

# UTILIZATION OF HEALTH INFORMATION AND PROTECTION OF PATIENT PRIVACY IN TAIWAN

HAN-HSI (INDY) LIU\*

## I. Abstract

This paper examines the current regulatory system in Taiwan for health care information utilization from the viewpoint of patient privacy protection. The author proposes a patient-centered, cooperative system centered on a “traffic light theory” as a solution to the potential conflict between health care information usage and patient privacy protection.

Being a country with a national health care insurance program and state-of-the-art electronic technology, Taiwan has its own perspective in dealing with the issue of patient privacy of health care information. On January 1, 2004, the Bureau of National Health Insurance (BNHI) implemented a comprehensive IC card project which put a wide range of health information of its 22 million beneficiaries on-line so that the BNHI could conduct utilization reviews more easily and efficiently.

It is well understood that health care information is of a personal and sensitive nature which demands stringent privacy protection; nevertheless, there is no denying the great potential benefit in using this information to achieve certain significant public good, especially in the area of cost containment. The comprehensive E-health system in Taiwan makes copying, transmission and usage of personal health information incredibly easy; however, does the regulatory system provide enough safeguards for patient privacy?

Because the law in Taiwan does not provide clear standards for using health care information, health care providers in practice are either too conservative or too aggressive. While most health care providers obey their oath of confidentiality, some rogue members severely abuse patient privacy. This paper proposes a “traffic light theory” to remedy this situation. Flashing yellow lights allow rude drivers to ignore others but careful drivers waste too much time judging whether to go. I contend in this paper that the law should establish clear standards for health care providers just as red and green traffic signals do for drivers; the law should establish detailed privacy regulations to let health care providers know when to stop and when to advance.

---

\* Graduate student at the National Chengchi University School of Law, Taipei, Taiwan  
8F., No. 2, Alley 1, Lane 48, Muzha Road, Section 3, Taipei, Taiwan, 116-48  
[B87301212@ntu.edu.tw](mailto:B87301212@ntu.edu.tw)

## II. Introduction

The National Health Insurance system in Taiwan consists of a single compulsory public insurer and has three main distinguishing features:

The single insurer is the Bureau of National Health Insurance (BNHI), which was founded by the Department of Health and deals with all of matters including US\$10 billion in insurance premiums, 18,000 health care providers, and 22 million insureds.

All residents of Taiwan are required by law to join the National Health Insurance system, which was enacted in 1994 and according to the Department of Health has a satisfaction rating of 80% at a cost of 5.4% of GDP.

Each insured is provided with an embedded integrated circuit Health Care card which is used by all health care providers to connect to a central health care database where medical records can be accessed.

The system has been found to be cost effective while providing a high standard of health care service.

Taiwan is known as Silicon Island due to its Information Technology industry

Taiwan is world famous for its Information Technology industry. The output of laptops, PC motherboards, and CRT and LCD monitors rank No.1 in global production. It boasts various prestigious brands including Acer, Benq, and Asus. Considering the ratio of population to the land mass, Taiwan is indeed a Silicon Island. This high-tech background provides a great foundation for an E-Health system.

Since January 1, 2004, BNHI has comprehensively implemented the BNHI IC card system used for the identification of insureds. The four sections of information stored on a BNHI IC Card contain personal information, BNHI-related information, medical services and public health administration data. The contents are as follows:

The Personal Information Section includes the card's serial number, the cardholder's name, gender, date of birth, health insurance ID number, picture, and the date of issue.

The BNHI-related Information Section includes the cardholder's status, remarks on catastrophic diseases, the number of visits and admissions, the utilization of the BNHI health prevention programs, the cardholder's premium records, the records for accumulated medical expenditures, and the amount of cost sharing.

The Medical Services Section includes the insured's drug allergy history, long-term prescription use and certain medical treatments such as CT and MRI scans. This section will be gradually phased in depending on how the healthcare providers adapt themselves to the system.

The Public Health Administration Section includes personal immunization records and the willingness for organ donation.

