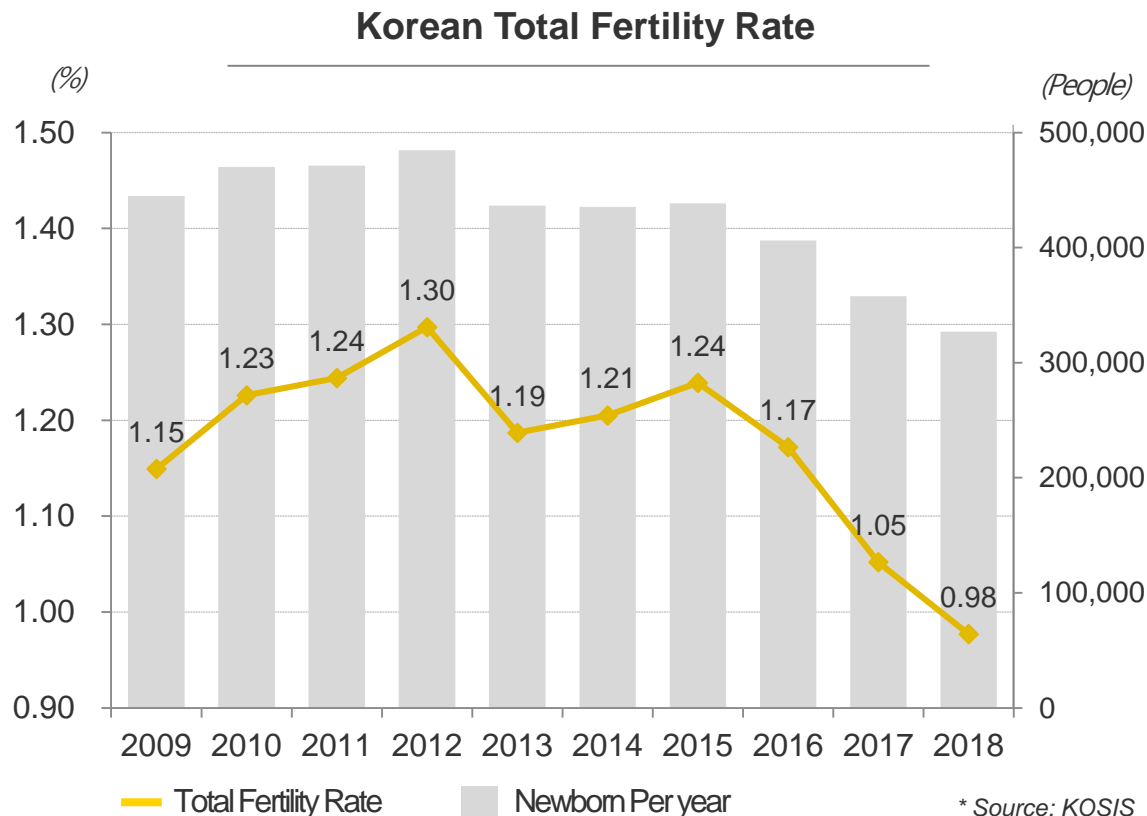


Health Care Industry

2.1. General Indicators of Health status

(1) Total Fertility Rate

- Korea's Total Fertility rate in 2018 was 0.98.
- The government has encouraged to increase the birthrate with various policies.



The ranking of 10 most active countries among OECD members in clinical trials (2017)

