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The VINCat Program: Quality and safety improvements in Catalonia. Editorial

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In this issue of Enfermedades Infecciosas y Microbiología Clínica, a large group of Health Care Professionals working on infection control and prevention of Health Care Related Infections (HCRI) in Catalonia (Spain), presents and discusses the results of 5 years of surveillance activities under the VINCat Program. The VINCat Program is described in detail, and its origins and likely future are also discussed.

Patient safety is a health care priority worldwide.[1,2] Most hospitals currently engage in activities to improve care quality, safety and health outcomes. The safest care is often the most cost-effective care. Many different strategies have a single goal: to provide safer health care, with the best health outcomes possible for the individual patient.[3,4] Infection control and prevention activities are at the core of these concepts. Basic quality of care concepts (such as surveillance: you only can improve what can be measured) are fundamental to infection control practices. Without a doubt, the concept of quality of care (including patient safety) is embedded in today's infection control policies.

Many now consider HCRI as preventable and unacceptable. The concept of "Zero HCRI" (Zero-Bacteremia and Zero-Ventilator Associated Pneumonia) is pressing, meaning that anything less than aspiring to eradicate the risk of HCRI in patients for whom we care is unacceptable.[5-7] "Zero HCRI" may be a desirable goal, but we must admit that some HCRI are not preventable (the so-called "minimum irreducible"). We have achieved a significant reduction in HCRI, but eradication is not yet in sight.

Several reports suggest that many HCRI are preventable with the implementation of evidence-based best practices. A number of evidence-based guidelines are available for the prevention and control of HCRI, as is an assessment of the strength of the evidence supporting them. However, the guidelines often lack recommendations regarding performance measures that can be used to assess their effectiveness, and there is also a lack of resource requirements analyses and feasibility assessments within the recommendations.

A number of new efforts have involved the use of simultaneous practice improvements, called *bundles*. A care bundle is a set of four or five processes that individually improve patient outcomes and that should be performed together for every patient, every time. Bundles for the prevention of infections have focused on ventilator-associated pneumonia and catheter-associated bloodstream infections in the ICU. Care bundles can be a powerful driver for improving the delivery of evidence-based care and improving patient outcomes.[8] It remains to be seen whether the success that has been achieved in Catalan (and worldwide) ICUs using care bundles can be reproduced in general wards. Another new effort are the checklists. The World Health Organization launched the Surgical Safety Checklist (Safe Surgery Saves Lives), which is a very simple and inexpensive initiative to improve patient safety. The use of checklists can be a powerful tool for better clinical practice in many situations, including several related to infection control and prevention.

The human factor is very important for infection control and prevention. Human factors engineering studies the capabilities and limitations of humans, and the design of devices and systems for improved performance. It is used to study the interaction between the health care worker and the system that he or she is working with, including the use of devices, the environment and the demands and complexities of patient care, all items related to quality of care and to infection control and prevention. Some key challenges for infection prevention are delayed feedback to health care workers, high cognitive workload, and poor ergonomic design. Human factors engineering must be incorporated to achieve improved and increased compliance with practices to better prevent HCRI.[9]

Not all practices always work well. Challenges to implementing evidence-based HCRI prevention and control activities included poor adherence, insufficient resources, staffing problems, lack of culture change, no driving force for change, and issues related to staff and patient education. Many studies have reported that engaging physicians is particularly challenging. Ensuring staff and physician engagement in and compliance with HCRI prevention and control efforts remains difficult for most institutions. The example of hand hygiene is a classic one. "Clean Care is Safer Care" is a current worldwide initiative sponsored by the WHO. Monitoring hand hygiene compliance and providing health care workers with feedback regarding their performance are integral parts of multidisciplinary hand hygiene improvement programs. However, compliance is improving slowly, and is still quite low in many health care settings.[10]

Finally, in the midst of a cumbersome economic crisis, we must recognize that hospitals with more resources had better scores in most patient safety, quality of care and infection control performance indicators. To promote patient safety and quality of care programs in hospitals, enough dedicated full-time staff is needed. Economic support for hospitals will also be required to ensure that quality and safety programs are sustainable over time. We need to move even further from infection control towards infection prevention. That is our current quality and safety mission. Better care is always safer care.

The Catalan infection control community is proud of the VINCat Program, which helps us improve our practice and the health

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outcomes of the patients we care for. We make a plea to our health authorities, quoting Sir Winston Churchill: "Give us the tools and we will finish the job".

Conflicts of Interest

The author declares that he has no conflicts of interest.

References

1. Flanagan ME, Welsh CA, Kiess C, Hoke S, Doebbeling BN; Agency for Healthcare Research and Quality Hospital-Acquired Infections Collaborative. A national collaborative for reducing healthcare-associated infections: current initiatives, challenges, and opportunities. Am J Infect Control. 2011;39:685-9.
2. Yokoe DS, Classen D. Improving patients safety through infection control: anew healthcare imperative. Infect Control Hosp Epidemiol. 2008;29 Suppl:S3-S11.
3. Yokoe DS, Mermel LA, Anderson DJ, Arias KM, Burstin H, Calfee DP, et al. A compendium of strategies to prevent healthcare-associated infections in acute care hospitals. Infect Control HospEpidemiol. 2008;29 Suppl:S12-21.
4. Hawn MT, Vick CC, Richman J, Holman W, Deierhoi RJ, Graham LA, et al. Surgical site infection prevention: time to move beyond the surgical care improvement program. Ann Surg. 2011;254:494-9.
5. Denham CR, Angood P, Berwick D, Binder L, Clancy CM, Corrigan JM, et al. Chasingzero: can reality meet the rhetoric? J Patient Saf. 2009;5:216-22.
6. Pronovost PJ, Goeschel CA, Colantuoni E, Watson S, Lubomski LH, Berenholtz SM, et al. Sustaining reductions in catheter related bloodstream infections in Michigan intensive care units: observational study. Br Med J. 2010;340:c309.
7. Kollef MH. Prevention of ventilator-associated pneumonia- or ventilator-associated complications: a worthy, yet challenging, goal. Crit Care Med. 2012;40:271-7.
8. Marwick C, Davey P. Carebundles: the holy grail of infectious risk management in hospital? Curr OpinInfect Dis. 2009;22:364-9.
9. Anderson J, Gosbee LL, Bessesen M, Williams L. Using human factors engineering to improve the effectiveness of infection prevention and control. Crit Care Med. 2010;38 Suppl:S269-81.
10. Boyce JM. Measuring health care worker hand hygiene activity: current practices and emerging technologies. Infect Control Hosp Epidemiol. 2011;32:1016-28.