In order to check insurance claims, the BNHI requires every health care provider to transmit to a central database a record of each visitation after treatment or consultation. This information is then used to double check a health care provider's claim for payment. This advanced E-Health system is a noticeable characteristic of Taiwan; however it has also caused a great of negative feedback due to its abuse.

#### C. Abuses of the health care information system that have arisen

The law in practice, not just in theory, depends upon the culture of a people. In order to demonstrate the problems Taiwanese face with their health care information system, this article will briefly discusses several real cases in Taiwan.

##### Case 1: The medical records of a mayoral candidate

Last year Taiwan held important campaigns for several mayoral positions. In one campaign, candidate A, who was the presiding mayor, had been rumored to suffer from a stroke. Candidate B continuously attacked this weakness and disclosed his medical records to force his opponent to face this issue. Several physicians who supported candidate B including the chairman of the district medical association and a member of the legislator who was also a physician held a press conference, disclosing the medical records of candidate A. These physicians pointed out that there was a high risk that candidate A would suffer from a stroke again and was incapable of being the mayor. Even though this act brought no response from candidate A, it demonstrates a sever abuse of the medical information system.

##### Case 2: Illegal selling of medical record data

One officer of the BNHI faced a serious financial problem due to investment loses in the stockmarket. In order to raise funds, he sold patient data to a debt collection agency owned by gangsters. This information was then turned over to a data management company and sold illegally. The police found that the data management company held over 13 billion records of patient data.

##### Case 3: Accessibility problems

According to the result of a phone interview, among the 23 medical centers and 80 district hospitals polled, if patients intended to get copies of their own records, they had to get the attending physician's consent first. More than 80% of the institutions asked patients to register, wait to see doctors to obtain the attending physician's consent and pay high copying fees. Even though the medical law entitles patients to full access to their medical records, patients in Taiwan still face an accessible problem.ii

#### D. Traditional paternalism

In Taiwan, traditionally physicians view medical records as the possession of the attending physician or the hospitals they belonged to. It was their creation and work. If the patient asked for these documents, especially whole copies of the records, they would be seen as troublesome and treated in an unfriendly manner. Even though amendments to the medical law declare it's a patient's right to obtain their own medical records, many medical institutions in Taiwan still require the attending physicians consent. Without registering and receiving a physician's consent, nobody can get their own medical records.

#### E. The mutual beneficial relationship between the mass media and physicians

Presently in Taiwan, there are twenty TV stations providing news programming, half of which provide 24 hour live news shows. These stations need to generate as much news as possible. When car accidents or gun fights between police and gangsters occur, reporters interview the attending physicians who often disclose health information without the patient's consent.

In addition, medical laws prohibit physicians from advertising. Even medical institutions are severely restricted from advertising. In general, only the name of the physician or hospital, specialty, and consulting hours are allowed to be promoted in advertisements.<sup>iii</sup> This is why the physicians are willing to cooperate with mass media correspondents. They like to use the mass media to advertise themselves in the form of news reports. This is another prospective of how professional people view health information.

#### F. Vague Standard of Reasonable usage

In practice, the usage, disclosure, and transmission of health information is needed; however there is no particular act to deal with this issue. Furthermore, the standard of reasonable usage is vague and indistinct. Take the digital data protection statutes for example. According to the data protection act article 23, besides the patient consent, there are three exceptions for reasonable usage and disclosure:

To prevent infringement upon the freedoms of other persons.

To avert an imminent crisis.

To maintain social order or to advance public welfare.

The Bureau of Nation Health Insurance, who is in charge of the central database of health information, defined reasonable usage and disclosure in its bylaws as:<sup>iv</sup>

Disclosure permitted by the laws, statutes, and regulations.

To maintain national safety.

To advance public welfare.

To avert an imminent crisis of the individual involved.

To avert an imminent and serious crisis of others interests, when necessary.

For research needs, when necessary, that would not harm the significant interests of the involved parties.

To benefit the interests of the individual involved.

When written consent or authorization of the individual involved is given.