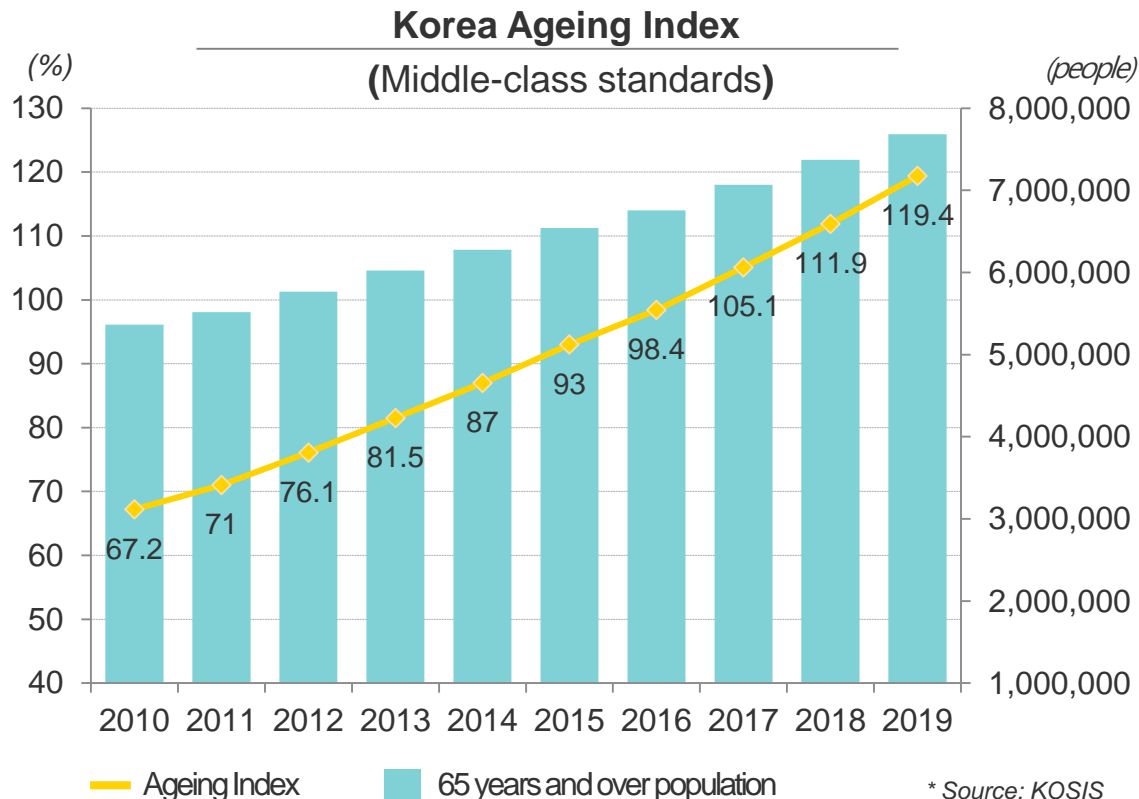
| Rank | Country | % |
|-----------|--------------|------------|
| 1 | France | 1.9 |
| 2 | US | 1.8 |
| 2 | UK | 1.8 |
| 4 | China | 1.6 |
| 4 | Germany | 1.6 |
| 6 | Canada | 1.5 |
| 7 | Japan | 1.4 |
| 8 | Italy | 1.3 |
| 8 | Spain | 1.3 |
| 10 | Korea | 1.1 |

* Source: World Bank

2.1. General Indicators of Health status

(2) Ageing Index

- The ageing index for 2019 was 119.4%.
- Ageing populations can drive economic growth as it becomes potential customers and investment opportunities to the pharmaceutical industry.



The ranking of 10 most active countries among OECD members in clinical trials (2018)

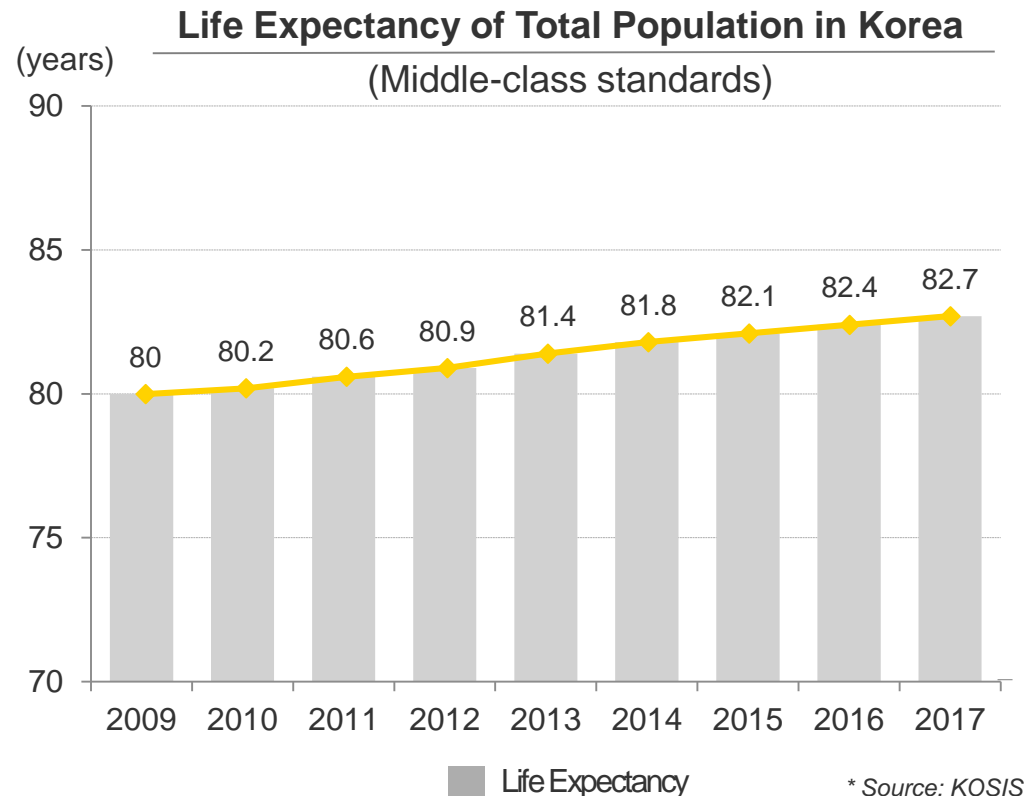
| Rank | Country | % of population ages 65 and above |
|----------|--------------|-----------------------------------|
| 1 | Japan | 27 |
| 2 | Italy | 23 |
| 3 | Germany | 22 |
| 4 | France | 20 |
| 4 | Spain | 20 |
| 6 | UK | 19 |
| 7 | Canada | 17 |
| 8 | US | 16 |
| 9 | Korea | 14 |
| 10 | China | 11 |

* Source: World Bank

2.1. General Indicators of Health status

(3) Life Expectancy

- Life expectancy in Korea was 82.7 years in 2017.
- Korea's Life expectancy continues to rise due to the advance in medicine and medical technology.



