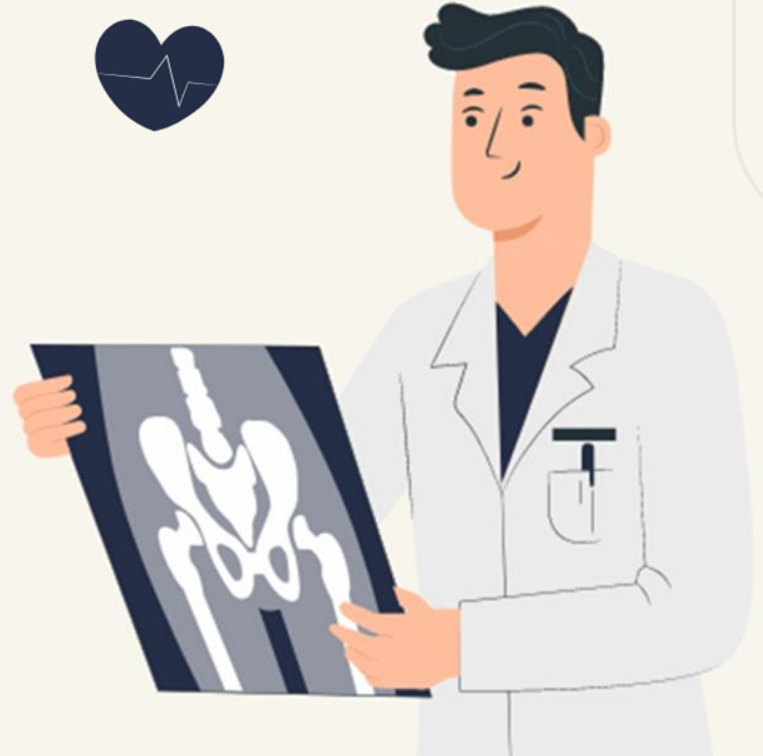


Family Physician Integrated Care System in Taiwan:

The Community Healthcare Group (CHCG), a collaborative model between PHC and Hospitals for high quality community healthcare

Dr. Brian Bih-Jeng Chang
MD, MPH

WONCA (*world organization of family doctors*)
Asia Pacific Regional President





Declaration of Astana

ASTANA, KAZAKHSTAN
25-26 OCTOBER 2018



**GLOBAL
CONFERENCE
ON PRIMARY
HEALTH CARE**

Why A New Declaration

- *While we have made great strides in health outcomes globally over the past 40 years, we face many ongoing challenges. **A primary health care (PHC) approach is the most effective way to sustainably solve today's health and health system challenges.***
- *The PHC approach is foundational to achieving our shared global goals in Universal Health Coverage (UHC) and the health-related Sustainable Development Goals (SDGs).*
- *The new declaration has renewed political commitment to primary health care from Governments, non-governmental organizations, professional organizations, academia and global health and development organizations. It will be used to inform the UN General Assembly high-level meeting on UHC in 2019.*
- *The new declaration was also a chance to commemorate the 1978 Alma-Ata Declaration on Primary Health Care, and reflect on how far we have come and the work that still lies ahead.*

The Importance of Primary Health Care

- *Improve health quality*
- *Reduce costs*
- *Increase national health status*
- *Reduce health disparities*



Source: Starfield B, Shi L, Macinko J. Contribution of primary care to health systems and health. Milbank Q. 2005;83(3):457-502.

