CDC Update
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Laboratory Medicine Best Practices (LMBP) project

- Develop methods for evaluating practice effectiveness via evidence reviews
  - support “best practice” recommendations
- Help the field adopt a systematic, transparent, and consistent approach to making evidence-based practice recommendations .
  - Phase 1 - develop methods to address this need.
  - Phase 2 - pilot test the methods
  - Phase 3 - develop access to unpublished information
- Progress to date:
  - Developed methods and pilot testing: 1) patient specimen identification and 2) critical values communication practices
- The goal is to improve health care quality by providing laboratory medicine practices based on evidence and by motivating participation in gathering evidence to support a practice .

Laboratory Medicine Best Practices Overview

Review

- Analytic Framework & Review question(s)
- Search strategy (published)
- Investigation: Focused search unpublished - LMBP Network
- Screen / exclusion criteria
- Review / abstract
- Summarize evidence

Evaluation

Evidence / study rating criteria:

- Quality
- Effective size
- Consistency

Overall Strength of Evidence ratings:

- High
- Moderate
- Suggestive
- Insufficient

"Best Practice" Recommendation

- Strongly Recommend
- Recommend
- Recommend based on expert opinion
- No recommendation (insufficient evidence)
- Recommend against

1 – Effect Size Rating

Study Ratings:	Effect Size(1)
Study 1 (Author Year)	
Study 2 (Author Year)	
.	
.	
.	
Study n (Author Year)	

- Substantial
- Moderate
- None/Minimal
- Adverse

2 – Study Quality Rating

Practice A	Study Characteristics (3 points)	Practice Characteristics (2 points)	Outcome Measures (2 points)	Results/ Other (3 points)	Overall Study Quality Rating (2)
Study 1					
Study 2					
Study 3					
…					
Study N					

- Good: 8-10 points
- Fair: 5-7 points
- Poor: ≤ 4 points

Individual Study Ratings

Study Ratings:	Effect Size(1)	Quality (2)
Study 1 (Author Year)		
Study 2 (Author Year)	1	2
.		
.		
.		
Study n (Author Year)		

Overall Evidence Rating

Overall Evidence of Effectiveness

Effect Size Ratings (1)	Individual Studies #/Quality (2)	Consistency (3) (Yes/No)	Overall Strength Rating (4)	Recommendation (5)
Substantial	# Good: #Fair:	3	4	5
Moderate	# Good: #Fair:			
None/Minimal	# Good: #Fair:			
Adverse	# Good: #Fair:			
1	2			

Recommendation Categories
- Strongly recommend
- Recommend
- Recommended based on expert opinion
- No recommendation for or against
- Recommend against

Additional Considerations
- *Feasibility of Implementation*
- *Economic Evaluation*
- *Applicability to Specific Care Settings*
- *(Non-Effect Size) Harms and Benefits*

Evidence-Based Laboratory Medicine: Quality/Performance Measure Evaluation

- identify and develop evidence-based laboratory medicine performance measures to evaluate performance associated with the pre- and post-analytic stages of testing.
- three steps – 1) ID evidence gaps for QI; 2) develop measures to target gaps; and 3) test and refine the measures
- three funded projects:
  - Kaiser Permanente Foundation Hospitals
    - Target is Kaiser Permanente health plans' chronic kidney disease patients and groups identified at high risk for developing the disease (e.g., diabetes patients)
  - Texas Department of State Health Services
    - Target is Texas Newborn Screening and six potential measures for timeliness of treatment
  - University of Colorado Denver
    - Target is six pre- and post-analytical steps of the testing process that address clinically important quality gaps in laboratory medicine at multiple collaborating laboratories in order to develop and validate the six quality/indicator/performance measures

Post-Institute Activities

- University of Colorado
  - Follow-up on 2007 Institute: Managing for Better Health
- 2007 National Status Report on Laboratory Medicine – Now available online
  - 2008 Add
    - chapter on patient-centered care
    - chapter on testing technology
    - chapter on policy implications
- National Quality Forum (NQF)
  - **Steering Committee on patient safety and communication practices**
    - **July 30-31 Reviewed 10 practices – ID gaps**
    - **NQF consensus for some practices**

Post-Institute Activities

- Institute of Laboratory Medicine (ILM)
  - Create an inventory of ongoing projects to optimize laboratory services
  - Provide support for two Workgroups
    - Roadmap Workgroup
      - To provide a framework to optimize laboratory services in health care
    - Integration Workgroup
      - To identify and champion models of patient care that facilitate collaboration between laboratory professionals and clinicians in the selection and interpretation of laboratory tests.
      - To promote the development and dissemination of education and training for laboratory professionals, clinicians, and patients
  - Identify private sector partner that might house ILM

Roadmap Working Group

- **Co-Lead:Lee Hilborne, MD, MPH**
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- **Co-Lead:Elizabeth Wagar, MD**
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- **John Ball, MD, JD**
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- **Cyril (Kim) Hetsko, MD, FACP**
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- **Mary Nix, MS, MT(ASCP), SBB**
  Agency for Healthcare Research and Quality
- **Karen Linscott, MA, PT**
  The Leapfrog Group
- **Alan Simon, MD**
  CDC - National Center for Health Statistics
- **Ana Stankovic, MD, PhD, MSPH**
  Becton Dickenson

Integration Working Group

- **Co-Lead:John Hickner, MD, MSc**
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The Power of Numbers