WEALTH OF HEALTH:
UNIVERSAL HEALTH COVERAGE

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Presentation Outline

- UN Sustainable Development Goal 3
- Exploratory Data Analysis
- Proposed Solution
- Summary
UN SDG 3: Good Health and Well-Being
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To ensure healthy lives and promote well-being for all at all ages in order to build prosperous societies.

Target 3.8: Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.
Universal health coverage is a human right.

Dr Tedros, WHO Director General
Why Universal Health Coverage?

Regional Trend:

Several ASEAN countries face a relatively low HAQ index

E.g. Indonesia, Cambodia, and Myanmar

Source: R. Barber et al. The Lancet 2017
**Healthcare Facilities Analysis**

**Insights:**
- Vietnam, Brunei Darussalam and Singapore have the largest percentages of hospital beds.
- In contrast, Thailand, Philippines and Brunei Darussalam have the highest hospital densities instead.

**Problems:**
1. Hospital Beds do not equate to Hospital Density
2. Large disparity in Hospital Density across ASEAN Nations

*Data Source: WHO Global Health Observatory*
Out-of-pocket expenditure (OOP) per capita in US$ by Country in 2015

Insights:
- Patients in Malaysia and Singapore spend substantially more
- More expenditure does not equate to better healthcare accessibility
- Possible result from high costs, resulting in expenditure increase and a reduction in healthcare access

Problem:
- OOP Healthcare expenditure needs to be reduced

Data Source: WHO Global Health Observatory
**Healthcare Professionals Analysis**

**Physicians Density (per 1000 population) by each ASEAN Country**

- Singapore: 20.88
- Brunei Darussalam: 13.75
- Viet Nam: 11.76
- Malaysia: 4.76
- Myanmar: 4.13
- Thailand: 4.07
- Philippines: 2.79
- Cambodia: 1.70
- Lao People's Democratic Republic: 1.64
- Indonesia: 0.68

**Insights for Physician density:**
- 7/10 countries fall below the overall average of 6.62 physicians per 1000 people
- Only 3 countries have physician densities well above average: Singapore, Brunei Darussalam and Vietnam

**Nursing and Midwifery Personnel Density (per 1000 population) by Country**

- Average: 65.13
- Singapore: 59.21
- Thailand: 17.90
- Philippines: 13.76
- Malaysia: 12.72
- Viet Nam: 10.81
- Cambodia: 8.26
- Myanmar: 6.65
- Lao People's Democratic Republic: 5.99
- Indonesia: 4.69

**Insights for Nursing and Midwifery density:**
- 8/10 countries fall below the overall average
- Urgent needs to account for smaller pools of health professionals among these countries

Data Source: WHO Global Health Observatory
Proposed Solution: Digital Healthcare Integration

1) ASEAN as a region
   - Promote digitalization of healthcare
   - ASEAN countries can learn health system models from each other

2) Governments and policy makers
   - Telehealth
   - Artificial Intelligence

Source: bankmycell.com
Proposed Solution: Digital Healthcare Integration

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Source: bankmycell.com
1) ASEAN as a region

- Promote digitalization of healthcare among both public and private health sectors
- Engage in dialogues to exchange successful healthcare models among ASEAN members
2) Governments and Policy Makers

a) Implement Telehealth

Mobile health (mHealth) can be used for
- Long-distance doctor consultations
- Tracking immunization records in rural areas

Benefits:
1. Sustainability
2. Affordability

67% of the global population owns a mobile phone

Source: Solutionbuilt.com
2) Governments and Policy Makers

b) Artificial Intelligence

- Healthcare professionals can be trained in the usage of AI to automate routine tasks
- Quick detection, tracking and prediction of infection spread in rural areas
- **Benefits**: Quick diagnosis, personalized medicine, and reduced human error
Towards a Wealth of Health!

Past Problems
- Lacking Universal Health Coverage
- Limited Healthcare Access

Current Analysis
- Hospital Density Disparity
- Low Healthcare Worker Density
- High OOP Expenditure

Future Solutions
- Digital Healthcare
- Telehealth
- Artificial Intelligence
End of Presentation

THANK YOU

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