Family Physician Integrated Care Plan

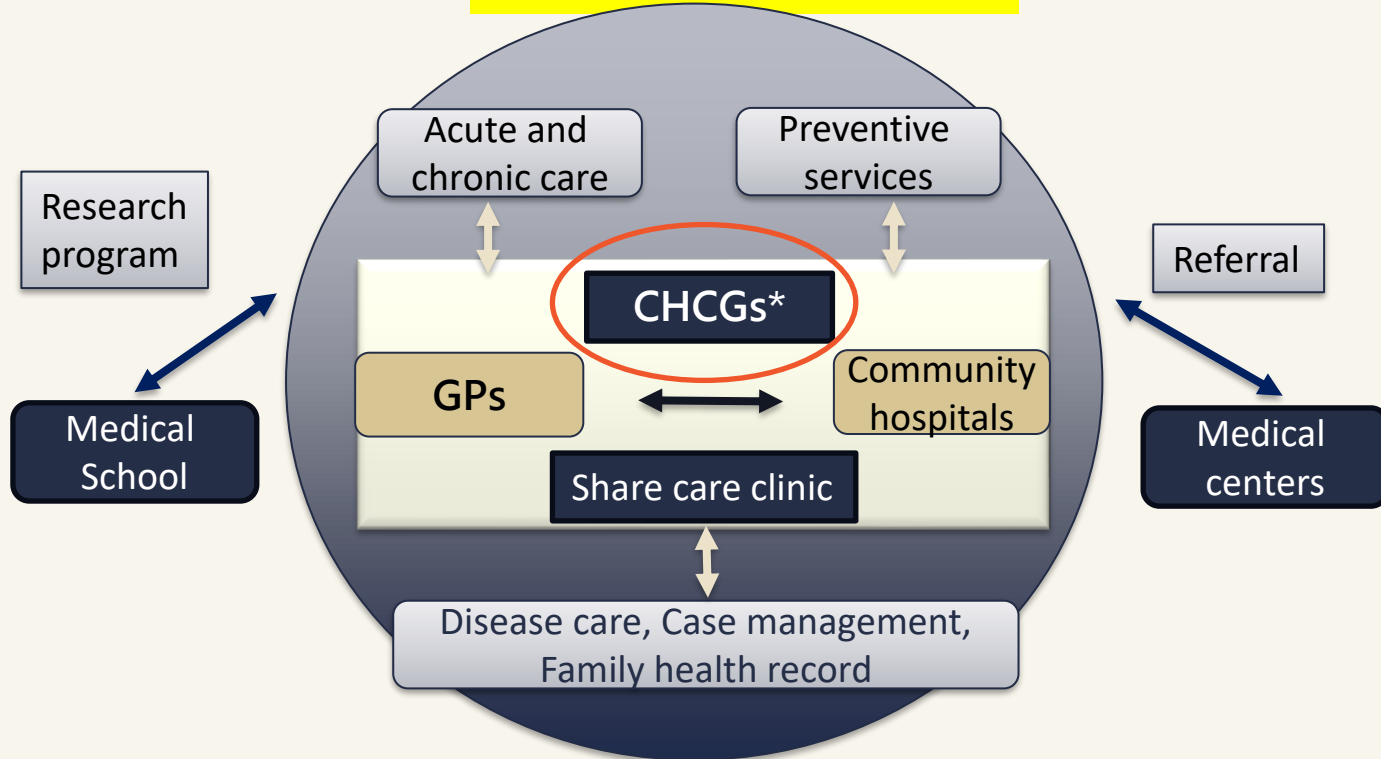
starting 2003

- *5 to 10 GPs, one fifth of which specialized in FM*
- *Recruit members from patients encountered*
- *Continuous and comprehensive care*
 - *24-hour call center*
 - *Health promotion*
 - *Disease prevention and treatment*
 - *Case management*
 - *Patient referral*
- *Regular meeting and sharing experiences*
- *Shared OPD clinic in the collaborative hospitals*

