# Update on Clinical Informatics Subspecialty

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**THE YEAR-IN-REVIEW**
**ABPM 2016**

# AMIA activities

- Quarterly in-person meetings with ABPM and ABMS officials
  - Concern regarding updates to the core content
  - MOC activities (applications for novel approaches)
  - Coordination with other certification and accreditation activities
    - ACGME (graduate medical education)
    - CAHIIM (MS health informatics programs)
    - AHIC (advance health informatics certification)
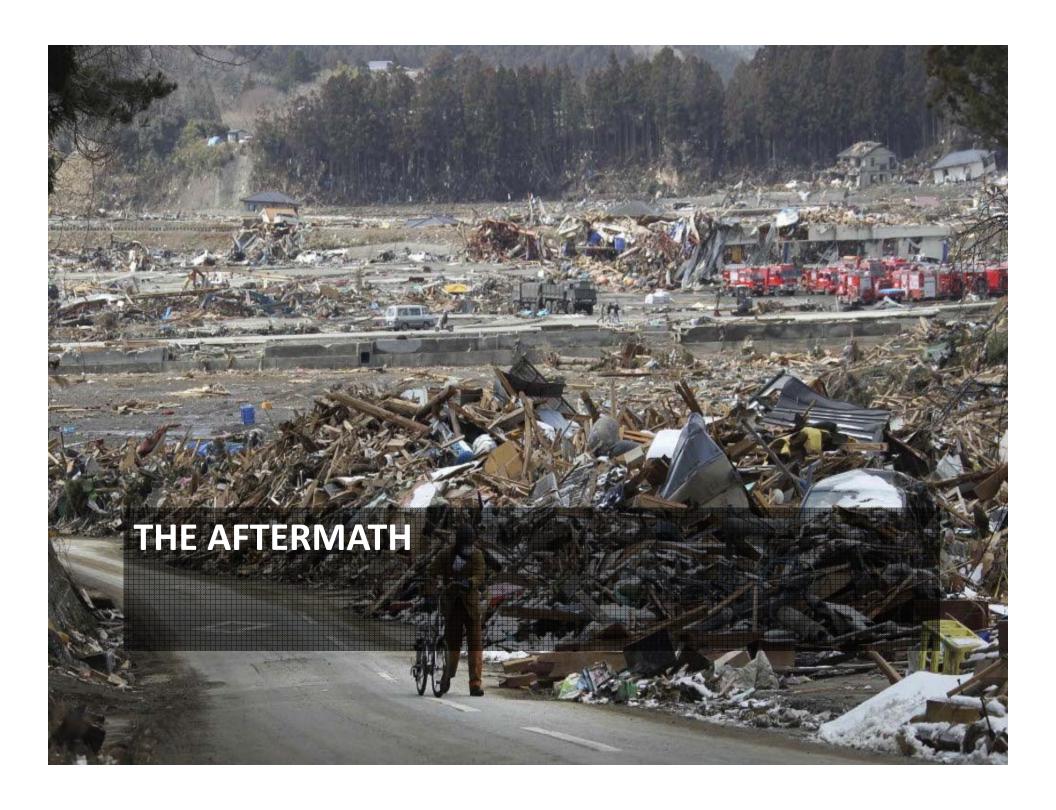
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**THE FALL 2016 EXAM**

# Complete quality breakdown

- Wrong examination (a non-approved, draft examination) uploaded to Pearsons
- Stem without questions
- Typos
- Questions without correct answers

- ABPM had not scaled its processes appropriately to meet the demand of the CI board or the addiction medicine board

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THE AFTERMATH

# ABPM 2017

- Executive Director resigned

- Interim director: Ben Munger

- Change from Pearson's to USMLE provider for examination

- Realized:
  - No communication of AMIA concerns to the ABPM board
  - No internal quality controls or communications
  - Governance without appropriate clinical informatics input

