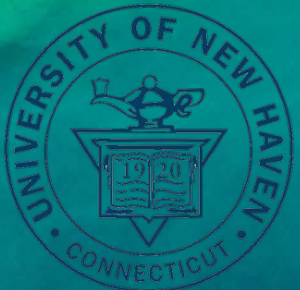


# HEALTHCARE IN JAMAICA

Presentation by: Danielle Hudson and Chris  
Argentino



# Team Members

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**Mentor: James Marinucci**  
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Reagan Institute of Emergency  
Medicine, and as Director of both  
International Special Projects and  
Emergency Medical Education  
Training Programs.

# About Jamaica

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- **Jamaica is the largest English-speaking and third largest island in the Caribbean with a land area of 11,424 km<sup>2</sup>.**
- **It is located south of Cuba and west of Haiti.**
- **Jamaica is divided into 3 counties and 14 parishes.**
- **Jamaica has three landforms: the eastern mountains, central valleys and plateaus and a narrow discontinuous plain where agriculture is concentrated.**



# THE PAST

# OUTLAY OF HEALTH FACILITIES IN 1962

```
graph LR; A((The British left a few hospitals to cater to 1.7 million people)) --> B((Training opportunities for doctors and nurses were limited)); B --> C((Majority of the population depended on herbal medicine and traditional healers)); C --> D((Infectious diseases such as malaria, dengue fever and pneumonia plagued the populace.));
```

The British left a few hospitals to cater to 1.7 million people

Training opportunities for doctors and nurses were limited

Majority of the population depended on herbal medicine and traditional healers

Infectious diseases such as malaria, dengue fever and pneumonia plagued the populace.

# GENERAL ORGANIZATION OF HEALTH SYSTEM ACCORDING TO

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**Public sector had 23 hospitals and 350 health care clinics dispersed around the country**

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**There were 8 private hospitals**

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**The public bed capacity was 4500**

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**The private bed capacity was 300**

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**2000 physicians were registered to practice in Jamaica and about 500 were employed by the public sector**

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**Based on the information above, it is clear that there is a dramatically low amount of health care resources for the population.**



# DEMOGRAPHICS IN 1999

Life expectancy at birth of the population was 75.3 years. Life expectancy by gender is 73.3 years for males and 77.3 for females

Population growth in 1999 was 0.7%

The dependency ratio was 63.8 dependents for every 100 persons in 1998.

The rate of growth has been slowly decreasing over the latter half of the decade.

Jamaica experienced a net loss in total migration.

# JAMAICA'S DEMOGRAPHICS IN 1993-1999

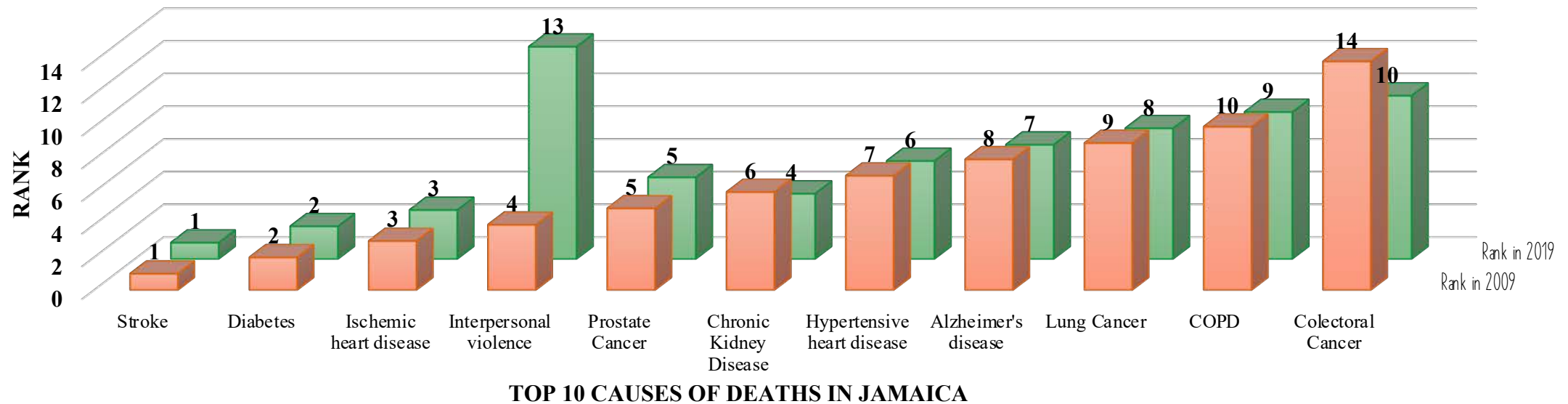
	YEAR						
	1993	1994	1995	1996	1997	1998	1999
CRUDE BIRTH RATE (per 1000)	25	ND	22.5	22.8	23.4	22.2	22.2
TOTAL FERTILITY RATE (per 1000)	3	ND	ND	ND	2.7	2.8	2.8
CRUDE DEATH RATE (per 1000)	3	ND	6.2	5.9	5.9	7.1	6.7
MATERNAL MORTALITY RATE (per 100,000)	ND	ND	ND	ND	110	110	110
INFANT MORTALITY RATE (per 1000)	25.5	ND	ND	24.5	24.5	24.5	24.5

