



## Complete Summary

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### TITLE

Venous thromboembolism (VTE): percentage of patients with VTE who meet the criteria for low-molecular-weight heparin (LMWH) and for whom LMWH is used.

### SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Venous thromboembolism. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2004 Feb. 92 p. [254 references]

## Brief Abstract

### DESCRIPTION

This measure assesses the percentage of patients diagnosed with venous thromboembolism (VTE) who meet the criteria for low-molecular-weight heparin (LMWH) and for whom LMWH is used.

### RATIONALE

The priority aim addressed by this measure is to reduce resources and costs used in the diagnosis and treatment of venous thromboembolism (VTE).

### PRIMARY CLINICAL COMPONENT

Venous thromboembolism; low-molecular-weight heparin

### DENOMINATOR DESCRIPTION

Number of people diagnosed with venous thromboembolism (VTE) who meet the criteria for low-molecular-weight heparin (LMWH) (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

### NUMERATOR DESCRIPTION

Number of people from the denominator with a diagnosis of venous thromboembolism (VTE) who are treated with low-molecular-weight heparin (LMWH) (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

## Evidence Supporting the Measure

### PRIMARY MEASURE DOMAIN

Process

### SECONDARY MEASURE DOMAIN

Not applicable

### EVIDENCE SUPPORTING THE MEASURE

A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

### NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [Venous thromboembolism.](#)

## Evidence Supporting Need for the Measure

### NEED FOR THE MEASURE

Unspecified

## State of Use of the Measure

### STATE OF USE

Current routine use

### CURRENT USE

Internal quality improvement

## Application of Measure in its Current Use

### CARE SETTING

Physician Group Practices/Clinics

### PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

### LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Group Clinical Practices

TARGET POPULATION AGE

Age greater than or equal to 18 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Getting Better  
Living with Illness

IOM DOMAIN

Effectiveness

Data Collection for the Measure

CASE FINDING

Users of care only

## DESCRIPTION OF CASE FINDING

Patients diagnosed with venous thromboembolism (VTE) who meet the criteria for low-molecular-weight heparin (LMWH)

Identify patients diagnosed with VTE using the specified diagnosis codes (see the "Denominator Inclusions/Exclusions" field). Some medical groups will be able to identify the population of patients through patient computer records of International Classification of Diseases, Ninth Revision (ICD-9) codes. If this is not possible, a list of patients may be generated from the laboratory log for compression ultrasounds with a diagnosis of VTE.

The medical record of each patient is reviewed to determine if the patient meets any of the exclusion criteria. If none of the exclusions are met, the chart is further reviewed for administration of LMWH.

During review, additional information on the number of days of treatment, and whether treatment was continued until the international normalized ratio (INR) was above 2.0 for two consecutive days. In addition, some medical groups may want to track the percent of patients treated with LMWH who received treatment in an outpatient setting.

The suggested time frame for data collection is a calendar month.

## DENOMINATOR SAMPLING FRAME

Patients associated with provider

## DENOMINATOR (INDEX) EVENT

Clinical Condition

## DENOMINATOR INCLUSIONS/EXCLUSIONS

### Inclusions

Number of people diagnosed with venous thromboembolism (VTE)\* who meet the criteria for low-molecular-weight heparin (LMWH)

\*Patients diagnosed with lower extremity VTE as identified by the following International Classification of Diseases, Ninth Revision (ICD-9) codes: 451.11, 451.19, 451.2, 453.8

### Exclusions

Patients are excluded for any of the following conditions:

- Any VTE other than lower extremity
- Suspected or confirmed pulmonary embolus
- Contraindications to anticoagulation
- Familial bleeding or clotting disorders
- History of heparin-induced thrombocytopenia

- Pregnancy
- Phlegmasia/extensive iliofemoral disease
- Renal dysfunction requiring dialysis

#### NUMERATOR INCLUSIONS/EXCLUSIONS

##### Inclusions

Number of people from the denominator with a diagnosis of venous thromboembolism (VTE) who are treated with low-molecular-weight heparin (LMWH)\*

\*Patients treated with LMWH (listed with GCN code 7542). Include only patients who meet the criteria for the denominator.

##### Exclusions

Unspecified

#### DENOMINATOR TIME WINDOW

Time window precedes index event

#### NUMERATOR TIME WINDOW

Episode of care

#### DATA SOURCE

Administrative data

Laboratory data

Medical record

#### LEVEL OF DETERMINATION OF QUALITY

Individual Case

#### PRE-EXISTING INSTRUMENT USED

Unspecified

### Computation of the Measure

#### SCORING

Rate

#### INTERPRETATION OF SCORE

Better quality is associated with a higher score

#### ALLOWANCE FOR PATIENT FACTORS

Unspecified

#### STANDARD OF COMPARISON

Internal time comparison

### Evaluation of Measure Properties

#### EXTENT OF MEASURE TESTING

Unspecified

### Identifying Information

#### ORIGINAL TITLE

Percentage of patients diagnosed with VTE who meet the criteria for LMWH and for whom LMWH is used.

#### MEASURE COLLECTION

[Venous Thromboembolism Measures](#)

#### DEVELOPER

Institute for Clinical Systems Improvement

#### ADAPTATION

Measure was not adapted from another source.

#### RELEASE DATE

2003 Apr

#### REVISION DATE

2004 Feb

#### MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: Institute for Clinical Systems Improvement (ICSI). Venous thromboembolism. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2003 Apr. 93 p.

#### SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Venous thromboembolism. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2004 Feb. 92 p. [254 references]

#### MEASURE AVAILABILITY

The individual measure, "Percentage of patients with VTE who meet the criteria for LMWH and for whom LMWH is used," is published in "Health Care Guideline: Venous Thromboembolism." This document is available from the [Institute for Clinical Systems Improvement \(ICSI\) Web site](#).

For more information, contact ICSI at, 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; phone: 952-814-7060; fax: 952-858-9675; Web site: [www.icsi.org](http://www.icsi.org); e-mail: [icsi.info@icsi.org](mailto:icsi.info@icsi.org).

#### NQMC STATUS

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