

Utilizing KS-EDSS for Quality Performance Measures

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What is a Performance Measure?

The specific representation of a capacity, process, or outcome deemed relevant to the assessment of performance. A performance measure is quantifiable and can be documented.



Criteria for Effective Performance Measures

- Validity
- Reliability
- Minimize Burden
- Access
- Fairness
- Actionable
- Communication value



Why Track Performance Measures in KS-EDSS?

- Public Health Preparedness Capabilities
 - Capability 13
 - Function 1: Conduct public health surveillance and detection
 - Function 2: Conduct public health and epidemiological investigations
 - Function 3: Recommend, monitor, and analyze mitigation actions
 - Function 4: Improve public health surveillance and epidemiological investigation systems

Why Track Performance Measures in KS-EDSS?

- PHAB Accreditation
 - **COMING JULY 1, 2011:** The following accreditation materials will be available to the public:
 - Guide to National Public Health Department Accreditation Version 1.0
 - Public Health Department Accreditation Standards and Measures Version 1.0
 - 2011/2012 Fee Schedule
 - PHAB Educational Services



PHAB Performance Measures

Standard 1.1 B: Collect and maintain reliable, comparable, and valid data that provide information on conditions of public health importance and on the health status of the population.

Standard 1.2 B: Analyze public health data to identify trends in health problems, environmental public health hazards, and social and economic risk that affect the public's health.

Standard 1.3 B: Provide and use the results of health data analysis to develop recommendations regarding public health policy, processes, programs or interventions.

Standard 2.1.5 B: Monitor timely reporting of notifiable diseases, lab test results, and investigation results.



Tracking Performance Measures

- Performance quality
 - Timeliness indicators
 - Additional fields to be added to KS-EDSS
 - LHD Report Date
 - Case Creation Date
 - Investigation Start Date
 - Investigation Complete Date
 - Case Closed Date
- Date quality
 - Quality Indicator Tracking

Investigation Information

Investigation ID : 129552177 Assigned to : RICKLEY, DANA / [Statewide : Clay County Health Dept]

Re-assign

Case Type* :

Human Case

Disease Name* :

Mumps

Supp form (HTML)

Print Supp form(PDF)

Case Classification* :

Suspect

Outbreak

Y/N : No

Outbreak

Name :

Outbreak

Number :

Onset Date

(mm/dd/yyyy) :

Diagnosis Date

(mm/dd/yyyy) :

Report Date (KDHE)

(mm/dd/yyyy) : 03/30/2011

LHD Report Date

(mm/dd/yyyy) :

Case Entry Date

(mm/dd/yyyy) : 03/30/2011

MMWR Week : 13

MMWR Year : 2011

CDC ID : 34686

State ID :

Died : Unknown

Supplemental Form Status :

Investigation Started

(mm/dd/yyyy) :

Investigation Completed

(mm/dd/yyyy) :

Imported:

Investigation Status :

New

Case Closed Date

(mm/dd/yyyy) :

Why Track Quality Indicators?

- Improve individual investigation data quality
- Better data for use in future projects
- Send more complete picture of disease in Kansas to CDC
- Determine how we can make KS-EDSS more user friendly



Quality Indicator specifics

- Quality indicators are assessed on a monthly basis on a county, regional and state level
- Frequency of completion is calculated for each variable.
 - TB cases are not included



Core Indicator Fields:

Address :	Hospitalized
Street Line 1	Imported
City	Race
County	Sex
Zip	Onset Date
Died	Supplemental Form Status
Date of Birth	Complete
Ethnicity	Partial



Address Fields

- Out of state cases will not factor into frequency
- Calculation do not include Animal Rabies cases

Case Reporting | **Address History** | Demographics | Referrer | Lab Reports | Notes | Map

Locked by TPKHEVKB (VIRGINIA BARNES)
CONTACT TRACING Patient: SIMPSON, MARGE

Address Information

Street Line 1 : 1000 SW Jackson Ave Geocode Source :

Street Line 2 :

City : Topeka County of Residence : Shawnee State: Kansas Zip : 66612

X: Y:

Address Timeframe

Valid Dates for the Address (mm/dd/yyyy):
from 05/21/2007 to

Valid Dates for the Address (mm/dd/yyyy):
 Case Address

Reset Submit Changes Cancel



Died

- This field is located on the Case Reporting tab under the Investigation Information section.
- If field is marked 'Unknown' it is not considered complete.
- You may mark 'Unknown' to create a new case, but it must be changed to be considered complete.

