

Executive Summary

Healthcare-associated infections (HAI) are a leading cause of death in the US and are involved in an estimated 99,000 deaths each year. The direct medical costs associated with these infections were estimated to be \$25,903 per infection in 2007 dollars. Growing public awareness has been instrumental in focusing increased attention to the problem of healthcare-associated infections. These infections are caused by a wide variety of common pathogens during the course of receiving medical care. These infectious agents can come from the patients themselves or from non-patient sources.

Many healthcare-associated infections are preventable through proven practices. They have been recognized by the Centers for Disease Control and Prevention as a top “winnable battle” in public health and as a priority for improving the quality of healthcare and patient safety. Since July 2008 New Mexico (NM) has responded to this challenge with an initiative to monitor and prevent healthcare-associated infections and a requirement to make its findings known to the public. This report, mandated by the Hospital-Acquired Infection Act, is the first to include data that is specific to healthcare facilities in NM.

The NM Healthcare-associated Infections Advisory Committee is led by the NM Department of Health and is comprised of stakeholders including consumers, the Association for Professionals in Infection Control and Epidemiology NM, the NM Hospital Association, NM hospitals, NM Medical Review Association (the state healthcare quality improvement organization), local representation from the Society for Hospital Epidemiology of America and the NM Department of Health. The Committee developed the NM Healthcare-associated Infections Prevention Plan that was submitted to the US Department of Health and Human Services January 1, 2010. The Plan provides guidelines for the surveillance and prevention of healthcare-associated infections, submission of data at state and national levels as well as public reports.

NM monitors central line-associated bloodstream infections because they can carry great risk to patients and also because hospitals can employ proven practices to prevent these infections. NM is also monitoring influenza vaccination rates of healthcare personnel. Healthcare personnel are a potential source of influenza to patients. However, they are not all vaccinated each season as recommended. This poses a risk to their patients.

Six hospitals submitted healthcare-associated infections surveillance data to the Department of Health during a pilot program from July 1, 2008 through May 31, 2009. The pilot monitored central line-associated bloodstream infections in their adult intensive care units as well as influenza vaccinations of healthcare personnel in their facilities. The Advisory Committee has since expanded efforts to include more healthcare facilities and additional measures. Now there are 38 acute and long-term acute care facilities voluntarily participating in healthcare-associated infections monitoring and/or prevention activities in NM. These activities include: a) monitoring and prevention of central line-associated bloodstream infections in hospitals; b) influenza vaccination of healthcare personnel; c) monitoring and prevention of *Clostridium difficile* infection in healthcare settings; d) recent completion of a one-year central line-associated bloodstream infections prevention collaborative and beginning of a new *Clostridium difficile* infection prevention collaborative; and e) special research projects.

The NM Healthcare-associated Infections Initiative is beginning to monitor *Clostridium difficile* infection while also starting prevention activities. *Clostridium difficile* infection causes a range of outcomes from diarrhea to death and has been increasing in incidence and virulence over the past one to two decades. While it is too early to report results, 17 units in 11 NM healthcare facilities have begun to submit data and a prevention collaborative (*Clostridium difficile* Infection Prevention Project) involving healthcare providers, environmental services, pharmacy and laboratory personnel within facilities is underway. The *Clostridium difficile* Infection Prevention Project has set a goal to reduce *Clostridium difficile* infection by 30% over the next two years through a combination of measures outlined in this report.

The following is a summary of the key findings:

- The NM Healthcare-associated Infections Initiative has enabled a growing number of NM healthcare facilities to collaborate in surveillance and prevention of these infections.
- The evaluation of the data submitted by participating NM healthcare facilities indicates that there were fewer central line-associated bloodstream infections than national reference data would have predicted.
- Data submitted from the statewide total of 32 participating units (18 intensive care units and 14 non-intensive care units) showed that 61% fewer central line-associated bloodstream infections were observed than would have been predicted from national reference data.
 - The 18 participating intensive care units observed 59% fewer central line-associated bloodstream infections than predicted
 - The 14 non-intensive care units observed 70% fewer than predicted from national data.
- Only the outcomes from individual healthcare facilities that submitted data for central line-associated bloodstream infections from intensive care units for more than 12 months are included: all of these individual outcomes were better than or no different from national reference data.
- During the 2010-2011 influenza season, 60.4% of healthcare personnel were vaccinated among 24 NM healthcare facilities that voluntarily submitted data. This result is similar to national influenza vaccination coverage of healthcare personnel.

Development of safer and more accountable healthcare systems is a priority for national agencies such as the Centers for Medicare and Medicaid Services, Centers for Disease Control and Prevention, and Agency for Healthcare Research and Quality. Because of the above efforts in NM, there now exists not only a substantive body of data about this problem but also new collaborations through which healthcare-associated infections can be reduced.

The NM Healthcare-associated Infections Advisory Committee will continue to guide the collection of data, facilitate communication among partners and with the public as well as promote improvement of healthcare practices in NM.