Forecasted data based on PAHO report (2001)

**Crude birth and death rates as well as total fertility rates were considered low, maternal mortality was moderate and the infant mortality rate was high**

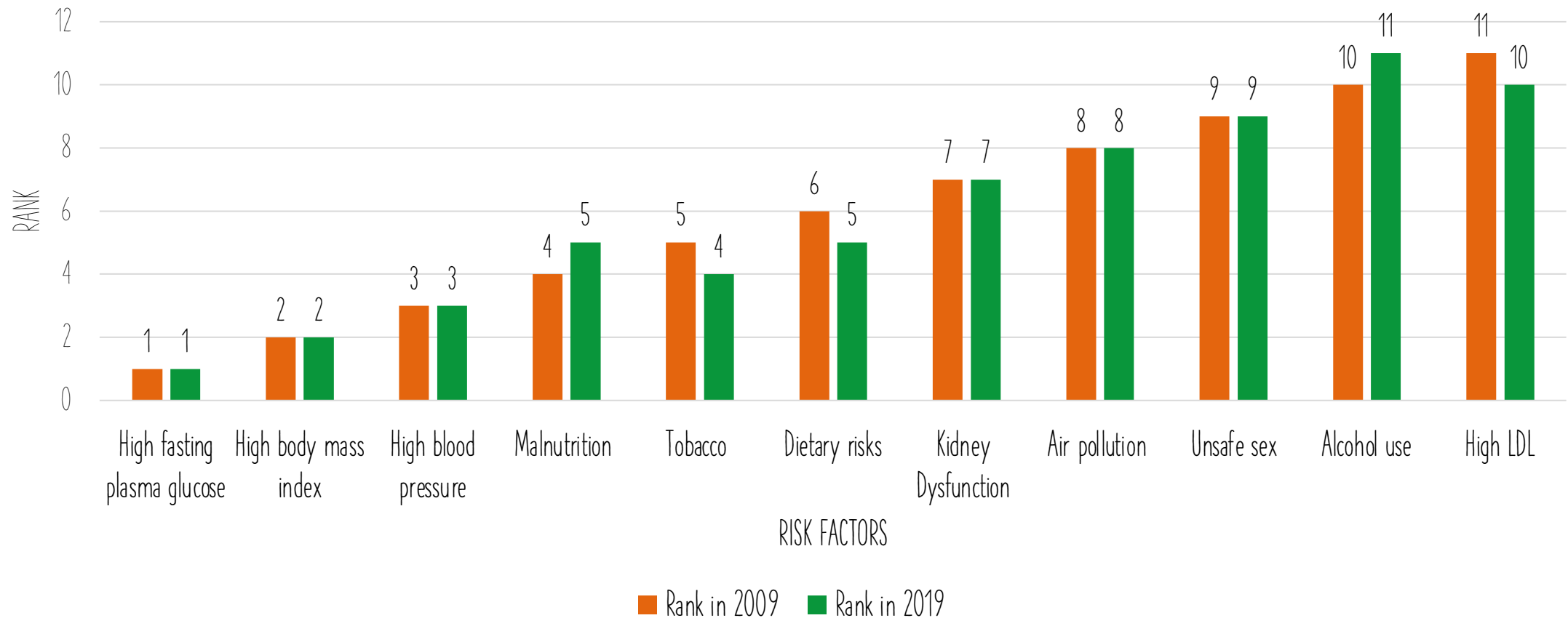


# TOP 10 CAUSES OF DEATH IN JAMAICA IN 2009 AND 2019



Rank in 2009 Rank in 2019

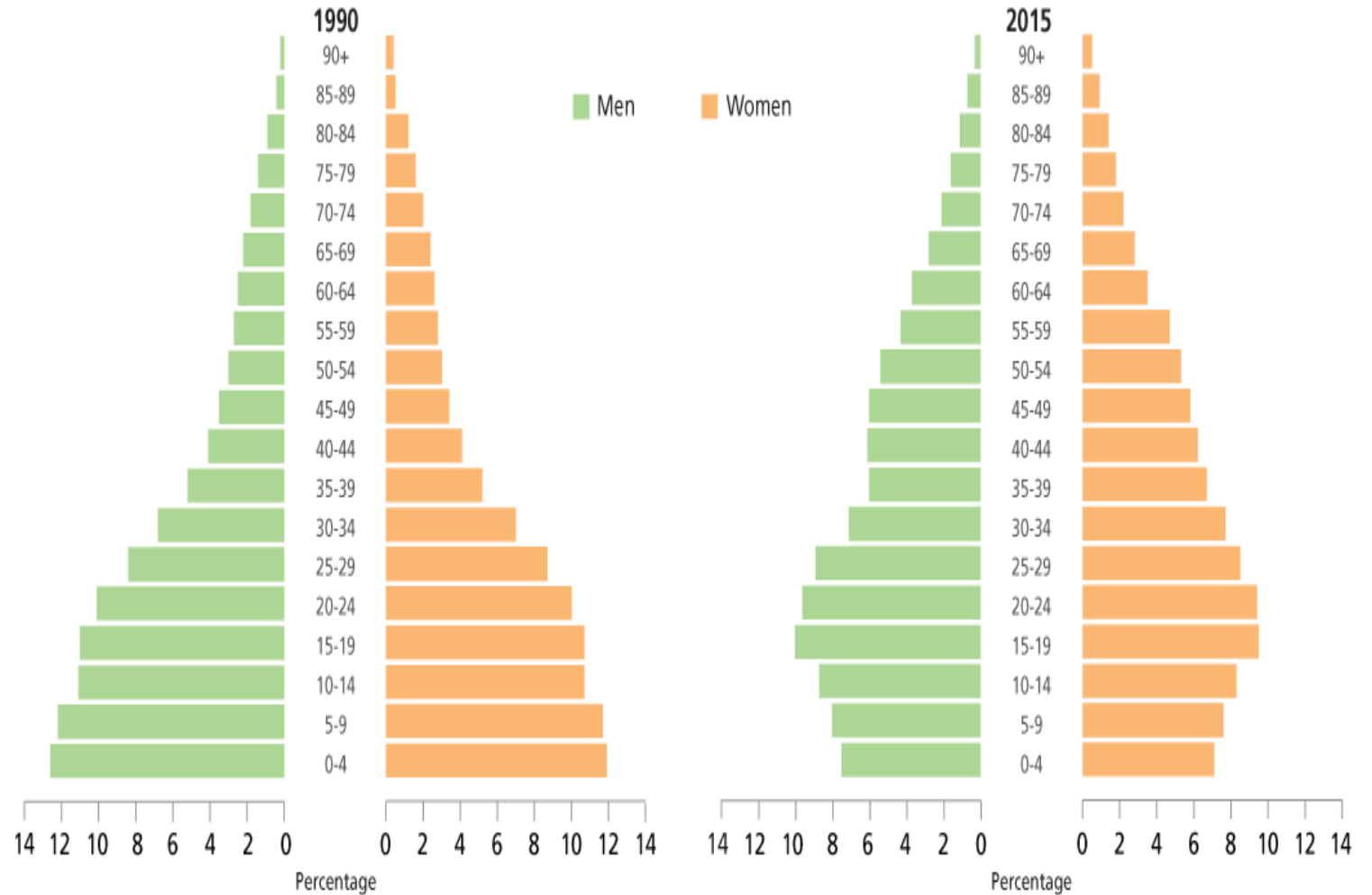
# TOP 10 RISKS CONTRIBUTING TO DEATH AND DISABILITY IN 2009-2019



Forecasted Data based on data from the Global Health Metrics, October 17, 2020

**Note: The smaller the graph icons, the higher the risk**

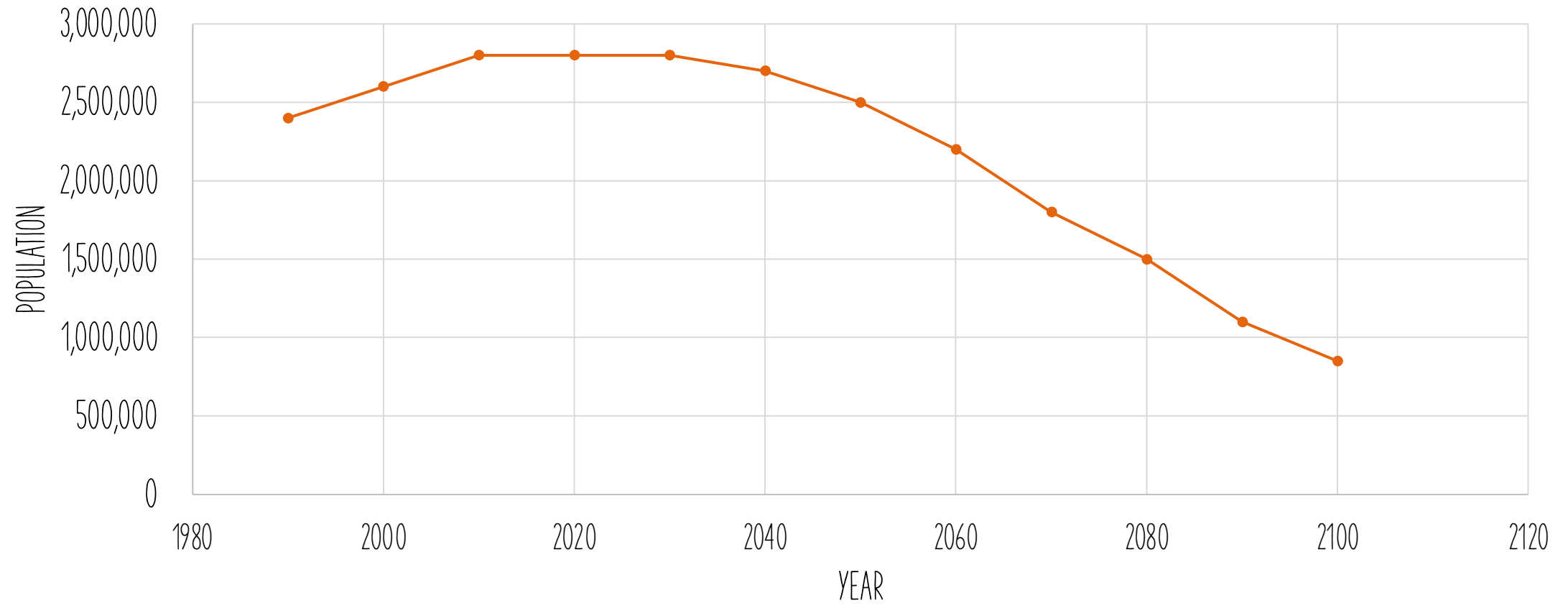
# JAMAICA'S POPULATION IN 1990 VS 2015



Forecasted Data based on data from the Global Health Metrics, October 17, 2020

**The population changed between 1990-2015 as it started to become an aging population rather than a growing one.**

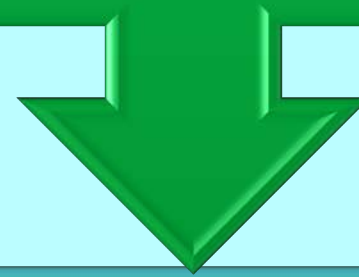
# FORECASTED POPULATION, 1990-2100



Forecasted data based on Global Burden of Disease 2017 results

