



**Department of Veterans Affairs
Office of Inspector General**

**Combined Assessment Program
Summary Report**

**Management of
Multidrug-Resistant Organisms in
Veterans Health Administration Facilities**

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Executive Summary

The VA Office of Inspector General Office of Healthcare Inspections completed an evaluation of the management of multidrug-resistant organisms (MDRO) in Veterans Health Administration facilities. The purposes of the evaluation were to determine whether facilities (1) complied with Centers for Disease Control and Prevention guidelines, the national patient safety goal, and Joint Commission standards regarding MDRO, hand hygiene, isolation, and environmental cleanliness and (2) adequately communicated about patients infected or colonized with MDRO.

Inspectors evaluated the management of MDRO at 24 facilities during Combined Assessment Program reviews conducted from October 1, 2010, through March 31, 2011.

Veterans Health Administration facilities recognized the importance of establishing and maintaining measures to reduce the incidence of health care-associated infections due to MDRO. We identified three areas where compliance with MDRO requirements needed improvement. We recommended that the Under Secretary for Health, in conjunction with Veterans Integrated Service Network and facility senior managers, ensures that:

- Patients infected or colonized with MDRO and their families receive infection prevention strategies education, such as hand washing and the proper use of personal protective equipment.
- Facilities provide MDRO education to designated staff during orientation and annually thereafter based on risk assessment results.
- Facilities develop policies and programs that control and reduce antimicrobial agent usage.



DEPARTMENT OF VETERANS AFFAIRS
Office of Inspector General
Washington, DC 20420

TO: Under Secretary for Health (10)

SUBJECT: Combined Assessment Program Summary Report – Management of Multidrug-Resistant Organisms in Veterans Health Administration Facilities

Purpose

The VA Office of Inspector General Office of Healthcare Inspections evaluated the management of multidrug-resistant organisms (MDRO) in Veterans Health Administration facilities. The purposes of the evaluation were to determine whether facilities (1) complied with Centers for Disease Control and Prevention guidelines, the national patient safety goal, and Joint Commission standards regarding MDRO, hand hygiene, isolation, and environmental cleanliness, and (2) adequately communicated about patients infected or colonized with MDRO.

Background

The Centers for Disease Control and Prevention defines MDRO as microorganisms, predominantly bacteria, that are resistant to one or more classes of antimicrobial agents. MDRO present a serious threat to patients in hospitals. Although there has been much emphasis on methicillin-resistant *Staphylococcus aureus*, other bacteria, such as gram-negative organisms (for example, *Pseudomonas*), *Clostridium difficile*, and vancomycin-resistant enterococci, play a significant role in the morbidity and mortality of hospitalized patients.

As illness acuity has increased, patients also face a risk of developing health care-associated infections. Risks include such factors as age, prolonged hospital (or nursing home) stays, pressure ulcers, indwelling urinary devices, and multiple or prolonged courses of antimicrobial therapy. Each of these, as well as other factors, alter a patient's ability to fight infection.

The Centers for Disease Control and Prevention and The Joint Commission have recommended actions to promote the control of MDRO in hospitalized patients. These include using effective and consistent hand hygiene practices, educating patients and staff, and judiciously using antimicrobial agents.

Scope and Methodology

Inspectors evaluated the management of MDRO at 24 facilities during Combined Assessment Program reviews conducted from October 1, 2010, through March 31, 2011. The facilities reviewed represented a mix of size, affiliation, geographic location, and Veterans Integrated Service Networks (VISNs). We interviewed selected program managers and reviewed documents, including facility self-assessments, patient medical records, and training records. We also conducted physical inspections of selected patient care units.

We generated an individual Combined Assessment Program report for each facility. For this report, we analyzed and summarized the data from the individual facility Combined Assessment Program reviews.

Inspectors conducted the reviews in accordance with *Quality Standards for Inspection and Evaluation* published by the Council of the Inspectors General on Integrity and Efficiency.

Inspection Results

Issue 1: Patient and Family Education

The Joint Commission's national patient safety goal¹ requires that facilities provide education about health care-associated infection prevention strategies to patients who are infected or colonized² with MDRO. Infection prevention education is also important for these patients' family members.

