Clinical Performance Measures

Preventive Care and Screening

Tools Developed by Physicians for Physicians

Provided by:

Physician Consortium for Performance Improvement

Purpose

This measurement tool provides physicians with evidence-based\(^1\) clinical performance measures, including a data collection flowsheet, that may be useful for quality improvement activities within physician practices. The measures and flowsheet are intended for prospective data collection only. The ability to track changes over time is integral to the concept of continuous quality improvement in patient care. Evidence-based clinical performance measures have been identified as a means for tracking these changes.

These measures are provided for physicians by the Physician Consortium for Performance Improvement (The Consortium), a physician-led initiative that includes methodological experts, clinical experts representing more than 50 national medical specialty societies, state medical societies, the Agency for Healthcare Research and Quality, and the Centers for Medicare and Medicaid Services. The Consortium’s vision is to fulfill the responsibility of physicians to patient care, public health, and safety by becoming the leading source organization for evidence-based clinical performance measures and outcomes reporting tools for physicians.

Performance measures must be designed based on their intended purpose.\(^2,3\) The measures presented here are intended to facilitate individual physician quality improvement. Therefore, there are no minimum sample size requirements, and the suggested feedback is sufficiently detailed to pinpoint areas of concern for the physician. The measures defined in this measurement tool are not intended, and should not be used, for physician comparison.\(^4\)

Performance measures are not clinical guidelines; rather, measures are derived from evidence-based clinical guidelines and indicate whether or not or how often a process or outcome of care occurs.\(^5\) Performance measures provide important information to a physician, allowing him or her to enhance the quality of care delivered to patients.

Preventive Care and Screening

The preventive interventions included in this measurement set have been shown to be effective in disease prevention and early detection. The interventions that comprise the preventive care measures were selected based on a combination of factors including risk factor prevalence, disease incidence, morbidity and mortality related to the resulting diseases, prevalence of complications, health care costs, and the existence of established clinical recommendations.

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This Physician Performance Measurement Set (PPMS) was developed by the Physician Consortium for Performance Improvement (The Consortium) to facilitate quality improvement activities by physicians. The performance measures contained in this PPMS are not clinical guidelines and do not establish a standard of medical care. This PPMS is intended to assist physicians in enhancing quality of care and is not intended for comparing individual physicians to each other or for individual physician accountability by comparing physician performance against the measure or guideline. The Consortium has not tested this PPMS.

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Preventive Care and Screening

The identified patient populations for these measures were selected based on 1) the level of scientific evidence supporting the intervention, and 2) the strength of clinical guideline recommendations. It is acknowledged that these measures do not encompass all possible performance measures for preventive care and screening or all possible age groups for which there is clinical evidence; the intention in selecting these populations is to begin with the interventions for which scientific evidence is strongest.

For preventive care and screening, The Consortium recommends that physicians select those individual measures that are appropriate for their patient population. For example, a physician whose patients are primarily under the age of 50 years may choose to apply the Tobacco Use measure, which covers patients aged 18 years and older, but not the Adult Influenza Immunization measure, which currently focuses on patients aged 50 years and older. The Consortium strives to provide physicians with tools that are flexible and useful.

For more information and updates, including a list of practicing physicians and other experts who developed this measurement set, please visit The Consortium's Web site

www.ama-assn.org/go/quality

References

### Statistics on Tobacco Use

- In 2001, the median prevalence of smoking in all 50 US states and the District of Columbia was 23%.\(^1\)
- Smoking causes an estimated 440,000 deaths in the United States annually.\(^2,4\)
- Tobacco use is the leading cause of preventable morbidity and mortality associated with heart disease, stroke, lung cancer, and chronic lung diseases, in the United States.\(^2,5\)
- The total direct and indirect costs of tobacco use in the United States are estimated at $157 billion annually.\(^3\)

### Statistics on Current Practice

Despite potential risks and established clinical guidelines, recent data suggest that some individuals are not screened for tobacco use. It has been reported that:

- In 2000, 66% of smokers aged 18 years and older in the average managed care plan were advised to quit smoking during a visit with their physician.\(^5\)
- In 1998, 71% of smokers enrolled in a Medicare managed care plan received advice to quit smoking.\(^6\)

### Selected Evidence-Based Clinical Guidelines

Evidence-based clinical practice guidelines are available for tobacco use. These measures are based on clinical guidelines from the following:

- Canadian Task Force on Preventive Health Care\(^7\)
- US Department of Health and Human Services, Public Health Service\(^8\)
- US Preventive Services Task Force\(^9\)

These performance measures were developed in agreement with these guidelines, enabling the physician to track his or her performance in individual patient care and across patient populations. Please note that treatment must be based on individual patient needs and professional judgment.

