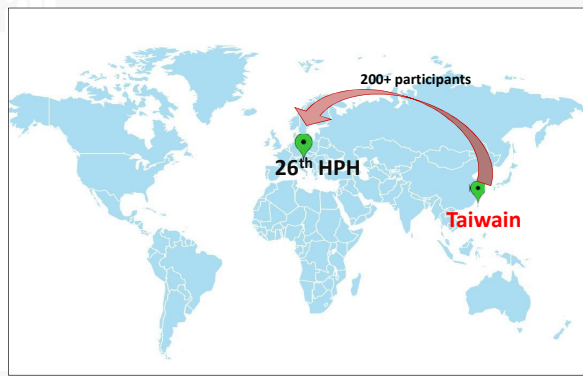

  
 衛生福利部  
 國民健康署  
 Health Promotion Administration,  
 Ministry of Health and Welfare

**HPH Network to improve primary and secondary prevention of NCDs - Experience from Taiwan -**


Dr. Ying-Wei Wang,  
 Director General, Health Promotion Administration, Taiwan  
 HPH Taiwan Network Representative  
 2018.6.7

1

**Where is Taiwan?**



200+ participants  
 26<sup>th</sup> HPH  
 Taiwan



  
 國民健康署

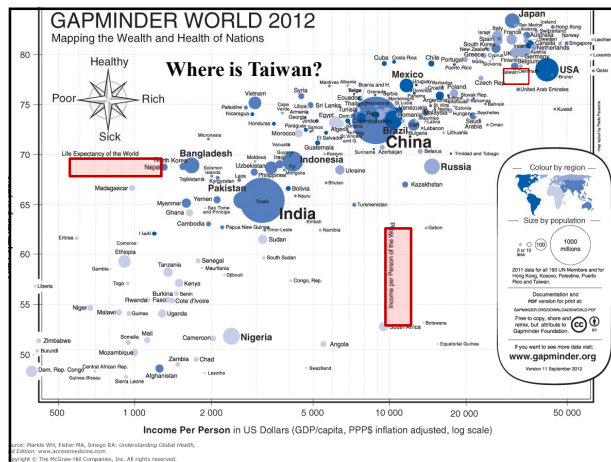
2

**2018 Taiwan Health Profiles**

<b>Total population (2018.4)</b>	<b>23.6 million</b>
<b>Population age 65 and above (%) (2018.4)</b>	<b>14.1</b>
<b>Crude birth rate (‰) (2017)</b>	<b>8.2</b>
<b>Crude death rate (‰) (2017)</b>	<b>7.3</b>
<b>Total fertility rate (per woman) (2017)</b>	<b>1.13</b>
<b>Maternal mortality rate ( per 100,000 ) (2016)</b>	<b>11.6</b>
<b>Neonatal mortality rate (‰) (2016)</b>	<b>2.4</b>
<b>Infant mortality rate (‰) (2016)</b>	<b>3.9</b>
<b>Under 5 mortality rate (‰) (2016)</b>	<b>4.8</b>
<b>Life Expectancy at birth (years) (2016)</b>	<b>80.0</b>
<b>Male (2016)</b>	<b>76.8</b>
<b>Female (2016)</b>	<b>83.4</b>

Source : 1. Department of Statistics, MOI, R.O.C.  
 2. Department of Statistics, MOHW, R.O.C.



  
 國民健康署



**WHO Global NCD Action Plan**

A road map with policy options to be implemented from 2013 to 2020 focusing on four modifiable risk behaviors that are linked to four preventable noncommunicable diseases.

RISK FACTORS	DISEASES
<ul style="list-style-type: none"> <li> Tobacco use</li> <li> Unhealthy diet</li> <li> Physical inactivity</li> <li> Harmful use of alcohol</li> </ul>	<ul style="list-style-type: none"> <li> Chronic respiratory diseases</li> <li> Cardiovascular diseases</li> <li> Cancers</li> <li> Diabetes</li> </ul>


  
 國民健康署

5

**GLOBAL ACTION PLAN FOR THE PREVENTION AND CONTROL OF NONCOMMUNICABLE DISEASES 2013-2020**



- A **25%** relative reduction in risk of premature mortality from cardiovascular diseases, cancer, diabetes, or chronic respiratory diseases.
- At least **10%** relative reduction in the harmful use of alcohol, as appropriate, within the national context.
- A **10%** relative reduction in prevalence of insufficient physical activity.
- A **30%** relative reduction in mean population intake of salt/sodium.
- A **30%** relative reduction in prevalence of current tobacco use in persons aged 15+ years.
- A **25%** relative reduction in the prevalence of raised blood pressure or contain the prevalence of raised blood pressure, according to national circumstances.
- Halt the rise** in diabetes and obesity.
- At least **50%** of eligible people receive drug therapy and counselling (including glycaemic control) to prevent heart attacks and strokes.
- An **80%** availability of the affordable basic technologies and essential medicines, including generics, required to treat major noncommunicable diseases in both public and private facilities.


  
 國民健康署

6

### Sustainable Development Goals (SDGs): Action on NCDs

The 2030 Agenda reaffirms that NCDs prevention and control are a priority for sustainable development. It is time to act for the prevention and control of NCDs.

