

Identification of critical factors for creating a prognosis indicator in the implementation of clinical practice guidelines

Background: Having a supportive context for establishing health strategies based on evidence, substantially facilitate the efficient development of a national program for implementation of clinical practice guidelines. It's essential to define whether implementation strategies will result cost effective for National Health System considering the characteristics of the population and public health capabilities, remain important to potentiate the full benefits of evidence medicine based. The human development index and Essential Public Health they are decisive in the effective implementation strategy.

Objective: Create an indicator that links the HDI and EPHF, gives us a holistic view of the environment in which it is intended to create an implementation program of CPG, and in turn tell us what changes should be made in the structure at the level of National Health System and population level, with the aim of fostering a fertile medium to increase the utility of CPG.

Methods: Computer databases United Nations Development Programme and Pan American Health Organization/World Health Organization were consulted for the human development index and the overall rating of the public health capabilities respectively (table 1.). We developed a theoretical implementation indicator, which is directly proportional to the product of the overall rating of Essential Public Health Functions and human development index (Figure 1). As an example, data from Latin American countries were taken where the EPHF measurement is made using the same indicators.

Variables:

Human development index (HDI)

Summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions.

Essential Public Health Functions (EPHF)

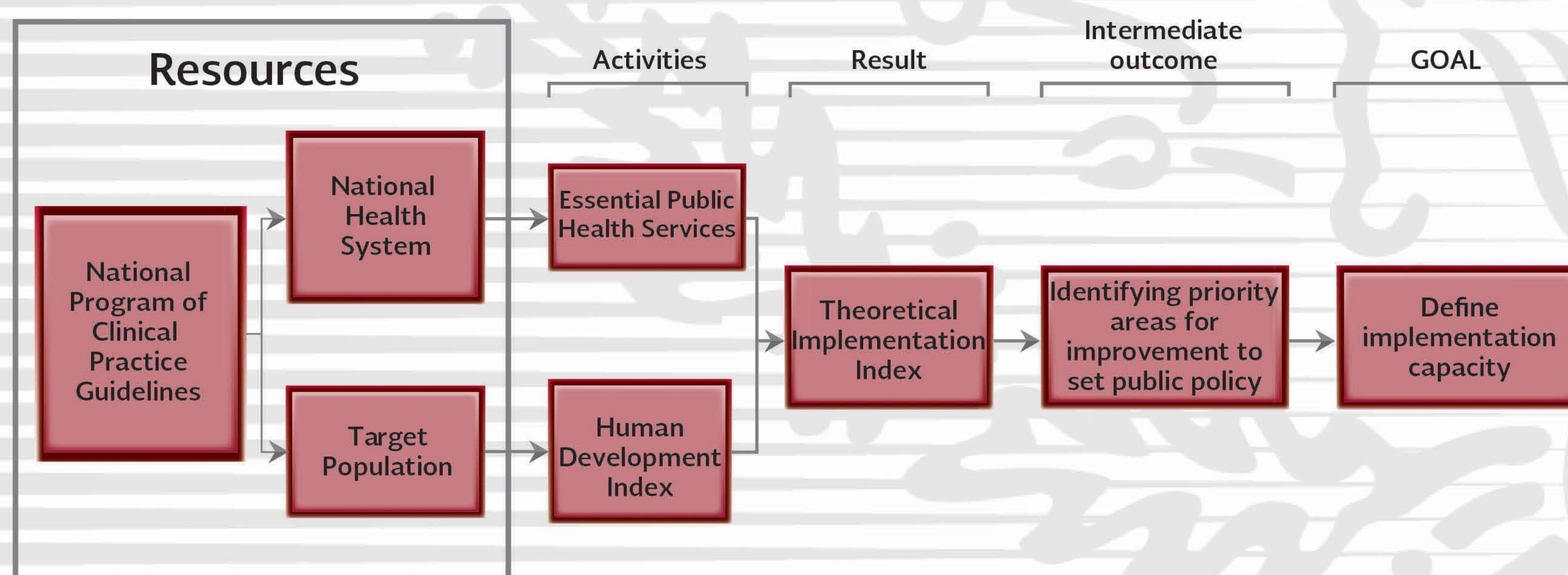
Fundamental set of actions that should be performed in order to achieve public health's central objective: improving the health of populations.

