Nutrition Informatics 101

Presenter:
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Director, Nutrition Informatics
Academy of Nutrition & Dietetics

Panelists:
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Chair, Nutrition Informatics Committee
Academy of Nutrition & Dietetics
Product Manager, Nutrition Services Suite
The CBORD Group

Nancy Collins, PhD, RD, LD/N, FAPWCA
Member, Nutrition Informatics Committee
Academy of Nutrition & Dietetics
Founder & CEO
Nutrition411.com

January 10, 2013
Agenda/Objectives

1. Provide a general overview on how Nutrition Informatics relates to all areas of practice.

2. Update an overview on regulations which are driving use of health information technology standards in the United States.

3. Describe how structured nutrition data is necessary for future nutrition care and outcomes reporting.
Healthcare Information Management & Systems Society (HIMSS)

A cause-based, not for profit organization exclusively focused on providing global leadership for the optimal use of information technology (IT) and management systems for the betterment of healthcare.

www.himss.org
A multidisciplinary framework focused on thought leadership that is supported by membership programs for nutritionists, physicians, pharmacists, dietitians, clinical engineers and nurses.

HIMSS Nutrition Informatics Resources
http://www.himss.org/asp/topics_nutritioninformatics.asp
Academy of Nutrition & Dietetics

73,000 Members ~ Largest Food & Nutrition Organization in the World

Compensation & Benefits Survey 2011
Nutrition Informatics

"The effective retrieval, organization, storage, and optimum use of information, data, and knowledge for food and nutrition related problem solving and decision making. Informatics is supported by the use of information standards, information processes, and information technology”.

ADA Nutrition Informatics Work Group, 2007
Adapted from the definition of biomedical informatics in Biomedical Informatics by Shortliffe & Cimino Springer Science & Media 2006
Nutrition Informatics Committee, 2010

“The intersection of information, nutrition, and technology.”
The concept of “Nutrition Informatics” is young... however, visionaries in nutrition anticipated the value decades ago.

First Article: “Computers in Dietary Studies”

First Book: “Computers in Nutrition”

1962

1979
Academy Areas of Informatics


(11 Academy Members, Varied backgrounds + Staff Leaders)

✓ ADA Annual Conference (FNCE) “Open Space Sessions” 2007-2010
✓ Completed Nutrition Informatics Survey Dec 2007
✓ BOD Recommendations Approved Fall 2009

Nutrition Informatics Committee (2010-Present)

(7 Academy Members + Staff Leaders)

✓ Charged with Implementation of Recommendations to the BOD Fall 2009
✓ Completed Second Nutrition Informatics Survey Jan 2011 –HIMSS Analytics

Nutrition Informatics Summit (April 9, 2010)

(27 Academy Member + Staff Leaders)

✓ Convened to determine priorities of Nutrition Informatics Committee & HITECH Action Plan
Academy Areas of Informatics (continued)

NIC Interoperability & Standards Sub Committee (2011-Present)
(6 Academy Members + Staff Leaders)
✓ Creating Nutrition Standards in support of nutrition inclusion in health IT.

Dietetic Practice Group (DPG) Subgroups (2007-Present)
Clinical Nutrition Management DPG
✓ Subgroup on Nutrition Informatics established 2007

Nutrition Entrepreneurs DPG
✓ Subgroup on Internet

Consumer Health Informatics Work Group (May 2011-Present)
(6 Academy Members + Staff Leaders )
✓ Identifying consumer focused opportunities in nutrition informatics

Health IT Nutrition Roadmap Planning: (May 2012-Present)
✓ Multi-Committee Collaboration for Strategic Planning: Coding & Coverage, Quality Management, Nutrition Care Process/Standardized Language, Nutrition Informatics and Research
Informatics Impacts All Areas of Nutrition Practice

**Research**
Leveraging digital data for outcomes evaluation

**Education**
Translation of Technology To Practice

**Community**
School Lunch, Food Safety
Health Departments, Food Availability

**Food & Nutrition Management**
Nutrition Information Systems, Food Purchasing & Distribution

**Clinical**
Electronic Health Records

**Consultation & Business Practice**
Mobile Monitoring & Consumer Access
Electronic Access – Areas of Member Use

Respondents were most likely to report that they access patient education materials and nutrient databases electronically. Nutrient database was most frequently selected previously.