The ranking of 10 most active countries among OECD members in clinical trials (2017)

| Rank | Country | Years |
|----------|--------------|-----------|
| 1 | Japan | 84 |
| 2 | Italy | 83 |
| 2 | Spain | 83 |
| 2 | France | 83 |
| 2 | Korea | 83 |
| 6 | Canada | 82 |
| 7 | UK | 81 |
| 7 | Germany | 81 |
| 9 | US | 79 |
| 10 | China | 76 |

* Source: World Bank

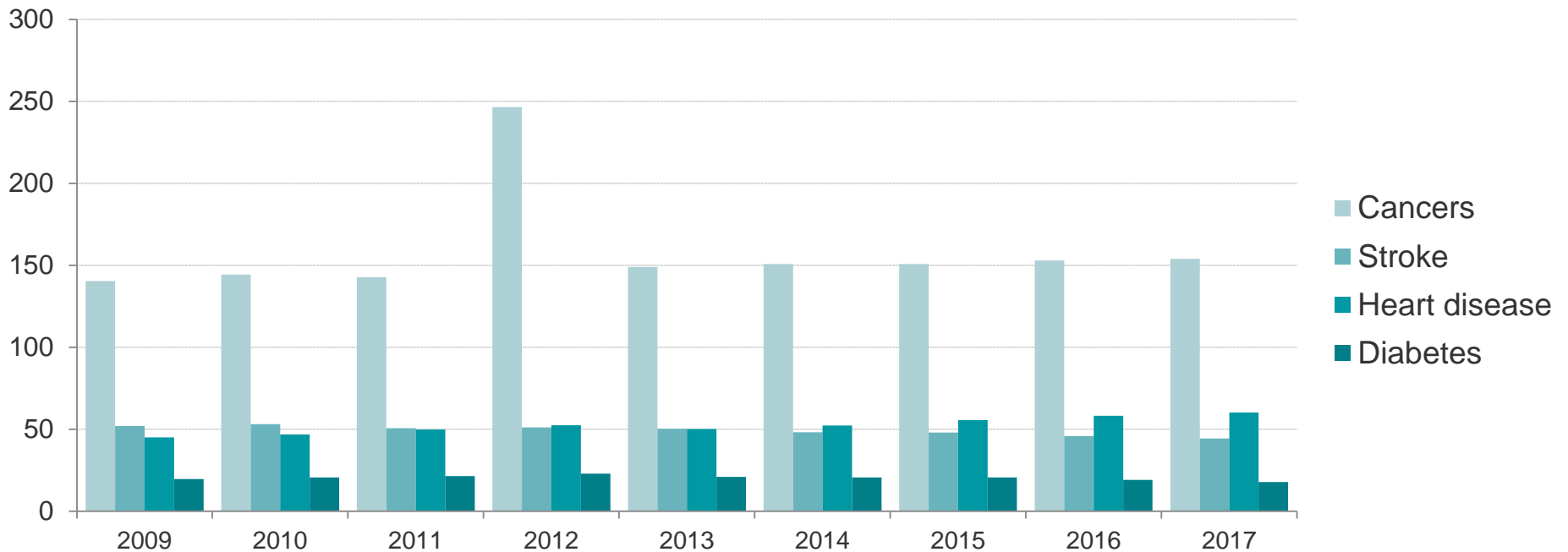
2.1. General Indicators of Health status

(4) Causes of Death

- Cancer is the most common cause of all deaths in Korea.
- While the overall cancer incidence in Korea has increased rapidly, age-standardized cancer mortality rates have declined since 2002 and survival has improved.