**3 GOOD HEALTH AND WELL-BEING**

**Target 3.4** Reduce by **1/3 NCD** premature mortality & promote mental health & wellbeing

**Target 3.5** Strengthen prevention and treatment of substance abuse, including harmful use of alcohol

Reduce modifiable risk factors

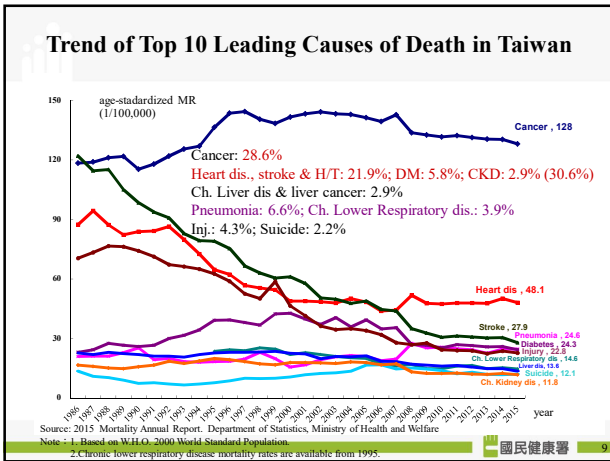
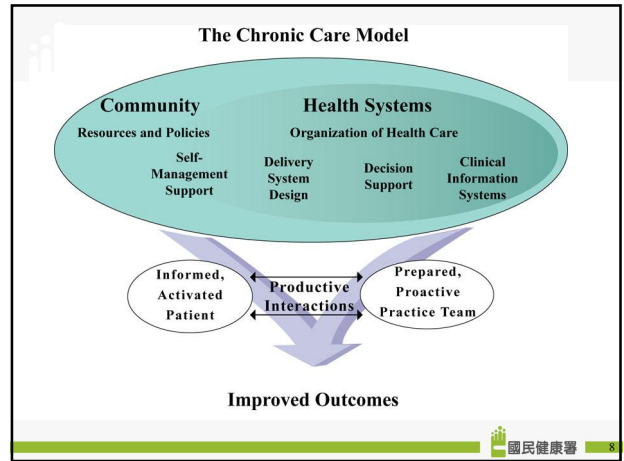
Expand coverage of essential medicines and technologies

Strengthen health systems

Improve surveillance

Data source: University of Bergen (<http://www.uib.no/en/research/global/103534/universities-and-sdgs>)  
NCD Alliance (<https://ncdalliance.org/>)

國民健康署 7



### UNIVERSAL HEALTH COVERAGE DATA PORTAL

Supporting the Universal Health Coverage Coalition

At least half of the world's 7.3 billion people still lack full coverage with essential health services

Coverage of essential health services has increased since 2000, but inequalities persist

Over 800 million people (almost 12 percent of the world's population) spent at least 10 percent of their household budgets in 2010 on out-of-pocket health expenditures

About 100 million people in 2010 fell into extreme poverty (living on \$1.90 or less a day) because of out-of-pocket health expenditures

**SERVICE COVERAGE**  
UHC service coverage index, 2015

**FINANCIAL PROTECTION**  
Population with catastrophic health spending (SDG indicator 3.8.2, 10% threshold)

More on Service Coverage >

More on Financial Protection >

國民健康署 10

### COVERAGE OF ESSENTIAL HEALTH SERVICES

REPRODUCTIVE, MATERNAL, NEWBORN, AND CHILD HEALTH

- Family planning >
- Antenatal and delivery care >
- Full child immunization >
- Health-seeking behaviour for child illness >

INFECTIOUS DISEASES

- Tuberculosis effective treatment >
- HIV antiretroviral treatment >
- Insecticide-treated nets coverage for malaria prevention >
- Adequate sanitation >

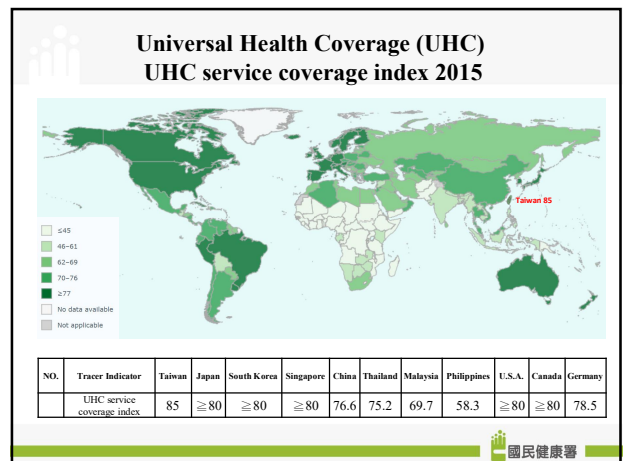
NONCOMMUNICABLE DISEASES

- Prevalence of raised blood pressure >
- Prevalence of raised blood glucose >
- Cervical cancer screening >
- Tobacco control >

SERVICE CAPACITY AND ACCESS

- Basic hospital access >
- Health-worker density >
- Access to essential medicines >
- Compliance with the International Health Regulations >

