



台灣健康產業發展方向

錢宗良

Chung-Liang Chien, Ph.D.

Professor, College of Medicine, National Taiwan University
CEO, Institute for Biotechnology and Medicine Industry

精準醫學與精準健康： 誰是未來大健康產業的藍海？



Precision Medicine 精準醫學

精準診斷: NGS 基因定序、液體活檢、AI 輔助診療、POC 檢測、數位影像設備等

精準治療: 標靶藥物、細胞治療、免疫治療、粒子治療、手術機器人等

醫療照護: 智慧醫院、智慧病房、智慧照護等

Precision Health 精準健康

風險評估: 風險基因、行為模式、家族病史

精準篩檢: 精準個人化健檢、AI 輔助早期檢測、居家篩檢、智慧遠距諮詢等

健康促進: 生活習慣、環境調適、個人化飲食、**營養和運動**、**腸道菌相**、居家及穿戴式健康管理裝置等

東森集團保健食品發展



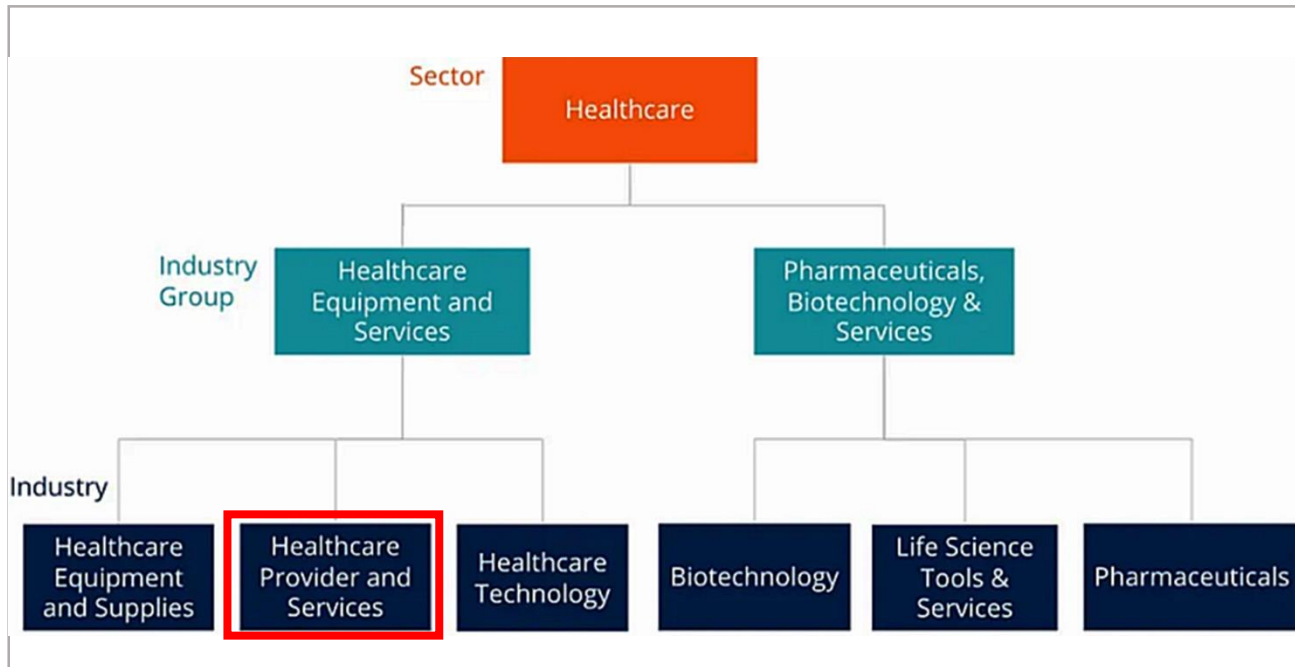
Agility+ 艾捷力
PLUS 膠囊



倍舒暢PLUS
益生菌

Healthcare sector by GICS definition

- ❑ The healthcare sector includes the following subsections, as per Global Industry Classification Standard (GICS)



Global Markets:

- International Healthcare
- Bio-pharmaceutical
- Medical device
- Regenerative medicine
- **Smart health**
- Precision medicine
- Sports medicine

Diagnostics, Pharmaceuticals & Cell Therapy

Predict, prevent, or precisely treated.