### Relevant Physician Specialties, Patient Population, and Settings of Care

These performance measures are designed for:

- Use by any physician who manages the ongoing care of patients aged ≥18 years.
- Prospective data collection in the office-based practice setting only.

<table>
<thead>
<tr>
<th>Clinical Recommendations</th>
<th>Clinical Performance Measures Per Two-Year Measurement Period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tobacco Use</strong></td>
<td>Percentage of patients who were queried about tobacco use one or more times during the two-year measurement period</td>
</tr>
<tr>
<td>Periodic screening for tobacco use is recommended for all patients.(^8,9)</td>
<td>Numerator = Patients who were queried about tobacco use one or more times</td>
</tr>
<tr>
<td>Tobacco cessation counseling is recommended for all patients who smoke.(^7,9)</td>
<td>Denominator = All patients aged ≥18 years at the beginning of the two-year measurement period</td>
</tr>
<tr>
<td>(A Recommendation, Level-I Evidence)(^9)</td>
<td>Percentage of patients identified as tobacco users who received cessation intervention during the two-year measurement period</td>
</tr>
<tr>
<td></td>
<td>Numerator = Patients identified as tobacco users who received cessation intervention</td>
</tr>
<tr>
<td></td>
<td>Denominator = All patients aged ≥18 years at the beginning of the two-year measurement period identified as tobacco users</td>
</tr>
<tr>
<td><strong>Per Patient</strong></td>
<td>Percentage of patients queried about tobacco use one or more times during the two-year measurement period</td>
</tr>
<tr>
<td>Whether or not patient was queried about tobacco use one or more times</td>
<td>Percentage of patients identified as tobacco users who received cessation intervention during the two-year measurement period</td>
</tr>
<tr>
<td>Whether or not patient identified as a tobacco user received cessation intervention</td>
<td>Percentage of patients identified as tobacco users who received cessation intervention during the two-year measurement period</td>
</tr>
</tbody>
</table>

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References


Statistics on Problem Drinking

- More than 8 million individuals in the United States meet the diagnostic criteria for alcohol dependence and an additional 5.6 million meet the diagnostic criteria for alcohol abuse.1
- Alcohol abuse is a major cause of mortality, leading to 100,000 deaths in the United States annually.2
- Excessive drinking is linked to an increased risk of liver disease, high blood pressure, stroke, and certain types of cancer.1,3
- The total direct and indirect costs of alcohol abuse in the United States are estimated at more than $185 billion annually.4

Statistics on Current Practice

Despite potential risks and established clinical guidelines, recent data suggest that some individuals are not screened for problem drinking. It has been reported that:

- The rate of alcohol screening in health care settings remains less than 50%.5,6
- In one study only 20% of patients at a general medical clinic reported being screened for alcohol use in the previous six months.7

Selected Evidence-Based Clinical Guidelines

Evidence-based clinical practice guidelines are available for the management of problem drinking. This measure is based on clinical guidelines from the following:

- Partnership for Prevention2
- US Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment8
- US Preventive Services Task Force9

This performance measure was developed in agreement with these guidelines, enabling the physician to track his or her performance in individual patient care and across patient populations. Please note that treatment must be based on individual patient needs and professional judgment.

Relevant Physician Specialties, Patient Population, and Settings of Care

This performance measure is designed for:

- Use by any physician who manages the ongoing care of patients aged ≥18 years.
- Prospective data collection in the office-based practice setting only.

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<thead>
<tr>
<th>Clinical Recommendations</th>
<th>Clinical Performance Measures Per Two-Year Measurement Period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Problem Drinking</strong></td>
<td>Percentage of patients who were queried about and screened for problem drinking during the two-year measurement period</td>
</tr>
<tr>
<td></td>
<td><strong>Numerator</strong> = Patients who were screened for problem drinking</td>
</tr>
<tr>
<td></td>
<td><strong>Denominator</strong> = All patients aged ≥18 years at the beginning of the two-year measurement period</td>
</tr>
<tr>
<td></td>
<td><strong>Per Patient:</strong> Whether or not patient was queried about and screened for problem drinking</td>
</tr>
<tr>
<td></td>
<td><strong>Per Patient Population:</strong> Percentage of patients who were queried about and screened for problem drinking during the two-year measurement period</td>
</tr>
</tbody>
</table>

