

# Occupational Health Surveillance

Putting the Right Tools in the Right Hands

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# NIOSH – 1985-90

## Surveillance Highlights

- SENSOR
- ABLES
- FACE
- Death Certificates

# Sentinel Event Notification System for Occupational Risks (SENSOR)

- Targeted Health Conditions (Sentinel Events)
  - Case Definitions
- Sentinel Provider Network
  - Voluntary Reporting
- State Health Departments
  - Receive and Analyze Data
- Link to Action

# SENSOR: Critical Success Factors

- State Agency Leadership and Innovation
  - Massachusetts
  - New Jersey
- NIOSH
  - Leadership
  - Support
  - Convening

# Adult Blood Lead Surveillance- ABLES

- Lab reporting
- ABLES Model
  - Case Definition
  - Sentinel Providers
  - State Health Agency
  - Action oriented

# Guiding Principles

- Use surveillance for:
  - Case identification
  - Trend Monitoring
- Focus on specific conditions
- Involve State Health Agencies
- Connect Surveillance with ACTION

# The Future

- Major Drivers
  - Unprecedented Health Care System Change
  - Focus on Population Health
  - Electronic Health Records- Meaningful Use
  - ONC Interoperability Roadmap

# The Future

- Changing Role of Public Health Agencies
  - Population Health Strategist
  - Connect with existing information systems
  - Avoid constructing stand alone systems which are not sustainable



# Organizational Challenges

- Disconnect between Occupational Health and Public Health System
  - But there are important exceptions
- NIOSH: a part of CDC but apart from CDC
  - But bridge building has happened