The screenshot shows a web-based form for case reporting. The 'Died' field is a dropdown menu currently set to 'Unknown'. A red box highlights the dropdown menu, which lists three options: 'No', 'Unknown', and 'Yes'. Other fields in the form include MMWR Week (14), MMWR Year (2010), CDC ID (34581), State ID (empty), Supplemental Form Status (dropdown), Investigation Status (Active), Imported (Indigenous), and a 'Died' label.

Date of Birth

- This calculation does not include Animal Rabies.

Case Reporting | Address History | **Demographics** | Referrer | Lab Reports | Notes | Map | Audit

Locked by TPKHEVKB (VIRGINIA BARNES)
CONTACT TRACING Patient: SIMPSON, MARGE

Demographics

Race :

Sex : ▼

Ethnicity : ▼

Race dropdown menu:

- SELECT -
- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- Unknown
- White**

Date of Birth / Age

Date of Birth (mm/dd/yyyy): Age : Age Unit : ▼

Ethnicity

- If field is marked 'Unknown' it is not considered complete.
- You may mark 'Unknown' to create a new case, but it must be changed to be considered complete.

The screenshot shows a patient record interface with the following elements:

- Navigation tabs: Case Reporting, Address History, **Demographics**, Referrer, Lab Reports, Notes, Map, Audit.
- System status: Locked by TPKHEVKB (VIRGINIA BARNES)
- Section: CONTACT TRACING
- Patient: SIMPSON, MARGE
- Section: Demographics
- Sex: Female (dropdown menu)
- Race: Open dropdown menu with options: - SELECT -, American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, Unknown, White.
- Ethnicity: Open dropdown menu with options: Not Hispanic or Latino, - SELECT -, Hispanic or Latino, Not Hispanic or Latino, Unknown. This section is highlighted with a red box.

Hospitalized

- This field is located on the Case Reporting tab in the Hospital Information section.
- Marking field 'Unknown' will not be considered complete for this analysis.

Hospital Information

Hospitalized :	Yes	Patient Status Date (mm/dd/yyyy) :	04/21/2010
Hospital Name :	No		
Hospital City :	Yes		
Date Hospitalized :		Number of Days Hospitalized :	27

Imported

Did patient contract the disease in Kansas?

Did patient get ill while traveling?

Out of Jurisdiction?

Out of State?

Out of Country?

Case Reporting | Address History | Demographics | Referrer | Lab Reports | Notes | Map | Audit

Locked by TPKHEVKB (VIRGINIA BARNES)
CONTACT TRACING Patient: SIMPSON, MARGE

Investigation Information

Investigation ID : 128947950 Assigned to : PHILLIPS, ASHLEY / [Statewide : Shawnee County Health Dept] [Re-assign](#)

Case Type* :
Human Case

Disease Name* :
Measles (Rubeola)
[Supp form \(HTML\)](#) [Print Supp form\(PDF\)](#)

Case Classification* :
Confirmed

Outbreak Y/N : No Outbreak Name : Outbreak Number :
Onset Date (mm/dd/yyyy) : Diagnosis Date (mm/dd/yyyy) : Report Date (mm/dd/yyyy) : 04/21/2010
MMWR Week : 16 MMWR Year : 2010
CDC ID : 34585 State ID : 20 Died : Unknown
Supplemental Form Status : Investigation Status : New
Imported:
Indigenous
Indigenous
Out of country
Out of jurisdiction
Out of state
Unknown
Hospital Information
Patient Status Date (mm/dd/yyyy) : 04/21/2010
Hospital City :

Race

- If field is marked 'Unknown' it is not considered complete.
- You may mark 'Unknown' to create a new case, but it must be changed to be considered complete.

