Local Disease Investigation
Norton County Health Department (Kansas)
FTEs: 8/Population Served: 6,000

Plan
Identify an opportunity and
Plan for Improvement

1. Getting Started
Based on the beta site self
assessment, performing disease
investigation (measure 2.1.2) was
selected due to staff's inability to
perform this independently. Options
considered but not selected were
customer satisfaction related to the
Family Planning or the immunization
program.

2. Assemble the Team
The team comprised all the nurses
that could be asked during time of
an outbreak or staff absence to do
an investigation. The office
manager was also included given
her key role as the "gatekeeper."

3. Examine the Current Approach
The problem that "staff don't know
how to perform a disease
investigation" was investigated, and
the root cause was determined to
be knowledge, or rather the lack of,
by using the Interrelationship
Diagraph.

The process for reportable disease
investigation at the time was
basically the following:

- LHD notified of a possible
  reportable disease
- LHD Administrator does investigation

This process didn't allow staff an
opportunity to learn, nor did it
address surge issues or
unavailability of the administrator.
Additionally, staff weren't informed
about diseases that are present in
the jurisdiction on a routine basis.

The final aim statement was to
"Increase nursing staff knowledge
and understanding of performing
disease investigation of Kansas
reportable disease(s) from 71% to
100% by November 30th, 2010."

4. Identify Potential Solutions
The team identified the following
interventions to achieve the aim
statement:
- create a flow chart general
  enough for all reportable
diseases yet flexible enough to
meet the specific disease(s)
being investigated
- provide training on the internal
  process, including rationale for
disease surveillance, available
investigation resources, and
where authority lies.
- perform a reportable disease
  investigation under the guidance
  of the LHD administrator.

5. Develop an Improvement Theory
If staff have training on "how to",
then they will demonstrate
increased knowledge in performing
disease surveillance.

A flow chart created by the health
department administrator with step-
by-step decision points and
resources available 24/7 was
presented. The flow chart was
challenged with tabletop scenarios.
A couple of decision errors were
corrected and one verbiage change
was made for clarity. Without
further discussion the post-test was
administered.

6. Test the Theory
A pre-test was developed by the
LHD administrator and given to the
nurses. The average pre-test
knowledge score was 71%. The
training included a power point
presentation provided by the Kansas
Department of Health and
Environment, with county-specific
information inserted.

7. Check the Results
The post-test group score was
100% for knowledge, thus achieving
the aim statement.

8. Standardize the Improvement
or Develop New Theory
The flow chart was adopted as a
resource for investigations.
However, field testing was
determined to be the best way to
test for success. Staff will be
assigned to perform future disease
investigations only using the flow
chart, and the flow chart will be
revised as needed following each
investigation.

9. Establish Future Plans
Bi-monthly staff meetings will
include time for reviewing disease
investigation cases. New employees
who may be called upon to assist in
disease investigation will be
trained using the same method and
materials.