THE NEW ORDER

# ABPM 2017

- Spring examination without complaints

- ABMS is monitoring

- Ongoing conversations with ABPM and AMIA (monthly and sometimes more)

  - Increased communication with AMIA and ABPM ED and board

  - Integration of ABPM board into plans for core content and program requirement updates

- Update to core content (driven by best practices and work analysis)

**THE SURVEY**

# AHIC Workforce Survey Strategies

- Survey entire informatics workforce (added bonus=opportunity to engage everyone in informatics rather than create sense of being left out again)

- Constant/creative messaging to AMIA members

- Work with other organizations

- Incentive

- Took broad approach to who is doing informatics and asked people to describe what they do
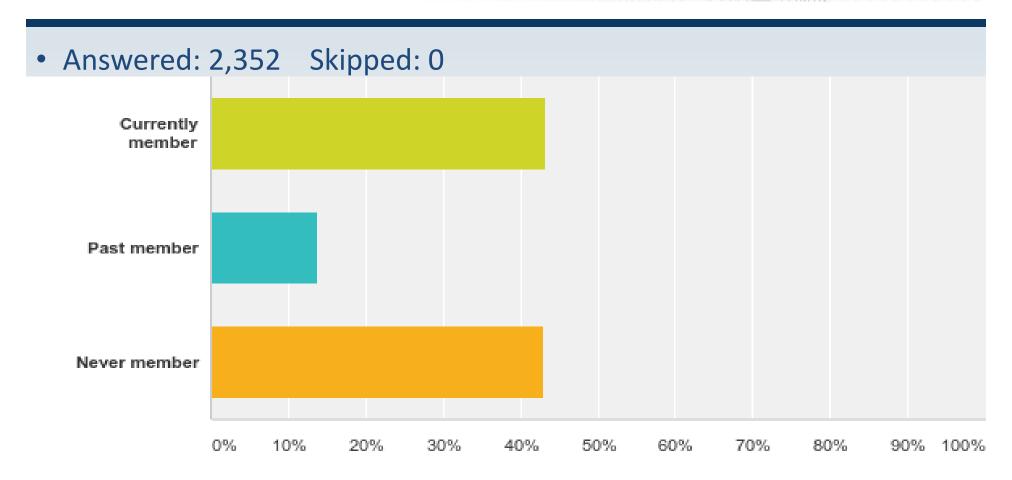
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# Informatics Workforce Survey Preliminary Results

- >2300 completed surveys with broad representation
- What does the sample look like?
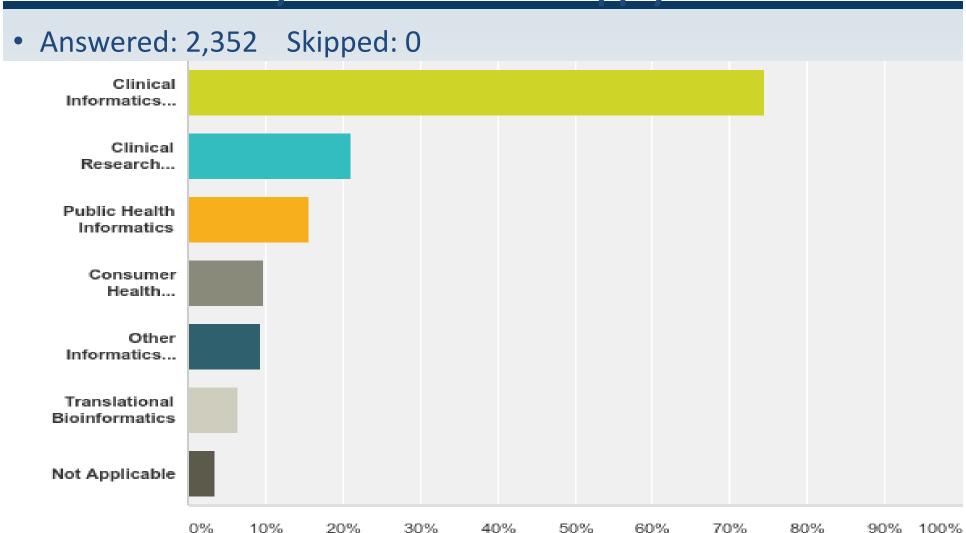- All results reported here are preliminary