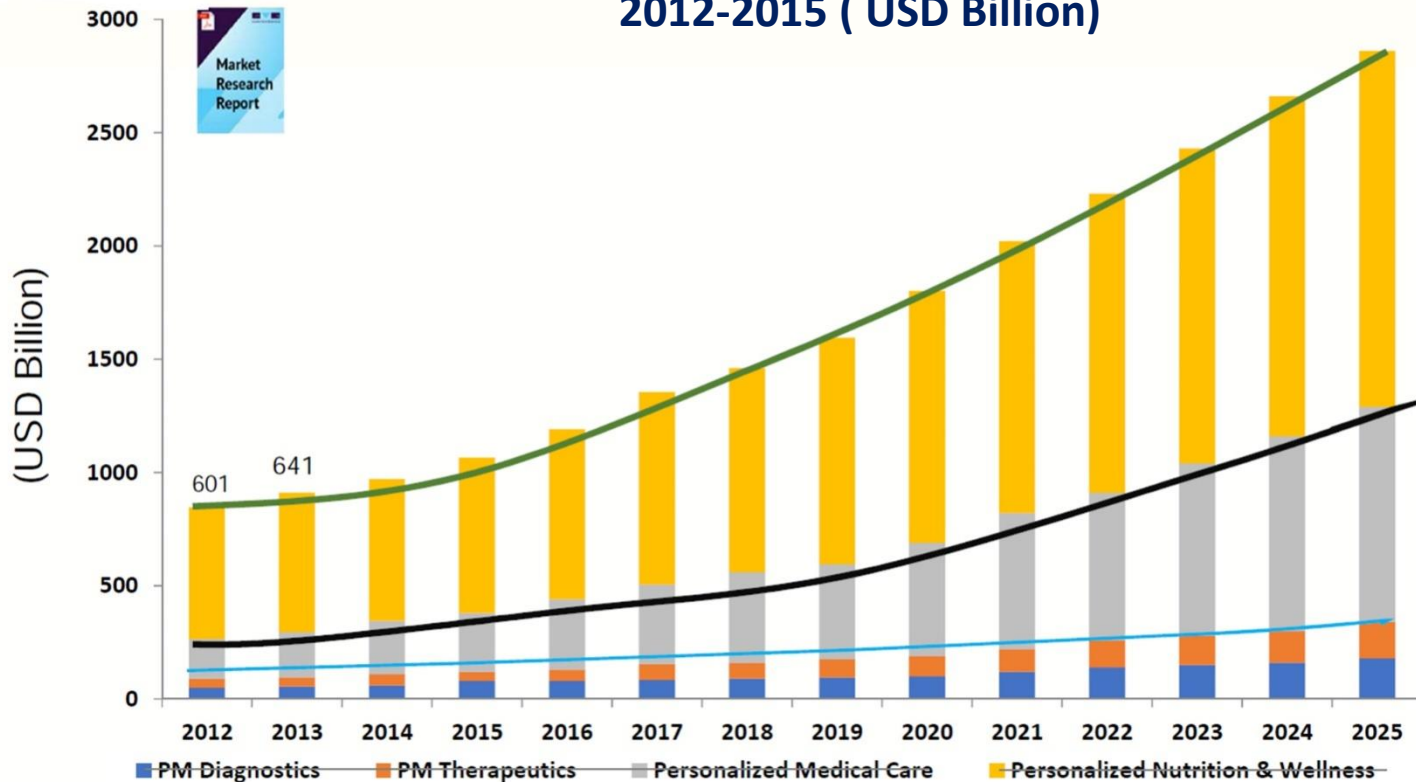
Diagnostics lays the foundation of making a clinical decision. The latest development and advancement- both for individual health and commercial use- were on display, ranging from digital pathology, liquid biopsy, bone marrow counting to cell manufacturing & storage.



