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Agency for Healthcare Research and Quality

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Electronic health record functionality needed to better support primary care: Joint Statement AAFP, AAP, ABFM, and NAPCRG

Presented By:

Alexander Krist, MD, MPH; Christoph Lehmann, MD; Jason Mitchell, MD;
James Mold, MD, MPH; and Robert L. Phillips, Jr., MD, MSPH

Moderated By:

David Meyers, MD, Agency for Healthcare Research and Quality (AHRQ)

Sponsored by the AHRQ PBRN Resource Center

February 28, 2014



Agenda

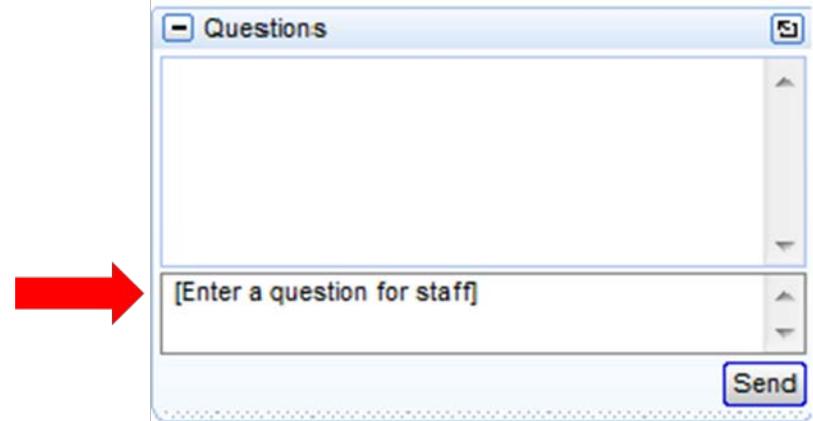
- **Instructions for Question Submission**
 - ▶ Kristin Mikolowsky, MSc, Project Manager, PBRN Resource Center
- **Welcome and Introduction of First Presenter**
 - ▶ David Meyers, MD, Director, Center for Primary Care, Prevention, and Clinical Partnerships, Agency for Healthcare Research and Quality
- **Presentation: Electronic Health Record Functionality Needed to Better Support Primary Care**
 - ▶ Alexander Krist, MD, MPH
- **Question & Answer Session; Introduction of Next Presenters**
 - ▶ Moderator: David Meyers, MD, Director, Center for Primary Care, Prevention, and Clinical Partnerships, Agency for Healthcare Research and Quality
- **Presentations: Positions of Primary Care Organizations**
 - ▶ Christoph Lehmann, MD; Jason Mitchell, MD; James Mold, MD, MPH; and Robert L. Phillips, Jr., MD, MSPH
- **Question & Answer Session**
 - ▶ Moderator: David Meyers, MD, Director, Center for Primary Care, Prevention, and Clinical Partnerships, Agency for Healthcare Research and Quality
- **Instructions for Obtaining CME Credits**
 - ▶ Kristin Mikolowsky, MSc, Project Manager, PBRN Resource Center

Note: After today's webinar, a copy of the slides will be e-mailed to all webinar participants.



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- Select “Send” to submit your question to the moderator.
- Questions will be read aloud by the moderator.





Today's First Presenter



Alexander Krist, MD, MPH

Ambulatory Care Outcomes
Research Network (ACORN),
Virginia Commonwealth
University



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North American
**PRIMARY CARE
RESEARCH GROUP**

Primary Care and Meaningful Use 2

Electronic Health Record Functionality Needed to Better Support Primary Care: Joint Statement AAFP, AAP, ABFM, and NAPCRG

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February 28, 2014



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- Jon Puro
- Michael Raddock
- Ray Simkus
- Steven Waldren



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NAPCRG HIT Working Group

- One of six working groups assembled in 2005 by the Committee for Advancing the Science of Family Medicine (CASFM)
 - HIT, economics, research methods, membership, practice based research, and education
- 43 members from the US, Canada, and UK
- Represent 38 unique universities and primary care organizations



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NAPCRG HIT Working Group Interests

- EHR data architecture needs for research
- Ensuring EHRs support practice workflow
- Reframing Meaningful Use to better support primary care (this presentation)
 - Position statement submitted to ONC
 - Perspective manuscript submitted to JAMIA
- Researcher, physician, practice, and patient access to their data (current focus)



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Theoretical Framework

- Systematically identified needed additions to EHRs to better support primary care
- Used Institute of Medicine (IOM) definition of primary care to define primary care needs
- Used stage 2 Meaningful Use (MU2) objectives to define EHR functionality

Analytic Steps

- MU2 objectives categorized by primary care attribute
- Unmet primary care needs identified and recommended EHR additions were made
- Categorizations and recommendations presented to primary care organizations
- Categorizations and recommendations presented to 148 members of 4 practice based research networks

IOM defines primary care as having the following attributes

Primary care is...

- Accessible
- Coordinated
- Sustained
- Comprehensive
- A partnership with patients
- Person-centered
- Integrated

MU2 objectives by attribute

- Accessible care – secure messaging
- Coordinated care – CPOE; eRx; patient summaries for care transition; ability to view, download, transmit information
- Sustained care – patient reminders; one patient list for outreach
- Comprehensive care – record vitals; record smoking status; med reconciliation; lab results as structured data; access imaging results

MU2 objectives by attribute

- Patient partnership – after visit patient summaries; patient-specific education resources; record advance directives
- Person-centered – record demographics; record family history
- Integrated care – 5 clinical decision rules; submit to immunization registries, public health agencies, and cancer registries; protect health information



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Question #1: For which primary care attribute do you think EHRs need to make the most improvements?

