



# An Integrative Model of Health Promoting Hospitals in Taiwan

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The health system in Taiwan faces compounding challenges from the increasing prevalence of non-communicable diseases, quickly aging population, less-than-healthy healthcare workers, and energy shortages. Hospitals are a suitable setting to implement health promotion for patients, staff and surrounding communities, and to create low-carbon environments. The hospitals have a high access to patients, they consumed 45.6% of the health expenditure budget in 2017; 20.9% for inpatient and 24.7% for outpatient services (1) and they have a relatively high use of imported energy; i.e.14.9% of energy consumption among non-manufacturing industries in 2017 (2).

The certification of management systems is a strategy for improving quality of care through health organization structures and service delivery practices. To ensure the implementation of health promotion in hospitals, Taiwan's Health Promotion Administration (HPA) has instituted a series of health promotion certifications in hospitals, including HPH since 2007, environment-friendly healthcare since 2010, and age-friendly healthcare and smoking-free healthcare since 2011 (3). However, the certifications contained duplication and overlapping. Furthermore, certification/accreditation could constitute significant paperwork for hospital staffs (4), but a review revealed that the benefits of an integrated approach outweighed those of individual management systems operating separately (5).

To address this, Taiwan's HPA launched an integrative certification model and proposed seven standard and 46

substandard self-assessment tools for certification integration of HPH (iHPH hereafter) at the end of 2016. A self-assessment form have shown to be a useful instrument for standardizing health promotions in hospitals (6;7). Accordingly, the HPA developed the iHPH self-assessment through expert validity tests, feedback from expert opinion surveys, expert consensus workshops, and satisfaction surveys in the hospitals that participated in a pilot certification process using the new tool (8). The iHPH standards include seven domains (Table 1); policy and leadership, patient assessment, patient information and intervention, healthy workplace and capacity for clinical health promotion (CHP), implementation and monitoring, age-friendly healthcare, and environment-friendly healthcare. The iHPH self-assessment tool refers to the draft of updated HPH standards (9), the WHO HPH standards (10), the Tobacco Free Healthcare Services standards (11), and Age-Friendly Health Care (12;13). The iHPH standards further highlighted aspects of shared decision making as advocated by the New Haven Recommendations (14) and organizational health literacy (15).

The integrative HPH certification has prompted hospitals to extend cross-disciplinary teams, integrate relevant HP task forces, and request more attention and support from high-level managers (16). By the end of 2018, 184 of 477 hospitals had received iHPH certificates, including 22 medical centers, 83 regional hospitals, and 79 district hospitals. Figure 1 compares the standardized scores of the seven standards among the 184 iHPH certificated hospitals by hospital



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level. Medical centers had the highest compliance scores and district hospitals had the lowest scores in all seven standards. Regardless of hospital levels, the iHPH-certified hospitals had the highest compliance scores in the environment-friendliness domain. Medical centers and district hospitals had lowest scores in patient assessment; and regional hospitals had lowest scores in healthy workplace and capacity for CHP. To sustain the momentum of health promotion in hospitals, Taiwan's HPA also subsidized 90 iHPH-certified hospitals in early 2019 to implement age-friendly healthcare, health literacy, climate-smart hospitals, or other health promotion issues related to the themes included in the

27th International Conferences of Health Promoting Hospitals and Health Services (17).

### Conclusion

The integrative certification model, facilitated with an iHPH self-assessment tool, created an extensive cross-disciplinary platform for hospitals to coordinate relevant health promotion tasks. The integrative model combines health of patients and staff, age-friendliness, and environment-friendliness to be a sustainable strategy for hospitals to implement health promotion in a world of multi-faceted challenges.

