



## Complete Summary

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### TITLE

Pregnancy and related conditions: proportion of neonates who expire at the facility within 28 days of birth.

### SOURCE(S)

Mathews TJ, MacDorman MF, Menacker F. Infant mortality statistics from the 1999 period linked birth/infant death data set. Natl Vital Stat Rep 2002 Jan 30;50(4):1-28. [PubMed](#)

Specifications manual for national implementation of hospital core measures. Oakbrook Terrace (IL): Joint Commission on Accreditation of Healthcare Organizations (JCAHO); 2002 July. Pregnancy and related conditions core performance measures. p. PR-1 to PR-3-5.

## Brief Abstract

### DESCRIPTION

This measure assesses the proportion of live-born neonates who expire within 28 days after birth.

### RATIONALE

Neonatal (0-28 days of age) mortality continues to account for the largest proportion of infant (0 through 11 months of age) deaths. Low birth weight is a very important risk factor of neonatal mortality.

### PRIMARY CLINICAL COMPONENT

Pregnancy and related conditions; inpatient neonatal mortality

### DENOMINATOR DESCRIPTION

All live-born neonates, including transfers in from another acute care hospital

### NUMERATOR DESCRIPTION

All neonates who expire at the facility within 28 days of birth

## Evidence Supporting the Measure

### PRIMARY MEASURE DOMAIN

Outcome

### SECONDARY MEASURE DOMAIN

Not applicable

### EVIDENCE SUPPORTING THE MEASURE

A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences  
One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

## Evidence Supporting Need for the Measure

### NEED FOR THE MEASURE

Wide variation in quality for the performance measured

### EVIDENCE SUPPORTING NEED FOR THE MEASURE

Bird ST, Bauman KE. State-level infant, neonatal, and postneonatal mortality: the contribution of selected structural socioeconomic variables. *Int J Health Serv* 1998;28(1): 13-27. [PubMed](#)

## State of Use of the Measure

### STATE OF USE

Current routine use

### CURRENT USE

Accreditation

## Application of Measure in its Current Use

### CARE SETTING

Hospitals

### PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Measure is not provider specific

## LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

## TARGET POPULATION AGE

Neonate: less than or equal to 28 days

## TARGET POPULATION GENDER

Either male or female

## STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

## Characteristics of the Primary Clinical Component

### INCIDENCE/PREVALENCE

The overall neonatal mortality rate in the United States in 1999 was 4.7 per 1,000 live births.

### EVIDENCE FOR INCIDENCE/PREVALENCE

Mathews TJ, MacDorman MF, Menacker F. Infant mortality statistics from the 1999 period linked birth/infant death data set. Natl Vital Stat Rep 2002 Jan 30;50(4):1-28. [PubMed](#)

### ASSOCIATION WITH VULNERABLE POPULATIONS

In 1999, in the neonatal mortality rate (less than 28 days) in the United States for infants of black mothers (9.5) was significantly higher than for all other racial groups.

### EVIDENCE FOR ASSOCIATION WITH VULNERABLE POPULATIONS

Mathews TJ, MacDorman MF, Menacker F. Infant mortality statistics from the 1999 period linked birth/infant death data set. Natl Vital Stat Rep 2002 Jan 30;50(4):1-28. [PubMed](#)

### BURDEN OF ILLNESS

Unspecified

### UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

All live-born neonates

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR (INDEX) EVENT

Institutionalization

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

All live-born neonates, including transfers in from another acute care hospital

Exclusions

Unspecified

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

All neonates who expire at the facility within 28 days of birth

Exclusions

Unspecified

DENOMINATOR TIME WINDOW

Time window is a single point in time

#### NUMERATOR TIME WINDOW

Fixed time period

#### DATA SOURCE

Administrative and medical records data

#### LEVEL OF DETERMINATION OF QUALITY

Not Individual Case

#### OUTCOME TYPE

Clinical Outcome

#### PRE-EXISTING INSTRUMENT USED

Unspecified

### Computation of the Measure

#### SCORING

Rate

#### INTERPRETATION OF SCORE

Better quality is associated with a lower score

#### ALLOWANCE FOR PATIENT FACTORS

Risk adjustment devised specifically for this measure/condition

#### DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

This measure is adjusted for risk factors.