1. Accessibility
2. Coordinated care
3. Comprehensive / sustained care
4. Patient partnership / person-centered care
5. Integrated care



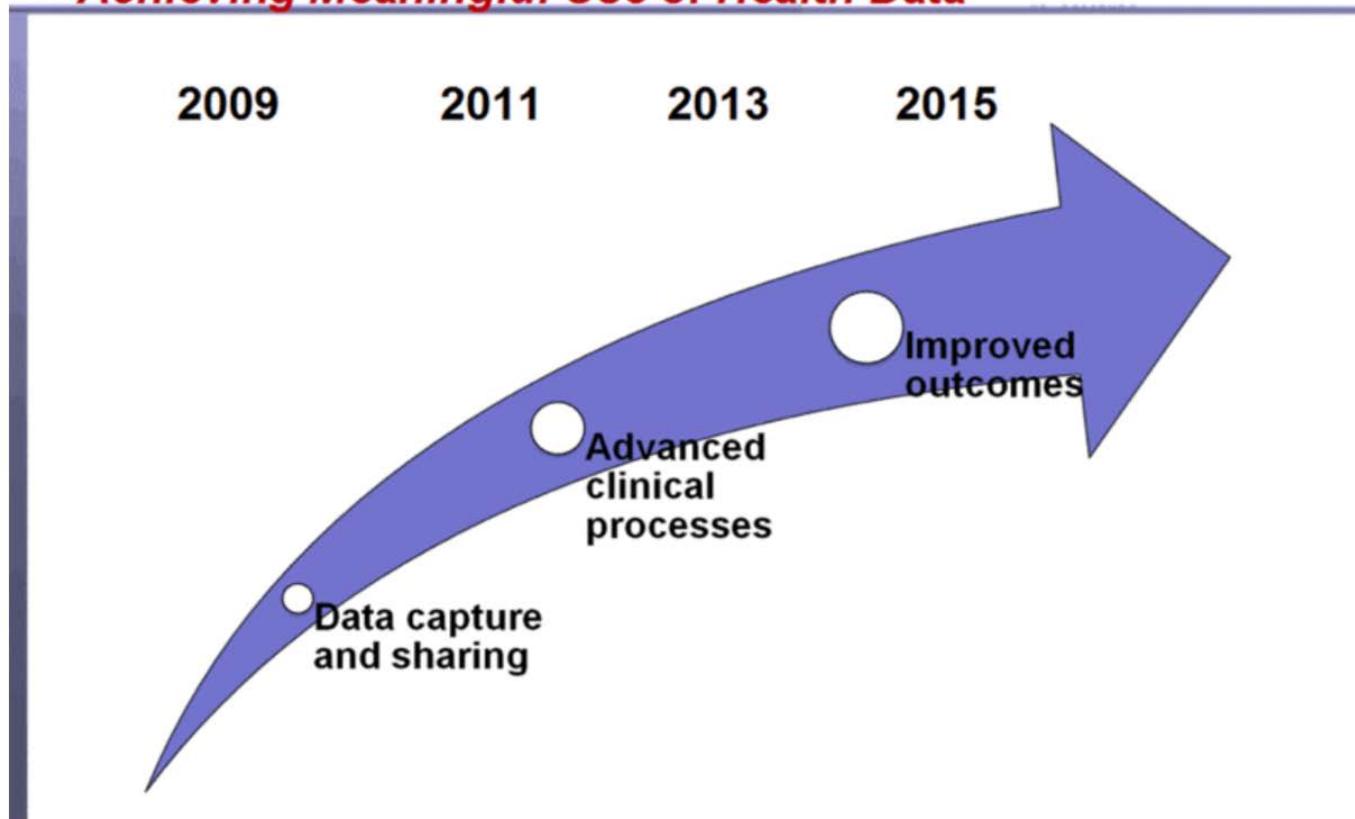
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Question #2: Which primary care attribute do you think EHRs currently best support?

1. Accessibility
2. Coordinated care
3. Comprehensive / sustained care
4. Patient partnership / person-centered care
5. Integrated care

MU focus has promoted integrated and coordinated attributes better than others

Achieving Meaningful Use of Health Data





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Gaps: Accessibility

- Make documenting, accessing, and conveying information easier and less labor intensive
 - Take doctors out of data entry role
- Support enhanced asynchronous care
 - Virtual visits or texting
- Embed tools to access and monitor clinician accessibility

Gaps: Coordination

- Expand capacity to receive and aggregate information from all settings at point of care
- Coordinate care among teams internally and externally
 - Including ancillary and enabling services
 - Define roles and track task progression
 - Support secure communication across team members
 - Maintain shared library of local coordination services

Gaps: Coordination

- Dashboard to synthesize and prioritize information for individuals and panels of patients
 - Identify and sequence visits, changes, results
 - Span across care settings
 - Highlight urgent messages, alerts, and changes

Gaps: Sustained Care

- Track and support continuity of care
 - Allow patients to define primary provider
 - Allow clinicians to track and manage panel size
- Track and support care over time
 - Describe chronic conditions and episodes of care over time
 - Include trending tools to show health information over time and events

Gaps: Comprehensiveness

- Support the whole spectrum of care
 - Preventive, chronic, acute, and mental health
- Seamlessly support all settings for primary care
 - Residential, ambulatory, nursing home, emergency, and hospital settings
- Ensure the accuracy of EHR information
 - Engage patients in process
 - Auto-resolve outdated information and identify data inconsistencies



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Gaps: Partnership with patients

- Incorporate patient perspectives into EHRs
 - Allow patients to enter their goals, values, beliefs, behaviors, psychosocial factors, and priorities
- Support patient-clinician shared decision-making
 - Identify who makes decisions, how decisions are made, and social support
 - Provide decision-making support – educational material, decision aids, and values assessment tools

Gaps: Person centered

- Support whole person care
 - Shift from disease focus (e.g. ICD 10) to defining who the patient is as a person
- Meaningfully record family history
- Identify environmental and community health factors
 - Link to community and occupational health data
- Integrate and share clinical and community based care