# PUBLIC AND PRIVATE INSTITUTIONS

**The Ministry of Health is the primary public organization involved in the health sector. A law was passed in 1998 to authorize the establishment of four regional health authorities to deliver health services in the 14 parishes.**



**Little information was available about the private sector. It was loosely regulated, and they handled about 5% of the total hospital services.**

# SYSTEM RESOURCES

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**The Ministry of Health largely drives the production and distribution of the sector's human resources. Within the context of public sector reform and health sector reform, the Ministry of Education has begun to play a major role in the training of human resources for health. Drugs and other health products (supplies and equipment) are largely imported, although there are a small number of manufacturers of medical supplies in the country.**

# HUMAN RESOURCES IN THE PUBLIC HEALTH SECTOR IN 1993-1999

TYPE OF RESOURCE	YEAR						
	1993	1994	1995	1996	1997	1998	1999
RATIO OF PHYSICIANS PER 10,000 POP.	ND	ND	ND	1.7	1.9	2.4	2.4
RATIO OF NURSES PER 10,000 POP.	ND	ND	ND	4.2	4.8	5.8	5.8
RATIO OF DENTISTS PER 10,000 POP	ND	ND	ND	0.2	0.2	0.2	0.2
RATIO OF MID-LEVEL LAB TECHS PER 10,000 POP	ND	ND	ND	0.2	0.3	0.4	0.4
RATIO OF PHARMACISTS PER 10,000 POP	ND	ND	ND	0.2	0.2	0.2	0.2
RATIO OF RADIOLOGISTS PER 10,000 POP.	ND	ND	ND	0.2	0.2	0.2	0.2

**This indicates that in the 20<sup>th</sup> century there was significantly low number of human resources in the public health sector for approximately 1.7 million people.**

# HUMAN RESOURCES IN PUBLIC INSTITUTIONS IN THE 20<sup>TH</sup> CENTURY

INSTITUTIONS	TYPE OF RESOURCE					
	PHYSICIANS	NURSES	NURSING AUXILIARIES	OTHER HEALTH CARE WORKERS	ADMINISTRATIVE PERSONNEL	GENERAL SERVICES
KINGSTON PUBLIC HOSPITAL	124	194	49	80	100	300
CORNWALL PUBLIC HOSPITAL	45	100	50	50	75	200
SPANISH TOWN PUBLIC HOSPIYAL	27	60	40	30	50	100
TOTAL	196	354	139	160	225	600

**This indicates that in the 20<sup>th</sup> century there was significantly low number of human resources in the public health sector for approximately 1.7 million people.**

