

COMPARISON OF PUBLIC HOSPITALS AND IMPLEMENTATION OF QUALITY IMPROVEMENT PROGRAM IN VALLE DEL CAUCA, COLOMBIA

Serra M., Gómez O.L., Girón L.N.

Objective:

To compare ten public hospitals with process and outcome data and to implement a program for quality improvement.

Methods:

While Colombian Health Sector Reform (HSR) is advancing (currently approximately 55% of the population with health insurance, unlike 23.4% in 1994) there is growing concern about quality in health care. The Secretary of Health of Valle del Cauca (SHVC), Colombia (a State in the southwest of the country, capital Cali, two million of inhabitants) is in charge of hospitals of secondary and tertiary levels of care. As part of institutional strengthening of hospitals, SHVC, in cooperation with FES Foundation (a research team devoted to health services research), has been implementing a initiative with two phases: the first, research to measure quality in health care (March and November 2001) and the second, design and implementation of improvement plans in hospitals (first semester of 2002).

Performance of hospitals was measured in four services: surgery, maternity, internal medicine and paediatric. In each one of them, a tracer event (disease or surgical procedure) was selected considering the frequency of the event and the extent to which it was possible to make a valid measure of process and outcome. Events selected were appendectomy, caesarean section, acute myocardial infarction (AMI), and pneumonia.

Process data was collected from medical records considering clinical guidelines with the advice of experts in each area. Outcome data were: the occurrence of adverse events (morbidity or mortality); and satisfaction about health care. Satisfaction was measured through the likelihood to return to hospital before necessary and the perception of benefits. Occurrence of adverse events and satisfaction were analyzed as a dichotomy variable. Taking the hospital with the greater number of cases as a reference, OR were calculated, adjusting by case-mix (sex, age, co-morbidity and severity of illness).

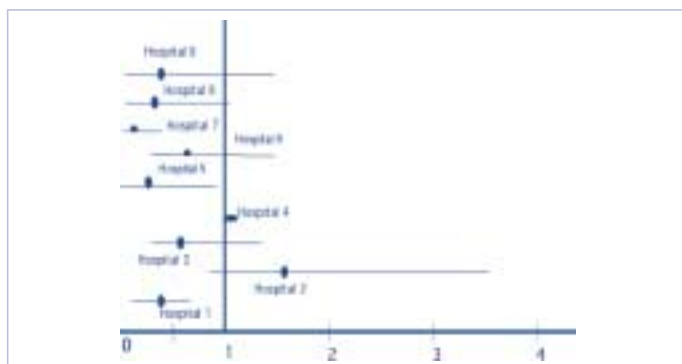
Results:

958 cases (422 caesarean sections, 238 appendectomies, 124 pneumonias, and 174 acute myocardial infarctions) were captured. Occurrence of adverse events was 19.7% in caesarean section, 32.5% in appendectomy, 37.1% in pneumonia, and 36% in AMI. Percentage of patients satisfied with health care was 74.2% in caesarean section, 64.5% in appendectomy, 70% in pneumonia, and 82.8% in AMI. After adjusting by case-mix, the hospitals with better performance taking into account occurrence of adverse events were 1, 5, 7, and 8 in caesarean section; 2 and 3 in appendectomy; 6 and 10 in pneumonia; and hospitals 1, 2, and 3 in AMI. (See graphic below). Considering satisfaction, the hospitals with better performance were 4 in caesarean section; 3, 6, 7, and 8 in appendectomy; 3, 6, and 7 in pneumonia; 3 and 8 in AMI (graphic not shown).

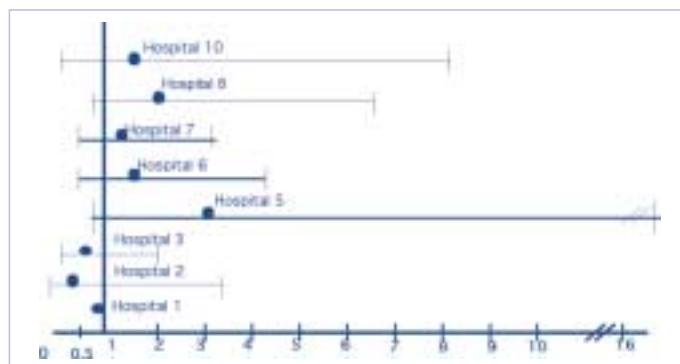
A forum with the hospitals was undertaken for giving a report of research, and offering a space to share their perspective about results. A reporting structure was developed to be understood by officers of public hospitals and support improvement activities. Officers of hospitals are designing improvement plans considering the results with the advice of SHVC and FES Foundation.

OR of occurrence of adverse events in ten public hospitals in Valle del Cauca, Colombia. 2001.

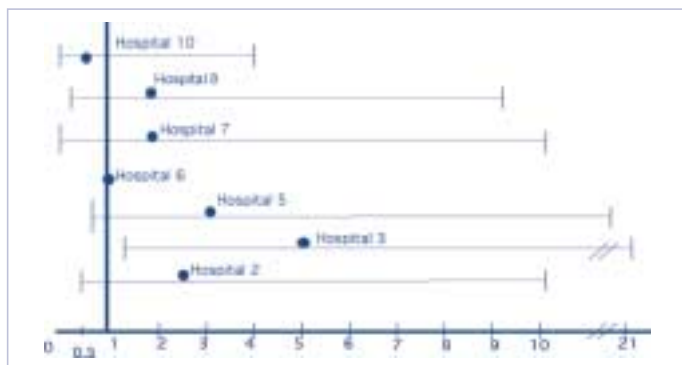
Caesarean section



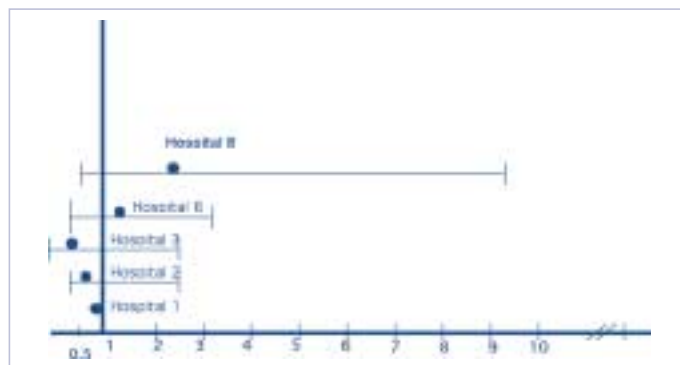
Appendectomy



Pneumonia



Acute Myocardial Infarction



Conclusions:

There were variations in performance among hospitals and services evaluated. Although confidence intervals of OR were large in some cases, the objectives of the project were achieved. In that adjusting by case-mix was undertaken, and the comparison of the hospitals was possible, and gave information to design improvement plans.

In the context of HSR, a collaborative project between Secretaries of Health and a Research Team for measurement and improvement of quality in health care is welcomed. Such an initiative helps to cross boundaries between research and policies on quality improvement. ■