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Gaps: Integrated

- Support the individual need of practices
 - Locally tailor to patient and practice needs
 - Application model for tailoring EHR functionality
- Support national health recommendations and priorities
 - Robustly integrate guidelines into EHRs
 - Update content as guidelines change
 - Make content actionable for patients and clinicians

Gaps: Integrated

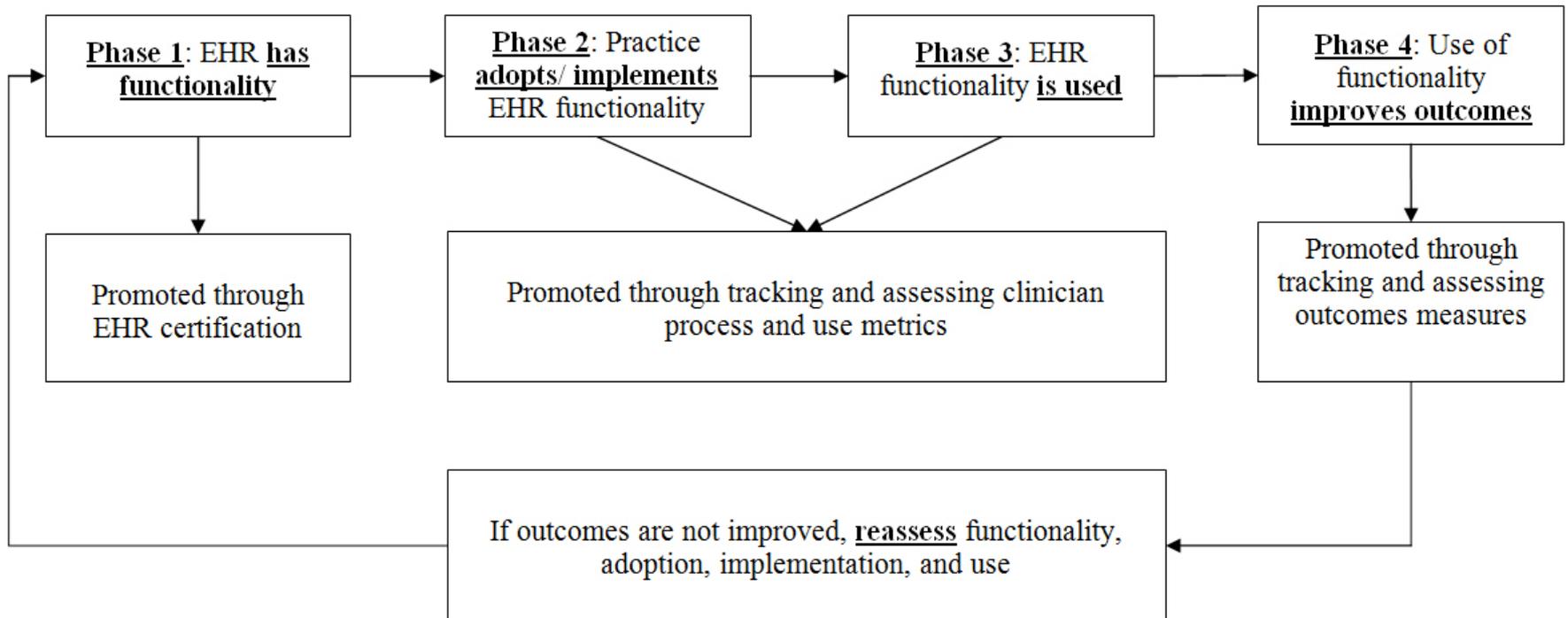
- Allow enhanced population management
 - Move between tracking population measures to delivering care to individuals
 - Incorporate patient values and needs in quality measures
- Promote accountability for care
 - Capture important health outcomes – morbidity, mortality, patient reported outcomes
 - Collaboratively share information with public health partners



Question #3: What new function would you most like added to your EHR?

1. Receive patient data from multiple sources at the point of care
2. Team coordination support
3. Dashboard to prioritize and synthesize information
4. Incorporate patient perspectives into EHRs
5. Provide enhanced population management tools

Practice framework for implementing EHR functionality





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Question #4: What phase is your practice (or most practices) at with implementing EHR functionality?

1. Phase 1
2. Phase 2
3. Phase 3
4. Phase 4

Limitations

- EHRs have functionality not mandated by MU
- MU was not designed for primary care so objectives don't fit neatly into attributes
- Recommendations were not prescriptively detailed, innovative interventions are needed
- Just because there is a gap in functionality does not mean adding functionality will improve outcomes

Concluding remarks

- We need much more from HIT to adequately support the needs of primary care
- Key enhancements include care coordination, relationship support, whole person care, and population care
- Solutions will require new HIT functionality, standardization, national infrastructure, new financial models, and policy changes

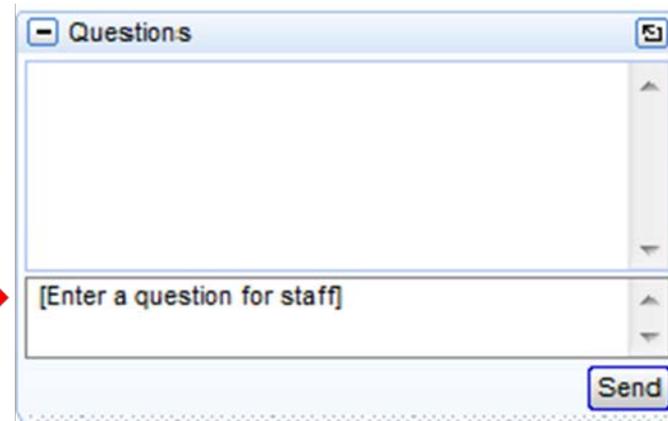
Question #5: What do you think is the best way to promote the advancement of EHR functionality?