Describe the public health activities that all communities should undertake and serve as the framework for the National Public Health Performance Standards instruments.

Table 1. Human development index/ Global score Essential Public Health Functions

Country	Human development index	Essential Public Health Functions (mean)
México	0.756	0.61
Colombia	0.711	0.48
Argentina	0.802	0.46
Dominican Republic	0.7	0.45

Figure 1. Procedure



Implementation index
 $100(\text{HDI} \times \text{EPHF})^{1/2}$

- 76-100% (0.76-1.0) quartile of optimum capacity of implementation
- 51-75% (0.51-0.75) quartile of medium capacity of implementation
- 26-50% (0.26-0.5) quartile of low capacity of implementation
- 0-25% (0-0.25) quartile of minimum capacity of implementation

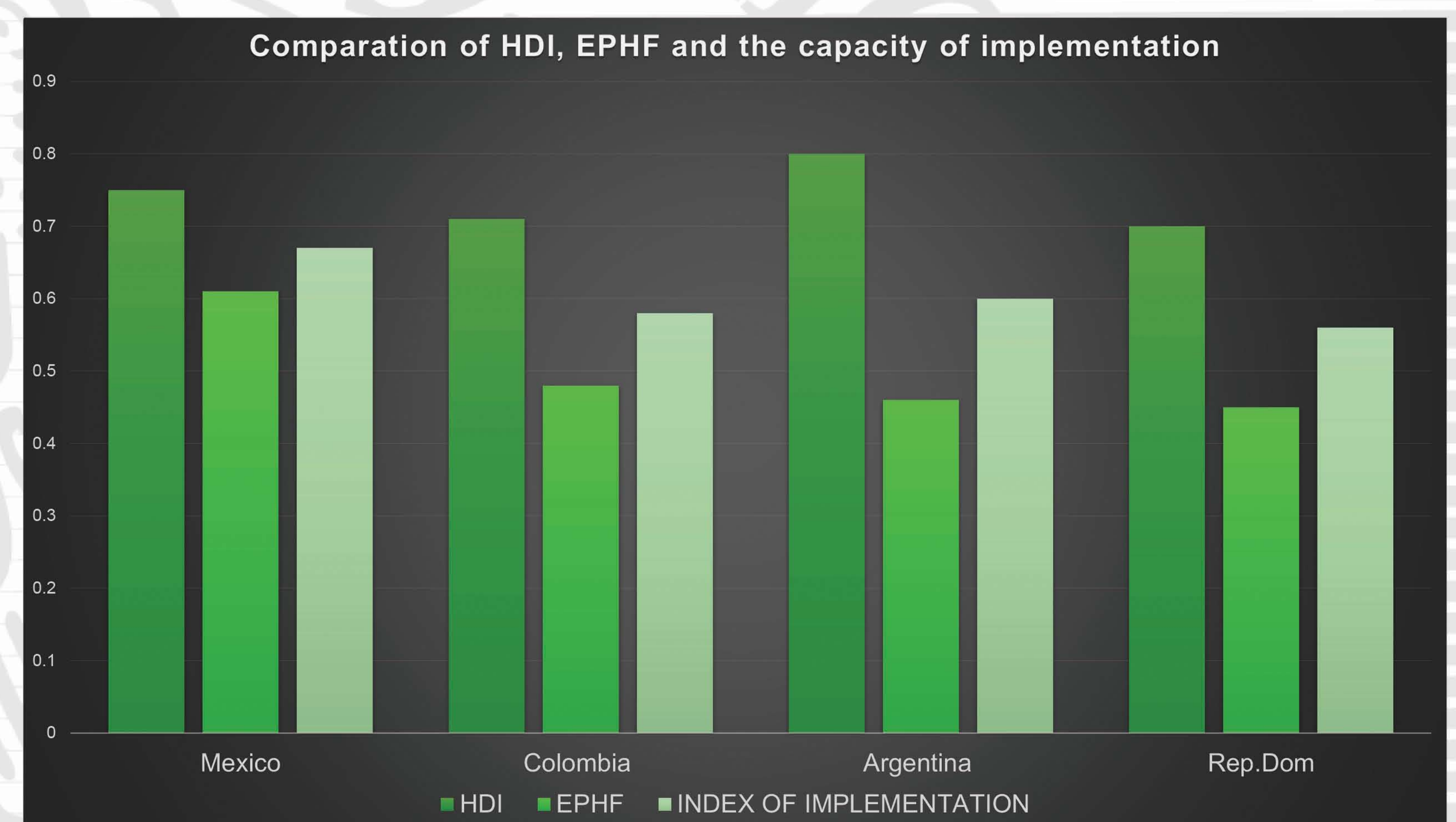
Results: The average of HDI for selected countries is high, for Argentina where it is very high.

