



# A TECHIE NURSE IN DOD HEALTH IT: A VENDOR PERSPECTIVE

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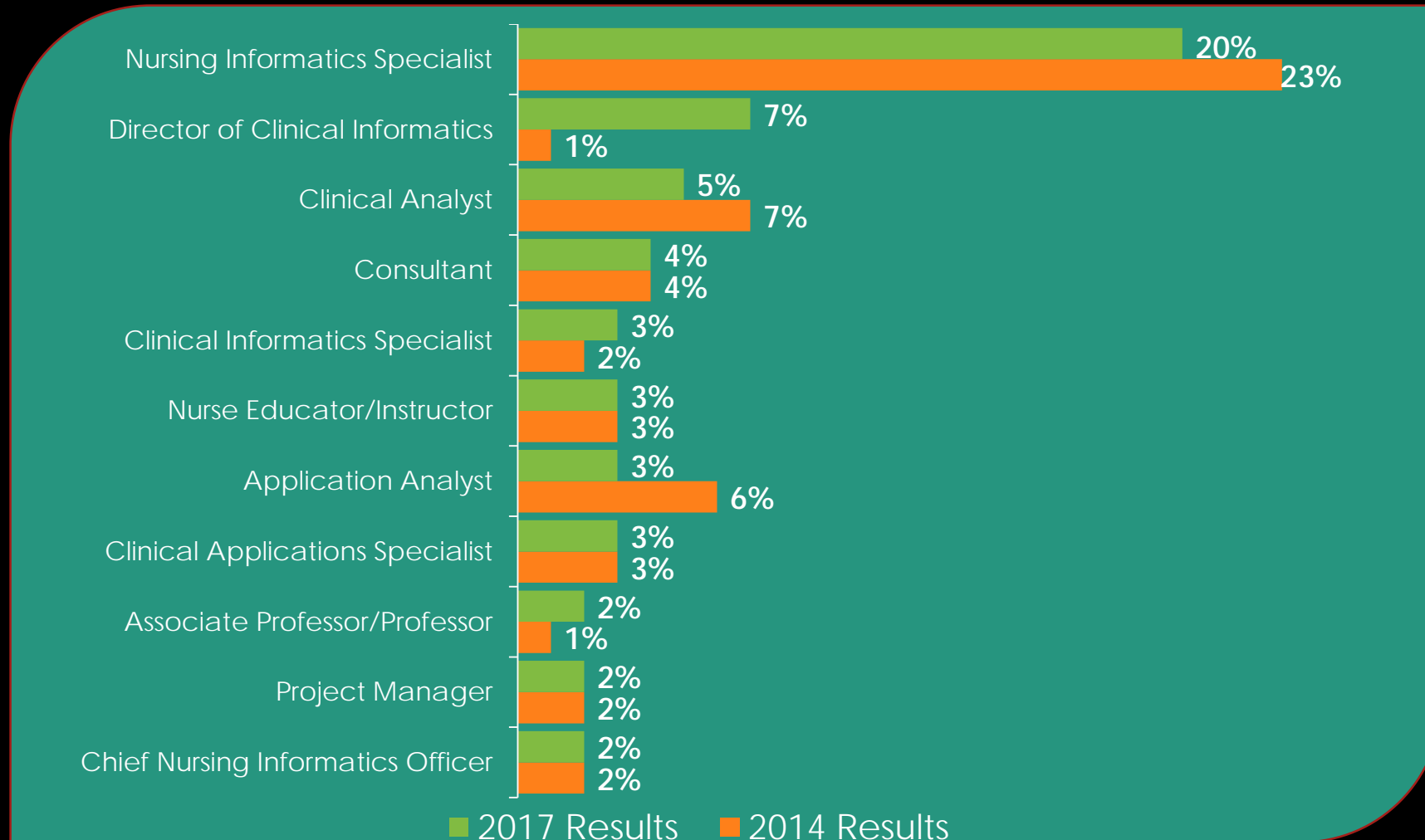
# NURSE INFORMATICIST: A.K.A. "THE TECHIE NURSE"