Leading Causes of Death

(per 0.1 million population)



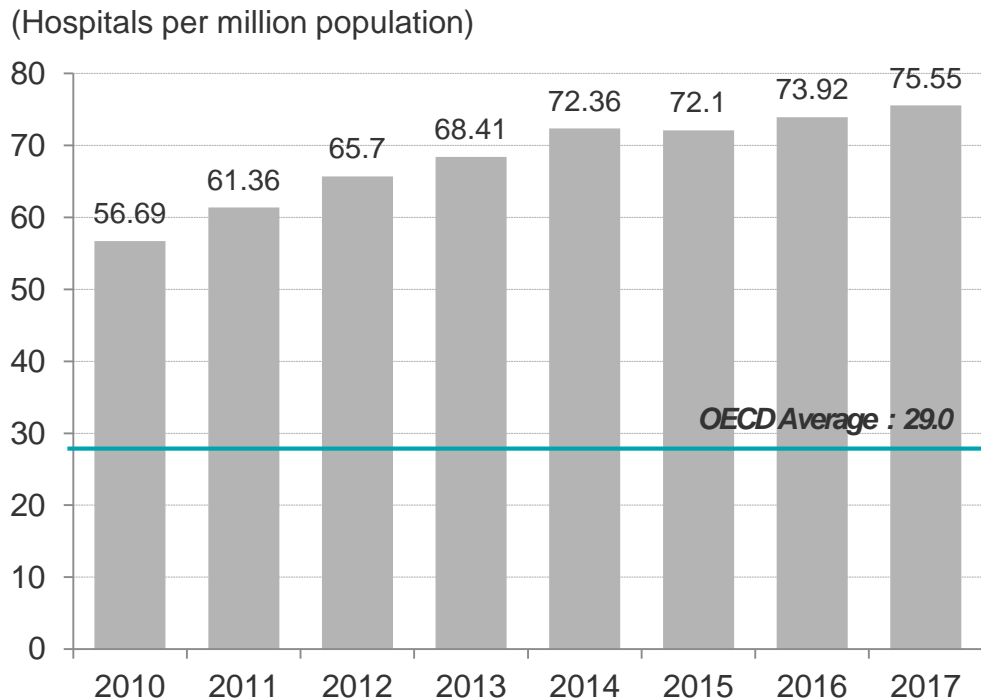
* Source: Statistics Korea

2.2. Health Care Resources

(1) Hospitals per Million population

- With 75 hospitals per million population, Korea was the first among OECD members.
- Korea provides a large supply of health and hospital services at comparatively low price.

Hospitals per Million population in Korea



The ranking of 10 most active countries among OECD members in clinical trials (2017 or nearest year)

| Rank | Country | Number |
|----------|--------------|--------------|
| 1 | Korea | 75.55 |
| 2 | Japan | 66.39 |
| 3 | France | 45.55 |
| 4 | Germany | 37.31 |
| 5 | UK | 29.06 |
| 6 | Canada | 19.67 |
| 7 | Italy | 17.56 |
| 8 | US | 17.33 |
| 9 | Spain | 16.68 |
| - | China | - |

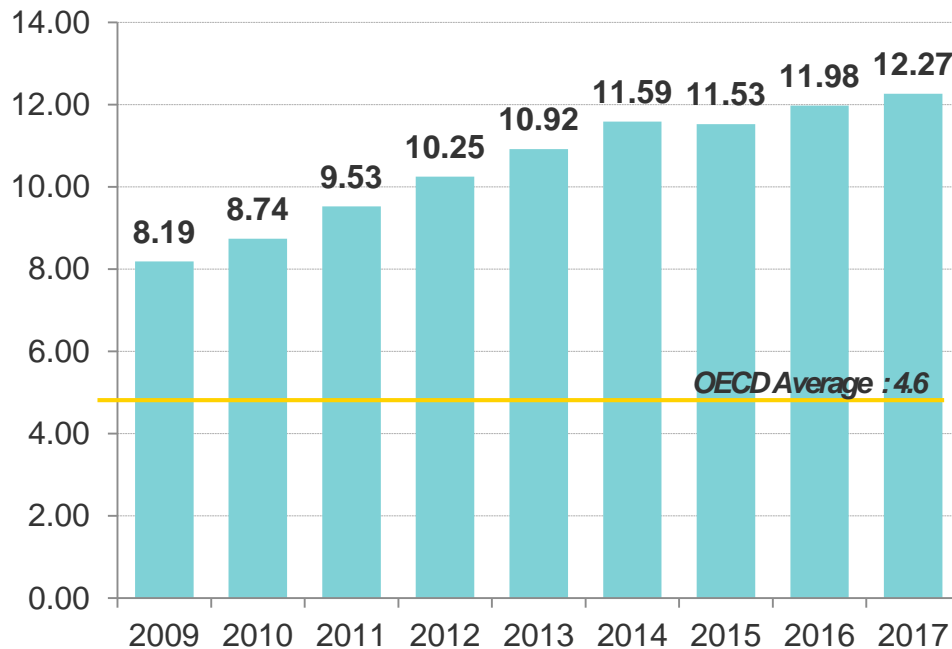
* Source: OECD Health Statistics 2019

2.2. Health Care Resources

(2) Hospital beds per 1,000 population

- Korea had 12.27 hospital beds per 1,000 population in 2017.
- Korea has the second highest in the supply of hospitals and high-technology medical equipment amongst OECD countries.