Routine screening and counseling for problem drinking in adults is recommended.2,5 (B Recommendation, Level-I, II-2 Evidence)9

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References


Physician Consortium for Performance Improvement
Clinical Performance Measures – Adult Influenza Immunization

Statistics on Influenza Immunization
- Approximately 95 million cases of influenza are reported in the United States annually.¹
- Approximately 36,000 individuals die from influenza-related complications in the United States annually.², ³
- Influenza immunizations can prevent up to 50% to 60% of hospitalizations and 80% of deaths from influenza-related complications among the elderly.⁴
- The total direct and indirect costs of influenza in the United States are estimated at more than $12 billion annually.⁴

Statistics on Current Practice
Despite potential risks and established clinical guidelines, recent data suggest that some individuals are not receiving influenza immunization. It has been reported that:
- In 2002, only approximately 35% of adults aged 50 to 64 years had received an influenza immunization during the past 12 months.⁵
- In 2002, approximately 67% of adults aged 65 years and older had not received an influenza immunization during the past 12 months.⁵

Selected Evidence-Based Clinical Guidelines
Evidence-based clinical practice guidelines are available for adult influenza immunization. This measure is based on clinical guidelines from the following:
- Centers for Disease Control and Prevention, Advisory Committee on Immunization Practices⁶
- US Preventive Services Task Force⁷
This performance measure was developed in agreement with these guidelines, enabling the physician to track his or her performance in individual patient care and across patient populations. Please note that treatment must be based on individual patient needs and professional judgment.

Relevant Physician Specialties, Patient Population, and Settings of Care
This performance measure is designed for:
- Use by any physician who manages the ongoing care of patients aged ≥50 years.
- Prospective data collection in the office-based practice setting only.

<table>
<thead>
<tr>
<th>Influenza Immunization (Adult)</th>
<th>Clinical Recommendations</th>
<th>Clinical Performance Measures Per One-Year Measurement Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denominator Exclusion: Documentation of medical reason(s) for not providing immunization; documentation of patient reason(s) for declining immunization</td>
<td>Annual influenza immunization is recommended for all groups who are at increased risk for complications from influenza including persons aged ≥50 years.⁵⁷</td>
<td>Percentage of patients who received an influenza immunization during the one-year measurement period</td>
</tr>
<tr>
<td>Numerator = Patients who received an influenza immunization</td>
<td>Denominator = All patients aged ≥50 years at the beginning of the one-year measurement period</td>
<td></td>
</tr>
<tr>
<td>Per Patient: Whether or not patient received an influenza immunization</td>
<td>Per Patient Population: Percentage of patients who received an influenza immunization during the one-year measurement period</td>
<td></td>
</tr>
<tr>
<td>Percentage of patients who received an influenza immunization during the one-year measurement period, with all denominator exclusions applied</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Specify medical reasons (eg, egg allergy) for not providing immunization.
b Specify patient reasons (eg, economic, social, religious) for declining immunization.

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References


Physician Consortium for Performance Improvement
Clinical Performance Measures – Colorectal Cancer Screening

Statistics on Colorectal Cancer

- In 2003, an estimated 148,000 new cases of colorectal cancer will be diagnosed in the United States.1,2
- Colorectal cancer is the second leading cause of cancer deaths in the United States and is expected to cause more than 57,000 deaths in 2003.1,3
- Screening for colorectal cancer can reduce the mortality rate from this disease by at least 30%.3
- The total direct and indirect costs of colorectal cancer in the United States are estimated at $6.5 billion annually.3

Statistics on Current Practice

Despite potential risks and established clinical guidelines, recent data suggest that some individuals are not screened for colorectal cancer. It has been reported that:

- In 2001, only 45% of adults aged 50 years or older had ever received a fecal occult blood test (FOBT).4
- In 2001, only 47% of adults aged 50 years or older had ever received a colonoscopy or sigmoidoscopy.4

Selected Evidence-Based Clinical Guidelines

Evidence-based clinical practice guidelines are available for colorectal cancer screening. This measure is based on clinical guidelines from the following:

- American Academy of Family Physicians5
- American Cancer Society6
- Partnership for Prevention7
- US Multisociety Task Force on Colorectal Cancer8
- US Preventive Services Task Force9

This performance measure was developed in agreement with these guidelines, enabling the physician to track his or her performance in individual patient care and across patient populations. Please note that treatment must be based on individual patient needs and professional judgment.