- IVD devices, microfluidic chips
- Cancer screening, pharmacogenomic testing
- Cell products & cell therapy services
- CRO, CMO & CDMO
- Lab apparatus, reagents, workflow automation

Global Precision Healthcare Market 精準健康產業之市場預測

2012-2015 (USD Billion)



精準醫療

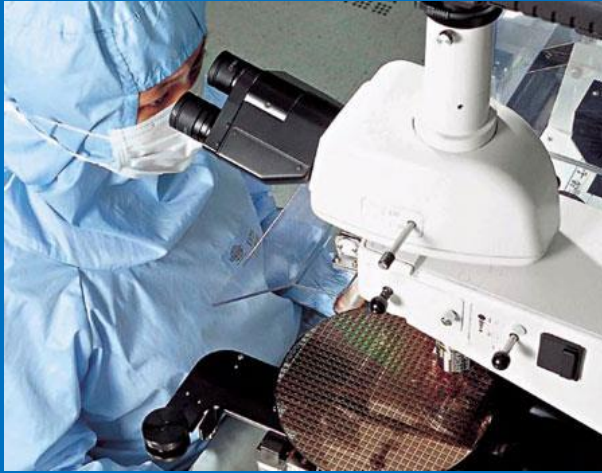
健康福祉

Taiwan Core Competences

- Taiwan ranks 3rd in the newcomer markets
- World-class quality of medicine and talent
- The best healthcare system and big data
- High quality clinical trials and R&D capacity
- Well-established research infrastructure
- ICT supply chain, talent and manufacturing
- AI and 5G R&D in national level



Source compiled by IBMI, RBMP (2021)



ICT



Hospital



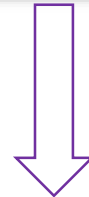
Smart Hospital



Healthcare IoT
Platform



Health AI



Medical &
Wearable Devices



Hospital
Equipment

Cross-industry cooperation at a glance



- 1) AI medical platform
- 2) Telemedicine / remote care
- 3) AI-assisted arrhythmia diagnosis
- 4) AIoT device/equipment



- 1) Genome database for Chinese
- 2) Medical wearables
- 3) Epidemic management products
- 4) Proton therapy / 8K medical imaging



- 1) Innovative devices / AI diagnostics
- 2) Health & chronic disease management
- 3) Medical imaging for animals
- 4) Cell therapy / AIoT solutions



- 1) Miniaturization of medical equipment
- 2) Exoskeleton / assistive devices
- 3) AI dialysis / medical AI imaging
- 4) Digital pathology / health management