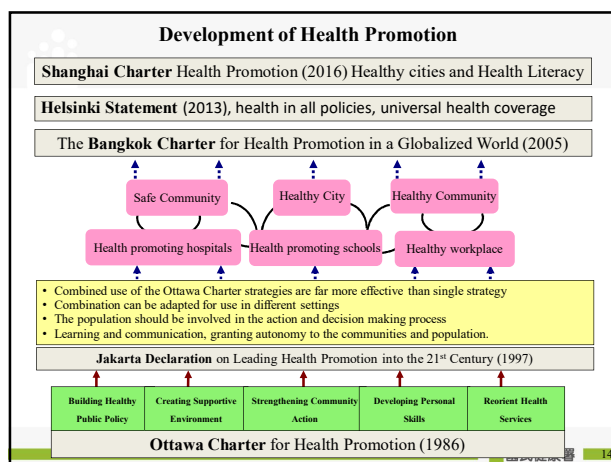
國民健康署 11



### Universal Health Coverage (UHC) index 2015

The index of service coverage in the major countries: NCDs and Service capacity and access

NO.	Tracer indicator	Taiwan	Japan	South Korea	Singapore	China	Thailand	Malaysia	Philippines	U.S.A.	Canada	Germany
<b>III. NCDs</b>												
9	Normal blood pressure (%)	90.5	83.0	88.0	85.0	81.0	78.0	77.0	78.0	87.0	87.0	80.0
10	Mean fasting plasma glucose (mmol/LF)	5.5	5.3	5.4	5.3	5.5	5.2	5.7	5.0	5.7	5.5	5.5
12	Tobacco nonsmoking (%)	81.9	77.0	76.0	83.0	75.0	79.0	78.0	75.0	78.0	85.0	69.0
<b>IV. Service capacity and access</b>												
13	Hospital beds per 10 000 populationc	56.8	134.0	115.3	24.0	42.0	21.0	18.6	5.0	29.0	27.0	82.8
14-1	Physicians per 1000 populationc	1.9	2.3	2.2	3.4	1.5	0.4	1.3	1.1	2.6	2.5	4.1
14-2	Psychiatrists per 100 000 population	6.7	8.4	7.0	13.7	1.7	0.9	0.8	0.5	12.4	13.4	7.5
14-3	Surgeons per 100 000 populationc	16.3	16.8	62.0	102.3	21.6	6.3	6.9	4.3	36.7	21.1	55.2
16	International Health Regulations core capacity index (%)	99.6	100.0	100.0	99.0	99.0	98.0	99.0	84.0	97.0	100.0	99.0



### 9th Global Conference on Health Promotion, Shanghai 2016

**Health Literacy** is an important factor in improving health outcomes

Increase knowledge to help people to make healthiest choice and decision for themselves or their family to achieve the goal:

- Empowering citizens
- Reducing health inequities

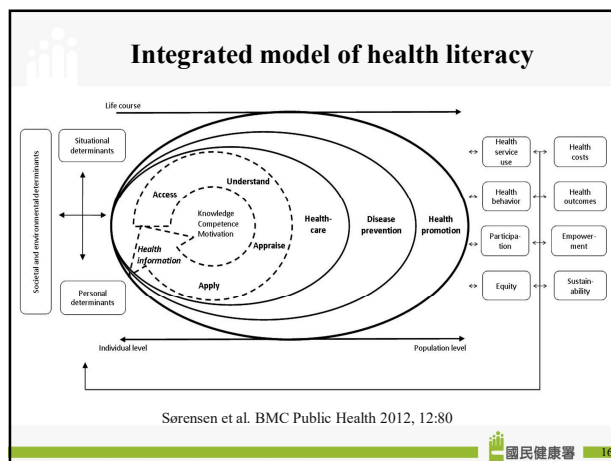
#CHOOSEHEALTH

**3 PILLARS OF HEALTH PROMOTION**

1. GOOD GOVERNANCE

2. HEALTHY CITIES

3. HEALTH LITERACY



### Development of HL Measurement Instruments

Childhood, Adolescence, Adult, Ageing

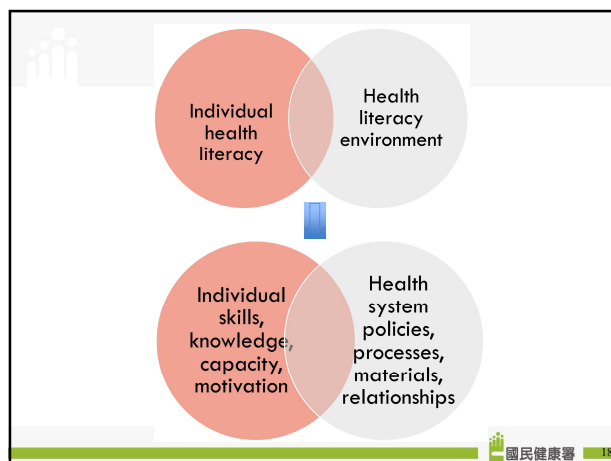
Settings: Research on HL of health care service- Health provider and patient -Questionnaires

