty, students and all members of health care team**

Primary Drivers

Align the organization's strategic priorities and GME strategic priorities.

Establish the processes and practices that fully integrate CLE staff and learners into the pursuit of quality, safety, equity, and value in the organization.
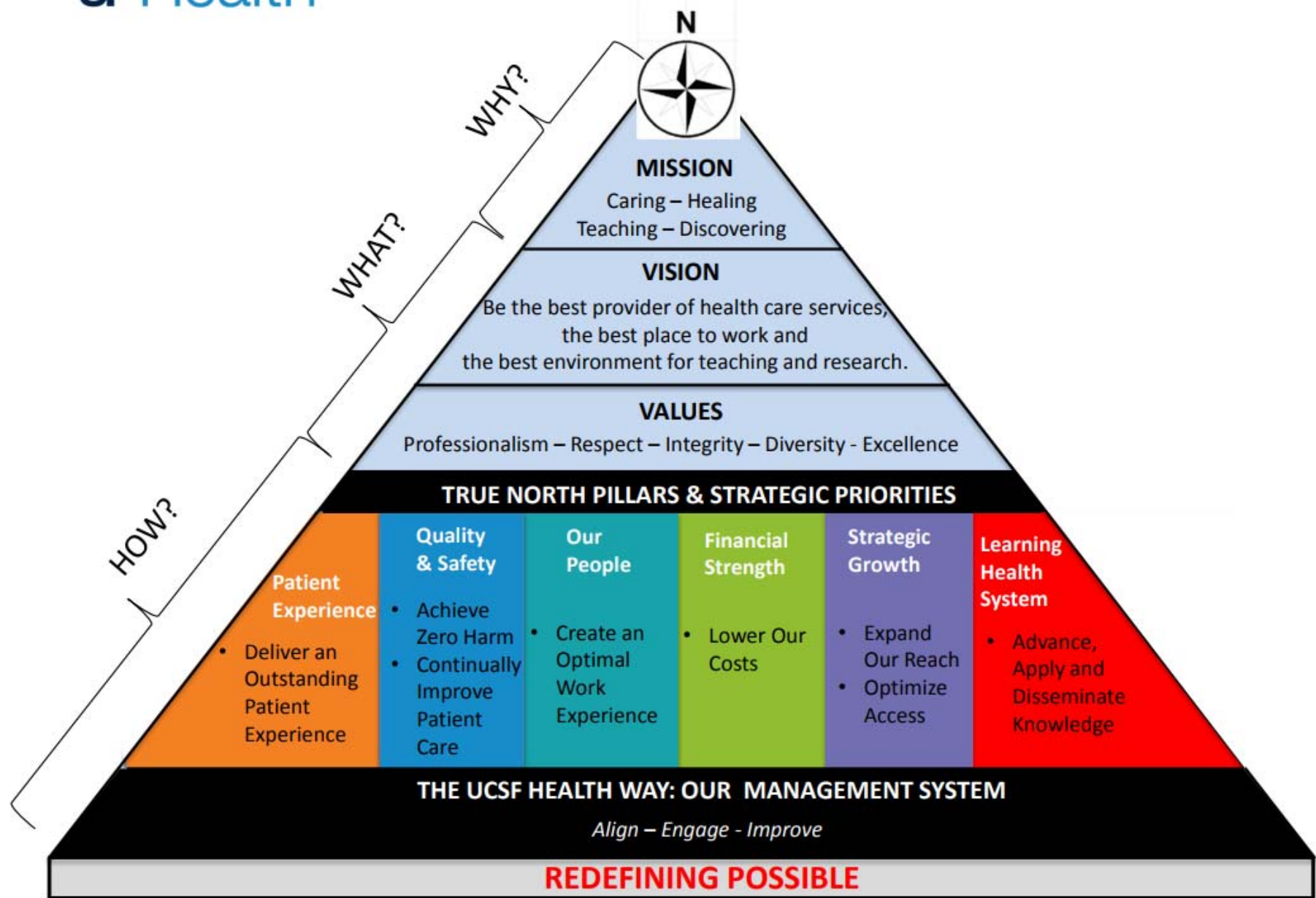
Create qualified, engaged, and motivated educators capable of practicing, teaching, and assessing quality, safety, equity, and value to residents.

Maximize shared learning with coordinated educational resources across health professions.