Source: Department of Health, Taiwan, 2003

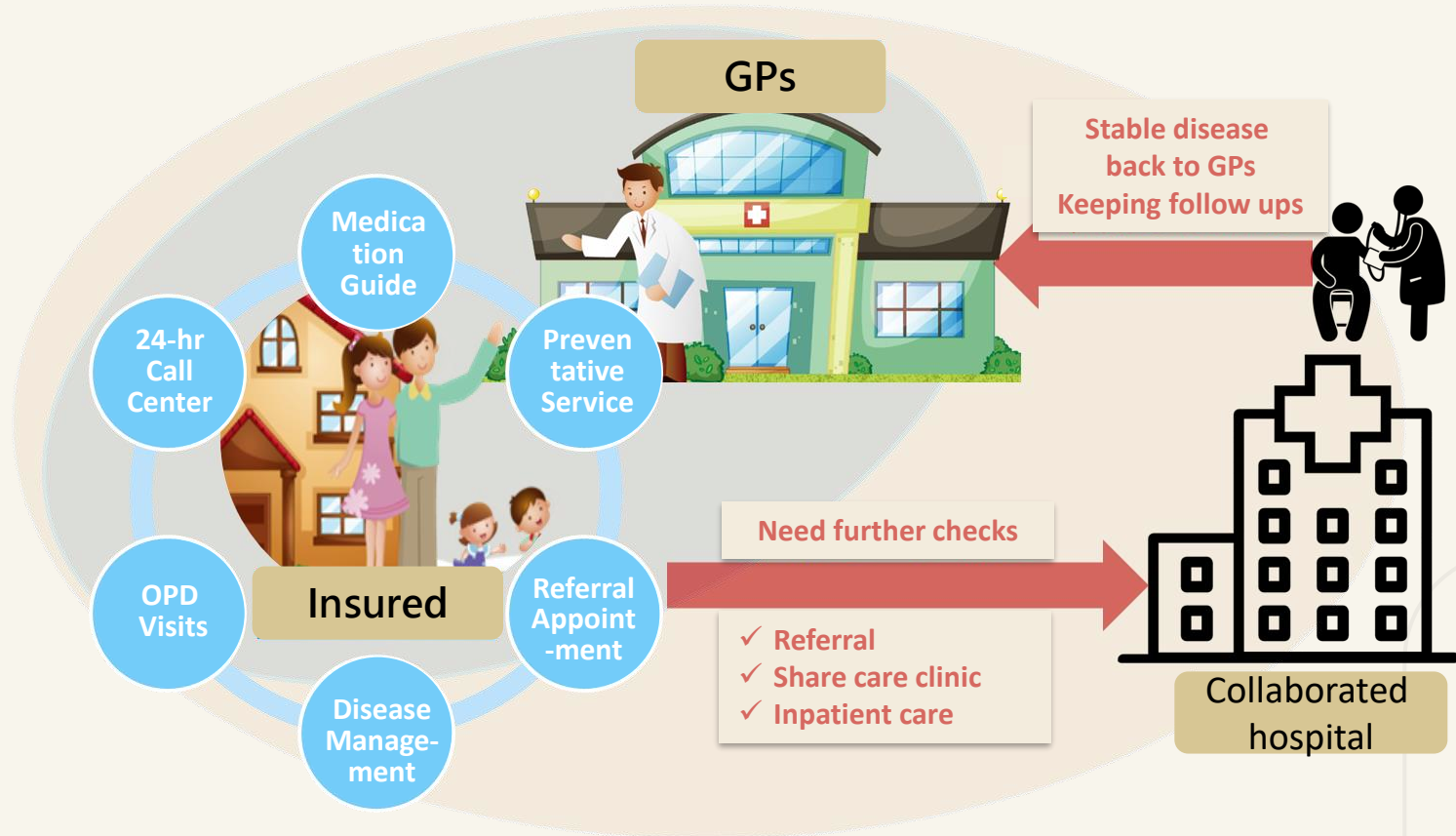
Models of Integrated Care System in the Community

