

# Implementation of Clinical Practice Guidelines in a Segmented Public Health System

**Background:** In 2007, the National Program of Clinical Practice Guidelines in Mexico emerged as a sectorial strategy that purpose integration of a Master Catalogue, intended to be a reference for clinical decision-making, decrease variability of medical practice, optimize resources and improve the quality of health care. Since 2009, the first Clinical Practice Guidelines (CPGs) were published in the Master Catalogue, and nowadays, it contains up to 724 guidelines including programs and priorities nationwide. Even though development and updating of CPGs has implied a big effort, they continue to be underutilized within the National Health System.

**Objective:** Assess utilization and adherence rate to CPGs focused to the main reason for greatest impact on health in primary care units in the National Health System.

**Methods:** Sample included 150 primary care units from the Mexican Social Security Institute (IMSS), Institute for Social Security and Services for State Workers (ISSSTE) and Local Health Services (SESA) from 7 states of Mexico. 2,250 clinical records were randomly reviewed from patients who were attended of prenatal care, diabetes mellitus and respiratory tract infection in the last year. (Table 1) To assess the utilization and adherence rate of CPGs key recommendation, health workers were surveyed and clinical records were reviewed through the utilization of checklists, which were based on descriptive statistic methods. For the analysis of the information Statistical Package for the Social Sciences and MAXQDA 11 were used.

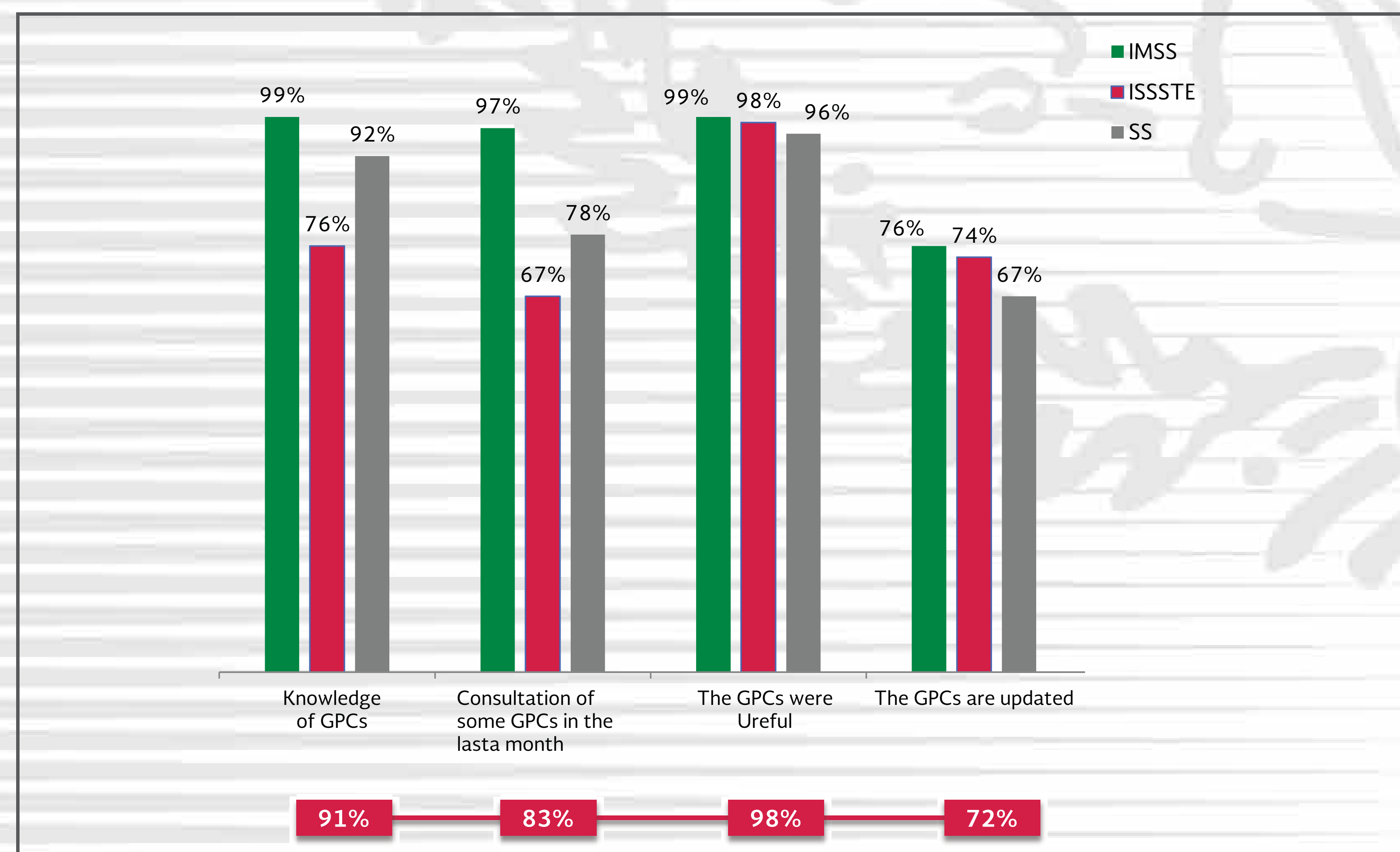
Table 1. Primary care units

| State            | IMSS | ISSSTE | SS | Total      |
|------------------|------|--------|----|------------|
| Aguascalientes   | 5    | 4      | 4  | 13         |
| Chiapas          | 3    | 10     | 10 | 23         |
| Campeche         | 3    | 0      | 1  | 4          |
| Distrito Federal | 18   | 16     | 34 | 68         |
| Durango          | 7    | 2      | 5  | 14         |
| Querétaro        | 7    | 3      | 2  | 12         |
| Sonora           | 7    | 5      | 4  | 16         |
| <b>Total</b>     |      |        |    | <b>150</b> |

**Results:** Only 425 (94.4%) out of 450 responses, were fully completed. Of these, the population of respondents is distributed as follows: 366 (86.1%) physicians, 30 (7%) nurses, 16 (3.8%) dentists, 11 (2.6%) medical practitioners, 1 (0.25%) psychologist and 1 (0.25%) social worker.

