PATHWAYS: THE HEALTH SYSTEM AND ECONOMIC GROWTH

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The health system

• The principal purpose of a country’s health system is to provide high-quality health care.

• In addition, the health system viewed as an economic sector produces output that contributes directly to economic growth.

• Furthermore, the health system provides a number of additional spill-over benefits that contribute both to economic growth and to health.
Benefits are realized through pathways

Figure 1.

Pathways to economic growth

1. health
   - full-income growth
   - improved labour supply and productivity
   - services
   - goods and capital assets
   - reduced inequality
   - political stability
   - technological change and risk management
   - commerce, trade, and the movement of populations

2. economic output

3. social protection

4. social cohesion

5. innovation and diversification

6. health security

Note: For simplicity feedback loops have been omitted; the pathways are neither linear nor unidirectional.
Source: Lauer et al.20
Health pathway

- The health pathway has two sub-pathways:
  - The “full-income” pathway. Health is an essential part of what people value as individuals. So health is an intrinsic benefit, with intrinsic value.
  - As a further, instrumental value of health, individuals enjoy increased activity. They can do more of everything they want to do.
  - In the labour market, activity is recorded in the national income as increased productivity.
Ill health affects productivity through:

• Losses to the labour force, caused by:
  ➢ Presenteeism (working less effectively)
  ➢ Absenteeism (missing work)
  ➢ Early retirement
  ➢ Disability

• Losses to consumption and investment, caused by:
  ➢ Expenditure on health, including catastrophic and out of pocket expenditures
Economic output pathway

• However, the health sector also produces **direct economic value** through:

  • health employment (hiring staff),
  
  • non-staff expenditures such as purchasing equipment, supplies and services,
  
  • investment in manufactured capital, such as buildings and related facilities,
  
  • development of communications, logistics, and supply networks, and
  
  • investments in human capital (e.g. training and education).
Economic output pathway

• The principal feature of the economic output pathway is that the health system makes the same contribution to economic growth even if no health benefit is derived.

• In Germany, the economic impact of the health sector has been measured to be large (next slide).
Value added effects [EUR bn.]

Induced effects
- 92

Indirect effects
- 86
  - 1.39

Direct effects
- 229 or 10.7%
  - 1.77

Value added effects: 407

1) Model calculations based on the 2007 HIOT domestic production (excluding imports and processing of production)

Source: HETA

© 2013 WifOR | Prof. Dr. Klaus-Dirk Henke | The Economic and Health Dividend of Health Care and Health
Social protection pathway

• The health system offers a number of means of social protection that are external to its defining purpose and which do not directly contribute to economic output but are spill-over effects.

• Health employment in particular means jobs, and all the social protection benefits offered by formal employment arrangements:
  • unemployment insurance,
  • sickness and disability insurance, and
  • retirement (pension) benefits.
Social protection, cont.: Financial risk protection

- Direct insurance against the financial risk of catastrophic health expenditures.

- Explicit concerns cited in the development of major health insurance legislation, such as:
  - Medicare programme (USA)
  - the Affordable Care Act (USA), and
  - the National Health Service in the United Kingdom
Financial risk protection

• The public financing of health services ensures that individuals do not have to bear the entire costs of their health care out of pocket.

• In the case of some health services, the benefits of financial risk protection have been found to outweigh the direct health benefits of the services themselves.
Social cohesion pathway

• More equal societies are more economically productive.

• In the words of a recent IMF report, “inequality … tends to reduce the pace and durability of growth”.

• Political stability is an important pre-condition for economic growth.

• The Arab Spring of 2011 was largely motivated by the desire for decent jobs and economic opportunities.
Innovation pathway

- Health sector development important area for economic diversification in some economies

- A number of countries have promoted high-impact health care systems by developing international networks of patient referral and internationally reputed medical services.

- Increasing demands for health generates innovation in equipment, devices, and drugs.
Diversification pathway

- Health employment tends to be counter-cyclical. Evidence for this is plentiful.

- Furthermore, fiscal policies to cut public spending in the wake of financial shocks have a negative impact on future growth prospects.