According to the bylaws, we find that even the most detailed regulations seems vague and indistinct. These rules are difficult to follow at a time when the demand to use health care information is huge and health care professionals are eager to use it. Sometimes people only follow the “the Laws of the Jungle”, where powerful people get anything whether it is reasonable or not, and the weak get nothing whether it is their own right.

### III. The Reaction of the Government in Taiwan

With this medical context and paternal atmosphere, it is difficult to establish a useful system to protect patient privacy; especially since there are diverse interests concerning the use of health information. and its abuse by including using it as a weapon to attack opposing politicians, business interests of the mass media and scientific research, people inclines to abuse. The situation is getting worse when health care system enters the E-Health. The E-health, the concentration of data, to duplicate and transmit easily, makes the privacy protection of health information more fragile.

#### A. The fundamental right of the patient: information privacy and autonomy

Before the measure taking and solution proposing, maybe we should review how the legal system in Taiwan views health information. According to interpretation No. 603v, the presiding justice of the Constitutional Court pointed out that protecting personal dignity and respecting personal develop is one of the core values of democracy, and privacy which is required to protect autonomy and access to personal information, which is an essential part of developing personal dignity and personality, shall be protected by the Constitution. From this decision, it is clear to realize how the Taiwanese Constitution categorizes the privacy issue in the spectrum of a fundamental right. Health information is under the protection of privacy laws which give people the right to determinate how to disclose, when to disclose and even whether to disclose; however, information privacy is not an absolute right. In order to conform to article 23 of the Constitution, the law allows the right to information privacy to be overridden in certain circumstances which allows others the right to use health information without the patient’s consent. For example, the statutes require health care practitioners to give notification in the following situations:

Child abuse

Infectious diseases

Psychotic illness

The statutes also permit disclosure of information in the case of criminal investigations, judicial reviews and claim checks by the BNHI. Finally, the Information Protection Act gives the broad exceptions for reasonable usage and disclosure:

To prevent infringement upon the freedoms of other persons.

To avert an imminent crisis.

To maintain social order or to advance public welfare.

## B. Measures the government of Taiwan has adopted

Even though there are rules to control the usage of the health information, enforcement is still a problem in practice. In general, in order to deal with inappropriate disclosure, the government in Taiwan has taken two paths to control inappropriate disclosure: set up more rules and increase the responsibility of users.

### 1. Setting up more rules has resulted in more complex and many loopholes

First, there is no one particular act to deal with health information; instead its use is governed by several different acts:

Digital Data Protection Act

Health Care Entity Control Act

Health Care Practitioner Control Act

Disease Control Act

Fundamental Act (civil law (torts) and criminal law).

Without one particular act to regulate health information, in order to cope with abuse, the government in Taiwan has constantly amended these statutes; resulting in increased complexity and confusion.

### 2. Increase responsibility

In addition, another approach of the amendments is to reemphasize the duty of confidentiality of health care practitioners and to fine abusers. For example, the penalty for breach of confidentiality was increased in 2004 from US\$1,500 to US\$15,000 for staff members and hospitals and from US\$600 to US\$6,000 for physicians. Even with these changes, as the cases mentioned above make clear, it seems that the statutes do not provide sufficient protection of health care information.

## IV. Analysis and Recommendations

### A. Recent situation: a flashing yellow light

There is a serious conflict between privacy protection and usage of health information and it is getting worse. Health care practitioners are either too rash or too conservative. Our Regulations are complicated, incomprehensive and vague, making them hard to follow. For

conservative practitioners, the regulations are too difficult to follow; just like a conservative driver who hesitates to cross an intersection in fear of rude drivers. Contrarily, rash drivers, who care nothing about the lives of others, cross the intersection at full speed; just like rash health care providers. A flashing yellow light is insufficient to force health care providers abide by the regulations.

