



Genomic Clinical Decision Support Developing Solutions for Clinical and Research Implementation

October 2-3, 2014 **Bethesda North Marriott Hotel & Conference Center** 5701 Marinelli Road North Bethesda, MD 20852-2785

Live Web Link: <u>http://www.genome.gov/GenomeTVLive/</u> Twitter Hash Tag - #GCGS2014

Objectives –

GM 7 will convene key thought leaders in genomic implementation and application of clinical decision support to:

- Compare current state with ideal state of genomic clinical decision support to define gaps and strategies to • close the gaps
- Identify and engage US and international health IT initiatives that would support recommended strategies •
- Define a prioritized research agenda for GCDS

Key Questions to be addressed:

- Is clinical decision support an essential element in the successful implementation of genomic medicine? 1.
 - Does genomic clinical decision support differ significantly from decision support used for other purposes? If yes, what are the key differences?
 - What is the ideal state of genomic clinical decision support? •
 - How can the impact of genomic clinical decision support be defined and measured? •
- What are data issues that impact genomic CDS? 2.
- How do we manage knowledge for genomic clinical decision support? 3.
- What are implementation issues surrounding genomic CDS? 4.
- What are areas that should be prioritized for the research agenda for GCDS? 5.

Thursday, October 2nd

LOCATION:

Bethesda North Marriott Hotel & Conference Center

7:00 AM	Registration and Breakfast	Registration Table
8:00 AM	Welcome, Introductions, and Expectations	Marc Williams

Salon E-H Conference Room

Blackford Middleton





Continued...Thursday, October 2nd

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8:15 AM Keynote Speaker *"Tales of Tenerife and Three Mile Island: Lessons from Other Industries for Genomic Clinical Decision Support.***"** Dan Masys

- 9:00 AM 1 Hour Discussion Ideal State of Genomic CDS
- 10:00 AM Break and Networking

10:30 AM – 12:30 PM

Panel 1 – Key Question#2 – What are the data issues that impact genomic CDS? **Moderators: Robert Freimuth, PhD and James Ostell, PhD**

10:30 AM - 10:45 AM

Presentation of the Key Question and Expected Deliverables

10:45 AM – 12:15 PM

Discussion of Key Questions

- I. What data types are essential for genomic CDS
 - a. Patient Level / Clinical Data?
 - b. Provider / Institutional Data?
 - c. Other?
- II. How does the massive nature of genomic data influence development and implementation of genomic CDS?
- III. Are there unique attributes of genomics data that present unique challenges to the development and implementation of genomic clinical decision support?
 - a. Persistent nature of germ-line variation
 - b. Rapidly changing knowledge around genomic variants
 - c. Somatic vs. germline variation

12:15 PM - 12:30 PM

Wrap-Up and Summary

12:30 PM – 1:15 PM

Lunch and Networking

1:15 PM – 3:15 PM

Panel 2 - Key Question #3 - How do we manage knowledge for genomic clinical decisionsupport?Moderators: Atul Butte, MD, PhD and Josh Peterson, MD, MPH

1:15 PM - 1:30 PM

Presentation of the Key Question and Deliverables





Continued...Thursday, October 2nd

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1:30 PM - 3:00 PM

Discussion of Key Questions

- I. What are the necessary elements of knowledge management and representation to achieve ideal state? What standards exist or are needed to achieve ideal state?
- II. What type of clinical decision support architecture (Wright and Sittia, 2008) is needed to achieve ideal state?
- III. What governance issues arise in knowledge management?

3:00 PM - 3:15 PM

Wrap-Up and Summary

3:15 PM - 3:45 PM

BREAK and Networking

3:45 PM - 6:00 PM

Panel 3 – Key Question#4 – What are implementation issues surrounding genomic CDS? **Moderators: Kensaku Kawamoto, MD, PhD, MHS and Casey Overby, PhD**

3:45 PM -4:00 PM

Presentation of the Key Question and Deliverables

4:00 PM - 5:30 PM

Discussion and Key Questions

- I. Are there common workflow issues to be considered when implementing GCDS? If so, what are they?
- II. What are the intra- and inter- institutional data and knowledge exchange issues implementing GCDS at scale?
 - a. Storage
 - b. System Requirements
 - c. Standards
 - d. Security
- III. What is the role for patient facing genomic clinical decision support?

5:30 PM - 6:00 PM

Wrap-Up and Summary

6:00 PM Summary Day 1

Marc Williams Blackford Middleton

Dinner on your own for all attendees. Genomic Medicine Working Group – See Jaqueline Odgis





Salon E-H Conference Room

Friday, October 3rd

LOCATION: Bethesda North Marriott Hotel & Conference Center

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7:00 AM Breakfast and Networking

8:00 AM - 11:30 AM

Panel 4 - Key Question #5 Discussion – What are areas that should be prioritized for the research agenda for GCDS?

- I. What existing entities (e.g. CPIC informatics, AMIA Genomics working group, CDSC, Health e-Decisions, ONC-HealthIT, Professional Societies, Guideline Developers, etc.) are aligned with the recommended strategies and how can they be engaged?
- II. Avoidance of adverse reactions vs. improvement in health
- III. Quality improvement vs. cost containment

8:00 AM - 9:00 AM

Presentation and discussion of Day 1 Synthesis Mapped to Key Question #5 Co-Moderators: Marc Williams, MD, FAAP, FACMG and Blackford Middleton, MD, MPH, MSc, FACP, FACMI, FHIMSS

9:00 AM - 10:15 AM

Group Discussion on KQ5

10:15 AM - 10:45 AM BREAK and Networking

10:45 AM – 12:00 PM Continuation Group Discussion on KQ5

12:00 PM – 12:30 PM Summary and Next Steps

Marc Williams Blackford Middleton

12:30 PM Adjourn and Pick-Up Boxed Lunch