Roles & Functions



CHCGs means community health care groups

Family Physician Integrated Care



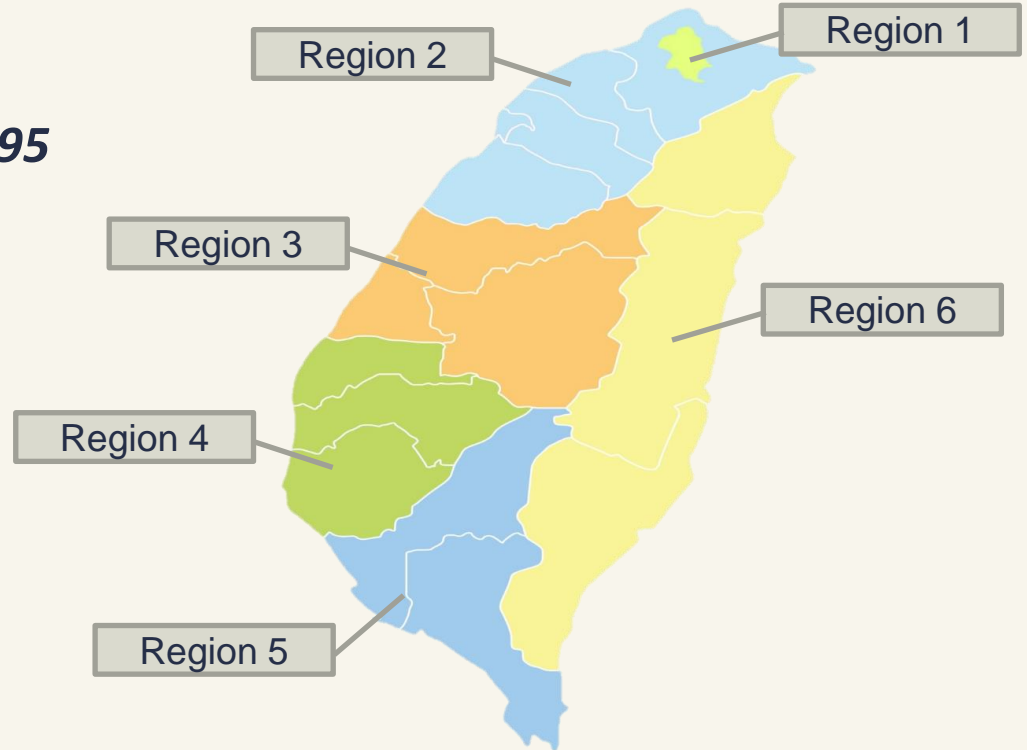
Reimbursement Scheme

- **Medical expense saved**
 - *Virtual Capital – Actual Expense*
- **Per member administration fee**
- **Quality performance**
 - *24-hour call center*
 - *Health promotion and protection*
 - *Ambulatory care and acute care KPIs*
 - *Chronic disease care outcomes*
 - *Collaboration with responsible hospital to improve quality and continuity in patient care*
 - *Loyalty to the health care group*
- **The fee-for service payment was not effected whether join this program or not**



Community Health Care Groups (CHCG) in Taiwan

- *6 regions*
- *Totally 609 CHCGs in 2022*
- *Operational budget NTD 3.95 Billion (US\$ 0.12 Billion)*



Physicians and Enrollees in the Project (2022)

- ***Clinics participated in CHCGs***
 - ***Around 5,664 (53.5% of total clinics)***
- ***Physicians participated in CHCGs***
 - ***Around 7,833 (46.3% of total physicians)***
- ***Enrollees***
 - ***Around 6,002,000 (24.8 % of total population)***

Partnership

Demonstration of a CHCG

SanChong Community Health Care Groups

CHCGs



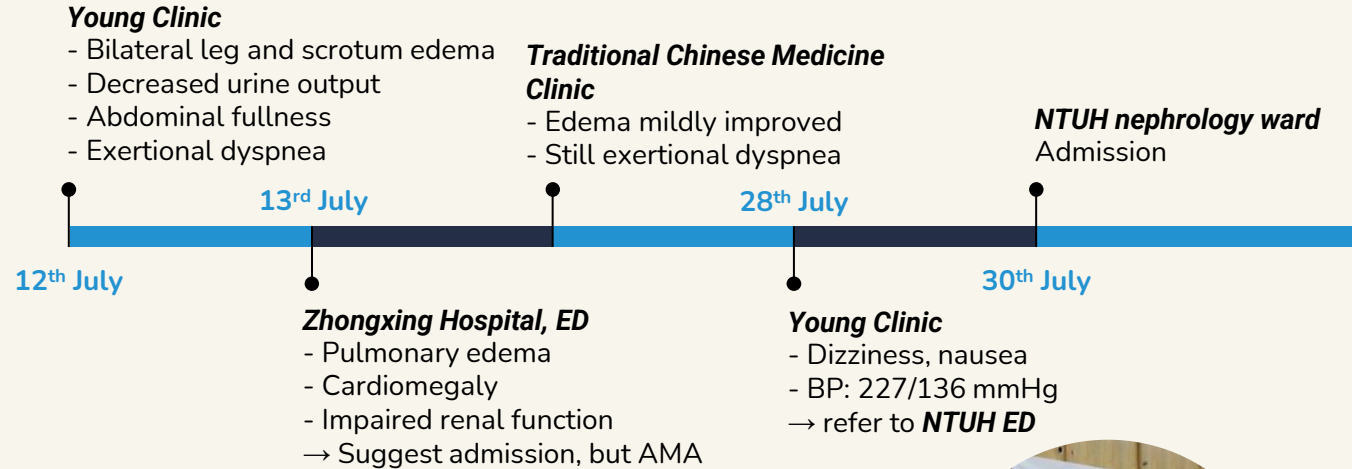
Collaborated community hospital

Collaborated Medical center NTUH

Green dots are CHCG clinics
Yellow cross are hospitals
Red circle is the imaginary line of the community

Case Study

National Taiwan University Hospital – SanChong CHCGs



- ✓ GP referred patient to collaborated hospital
- ✓ Share care by the joint efforts from clinic and hospital
- ✓ Realize holistic health care by dual attending physicians



Seminars

National Taiwan University Hospital – SanChong CHCGs



Workshops

National Taiwan University Hospital – SanChong CHCGs



Health Education

National Taiwan University Hospital – SanChong CHCGs



**Vaccination
(COVID-19 & influenza)**

**Clinic Anniversary
Celebration**

**Prevent Disability
in Community**



*During COVID-19 pandemic,
Virtual meeting to discuss the
outcome of preventing disability of
the elderly (Jan 20, 2021)*