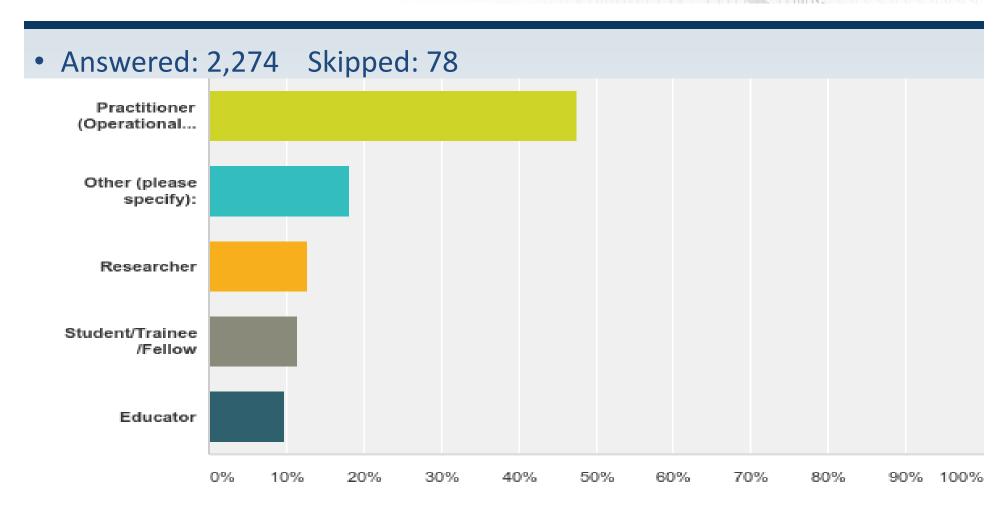# Q118: Are you or have you ever been a member of AMIA?

- Answered: 2,352    Skipped: 0

# Q1: Please indicate which of the following informatics domains represents your area(s) of work or study. Choose all that apply.