91% of health workers referred to know the CPGs, of which 83% had consult a guideline on the last month, referring that 98% of the cases the guidelines was useful for them. In the other hand, 28% reported that the CPGs are outdated. (Fig. 1)

Fig 1. Perception of CPGs for health professional



Only 2,212 out of the 2,250 clinical records intended to assess the utilization and adherence rate of the to the CPGs key recommendations, were reviewed. The average of key recommendations adherence in prenatal care was 68% (Table 2), diabetes mellitus 53% (Table 3) and respiratory tract infection 74%. (Table 4)

Tabla 2. Adherence to prenatal care recomendations

| Institution                     | IMSS | ISSSTE | SSA | Average |
|---------------------------------|------|--------|-----|---------|
| Adherence to key recommendation | 72%  | 59%    | 69% | 68%     |

Tabla 3. Adherence to diabetes mellitus recomendations

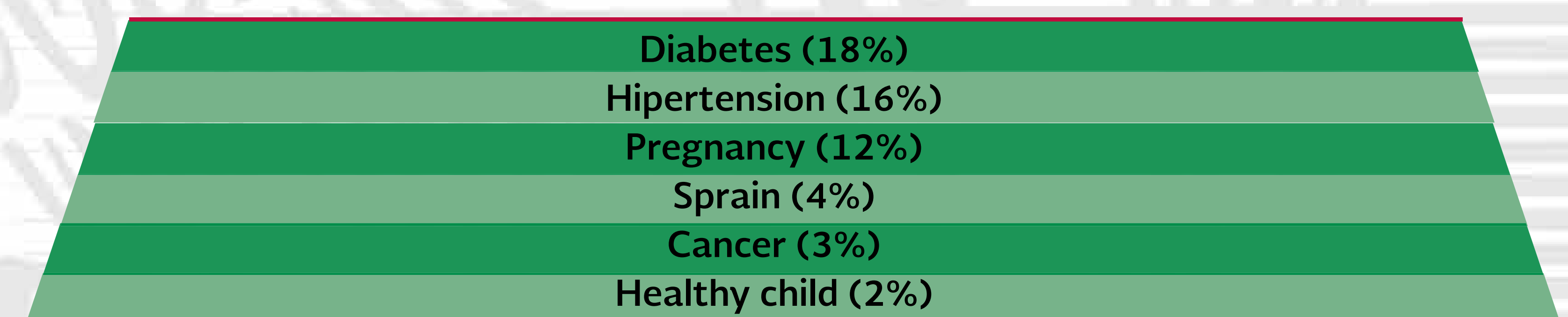
| Institution                     | IMSS | ISSSTE | SSA | Average |
|---------------------------------|------|--------|-----|---------|
| Adherence to key recommendation | 55%  | 49%    | 55% | 53%     |

Tabla 4. Adherence to respiratory tract infection recomendation

| Institution                     | IMSS | ISSSTE | SSA | Average |
|---------------------------------|------|--------|-----|---------|
| Adherence to key recommendation | 76%  | 66%    | 76% | 74%     |

CPGs that presented high rates of consultation are related with diabetes, hypertension and pregnancy. (Table 5)

Tabla 5. CPGs most consulted



**Discussion:** The CPGs are supporting tools for clinical decision-making, which aim to improve the quality and effectiveness of health care.

According to the results of this assessment, there is a wide knowledge regarding CPGs among health workers from different areas of expertise, primarily medicine. Indeed, this coincides with the report of 2012, which was 88%. CPGs consultations in the last month remain unchanged, two years after the first assessment. Health professionals have reported CPGs are useful to them for making reliable decisions on their daily clinical practice. An important point to consider is that 72% of the respondents referred CPGs are updated, ensuring decision-making is based on current recommendations.

Additionally, a moderate adherence rate to the CPGs key recommendation was observed within assessed issued among primary care units. The average adherence to the recommendations on prenatal care was 68%, increasing by 21% compared to the report of 2012; the status for diabetes mellitus did not change, which remains 50%.

The highest adherence rate was observed on respiratory tract infection, where 2 of every 3 health workers referred they adhere to the CPGs recommendations.

It is important to point out CPGs that presented high rates of consultation by health workers, are related to chronic non-communicable diseases and maternal mortality, main problems of morbidity and mortality in Mexico.

**Implications for guideline developers/users:** Currently, there is a large universe of CPGs, which are widely recognized by health workers; however, based on the results of this study, it is necessary to establish effective strategies on CPGs diffusion, capacity-building and implementation, in order to achieve greater utilization and adherence to recommendations of CPGs.

**Reference:**  
Evaluación 2014 de la Estrategia de Implantación de Guías de Práctica Clínica del Sector Salud. Secretaría de Salud, México, 2014.  
Evaluación de la Difusión e implementación de las Guías de Práctica Clínica. Secretaría de Salud, México, 2012.