Feedbacks

National Taiwan University Hospital – SanChong CHCGs

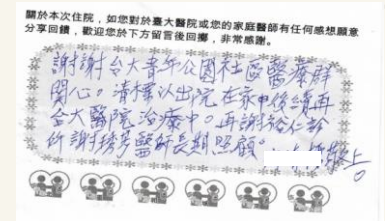
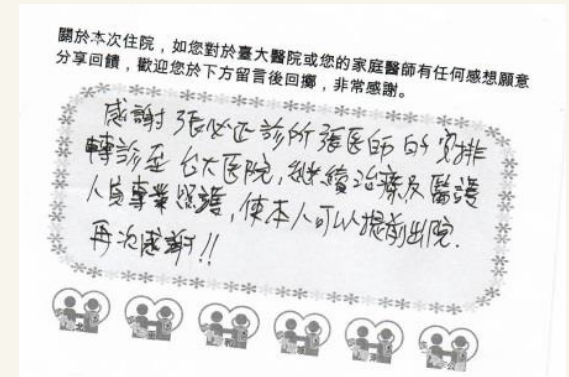
Caring Cards for Patients



Thank-you Cards for Physicians



Feedbacks from Patients



Performance

Outcomes in 2021

Family Physician Integrated Care Plan



296 collaborated hospitals
5,344 share clinics

Medical care collaboration



24,458 attendees
736 events

Health education activities



47,034 calls

24-hour call consultation

Patient Satisfaction

- **80%** of the enrollees  *satisfaction on CHCGs*
- **90%** of the enrollees  *satisfaction on two-way referral*
- **> 80%** of the enrollees *preferred consultation with their family doctors before seeking medical attention in hospitals.*

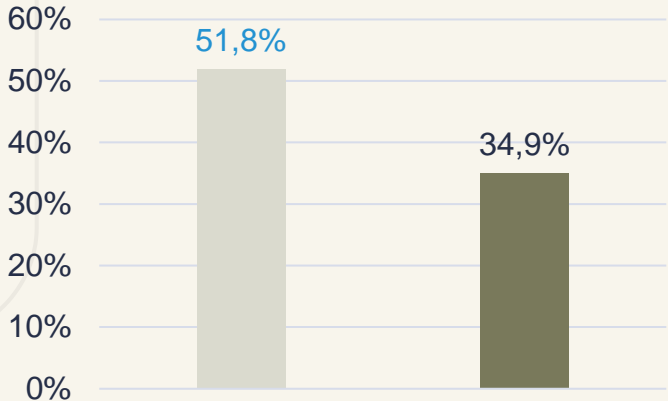
Family Physician Integrated Care Plan

- *Reduce clinic visits, admission, medical expense and health insurance cost*
- *Increase satisfaction on medical care*
- *Strengthen the service of patient referral*
- *Emphasis on health promotion to have good results on disease prevention*
- *Pay for performance to ensure quality of care*
- *The design on performance feedback leads to a variety of business models to better health*

Source: Chang et. al. The outcome and prospect of integrated care through family physician system. TMJ. 2011;54(8): 466-470.