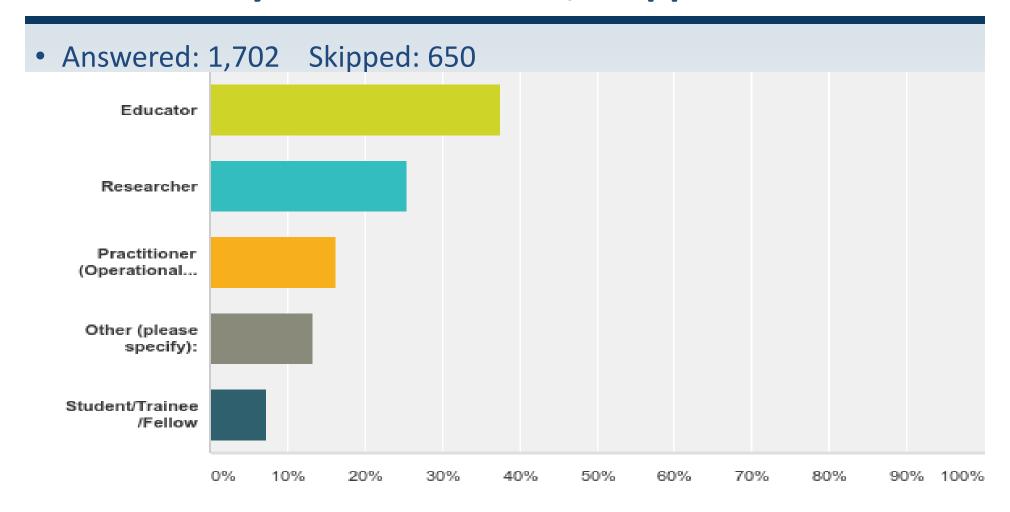- Answered: 2,352    Skipped: 0

# Q4: Please indicate your primary informatics role:

- Answered: 2,274    Skipped: 78



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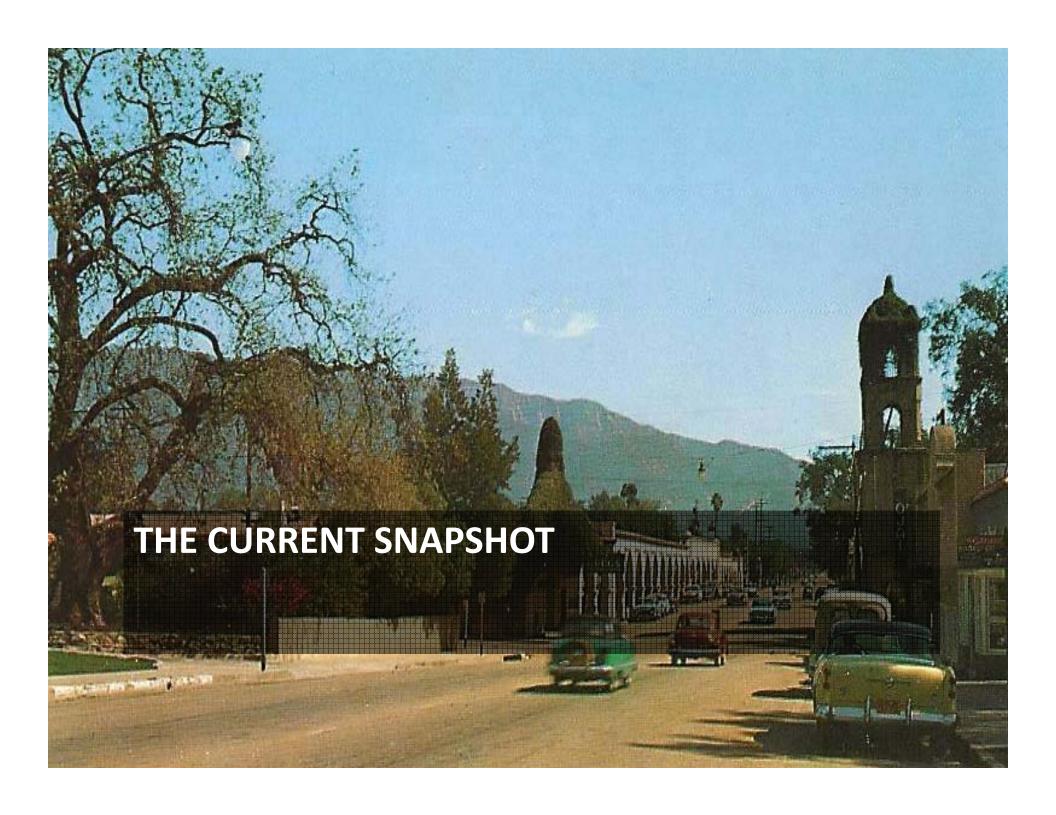
# Q5: Please indicate your secondary informatics role, if applicable:

- Answered: 1,702    Skipped: 650

**Q114:** **Which of the following best describes the organization where you currently perform most of your health informatics work? Choose all that apply.**