Hospital beds per 1,000 population in Korea



The ranking of 10 most active countries among OECD members in clinical trials (2017 or nearest year)

| Rank | Country | Number |
|------|--------------|--------------|
| 1 | Japan | 13.05 |
| 2 | Korea | 12.27 |
| 3 | Germany | 8 |
| 4 | France | 5.98 |
| 5 | China | 4.34 |
| 6 | Italy | 3.18 |
| 7 | Spain | 2.97 |
| 8 | US | 2.8 |
| 9 | UK | 2.54 |
| 10 | Canada | 2.52 |

* Source: OECD Health Statistics 2019

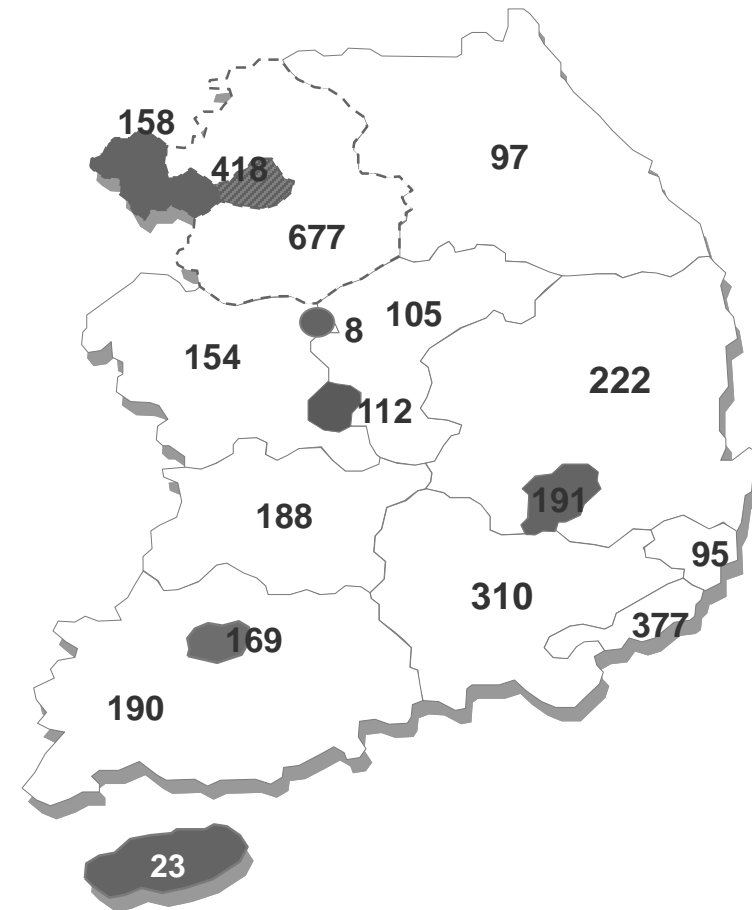
2.2. Health Care Resources

(3) Korea's Medical Institutions

▶ Regional Medical Institutions

| Region | General Hospital | Hospital | Intermediate Care Hospital | Army Hospital | Total |
|--------------|------------------|--------------|----------------------------|---------------|--------------|
| Seoul | 58 | 233 | 126 | 1 | 418 |
| Busan | 29 | 146 | 201 | 1 | 377 |
| Daegu | 16 | 110 | 65 | - | 191 |
| Incheon | 19 | 63 | 76 | - | 158 |
| Gwangju | 22 | 79 | 68 | - | 169 |
| Daejeon | 10 | 48 | 53 | 1 | 112 |
| Ulsan | 8 | 44 | 43 | - | 95 |
| Gyeonggi | 61 | 276 | 334 | 6 | 677 |
| Gangwon | 15 | 45 | 33 | 4 | 97 |
| Chungbuk | 13 | 39 | 52 | 1 | 105 |
| Chungnam | 13 | 46 | 93 | 2 | 154 |
| Jeonbuk | 13 | 86 | 89 | - | 188 |
| Jeonnam | 26 | 77 | 86 | 1 | 190 |
| Gyeongbuk | 19 | 82 | 119 | 2 | 222 |
| Gyeongnam | 25 | 144 | 139 | 2 | 310 |
| Jeju | 6 | 7 | 10 | - | 23 |
| Sejong | - | 1 | 7 | - | 8 |
| Total | 353 | 1,526 | 1,594 | 21 | 3,494 |

[Regional Medical Institutions]