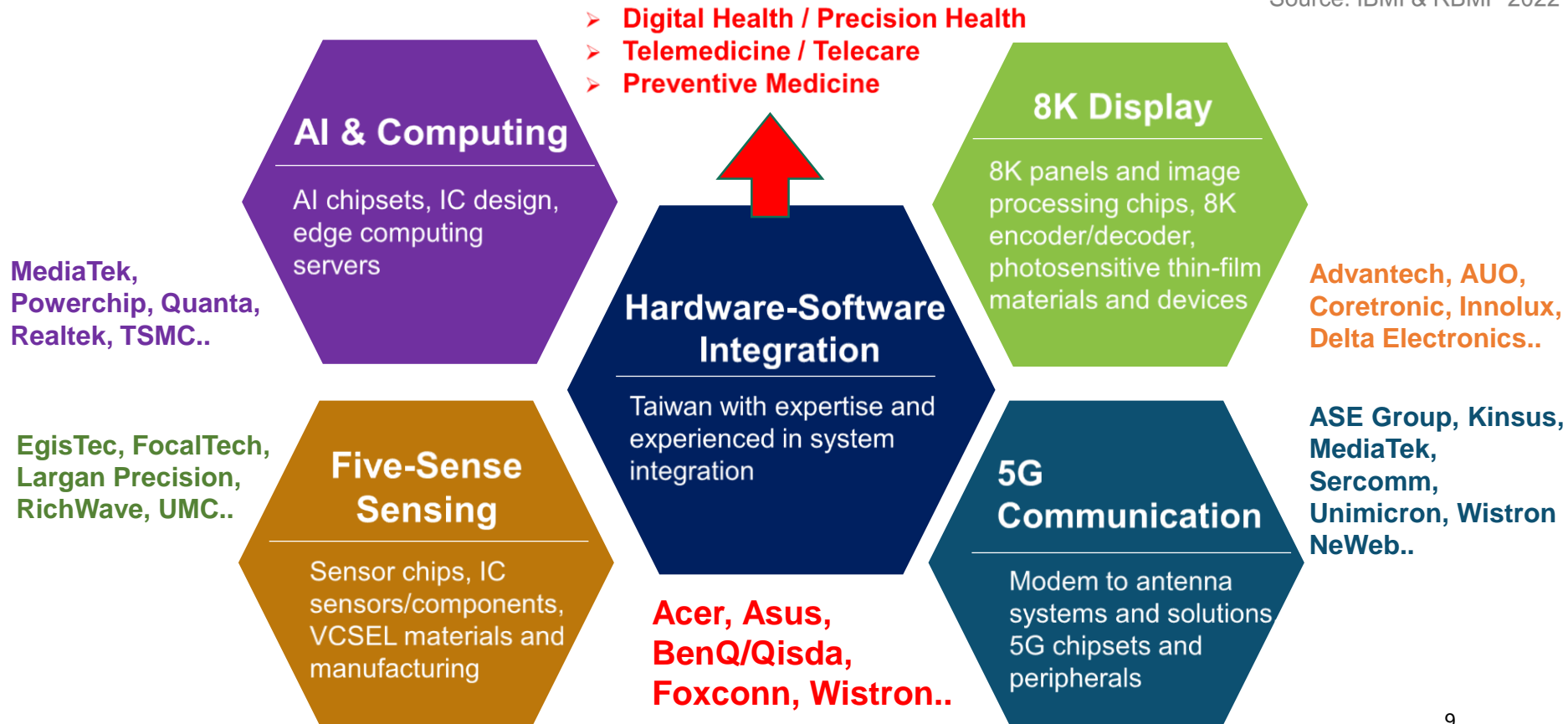


- 1) Telehealth / IoT products
- 2) Auto detection of CTC
- 3) Data integration of sports health
- 4) AI-assisted detection of disease

Taiwan Industry Overview

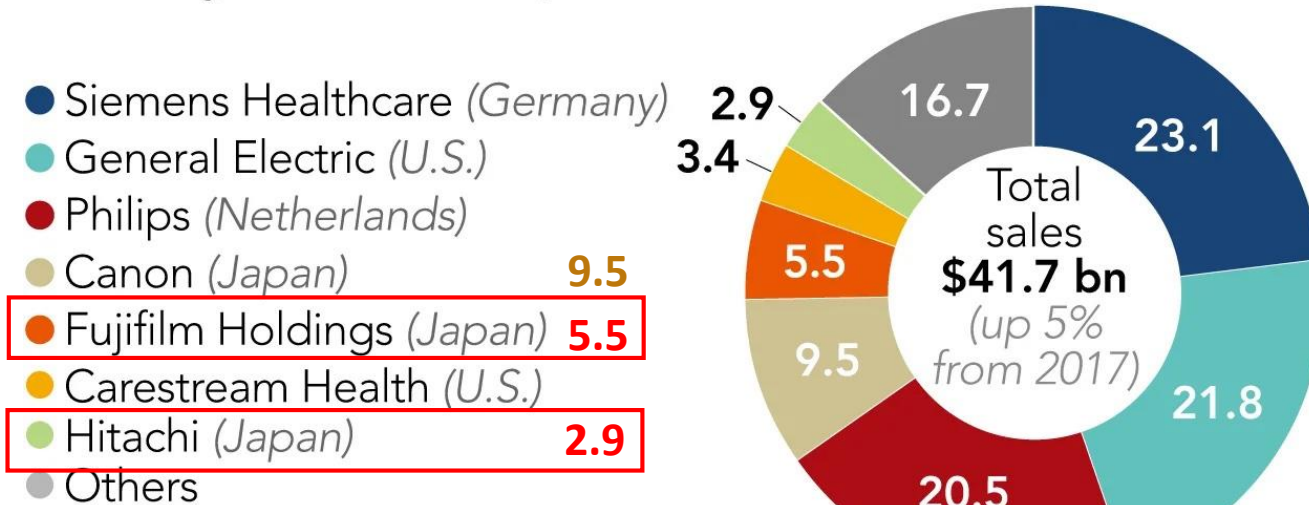
Market Players and Focus Areas

Source: IBMI & RBMP 2022



Fujifilm Healthcare acquires Hitachi Diagnostic Imaging in 2021

Diagnostic imaging equipment global market share by sales (2018, in percent)



Source: Evaluate **8.4 + 9.5 = 17.9 (Japan)**

Fujifilm Healthcare presented a complete and integrated portfolio of diagnostic products and services, including CT, MRI, X-ray, AI, PACS, endoscopy and ultrasound systems.

Taiwan leading hospitals are expanding their productivity from building smart hospital...



