



Using Informatics and Technology to Address Common Challenges in Public Health

Linda Dimitropoulos, PhD

Director, Center for the Advancement of Health IT

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University of Gadjja Mada

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Our mission is to improve the quality of health care by advancing the safe, effective, and efficient use of electronic health information to inform patient and population health care decision making, research, and practice.

Advancing the Safe, Effective, and Efficient Use of Electronic Health Information

Health IT is Multidisciplinary



- 30 full-time researchers, informaticists, and policy analysts
- More than 40 affiliated staff from across RTI
- Partnerships with UNC School of Information and Library Science
- University College Dublin Applied Research Center



RTI's Center for the Advancement of Health IT provides research and technical services that advance the effective use of health IT and electronic health information exchange to improve the efficiency and effectiveness of health care delivery.

Harnessing the Power of Health Information to Improve Care

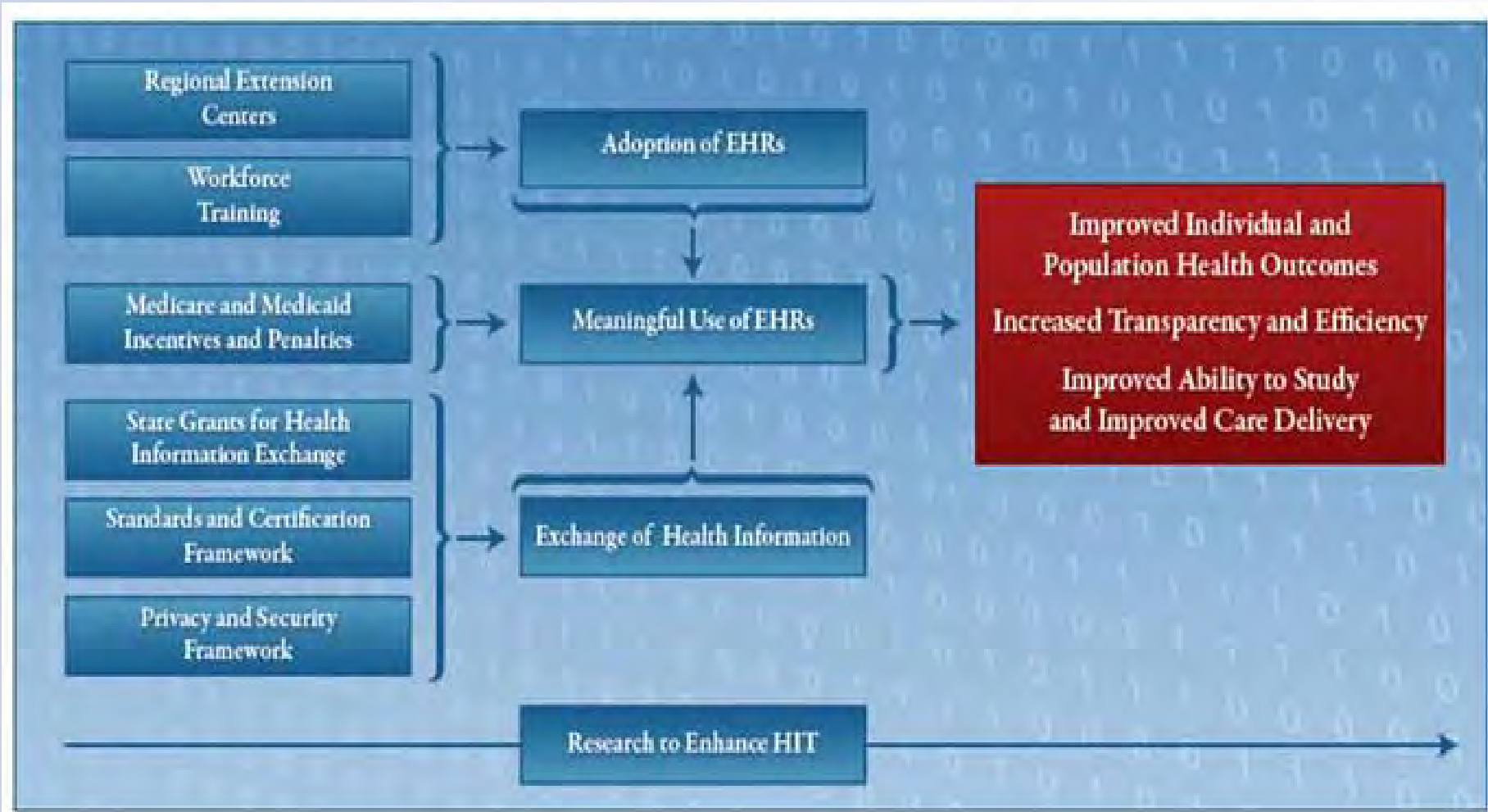


CAHIT provides research and technical services to:

- Help build the technical and policy infrastructure to support electronic HIS
- Build public health capacity
 - enhance monitoring of all-hazard public health threats
 - Build knowledge sharing network
- Advance technology adoption and implementation; evaluate effectiveness of technology in clinical practice.
- Promote healthy behavior through technology-enabled health behavior change.