- Answered: 2,232 Skipped: 120

THE CURRENT SNAPSHOT

# Board-certified Clinical Informaticians
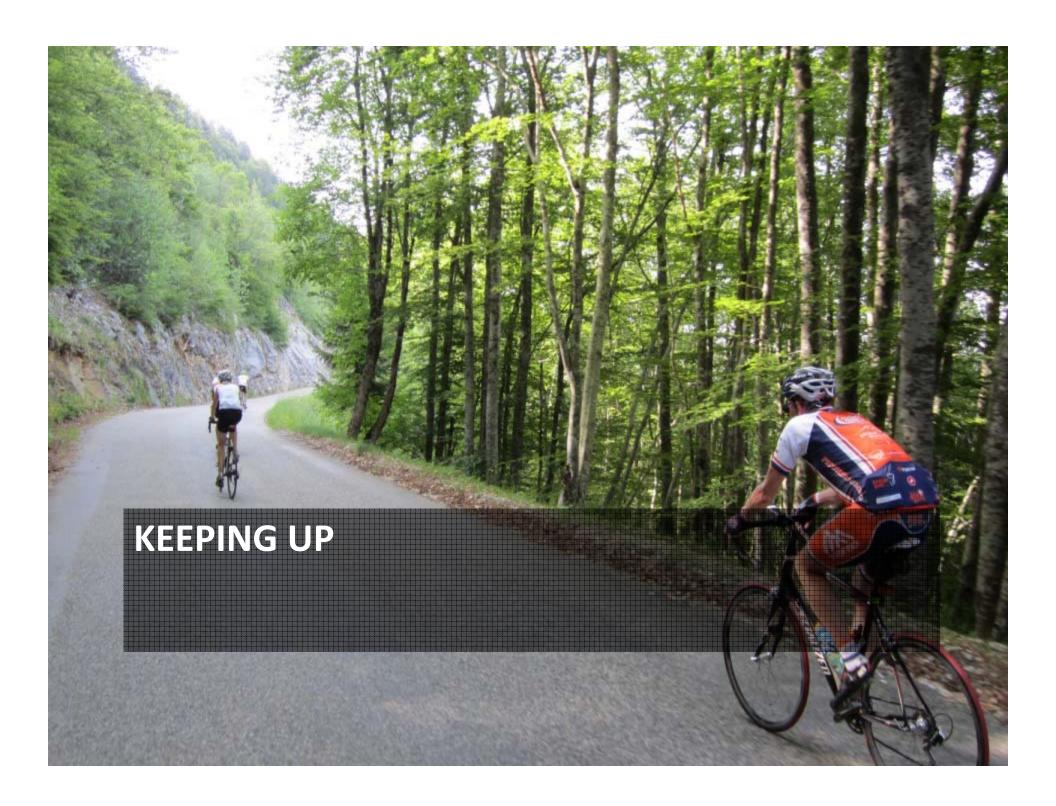
| Cohort | ABPM | Pathology |
|---|---|---|
| 1. 2024 recertification | 432 | 24 |
| 2. 2025 recertification | 304 | 25 |
| 3. 2026 recertification | 303 | 17 |
| 4. 2027 recertification | 353 | 25 |
| TOTALS | 1392 | 91 |
| | **1483 board-certified clinical informaticians in the US** | |

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# The pipeline

- 29 ACGME programs so far (Goal is 50-75)
- Program acceleration
  – Foundation funding for new programs
  – Resources for program directors
- Medical schools
  – Meeting with AAMC, NBME, AMA, others
  – Need additional resources to get clinical informatics into the curriculum

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# KEEPING UP

# AMIA's CME Program

- Live Meetings

- Webinars

- 10x10 courses in partnership with universities

- Clinical Informatics Board Review Course

- 2017: online learning at education.amia.org

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# MOC Program

- Provider of MOC-II credits for board-certified clinical informaticians
- rigorous peer-reviewed MCQs **in accordance with NBME guidelines**
- **ALWAYS** looking for partners with our MOC activities

| Year | Activity | # MOC-II Credits |
|------|----------|------------------|
| 2014 | Annual Symposium | 21 |
| 2015 | iHealth | 6 |
| | Annual Symposium | 25.5 |
| 2016 | iHealth | 12 |
| | Annual Symposium | 25.5 |
| 2017 | iHealth | 17 |
| | | **107** |