**Table 1.** iHPH standards and sub-standards in Taiwan

Standards and Sub-Standards
<p><b>Standard 1: Policy and Leadership</b></p> <p>1.1.1 The hospital has a CHP policy that encompasses patients, family members, communities, and staff.</p> <p>1.1.2 Hospital staff are involved in the formulation, auditing, and review of the policy.</p> <p>1.1.3 The hospital includes CHP in its current quality and management plans.</p> <p>1.1.4 The hospital prohibits the acceptance of donations and/or sponsorships from tobacco vendors and the sales of tobacco or e-cigarette products.</p> <p>1.2.1 Hospital executives value the health plans and demands of the surrounding communities and are involved in interdepartmental and intradepartmental collaboration projects.</p> <p>1.2.2 The hospital can provide a roster of health and social care resources and partners.</p> <p>1.2.3 The hospital has written cooperation plans with its healthcare partners to improve the continuity of patient care.</p>
<p><b>Standard 2: Patient Assessment</b></p> <p>2.1.1 The hospital has clinical guidelines and procedures to identify the smoking/betel nut consumption/alcohol consumption history, activity level, nutritional status, and psycho-socioeconomic status of patients on first admission or visit. These guidelines or procedures are implemented and reviewed/amended annually.</p> <p>2.1.2 The assessment of patients' health promotion needs is written into their medical records.</p> <p>2.1.3 Patients' sociocultural preferences are detailed in their medical records to facilitate the provision of specialized care.</p> <p>2.1.4 Patients' referring physicians or other relevant sources are detailed in their medical records.</p> <p>2.2.1 The hospital has clinical guidelines or procedures for reassessing patients' health promotion needs at discharge or at the end of clinical intervention. These guidelines or procedures are reviewed/amended, and improvement measures are implemented annually.</p>
<p><b>Standard 3: Patient Information and Intervention</b></p> <p>3.1.1 General health information and information concerning high-risk diseases are provided to the patient.</p> <p>3.1.2 Information of patients' self-supporting organizations is available.</p> <p>3.1.3 Work protocols (procedures and guidelines) developed by multidisciplinary teams (MDT) are in place.</p> <p>3.1.4 The hospital has clinical guidelines or procedures for providing information, suggestions, and preliminary intervention services or measures for particular health issues (e.g., smoking, betel nut consumption, alcohol consumption, physical activity, nutrition, and psycho-socio-economic problems). These guidelines or procedures are reviewed/amended, and improvement measures are implemented annually.</p> <p>3.1.5 The health promotion information and services provided to patients are documented in their medical records.</p> <p>3.1.6 The health promotion activities, intervention services, rehabilitation/follow-up treatment provided to patients, and the expected outcomes and evaluations are documented in their medical records.</p> <p>3.1.7 The hospital promotes a shared decision making plan and provides a favorable communication environment for patients and their family members to obtain information, thereby fostering their ability and safeguarding their right to make decisions concerning care services.</p>



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3.2.1 The hospital has clinical guidelines or procedures for the provision of intensive intervention services, rehabilitation, or treatment for particular issues (e.g., smoking, betel nut consumption, alcohol consumption, physical activity, nutrition, and psycho-socio-economic). These guidelines or procedures are reviewed/amended, and improvement measures are implemented annually.

3.2.2 Patients (or their family members) are provided with easy-to-understand follow-up advice at out patient visits, referrals, or discharge.

3.2.3 The receiving hospital promptly provides patients with written summaries concerning their conditions, health needs, and intervention and clearly defines its role and the roles of its partners in their medical records (e.g., rehabilitation plan).

3.2.4 The hospital has a health literacy promoting plan that aims to help patients obtain, comprehend, and apply information and services to improve their health and the provision of care.

### Standard 4: Promoting a Healthy Workplace and Ensuring Capacity for CHP

4.1.1 Staff comply with health and safety requirements and all risk factors in the workplace are identified.

4.1.2 Staff have health promotion options, such as smoking cessation, betel nut cessation, alcohol abstinence, nutrition, vaccinations, mental health in the workplace, and physical activities.

4.1.3 Annual staff surveys are conducted. Survey content should encompass assessments on personal health, understanding of relevant services and policies, and utilization of health promotion activities.

4.2.1 Staff are offered CHP training and professional development programs.

### Standard 5: Implementation and Monitoring

5.1.1 The hospital has designated staff member(s) responsible for coordinating health promotion activities.

5.1.2 The hospital has a budget for funding health promotion services.

5.1.3 The hospital has space or facilities (i.e., resources, space, and equipment) to accommodate health promotion.

5.1.4 The hospital includes health promotion services in its operating procedures (e.g., clinical guidelines or pathways) and makes them available to all clinical departments.

5.2.1 The hospital routinely collects health promotion intervention information and makes it available to staff for evaluation.

5.2.2 The hospital has a quality control protocol for organizing health promotion activities.

5.2.3 The hospital is involved in the research and development of health promotion.

5.2.4 The hospital performs satisfaction surveys on the information it provides to its patients and uses the feedback to improve its quality management system.

### Standard 6: Age-Friendly Healthcare

6.1.1 Accessible facilities are available for people with mobility restrictions.

6.1.2 Environments adopt universal designs.

6.1.3 A healthy environment which takes into account the physical and mental impairments of elderly patients.

6.2.1 The administrative procedures are adjusted to take into account of the special needs of the elderly (patients or family members)

6.2.2 A favorable communication environment is established so that elderly patients and relatives can obtain information, thereby ensuring that older adults have the ability and the right to make their own medical decisions.