Clinical Recommendations Clinical Performance Measures Per One-Year Measurement Period

| Colorectal Cancer Screening | Annual screening for colorectal cancer is strongly recommended for men and women aged ≥50 years.5-9 |
| Denominator Exclusion: | Documentation of medical reason(s)a for not providing colorectal cancer screening; documentation of patient reason(s)b for declining colorectal cancer screening; high risk populationc |
| | • Fecal occult blood testing (FOBT) annually |
| | • Flexible sigmoidoscopy every 5 years |
| | • Annual FOBT plus flexible sigmoidoscopy every 5 years |
| | • Double-contrast barium enema every 5 years |
| | • Colonoscopy every 10 years (B Recommendation, Level-I, II-1, II-2 Evidence)3 |
| Numerator = Patients with any of the recommended colorectal cancer screening test(s) performed Denominator = All patients aged ≥50 years at the beginning of the one-year measurement period |

Per Patient: Whether or not patient was screened for colorectal cancer

Per Patient Population:
Percentage of patients screened for colorectal cancer during the one-year measurement period
Percentage of patients screened for colorectal cancer during the one-year measurement period, with all denominator exclusions applied
Distribution of screening test(s) performed:
- FOBT
- Sigmoidoscopy
- Double-contrast barium enema
- Colonoscopy
- Recommended or considered only (no test performed)

a Specify medical reasons (eg, total colectomy, terminal illness) for not providing colorectal cancer screening.
b Specify patient reasons (eg, economic, social, religious) for declining colorectal cancer screening.
c Those at higher risk require more intensive surveillance.

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Relevant Physician Specialties, Patient Population, and Settings of Care

This performance measure is designed for:

- Use by any physician who manages the ongoing care of patients aged ≥50 years.
- Prospective data collection in the office-based practice setting only.

References

1 American Cancer Society. What are the key statistics for colon and rectum cancer? Available at: http://www.cancer.org/docroot/CRI/content/CRI_2_4_1X_What_are_the_key_statistics_for_colon_and_rectum_cancer.asp?sitearea=&level=. Accessed March 2003.


Physician Consortium for Performance Improvement
Clinical Performance Measures – Screening Mammography

Statistics on Breast Cancer and Screening Mammography

- In 2003, more than 211,000 women in the United States will be diagnosed with invasive breast cancer.¹
- In 2003, about 39,000 women in the United States will die from breast cancer.¹
- Mammography screening can reduce mortality by 17% among women aged 40 to 49 years and by 30% for women aged 50 to 74 years.²
- The total direct and indirect costs of breast cancer in the United States are estimated at more than $6 billion annually.³

Statistics on Current Practice

Despite potential risks and established clinical guidelines, recent data suggest that some individuals are not receiving preventive screening mammography. It has been reported that:

- In 2001, 76% of women aged 52 to 69 years had at least one mammogram in the previous two years.⁴
- In 2000, 17% of women aged 40 to 49 years had never had a mammogram.⁵

Selected Evidence-Based Clinical Guidelines

Evidence-based clinical practice guidelines are available for screening mammography. This measure is based on clinical guidelines from the following:

- American Academy of Family Physicians⁶
- American College of Obstetricians and Gynecologists⁷
- American College of Preventive Medicine⁸
- Canadian Task Force on Preventive Health Care⁹
- National Cancer Institute¹⁰
- US Preventive Services Task Force¹¹

This performance measure was developed in agreement with these guidelines, enabling the physician to track his or her performance in individual patient care and across patient populations. Please note that treatment must be based on individual patient needs and professional judgment.

Statistics on Current Practice

Despite potential risks and established clinical guidelines, recent data suggest that some individuals are not receiving preventive screening mammography. It has been reported that:

- In 2001, 76% of women aged 52 to 69 years had at least one mammogram in the previous two years.⁴
- In 2000, 17% of women aged 40 to 49 years had never had a mammogram.⁵

Selected Evidence-Based Clinical Guidelines

Evidence-based clinical practice guidelines are available for screening mammography. This measure is based on clinical guidelines from the following:

- American Academy of Family Physicians⁶
- American College of Obstetricians and Gynecologists⁷
- American College of Preventive Medicine⁸
- Canadian Task Force on Preventive Health Care⁹
- National Cancer Institute¹⁰
- US Preventive Services Task Force¹¹

This performance measure was developed in agreement with these guidelines, enabling the physician to track his or her performance in individual patient care and across patient populations. Please note that treatment must be based on individual patient needs and professional judgment.