Higher Adherence to Preventive Program

Periodic health exam rate



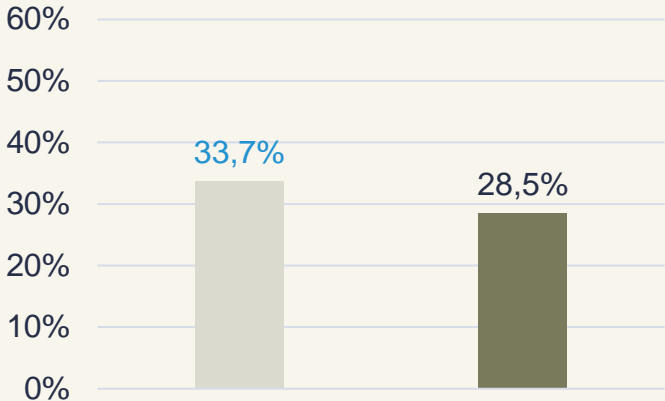
Enrollees

Not enrollees



+16.88%

Pap Smear rate



Enrollees

Not enrollees

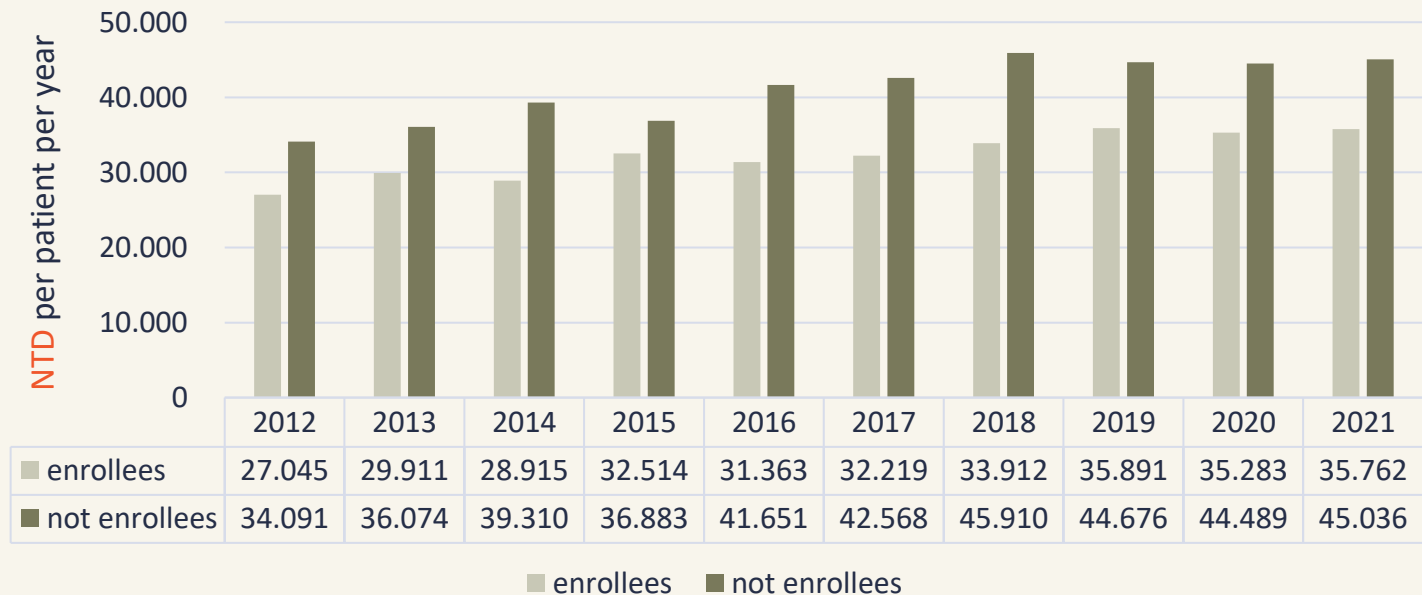


+ 5.18%

Saving Medical Expenditure

Family Physician Integrated Care Plan

Average medical expenditure among enrollees is lower than not enrollees during 2012 to 2021 (difference is ~ USD 300)

