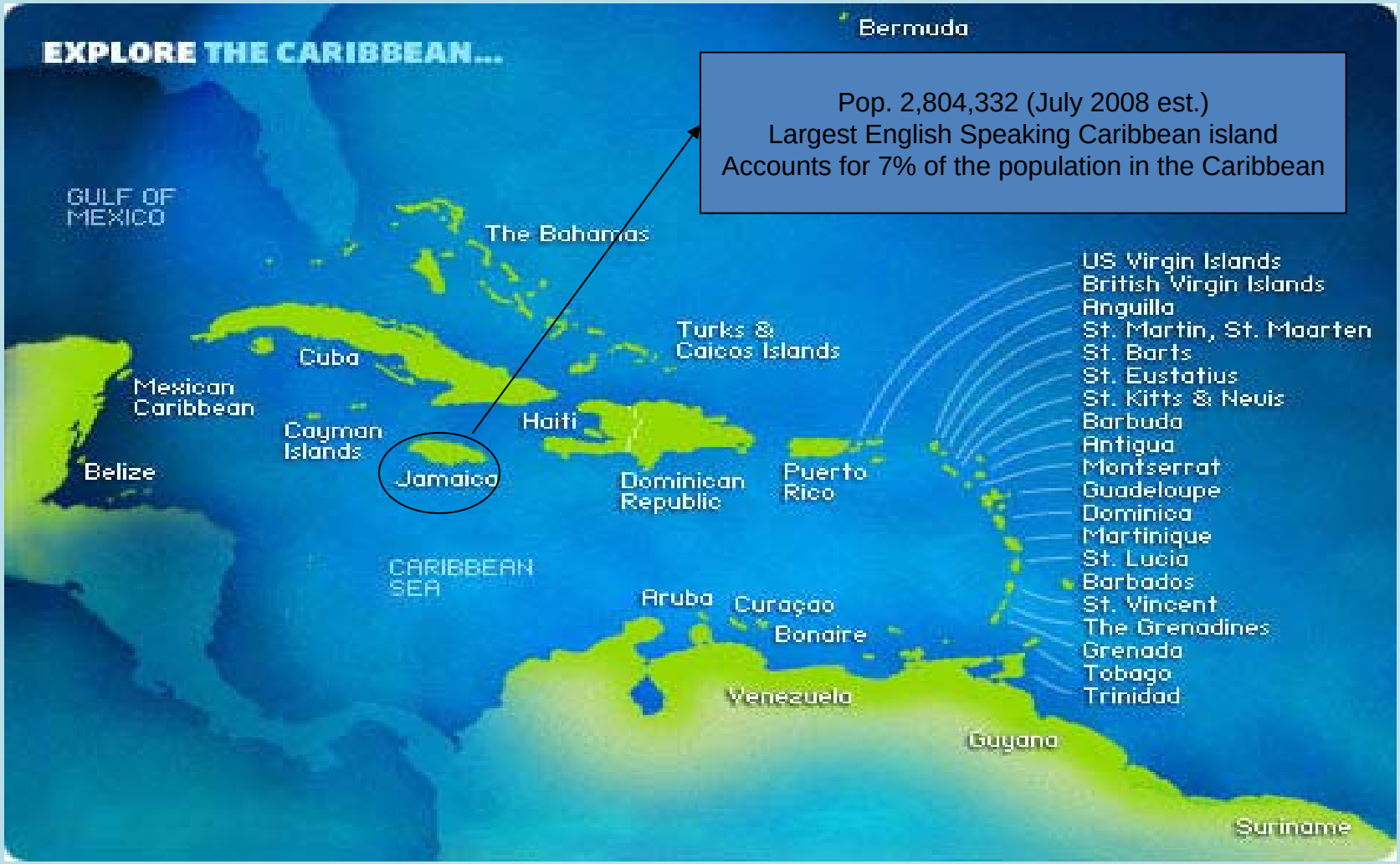
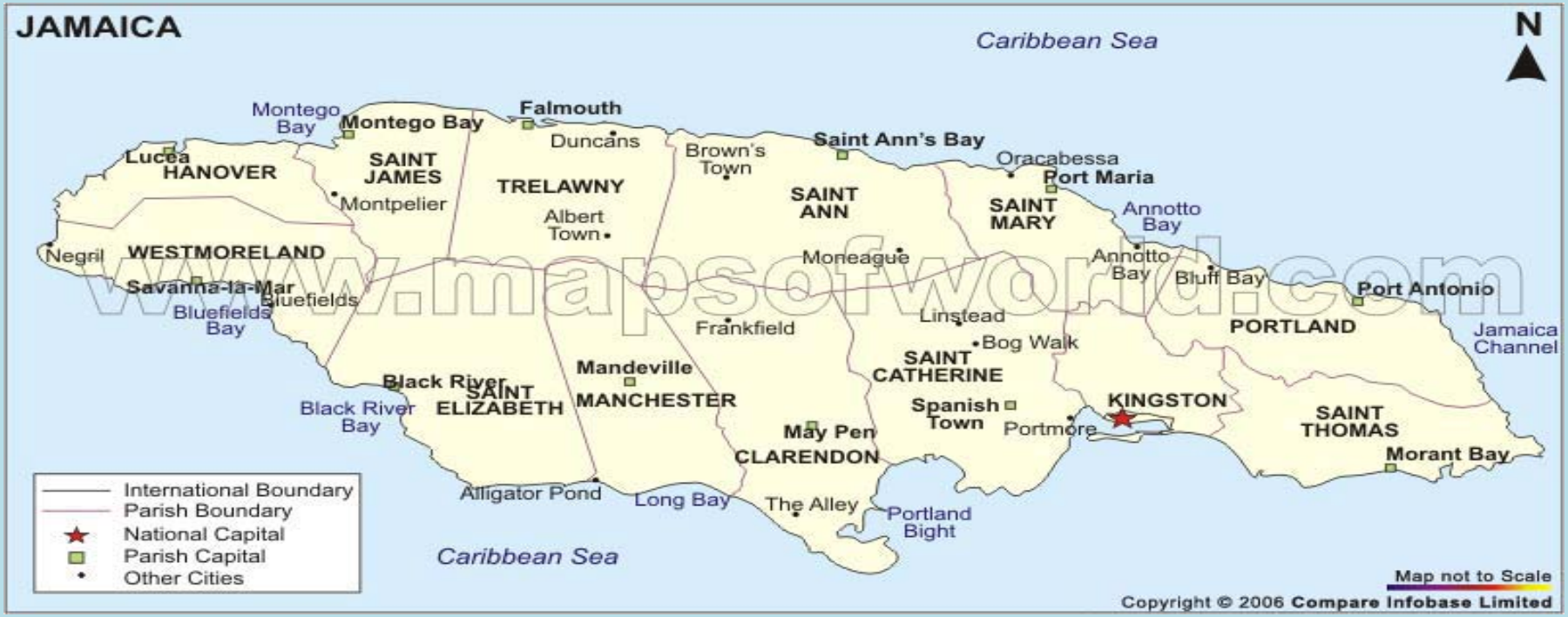
A Caribbean Chronic Care Collaborative: Improving the Quality of Diabetes Care Project: The Jamaican Experience