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<tr>
<th>Clinical Recommendations</th>
<th>Clinical Performance Measures Per Two-Year Measurement Period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Screening Mammography</strong></td>
<td><strong>Percentage of female patients who had a mammogram performed during the two-year measurement period</strong></td>
</tr>
<tr>
<td><strong>Denominator Exclusion:</strong></td>
<td><strong>Numerator</strong> = Female patients who had a mammogram performed</td>
</tr>
<tr>
<td>Documentation of medical reason(s)¹ for not performing screening mammography; documentation of patient reason(s)² for declining screening mammography; high risk population³</td>
<td><strong>Denominator</strong> = All female patients aged 50-69 years at the beginning of the two-year measurement period</td>
</tr>
<tr>
<td><strong>Per Patient:</strong> Whether or not female patient had a mammogram performed</td>
<td><strong>Per Patient Population:</strong> Percentage of female patients who had a mammogram performed during the two-year measurement period</td>
</tr>
</tbody>
</table>

Note: Evidence to support screening mammography in women aged 50 to 69 years is stronger than the evidence to support screening mammography in women aged 40 to 49 years or aged ≥70 years. The Preventive Care and Screening Work Group continues to monitor the evidence and reviews this measure annually.

¹ Specify medical reasons (eg, history of bilateral mastectomy, terminal illness) for not performing screening mammography.
² Specify patient reasons (eg, economic, social, religious) for declining screening mammography.
³ Those at higher risk require more intensive surveillance.
Relevant Physician Specialties, Patient Population, and Settings of Care

This performance measure is designed for:

- Use by any physician who manages the ongoing care of female patients aged 50 to 69 years.
- Prospective data collection in the office-based practice setting only.

References

**Physician Consortium for Performance Improvement**

**Preventive Care and Screening Physician Performance Measurement Set**

**Prospective Data Collection Flowsheet**

<table>
<thead>
<tr>
<th>Date of visit (mm/dd/yyyy)</th>
<th><strong><strong>/</strong></strong>/____</th>
<th><strong><strong>/</strong></strong>/____</th>
<th><strong><strong>/</strong></strong>/____</th>
<th><strong><strong>/</strong></strong>/____</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Weight (lb/kg)</th>
<th>❑ Unable to weigh</th>
<th>❑ Unable to weigh</th>
<th>❑ Unable to weigh</th>
<th>❑ Unable to weigh</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Blood pressure</th>
<th>L R</th>
<th>L R</th>
<th>L R</th>
<th>L R</th>
</tr>
</thead>
<tbody>
<tr>
<td>sitting supine</td>
<td>standing</td>
<td>sitting supine</td>
<td>standing</td>
<td>sitting supine</td>
</tr>
</tbody>
</table>

**Tobacco Use**

- ❑ Never
- ❑ Former ___ pack yrs ___/____/____ (stop date)
- ❑ Current ___ pack/day

**Cessation Intervention for Tobacco Users**

- ❑ Counseling
- ❑ Medication
- ❑ Referral

**Alcohol Use**

- ❑ Never
- ❑ Current ___ # drinks per day ___/____/____
- ❑ Screened for problem drinking

**Problem Drinking (assess during each visit)**

- ❑ Never
- ❑ Current ___ # drinks per day ___/____/____
- ❑ Screened for problem drinking

**Influenza Immunization**

- ❑ Given ___/____/____
- ❑ Not given (medical reasons*)
- ❑ Not given (patient reasons*)

**Colorectal Cancer Screening**

- ❑ Average risk
- ❑ High risk

- Indicate test(s) completed
- FOBT ___/____/____
- Sigm. ___/____/____
- Col. ___/____/____
- DCBE ___/____/____
- ❑ Not performed (medical reasons*)
- ❑ Not performed (patient reasons*)

**Colorectal Cancer Screening (ages 50+ annually)**

- Date performed ___/____/____
- ❑ Not performed (medical reasons*)
- ❑ Not performed (patient reasons*)

**Mammogram Performed**

- ❑ Average risk
- ❑ High risk

- Date performed ___/____/____
- ❑ Not performed (medical reasons*)
- ❑ Not performed (patient reasons*)

This flowsheet is intended for prospective data collection only.

*Specify medical (eg, egg allergy for influenza immunization, bilateral mastectomy for screening mammography) or patient (eg, economic, social, religious) reasons for not providing preventive care: