AGENDA  AI & Data in Healthcare

12:30pm  Arrival & Lunch

1:00pm  Welcome and Introductions (Mona Atallah)

1:10pm  The Value of Health Analytics (John Froehlich)

1:30pm  Artificial Intelligence Overview (Sean McClure)

2:45pm  Deep Dive on AI with Accenture Labs (David Vinson)

3:15pm  Break

3:30pm  Shining Light on Dark Data (Colin Puri)

4:00pm  Labs Technology Showcase: Learn about our latest research at the labs.

4:45pm  Bringing it All Together (John Froehlich, Sean McClure)

5:30pm  Departures & Dinner
INNOVATION LED

WORKSHOP OBJECTIVES

• HEAR ABOUT THE LATEST TRENDS IN ARTIFICIAL INTELLIGENCE & BIG DATA.
• EXPLORE HOW DENMARK’S CLINICAL & ADMINISTRATIVE LEADERSHIP CAN APPLY AI & DATA PRACTICES TO IMPROVE HOSPITAL QUALITY AND EFFICIENCY.
Key Insights:
- Key 3 trends affecting us:
  1. Access to data & information – with a renewed focus on design and data analytics.
  2. Outcome based reimbursement and cost of healthcare.
  3. Structural changes in the market
- AI is being used for revenue optimization, improving efficiency, and increasing quality.
- Liquid expectations: This digital age is training our patient’s to expect digital interactions.
- Organize analytic talent based on the problem you are solving for.
- Leverage AI & Analytics for patient satisfaction, profitability, and reduction of wait times.
- AI is shaping how we experience the world.
Key Insights:

- Understand your challenges that will drive your use cases, which will lead to product implementation.
- AI requires stored, aggregated, clean, adjusted data, and adaptive software to work.
- Create a data driven culture within the organization.
- AI increases scalability. Humans should see AI as their partner to improve their ways of working.
- Approach low-hanging fruit to build out a Proof of Concept for Stakeholder buy-in.
- Examples of AI benefits in healthcare are:
  - Determining if patients are at risk of serious conditions
  - Providing early diagnosis of conditions
  - Increasing speed of treatment
  - Interpreting medical images in milliseconds, and more
  - Increasing claims management efficiency
Key Insights:

- Machine Learning is based on data & learning algorithms to create a multi-layered complex model.
- AI is still lacking ability to quickly label human knowledge.
- Labeling large amounts of unstructured data is expensive and time consuming.
- Clean up data sets faster to enable machine learning by empowering interaction between humans and machines.
- Latest research allows you to label large amounts of unstructured data with minimal expert supervision at scale to empower your AI models.
Areas of Opportunity for a Universal Metadata Repository:

- Universal Metadata Repository allows organizations to bring hidden data out from darkness to provide data traceability.
- It provides a universal view of data enables businesses to figure out what is most important quickly answer questions about the data
- This enables organizations to strategize around what data you have and what data you can bring together to implement AI.
- Obtain knowledge of knowing where to retrieve the data and how to track the data to the original source
- UMR approach provides a layer of governance and recording capability to continue to enrich the data within the system.
Emerging Technology Showcase: Consider new ways to apply emerging technology based on cross-industry examples.

- **Quantum Computing**: Rapidly pilot and deploy a quantum-enabled applications.
- **Model Management**: Framework for running analytical models at scale.
- **Extended Reality**: Using virtual and augmented reality for prototyping, understanding human behavior, connected workers, and more.
- **Retail Interaction Platform**: Allowing retailers with brick-and-mortar operations, better understand the behavior of their customers within the store using sensors.
Key Takeaways:

- Shift to new technology requires a real **culture change**.

- The use of an **iterative** (fail fast) approach and rapid prototyping can bring new solutions to quickly in order to engage stakeholders and obtain consensus.

- **Define** what **success** looks like and routinely engage in its measurement to continue excitement through the entire phase of the project.
Next Steps & Follow Up

- Regroup to discuss current business challenges
- Engage clinical environment to show the value and incentives of using AI and new data solutions.
- Consider a future need for a design thinking to ideate on challenges and use cases for implementing AI and Data solutions within various aspects of the healthcare organization.
- Discuss opportunities to rapidly prototype a working product for stakeholders buy-in.

Copyright © 2017 Accenture. All rights reserved.
CONCLUDING THOUGHTS...

“This was a nice balance between data and AI clinical possibilities and reduced the fears for the future”

“This was a very relevant session. We got a deeper understanding that makes us feel like we should do more”

“You hit the spot on topics we are dealing with at the moment. It is a different way of working in healthcare”

“Very valuable. We looked at the technical side and understood it. We need to engage our clinical environment to show the value and incentives of using AI. The new discussion needs to shift to value”

We are talking about technology as precision technology and precision medicine. We need to do this to help our clinicians and patients. We need to use big data in an analytic way
THE ACCENTURE TEAM

John Froehlich
Health Analytics Strategy Lead
North America, Accenture

Sean McClure, PhD
Sr. Technical Principal, AI
Accenture

Mona Atallah
Workshop Development Manager
Accenture Labs

David Vinson, PhD
Research Assoc. Principal
Accenture Labs

Colin Puri
Research Principal
Accenture Labs