

Infection Surveillance Project *for Home Care*



 **Home Care Fall
Reduction Initiative**

 **Infection Surveillance Project
for Home Care**

 **Patient Satisfaction
Survey Project**

 **Client Satisfaction
Survey Project**



2420 Hyde Park Rd., Ste. A · Jefferson City, MO 65109
(573) 634-7772 · www.homecaremissouri.org

INTRODUCTION

For more than fifteen years the Missouri Alliance for Home Care (MAHC) Infection Surveillance Project (ISP) has been helping home care providers across the country determine the rate of infection for their patients with bladder and central venous catheters. The program began when home care nurses developed infection criteria specific to home health and is considered a national leader in infection benchmarking.

Utilizing the ISP, agencies can compare their incidence of infection year to year and against that of other providers of similar size and demographic profile. Every quarter MAHC compiles the aggregate data and returns easy-to-read individualized reports to the agencies. The reports show an overview of the data collected from all of the participants as well as the agency's individual analysis. Staffs use their reports to track outcomes, identify trends, and improve care. MAHC uses the aggregate to determine where future research is needed, and program participants regularly share strategies for improving care and patient education, reducing infection rates, and addressing emerging issues.



As PPS refinements are implemented, having instruments that clearly demonstrate improved outcomes and decreased need for acute care will be even more vital. In this packet you will find information and samples of some of the tools used in the MAHC Infection Surveillance Project including:

- Criteria and definition of infection
- Data submission template
- Example of a quarterly report
- Program guidelines & enrollment form

The project is managed by MAHC staff and overseen by a volunteer committee of home health care clinicians. An annual registration fee paid by the participating agencies covers the cost of data collection and statistical analysis. In addition to the quarterly reports, other benefits include: training and on-going support; periodic reports on infection control developments; and interactive community meetings where participants and MAHC staff share feedback and look for ways to enhance the program's value to home care agencies, staff, and patients. By expanding the program and adding features suggested by its participants, MAHC continues to assist home care clinicians as they provide the highest quality care to their patients.

FREQUENTLY ASKED QUESTIONS

Which patients are included in the study?

All patients currently under a care plan with the agency who have an indwelling or suprapubic bladder catheter, or a central venous catheter.

Are agencies required to track both bladder and central venous catheters to participate?

No. Agencies may submit data for one type of catheter or both. The annual program fee remains the same.

How much additional staff time will participating in the study require?

Minimal staff time is needed to participate in the program. Three numbers are required for each type of catheter the agency is tracking. Recording the incidence of infections is most likely already agency procedure and many widely-used software programs make retrieving the information fast and easy. MAHC provides patient tracking forms and a pre-formatted Microsoft Excel spreadsheet streamlining the process even further.

Why are agencies required to submit a copy of their collection process?

This step ensures all information is collected uniformly and protects the integrity and accuracy of the reports.

How do agencies submit data and get their reports?

Data is entered on the spreadsheet and sent to MAHC by e-mail every quarter. MAHC then completes the statistical analysis and distributes the reports by e-mail to the project supervisor 7-10 days later. Each report contains an individual agency analysis as well as the aggregate information.

Why is the participation fee higher the first year?

The enrollment fee covers training for the project supervisor and other administrative costs associated with initiating the agency's statistical analysis. If the agency changes project supervisors later on, no additional fees are incurred to train the new person.

Do you have to be a member of MAHC to participate?

No. Home care agencies from any state may participate in the program.

Does MAHC offer any other benchmarking programs for home care?

Yes. MAHC also administers a fall prevention benchmarking program as well as patient and customer satisfaction projects.

What if I have more questions?

Contact Cyndee Howell at (573) 634-7772 or email cyndee@homecaremissouri.org. You may also visit the MAHC website at www.homecaremissouri.org to learn more about all MAHC benchmarking initiatives.



Infection Surveillance Project

Infection Surveillance Project Agency Enrollment Form and Participation Agreement

Company Name _____

Company Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____

Project Manager _____ Title _____

Email _____

Alternate Contact _____ Title _____

Email _____

- I have read the Guidelines and Policies document and the Quality Assurance Procedures and I agree to comply with the terms and requirements therein.

Project Supervisor's Signature _____ Date _____

Demographic Information for the Most Recent Calendar Year

To ensure accuracy of data comparisons, please complete this demographic information.

