Science for Healthier Cities:

How science, innovation, and new technology can be best used to promote health in Gangdong-gu, Korea?

Lee, Haesik
Chair of Korea Healthy Cities Partnership
Mayor of Gangdong-gu, Korea
Mobile application for promoting physical activities

Climbing stairs at apartments and workplaces
- Free App (signed MOU with Kangbuk Samsung Hospital)
- Uses NFC (Near Field Communication)
- Set up tags on stair walls at apartments and workplaces
- Track steps climbed and calories burned

Earn and donate mileage by walking
- Track steps taken, calories burned, and ranking (daily)
- Provide health care services based on “big data”
- Provide mileage as incentives to walk
- Users can donate mileage earned to neighbors in need
U-Health Care System
for the prevention and management of NCDs

Accessible in common areas such as the town hall, public health center, and markets

Everyone!

RFID card serves as a personal ID and monitors 3D activities

Everywhere!

Easily assess your health levels using handy professional devices, whenever and wherever, with CADY.

Remote data transmission!

Everyday!

Care Diary
- Weight / Body fat % / Body fat mass
- Visceral fat level / Basal metabolic rate
- Muscle mass / Physical age / Bone mass
- Step count / Calorie consumption
- Blood pressure / Pulse rate

Automatic data transmission to Web!
Healthy 100s Counseling Centers
for the prevention and management of NCDs

: in all 18 community centers of Gangdong District

BEFORE

Residents

- Health exam (blood pressure, blood sugar) & health counseling

Public Health Center

AFTER

Residents

Healthy 100s Counseling Centers

- Health exam (BP, Glucose, abdominal circumference, HDL, and TG etc.)
- Screening, Counseling, and Education

Results are automatically saved

Data are saved after health counseling

Data sorting

Community health clinics and Hospitals

Public Health Center

Patients

Referral for NCDs treatment

The integrated computing database

Integrated management of data

Checkup data

Community health clinics

National Health Insurance Service

Recognize the importance of health management ➔ Improvement of lifestyle through regular health management ➔ Early detection of chronic disease and decline in prevalence of NCDs
Health Care Center for Citizens to prevent and manage NCDs

: at Gangdong Public Health Center

Resident-centered integrated service
1:1 personalized health care plan with a physician
Lifestyle improvement consultation & information
U-Health monitoring

Process

Registration
Health Questionnaire

Physical examination
Physician counseling
Making personalized health care plan

Healthy lifestyle counseling based on team approach
Nutrition, physical activities, smoking, drinking, stress, and oral health

Metabolic syndrome management
Health exam and screening

Guidance by health manager (Public Nurse) and follow-up management

Chronic disease management
Treatment (additional health exam if needed)
THANK YOU

Any questions?