Case Reporting | Address History | **Demographics** | Referrer | Lab Reports | Notes | Map | Audit

Locked by TPKHEVKB (VIRGINIA BARNES)
CONTACT TRACING | Patient: SIMPSON, MARGE

Demographics

Race :

- SELECT -
- American Indian or Alaska Native
- Asian
- Black or African American
- Native Hawaiian or Other Pacific Islander
- Unknown
- White

Sex : Female

Ethnicity : Not Hispanic or Latino

Sex

- If field is marked 'Unknown' it is not considered completed.
- You may mark 'Unknown' to create a new case, but it must be changed to be considered complete
- This indicator has consistently been 100% complete.

The screenshot shows a patient record interface for Marge Simpson. The 'Demographics' tab is active. The 'Sex' dropdown menu is open, showing options: Female, - SELECT -, Failure to Report, Female, Male, Other, Transexual, and Unknown. The 'Race' dropdown menu is also open, showing options: - SELECT -, American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, Unknown, and White. The 'Ethnicity' dropdown menu is set to 'Not Hispanic or Latino'. The 'Date of Birth / Age' section shows a date of 01/01/1957 and an age of 53 years.

Case Reporting | Address History | Demographics | Referrer | Lab Reports | Notes | Map | Audit

Locked by TPKHEVKB (VIRGINIA BARNES)
CONTACT TRACING Patient: SIMPSON, MARGE

Investigation Information

Investigation ID : 128947950 Assigned to : PHILLIPS, ASHLEY / [Statewide : Shawnee County Health Dept] [Re-assign](#)

Case Type* :
Human Case

Disease Name* :
Measles (Rubeola)
[Supp form \(HTML\)](#) [Print Supp form\(PDF\)](#)

Case Classification* :
Confirmed

Outbreak Y/N : No Outbreak Name : Outbreak Number :

Onset Date (mm/dd/yyyy) : 04/18/2010
Diagnosis Date (mm/dd/yyyy) : Report Date (mm/dd/yyyy) : 04/21/2010

MMWR Week : 16 MMWR Year : 2010

CDC ID : 34585 State ID : 20 Died : Unknown

Supplemental Form Status : Investigation Status :
New

Imported:
Indigenous

Onset Date

- Calculation does not include chronic disease:
 - Hepatitis B
 - Hepatitis C
- Calculation also does not include :
 - Rabies, Animal

Supplemental Form Status

The screenshot shows a web application interface for 'CONTACT TRACING'. At the top, there are tabs for 'Case Reporting', 'Address History', 'Demographics', 'Referrer', 'Lab Reports', 'Notes', 'Map', and 'Audit'. Below the tabs, it says 'Locked by TPKHEVKB (VIRGINIA BARNES)' and 'Patient: SIMPSON, MARGE'. The main section is titled 'Investigation Information' and contains the following fields:

- Investigation ID : 128947950 Assigned to : PHILLIPS, ASHLEY / [Statewide : Shawnee County Health Dept] [Re-assign]
- Case Type* : Human Case
- Disease Name* : Measles (Rubeola)
- Case Classification* : Confirmed
- Outbreak Y/N : No
- Onset Date (mm/dd/yyyy) : []
- Diagnosis Date (mm/dd/yyyy) : []
- Report Date (mm/dd/yyyy) : 04/21/2010
- MMWR Week : 16
- MMWR Year : 2010
- CDC ID : 34585
- State ID : 20
- Died : Unknown
- Supplemental Form Status : []
- Investigation Status : New

The 'Supplemental Form Status' dropdown menu is highlighted with a red box and contains the following options:

- Form Approved
- Form Complete
- Form Sent to CDC
- Form in Progress
- Not Done

At the bottom, there is a section for 'Hospital Information' with 'Patient Status Date (mm/dd/yyyy) : 04/21/2010'.

- Indicator calculated to show percentage marked 'Form Complete' or 'Form Approved'
- Second indicator calculated to show percentage of "Partially Complete" using 'Form in Progress' option
- You should use this field as you work an investigation to track your work on the supplemental form.