# Webinars

- Working Group (WG) – sponsored

  - 35 webinars in 2016

- *JAMIA* Journal Club

  - Monthly: 11 in 2016

  - Live webinar for CME credit

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# 10x10 Courses

- 22 courses completed in 2016
  - 11 completed as of 6/14/2017
- 46 – 54 CME credit for most
  - Minnesota = CNE
- Partnerships with Duke, IUPUI, Kansas UMC, Nova Southeastern, OHSU, OSU, Stanford, UAB, U of Minnesota, U of Utah
- Topics range from introductory to pharmacogenomics
  - Outcomes-based: capstone projects for most

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# Clinical Informatics Board Review Course (CIBRC)

- 2013 first year of board certification exam
- 10 board review live meetings completed by 2016 = **987 physicians** educated through 2016
  - Online course plus 200-MCQ simulated exam = **935 physicians** educated online through 2016 (some overlap with live meetings)
- CIBRC V in 2017

# Learning Management System

- Next generation of informatics education from AMIA

- Launching in 2016

- Multiple formats:
  - Short courses
  - Multiple-module courses
  - Journal-based CME (*JAMIA*)
  - Webinars
  - Podcasts

- Education for CME, MOC-II, and CNE credit and for gaining knowledge; activities on policy and leadership

- Clinical Informatics content will be first content to go-live

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ADVOCACY

# Supporting the Clinical Informatics Community in Washington DC

- In the Past Year…
  - Members of our Applied Clinical Informatics community
    submitted recommendations to:
    - FDA – Real-World Data using EHRs
    - CMS – Meaningful Use / Advancing Care Information
    - ONC – Measuring Interoperability
    - OHRP – Secondary research by HIPAA covered entities
    - CDC – CDS at the intersection of care and surveillance

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# Published Policy Priorities

**Patient Empowerment**

Patients must be empowered with access to and use of their health information.

**Data Sharing in Research**

Data sharing is foundational to advance discovery and find new cures.

**Health IT Safety**

Health IT improves patient safety, but can also introduce new and novel risks.

**Health IT Standards & Interoperability**

Health IT standards are necessary to improve interoperability for clinicians and patients.

**Informatics Workforce and Education**

New skills are needed to leverage data across health, care and research.

**Informatics-driven Quality Measurement**

Improved measures meant for an electronic environment will lead to better quality and safer care.

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# MACRA NPRM (current as of 4pm EST)

- The key policy questions for this NPRM are
  - how will the ACI measures / objectives and scoring methodology change, and
  - what will the CEHRT requirements and reporting period be?

- In both instances, CMS has proposed a reasonable set of requirements that both encourage continued adoption and focus on health IT-enabled care, while also addressing potential concerns with the timeline for adoption of CEHRT.

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# ACI measures/objectives and scoring methodology