Financing Graduate Medical Education

- Mostly from Medicare Trust Fund
- Institution sends reports to Medicare
- Each clinical site contributes
- Must be paid at all times (no volunteering)
- Other funding:
  - State appropriated
  - Grants
  - Department funds
  - Other funds
  - Military
- All funds processed through UCSF School of Medicine (except military)

Continuing Medical Education (CME)

- CME is for practicing health care providers, designed to support and improve:
  - Medical Knowledge
  - Patient Care and Procedural Skills
  - Practice-based Learning and Improvement
  - Communication
  - Professionalism
  - Systems-based Practice
  - Technology Skills

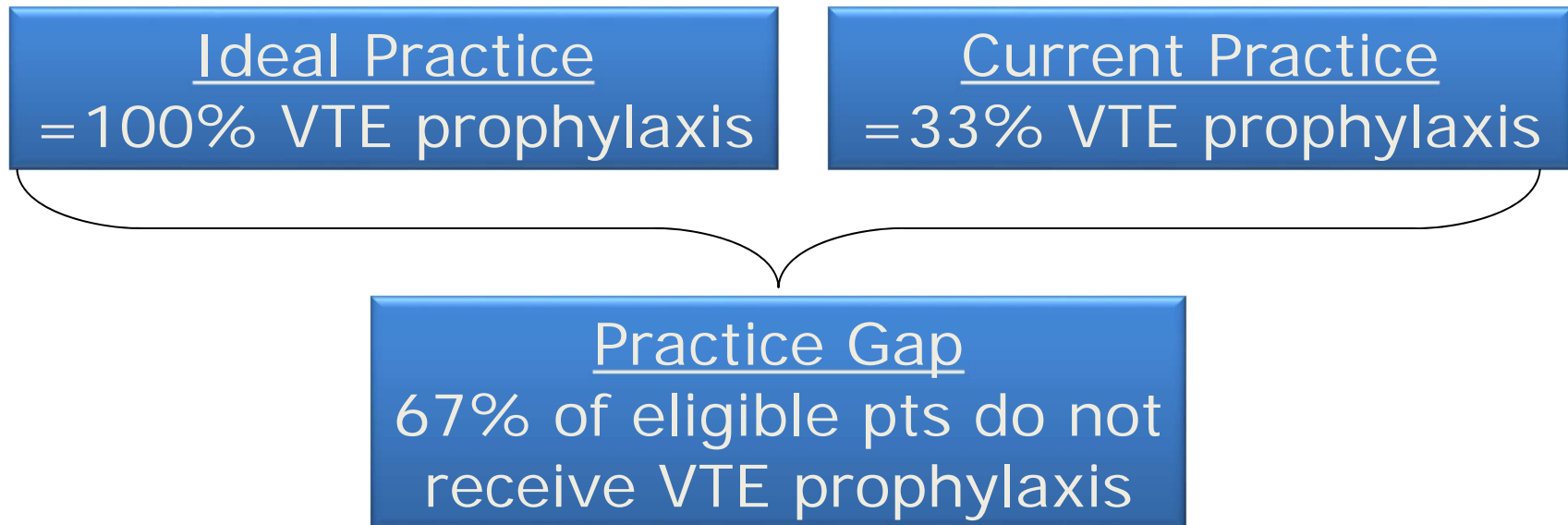# Continuing Medical Education (CME)

- >790 Accredited CME providers in the US
  - 132 are medical schools
- Accredited by the Accreditation of Council of CME (ACCME)
- CME credits are required to maintain licensure

Continuing Medical Education (CME)

- Valid continuing education credit for other professions
- Purpose is to improve knowledge, competence, performance and patient outcomes through unbiased education and training
- CME is one part of Continuous Professional Development (CPD)

CME Design: CME Fills a Gap

- **Practice gap is the result of an educational or practice need:**
  - **Knowing something**
  - **Knowing HOW to do something**
  - **Actually doing something**

Ideal Practice =100% VTE prophylaxis	Current Practice =33% VTE prophylaxis

Practice Gap
67% of eligible pts do not receive VTE prophylaxis

CME Design: Avoiding Bias

- Education without influence of commercial interests.

- Disclosure of financial relationships from anyone in control of content.

- Financial relationship with a company that produces goods or services related to the education = conflict of interest.

- Conflicts must be resolved or eliminated.

- Education must be evidence-based, scientifically rigorous, within accepted practice, and without commercial bias.

CME Design: How Does it Work?

- Identify a gap and determine the need (knowledge, competence or performance). *What is it providers are not doing?*

- Determine the expected outcomes of education. *What is it providers ought to be doing?*

- Plan an activity to deliver the knowledge, strategies and skills to meet the need and fill the gap.