 - SMS for health promotion and education
 - Personal health records and self-generated health information
 - Enhanced communication between patients and providers.

Better Technology, Better Information, Better Healthcare

US Federal Plan and Programs



Key Presentation Theme

*Using information science and technology to address common challenges in **building capacity** for public health*

Public Health

“Public health is a negative. When it is at its best, nothing happens: there are no epidemics, food and water are safe to consume...”

—Laurie Garrett, Betrayal of Trust: The Collapse of Global Public Health

Entities Comprising the Public Health Infrastructure

- **About 3,000 county and city health departments and local boards of health**
- **59 state, territorial, and island nation health departments**
- **Various U.S. Public Health Service agencies in the Department of Health and Human Services (HHS)**
- **Tribal health agencies, coordinated by the Indian Health Service**
- **More than 160,000 public and private laboratories**
- **Hospitals and other private-sector healthcare providers**
- **Volunteer organizations, such as the American Red Cross, American Diabetes Association, American Cancer Society, and others.**

Source: Lister SA. 2005. An Overview of the U.S. Public Health System in the Context of Emergency Preparedness, Congressional Research Service.

Common Goal, Common Needs

Goal:

Timely, accurate, and cost-effective...

- *Capture*
- *Sharing*
- *Analysis*
- *Response*

...to information related to monitoring, prevention and control of communicable and non-communicable diseases.

Needs:

- Funding
- Staffing
- Infrastructure
- Practice
- Legal & Policy

BioSense 2.0










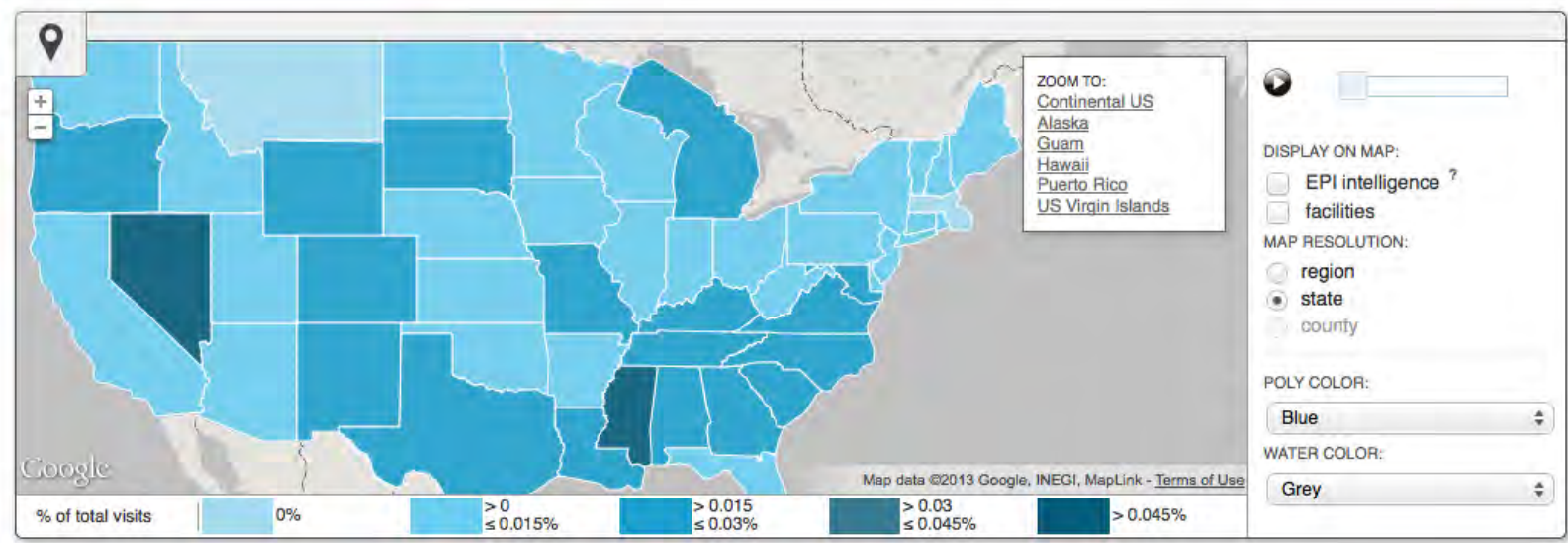
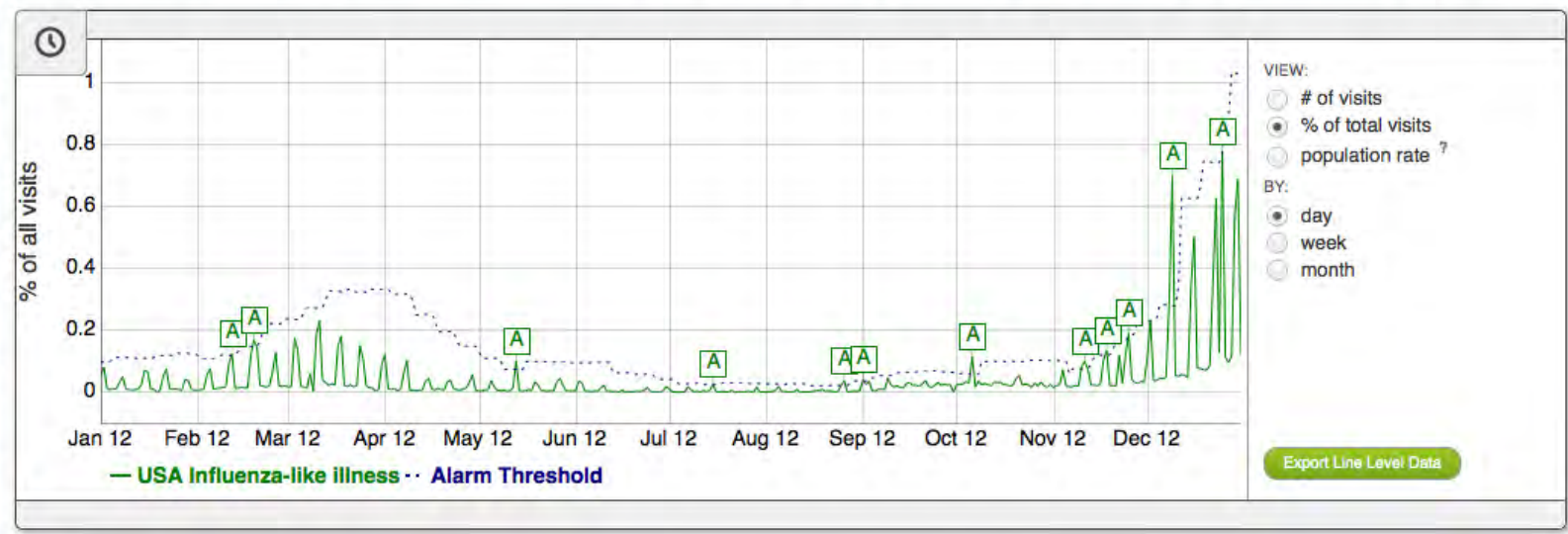
BioSense 2.0: Enables Situational Awareness

- A common, low cost, shared infrastructure to enable surveillance of “all hazards”
 - Early event detection
 - Rapid event characterization (regardless of how detected)
 - Ongoing & timely monitoring over course of event

- Unique features
 - “User-Centered” **design approach**
 - Community-owned **governance model**
 - Cloud-based, **scalable infrastructure**
 - Robust **visualization and analysis tools**

Viewing **15,920** visits for **1** syndrome in **1** location from **1/1/2012 - 12/31/2012** from **2** sources for **Male, Female, and Unknown**, ages **all ages**.