6.2.3 Assistance is provided to elders with financial difficulties, or make referrals so that elders (patients and family members) can receive suitable medical/care records and follow-up services.

6.2.4 A volunteer plan is available and effectively implemented to assist elders.

### Standard 7: Environment-Friendly Healthcare

7.1.1 Plans and records on annual energy and water conservation are available.

7.1.2 Plans and records on annual medical waste reduction are available.

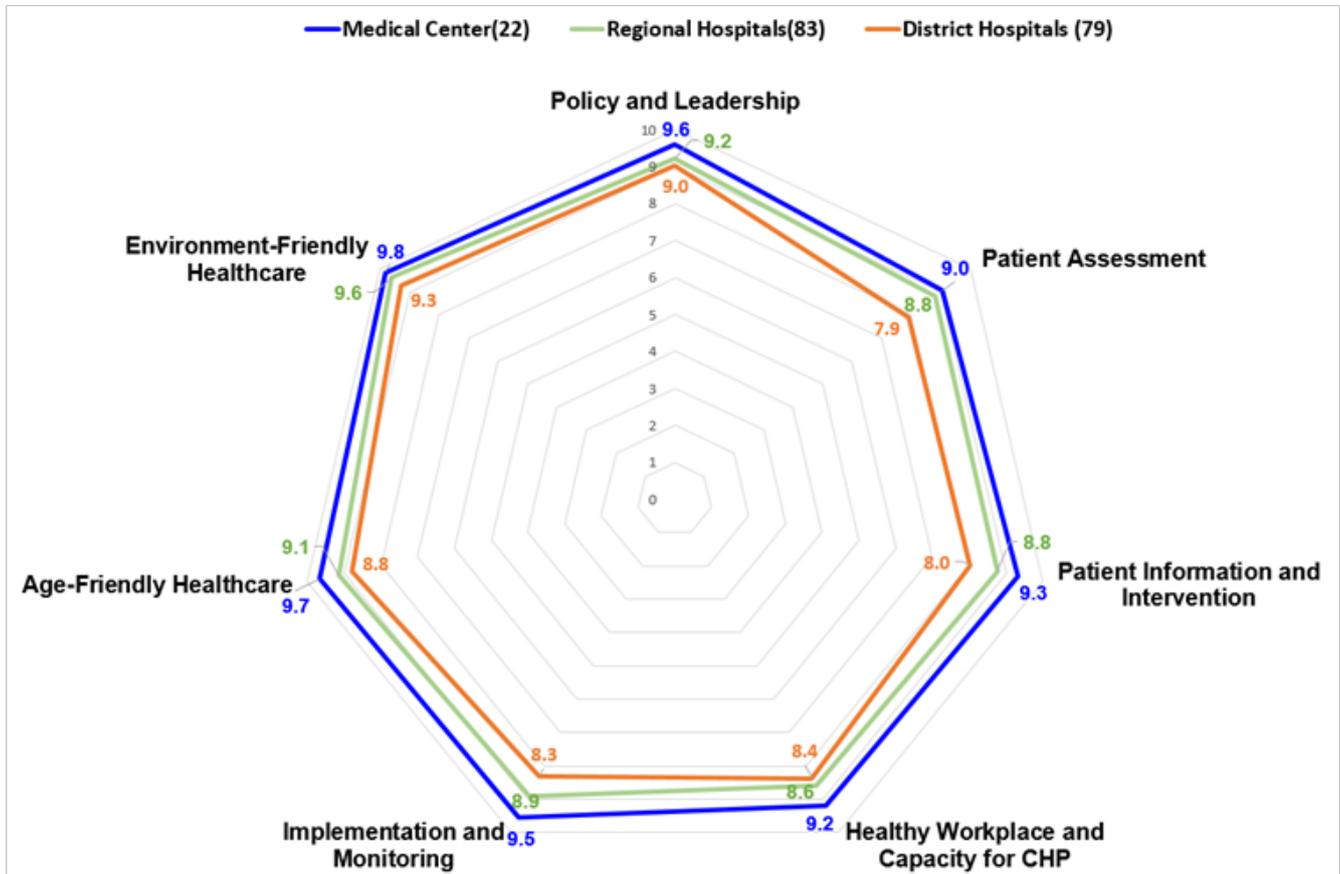
7.1.3 Plans and records on annual green procurement are available.

7.1.4 Periodically reviews the progress and proposes improvement plans.



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Figure 1. Radial plot graph of the standard compliance among iHPHs by hospital level



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