<table>
<thead>
<tr>
<th>Area</th>
<th>Percent – 2008</th>
<th>Percent – 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient education materials</td>
<td>72.1%</td>
<td>81.5%</td>
</tr>
<tr>
<td>Nutrient database</td>
<td>78.4%</td>
<td>81.1%</td>
</tr>
<tr>
<td>Evidence-based library</td>
<td>77.7%</td>
<td>78.4%</td>
</tr>
<tr>
<td>Continuing professional education</td>
<td>66.8%</td>
<td>78.0%</td>
</tr>
<tr>
<td>Professional journals</td>
<td>67.3%</td>
<td>77.3%</td>
</tr>
<tr>
<td>Recipes/menus</td>
<td>75.3%</td>
<td>75.8%</td>
</tr>
<tr>
<td>Lay literature</td>
<td>66.4%</td>
<td>73.1%</td>
</tr>
<tr>
<td>Drug data/information from patients/clients</td>
<td>NA</td>
<td>70.7%</td>
</tr>
<tr>
<td>Data information about patients</td>
<td>64.7%</td>
<td>66.8%</td>
</tr>
<tr>
<td>Standards of practices</td>
<td>64.5%</td>
<td>66.8%</td>
</tr>
</tbody>
</table>

We have listed a number of areas in which you may require data to support your daily work activities. Through which means have you accessed this data in the past six months.

2011 Nutrition Informatics Survey-Academy/HIMSS Analytics
Respondents were most likely to report that they used web tools for collaboration and communication to support daily activities. Three-quarters also reported using clinical nutrition management technologies in the past six months.

<table>
<thead>
<tr>
<th>Technology</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Web Tools for Collaboration</td>
<td>88%</td>
</tr>
<tr>
<td>Clinical Nutrition Management</td>
<td>78%</td>
</tr>
<tr>
<td>Data Analytics</td>
<td>69%</td>
</tr>
<tr>
<td>Electronic Health Record</td>
<td>61%</td>
</tr>
<tr>
<td>Project Management</td>
<td>42%</td>
</tr>
<tr>
<td>Human Resources Management</td>
<td>42%</td>
</tr>
<tr>
<td>Business Management</td>
<td>37%</td>
</tr>
<tr>
<td>Electric Personal Health Record</td>
<td>33%</td>
</tr>
<tr>
<td>Diet Office Management</td>
<td>32%</td>
</tr>
<tr>
<td>Food Service Management</td>
<td>30%</td>
</tr>
</tbody>
</table>
Health care is “going digital” at a rapid pace.

31% of health app users monitor their diet.

One-fifth of Smartphone owners have health apps.

Half of Smart Phone Owners use their device to get health information.

Eight in ten internet users have searched online for health information.

85% of American Adults Have A Cell Phone
We are in midst of a *Window of Opportunity* for Nutrition and Health IT
• Goal: Improving health and health care through the best possible applications of HIT.

• To help accomplish this goal, the Act creates a system of incentives to encourage practices to implement EHRs and disincentives to penalize slow adoption.

• “This initiative will be an important part of health reform as health professionals and health care institutions, both public and private, will be enabled to harness the full potential of digital technology to prevent and treat illnesses and to improve health.”

~David Blumenthal
Office of the National Coordinator of Health IT
Adoption of EHRs

Hospital adoption of EHR systems has more than doubled since 2009.

Figure 1: Percent of non-federal acute care hospitals with adoption of at least a Basic EHR system: 2008-2011

NOTES: Adoption requires the EHR system to have at least a basic set of EHR functions as defined in Table 2. Estimates reported are based on adoption of at least a Basic EHR without Clinician Notes.
*Significantly different from previous year (p < 0.05).
SOURCE: ONC/American Hospital Association (AHA), AHA Annual Survey Information Technology Supplement
Timeline

- President Bush Issues Executive Order in 2004
- HITECH Act Passed in 2009
- Stage I MU Policies Created in 2010
- Stage 2 MU Begins in 2014
- Stage 3 MU Begins in 2016+