- No change to the required measures/objectives (Page 190)
- Overall, there are more chances for ECs to garner bonus points – either through expanded improvement activities or through a more generous policy around public health / clinical data registry reporting
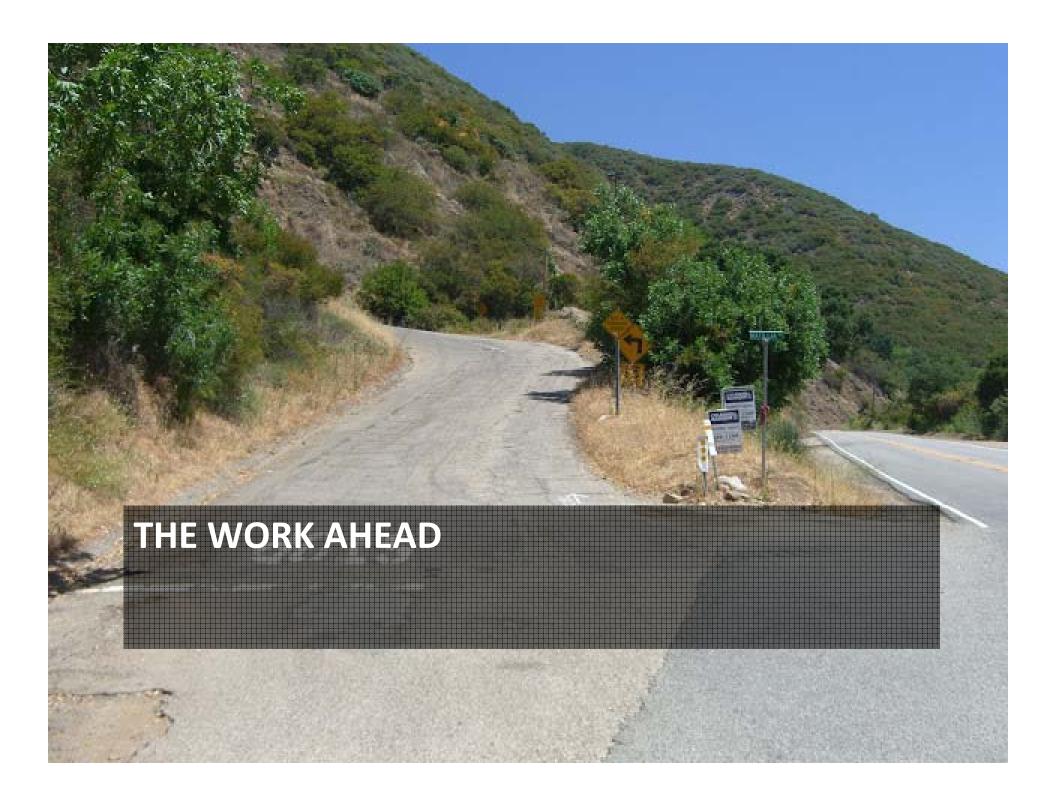
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# CEHRT requirements and reporting period

- The proposal loosens requirements to use 2015 Edition CEHRT in 2018, but proposes bonus points for those who do (no points for those who use a combination)

- ECs can continue to use 2014 Edition CEHRT, a combination of 2014 and 2015 CEHRT, or use 2015 Edition CEHRT

- They continue the 90-day reporting period for this year and propose the same for next year.

# Overall AMIA impression

- CMS has proposed a set of policies that provide flexibility in CEHRT and reporting period, while also encouraging more advanced use of health IT to support patient care – such as APIs, patient generated health data and clinical information reconciliation.

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THE WORK AHEAD

# Informatics Employer Survey

- Current and future demand for informatics professionals
- Challenges employers face in hiring informatics professionals
- Employers' perceptions of informatics certification

**Survey Open June 7 – June 30**

**amia.org/ahic/employer-survey**

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# Informatics Education Program Survey

Types and sizes of current and planned informatics educational programs in the U.S. as a first step in estimating the pipeline for future informatics professionals.

**Survey Open June 7 – June 30**.

**amia.org/ahic/education-survey**
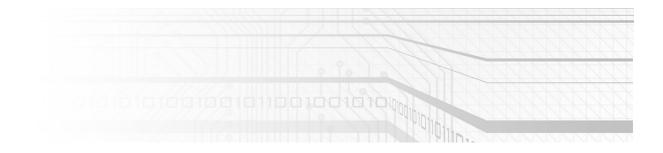
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# Update to Core Content and Program requirements