# CME Design: Target Audience
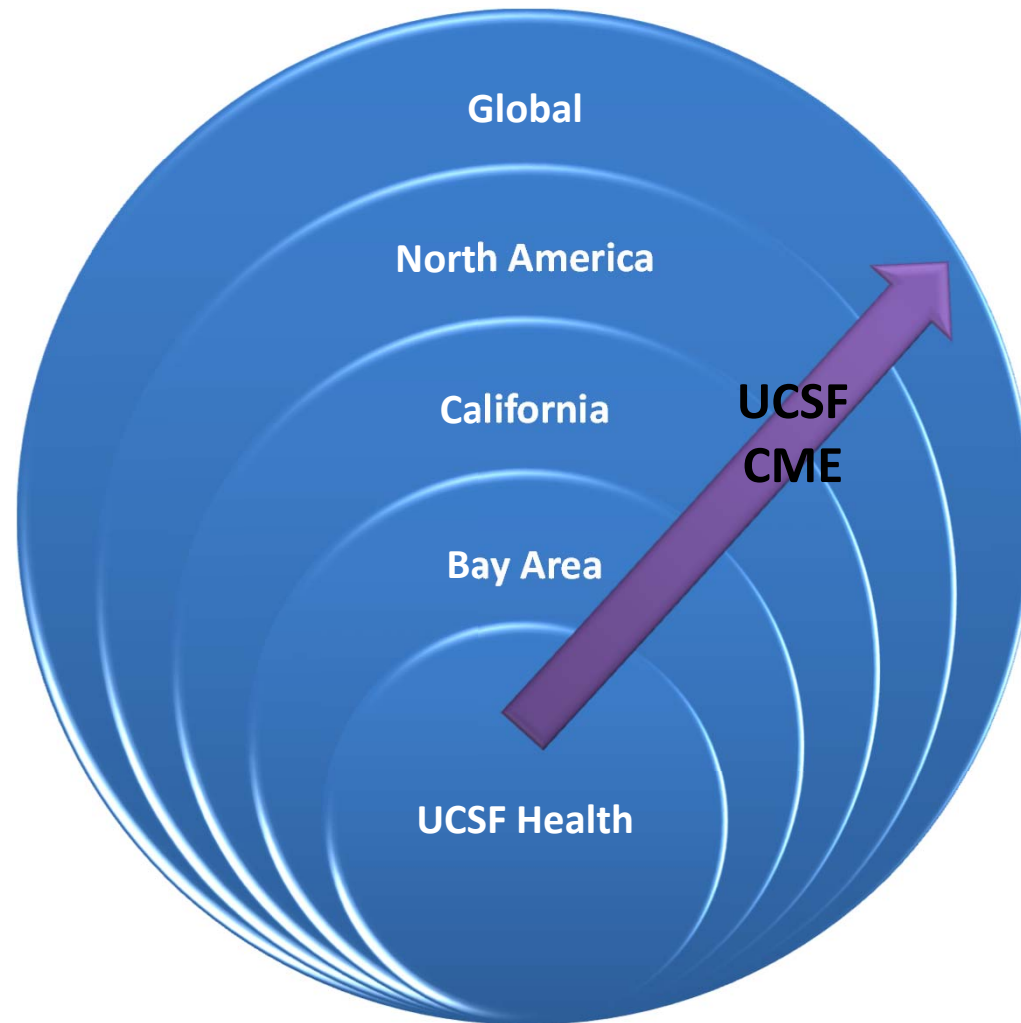
CME Design: How Does it Work?

- **Make a plan to evaluate the effectiveness.**
- **Revise and repeat, if necessary.**
- **Peer review to ensure elements are satisfactory and meeting UCSF's mission for continuing education.**

CME Design: Ensuring Independence

- **Obtain financial relationships.**
  - **Disclosure form**
  - **Verbal/email dialogue**
- **Identify conflicts of interest.**
  - **Products/services of company related to content = Conflict of interest**
- **Mitigate, or resolve, conflicts of interest.**
  - **Content validation**
  - **Consultation to avoid bias and treatment recommendations**
  - **Peer review**
- **Monitor perceptions of bias through evaluation.**

