Measuring & Evaluating IIS Training

How Nevada started using audit reports to evaluate provider training

Some background about Nevada IIS

❖ Usage of state IIS, called Nevada WebIZ, is mandated by state law

    ❖ All vaccinations must be entered into Nevada WebIZ's IIS (previously known as the registry), regardless of funding source or patient age

❖ Public Access Portal is live, so data quality is a key factor

❖ Approximately 1000-1500 registry users are trained every year

❖ Nevada is a transient state, and turnover at provider offices is very high

    ❖ Retraining of providers and/or users is constant

    ❖ Prior audit checked for compliance only

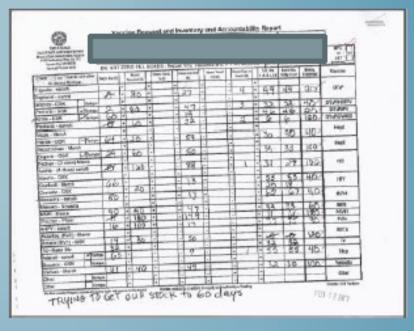   ❖ Launch of Reports and Data Management class in December 2011 evaluated for data quality only

VFC Evaluation Project

❖ 2012 project compared doses reported to VFC program with doses entered into IIS

 ❖ Part of CDC grant plan

 ❖ Evaluation used data from January to March 2012

 ❖ Data gathering began in May 2012

 ❖ Some VFC providers still submitting manual VFC reports, especially if not using IIS inventory feature

 ❖ Ideally, number of VFC administered doses should match in both reports

 ❖ VTrcks ExIS implementation will begin in late 2015

Slide created by Emily Doyle, CDC Intern, Nevada State Immunization Program

VFC Evaluation Project

❖ After reviewing results, IIS trainers conducted site visits
  ❖ Goal was to review audit results and determine causes behind any discrepancies
  ❖ Additional resources and training were offered
  ❖ Providers encouraged to register for Reports and Data Management class
  ❖ Approximately 80 site visits conducted all over the state, the rest of the providers were contacted via mail or email

❖ CDC intern compiled results of the project and conducted follow-up evaluation
  ❖ To determine if provider rate improved after trainers intervened
  ❖ To determine which interventions proved most effective
  ❖ Create training material for providers
  ❖ Submit recommendations for continuation of improving IIS compliance rates

Lessons Learned during Site Visits

❖ Lack of Office Management Support and Reinforcement
  - ❖ Manager viewpoint/knowledge/support for IIS determined results
  - ❖ Strict AFIX coordinator usually meant better or improving results
  - ❖ Intentional data quality compromises to "get law requirement out of the way"

❖ Policy/Procedure Obstacles
  - ❖ Inventory and doses recorded by different users
  - ❖ Sometimes vaccine information incomplete (no lot #, etc.)
  - ❖ No way to account for borrowed vaccines

❖ Lack of Trained Users at Provider Office
  - ❖ High turnover meant not enough or no users
  - ❖ Incorrect data entry methods (missing or inaccurate information)
  - ❖ Users trained several years before evaluation – no knowledge of updates
  - ❖ Users/Providers unaware of reporting and data management features

Redesign of Reports and Data Management Class

❖ Continually evolving curriculum throughout 2013

❖ Rapid Instructional Design used

❖ Invited providers from 2012 Evaluation project

❖ Based on their participation and feedback, adjusted module throughout the year

❖ Evaluation Plan built into curriculum to measure effects of training & compliance (required for CEUs)

❖ CEU's approved for Board of Nursing, Board of Pharmacy, America Association of Medical Assistants (AAMA), American Medical Technologists (AMT), and soon Emergency Medical Services (EMS)

❖ Evaluation Plan used Kirkpatrick's New World Model

❖ www.kirkpatrickpartners.com/OurPhilosophy/TheNewWorldKirkpatrickModel/tabid/303/Default.aspx

Evaluation Concepts – Level 1 (Reaction)

❖ Level 1 – Reaction measures:
- ❖ Participant Satisfaction (how they feel about the training)
- ❖ Engagement (the degree to which participants are actively involved and contributing to their own learning)
- ❖ Relevance (the degree to which participants will have the opportunity to use or apply what they learned when they return to the workplace)

❖ Measured through training evaluation sheets (smile sheets)
- ❖ Administered through paper or Survey Monkey
- ❖ Asks for feedback on satisfaction, including participation levels
- ❖ Feedback also requested on how they will apply new skills and knowledge to their jobs

Evaluation Concepts – Level 2 (Learning)

❖ Level 2 – Learning measures:
- ❖ To what degree participants acquire new knowledge, skills, and attitudes (KSA)
- ❖ Participant confidence and commitment to apply new KSA based on training

❖ Measured through satisfactory completion of Office Homework
- ❖ Providers are given their data quality reports and assigned to fix errors
  - ❖ Vaccines Added but Not Administered (missing lot #s)
  - ❖ Duplicate vaccinations
  - ❖ Duplicate patients
  - ❖ Update IIS User list for their office
- ❖ CEUs will not be granted until homework has been completed and submitted
- ❖ Trainers to check for correct completion of homework

❖ Measured through follow-up audit 30-60 days after class

Evaluation Concepts – Level 3 (Behavior)

❖ Level 3 – Behavior measures:

  ❖ To what degree participants actually apply what they learned during training when they are back on the job

❖ Measured through comprehensive provider audit 6-12 months after class

  ❖ Most participants are managers; evaluation will determine how they reinforce principles and IIS law compliance

  ❖ Also tell us if they are able to successfully self-audit their practices on a regular basis

  ❖ Audit checks for correct data entry, data quality, usage statistics, VFC dosage matching, immunization rates, reminder/recalls, and compliance with IIS law

Evaluation Concepts – Level 4 (Results)

❖ Level 4 – Results measures:
  ❖ To what degree outcomes occur as a result of the training event and subsequent reinforcement

❖ Not included as part of formal plan for these reasons:
  ❖ Annual IIS updates can make measuring this level of effectiveness difficult
  ❖ High turnover within provider offices

❖ Very few organizations reach Level 4

Suggestions for designing evaluations

❖ Work in reverse
- ❖ Determine IIS program needs (Level 4 results)
- ❖ Determine desired job behavior after they leave your class (Level 3 results)
- ❖ Determine knowledge and skills to be learned (Level 2 results)
- ❖ Determine how you know learners will be satisfied (Level 1 results)

❖ Conduct needs analysis for your training to match each stage
- ❖ What are program needs?
- ❖ What are performance needs?
- ❖ What are learning needs?
- ❖ What are individual learner needs?

❖*Needs Assessment Basics* by Deborah Tobey.
   http://store.astd.org/Default.aspx?tabid=167&ProductId=7346

Training Transfer Factors to Consider

❖ Transfer Climate
  ❖ The most significant factor in whether or not training is successfully transferred to the job is the degree in which the work environment supports what was learned in training

❖ Learner Self-Efficacy
  ❖ The more confident learners are in their ability to learn skills, the more successful they will be in applying what they have learned
  ❖ Especially true for learners with high computer self-efficacy

❖ Transfer Design
  ❖ The more training activities reflect real-world scenarios, the more learners will apply new skills and knowledge

For current NV information:

Nevada IIS Manager:

Mandy Harris, asharris@health.nv.gov   775-684-4258

Nevada IIS Trainers:

Tami Smith, tasmith@health.nv.gov   775-684-5996

Joseph Aylsworth, jaylsworth@health.nv.gov   702-486-0579

Kevin Filippelli, kfilippelli@health.nv.gov   702-486-0580

Questions?