We reviewed 422 medical records of patients infected or colonized with MDRO, such as methicillin-resistant *Staphylococcus aureus*, vancomycin-resistant enterococci, and various gram-negative organisms. We found that 157 patients and their families (37 percent) did not receive MDRO education.

We recommended that patients infected or colonized with MDRO and their families receive infection prevention strategies education, such as hand washing and the proper use of personal protective equipment.

¹ The Joint Commission, "Hospital Accreditation Program, 2010 Chapter: National Patient Safety Goals," National Patient Safety Goal 07.03.01, performance element 3.

² Colonization is the presence of bacteria in the body without causing clinical infection.

Issue 2: Staff Education

Facilities conduct periodic risk assessments for MDRO acquisition and transmission. Based on the results of these risk assessments, facilities may identify a need for designated staff to be educated about health care-associated infections, MDRO, and prevention strategies.³ Twenty-one (88 percent) of the 24 facilities identified in their risk assessments a need for designated staff to receive MDRO education during orientation and annually thereafter.

We reviewed a total of 463 employee training records from these 21 facilities. Of the 59 employees hired within the previous 12 months, 13 (22 percent) did not receive MDRO education during orientation. Of the 404 employees who had been employed more than 12 months, 89 (22 percent) did not receive annual MDRO education.

We recommended that facilities provide MDRO education to designated staff during orientation and annually thereafter based on risk assessment results.

Issue 3: Antimicrobial Agent Use

The Centers for Disease Control and Prevention recommends review, control, and improvement in the use of agents known to perpetuate the incidence of MDRO.⁴ The Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America have developed guidelines to reduce the incidence and risk for transmission of MDRO.⁵ The primary goal of antimicrobial stewardship is to optimize clinical outcomes while minimizing unintended consequences of antimicrobial use.

At the time of our review, the Veterans Health Administration did not require its facilities to have programs to control and reduce antimicrobial agent use. We understand that a task force has been formed and that a draft directive is in progress. Fourteen (58 percent) of the facilities in our review had not developed antimicrobial control policies.

We recommended that the Veterans Health Administration require facilities to develop policies and programs that control and reduce antimicrobial agent use.

Conclusions

We identified strengths in Veterans Health Administration facilities' management of MDRO in the areas of routine risk assessments, dissemination of MDRO-positive patient information to relevant clinical staff, and consistent hand hygiene and isolation precautions practices. However, compliance with applicable MDRO requirements

³ The Joint Commission, performance element 2.

⁴ Jane D. Siegel, MD, et al., "Management of Multidrug-Resistant Organisms in Healthcare Settings, 2006."

⁵ Timothy H. Dellit, et al., "Infectious Diseases Society of America and the Society for Healthcare Epidemiology of America Guidelines for Developing an Institutional Program to Enhance Antimicrobial Stewardship," *Clinical Infectious Diseases*, Vol. 44, No. 2, 2007, pp. 159–177.

needed improvement in the areas of patient and family education, staff education, and control of antimicrobial agents.

Recommendations

Recommendation 1. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that patients infected or colonized with MDRO and their families receive infection prevention strategies education, such as hand washing and the proper use of personal protective equipment.

Recommendation 2. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that facilities provide MDRO education to designated staff during orientation and annually thereafter based on risk assessment results.

Recommendation 3. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that facilities develop policies and programs that control and reduce antimicrobial agent use.

Comments

The Under Secretary for Health concurred with the findings and recommendations. The implementation plan is acceptable, and we will follow up until all actions are completed.



JOHN D. DAIGH, JR., M.D.
Assistant Inspector General for
Healthcare Inspections

Under Secretary for Health Comments

**Department of
Veterans Affairs**

Memorandum

Date: September 2, 2011

From: Under Secretary for Health (10)

Subject: **OIG Combined Assessment Program Summary Report:
Management of Multidrug-Resistant Organisms in Veterans
Health Administration Facilities (VAIQ 7128023)**

To: Assistant Inspector General for Healthcare Inspections (54)

1. I have reviewed the draft report and concur with the report's recommendations. Attached is the Veterans Health Administration's (VHA) corrective action plan for the report's recommendations.
2. Thank you for the opportunity to review the draft report. If you have any questions, please contact Linda H. Lutes, Director, Management Review Service (10A4A4) at (202) 461-7014.