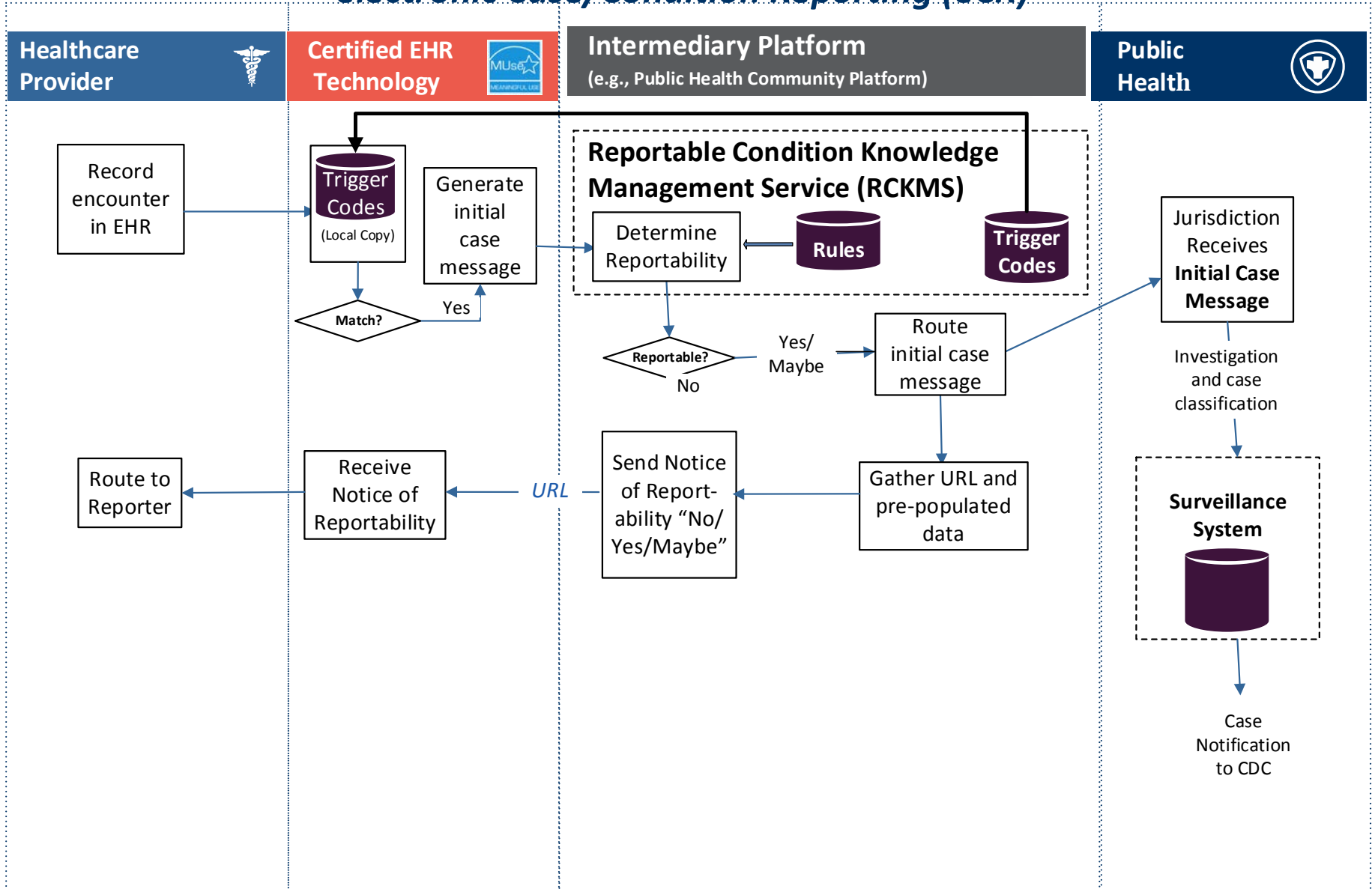
# Capacity Challenges

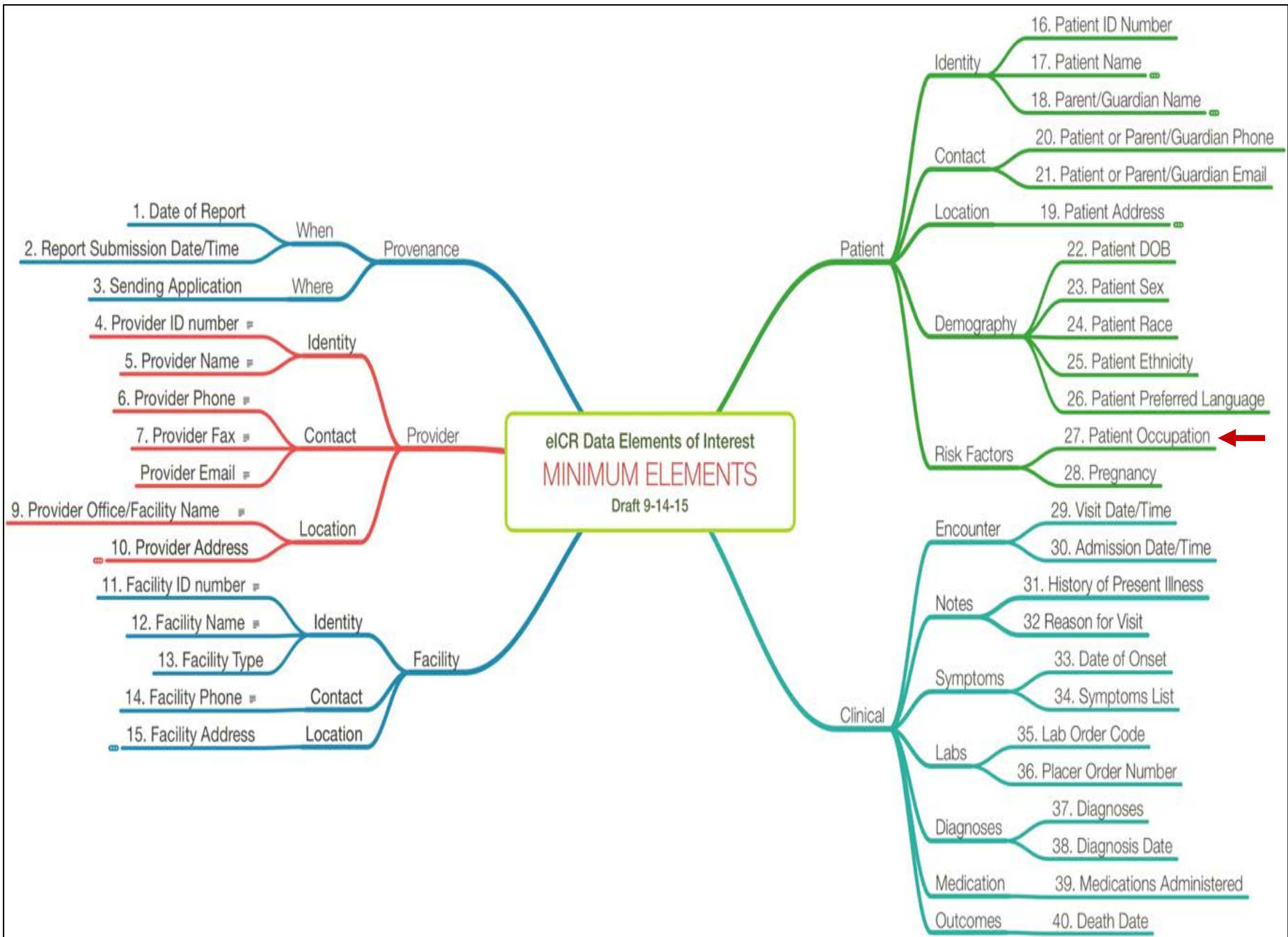
- Avalanche of data coming from EHRs but limited capacity to use it
- Limitations
  - Workforce
  - Out-dated systems with poor interoperability
  - Financing
- Lack of business case for system development

# Future Opportunities

- Electronic Case Reporting
- Electronic Lab Reporting
- Electronic Death Records
- Syndromic Surveillance

# electronic Case/Condition Reporting (eCR)





# Strategic Directions

- Can OH use systems that are current CDC priorities to enhance OH surveillance?
  - Electronic Case Reporting
  - ED reporting (syndromic surveillance systems)
  - Lab reports
  - Death records

# Tactical Considerations

- Enhance State Capacity
  - Innovation Grants to State Health Agencies
    - Use of EMR data for OH surveillance
  - Technical Assistance
- Speak with one voice to EMR vendors

# 2011 IOM Report on EMR and OH Surveillance: Progress?

- Demonstration projects?
- Requirements definition?
- Standardization for Interoperability?
- Autocoding for occupation and industry?
- Meaningful Use metrics?



# Could SENSOR model work today?

- Targeted Health Conditions (Sentinel Events)
  - EHR triggers?
- Sentinel Provider Network
  - Accountable Care Organizations?
- State Health Departments
  - Receive and Analyze Data
- Link to Action

# Questions

- What is impact of existing OH surveillance systems?
- How can existing OH systems be modified in light of changes in health system and health IT?
- How can systems with low ROI be ended?

# Further Questions

- How could electronic case reporting be used for OH surveillance?
- How could electronic lab reporting be used?

# Even Further Questions

- How might electronic death record reporting change OH surveillance?
- Can syndromic surveillance systems be used to detect and report occupational injury and illness from Emergency departments?

# Responses to Your Questions

- PH Systems and Services Research
  - Potential for studying surveillance systems
- **Toward an integrated system**
  - More than a sum of parts (the current reality)

# Occupational Health Surveillance

Back to the Future

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