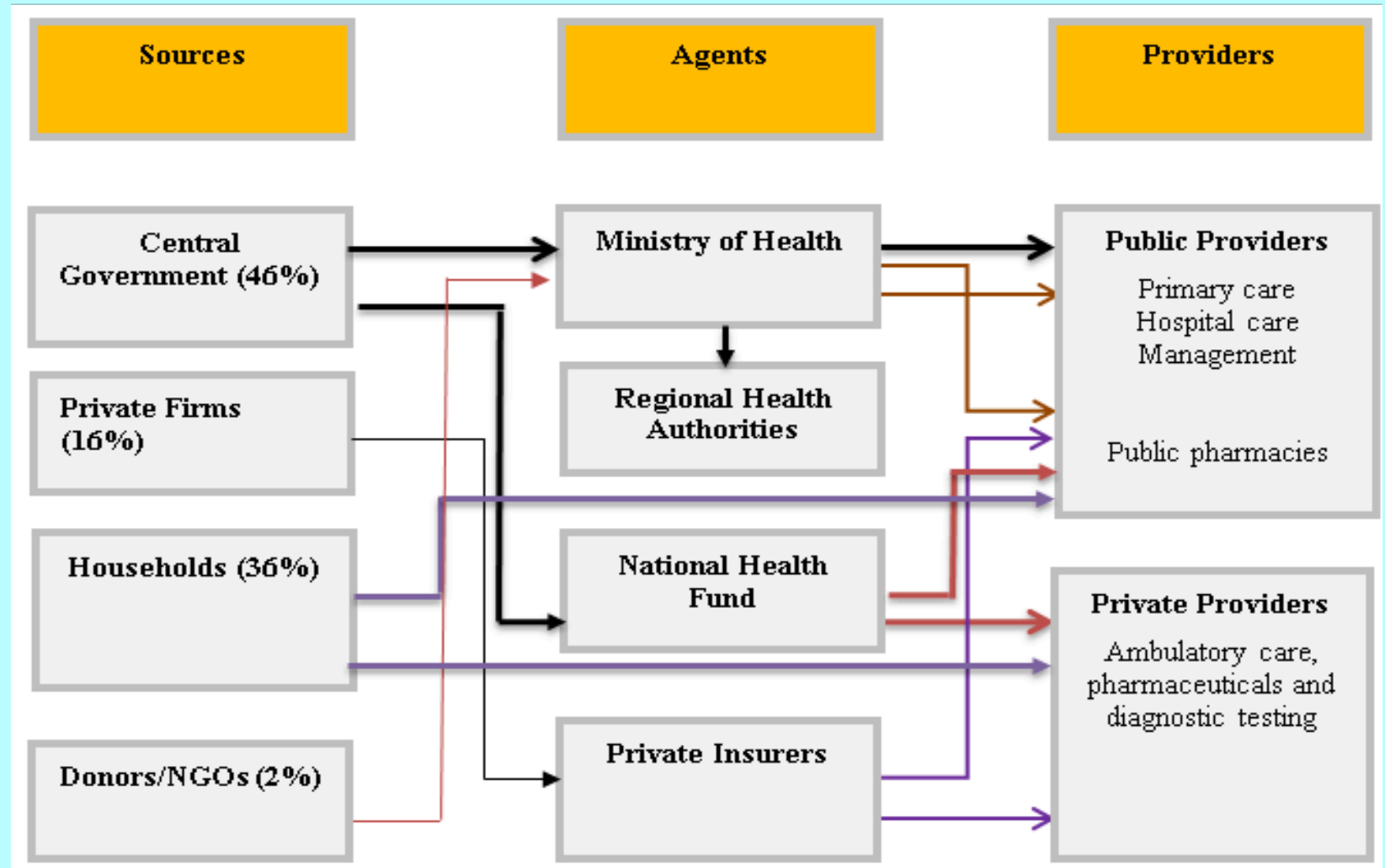


# FINANCING IN JAMAICA'S HEALTHCARE SYSTEM

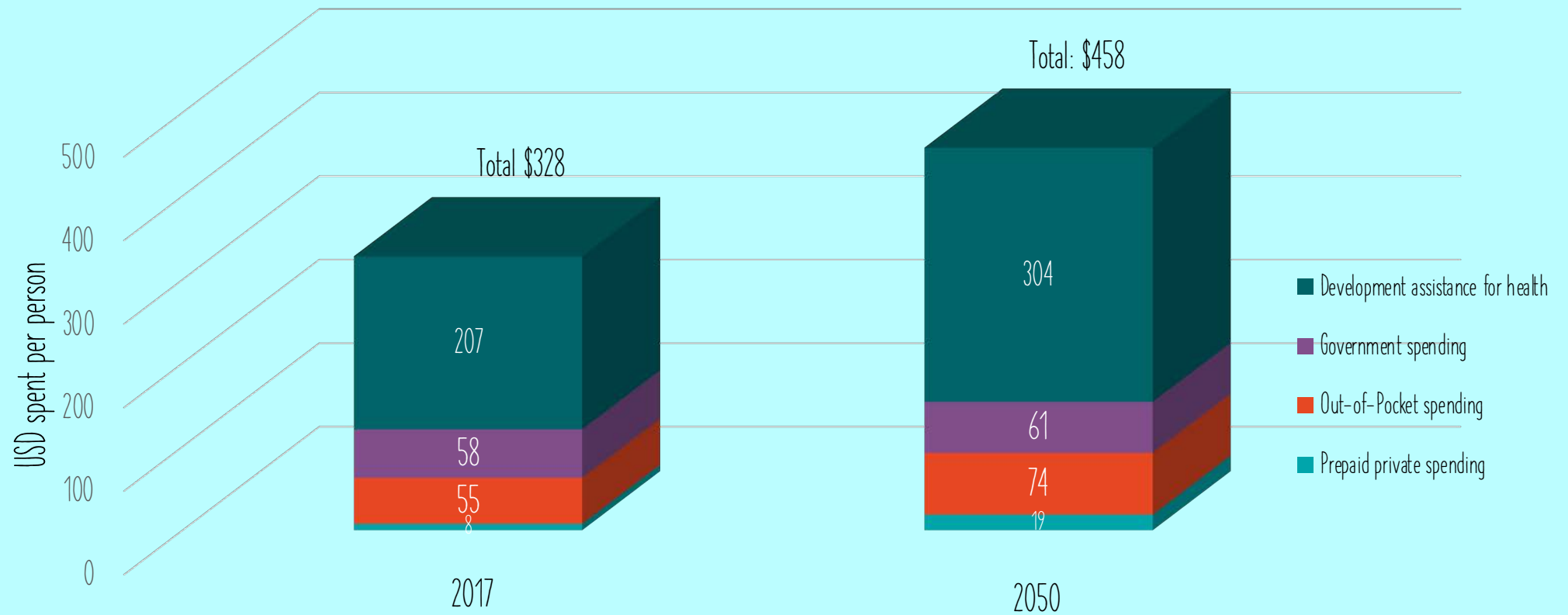
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- **Public financing comes mainly from general taxation.**
- **The Ministry of Health receives its budget from the central government and transfers about 86% of its budget to regional health authority for providing health care services.**
- **Spending by the Ministry of Health has ranged from less than 2% of GDP in the mid-1990s to 2.5% in the late 2000s.**
- **Less than 20% of the population was covered by private health insurance in 2009, mainly through employee health plans in medium and large establishments.**
- **In 2008, the government abolished user fees at public health facilities to reduce financial barriers to accessing health.**
- **The government has increased its budget allocation to the Ministry of Health to compensate for this income loss to health facilities.**
- **Since 2008, services in the public health centers and hospitals are free of charge at the point of service delivery. Households still pay for drugs at the public pharmacies.**

# FINANCIAL FLOWS IN THE JAMAICAN HEALTH CARE SYSTEM, 2009



# GRAPH SHOWING THE AMOUNT OF MONEY SPENT PER PERSON NOW AND IN THE FUTURE



Source: Financing Global Health Database 2019