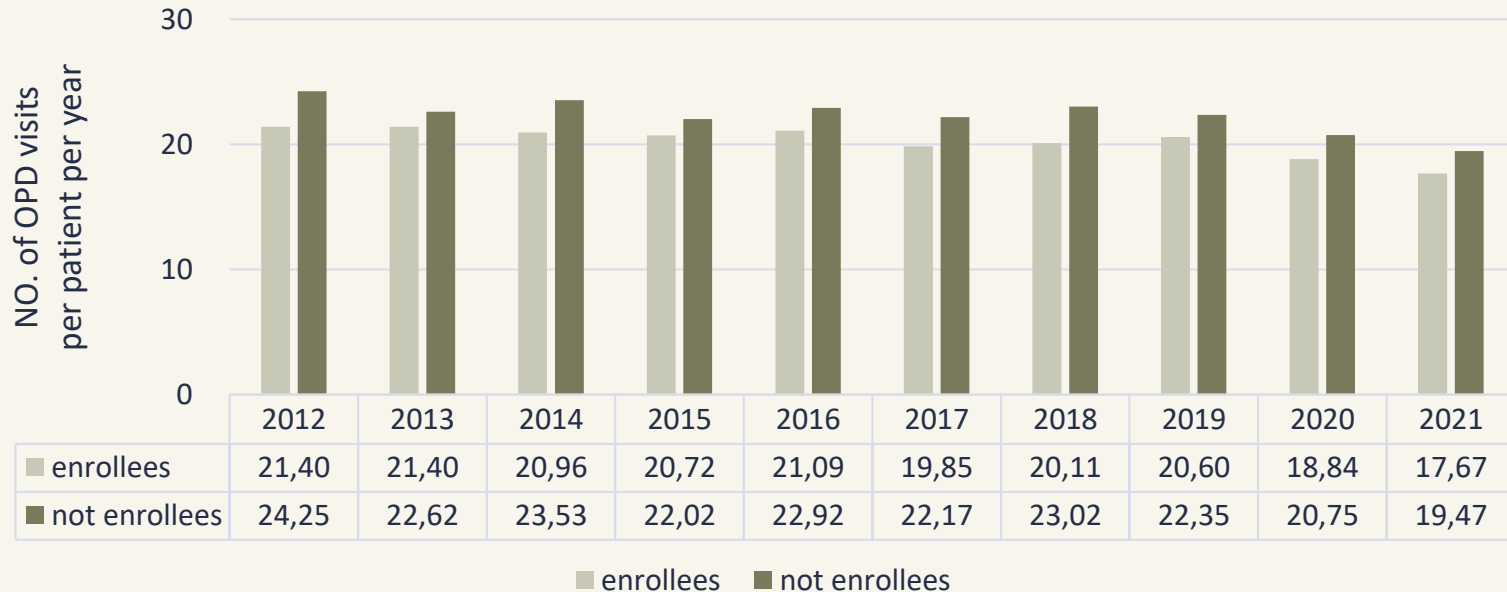


Source: National Health Insurance Administration

Reducing OPD Visits

Family Physician Integrated Care Plan

Average NO. of OPD visits among enrollees is lower than not enrollees during 2012 to 2021 (difference is ~ 2 visits)



Source: National Health Insurance Administration

Research evidence on performance of FPICP

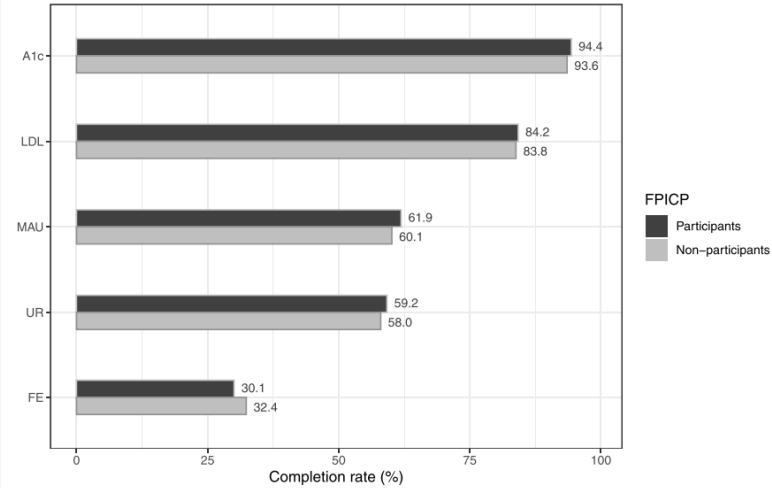
Open access

Original research

BMJ Open Impact of team-based community healthcare on preventable hospitalisation: a population-based cohort study in Taiwan

Chyi-Feng Jeff Jan^{1,2}, Che-Jui Jerry Chang¹, Shinn-Jang Hwang^{3,4,5}, Tzeng-Ji Chen^{3,4}, Hsiao-Yu Yang⁶, Yu-Chun Chen^{3,4}, Cheng-Kuo Huang^{5,7}, Tai-Yuan Chiu^{1,2,7}

Participation in the FPICP was associated with lower hospitalization for COPD/asthma and for diabetes or its complications.



Chang et al. BMC Family Practice (2020) 21:209
<https://doi.org/10.1186/s12875-020-01284-w>

BMC Family Practice

RESEARCH ARTICLE

Open Access

Team-based care improves quality of diabetes care -Family Practice Integrated Care Project in Taiwan

Jerry Che-Jui Chang^{1,2}, Shinn-Jang Hwang^{3,4,5}, Tzeng-Ji Chen^{3,4,5}, Tai-Yuan Chiu^{1,2}, Hsiao-Yu Yang^{6,7,8}, Yu-Chun Chen^{4,5}, Cheng-Kuo Huang^{3,9} and Chyi-Feng Jan^{1,3*}



Adherence of these tests among enrollees is higher than not enrollees, in terms of HbA1c, LDL, microalbumin test, and Urinalysis



Public Health Platform & Collaboration

Social Services

- *Solitary elderly home care (since 1995)*
 - *Since 1995*
- *Free meal delivery*
 - *180,000 meals in total*
- *Home visits*
 - *14,000 visits in total*



CHCGs Helped in Infective Disease Control

An Example of **Flu Attack**

Interventions provided by CHCGs

- *Fever check-up*
- *H1N1 quick screening*
- *Anti-viral drug prescription and dispense*

