ISE & Healthcare

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Healthcare Trends & Terminology
Health Care Reform – Value Based Purchasing” (VBP)
Medicare Access and CHIP Reauthorization Act (MACRA)
“Care Transformation”
“Accountable Care Organizations (ACO) & Primary Care Medical Home (PCMH)
Business Intelligence/Decision Support/”Big Data”
Population health, preventive care and predictive modeling
Patient safety/”patient engagement”
Electronic Medical Records (EMR) & Health Information Exchange (HIE)
Mobile health technology/voice and handwriting recognition/barcording
Wearable/implantable technology
Smart homes/gerotechnology
Nanotechnology
Telemedicine
Meaningful Use/quality management
Lean/Agile
ICD-10
“Pre-hospital care” (emergency medical services)
Job Titles and Venues
Employment Settings

- Providers (hospitals/clinics/urgent care) and health plans
- Vendors (software, medical devices, nanotechnology)
- Emerging health entities (start-ups or e-health companies)
- Health division of established firms (Google, Microsoft, Apple, Intel, etc.)
- “Retail” medicine (brick & mortar) and online pharmacies/other services
- Public sector/public health
- Non-profits, global health/disaster relief
- Life sciences or virtual reality firms
- Architectural firms
- Consulting firms
- Big data firms
<table>
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<th>“Code Words” in Job Descriptions</th>
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<td><strong>• Analyst/Analytics:</strong> (revenue cycle, value chain, security, financial, clinical value, data, supply chain, utilization mgmt, outcomes mgmt, systems, business, sourcing, research)</td>
<td><strong>• EMR Implementation analyst</strong></td>
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<td><strong>• Program Operations, Process redesign</strong></td>
<td><strong>• Lean/Agile</strong></td>
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<td><strong>• Decision support, clinical decision support, Business Intelligence</strong></td>
<td><strong>• Cost/policy/financial/predictive/statistical modeling</strong></td>
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<td><strong>• Care Transformation</strong></td>
<td><strong>• Quality/performance management</strong></td>
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<td><strong>• Project Manager/Coordinator</strong></td>
<td><strong>• Compliance or “Meaningful Use”</strong></td>
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<td><strong>• Materials and Logistics</strong></td>
<td><strong>• Design/Ergonomic/Reliability</strong></td>
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<td><strong>• Optimization</strong></td>
<td><strong>• Epidemiology</strong></td>
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<td><strong>• Virtual Reality</strong></td>
<td><strong>Note: you will not see the words Industrial Engineer in healthcare job descriptions. “Management Engineer” sometimes used in midwest &amp; south part of US.</strong></td>
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Resources
Institute of Medicine publications
“Every system is perfectly designed to get the results it consistently achieves.”

Don Berwick, MD
Institute for Healthcare Improvement (IHI)
UNIVERSAL DESIGN

http://www.universaldesignonline.com
**IMAGINE:**

The Future of Aging…..

http://www.youtube.com/watch?v=SBH9dkCZsXQ
Associations and Certifications
Important Associations

• ** Healthcare Information and Management Systems Society (HIMSS) **
  National: www.himss.org
  WA state chapter: http://wa.himsschapter.org/
  HIMSS17 students: http://www.himssconference.org/register/registration/program-assistants
  Communities: http://www.himss.org/get-involved/community

• Project Management Institute (PMI)
  Puget Sound Chapter: http://pugetsoundpmi.org/index.php

• IIE/Society For Health Systems (SHS)
  http://www.iienet2.org/SHS/
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<th>Organization</th>
<th>Certification</th>
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| HIMSS        | Certified Associate in Healthcare Information & Management Systems - CAHIMS  
(initial credential) |
| HIMSS        | Certified Professional in Healthcare Information & Management Systems – CPHIMS  
(credential for those with more experience) |
| PMI          | Project Management Professional (PMP)  
Agile Certified Professional (PMI - ACP) |
| ACCE         | Clinical Engineering Certification (more for medical device work) |
| Various      | Lean Six Sigma certification |

Strategies for leveraging the professional associations:
- Attend the chapter meetings
- VOLUNTEER – it is great networking & they can waive your fees!!
- Ask about scholarships and Emerging/Early Career Professional services
- Consider one of the certifications
Your Questions ......