VALUE ENHANCED NUTRITION ASSESSMENT IN WIC Webinar

Thursday, August 25, 2016 2:00-3:00 PM ET

Title: *The Role of Technology in VENA.....To Think or Not to Think?* Presented by: Shirley Sword, Pennsylvania WIC Audience: All WIC Agencies



United States Department of Agriculture

Technology & VENA ...to think, or not to think?

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Today's Objectives

- Provide a review of VENA
- Define technology and its role in our future
- Discuss technology as it relates to WIC assessments
- Identify the strengths and limitations of relying on technology to conduct VENA

Value Enhanced Nutrition Assessments in WIC





WIC

 Categories of assessment information

 The steps of an assessment process

U.S. Department of Agriculture Food and Nutrition Service Essential staff competencies required to conduct VENA

Health outcomes based model

Blending Art and Science in VENA



VENA • A Guide to the Art and Science of WIC Nutrition Assessment

The Desired Result of VENA

The endpoint of the value enhanced WIC nutrition assessment is the identification of risk factors and a plan for intervention. Risk factors may be considered as the springboard to formulate an intervention plan, rather than the conclusion of the discussion. But planning the most effective WIC intervention <u>for</u> a participant must include interaction <u>with</u> the participant.



VENA Guidance Document, p. 12

Technology – What does it really mean?

- The use of the term "technology" has changed significantly over the last 200 years. Before the 20th century, the term was uncommon in English, and usually referred to the description or study of the useful arts.
- In 1937, the American sociologist Read Bain wrote that "technology includes all tools, machines, utensils, weapons, instruments, housing, clothing, communicating and transporting devices and the skills by which we produce and use them." Bain's definition remains common among scholars today, especially social scientists.
- But equally prominent is the definition of technology as applied science, especially among scientists and engineers, although most social scientists who study technology reject this definition.

Wikipedia

Technology - Defined

Technology ("science of craft", from Greek τέχνη, techne, "art, skill, cunning of hand"; and $-\lambda o \gamma(\alpha, -logia)$ is the collection of techniques, skills, methods and processes used in the production of goods or services or in the accomplishment of objectives, such as scientific investigation. Technology can be the knowledge of techniques, processes, etc. or it can be embedded in machines, computers, devices and factories, which can be operated by individuals without detailed knowledge of the workings of such things.

Wikipedia



VENA is Technology!

 VENA is a collection of techniques, skills, methods and processes

> **PROCESS:** The assessment process

SKILLS: Core staff competencies

TECHNIQUES: Categories of assessment information

METHOD: Health Outcomes-based Model

So, what about computers?

"Technology can be embedded in machines, computers, devices and factories, which can be operated by individuals without detailed knowledge of the workings of such things."

What does that mean for our jobs and our roles in the future, particularly that of the CPA?

More automation?

Jerry Michalski, founder of REX, the Relationship Economy eXpedition, sees the logic of the slow and unrelenting movement in the direction of more automation: "Automation is Voldemort: the terrifying force nobody is willing to name... The race between automation and human work is won by automation. . .The safe zones are services that require local human effort (gardening, painting, babysitting), distant human effort (editing, coaching, coordinating), and high-level thinking/relationship building. Everything else falls in the target-rich environment of automation."

August 6, 2014

AI, Robotics, and the Future of Jobs; Aaron Smith and Janna Anderson; Pew Research Center http://www.pewinternet.org/2014/08/06/future-of-jobs/

Are our jobs in peril?

- The educational system is doing a poor job of preparing the next generation of workers
- Howard Rheingold, a pioneering Internet sociologist and selfemployed writer, consultant, and educator, noted, "The jobs that the robots will leave for humans will be those that require thought and knowledge. In other words, only the best-educated humans will compete with machines."

August 6, 2014

AI, Robotics, and the Future of Jobs; Aaron Smith and Janna Anderson; Pew Research Center http://www.pewinternet.org/2014/08/06/future-of-jobs/

The Future Workplace

2014 Georgetown Public Policy Institute – Center on Education and the Workforce; Job Growth and Education Through 2020 https://cew.georgetown.edu/wp-content/uploads/2014/11/Recovery2020.ES .Web .pdf

- 165 million jobs in the economy by 2020, with 55 million open jobs
- By 2020, 65 percent of all jobs in the economy will require postsecondary education and training beyond high school.
- By educational attainment:
 - 35 percent of job openings will require at least a bachelor's degree;
 - 30 percent of the job openings will require some college or an associate's degree;
 - 36 percent of the job openings will not require education beyond high school.
- Three of the fastest-growing occupations —STEM, healthcare professional, and community services — also have the highest demand for postsecondary education and training.