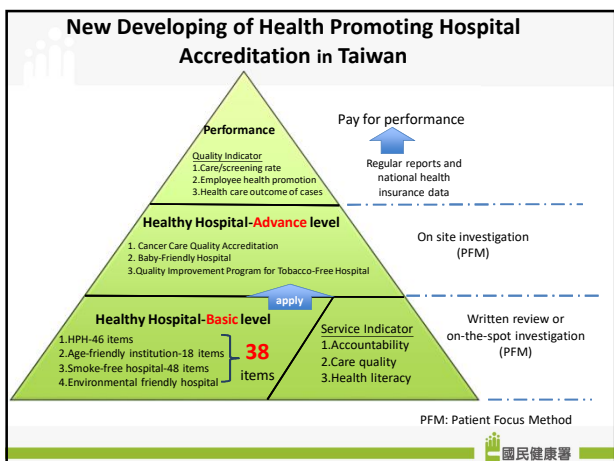
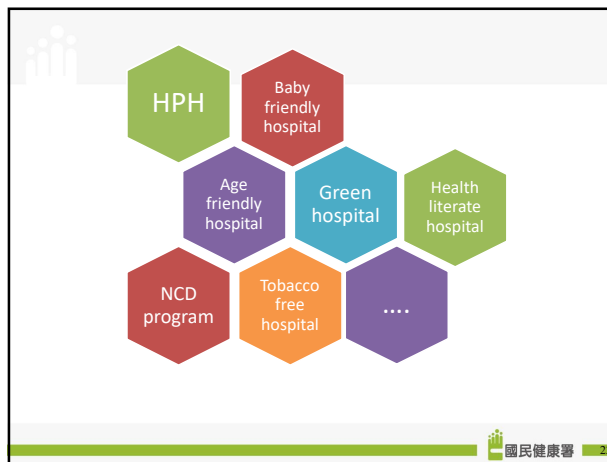
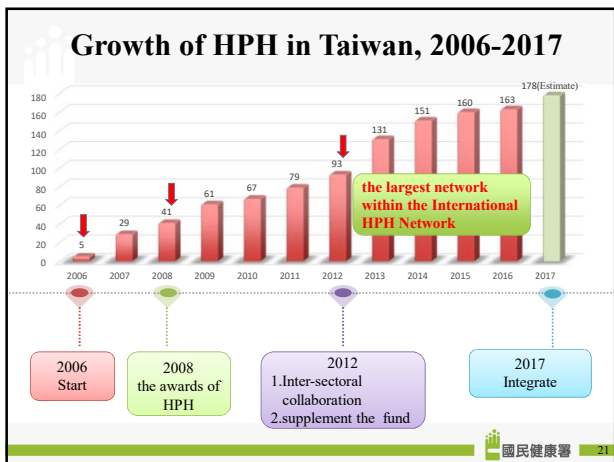
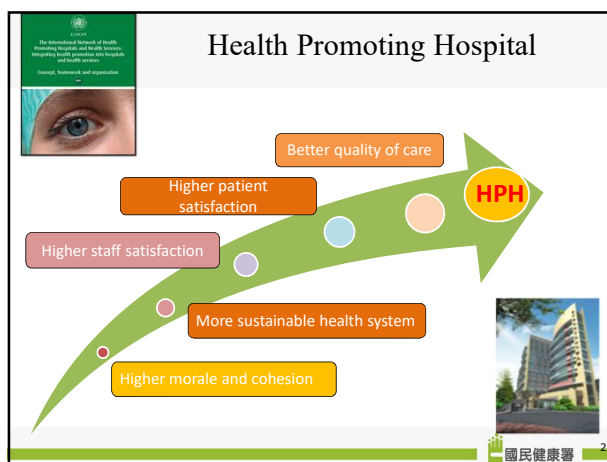
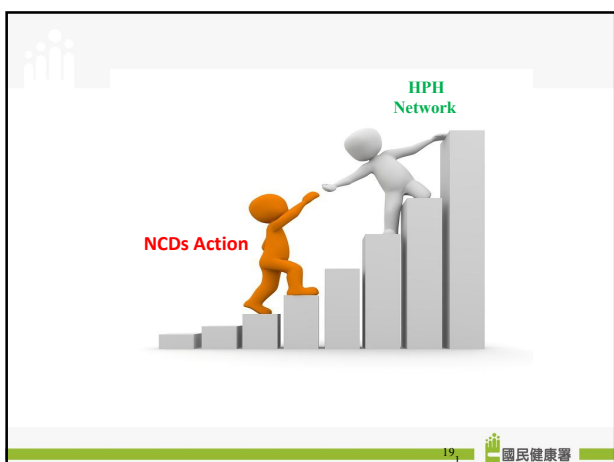
Special Issue: Weight management HL for children (interview questionnaires), Adolescent media HL survey and interview questionnaires, the national healthy dietary patterns of HL questionnaire in web media

Special Target: HL instruments for initial diagnostic cancer patient, HL instruments for Diabetes

1. HL instruments for Adult weight management

2. HL instruments for weight management of parenthood





	Medical centers	Regional	District	Total
National	19	81	361	461
Healthy Hospital certified	19	77	67	163 <sup>2</sup>
Coverage	100%	95.1%	18.6%	35.3%

1. As of December 31, 2017  
2. HPH:148+non-HPH:15

■ Coverage by hospital beds: 74.9% (97,497 / 130,093)

### New Taiwan Standards for Health Promoting Hospital

- Emphasize on Patient Empowerment and Health Literate

Organization-

Standard	Contents	No.
Standard 1	Policy and Leadership	7
Standard 2	Patient Assessment	5
Standard 3	Patient Information and Intervention	11
Standard 4	Promoting a Healthy Workplace and ensuring capacity for Clinical Health Promotion	4
Standard 5	Implementation and monitoring	8
Standard 6	Age-friendly Healthcare	2
Standard 7	Environment-friendly healthcare	1

- 3.1.7 Shared Decision Making(SDM)
- 3.2.4 Health Literacy

國民健康署

### Apply Health Literacy in Healthy Hospital Certification

- 3.1.7 SDM
  - Launch Shared Decision Making(SDM) project, creating greater communicating environment for patients and families, to empower patients' ability and right to make decisions.
- 3.2.4 Health Literacy
  - With health literacy friendly promotion strategy in the hospital, enables patients easily observe, understand, utilize information and services, and provide care and promote health.