**It is important to note that spending \$458 USD per person for healthcare in 2050 will be worth 19 significantly less than spending \$328 USD in 2017**



# THE PRESENT

# FAST FACTS

**Jamaica's healthcare is being severely challenged by persistent and reemerging infectious diseases and by the rapid increase non-communicable diseases and injuries.**

**The country has suffered from low economic growth, carries a high debt burden which leaves limited fiscal space for improving healthcare.**

**With the establishment of the Jamaica National Health Fund (NHF) in 2003 and the abolition of user fees at public facilities in 2008, the government of Jamaica has taken steps toward achieving universal coverage.**

# DEMOGRAPHIC OVERVIEW

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**Jamaica's population is  
2,961,167 million.**

**Life expectancy at birth  
is 76.6 years for women  
and 73.2 years for men**

**Infant mortality rate is  
10.7 per 1000 live births  
(high rate) and the  
death rate for children  
under 13 is 6 per 1000  
(moderate)**

# GENERAL ORGANIZATION OF HEALTH SYSTEM IN 2020

**26 Public hospitals**

**11 Private hospitals**

**450+ Pharmacies**

**342 Health centers**

**This is a significantly low number of resources for 2.96 million people.**

# TRIPLE THREAT

- **Dengue fever:** local medical experts project that Jamaica could record more than 300 dengue cases and three to five dengue deaths per week if individuals are complacent
- **Covid-19:** there is currently an upsurge in cases (November 2020)
- **Influenza:** it is currently the flu season (November 2020)