Computer Geek! Nerd! Just a Nurse... Computer Help Desk

**Subject Matter Expert (SME)** *Technical Liaison*

*Functional* Tester *Analyst* **DEVELOPER** Project Manager

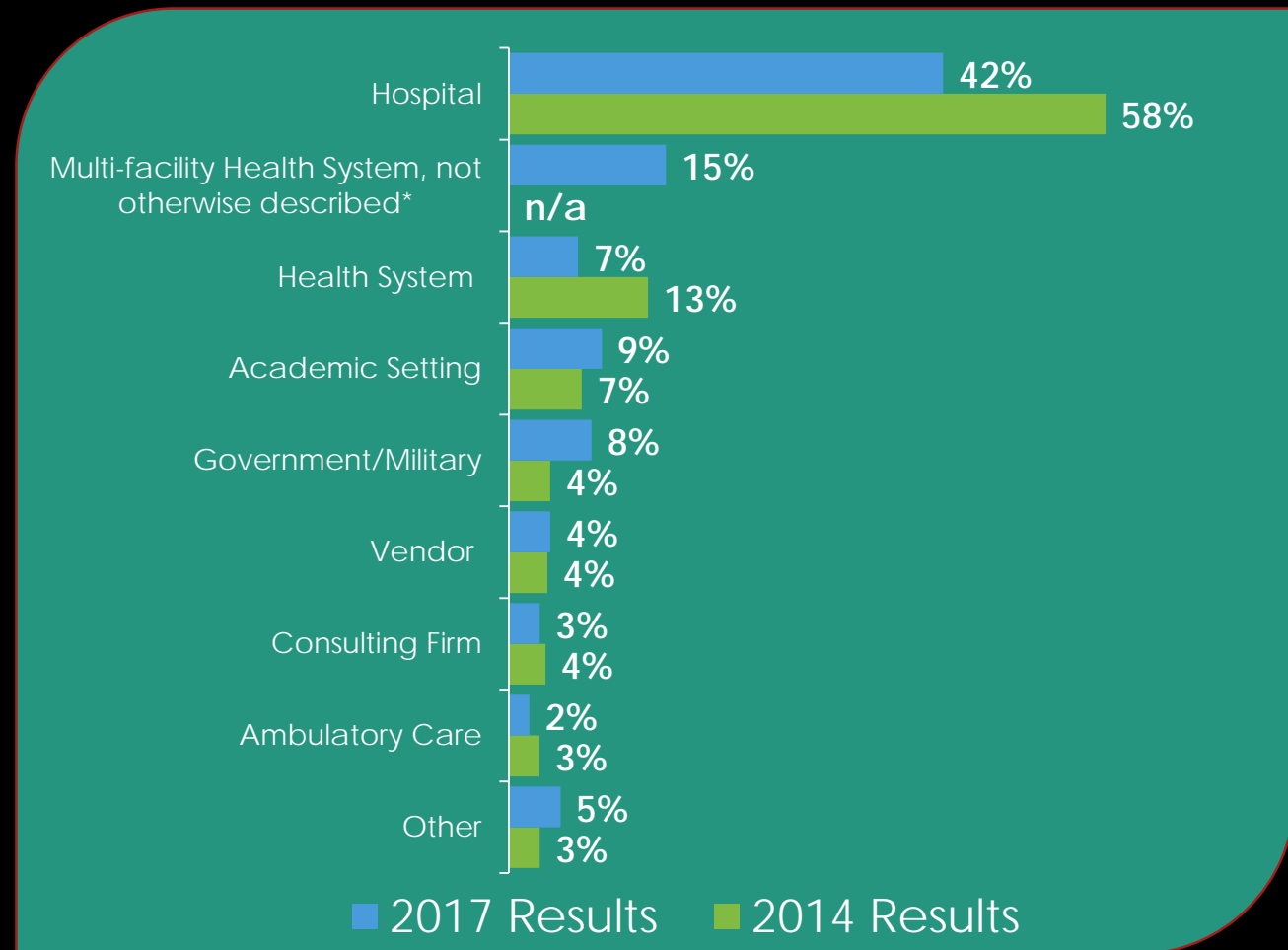
# NURSE INFORMATICISTS



\* HIMSS 2017 Nursing Informatics Workforce Study

# EMPLOYMENT

- **Employers**
  - >65% Clinical/Healthcare Setting
  - 8% Government/Military Setting
  - 4% Vendors
- **Federal Health IT Systems Integrator**
  - a.k.a "Vendor" or "Contractor"
  - Support Department of Defense (DoD) Military Health System (MHS), Veterans Health Administration (VHA), Center for Medicare & Medicaid Services (CMS), & Health & Human Services (HHS)