- Hospitals should set up policies and guides to promote patient and family participating in SDM.
- There should be regular review mechanism.
- Patients and families participate in clinical decisions.
- Training to strengthening employees' health literacy
- Provide information about the clinical environment
- Health information that meets the criteria of health literacy, including graphics, films, media and more.
- Health literacy activities or facilities that empowers patients and families, such as group education or lecture courses.
- Activities or facilities that increases community health literacy.

國民健康署 26

### Health literacy friendly materials assessment index guidelines

衛生福利部國民健康署

健康識能友善素材審查指標

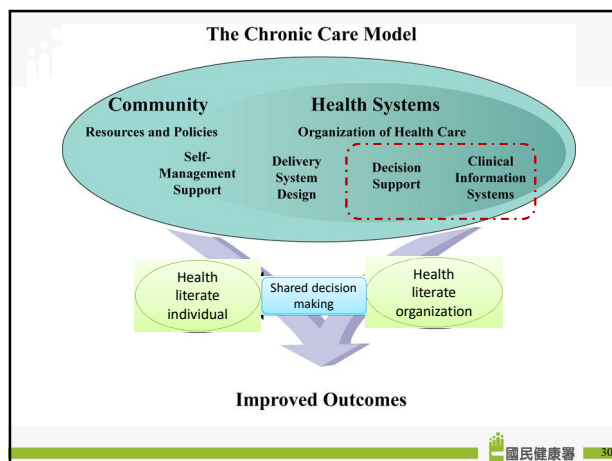
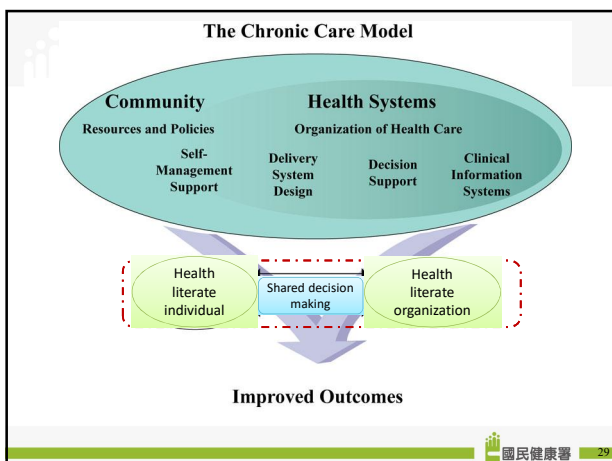
使用指引

國民健康署 27

### Current Status of SDM Implementation

- 2016-2019 SDM action plan
- 4 pilot PDAs on Hypertension, diabetes, colorectal cancer and breast cancer had been launched in 2016
- 8 Medical institutions implement the SDM pilot program in 2016.
- The advocacy to increase the public awareness: ask 3 questions
- Collaboration with MOHW existing SDM platform(57 PDAs) to establish national shared evidence-informed platform for public application

國民健康署 28



### Primary Prevention-Control risk factors

- Record health behavior in HIS (health information system).

**Pop up reminding system**

依105/6/27科主任醫學會主席指示即日起全院門診開放菸癮登錄

Smoking  yes  no  quit

Betel nut  yes  no  quit

若有相關問題請洽家醫部口譯助理 汪佳純 3831  
家醫部總務組長 宋學堂 3833

感謝您的配合!

國民健康署 31

### Development of risk prediction models and calculators for chronic disease in HIS

Service of Risk Prediction of Chronic Diseases.

Personalized Health Care Services

Platform for chronic disease prediction

Platform for health care

Development of Personal care guideline for chronic disease

Personalized health care system

國民健康署 32

### ICT Based Smart Healthcare

Patient with diabetes

Outpatient self-management and diet education

Personalized precision care

Management and online assistance by case manager

Digital Diabetes Care Solution (APP)

Self data upload

Integration of telecare data platform with hospital's information system

國民健康署 33

### The Chronic Care Model

Community Resources and Policies

Self-Management Support

Health Systems Organization of Health Care

Delivery System Design

Decision Support

Clinical Information Systems

Health literate individual

Shared decision making

Health literate organization

Improved Outcomes

國民健康署 34

### Diabetes Shared Care Program in Taiwan

Health Promotion Administration, Ministry of Health and Welfare (HPA)

22 City (County) Health Bureaus

Associations

Training and Certification

Certified

Diabetes Pay for Performance (P4P)

Hospitals of Diabetes Shared Care Network

Nurses

Physicians

Dietitians

DM Patients support Groups

Consultation

Ophthalmologists, dentists and cardiovascular specialists...