* Source: Korean Hospital Association

2.2. Health Care Resources

(4) Korea's Medical Institutions

▶ Medical Institutions by departments(1/2)

| Medical departments | General Hospital | Hospital | Intermediate Care Hospital | Army Hospital | Total |
|---------------------------|------------------|----------|----------------------------|---------------|-------|
| Internal Medicine | 312 | 606 | 451 | 19 | 1,388 |
| Pediatrics | 283 | 340 | 93 | 3 | 719 |
| Neurology | 215 | 160 | 285 | 11 | 671 |
| Psychiatry | 184 | 142 | 118 | 15 | 459 |
| Dermatologist | 139 | 124 | 107 | 18 | 388 |
| Surgery | 306 | 366 | 194 | 16 | 882 |
| Thoracic Surgery | 162 | 36 | 11 | 10 | 219 |
| Orthopedics | 308 | 438 | 192 | 19 | 957 |
| Neurosurgery | 294 | 291 | 144 | 18 | 747 |
| Plastic Surgery | 145 | 64 | 9 | 8 | 226 |
| Obstetrics and gynecology | 259 | 168 | 43 | 4 | 474 |
| Ophthalmology | 161 | 28 | 8 | 19 | 216 |
| Otorhinolaryngology | 211 | 94 | 61 | 19 | 385 |
| Urology | 226 | 116 | 87 | 18 | 447 |

* Source: Korean Hospital Association

2.2. Health Care Resources

(4) Korea's Medical Institutions

▶ Medical Institutions by departments (2/2)

| Medical departments | General Hospital | Hospital | Intermediate Care Hospital | Army Hospital | Total |
|--|------------------|--------------|----------------------------|---------------|---------------|
| Tuberculosis | 14 | 6 | 1 | - | 21 |
| Rehabilitation | 169 | 185 | 256 | 6 | 616 |
| Anesthesiology | 309 | 381 | 58 | 19 | 767 |
| Radiology | 310 | 364 | 70 | 18 | 762 |
| Radiation Oncology | 71 | 3 | - | - | 74 |
| Diagnosis | 270 | 94 | 20 | 12 | 396 |
| Pathology | 182 | 41 | 13 | 6 | 242 |
| Family Medicine | 205 | 219 | 294 | 11 | 729 |
| Nuclear Medicine | 71 | 1 | 1 | 3 | 76 |
| Emergency Medicine | 177 | 28 | 5 | 5 | 215 |
| Environmental Medicine | 79 | 15 | 3 | - | 97 |
| Dentist | 216 | 16 | 4 | 4 | 240 |
| Complementary and Alternative Medicine | 22 | 6 | 2 | 1 | 31 |
| Total | 5,300 | 4,332 | 2,530 | 282 | 12,444 |

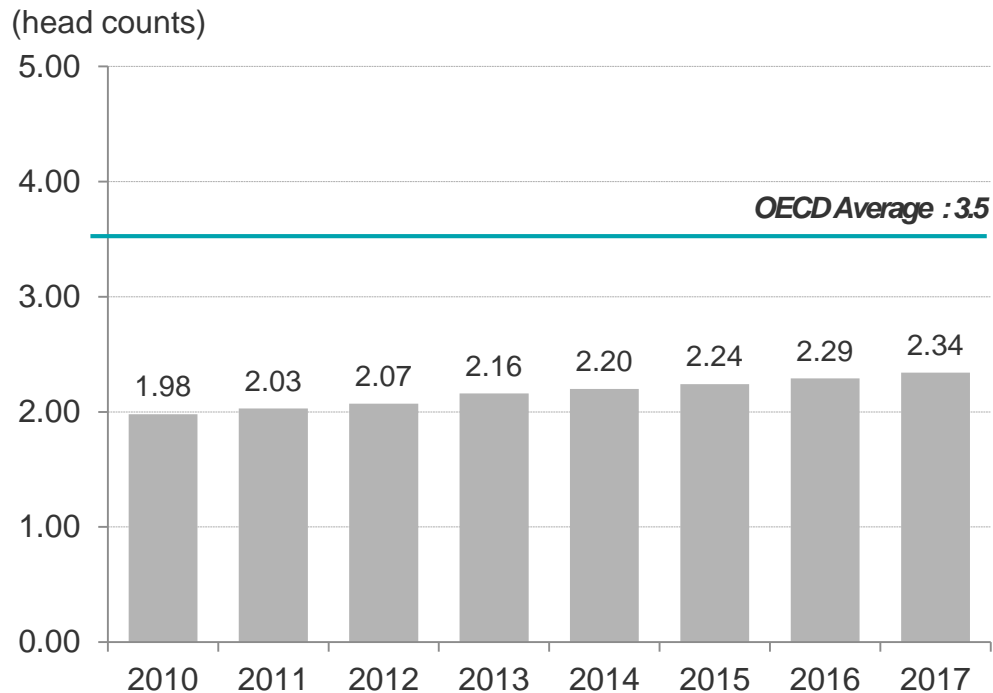
* Source: Korean Hospital Association

2.2. Health Care Resources

(5) The number of physicians (per 1,000 population)

- In 2017, the official data shows that Korea has 2.3 physicians per 1,000 population.
- The number of physicians is gradually increasing due to continuous government efforts to establish medical schools and to improve the quality of medical practitioners.