#### B. Suggestion: Red and Green light with the IC card

The author would like to light with the IC card. The normal traffic light, is going people can go and when they practitioners should know and when the red light is, they should do.



propose the Red and Green red and green light, just like the to set up the clearer rule when can not. The medical exactly when the green light is then they would decide what

There are several measures could improve the system: the clearer rules, the privacy officer and the patient participation. First, by amending the rules, creating the directives, court's decisions and hospital's bylaws the cleared standard could be made. The yellow light would be minimized. Second, to deploy the privacy officer in the central hospitals or district bureau of health charges with health information controlling. When the practitioner encounters the dilemma, such as media reporting or criminal investigation, he or she could consult the officer and get the direction. With this indication, he or she could get the privilege from suing. If the petitioner thinks his right be violated, he could sue the privacy officer and the court would decide it is permissible or not. This system could avoid practitioners stand up the battlefield and only focus on their patients. Third, the patient-centered, cooperative system is needed for health information protection. The subject of the health information, the patient, would concern the illegal discourse, too. And generally speaking, they usually care and worry about mostly. The IC card system should be considered to fulfill the patient-centered demanding: just like the ATM IC card, the card holder could use this to realize each deposit and transaction of his account. He knows where each penny comes from and goes into. The health information is like the money. Patient should know exactly how much information the health care providers have, how they use it, what is the content of this information. The authority should allow patients using their IC card to check out the health information. Then people could realize how the each a piece of the health information be gathering, where the health information be storing, what the content of the information be, and how the health information be transmitting.

Depending on this system, the patient is easier to sue the people invading their information privacy, seek for the reasonable compensation and protect their legal right.

In Taiwan, the thing is more practicable. The comprehensive NHI IC card makes thing easier to facilitate this function and carry out the plan. Our NHI IC card can let the patient know exactly how each piece of health information be collected, used, transmitted, and stored. The patient-centered cooperative system has been made.



#### IV. Conclusion

Facing the strict challenge of the privacy protection of the health information, the legal frame seems not good enough to prevent from illegal disclosure. It is getting worse in the developing E-health system in Taiwan. This article proposes that the flashing yellow light system should be replaced by the traffic light system, which provides the distinct rules. And with the founding of the NHI IC card model the patient-centered privacy protection system could be made. In order to the goal, the measures should be taken:

1. To set up the more concise and practicable standard of information usage by legal amendment, court decision and hospital bylaw.

To set up the formulation process, to deploy the privacy officers deal with the controlling, explaining, approval the affairs of the patient information.



To set up the patient-centered IC card system, patient could check out how his health information has been collected, stored, transmitted and used.

Taiwan is very special in its health care system, such as the compulsory and all participation insurance, low premium but high health care providing. Besides, its IT background gives the H-health a wonderful condition to fulfill. In the same time, the fear of illegal and inappropriate disclosure threatens the Taiwanese people. Some events happened recently justify the fear. How to rebuild the safer system protects the health information privacy is the major issue to Taiwanese government and people now and in the future.

<sup>i</sup> available at [http://www.nhi.gov.tw/english/e\\_00iccard](http://www.nhi.gov.tw/english/e_00iccard) (last visited Apr.13, 2006)

<sup>ii</sup> available at [http://www.thrf.org.tw/Page\\_Show.asp?Page\\_ID=85](http://www.thrf.org.tw/Page_Show.asp?Page_ID=85)(last visited Apr.2, 2006)

<sup>iii</sup> Mei-ling Xu, *News of Ads? – Rethink the Use of Health Information in the Mass Media*, Journalism Research, Vol. 93, p. 85-125

<sup>iv</sup> see Principals of date providing by BNHI available at [http://www.nhi.gov.tw/webdata/webdata.asp?menu=1&menu\\_id=&webdata\\_ID=333](http://www.nhi.gov.tw/webdata/webdata.asp?menu=1&menu_id=&webdata_ID=333) (last visited Apr.5, 2006)

<sup>v</sup> See CONST. Act 22 and interpretation No. 603 available at [http://www.judicial.gov.tw/constitutionalcourt/EN/p01\\_03.asp](http://www.judicial.gov.tw/constitutionalcourt/EN/p01_03.asp) (last visited Apr.20, 2006)