Quality Control

國民健康署

### Performance of Diabetes Share Care

Year	Check Rate (%)
2009	83.7
2010	86.0
2011	87.4
2012	89.3
2013	90.5
2014	91.3
2015	92.1
2016	92.5

Year	Check Rate (%)
2009	34.0%
2010	36.3%
2011	38.0%
2012	38.0%
2013	40.7%
2014	42.7%

Year	Check Rate (%)
2009	59.6
2010	62.9
2011	64.3
2012	75.7
2013	77.5
2014	78.6
2015	79.7
2016	80.4

Year	Check Rate (%)
2009	39.9%
2010	43.2%
2011	46.6%
2012	48.7%
2013	47.3%
2014	51.6%

■ In 2016, fundus examination rate is 38.5%, and micro-albuminuria examination rate is 55.0%.

Source : National Health Insurance Administration  
1. Check rate is hospital grade and clinics grade.  
2. Quality among P4P patients is hospital grade.

國民健康署

### National CVDs Prevention Strategic Action Plan 2018-2022 (HEARTS framework)

**Vision:** Reduce premature CVDs death and morbidity, diminish health inequality

**Health living and community-1<sup>st</sup> prevention** | **2<sup>nd</sup>/3<sup>rd</sup> prevention- Treatment management and quality**

Healthy lifestyles- Policy and environment → Reduce risk factors- Change in behavior → Early monitoring and detection- Risk factor surveillance and control → Early diagnosis and treatment- ER treatment and acute care → Chronic treatment and management- disease control and rehabilitation → Hospice care services in long-term care

**Health system coordination, cooperation and NGOs participation**

- Health literacy** and Healthy lifestyle: Improve public health literacy and establish healthy lifestyles.
- Evidence-based** guideline: Develop Evidence-based guideline for NCDs care: Evidence-Based Medicine
- Accessibility:** Increase service capacity for all levels of health institutions and create CVDs shared care network
- Risk-based management:** Develop personalized prevention care services and implement early detection and early treatment
- Team-based /task-sharing care:** Integrate cardiovascular prevention system and establish partnership (community, NGOs, professional and medical service organizations)
- Systems for monitoring and surveillance:** Establish integrated database to enhance surveillance management analysis and policy translation research

Cross-life cycle intervention

國民健康署 37

### WHO cancer control strategy in Taiwan

**Cancer**

National cancer control programmes

- Prevention
- Early detection
- Treatment
- Palliative care
- Cancer country profiles

**Prevention**

- Common risk factors of NCD
  - Tobacco use
  - Physical inactivity
  - Unhealthy diet
  - Harmful use of alcohol
- Betel nuts
- Hepatitis B/C
- HPV vaccination
- Air pollution and other chemical carcinogens
- Radiation

**Early detection**

- Cervical cancer
- Breast cancer
- Colorectal cancer
- Oral cancer
- Hepatocellular carcinoma (National Health Insurance) Screening

**Treatment**

- Cancer Patient Navigation
- Timely treatment
- Participative decision-making
- Multi-disciplinary team
- Evidence-based medicine and quality enhancement
- Sustainable development and equality
- Survivorship

**Palliative care**

- Whole person
- Whole family
- Full journey
- Whole team
- Whole community

國民健康署 38

### Secondary prevention : Early detection (Cancer screening)

**Cervical Cancer** F, 30-69 y/o, 3 yrs

**Breast Cancer** F, 45-69 y/o, 2 yrs

**Colorectal Cancer** F, 50-69 y/o, 2 yrs

**Oral Cancer** Smokers or betel-quid chewers, ≥30 y/o, 2 yrs

**Table 1. Recommended activities for early detection of selected cancers**

Site of cancer	Activities for	
	Early diagnosis	Screening
Breast	Yes	Yes*
Cervix	Yes	Yes
Colon and rectum	Yes	Yes*
Oral cavity	Yes	Yes
Naso-pharynx	Yes	No
Larynx	Yes	No
Lung	No	No
Oesophagus	No	No
Stomach	Yes	No
Skin melanoma	Yes	No
Other skin cancers	Yes	No
Ovary	No	No
Urinary bladder	Yes	No
Prostate	Yes	No
Reproductive	Yes	No
Testis	Yes	No

Recommended by the WHO, 2007.

國民健康署 39

### Cancer Care Quality Accreditation(CCQA)

- Cancer Care Quality Accreditation launched in 2008.
- 57 hospitals have passed the accreditation
- Coverage rate increased from 59.5 in 2008 to 85.9 in 2016.
- Domains of assessment:
  - Organizational policy and management of cancer care quality and clinical procedures
  - Cancer registry
  - Multi-disciplinary team care models
  - Establish cancer screening reminder and referral system
  - ...