Outcomes

*In Taipei, 284 clinics worked with 12 public health centers and 1 local health bureau to prevent virus transmission. **Individuals were able to reach one clinic in 8-minute distance****

Services Can Be Added On To The Network

- *H1N1*
- *Enterovirus oral screening*
- *Cancer screening*
- *Smoking cessation*
- *Weight control*
- *Vaccination*
- *And more...*

Role and Responsibility of GPs

6 Anti-COVID-19 Strategies



*Telehealth:
Home care for
mild cases*



*Telehealth:
Diagnosis through
fast screening*



*Telehealth:
Evaluation and
prescription*



*Anti-COVID-19
vaccination*



*PCR testing in
clinics*



*Support fever
check-up stations
in the community*



CHCGs' Efforts to COVID-19 Containment

Telemedicine care

1. **609 CHCGs (100%)** provide telemedicine care.
2. **4,716 clinics from CHCGs** was the majority (62.7%) among total 7,520 clinics national wide.

Tele-home Care

1. **608 CHCGs (~100%)** provide Tele-home care.
2. **3,469 clinics from CHCGs** was the majority (78%) among total 4,427 clinics national wide..

CHCGs' Efforts to anti-COVID-19 Vaccination

Multiple Channels

1. Vaccination rate of **Taipei City Citizens** is the highest, compared to other cities.
2. **Over half citizens** vaccinated in clinics
3. CHCGs also went to long-term care facilities and homes to vaccinate those **elderly or disability.**

High Participation

1. **595 CHCGs (>99.5%)** joined anti-COVID alliance.
2. **2,456 clinics from CHCGs** was the majority (82.6%) among the 2,972 clinics national wide.

Case management

1. CHCGs **proactively follow up** the enrollees who haven't received 3 doses of anti-COVID-19 vaccines, according to the not-vaccinated list provided by the NHIA.

Future Plan

New Goals

- *Collaborate with National Health Insurance Administration to enroll the patients with **high medical expenditure** to the CHCGs, trying to reduce the unnecessary cost*
- *Collaborate with Health Promotion Administration to educate patients and **proactively manage chronic diseases**.*
- *Collaborate with Ministry of Health and Welfare to bridge community care to **long-term care** system*

Key performance indicators




- ✓ *Loyalty to CHCGs*
- ✓ *Risk factors control of chronic diseases*
- ✓ *24-hour consultation*
- ✓ *Health promotion and protection*

Value of CHCGs

Health Policy Participation

1. Check **NHI PharmaCloud** System
2. Upload test results timely
3. Assist enrollees to download **My Health Bank** and apply to health management

Health Prevention

1. Periodic health exam for adults 
2. PAP smear test 
3. Fecal occult blood test 

Health Promotion

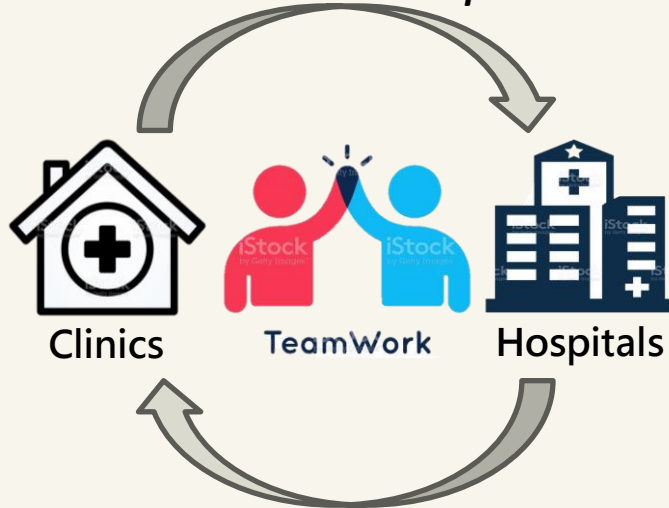
1. Control **high risk life style** among patients with high blood pressure, high blood sugar or high cholesterol
2. Provide **health education** in community

Gate keeper

1. Influenza vaccination rate among citizen over 65 y/o
2. **First encountered care** for acute infectious disease to secure the capacity of hospitals for severe cases

The Best Collaborative Model Between Hospitals and Clinics

CHCGs are the front-line gate keepers to refer patients in need to collaborated hospitals



CHCGs are the bridges to take care of the discharged patients back to community.



the Beitou Community Medical Group in Taipei City regularly holds meetings with collaborated hospitals (August 4th, 2021)



**Thank
You**