



# Introduction

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Hospitalized patients with critical illness requiring aggressive medical intervention are at risk of acquiring serious nosocomial infection that may lead to increase in medical expenditures, morbidity and mortality (*Kieckhaus and Cooper, 1998*). Infection control in this population entails continuous surveillance for hospital acquired infection with investigation of outbreaks since the isolation of micro-organism is the basis for treating infections (*Woeltje and Fraser, 1998*).

Prevention of hospital infection is an ideal model for nascent efforts to improve the quality of hospital care because of its proven efficacy in reducing the occurrence of infections that compromise patient outcomes and increase costs (*Brossette et al., 1998 and Huskin et al., 1998*).

The overall prevalence of hospital acquired infection during the years 1994-1996 was 6.8, 5.5 and 5.9 respectively. Among these infections were; urinary tract infections, respiratory tract infections, surgical site infections and blood stream infections (*Symth et al., 1997 and Gikas et al., 1999*).

The frequency of antimicrobial resistance is increasing, making accurate identification and screening for susceptibility essential (*Iwen et al., 1996*).

Automation was introduced into the clinical microbiology laboratory in the late 1960s. Since that time improvements in technology

and the introduction of computerized data analysis have made mechanization practical and allowed its applications to expand. Today instruments have many uses in the microbiology laboratory as detection of organisms in clinical specimens, identification of isolates of bacteria and testing the susceptibility of isolates of bacteria to antimicrobial agents (*Woods, 1992*).

The choice of automated microbial identification system for the identification of a certain pathogen depends on the availability of identification libraries within the system and the performance of the systems for the identification of the pathogen (*Odumeru et al., 1999*).