Physicians Density per 1,000 population



The ranking of 10 most active countries among OECD members in clinical trials (2017 or nearest year)

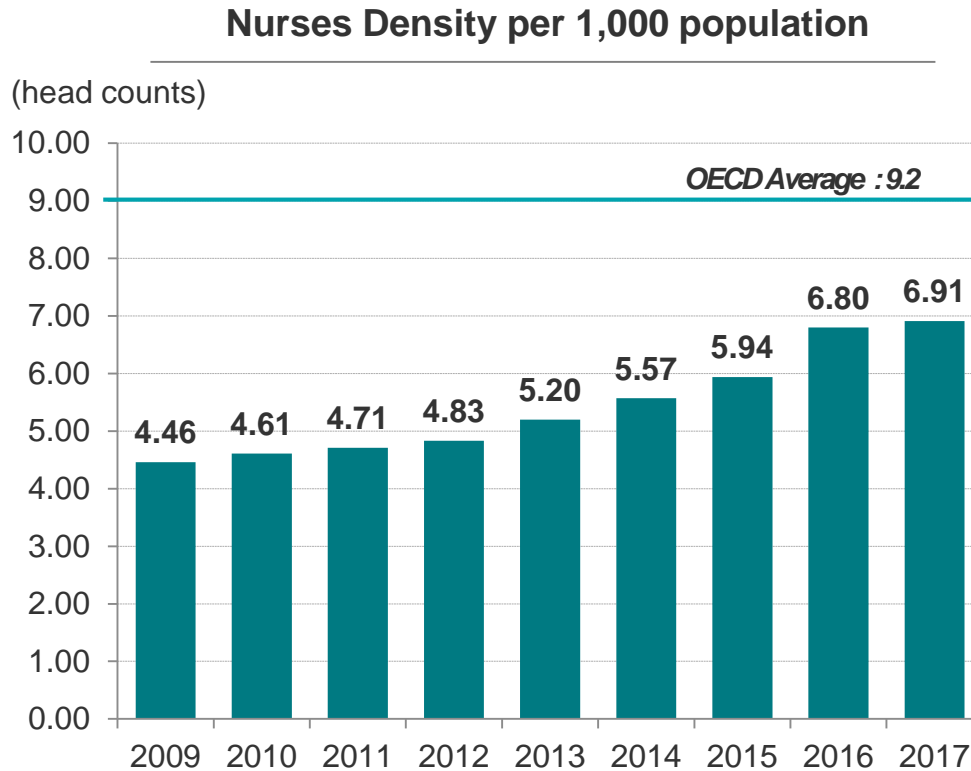
| Rank | Country | Number |
|----------|--------------|-------------|
| 1 | Germany | 4.25 |
| 2 | Italy | 3.99 |
| 3 | Spain | 3.88 |
| 4 | France | 3.16 |
| 5 | UK | 2.81 |
| 6 | Canada | 2.65 |
| 7 | US | 2.61 |
| 8 | Japan | 2.43 |
| 9 | Korea | 2.34 |
| 10 | China | 2.01 |

* Source: OECD Health Statistics 2019

2.2. Health Care Resources

(6) The number of nurses (per 1,000 population)

- In 2017, the official data shows that Korea has 6.9 nurses per 1,000 population.



The ranking of 10 most active countries among OECD members in clinical trials (2017 or nearest year)

| Rank | Country | Number |
|------|--------------|-------------|
| 1 | Germany | 12.93 |
| 2 | Japan | 11.34 |
| 3 | Canada | 9.96 |
| 4 | UK | 7.86 |
| 5 | Korea | 6.91 |
| 6 | Italy | 5.8 |
| 7 | Spain | 5.51 |
| 8 | China | 2.7 |
| - | France | - |
| - | US | - |