Dissemination Methods

- State level data will be reported monthly in the Epi Updates newsletter.
 - Posted monthly to BEPHI website.
- Email county and regional level data reports to KS-EDSS users and LHD administrators on a monthly basis.
- Suggestions?



Forthcoming Email Report - County



KS-EDSS Quality Indicators

By Individual County

Indicator Fields	<u>County</u>		<u>Region</u>		<u>State</u>	
	Greenwood		East Central Coalition		Kansas	
	Total County Cases:	36	Total State Cases:	49	Total State Cases:	688
	County Cases with Field Completed	County Percent Complete	Region Cases With Field Completed	Region Percent Complete	State Cases With Field Completed	State Percent Complete
Address Street **, #	34	94.44%	44	89.80%	555	81.38%
City **	36	100.00%	49	100.00%	673	98.10%
Zip Code **	36	100.00%	49	100.00%	601	87.61%
County **	36	100.00%	49	100.00%	686	100.00%
Date of Birth #	36	100.00%	49	100.00%	683	99.85%
Died +	36	100.00%	39	79.59%	297	43.17%
Ethnicity +	36	100.00%	45	91.84%	368	53.49%
Hospitalized #, +	36	100.00%	38	77.55%	290	42.40%
Imported #	36	100.00%	38	77.55%	214	31.29%
Onset Date *, #	17	47.22%	19	42.22%	253	51.42%
Race +	36	100.00%	46	93.88%	410	59.59%
Sex +	36	100.00%	49	100.00%	688	100.00%
Supplemental Form Status - Complete	23	63.89%	25	51.02%	211	30.67%
Supplemental Form Status - Partial	3	8.33%	4	8.16%	47	6.83%



Forthcoming Email Report - Region



KS-EDSS Quality Indicators Report

By Region and Associated Counties

KS-EDSS Indicator Fields	Address Street ** #	City **	Zip Code **	County **	Date of Birth #	Died +	Ethnicity +	Hospitalized # +	Imported #	Onset Date * #	Race +	Sex +	Supplemental Form Status	
													Complete	Partial

Region: North East Corner Regional Initiative

Field Completed:	55	56	55	57	56	39	41	37	22	25	47	57	28	6
Percent Complete:	98%	98%	96%	100%	100%	68%	72%	66%	39%	63%	82%	100%	49%	11%

Region's Total Cases: 57

Counties of Region:

Atchison

Field Completed:	3	3	3	3	3	1	2	1	0	1	2	3	0	1
Percent Complete:	100%	100%	100%	100%	100%	33%	67%	33%	0%	50%	67%	100%	0%	33%

County's Total Cases: 3

Jackson

Field Completed:	0	1	1	1	1	0	1	0	0	0	1	1	0	0
Percent Complete:	0%	100%	100%	100%	100%	0%	100%	0%	0%	0%	100%	100%	0%	0%

County's Total Cases: 1

Jefferson

Field Completed:	7	7	7	7	7	6	6	5	4	4	6	7	4	1
Percent Complete:	100%	100%	100%	100%	100%	86%	86%	71%	57%	67%	86%	100%	57%	14%

County's Total Cases: 7

Nemaha

Field Completed:	3	3	3	3	3	2	2	2	2	2	2	3	1	1
Percent Complete:	100%	100%	100%	100%	100%	67%	67%	67%	67%	100%	67%	100%	33%	33%

County's Total Cases: 3

* Calculations do not include Hep B, chronic or Hep C, chronic; ** Out of State cases not included in this calculation; # Animal rabies not included in this calculation; + Unknown, considered incomplete
NOTE: If an associated county to the region is not listed, then there were no cases for that county during the time period of the report.



Future Goals

- Add additional core field:
 - “Diagnosis Date” will need to be tracked to meet Preparedness grant requirements for Capacity 13
- Add disease-specific data quality indicators
 - Enteric
 - Symptoms
 - Food history
 - Vaccine-preventable disease
 - Symptoms
 - Vaccination history
 - Vector-borne
 - Symptoms
 - Exposures



Questions?

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