CME Design: Evaluation

- **Educational activity assessed for impact on improving strategies, skills, performance or patient outcomes.**
  - **Surveys**
  - **Post-tests**
  - **Case Vignettes**
  - **Direct observation**
  - **Patient charts, registries**
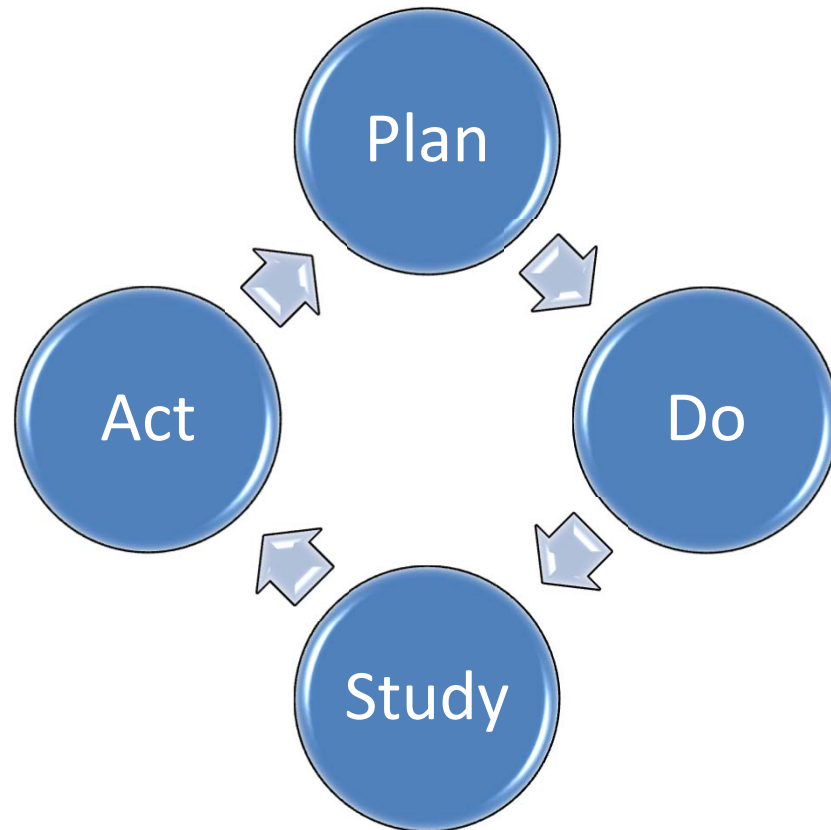- **Assessment level is based on Moore's Pyramid for CME Outcomes**
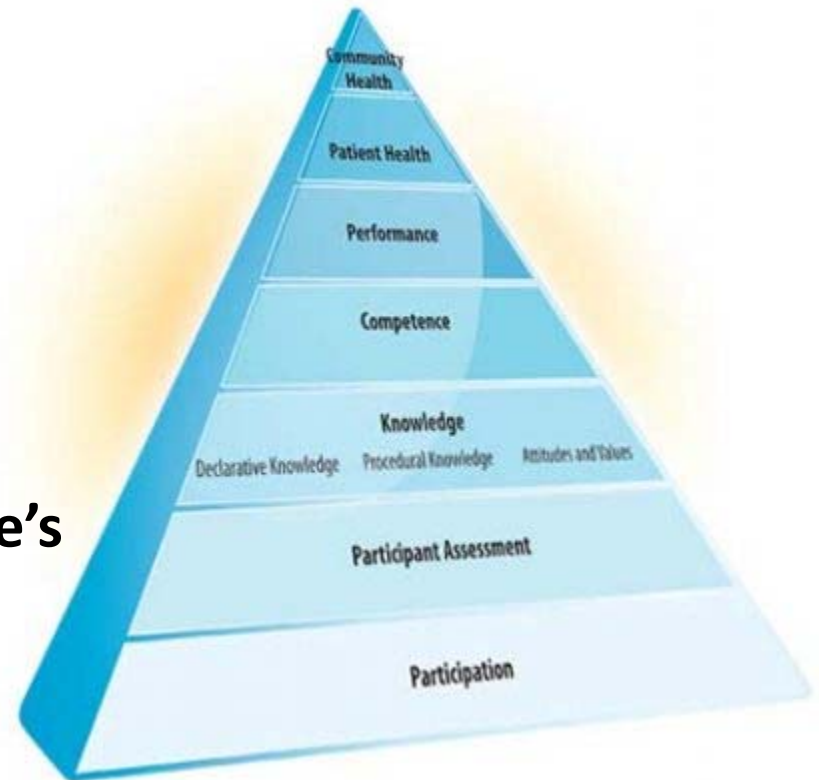
CME Delivery: UCSF

- **Courses, conference, symposia (in-person) – 90/year**
- **Webinars, streaming video, streaming audio (online, on-demand) – 45/year**
- **Grand rounds, M&M conferences, tumor boards, monthly webinars – 60/year**
- **Adjunct activities include non-accredited activities.**
- **Patient and community education to better inform healthcare consumers and integrate shared decision-making**
- **Quality Improvement projects.**

Maintenance of Certification (MOC)

MOC Component	Commonly known as….
Part I: Professionalism and Professional Standing	State Licensure
Part II: Lifelong Learning and Self-Assessment	CME and Self-Assessment
Part III: Assessment of Knowledge, Judgment, and Skills	Pass a written examination
Part IV: Improvement in Medical Practice	Engage in ongoing assessment and improvement activities to improve patient outcomes

Continuous Professional Development Leads to Healthcare Improvements

UCSF