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# DOD HEALTH IT

- **Defense Health Agency (DHA)**
  - Oversees Military Health System (MHS) and Tricare Health Plan
- **9+ million beneficiaries**
  - 1 million + Active Duty beneficiaries
  - Active Duty, Retirees, & Family Members
- **www.health.mil**

## **TRICARE** FACTS AND FIGURES

MILITARY HEALTH SYSTEM\* FACTS AND FIGURES

Our Beneficiaries:

**9.4** MILLION



### HEALTH & DENTAL FACILITIES

Military Hospitals

[ **54** ]

Military Medical Clinics

[ **377** ]

Dental Facilities

[ **270** ]



### 2017 PATIENT CARE AT-A-GLANCE



**106**  
Million

Outpatient Visits



**ONE**  
Million

Inpatients Admitted



**110**  
Thousand

Number of Births



**119**  
Million

Prescriptions Filled

\*DATA FOR FISCAL YEAR 2017



# HEALTH IT IMPACTS

## Clinical

Electronic Health Records (EHRs)  
Admission (ADT) Systems  
Med System  
Barcode Scanning  
Medication Pumps  
FHR Monitoring  
Ventilation Systems  
Documentation Scanning  
X-rays and Imaging  
Dictation  
Safety and Risk Monitoring Systems