Electronic Health Record Adoption
Goal of “Meaningful Use” (MU) Of HITECH Act

- Data Capture & Sharing
- Advanced clinical processes
- Improved outcomes
### Table 1: Estimated Health Care Costs* By Top 15 Causes of Death Which Relate to Nutrition in the United States

<table>
<thead>
<tr>
<th>Top 15 Causes of Death</th>
<th>Condition</th>
<th>Estimated medical Costs</th>
<th>Data Report Year</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diseases of Heart (1)</td>
<td>Congestive Heart Failure</td>
<td>$39.2 Billion</td>
<td>2010</td>
<td>Centers for Disease Control¹³</td>
</tr>
<tr>
<td></td>
<td>Coronary Heart Disease</td>
<td>$108.9 Billion</td>
<td>2010</td>
<td>Centers for Disease Control¹⁴</td>
</tr>
<tr>
<td>Malignant Neoplasms (2)</td>
<td>Cancers</td>
<td>$226.8 Billion</td>
<td>2007</td>
<td>American Cancer Society¹⁵</td>
</tr>
<tr>
<td>Chronic Lower</td>
<td>COPD</td>
<td>$49.9 Billion</td>
<td>2010</td>
<td>National Heart, Lung &amp; Blood Institute¹⁶</td>
</tr>
<tr>
<td>Respiratory Disease</td>
<td>Stroke</td>
<td>$53.9 Billion</td>
<td>2010</td>
<td>American Heart Association¹⁷</td>
</tr>
<tr>
<td>Cerebrovascular</td>
<td>Dementia</td>
<td>$200 Billion</td>
<td>2012 (Est)</td>
<td>Alzheimer’s Association¹⁸</td>
</tr>
<tr>
<td>Diseases (6)</td>
<td>Diabetes –I and II</td>
<td>$218 Billion</td>
<td>2007</td>
<td>American Diabetes Association¹⁹</td>
</tr>
<tr>
<td>Nephritis, nephrotic</td>
<td>Obesity</td>
<td>$147 Billion</td>
<td>2008</td>
<td>Health Affairs²⁰</td>
</tr>
<tr>
<td>syndrome &amp; nephrosis</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Septicemia (11)</td>
<td>Septicemia</td>
<td>$14.6 Billion</td>
<td>2008</td>
<td>Centers for Disease Control²¹</td>
</tr>
<tr>
<td>Chronic Liver Disease</td>
<td>Chronic Liver Disease</td>
<td>$28 Billion</td>
<td>1998</td>
<td>American Association for Study of Liver Disease²²</td>
</tr>
<tr>
<td>and cirrhosis (12)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Essential Hypertension</td>
<td>Hypertension Renal Disease</td>
<td>$93.5 Billion</td>
<td>2010</td>
<td>Centers for Disease Control²³</td>
</tr>
<tr>
<td>&amp; Hypertensive renal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>disease (13)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pneumonitis due to</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>solids and liquids (15)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL Costs of</strong></td>
<td></td>
<td><strong>$1.18 Trillion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Nutrition Related</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Conditions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Cost includes medical care, and in some instances lost productivity.
The Future is: “Data follows the Patient”

In Midst of:
- New Care Models
- Changes in Reimbursement
- Privacy, Security Changes
- New Policies
- Consumer Centered Care
The Need for “Interoperability”
“The extent to which systems and devices can exchange data, and interpret that shared data. In healthcare, interoperability is the ability of different information technology systems and software applications to communicate, exchange data accurately, effectively and consistently, and use the data that has been exchanged.”

There are three levels of interoperability:
1) Basic: receiving does not have to interpret data.
2) Structural: defines the format of data exchanged
3) Semantic: highest level; combines structure to allow receiver to interpret data.

http://www.himss.org/asp/topics_focusdynamic.asp?faid=665
Different Industries, Same Concept
A **standard** is a well-defined approach that supports a business process and . . .