The Caribbean



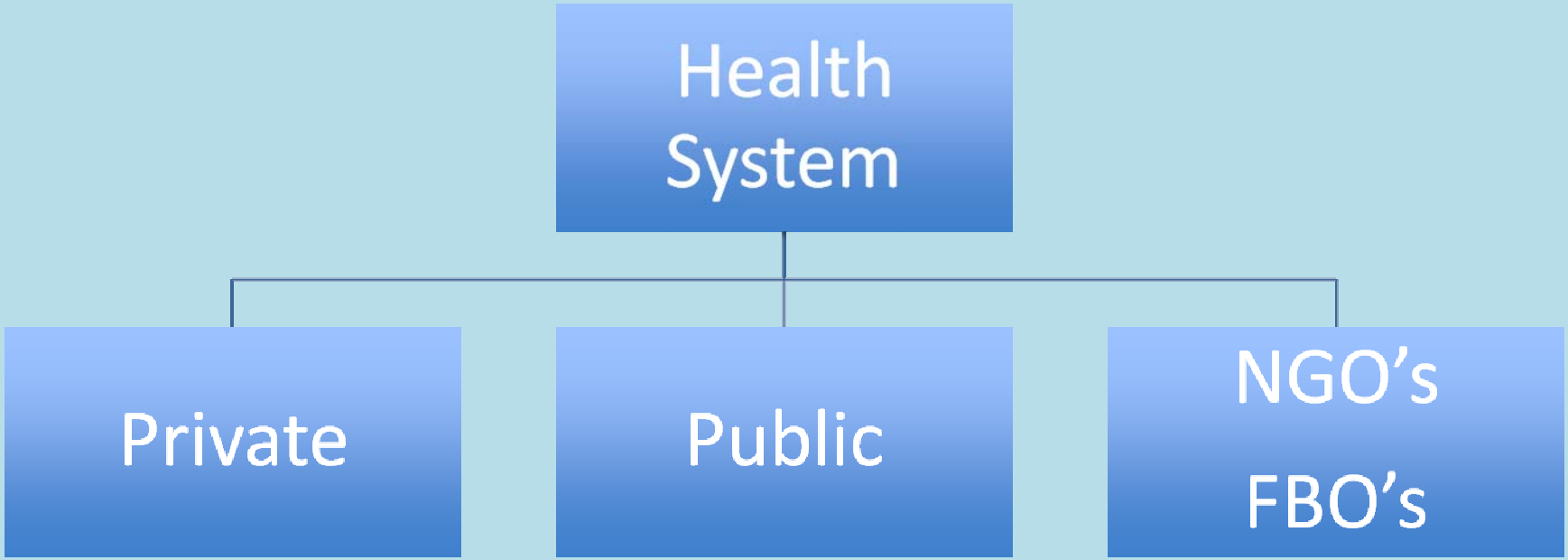


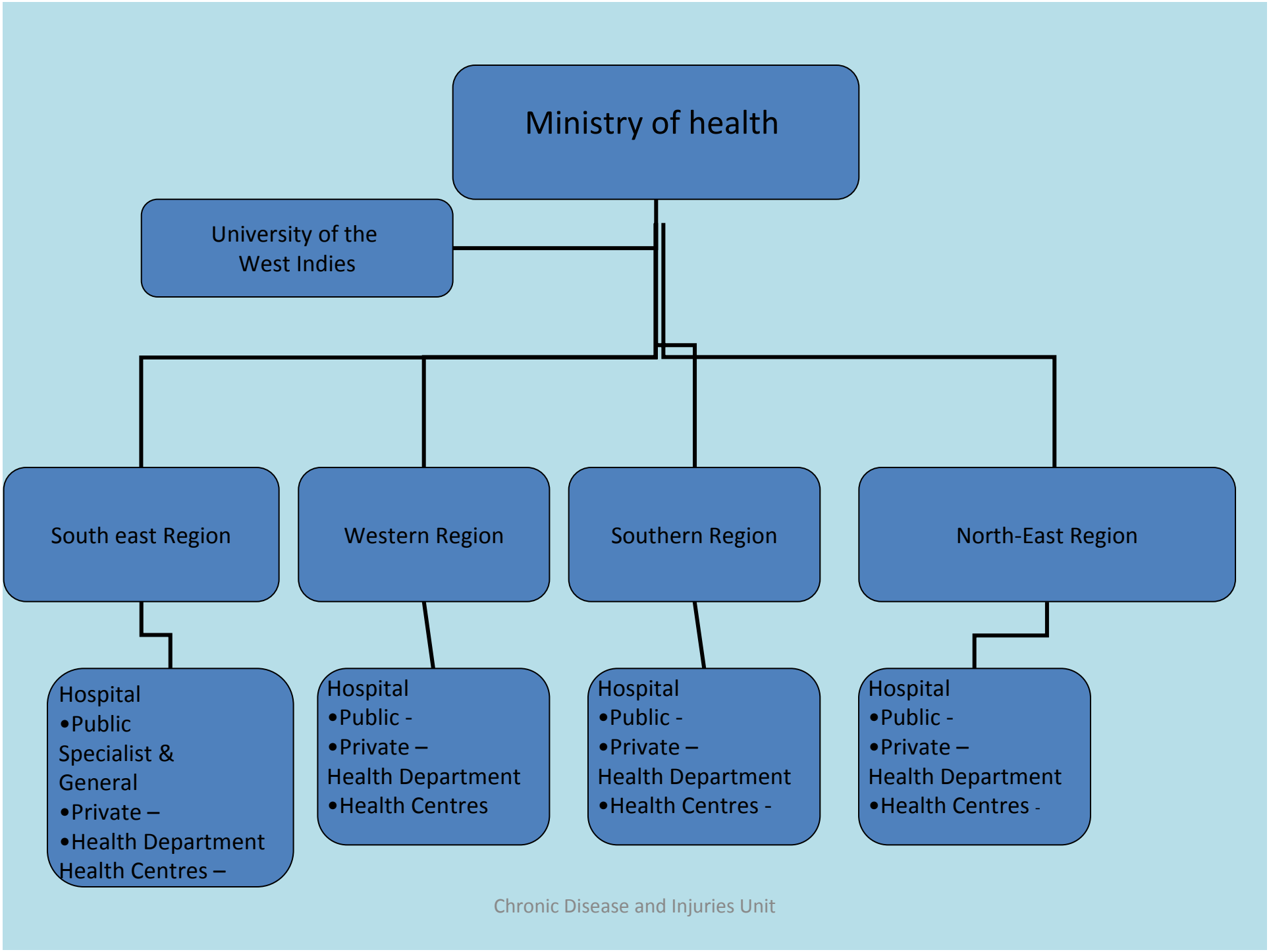
- Population - 2,804,332 (July 2008 est.)