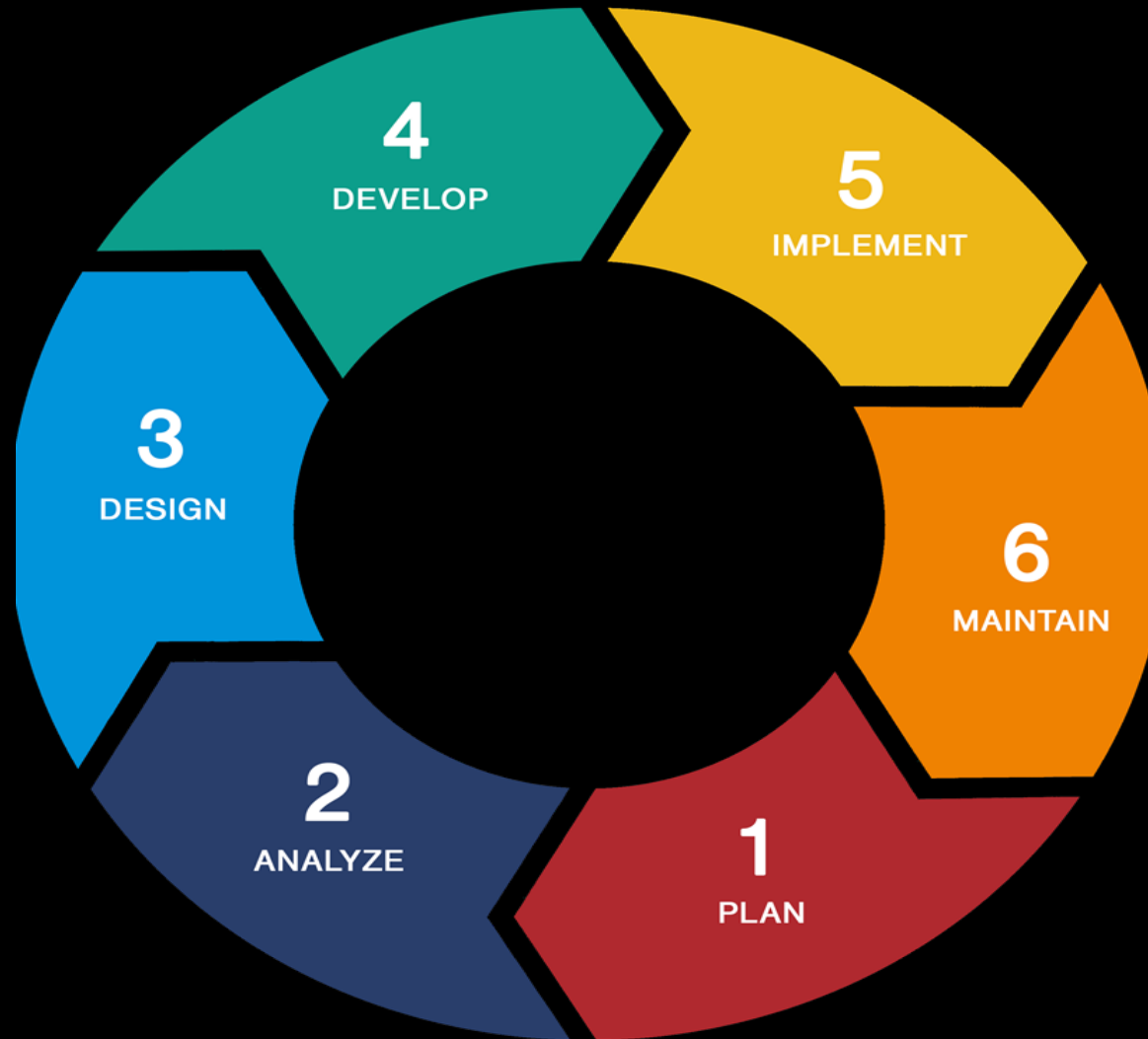
## Finance/Mgmt

Registration  
Claims Systems/ Direct Billing to Insurance Companies  
Billing to Patients  
Charge Captures  
Payroll Systems  
HR Systems  
Staff Scheduling  
Procedure Scheduling

## Networks

Wi-Fi  
Internet (Network Bandwidth)  
Intranet  
Back-up Power Source Location/ Planning  
Intercom Systems  
Mobile/Telecom Networks  
Smart Phones  
Tablets

# PROJECT/ SYSTEM LIFECYCLE



# PLANNING

- **Request for Information (RFI)**
  - Government releases/ Contractor responds
  - Vendor provides capabilities and/or ideas based on request
  - NI input
- **Request for Proposal (RFP)**
  - Government releases/ Contractor responds
  - Includes Price & Solution
  - 30-100+ pages – Technical, Quality, & Management responses
  - Draft Management Plans
  - Period of Performance typically 6 months – 5 years (Option Periods)
  - Decision factors vary – Best Value, LPTA (Lowest Price Technically Acceptable), etc
  - May be a “team” response
  - NI input and resumes

.... **Award!**



# ANALYZE

- **Requirements Gathering**
  - Subject Matter Experts (SME's)
    - NI's lead the way!!
    - Clinical requirements, process flows, wish lists
  - Joint Service Sessions: JAD (Joint Application Design)
    - Service specific workflows, user requirements, hierarchy, site configurations
  - Government Provided
    - Specific security, network, storage, data retention, reporting, analytic, compliance requirements

*...Acceptance Criteria*

# DESIGN & DEVELOPMENT

- **Storyboards/ Mock-ups**
  - Analysts and Technical team together
- **System Development**
  - Hand off to Technical team (some NI's but not common)
  - Various methodologies – waterfall, Agile, etc
  - Various technologies & components – network, servers, database, interfaces, application, etc.
- **Validation**
  - Development Testing (DIT), System Testing (SIT), User Acceptance Testing (UAT)
  - Find the defects/bugs and confirm acceptance criteria
  - Lot's of NI's and clinical support

*...Finished Product!*

# IMPLEMENT

- **Authority to Operate (ATO)**
  - Security risk assessments – DIACAP, NIST, RMF
  - NI's involved in security based training and certifications, critical in creating backup and contingency plans
- **Deployment**
  - Local & world-wide impact
  - Timing (time differences world wide)
  - Integration with other systems
  - Post-deployment process improvements/ results

*...Go Live!*

# MAINTAIN

- **Continued sustainment (joint efforts)**
  - System maintenance
  - Hardware maintenance
  - Security monitoring & control
- **RFP for maintenance activity**
  - Process starts again!
- **Continued employment**
  - Stick with the project or with the company?

*...Planning*

# IMPLICATIONS

- ✓ Experience and lessons learned from supporting 9+ million beneficiaries
- ✓ System development and program management is truly cyclical
- ✓ Lots of opportunities for Nursing Informatics in vendor and federal healthcare





**QUESTIONS?**