1. Mandate changes through EHR certification
2. Incent changes through clinician meaningful use payments
3. Lobby vendors and policy-makers for desired changes
4. Let the free market drive EHR changes
5. Approach technology leaders to create new EHR systems

Questions or comments about the paper?

“Electronic health record functionality needed to better support primary care. *J Am Med Inform Assoc.* Jan 15 2014.”

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Today's Next Presenters



Jason Mitchell, MD
American Academy of Family
Physicians



Christoph Lehmann, MD
Vanderbilt University /
American Academy of
Pediatrics



Robert L. Phillips, Jr., MD, MSPH
American Board of Family Medicine



James Mold, MD, MPH
University of Oklahoma
Health Sciences Center /
North American Primary
Care Research Group



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Primary Care and Meaningful Use 2

American Academy of Family Physicians

Jason Mitchell MD
Center for Health IT, AAFP
jmitchel@aafp.org

Putting the Family Back in Medicine

- Technology is a tool, not the answer
- Technological “walled gardens” are fragmenting care, not coordinating it
- Care teams and care plans must be comprehensive and continuously managed
- Population health management improves individual care and outcomes



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Primary Care and Meaningful Use 2

American Academy of Pediatricians

Chris Lehmann MD

Department of Pediatrics and Biomedical Informatics

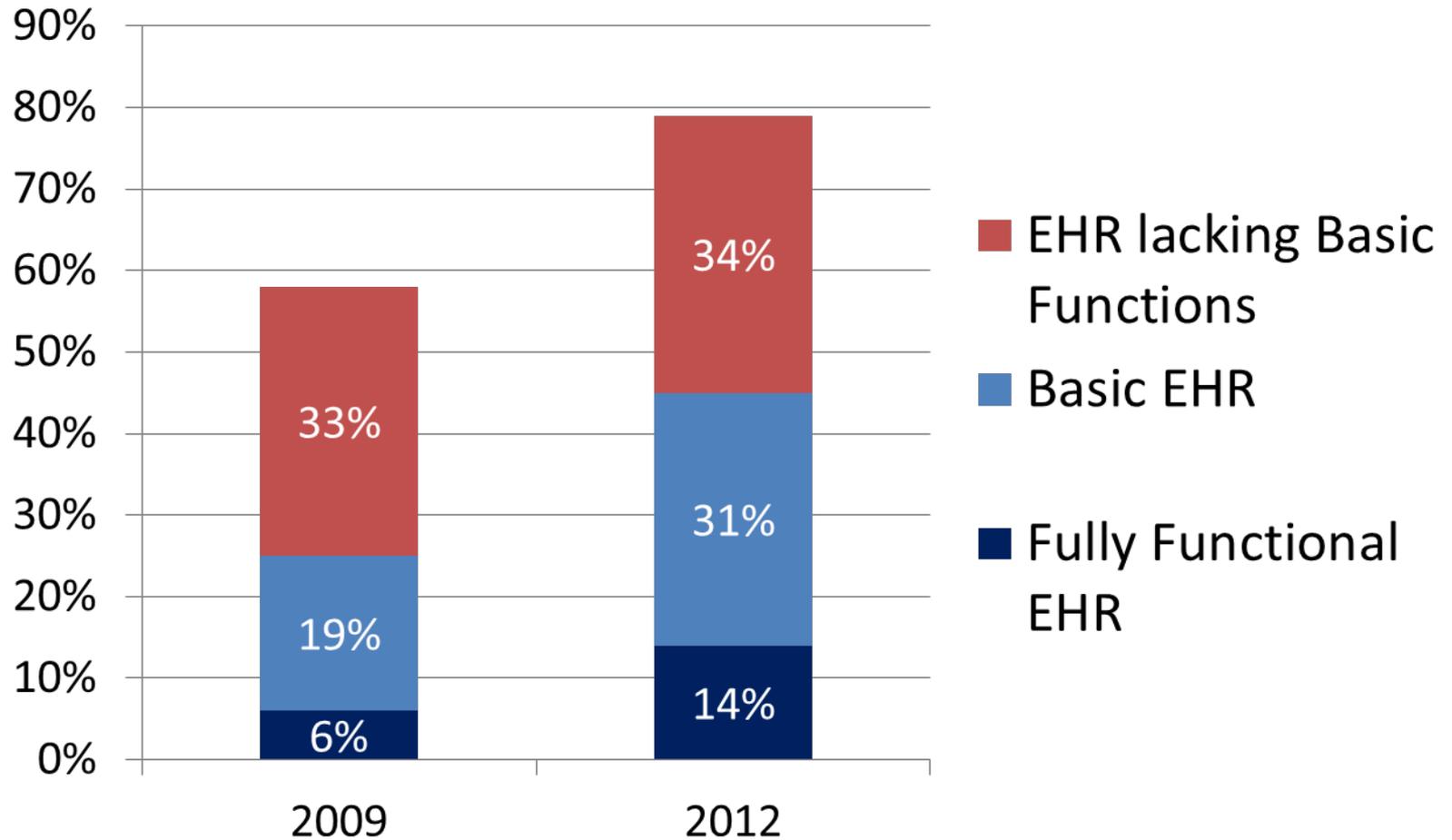
Vanderbilt University

christoph.u.lehmann@vanderbilt.edu

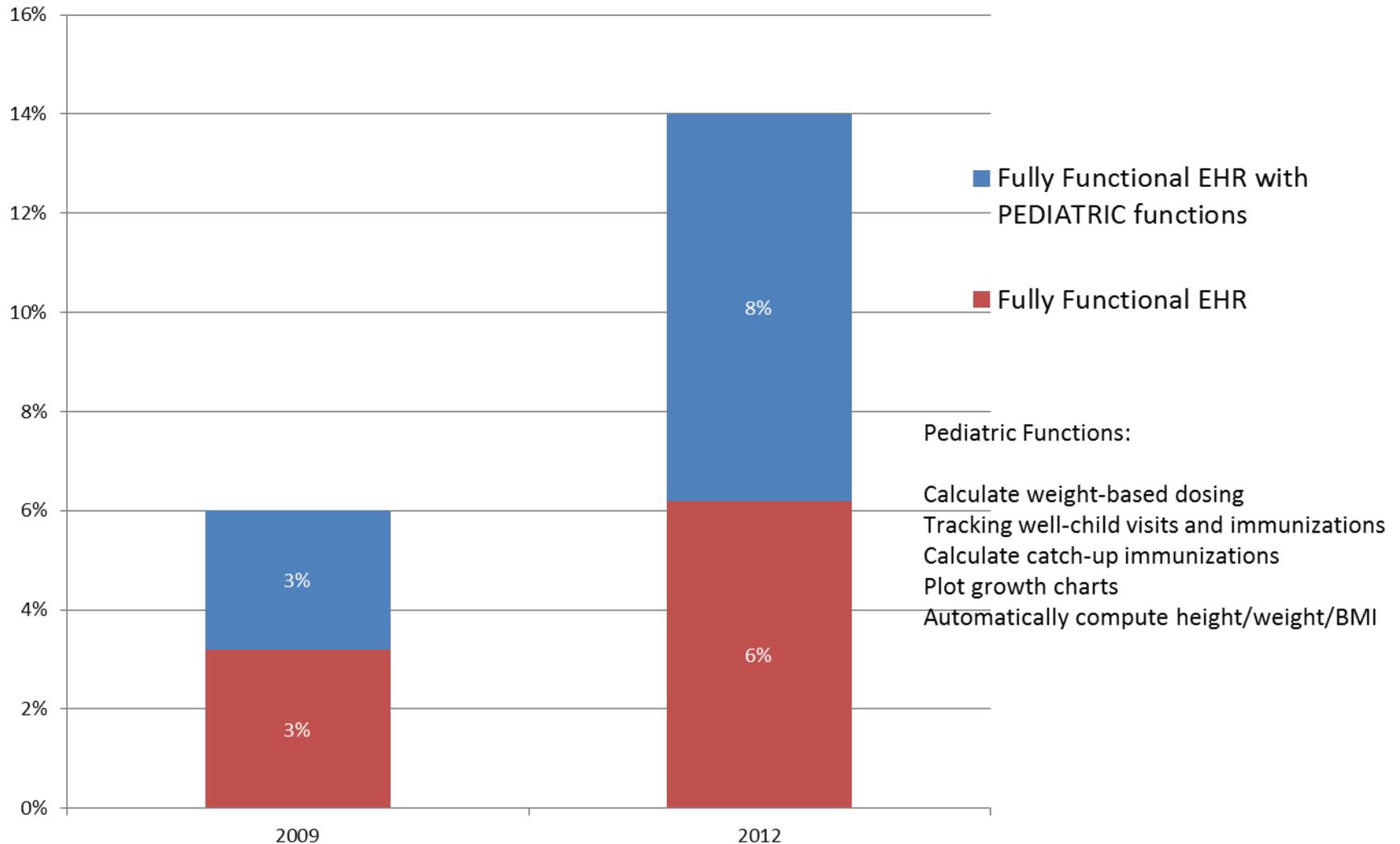
American Academy of Pediatrics

- The American Academy of Pediatrics supports the use of Electronic Health Records (EHRs) as a means
 - To improve quality and reduce cost in care
 - To provide safe and effective care
 - To support the Medical Home for Children
- HIT is lead and supported by two leadership groups
 - Child Health Informatics Center founded in 2009
 - Council on Clinical Information Technology: 511 members to date