The most higher EPHF is in Mexico.

The Index of implementation and HDI and EPHF they are directly proportional.

In the selected countries, the implementation index is in the médium capacity of implementation, being Dominican Republic the countrie with smaller capacity of implementation.

Figure 2. Results



Discussion: The medium-low human development index and mid-upper of the EPHF, performance are crucial to establishing effective implementation strategies. The perception of the degree of change by this indicator will be useful for develop an effective implementation strategy and development of public politics in health. We believe that establishing an empirically tested theoretical base for healthcare professional and organizational behavior is likely to lead to incrementally more effective interventions after use of the CPG. Most implementation strategies resulted in small to moderate improvements in care, perhaps because not all health systems are made possible for it, or population characteristics that do not allow an efficient implementation, therefore, not all health systems can support a national program of practice guidelines. Decision makers still need to use considerable judgement about which interventions are most likely to succeed, after considering the feasibility, costs and benefits that particular interventions are likely to yield, the rate of implementation can be useful to facilitate such decisions.

Reference:

- Haines A, Kuruville S, Borchert M. Bridging the implementation gap between knowledge and action for health. Bull World Health Organ. 2004 Oct;82(10):724-31; discussion 732. Review.
- Hakkennes S, Dodd K. Guideline implementation in allied health professions: a systematic review of the literature. Qual Saf Health Care. 2008 Aug;17(4):296-300. doi: 10.1136/qshc.2007.023804.
- Health Information and Quality Authority. Guidance on Developing Key Performance Indicators and Minimum Data Sets to Monitor Healthcare Quality: February 2013 (Version 1.1). Dublin: Health Information and Quality Authority; 2013.
- Aluttis CA, Chiotan C, Michelsen M, Costongs C, Brand H, on behalf of the public health capacity consortium (2013). Review of Public Health Capacity in the EU. Published by the European Commission Directorate General for Health and Consumers. Luxembourg, 2013. ISBN 978-92-79-25023-1
- Informe sobre Desarrollo Humano 2014. Publicado por el Programa de las Naciones Unidas para el Desarrollo (PNUD). Communications Development Incorporated, Washington DC, EUA
- Organización Panamericana de la Salud. Desempeño de las Funciones Esenciales en Salud Publica en la Región de las Américas. Washington D.C., 2003
- Organización Panamericana de la Salud. Instrumento para la Medición del Desempeño de las Funciones Esenciales en Salud Publica. Washington. D.C., 2003
- Rozner, Steve. December 2013. Developing and Using Key Performance Indicators A Toolkit for Health Sector Managers. Bethesda, MD: Health Finance & Governance Project, Abt Associates Inc.