(original signed by:)
Robert A. Petzel, M.D.

Attachment

**VETERANS HEALTH ADMINISTRATION (VHA)
Action Plan**

OIG Combined Assessment Program Summary Report: Management of Multidrug-Resistant Organisms in Veterans Health Administration Facilities (VAIQ 7128023)

Date of Draft Report: June 21, 2011

Recommendations/ Actions	Status	Completion Date
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OIG Recommendations

Recommendation 1. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that patients infected or colonized with MDRO and their families receive infection prevention strategies education, such as hand washing and the proper use of personal protective equipment.

VHA Comments

Concur

The Office of the Deputy Under Secretary for Health for Operations and Management (DUSHOM) will issue a memorandum to Veterans Health Administration (VHA) medical facilities reinforcing the need to provide patient/family members with educational brochures that address prevention strategies for the transmission of multidrug-resistant organisms (MDRO). These materials should include information on hand-washing and use of personal protection equipment at minimum.

In Process

Memorandum to be
issued no later than
(NLT)
September 30, 2011

Recommendation 2. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that

facilities provide MDRO education to designated staff during orientation and annually thereafter based on risk assessment results.

VHA Comments

Concur

The DUSHOM will issue a memorandum to the field emphasizing The Joint Commission requirements for a risk assessment for MDRO and the need for designated staff training at orientation and annually based on the results of the risk assessment.

In Process Memorandum to be
issued NLT
October 31, 2011

The DUSHOM will require each Veterans Integrated Service Network (VISN) to submit a list of designated staff positions to be trained as well as copies of its risk assessment and training materials to ensure each VISN has a plan for oversight.

In Process To be completed
NLT
December 31, 2011

To address the concerns involving facilities that have not provided the training, the DUSHOM will review the Combined Assessment Program (CAP) review reports and action plans for the time period of this summary report and work directly with the facilities that needed improvement in this area to ensure that action plans have been implemented successfully.

In Process Review to be
completed NLT
December 31, 2011

Recommendation 3. We recommended that the Under Secretary for Health, in conjunction with VISN and facility senior managers, ensures that facilities develop policies and programs that control and reduce antimicrobial agent use.

VHA Comments

Concur

VHA agrees with the universal need for antimicrobial stewardship understanding that the goal is to provide each patient with the appropriate antimicrobial at the correct dose and for the proper length of time. However, it is important to note that a successful antimicrobial stewardship program may not always reduce antimicrobial usage, but it may contribute to the national goal of preventing the emergence of antimicrobial resistance.

To assist VHA facilities in the enhancement of local antimicrobial stewardship programs, the Infectious Disease Program Office, in conjunction with Pharmacy Benefits Management, both in Patient Care Services, conducted three Antimicrobial Stewardship Conferences (geographically distributed) in third and fourth quarter fiscal year 2010.

Completed

The Deputy Under Secretary for Health for Policy and Services (DUSHPS) also chartered the Patient Care Services/Operations and Management Antimicrobial Stewardship Task Force in May 2011. The purpose of the task force is to optimize the care of Veterans by developing, deploying, and monitoring a national-level strategic plan for improvements in antimicrobial therapy management. Current activities of the task force include the following:

- Establish work groups. Four work groups (Education, Metrics, Antimicrobials Tools and Resources, Survey) are to assess antimicrobial stewardship resources at local sites. The fifth work group will address implementation.

Completed

- Inventory current antimicrobial stewardship practices in VHA.

In Process

Distribution of inventory to Facilities NLT October 31, 2011

- Conduct an educational conference, “Antimicrobial Stewardship in VA – Moving Forward.”

In Process

Planned for November 2011

The DUSHPS will work with the DUSHOM to issue an Information Letter to VHA medical facilities describing antimicrobial stewardship programs and components.

In Process

Information Letter
to be distributed
NLT
December 15, 2011

OIG Contact and Staff Acknowledgments

OIG Contact	For more information about this report, please contact the Office of Inspector General at (202) 461-4720
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