- has been agreed upon by a group of experts
- has been publicly vetted
- provides rules, guidelines, or characteristics
- helps to ensure that materials, products, processes & services are fit for their intended purpose
- is available in an accessible format
- is subject to an ongoing review & revision process

**Standards Harmonization** is required when a proliferation of standards *prevents* progress rather than *enabling* it.
Standards for Nutrition Practice

- **The Process of Care**
  - The Nutrition Care Process (NCP)

- **Terminologies for Food**
  - Langual
  - UNII codes
  - *SNOMED – CT*

- **Terminologies for Describing Health Care**
  - The International Dietetics and Nutrition Terminology (IDNT)
  - *SNOMED – CT*
  - *LOINC*

- **Moving information between systems**
  - HL7 messages for patient information and diet orders
Since Feb 2010 . . .

Academy participation as organizational member in HL7

HL7 January 2013 WG Meeting – Academy Leadership

- Nutrition Orders Clinical Messaging Project (DSTU)
- HL7 Patient Care Allergy Project (DAM)


HL7 Patient Care Pressure Ulcer Prevention Model: Inclusion of Nutrition Care in Prevention and treatment.

Academy members & staff are actively participating in multiple HL7 WG

Academy participation in ONC Standards & Interoperability Framework
Nutrition Orders Domain Analysis Model—Balloted May 2012/Published
- **What** data do we need?
- **Who** has/needs that information?
- **When** is that data critical (Describes workflow)

Nutrition Order Clinical Messages—Ballot in Jan/May 2013
- Combines **How** with **What** (e.g., diet, supplement, tube feeding) to be exchanged
- Sets the rules (Conformance)
- HL7 Reference Information Model
  - Structured data and reuse (C-CDA documents)
  - Binds to Vocabulary/Terminology (SNOMED & LOINC)
Nutrition Data Exchange – Present & Future

EHR

HL7

ADT Interface
Nutrition/Diet Order Interface

HL7

EHR Requirements
Nutrition/Diet Orders
Documentation
Allergies and Intolerances

Nutrition Information System

EHRs

HIE

PHR

Registries

Himss
Nutrition Care Process

Nutrition professionals practicing in all areas of healthcare including in-patient acute care, long term care, and outpatient/ambulatory care use the Nutrition Care Process (NCP) for identifying, planning for, and meeting nutritional needs of patients/clients. The Nutrition Care Process includes four steps:

- Nutrition Assessment
- Diagnosis
- Intervention
- Monitoring & Evaluation

Each step in the Nutrition Care Process has a set of standardized terms published by the Academy for Nutrition and Dietetics (AND) as the International Dietetics & Nutrition Terminology (IDNT).

Work is currently underway to submit these terms to SNOMED-CT. The narrative summary and underlying IDNT codes would represent the nutrition and diet data that should be included in clinical summaries, nutrition consult request summaries, and as discharge summary and instructions.
Use of ADA’s Nutrition Care Process Standardized Language has increased since this study was last conducted. At this time, approximately 61 percent of respondents reported that they use nutrition diagnostic terms.

- Nutrition Diagnostic Terms: 61%
- Nutrition Assessment Terms: 52%
- Nutrition Intervention Terms: 47%
- Nutrition Monitoring and Evaluation Terms: 42%
- Not Used at Primary Worksite: 32%
- Don't Know: 1%

©2011 HIMSS Analytics

2011 (N=1,690)  2008 (N=11,223)
Sources of Nutrition Data

- **Diet Orders** (MD order and/or patient activation)
- **Medication List** (including vitamin/mineral, herbal supplements)
- **Problem List**
- **Intolerances including Allergies** (Food)
- **Goals** (Nutrition Related)
- **Patient Instructions** (Food Modification/Enteral/Parenteral)
- **Social History** (Alcohol)
- **Vital Signs** (Ht/Wt/BMI with Date Stamp)
- **Interdisciplinary Documentation**
- **Lab Values** (condition specific related to nutrition)

- **Screening & Assessments**
- **Diet histories**
- **Weight Changes**
- **Food Intake Records**
- **Food composition databases**
Structured Data

• Data that is identifiable because it is organized in a specific structure.
• Most Common Form is a “database” where specific information is stored based upon a methodology of columns and rows.
• Is searchable by data type within content.
• Is understood by computers and also efficiently organized for human readers.

For example: Word document (unstructured) vs. Excel Spreadsheet (structured).
Structured or Unstructured Data?