The Future Workplace (cont'd)

- The skills and abilities that are most valued in the economy include *leadership, communications, and analysis*.
- Of all occupations, **96 percent require critical thinking and active listening** to be either very important or extremely important to success.
- Over 60 percent of all occupations require **oral comprehension and expression** to be either very important or extremely important to success.
- Almost all occupations consider **near vision** to be either very important or extremely important to their jobs.

To think, or not to think...

Consider the Role of the MIS in VENA

Management Information Systems (MIS) can play an important role in the assessment process. They can be used to:

- Store the assessment information
- Automatically assign risk factors
- Improve the accuracy of risk assignment
- Perform calculations that save time

VENA Guidance Document, pg. 17



However, the use of MIS should never be considered as a replacement for critical thinking skills and professional judgment; nor should it replace dialogue and feedback between staff and participant during the WIC nutrition assessment.

VENA Guidance Document, pg. 17

Point of Clarification

Information systems are sets of interconnected components that collect, process and store raw data that is subsequently delivered to users as information.

The term MIS and "information system" are often used interchangeably. Information systems, by themselves deal strictly with the computerized aspects of a business, whereas MIS are supposed to assist with the management of multiple facets of business organizations.

Components of an Information System

The six components of typical information systems are: 1.Data 2.Hardware 3.Software 4.Communication 5.People **6.**Procedures

Strengths of a Good Information System

- Data warehouse
- Repository for relevant information
- Efficient at performing complicated computations
- Capture historical data
- Strong querying and reporting capabilities
- Captures information that is vital to the process
- Intuitive and easy to use

Pitfalls of Information Systems

- Conclusions drawn are limited by the quantity and quality of human input
- In an effort to capture more data, it requires standardization of business processes and may create inefficiencies
- More difficult to establish personal relationships between people
- Cannot make connections between abstract ideas
- Reliance on technology can create complacency
- Can lead to overzealous development efforts



What's Changed in WIC?

- For those who have been around for a long time in WIC, how has your job changed with the introduction of computers?
- How have things changed with the introduction of more sophisticated information systems?
- What tasks are different?
- Is there a difference in how long appointments take?
- Do you find yourselves interacting differently with your participants?

Positive Changes

- Don't have to hand write checks
- Reduction in the papers used to complete a WIC certification
- Don't need to keep as much information in the participant charts
- Don't have to hand plot growth charts
- Don't have to write down as much information
- Sharing of information is easier because of a centralized system
- Much easier to move clients within a state
- Historical data is captured and readily available
- Trend data can be tracked more easily

Not So Positive Changes

- Creates physical barrier between client and staff
- Distracts from conversation
- System errors or flaws override policies
- Does not promote staff use of professional discretion
- Reliance on guided scripts discourages use of probing questions
- Staff are not utilizing the information in the IS to its full capacity
- Focuses the staff attention on the completion of tasks as opposed to seeing the big picture
- Savings in time not used for additional education

"Just because it's what's done, doesn't mean it's what should be done!"

Developing Systems-Lessons Learned

- Computer applications are developed by people
- Computers are binary systems
- When developing new system functionality it is vitally important to have the right people at the table
- A computer system can do as much or as little as you want it to do, but at what price?
- There is such a thing as collecting too much information

Consider the following scenarios:

 A woman comes in to the WIC clinic and says that she is on methadone and has major dental issues. The CPA is trying to determine whether she would be justified to issue 2% milk. What food prescription should be provided?

Can the computer system assign the appropriate package?

Scenario #2

- A breastfeeding woman indicates that she smokes one pack a day of cigarettes and her hemoglobin level is at 9.8 gm/dl. What are the key counseling points that should be discussed as part of her nutrition education?
- Can the computer make that determination for you?

Scenario #3

- A three year old child comes in for their recertification appointment. They have been on WIC since infancy. Their BMI plots at the 10th percentile at this appointment, so the system auto-assigns Risk 103, Underweight or At Risk of Underweight. Is this risk assignment appropriate?
- Do we have all the puzzle pieces we need? How would you tailor the nutrition services provided to this participant?

Beyond VENA

- The scope of this presentation was to provide some food for thought related to technology and conducting assessments in WIC
- What about the use of technology in providing nutrition education?
- Computers can be powerful tools, but the tool should not become the focus of the services we provide
- We provide services to people and any application of technology should focus on how we can enhance the quality of services we provide to them

Questions?

This Webinar will be Posted to WIC Works!

Thank you!



Thank you for your participation.

Thank you for your hard work.



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