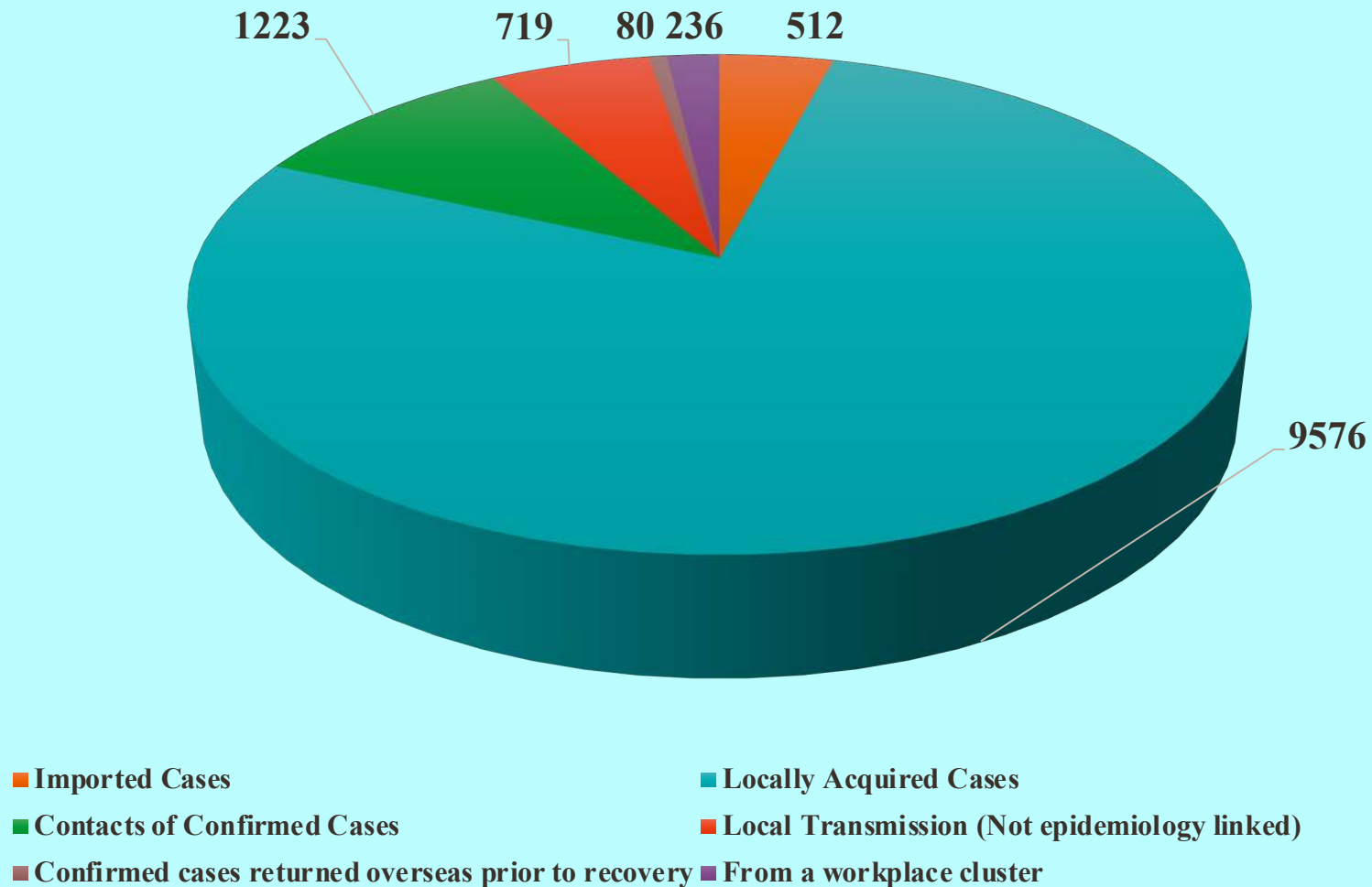
# COVID-19 IN JAMAICA – SITUATIONAL REPORT

- **10,088 confirmed cases; 4575 males (45%), 5512 females (52%)**
- **235 deaths**
- **5407 recovered**
- **Age range of cases: 1-104; median age 39**

# SITUATIONAL REPORT CONTINUED

- **653 daily samples tested**
- **4395 insolation; 153 in hospital, 4 national quarantine facilities, 22,714 in home quarantine**
- **84 hospitalized, 9 critically ill, 5 severely ill, 21 moderately ill**

# PIE CHART SHOWING THE CAUSES OF TRANSMISSION FOR COVID—19 CASES





# ACTIONS TAKEN

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- **On 28<sup>th</sup> October 2020, the Prime Minister announced that all measures currently in place will remain in effect until 30 November 2020.**
- **In November:**
- **The curfew is from 9:00 p.m. Daily to 5:00 a.m. on the next day.**
- **Gatherings should not exceed 15 persons and social distance of a minimum of 6 feet must be maintained.**
- **A mask shall be worn in public spaces and this includes workplaces and licensed public passenger vehicles.**
- **25400 doses of trivalent influenza vaccine has been bought and distributed.**