- Maintain high-impact public spending on key redistributive, growth-enabling sectors such as education, health, and financial services.
Health security pathway

• The health system provides an important health security function.

• Epidemic surveillance and response depend on well-functioning health systems.

• A recent report from the National Academy of Medicine of the United States commented that “framed as an issue of human security, the current level of investment in countering the threat [of pandemics] … looks inadequate”.
Growth in health and social sector employment throughout the economic downturn

Around 42 million people across 34 countries of the Organisation for Economic Co-Operation and Development (OECD) were unemployed in May 2015, 10 million more than before the financial crisis.
Health employment: Women’s economic participation

Source: Magar et al, WHO, based on ILOSTAT (forthcoming 2016)
Health employment: Source of sustainable jobs (USA)

Figure 1: Cumulative percentage of Health and Non-Health employment, US 07/13

**Economic News Release**

**Table 5. Fastest growing occupations, 2014-24**

(Numbers in thousands)

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<tr>
<td>Total, all occupations</td>
<td>150,539.9</td>
<td>160,328.8</td>
<td>9,788.9</td>
<td>6.5</td>
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<tr>
<td>Wind turbine service technicians</td>
<td>4.4</td>
<td>9.2</td>
<td>4.8</td>
<td>108.0</td>
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<td>Occupational therapy assistants</td>
<td>33.0</td>
<td>47.1</td>
<td>14.1</td>
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<td>Physical therapist assistants</td>
<td>78.7</td>
<td>110.7</td>
<td>31.9</td>
<td>40.6</td>
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<td>Physical therapist aides</td>
<td>50.0</td>
<td>69.5</td>
<td>19.5</td>
<td>39.0</td>
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<tr>
<td>Home health aides</td>
<td>913.5</td>
<td>1,261.9</td>
<td>348.4</td>
<td>38.1</td>
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<td>Commercial divers</td>
<td>4.4</td>
<td>6.0</td>
<td>1.6</td>
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<td>Nurse practitioners</td>
<td>126.9</td>
<td>171.7</td>
<td>44.7</td>
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<td>Physical therapists</td>
<td>210.9</td>
<td>282.7</td>
<td>71.8</td>
<td>34.0</td>
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<td>Statisticians</td>
<td>30.0</td>
<td>40.1</td>
<td>10.1</td>
<td>33.8</td>
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<td>Ambulance drivers and attendants, except emergency medical technicians</td>
<td>19.6</td>
<td>26.1</td>
<td>6.5</td>
<td>33.0</td>
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<tr>
<td>Occupational therapy aides</td>
<td>8.8</td>
<td>11.6</td>
<td>2.7</td>
<td>30.6</td>
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<td>Physician assistants</td>
<td>94.4</td>
<td>123.2</td>
<td>28.7</td>
<td>30.4</td>
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<td>Operations research analysts</td>
<td>91.3</td>
<td>118.9</td>
<td>27.6</td>
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<td>Personal financial advisors</td>
<td>249.4</td>
<td>323.2</td>
<td>73.9</td>
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<td>Cartographers and photogrammetrists</td>
<td>12.3</td>
<td>15.9</td>
<td>3.6</td>
<td>29.3</td>
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Source: U.S. Bureau of Labor Statistics

U.S Bureau of Labour Statistics:  
http://www.bls.gov/emp/ep_table_103.htm
Health employment: Source of future jobs (worldwide)

Source: Human Development Report 2015: Work for Human Development
Health employment and productivity: new evidence

**Health as a cost disease and a drag on the economy**

Baumol (1967)

- Growth in health sector employment without increase in productivity could constrain economic growth (data from USA)

Hartwig (2008 and 2011)

- Confirmation of Baumol hypothesis (data from OECD countries)

**Health as a multiplier for inclusive economic growth**

Arcand et al., World Bank (In press, 2016)

- larger dataset; data from low-, middle- and high-income countries
- establishes positive and significant growth inducing effect of health sector employment; multiplier effect on other economic sectors
- magnitude of effect greater than in other recognized growth sectors