- Clinical informatics Program directors (CCIPD)
  - Updating program requirements (to support ACGME accreditation)
- Clinical Informatics Community of Practice (CICOP)
  - Update Core content (to support examination update)
  - Coordinate with ABPM and with AHIC activities
- AMIA with clinical informatics fellows, program directors, and diplomates
  - Fostering community within clinical informatics fellows, program directors and diplomates
  - Advocacy for pipeline development
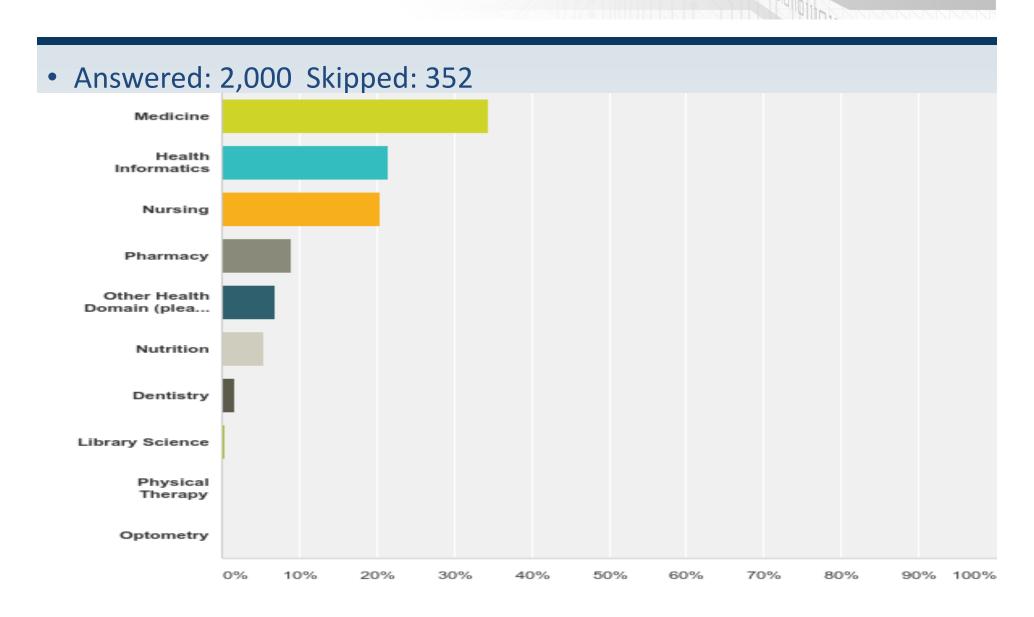  - Recognition programs for applied informatics

QUESTIONS?

# Q7: What is your primary health domain?

- Answered: 2,000  Skipped: 352

# 10x10 Real Quotes

- "Great information presented in a logical manner. Helped me learn a lot of information related to medically specific IT."
- "I learned the theoretical components of health informatics and that gave me a deeper understanding of what I was doing in practice and why."
- "Basic Knowledge of complexity of a large multi hospital informatics network helped me get new job."
- "The unit that included Telemedicine inspired me to research this area more, and I am now a Telemedicine provider of patient care"
- "I can now communicate with informatics professionals/hospital IT admin using their language and understand their terminology as I work on informatics projects"
- "The 10x10 opened many doors for me to make a transition to the field of informatics. I still refer back to my notes and articles from the course. Gave me a solid understanding of the many facets of informatics"
- "I am helping kick off a Clinical Informatics Fellowship at XXX ...It was due to this course that I managed to persuade the Chair of Medicine... to start the Clin Inf Section ....Knowing about Meaningful Use, and lots of the acronyms and jargons typical of BMI have helped open new collaborations and research efforts. We migrated to ICD10 with the drugs database and moved into controlled vocabularies for drugs - direct results of the 10x10 course."

# Live Meetings

- **Annual symposium**
  - >2300 attendees in 2016
  - 25.5 hours CME, MOC-II, and CNE credit
    - 193 diplomates claimed 3093 MOC-II credit hours using >800 multiple-choice self-assessment questions
    - +18 pathologists claimed MOC-II credit
- **Joint Summits**
  - >530 attendees in 2017
  - 24 hours CME and CNE credit
- **iHealth**
  - 288 attendees in 2017
  - 20.75 hours CME and CNE; 17 MOC-II credits
  - 61 diplomates claimed 727 MOC-II credit hours using >130 MCQs
  - + 4 pathologists claimed MOC-II credit

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# AMIA's Education Program

- Scientific rigor

- Growth

- Based on identified educational gaps and needs

- Leading authority for the most up-to-date biomedical and health informatics education

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