Abstract

Background: Increasingly, states are mandating the reporting of nosocomial infection (NI) data. Some are now requiring that all NIs be reported. To accomplish this, hospital wide surveillance for NIs, a labor-intensive process uncommonly currently employed, will need to be implemented. The purpose of this study was to assess the current size of the infection control workforce in Virginia and to assess the number of additional personnel that would be needed to implement hospital wide NI surveillance.

Methods: A one-page questionnaire was mailed to the infection control department of each acute care hospital (n=94) in Virginia. For the cost analysis, 1.0 infection control professional (ICP) FTE was estimated at $72,000 annually ($60,000 salary + $12,000 fringe benefits [20% of salary]).

Results: Seventy-four hospitals (79%) responded. The majority of hospitals (64%) had 1 nurse FTE, while 21% had <1, and 14% had >1 nurse FTE (mean 1.0, median 1.0). Nine hospitals had medical technologists; 7 of these had 1.0 FTE. Only 13 hospitals (18%) had any clerical support for infection control and 54% of these had <0.5 FTE. At the vast majority of hospitals (86%), the ICPs had other major responsibilities (Emergency Preparedness at 67% of responding hospitals, Quality Improvement at 57%, Employee Health at 46%, Risk Management at 4%). The estimated number of additional FTE required to perform hospital wide surveillance ranged from 0 to 8 (mean 1.7; 68% of hospitals would require at least 1.0 FTE. Assuming that the nonresponding hospitals do not differ from the responding hospitals, an estimated 160 additional ICPs would be required in Virginia hospitals at an estimated additional annual cost of $11.5 million.

Conclusions: The majority of acute care hospitals in Virginia staff their infection control efforts with 1.0 FTE ICP. Most ICPs have major responsibilities outside infection control. Thus, if reporting of all NIs is mandated, two-thirds of Virginia hospitals will need to hire at least one additional FTE.

Background

• 37 have introduced or enacted legislation to mandate reporting of nosocomial infections; most bills require hospitalwide reporting of some types of infection
• In 2001, 2003, 2004 and 2005, bills were introduced at the Virginia General Assembly requiring public reporting of all nosocomial infections
• Hospitalwide surveillance is resource intensive and no longer performed at many hospitals
• The goal of this study was to assess the current size of the infection control workforce in Virginia and to estimate the number of additional personnel that would be needed to implement hospital wide nosocomial infection surveillance.

Methods

• A one-page questionnaire was sent to the infection control department of each acute care hospital in Virginia (n=94) to ascertain the number of FTE dedicated to infection control (RN, medical technologist/technologist, clerical).
• Each hospital was asked to estimate the number of additional FTEs required to provide for hospital wide surveillance for all nosocomial infections.
• For the cost analysis, 1.0 infection control professional (ICP) was estimated at $72,000 annually ($60,000 salary + $12,000 fringe benefits [20% of salary]).

Results

74 (79%) of the surveyed hospitals responded

Current ICP FTE for infection control:

<table>
<thead>
<tr>
<th>Infection Control FTE stratified by hospital size:</th>
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<tbody>
<tr>
<td>Number of staffed beds</td>
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<tr>
<td>------------------------</td>
</tr>
<tr>
<td>&lt;100</td>
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<td>100-299</td>
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<td>&gt;300</td>
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ICP other major responsibilities:

Estimated cost of additional ICPs required if hospital wide surveillance of nosocomial infections were mandated:

• Additional FTE/hospital:  Mean 1.7 (range 0-8)
• Statewide FTE required:  1.7 FTE x 94 acute care hospitals = 160
• Cost:  160 x ($60,000 annual salary + $12,000 benefits) = $11.5 million

Conclusions

• The majority of acute care hospitals in Virginia staff their infection control efforts with 1.0 FTE ICP.
• Most ICPs have major responsibilities outside infection control.
• If reporting of all nosocomial infections is mandated, two-thirds of Virginia hospitals will need to hire at least one additional ICP FTE.
• Annual human resources cost statewide (ICPs only) = $11.5 million