-  save
-  modify
-  analytics
-  notes
-  share
-  export
-  alerts



my views 

BioSense most popular 

Situational Awareness Leads to Action

- 2011
 - Japanese Tsunami and Nuclear Disaster in Fukushima
 - Heat-Related Illness in Texas
- 2010
 - Dengue Fever Surveillance in Florida
 - Deep Water Horizon Oil Spill
- 2009
 - H1N1 Flu Pandemic

Common Goal, Common Challenges

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Challenges:

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Public Health Quality Improvement exchange

The Public Health Quality Improvement Exchange (PHQIX) is a centralized communication hub dedicated to supporting quality improvement efforts in public health practices throughout the United States. Submit your own quality improvement initiative or search for interventions that might be relevant to your community.



Submit a quality improvement initiative.



Search existing quality improvement interventions and tools.



Visit the community forum to start a discussion or chat with an expert.

User Menu

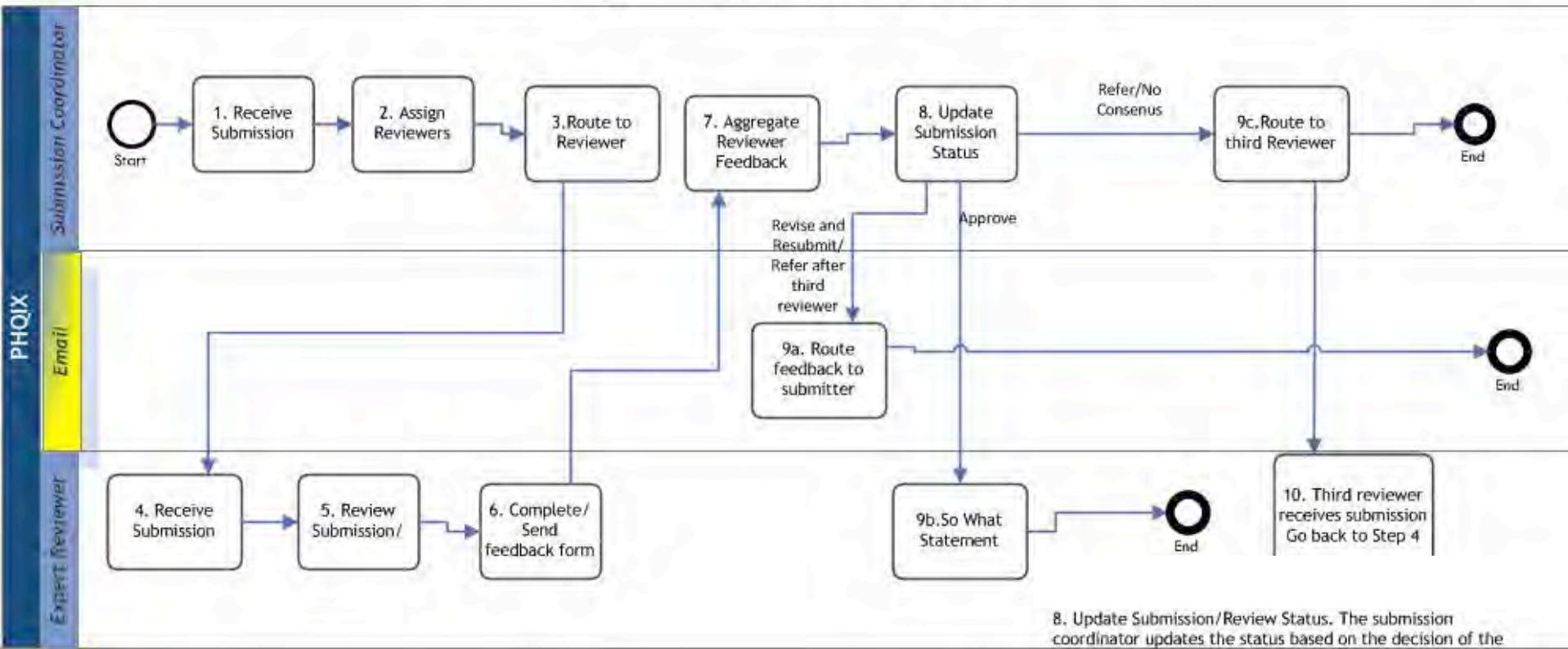
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QUALITY IMPROVEMENT TOGETHER.