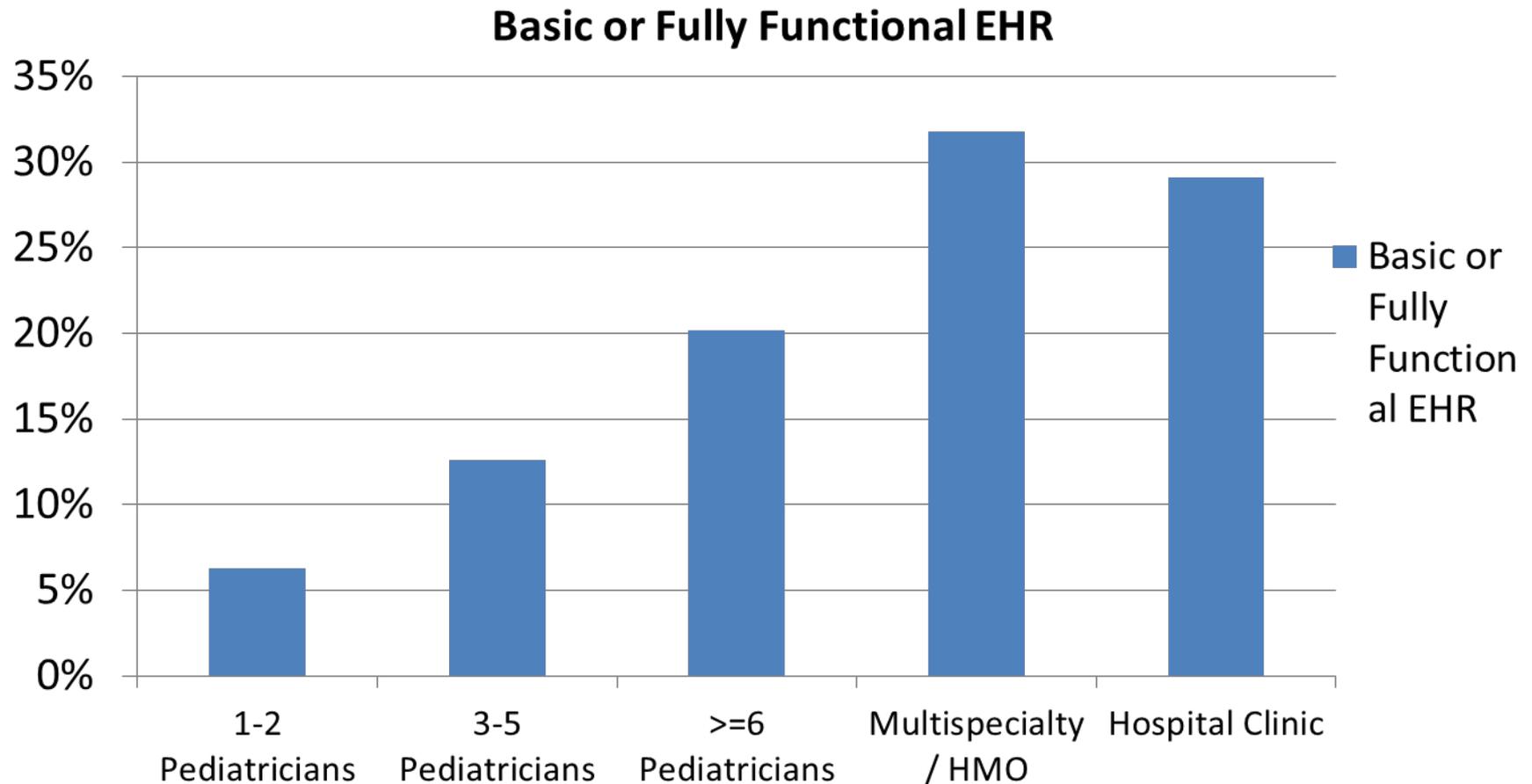
EHRs lack Functionality



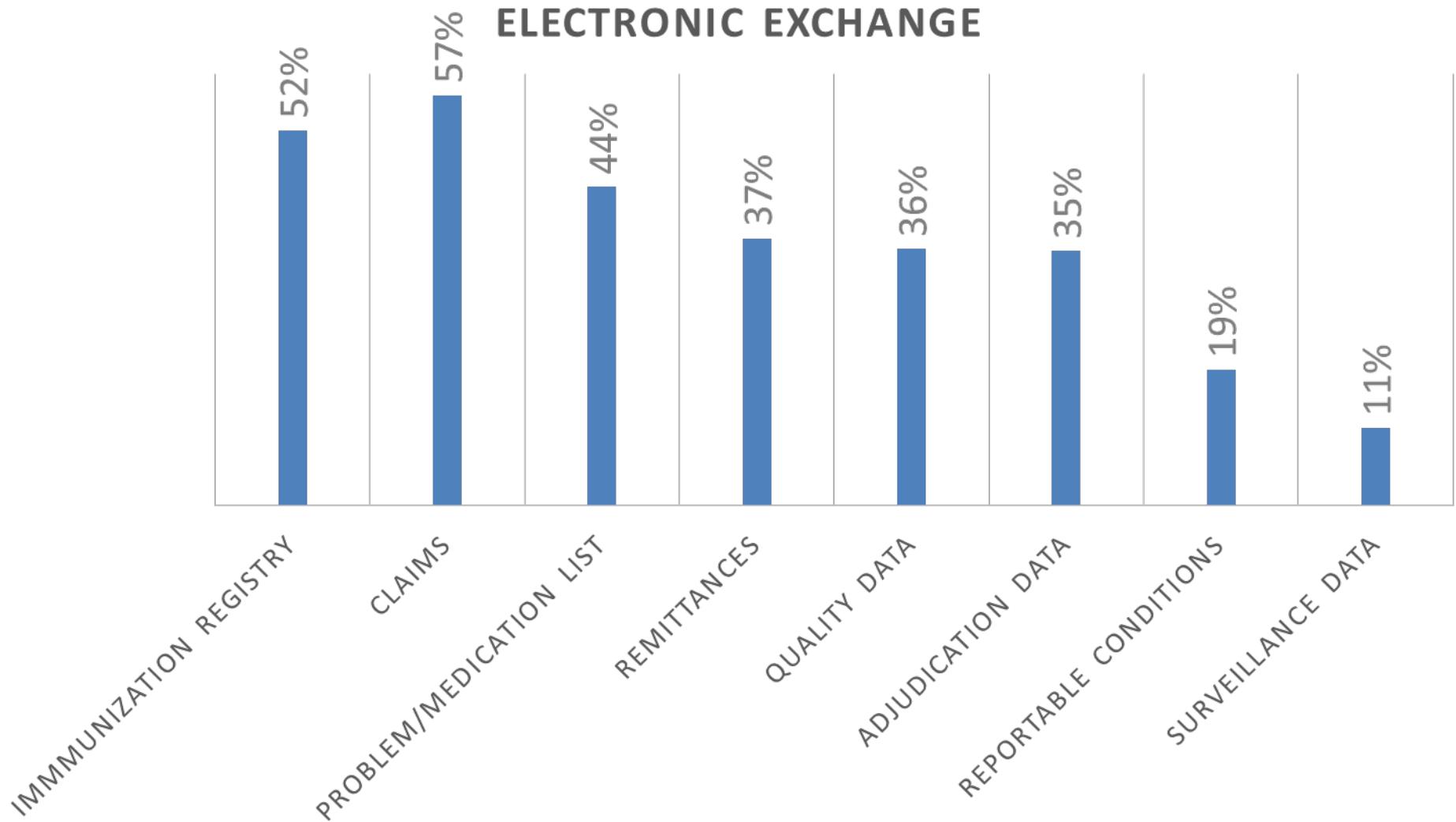
EHRs Lack PEDIATRIC Functions!



Basic and Fully Functional EHRs are NOT used by Small Practices



Electronic Data Exchange is limited





American Board of Family Medicine, Inc.