1. Home Health Agency Base	
<input type="checkbox"/> Freestanding	<input type="checkbox"/> Institutional
2. Designation	
<input type="checkbox"/> Urban	<input type="checkbox"/> Rural
3. The total number of visits per year _____	

Project Participation Fees: \$400.00 Annual fee
 \$200.00 Enrollment fee (*due first year only*)

Total enclosed: \$ _____

Return this completed, signed agreement with the first annual payment to:

Missouri Alliance for HOME CARE
2420 Hyde Park, Suite A, Jefferson City, MO 65109-4731 • (573) 634-7772 • (573) 634-4374 Fax
www.homecaremissouri.org

CRITERIA FOR DEFINING INFECTION

Central vein catheter-associated infections must meet one of the following criteria:

1. **Purulent drainage at the wound, skin or soft tissue site**
2. **Four or more of the following six signs/symptoms with no other recognized cause:**
 - a. Fever OR worsening mental or functional status
 - b. Pain OR tenderness at the affected site
 - c. Localized swelling at the affected site
 - d. Redness at the affected site
 - e. Heat at the affected site
 - f. Serous discharge at the affected site

Catheter-associated urinary tract infections must meet one of the following criteria:

1. **Two of the following four signs/symptoms with no other recognized cause AND urinalysis or culture is NOT done:**
 - a. Fever OR chills with no other external urinary source noted
 - b. Flank pain OR suprapubic pain OR tenderness OR frequency OR urgency
 - c. Worsening of mental OR functional status
 - d. Changes in urine character (e.g., new bloody urine, foul odor, increased sediment)
2. **One of the following two signs/symptoms AND both bacteriuria** (determined by positive urine culture for pathogen or positive nitrite assay by dipstick) **and pyuria** (determined by 10 or more WBC/HPF on urinalysis or positive leukocyte esterase assay by dipstick).
 - a. Fever OR chills
 - b. Flank pain OR suprapubic pain OR tenderness

DATA SUBMISSION (MS EXCEL FILE)

Infection Surveillance Project		e-mail completed form to: cyndee@homecaremissouri.org (573) 634-7772																											
Please enter data into every white box. E-mail the completed data summary report within 45 days of the end of each quarter.																													
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="background-color: #003366; color: white;">Reporting Agency / Period</th> </tr> </thead> <tbody> <tr> <td style="width: 30%;">Agency name ▶</td> <td style="background-color: #e0e0e0;"></td> </tr> <tr> <td>Contact name ▶</td> <td style="background-color: #e0e0e0;"></td> </tr> <tr> <td style="text-align: center;">Agency control number ▶</td> <td style="background-color: #e0e0e0;"></td> </tr> <tr> <td style="text-align: center;">Quarter of year surveyed (1-4) ▶</td> <td style="background-color: #e0e0e0;"></td> </tr> <tr> <td style="text-align: center;">Calendar year surveyed (yyyy) ▶</td> <td style="background-color: #e0e0e0;"></td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="background-color: #003366; color: white;">Central Venous Catheter (CVC)</th> </tr> </thead> <tbody> <tr> <td style="width: 30%;">Number of CVC infection occurrences ▶</td> <td style="background-color: #e0e0e0;"></td> </tr> <tr> <td>Number of Patient Days with CVC ▶</td> <td style="background-color: #e0e0e0;"></td> </tr> <tr> <td>Number of Unduplicated Patients with CVC ▶</td> <td style="background-color: #e0e0e0;"></td> </tr> </tbody> </table> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2" style="background-color: #003366; color: white;">Bladder Catheter</th> </tr> </thead> <tbody> <tr> <td style="width: 30%;">Number of BC infection occurrences ▶</td> <td style="background-color: #e0e0e0;"></td> </tr> <tr> <td>Number of Patient Days with BC ▶</td> <td style="background-color: #e0e0e0;"></td> </tr> <tr> <td>Number of Unduplicated Patients with BC ▶</td> <td style="background-color: #e0e0e0;"></td> </tr> </tbody> </table>	Reporting Agency / Period		Agency name ▶		Contact name ▶		Agency control number ▶		Quarter of year surveyed (1-4) ▶		Calendar year surveyed (yyyy) ▶		Central Venous Catheter (CVC)		Number of CVC infection occurrences ▶		Number of Patient Days with CVC ▶		Number of Unduplicated Patients with CVC ▶		Bladder Catheter		Number of BC infection occurrences ▶		Number of Patient Days with BC ▶		Number of Unduplicated Patients with BC ▶		<p style="font-size: x-small;"> Criteria for fever: • Fever is present when the patient's temperature is 2.4 F degrees greater than the baseline temperature. • MAHC ISD utilizes the temperature recorded at the patient's initial assessment/admission as the baseline. Criteria for home healthcare-associated infection occurrence: • Do not include institution or other previously-acquired infections (those evident within 72hrs post-SOC). • Evaluation of a suspected infection includes considering whether symptoms are new or acutely worse from established baselines. Non-infectious causes also must be considered. In most cases, compatible signs/symptoms should accompany physician diagnosis. Lab reports (micro & serology) alone do not define infection but may be used adjunctively for confirmation. • An infection occurrence is when the patient who meets the listed criteria is treated and then asymptomatic for 14 days post-tx (Zithromax extends treatment 5 days after the last dose). If the patient later develops symptoms and is treated again, that infection becomes the second occurrence, not a continuation of the first. CVC infection must meet ONE of the following: 1.) Purulent drainage at the catheter site. 2.) Four or more of the following signs/symptoms with no other recognized cause: a. Fever or worsening mental or functional status d. Redness at the affected site b. Pain or tenderness at the affected site e. Heat at the affected site c. Localized swelling at the affected site f. Serous discharge at the affected site </p> <p style="font-size: x-small;"> UTI must meet ONE of the following: 1.) Two of the following - and urinalysis or culture is not done: a. Fever or chills with no other external source noted b. Flank pain or suprapubic pain or tenderness or frequency or urgency c. Worsening of mental or functional status d. Changes in urine character (new blood, odor, increasing sediment, etc.) 2.) One of the following - and both bacteriuria and pyuria are present: a. Fever or chills b. Flank pain or suprapubic pain or tenderness <small>*Bacteriuria is determined by urine culture positive for pathogen or positive nitrite assay by dipstick. *Pyuria is determined by ≥10 WBC/HPF on urinalysis or positive leukocyte esterase assay by dipstick.</small> </p>
Reporting Agency / Period																													
Agency name ▶																													
Contact name ▶																													
Agency control number ▶																													
Quarter of year surveyed (1-4) ▶																													
Calendar year surveyed (yyyy) ▶																													
Central Venous Catheter (CVC)																													
Number of CVC infection occurrences ▶																													
Number of Patient Days with CVC ▶																													
Number of Unduplicated Patients with CVC ▶																													
Bladder Catheter																													
Number of BC infection occurrences ▶																													
Number of Patient Days with BC ▶																													
Number of Unduplicated Patients with BC ▶																													
Reports must be received by MAHC within 45 calendar days of the end of each quarter. Late submissions will be accepted; however a \$25 fee will be applied to produce an individualized agency report after the quarterly deadline.																													