### Measurements - Pediatric

<table>
<thead>
<tr>
<th>Measurement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Child</td>
</tr>
<tr>
<td>Weight (kg)</td>
<td>25.5</td>
</tr>
<tr>
<td>Height (cm)</td>
<td>78.5</td>
</tr>
</tbody>
</table>

- **Weight For Age Percentile**: 25 - 50 percentile
- **Height For Age Percentile**: 25 - 50 percentile
- **BMI For Age Percentile**: Greater than or equal to 95th percentile; Overweight

**Growth Chart Comments**:

**Peds Measurements Comments**
Structured or Unstructured Data

**Energy Balance**
- Increased energy expenditure
- Inadequate energy intake
- Excessive energy intake

**Oral or Nutrition Support Intake**
- Inadequate oral food/beverage intake
- Excessive oral food/beverage intake
- Inadequate intake from enteral/parenteral nutrition
- Excessive intake from enteral/parenteral nutrition
- Inappropriate infusion of enteral/parenteral nutrition

**Fluid Intake**
- Inadequate fluid intake
- Excessive fluid intake

**Bioactive Substances**
- Inadequate bioactive substance intake
- Excessive bioactive substance intake
- Excessive alcohol intake

**Nutrient**
- Increased nutrient needs (specify below)
- Malnutrition
- Inadequate protein-energy intake
- Decreased nutrient needs (specify below)
- Imbalance of nutrients

**Fat and Cholesterol**
- Inadequate fat intake
Structured Data – For Queries & Outcomes

<table>
<thead>
<tr>
<th>NUTRITION NEEDS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct Date/Time?</td>
</tr>
<tr>
<td>Weight Assessment</td>
</tr>
<tr>
<td>○ Current weight</td>
</tr>
<tr>
<td>○ Adjusted weight</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Estimated Needs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein Needs</td>
</tr>
<tr>
<td>Assessment Factor</td>
</tr>
<tr>
<td>1.0 gm/kg</td>
</tr>
<tr>
<td>to</td>
</tr>
<tr>
<td>Energy Needs</td>
</tr>
<tr>
<td>30 KCal/kg</td>
</tr>
<tr>
<td>Fluid Needs</td>
</tr>
<tr>
<td>30 mL/kg</td>
</tr>
<tr>
<td>or per MD</td>
</tr>
</tbody>
</table>

| Explanation of Needs |
| Increased Needs Due to |
| Decreased Needs Due to |
| ○ Maintenance needs | ○ Low albumin |
| ○ Increased needs | ○ Weight gain desired |
| ○ Decreased needs | ○ Wound healing |
| ○ Other | ○ Other: |

| Comments |
| skin: Fl. foot ulcer, dressing changed this AM, + Drainage. |

Circled boxes are calculated fields
Structured Data – Intervention

This field will populate a physician tab for quick reference.
Structured Data – Tube Feeding

<table>
<thead>
<tr>
<th>Tube feed access</th>
<th>Tube feed order</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEG</td>
<td>Crucial</td>
</tr>
<tr>
<td>GT</td>
<td>Ensure</td>
</tr>
<tr>
<td>JT</td>
<td>Ensure Plus</td>
</tr>
<tr>
<td>ND</td>
<td>Glucerna Select</td>
</tr>
<tr>
<td>Oral Gastric Tube</td>
<td>Impact</td>
</tr>
<tr>
<td>FEG</td>
<td>Isocore 1.5</td>
</tr>
<tr>
<td></td>
<td>Nepero Carb Steady</td>
</tr>
<tr>
<td></td>
<td>Nutren 2.0</td>
</tr>
<tr>
<td></td>
<td>Nutren 2.0</td>
</tr>
<tr>
<td></td>
<td>Nutren 2.0</td>
</tr>
<tr>
<td></td>
<td>Repleate with fiber</td>
</tr>
<tr>
<td></td>
<td>Traumacal</td>
</tr>
<tr>
<td></td>
<td>Vivonex RTF</td>
</tr>
<tr>
<td></td>
<td>Other</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional calorie sources</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Additives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pource</td>
</tr>
<tr>
<td>Bemohier</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Aginaide</td>
</tr>
<tr>
<td>Polyose</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tube feed provides:</th>
<th>% of need met by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td></td>
</tr>
<tr>
<td>Fluid</td>
<td></td>
</tr>
<tr>
<td>Comments</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tube feed rate</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Additive rate</th>
</tr>
</thead>
</table>