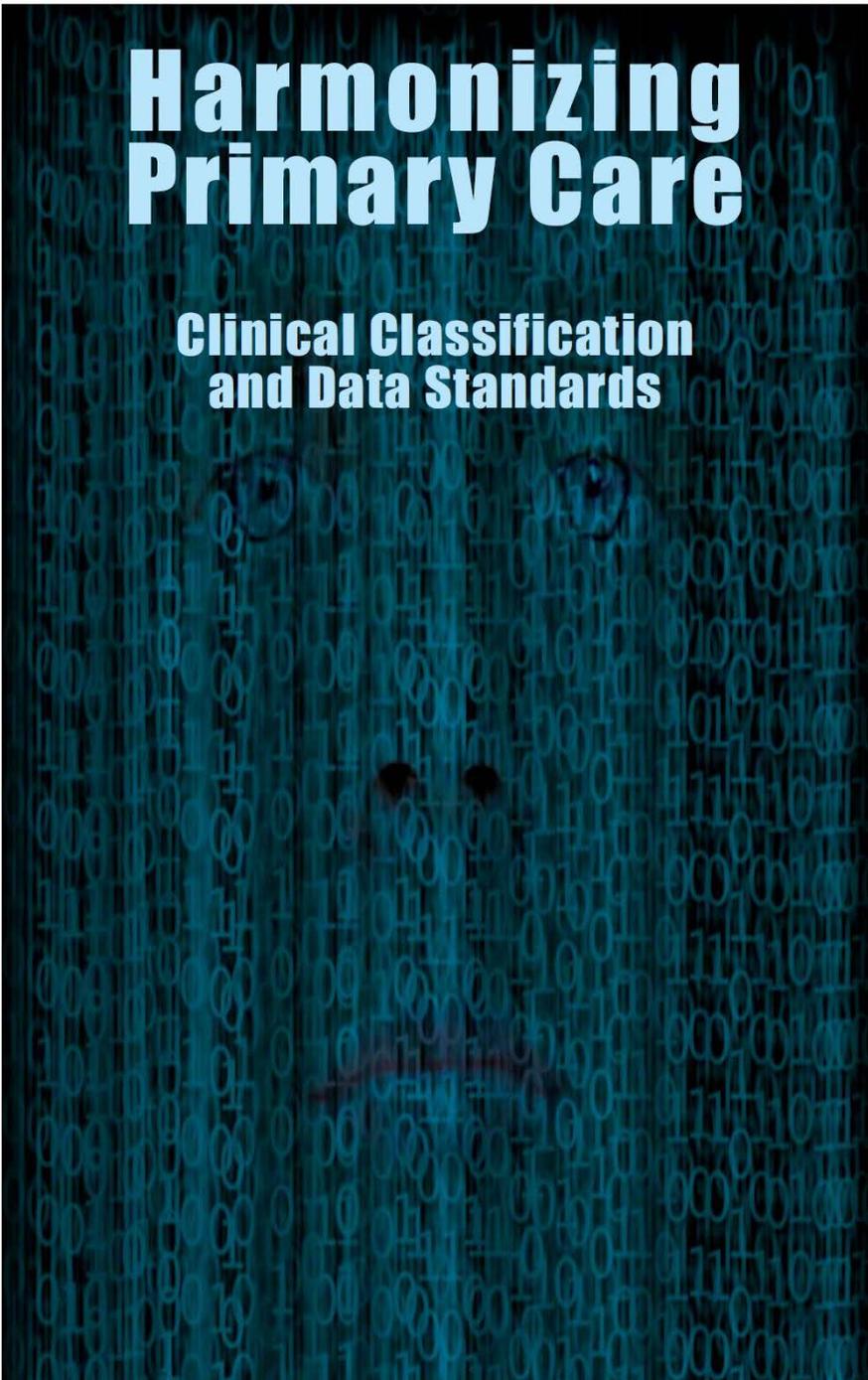
Electronic Health Record Functionality: Certifying Board Perspective

Robert L. Phillips, MD, MSPH

Vice President for Research & Policy

- **Second largest medical specialty board— 83,000 diplomates**
- **Nearly 75% have an EHR, ~60% comply with MU 1**
- **Need to reduce reporting burden**
- **Turn data into actionable information**
 - **Facilitate quality improvement**
 - **Population health**
 - **Decision support**
- **Move to domain-specific classification**
International Classification of Primary Care
 - **Would facilitate ICD10 conversion**
 - **Better able to identify episodes of care**
 - **Create Framingham-like decision support**
- **Need better measures of primary care and construct HIT system to capture them**



The image shows the cover of a report. The background is dark blue with a pattern of binary code (0s and 1s) in a lighter blue color. In the center, there is a stylized face composed of binary code. The text is in white and light blue.

Harmonizing Primary Care

**Clinical Classification
and Data Standards**

Conference Report 2007
Supported by AHRQ



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Primary Care and Meaningful Use 2

North American Primary Care Research Group

Jim Mold MD

**Department of Family and Preventive Medicine
University of Oklahoma Health Sciences Center**

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Attributes

Accessibility

First Contact
Accommodation

Coordination

Internal
External

Sustained Care

Longitudinality
Continuity
Management
Informational

Comprehensiveness

Partnership w. Patients

Relationship
Decision-making
Advocacy

Person-centeredness

Whole Person Care
Family Context
Community Context

Integration

Accountability

Mechanisms

Greater Efficiency /Capacity

Fewer Medical Errors

Delivery and Receipt of
More Preventive Services

Better Informed and
Activated Patients

Higher Level of Trust

Investment

More Family Support

More Community Support
for Good Health Practices

Greater Focus on Outcomes

Enhanced Clinician Learning

Closer Relationships with
Consultants/Resources

Less Clinician /Patient
Anxiety

Greater Understanding;
Better Decisions

Psycho-physiological Effects

Intermediate Outcomes

Fewer Preventable Diseases

Fewer Low Birth Weight
Infants

Earlier Detection/Treatment

Better Management of
Chronic Diseases

Better Adherence

Improved Functioning

Fewer Unplanned Visits

Fewer Diagnostic Tests

Greater Patient Safety

Fewer Non-Urgent ED Visits

Fewer Hospital Days

More Appropriate, Effective
Consultations/ Referrals

More Affirming Interactions

Fewer Lawsuits

Fewer Unnecessary and
Futile Interventions

Desired Outcomes

Increased Length of Life

Improved Quality of Life

Increased Productivity
(Home, School, Work)