<https://www.phqix.org/>

Quality Improvement Review Process

Public Health Quality Improvement Exchange (PHQIX)
Review Submission Workflow



8. Update Submission/Review Status. The submission coordinator updates the status based on the decision of the

PH

PHQIX

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[Adult Health Clinic Patient Services](#)

Cumberland County Health Department

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Summary:

The Adult Health Clinic (AHC) patient services quality improvement (QI) project aimed to increase effectiveness, efficiency, and timeliness of provision of medical services.

Le:

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[The Quality Improvement 101 Training Program](#)

NC Center for Public Health Quality

QI *

Summary:

The Center for Public Health Quality (CPHQ) piloted the Division of Public Health Quality Improvement 101 program, a 5–8 month program designed to train the NC Division of Public Health (NCDPH) workforce in applying continuous quality improvement (QI) tools and methods to make improvements in the...

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Int:

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[Implementing an Open Access Appointment System](#)

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Macon County Public Health

Summary:

Br:

Macon County Public Health (MCPH) has historically scheduled clinics by type of appointment (e.g., family planning, prenatal, Breast and Cervical Cancer Control Program [BCCCCP], child health). This created a long wait time to get an appointment for high-demand services, such as family planning...

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[Improving the Appropriate Collection of Revenue at a Local Health Department: The Medicaid Title XIX](#)

Flc

[Match QI Project](#)

Tacoma-Pierce County Health Department

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Summary:

Revenue collected through reimbursement for Medicaid (Title XIX) match activities had been trending downward for 2 years for the Tacoma-Pierce County Health Department. Additionally, the Washington state contractor hired to implement a new tracking and submission process for Medicaid match...

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PHQIX in Action



Open Forum Meeting in Charlotte, NC

News and Events

[Last Days of March Drawing!](#)

Don't forget to comment on a [submission](#) or on...

[The Relationship Between Quality Improvement and Performance Management](#)

"The relationship between quality improvement (QI) and performance management (PM) is mutually...

[Have You Been Making Excuses?](#)

Jack Moran, a member of the PHQIX Expert Panel, recently wrote about making excuses for not...

Recent Submissions


[Home](#) » [Community](#)

Ask an Expert

[A Culture of Quality: Is it Elusive?](#)

Question:

We have been working on QI efforts for about the last two years, and feel like we have made great strides toward implementing a QI culture. What recommendations would you have not only for sustaining the gains that have been made, but also to continue to develop the skills of staff at all levels?

Reply:

As Public Health Quality Improvement (QI) Consultants we are frequently asked by clients; "We are using QI tools and PDSA, but how do we know when we have created a culture of quality in our health department?"

Does this sound like you? There is a growing body of literature on what a public health culture of quality is and how it is created. But for many of us, it remains elusive. There isn't a short snappy answer, but much of what constitutes a culture of quality is actually embedded in the practice of doing QI. If you want to peek at some literature, NACCHO has a Roadmap to a...

[Submit a question](#)



QUALITY IMPROVEMENT TOGETHER.





Summary

- We all share common goals with respect to public health challenges
- We all share common needs to have an effective, comprehensive public health infrastructure
- Applying information science and technologies can help strengthen the infrastructure for public health by providing timely access to actionable health information
- Sharing proven methods for quality improvement practices in public health will benefit all

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Terima
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Linda Dimitropoulos, PhD

RTI International

lld@rti.org