# RULES FOR EVENTS DURING COVID-19

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- **Churches are prohibited from hosting funerals, crusades, conferences, conventions and other special events.**
- **Marriages may take place following the guidelines, with each person in a space of 36 sq. ft. and no more than 50 persons.**
- **Burials may continue, however, only 15 persons are allowed at the graveside, including the clergy and funeral home personnel. No more than 10 are to be mourners.**
- **Worship services may continue to be held within the existing guidelines, requiring temperature checks, sanitization and the mandatory wearing of masks. - Entertainment events requiring permits remain suspended, as of 27 August 2020.**



# ENTRY INTO JAMAICA

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- **All residents of the United States of America, Brazil, Dominican Republic, Jamaica, Mexico or Panama who are 12 years of age and over, are required to obtain and present a negative COVID-19 PCR or antigen test result to check-in for a flight.**
- **Persons ordinarily resident in Jamaica will be quarantined at home for 14 days. Testing will be done if persons are assessed as high risk personally or are symptomatic or become symptomatic during the 14-day period.**
- **Persons not ordinarily resident in Jamaica and who are visiting as a tourist staying in the resilient corridor, are required to present at their port of departure, a negative COVID-19 test result as may be specified by the ministry of health and wellness, at the time.**
- **They are required to stay at their abode or residence and may leave as outlined in their quarantine order.**

# EFFECTS OF COVID-19 ON HEALTHCARE IN JAMAICA

- **The health facilities and staff are not equipped with the specialized gear needed to treat patients afflicted with the highly infectious disease.**
- **Jamaica increased the number of critical care and high dependency unit beds from 10% to 39%.**
- **Short supply of specialists to operate ventilators**
- **Shortage in physicians, nurses and other hospital staff to treat patients**

# NEEDS:

- **PPEs, laboratory supplies, UTM and swabs, equipment and supplies for isolation**
- **And quarantine facilities, wards and rooms**
- **Additional guidance on laboratory testing and interpretation of results**
- **Digital thermometers**



A Jamaican flag, featuring green, yellow, and black diagonal stripes, is flying on a wooden pole. The background consists of a clear blue sky with light clouds and a vibrant turquoise ocean. The text 'THE FUTURE' is overlaid in a large, white, sans-serif font across the center of the image.

# THE FUTURE

# GUIDING PRINCIPLES FOR JAMAICA'S HEALTHCARE SYSTEM

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- Equity - Striving for fairness and justice by eliminating differences that are unnecessary and avoidable.
- Integrity-Ensuring transparent, ethical, and accountable performance.
- Respect-Embracing the dignity and diversity of individuals and groups.
- Collaborative -The application of collective experience and knowledge of internal and external partners that responds to shared challenges and goals.
- Responsive - Anticipating change and taking relevant actions that make a difference and achieve positive results.
- Transformational Leadership-Ownership of, and championing the change required to achieve the vision for the health sector.

# DIRECTION OF HEALTHCARE IN JAMAICA

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- Safeguarding access to equitable, comprehensive and quality health care
- Improving leadership and governance to achieve universal access to health and universal health coverage
- Increasing and improving health financing with equity and efficiency.
- Ensuring human resources for health in sufficient number and competencies.
- Increasing social participation and inter-sectoral collaborations to address the social determinants of health.
- Making reliable and modern infrastructure available for Health Service Delivery.

# RECOMMENDATIONS:

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- Jamaica needs extended hours of service in health care centers since there are just a few hospitals in comparison to the population.
- Increased access to service is another way to improve Jamaica's healthcare system. Provisions should be made to improve the delivery of radiology and laboratory services in health care centers and all hospitals.
- Due to the stress on the hospitals, more resources need to be provided to increase minor procedures (specialist services) in healthcare centers.

# RECOMMENDATIONS CONT'D

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- Infrastructural improvements should be made such as increasing space for consultations. This will also improve staff morale.
- Jamaica also needs a strengthened information systems because their system is paper based. Firstly, an electronic system should be implemented, and the paper-based records should be digitized. Health analytics should be incorporated for improved health information and decision making.

# RECOMMENDATIONS CONT'D

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- The use of the Electronic Health Record should be promoted in order to raise the awareness of the population about the importance of adequate management of clinical information and the potential benefits.
- Health financing: There should be a collection of revenues: i.e., sources of funding (general taxation, contributory regimes, others) and perspective on fiscal space.
- Jamaica should also reach out to members of CARICOM as well as other partners in WHO to install virtual healthcare in order to reduce waiting times at health centers and hospitals.

# RECOMMENDATIONS CONT'D

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- Physicians and Nurses should be paid adequately to reduce brain drain.

# ACKNOWLEDGEMENT

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- We would like to extend gratitude to Mr. James Marinucci for being an extraordinary mentor, going above and beyond to help us.
- We would also like to thank Professor George King for his creativity in giving us this project and allowing us to be equally creative by giving us the freedom to produce meaningful and helpful presentations.
- Last but my no means least, we would like to acknowledge the HIPPO institute for welcoming and being apart of this initiative.



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