Improved End of Life
Quality

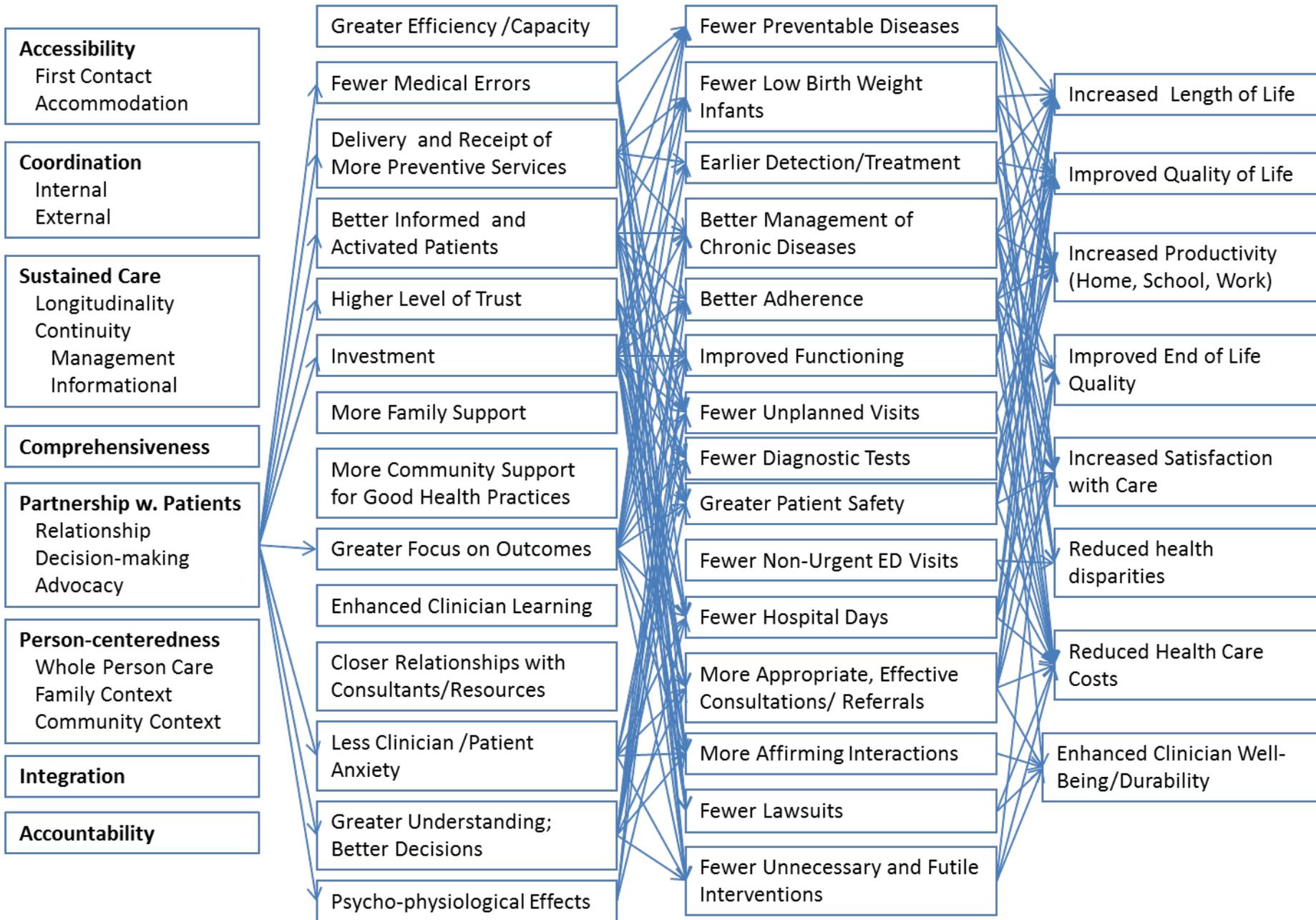
Increased Satisfaction
with Care

Reduced health
disparities

Reduced Health Care
Costs

Enhanced Clinician Well-
Being/Durability

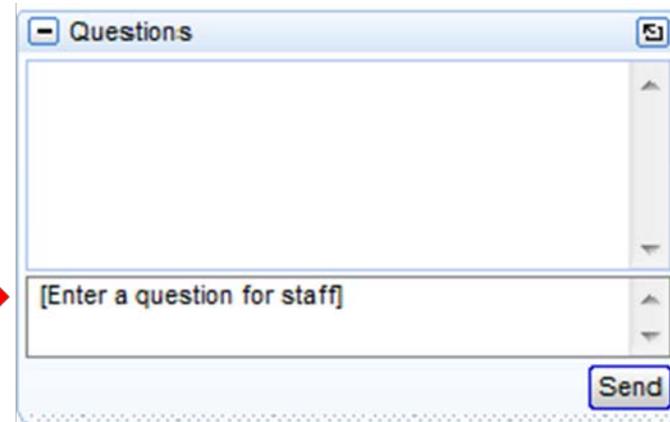
Attributes → **Mechanisms** → **Intermediate Outcomes** → **Desired Outcomes**



Questions or comments for any of the primary care organizations?

**American Academy of Family Physicians
American Academy of Pediatrics
American Board of Family Medicine
North American Primary Care Research Group**

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