Augmented Intelligence: Advanced Technology Meets Case Management
Agenda

- **Welcome and Introductions:**
  - Commission for Case Manager Certification

- **Presentation:**
  - Deborah Viola, MBA, PhD
    Vice President, Data Management & Analytics
    Westchester Medical Center Health Network

  - Question and Answer Session
There is no call-in number for today’s event. Audio is by streaming only. Please use your computer speakers, or you may prefer to use headphones. There is a troubleshooting guide in the tab to the left of your screen. Please refresh your screen if slides don’t appear to advance.
How to submit a question

To submit a question, click on Ask Question to display the Ask Question box. Type your question in the Ask Question box and submit. We will answer as many questions as time permits.
A recording of today’s session will be posted within one week to the Commission’s website, www.ccmcertification.org

One CCM continuing education credit for board-certified case managers (CCM) and one ANCC nursing contact hour continuing education credit is available for today’s webinar only to those who registered in advance and are participating today.
Learning Outcomes Overview

After the webinar, participants will be able to:

• Distinguish among different types of technology and dispel common myths and misconceptions on how “big data” and advanced technology such as artificial intelligence will be applied in healthcare and to the practice of case management

• Describe how tech development teams are approaching the application of advanced technology & analytics -- for utilization management, patient flow, discharge planning, population health, consumer health engagement and other areas across healthcare -- and the intersection with case management

• Illustrate ways that new technology and analytical tools will cause case managers to work differently with both their employers and their clients in the near future and longer term
Augmented Intelligence: Advanced Technology Meets Case Management

MaryBeth Kurland, CAE
Chief Executive Officer
CCMC
Augmented Intelligence: Advanced Technology Meets Case Management

Deborah Viola, MBA, PhD
VP, Data Management & Analytics
Westchester Medical Center
Augmented Intelligence: Advanced Technology Meets Case Management

A Primer

December 5, 2019
CM Learning Network Webinar

Deborah Viola, MBA, PhD
Vice President
Data Management & Analytics
WMCH Health Network
Session Overview

• Define and distinguish between technology terms

• Identify patient data privacy and security considerations

• Identify how advanced technology intersects with the work of case managers

• Understand how tech development teams are approaching machine learning & AI as part of the case management process
Agenda

• Technology...Distinctions and Definitions
  ✓ Artificial Intelligence and Augmented Intelligence
  ✓ Machine Learning and Human Experience
  ✓ Interoperability and Intentional Blocking
  ✓ Patient Privacy and Patient Care

• Case Management
  ✓ Phases
  ✓ Analytics
  ✓ Opportunities
Healthcare as a Business

• The U.S. spends more than $3 trillion annually
• This spending represents 18 percent of GDP
• Dollars spent on healthcare reflect opportunity costs to society; these $ can’t be spent on infrastructure, education, or towards other business growth
• Out-of-pocket expenditures have doubled since 1970; these represent opportunity costs to households as evidenced by the rise in medical bankruptcies
Typical patient generates 80 MB each year

1 MB of data = 500 typed pages!

Data, data everywhere!

30% of entire world’s stored data generated by health care industry.
Disruptive Payment Models

• Transition from traditional fee-for-service to value-based payment models has fostered a data-driven ecosystem in healthcare

• Negotiation with insurers will become increasingly more important especially around new financial structures, quality measurement and patient centered care

• The data exists but the sources are disparate, access is not always automated, and beyond measuring length of stay or mortality, analytics become more challenging
Building Toward Membership Health
Future Model Requires Embracing Multiple Roles

Traditional Scope
Emerging Scope
Frontier Scope

Event Health
Episode Health
Member Health

Beyond Health

A Bridge Too Far?
Information Health
Wellness Health
Fitness Health
Public/Social Health

Consumer life-stage

Neonate ➔ Childhood ➔ Adulthood ➔ Decline ➔ End of Life

Source: Gist Healthcare analysis.

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Technology...Distinctions and Definitions
Technology Science

• Technology science is basically about the interaction with and application of human knowledge

• Artificial Intelligence (AI) and Machine Learning (ML) are important factors for success

• Augmented Intelligence is an alternative conceptualization of AI emphasizing the fact that it is designed to enhance and work with Human Intelligence (HI), not replace it
Predictive Analytics
Data Spirits
“Your previous provider refused to share your electronic medical records, but not to worry—I was able to obtain all of your information online.”
Intentional information blocking by vendors and health information exchanges (HIE) impacts interoperability.
Big Data: APIs

• Application Program Interfaces are essentially a toolkit of communication protocols and tools to build programs
Big Data: Disruptive Technology

• Blockchain could be the next disruptive technology in healthcare

✓ What does this mean?

✓ Simply put: Blockchain is an interface between the medical record and other personal data in a cloud based data warehouse that could provide information portability and secure access to critical medical information anywhere, anytime.
Case Management
Case Management Process

• “Case management is a collaborative process within the health and human services profession. While the roles of case managers may be different within each organization, the Case Management Process remains a series of phases that work together seamlessly to help clients and their support systems (families, significant others, caregivers, or others) deal with health and other related matters.”
Transformation in Progress!
AI Meets Case Management

OPPORTUNITIES
THANK YOU
Question and Answer Session

Deborah Viola, MBA, PhD
VP, Data Management & Analytics
Westchester Medical Center Health Network

MaryBeth Kurland, CAE
Chief Executive Officer
CCMC
Thank you!

- Please fill out the survey after today’s session.
- Those who signed up for continuing education will receive an evaluation from the Commission.
- A recording of today’s webinar and slides will be available in one week at http://ccmcertification.org

Commission for Case Manager Certification
1120 Route 73, Suite 200, Mount Laurel, NJ 08054
1-856-380-6836 • Email: ccmchq@ccmcertification.org
www.ccmcertification.org