國民健康署 40

### Cancer Care Quality Accreditation(CCQA)

58 hospitals have passed the accreditation

Map of Taiwan showing accreditation status by region:

- New Taipei City: 1 (Medical), 5 (Non-medical)
- Taipei: 7 (Medical), 3 (Non-medical)
- Keelung: 1 (Medical)
- Yilan: 3 (Medical)
- Hualien: 1 (Medical)
- Tainan: 2 (Medical), 3 (Non-medical)
- Changhua: 1 (Medical), 1 (Non-medical)
- Tainan: 2 (Medical), 3 (Non-medical)
- Yulin: 5 (Medical)
- Chia: 2 (Medical), 2 (Non-medical)
- Tainan: 2 (Medical), 3 (Non-medical)
- Pingtung: 2 (Medical)
- Tainan: 2 (Medical), 3 (Non-medical)
- Yulin: 5 (Medical)
- Chia: 2 (Medical), 2 (Non-medical)
- Tainan: 2 (Medical), 3 (Non-medical)
- Pingtung: 2 (Medical)

**Cancer Care Coverage in accredited hospitals**

Year	Coverage Rate (%)
2009	59.5%
2010	75.1%
2011	76.9%
2012	80.8%
2013	82.0%
2014	82.4%
2015	85.1%
2016	86.0%
2017	86.8%

國民健康署

### PPF(Pay-For-Performance) Hospitals and clinics

- 230 hospitals and clinics since 2010
- **Cancer Prevention**
  - Create "No Betel Quid Chewing" supportive environment
  - Develop a Betel Chewing Cessation Policy
- **Cancer Screening**

**Public Health System**

- Establish cancer screening booths in the community
- Create mobile cancer screening vans to deliver mobile mammography along with pap smear service

**Clinical Delivery System**

- Build up automatic reminder system to notify physicians the qualified candidates for cancer screening
- The system generates reminder messages to invite patients revisit clinic
- Collaborate with local health departments to deliver cancer screening services

國民健康署

### Cancer Prevention and Control Institutes and Health Offices Award Ceremony

國民健康署

### Tobacco Control in Taiwan

-Implement the WHO FCTC: MPOWER Strategies-

- Monitor Tobacco Use and Prevention Policies**
  - Adult Survey :Adult Smoking Behavior Survey (ASBS), Taiwan NHIS
  - School based Survey: Global School Personnel Survey (GPS), Global Health Professional Student Survey (GHPSS) ,GSHS/Taiwan Youth Health Survey (TYHS), Global Youth Tobacco Survey (GYTS)
- Protect People from Tobacco Smoke**
  - Regulation Enforcement on Smoking ban area to assure **smoke-free environments**, public awareness by mass media campaign
- Offer Help to Quit Tobacco Use:**
  - Second-generation Payment Scheme for Cessation Services and Quit Line
- Warn About Dangers of Tobacco**
  - graphic and text warnings on cigarette packs
- Enforce Bans on Tobacco Advertising, Promotion and Sponsorship**
- Raise Taxes on Tobacco:**
  - Tobacco Tax
  - Tobacco Health Welfare Surcharge

\*In 2008, WHO packaged and promoted six proven measures to reduce tobacco use worldwide. Known as MPOWER, the measures support scale up of specific provisions of the WHO FCTC on the ground.

國民健康署 44

### Tobacco-Free Hospital Initiative

- Members: 209 hospitals
- Since 2009, 18 Taiwanese hospitals among 50 globally have won the Global Gold Awards for Tobacco-free Hospitals

國民健康署

### Quality Indicators of Healthy Hospital

Items	Indicator
I	<b>Registered Smoking or Betel-quit chewing – 30 years and above</b>
II	<b>Diabetes Care Indicators</b> (1) Coverage rate of Hospital-wide participation in the NHRI's Diabetes Payment Improvement Plan (2) HbA1c checks in diabetes patients (3) Fundus or fundus color imaging checks in diabetes patients (4) Fasting blood lipid checks in diabetes patients (5) Urine micro albumin checks in diabetes patients
III	<b>Utilization of Adult Health Preventive Services</b> (1) Utilization of Adult Health Preventive Services: age 40-64 years (2) Utilization of Adult Health Preventive Services: age 65 years and above
IV	<b>Cancer Screening</b> (1) Cervical cancer screening for outpatient women age 30-69 years within 3 years (2) Breast cancer imaging for outpatient women age 45-69 years within 2 years (3) Fecal occult blood screening for patients age 50-69 within 2 years (4) Oral mucosa screening for smoking or betel-quit chewing patients age 30 years and more within 2 years
V	<b>Success rate of 3-month and 6-month smoking cessation</b> (1) Success rate of smoking cessation therapy – 3 months (2) Success rate of smoking cessation therapy – 6 months (3) Success rate of smoking cessation health education – 3 months (4) Success rate of smoking cessation health education – 6 months
VI	Re-hospitalization within 14 days after discharging from unplanned inpatients

國民健康署

### New Approach-NUDGE- Colorectal Cancer Screening

國民健康署

### NUDGE-

Decisions About Health, Wealth, and Happiness

*By knowing how people think, we can make it easier for them to choose what is best for them, their families and society*

Richard Thaler and Cass Sunstein in the book *Nudge*, which was published in 2008.