PROGRAM GUIDELINES AND POLICIES


Companies that participate must:

1. Identify a project supervisor within their organization. The project supervisor serves as a liaison between the agency and MAHC, assures data is collected and reported accurately, and receives the quarterly infection rate reports.
2. Submit a copy of the infection surveillance policies and procedures used to collect infection data.

MAHC staff and committee members:

1. Provide on-going training and support for the program.
2. Manage a forum for the exchange of information among participants from across the country and supply information on new developments in infection control.
3. Monitor new data submissions to ensure data integrity.
4. Provide continuous review of the program for needs assessment, enhanced capabilities, and new research techniques specific to home care infection control.

AGENCY REPORT

 Infection Surveillance Project		2007 - Quarter 4 BC Infections / 1000 Catheter Days							
	HHA Rpg	Number of Days	Number of Patients	Group Rate	First Quartile	Median Value	Third Quartile	Prev. Quarter Median Value	Prev. Year Median Value
All Agencies	45	86,101	1,194	2.678	1.195	1.952	3.891	2.649	2.387
Agency Base									
Free standing	9	12,721	231	1.808	1.141	1.715	2.092	2.016	2.112
Hospital-based	36	53,380	963	2.885	1.195	2.199	4.490	3.546	2.453
Agency Size Visits per Year									
<10,000	11	4,679	72	3.633	1.131	4.329	6.042	1.271	0.000
10,000-30,000	21	20,103	390	3.034	1.141	1.887	2.793	3.199	2.943
30,000-70,000	10	31,208	570	2.179	1.384	2.443	3.085	1.998	2.221
>70,000	3	10,111	162	3.088	1.846	2.088	2.794	3.872	2.387
Location									
Urban	19	47,169	825	2.629	1.400	2.310	3.381	2.852	2.527
Rural	26	18,932	369	2.800	1.025	1.947	4.580	2.649	2.114
BC device days									
<233	12	3,394	64	3.241	0.000	2.165	5.938	0.000	0.000
233-432	11	7,277	135	2.199	1.807	1.931	2.129	4.149	2.211
432-599	11	15,655	244	2.811	1.373	2.088	3.943	3.805	3.599
>599	11	39,775	751	2.685	1.574	2.527	3.557	2.504	1.958