彰化基督教醫院
CHANGHUA CHRISTIAN HOSPITAL



員林基督教醫院
Yuanlin Christian Hospital



U.S. Green Building Council
LEED Gold Level Certification on
Dec, 2015



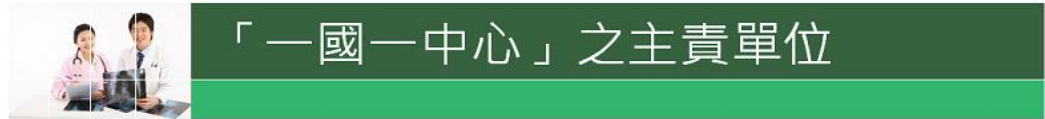
ICT Players launch products and solutions:

- ◆ Smart Nurse Station
- ◆ Smart Ward
- ◆ Smart Clinic
- ◆ Smart Counter
- ◆ Smart Dialysis
- ◆ Smart Operation Room
- ◆ Multimedia interaction
- ◆ Accompany robot
- ◆ Logistics Management

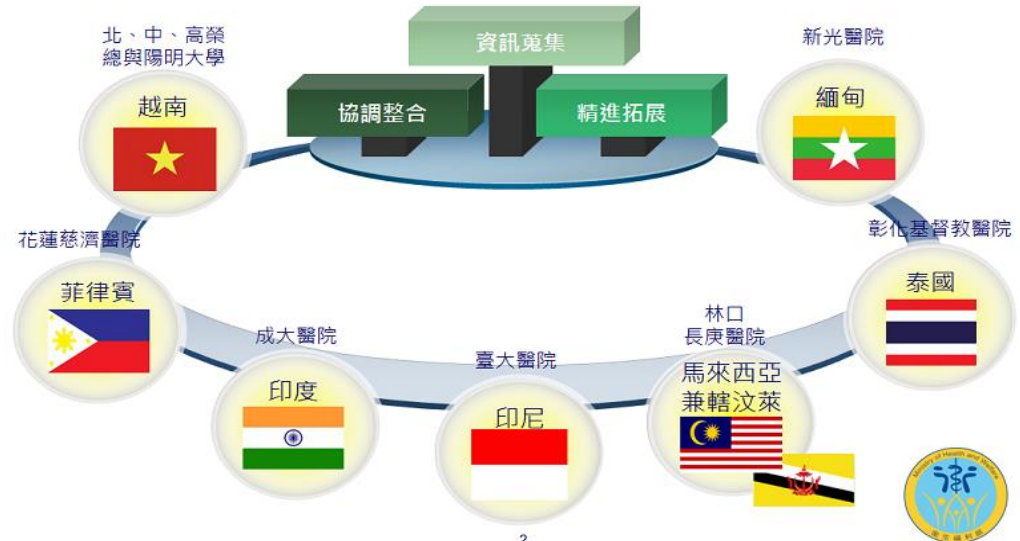


- ❑ Taiwan has become the most important exporting Smart Hospital Solution country in Asia.
- ❑ Offer Total solutions to assist Asia countries to build smart hospitals or improve hospital management effectiveness.

- Thailand (彰基)
- Malaysia (長庚+中國附醫)
- India (成大)
- Vietnam (榮總+高醫)
- Indonesia (台大+亞東)
- Philippine (慈濟)
- Myanmar (新光)



透過委託具醫學中心量能之機構，在當地執行一國一中心計畫。





《主責新南向政策醫衛產業供應鏈工作小組》

醫衛產業合作搭橋



台灣利基醫衛產業鏈

數位醫療

企業

產品

- ✓ 遠距照護系統
- ✓ IoT設備/維修
- ✓ 穿戴式裝置
- ✓ 健康數據監測分析與管理系統

醫材設備

- ✓ 血液透析器
- ✓ 微型電腦斷層
- ✓ X光/超音波
- ✓ 生理監測設備
- ✓ 膠囊內視鏡

細胞治療

- ✓ CTC檢測系統
- ✓ 細胞療法
- ✓ 基因定序及晶片
- ✓ 蛋白質與基因檢測

精準檢測

- ✓ AI晶片
- ✓ 有機半導體元件
- ✓ 影像顯示元件
- ✓ 體徵訊號量測感應器

Healthcare[®] 2021.12.02-12.05 EXPO · TAIWAN 台灣醫療科技展



Visit the website for more information!

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<https://expo.taiwan-healthcare.org/zh/>

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Please Book your Calendar for 2022!

Branding Taiwan



Thank you for your attention