國民健康署



### Nudge Design

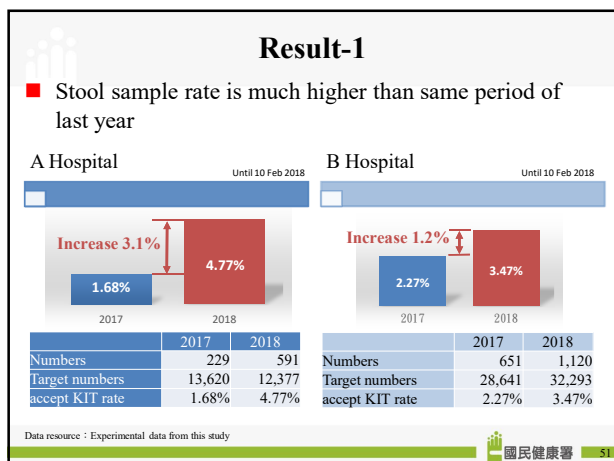
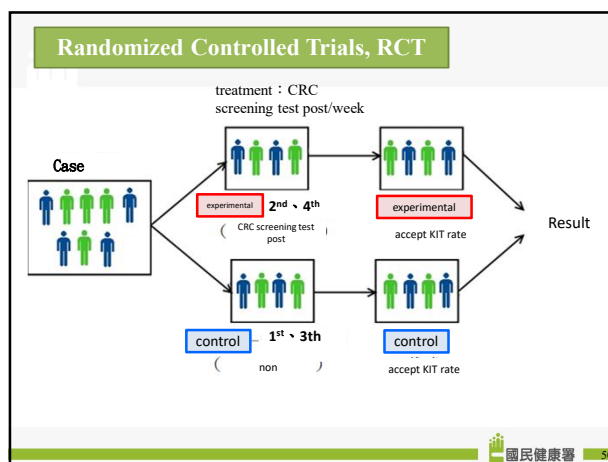
Ex. Integration CRC screening post

- Color print
- Economic incentive (Free test)
- Separated from other tests.

Correct the unrealistic optimism on risks of cancer

Simplify:  
1. The processes of screening  
2. Information presented

國民健康署 49



### RE-AIM model

[http://www.re-aim.org/2003/FAQs\\_basic.html](http://www.re-aim.org/2003/FAQs_basic.html)

- A systematic way to evaluate intervention for health behaviors and to assess the possible effects of public health project
- RE-AIM model defines the intervention **outcomes of public health projects** with the following five elements (dimensions): reach, efficacy, adoption, implementation, maintenance

國民健康署 52

### Five dimensions of RE-AIM

- Reach the target population
- Efficacy or effectiveness
- Adoption by target settings or institutions
- Implementation : consistency of delivery of intervention
- Maintenance

國民健康署 53

### Effectiveness- patient(2017)

Questions	Avg. %
<b>1.Diabetic care</b>	
• Service coverage rate of institutions participating in NHI diabetic medical payment improvement plan	51.7%
• The rate of glycohemoglobin (HbA1c) examination in diabetic patients	94.9%
• Percentage of diabetic patients with fundus examination	50.3%
• Percentage of diabetic patients with fasting lipid profile examination	82.1%
• Percentage of diabetic patients with microalbumin examination	62.8%
<b>2. Cancer Screening</b>	
• The rate of women aged 30-69 attending OPD who have undergone a Pap smear within 3 years	43.7%
• The rate of women aged 45-69 attending OPD who have undergone a mammogram in the past two years	34.1%
• The rate of people aged 50-69 attending OPD who have undergone fecal occult blood tests in the past two years	29.2%
• The rate of betel-quit chewers and smokers aged 30 or above attending OPDs who have undergone oral mucosa checkups within 2 years	24.6%
<b>3.The utilization rate of adult preventive care services</b>	
• aged 40-64	2.8%
• aged 65+	6.2%

國民健康署 54

### Implementation-patient care outcome(2017)

Questions	Avg. %
1. Rate of Risk factors record	
• Ratio of smoking or betel-quid chewing record for patients age 30 years and above	94.9%
• Ratio of alcohol consumption record for patients age 18 years and above	28.7%
• Ratio of nutritional assessment record for patients age 18 years and above	17.5%
• Ratio of waist measurements for patients age 18 years and above	19.3%
• Ratio of BMI measurements for patients age 18 years and above	34.6%
• Ratio of regular exercise record for patients age 18 years and above	19.2%
2. Successful 6-month smoking cessation rate in medical institutions with smoking cessation services improvement	34.4%
3. Re-admission rate within 14 days after discharge	7.9%


### Maintenance: HPH model adoption by institutions


2017 HPA service modules promoted by HPH institutions and participates health promotion program

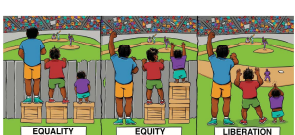
Hospitals	HPH					
		yes	%	no	%	total
Age-friendly	Yes	163	86.7%	25	13.3%	188
	No	0	0.0%	273	100.0%	273
Tobacco free	Yes	163	73.4%	59	26.6%	222
	No	0	0.0%	239	100.0%	239
Diabetes	Yes	128	79.0%	34	21.0%	162
	No	35	11.7%	264	88.3%	299
Cancer prevention	Yes	128	64.3%	71	35.7%	199
	No	35	13.4%	227	86.6%	262

\*HPH participates in all certifications : 114 hospitals

#### Take home message :

1.  Carrot and stick      Carrot and baton

2.  Top down and bottom up Partnership between government and health service organization

3.  Health literate organization : remove barrier for communication



4. Patient centered care  
Holistic care