* Source: OECD Health Statistics 2019

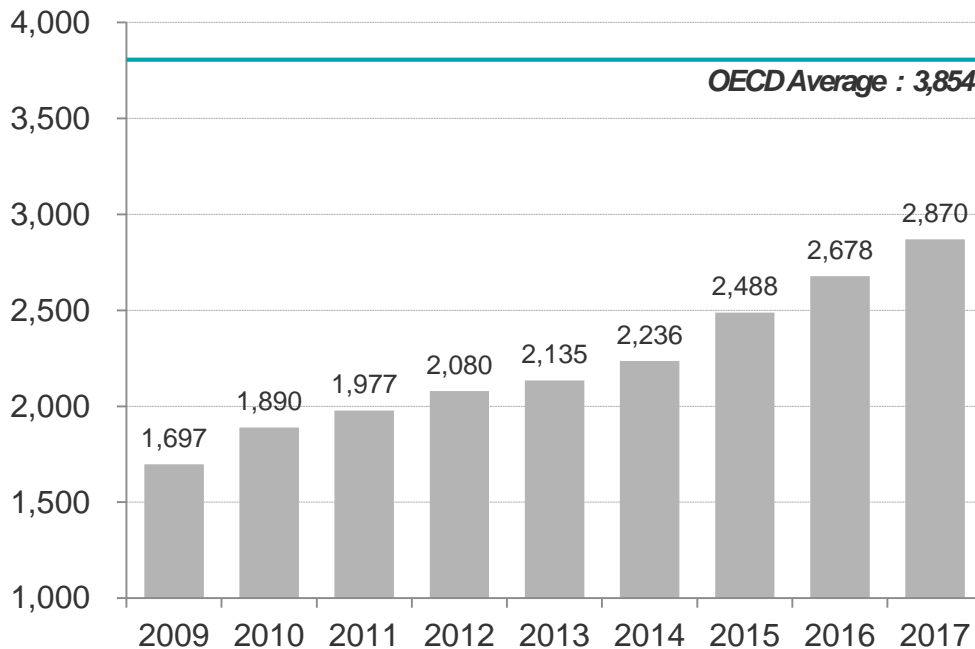
2.3. Health Care Expenditure

(1) Trends of Domestic Health Expenditure Per Capita

- With a rapid pace of growth, total health expenditure per capita in Korea increased to \$2,870 in 2017.
- Health spending growth has continued to be strong in Korea in recent years mainly with introduction and expansion of long-term care insurance in Korea.

Health Expenditure Per Capita

(/capita, US\$ purchasing power parity)



The ranking of 10 most active countries among OECD members in clinical trials (2017)

| Rank | Country | /capita, US\$ purchasing power parity |
|------|--------------|---------------------------------------|
| 1 | US | 10,207 |
| 2 | Germany | 5,848 |
| 3 | France | 4,931 |
| 4 | Canada | 4,812 |
| 5 | Japan | 4,630 |
| 6 | UK | 3,943 |
| 7 | Italy | 3,376 |
| 8 | Spain | 3,224 |
| 9 | Korea | 2,870 |
| - | China | - |

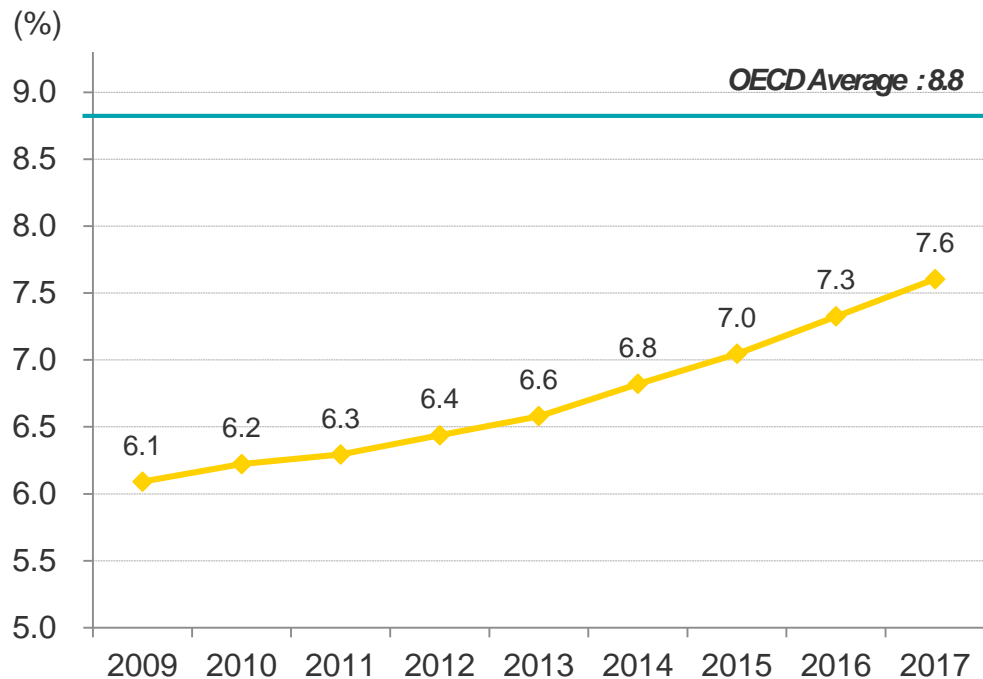
* Source: OECD Health Statistics 2019

2.3. Health Care Expenditure

(2) Trends of Domestic Health Expenditures

- Domestic health care expenditure accounted for 7.6% of GDP in Korea in 2017.

Domestic Health Expenditures Trends



The ranking of 10 most active countries among OECD members in clinical trials (2017)

| Rank | Country | % gross domestic product |
|----------|--------------|--------------------------|
| 1 | US | 17.1 |
| 2 | France | 11.3 |
| 3 | Germany | 11.2 |
| 4 | Japan | 10.9 |
| 5 | Canada | 10.7 |
| 6 | UK | 9.6 |
| 7 | Spain | 8.9 |
| 8 | Italy | 8.8 |
| 9 | Korea | 7.6 |
| - | China | - |

* Source: OECD Health Statistics 2019