**Correct Date/Time?**

**Tube Feed changed to (per therapeutic interchange policy):**
E-Measure 421 - Preventive Care and Screening: Body Mass Index (BMI), Screening and Follow-Up

- Screening and follow-up for individuals outside of normal parameters:
  - Age 65 years and older BMI of $\geq 23 - < 30$
  - Age 18 – 64 years BMI of $\geq 18.5$ and $< 25$

- Standards require specific format and use of standard terminology
Structured Data – eMeasures

Assessment
BMI > 30

Diagnosis
Excessive Energy Intake

Event
Reporting on Outcomes by Value Set

Improved Outcomes = Better Health

Intervention
Diet Counseling
Energy Modified Diet

Outcome
Weight Loss leading to Recommended Body Mass Index

Improved Outcomes = Better Health

Improved Outcomes = Better Health
Pt Presents With Newly Diagnosed Hypertension

Secondary Diagnosis: Obesity

Provider Discusses Options for Treatment

EHR Generates Options & Side Effects

Weight Loss Of 10 LBS

HTN Medication Side Effects: XYZ

HTN Medication Side Effects: 123

Med for SE

Med for SE
Patient-Generated Data

Data Capture
- Patient* directed / authorized
- Sometimes provider-requested

Data Transfer
- Patient* directed / authorized
- Sometimes provider-requested

Review / Document
- Provider directed / authorized

*Patient, person, designee
Abbreviations: APP=application; PCHR=personally controlled health record; EHR=electronic health record
How familiar are you with the part of the new law that says patients should receive copies of their health information in electronic form if they ask for it?

- Very familiar: 2% (Public), 5% (Doctors)
- Somewhat familiar: 10% (Public), 21% (Doctors)
- Not too familiar: 28% (Public), 43% (Doctors)
- Not at all familiar: 59% (Public), 30% (Doctors)

Markle Foundation Survey on Health in a Networked Life Jan 2011
Processes & Tools for Nutrition

Telehealth

HealthVault

PHR

EHR

SMS

Decision Support

Mobile Apps

Online Learning

Academy of Nutrition and Dietetics

HIMSS
The Age of Consumer Engagement
Concluding Comments

Nutrition Informatics is the intersection of information, nutrition and technology.

Nutrition inclusion in health information technology is supported by standards development work at HL7.

Use of Structured Nutrition Data will allow for use of Clinical Decision Support and Outcomes Reporting.

Used effectively, Nutrition Informatics has great potential to improve quality of care and outcomes for 11 out of the Top 15 Causes of Death in America.
Additional Resources

HIMSS Nutrition Informatics Web Page
http://www.himss.org/asp/topics_nutritioninformatics.asp

Academy Nutrition Informatics Blog
http://www.eatright.org/Media/Blog.aspx?id=6442473707&blogid=6442451184

Academy Nutrition Informatics Web Page
http://www.eatright.org/HealthProfessionals/content.aspx?id=6442471521
Save the Dates!

Nutrition Informatics Town Hall Series:

**Informatics Competencies Delphi Study**
Thursday, February 14th, 2013 at 12:00 pm Central/1:00pm Eastern
Presenter: Elaine Ayres, MS, RD (NIC Interoperability and Standards Sub-Committee Chair)
Panelists: Peggy Turner, MS, RD/LD (NIC Incoming Chair) & Phyllis Fatzinger-McShane, MS, RD (NIC member)
Registration - [https://himss.webex.com/himss/onstage/g.php?t=a&d=926906705](https://himss.webex.com/himss/onstage/g.php?t=a&d=926906705)

**Meaningful Use in Action – Exploring the Possibilities of Nutrition Informatics**
Thursday, April 11, 2013 at 12:00 pm Central/1:00pm Eastern
Presenter: Jan Greer-Carney, MS, MBA, RD, LD
Panelist: Lindsey Hoggle, MS, RD, PMP (Academy Director, Nutrition Informatics)
Registration - [https://himss.webex.com/himss/onstage/g.php?t=a&d=922070039](https://himss.webex.com/himss/onstage/g.php?t=a&d=922070039)
Questions?
Thank You!

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