#### STANDARD OF COMPARISON

External comparison at a point in time

External comparison of time trends

Internal time comparison

## Evaluation of Measure Properties

### EXTENT OF MEASURE TESTING

Pregnancy and Related Conditions Core Measure Set has been field tested in conjunction with the National Perinatal Information Center (NPIC) using its trend database to analyze the measures. This testing permitted refinement respecting the measures and provided information pertinent to risk-adjustment models.

### EVIDENCE FOR RELIABILITY/VALIDITY TESTING

Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Overview of the pregnancy and related conditions (PR) core measure set. [internet]. Oakbrook Terrace (IL): Joint Commission on Accreditation of Healthcare Organizations (JCAHO); 2002 Mar 22 [cited 2002 Nov 13]. [3 p].

## Identifying Information

### ORIGINAL TITLE

Inpatient neonatal mortality.

### MEASURE COLLECTION

[Joint Commission on Accreditation of Healthcare Organizations \(JCAHO\) Core Performance Measures](#)

### MEASURE SET NAME

[Pregnancy and Related Conditions Core Performance Measures](#)

### DEVELOPER

Joint Commission on Accreditation of Healthcare Organizations

### ENDORSER

National Quality Forum

### ADAPTATION

Measure was adapted from another source.

### PARENT MEASURE

- Mortality rate of all neonates with birth weight between 500 and 749 grams
- Mortality rate of all neonates with birth weight between 750 and 999 grams
- Mortality rate of all neonates with birth weight between 1000 and 1499 grams
- Mortality rate of all neonates with birth weight between 1500 and 1999 grams

- Mortality rate of all neonates with birth weight between 2000 and 2499 grams
- Mortality rate of all neonates with birth weight greater than or equal to 2500 grams
- Mortality rate of all in-hospital births greater than 500 grams (The Performance Measurement System--formerly CORE Plus™)

#### RELEASE DATE

2001 Apr

#### REVISION DATE

2002 Jul

#### MEASURE STATUS

This is the current release of the measure.

#### SOURCE(S)

Mathews TJ, MacDorman MF, Menacker F. Infant mortality statistics from the 1999 period linked birth/infant death data set. *Natl Vital Stat Rep* 2002 Jan 30;50(4):1-28. [PubMed](#)

Specifications manual for national implementation of hospital core measures. Oakbrook Terrace (IL): Joint Commission on Accreditation of Healthcare Organizations (JCAHO); 2002 July. Pregnancy and related conditions core performance measures. p. PR-1 to PR-3-5.

#### MEASURE AVAILABILITY

The individual measure "Inpatient Neonatal Mortality," is published in "Specifications Manual for National Implementation Hospital of Core Measures." Information is available from the [Joint Commission on Accreditation of Healthcare Organizations \(JCAHO\) Web site](#). For further information refer to [www.jcaho.org](http://www.jcaho.org).

#### COMPANION DOCUMENTS

The following are available:

- Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Overview of the pregnancy and related conditions (PR) core measure set. [internet]. Oakbrook Terrace (IL): Joint Commission on Accreditation of Healthcare Organizations (JCAHO); 2002 Mar 22 [cited 2002 Nov 13]. [3 p]. This document is available from the [Joint Commission on Accreditation of Healthcare Organizations \(JCAHO\) Web site](#).
- Joint Commission on Accreditation of Healthcare Organizations (JCAHO). A comprehensive review of development and testing for national implementation of hospital core measures. [internet]. Oakbrook Terrace (IL): Joint Commission on Accreditation of Healthcare Organizations (JCAHO); 2002

[cited 2002 Nov 13]. [8 p]. This document is available from the [JCAHO Web site](#).

- Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Attributes of core performance measures and associated evaluation criteria. [internet]. Oakbrook Terrace (IL): Joint Commission on Accreditation of Healthcare Organizations (JCAHO); 2002 [cited 2002 Nov 13]. [4 p]. This document is available from the [JCAHO Web site](#).
- Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Information on final specifications for national implementation of hospital core measures as of 11/04/02. [internet]. Oakbrook Terrace (IL): Joint Commission on Accreditation of Healthcare Organizations (JCAHO); 2002 Nov 04 [cited 2002 Nov 13]. [10 p]. This document is available from the [JCAHO Web site](#).

#### NQMC STATUS

This NQMC summary was completed by ECRI on December 27, 2002. The information was verified by the Joint Commission on Accreditation of Healthcare Organizations on January 17, 2003.

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