60.6% 15-65 yrs. old; 7.4% over 65 yrs.

- *Life expectancy- 73.59 years (male: 71.88 years female: 75.38 years) 2008 est.*

Health care is provided…




Ministry of health
University of the West Indies
South east Region
Western Region
Southern Region
North-East Region
Hospital •Public Specialist & General •Private – •Health Department Health Centres –
Hospital •Public - •Private – Health Department •Health Centres
Hospital •Public - •Private – Health Department •Health Centres -
Hospital •Public - •Private – Health Department •Health Centres -

Diabetes care

An Integrated Primary care, Secondary & Tertiary care system

- **Primary Health care services**
  - Health center curative clinics
  - Special days for diabetics at major health centres
  - Chronic Disease Nutrition clinics, High-risk Antenatal clinics, Footcare
- **Private sector**
  - General and specialists practitioners doctors' office

- **Secondary Health care (Public & Private)**
  - Medical out-patient clinics
  - Endocrinology, Ophthalmology, Surgical, Obstetric care clinics
  - In-patient services
  - Renal Dialysis
- **Community based services**

- Diabetes Association – screening, assessment, individual patient management, health education, capacity building (training of foot care assistants and lay Diabetes educators), renal dialysis
- Health Fairs- screening and treatment
- Church Clinics – screening and individual management
- Non-conventional unregulated practitioners(Complimentary and Alternative Medicine [CAM])

Diabetes situation in Jamaica

- 8% of Jamaicans 15-74 years old have diabetes
- Over the past eight years there has been an increase in prevalence (7.2% 2000 vs 8% 2008).
- 24% of Persons 15-74 years old diagnosed were unaware they had diabetes
- 72% of diabetics are on treatment but 52% of Diabetics are not controlled
- Diabetes is one of the top five reasons for admission to hospitals
- Amputations continue to increase

Source: Jamaica Health Lifestyle Survey 2008

Survey of Chronic Renal Failure in Jamaica

N= 605 *Percent prevalence with chronic renal failure*

Hypertension	60.8
Diabetes Mellitus	31.4
Primary chronic glomerulonephritis	6.0
Obstructive nephropathy	3.8
Adult polycystic kidney disease	3.5
Systemic lupus erythematosus	2.3
Nephrotoxic agents	2.3
Genitourinary neoplasm	2.0
HIV/AIDS	1.8
Genitourinary chronic pyelonephritis	0.8
Interstitial nephritis	0.7
Sickle cell disease	0.7

EN Barton et al

West Ind. Med. J. 2004 53(2) 82

COST OF CHRONIC DISEASES
Economic Burden of Disease (2002)

Cost Item	Diabetes (J$)	Hypertension (J$)
Direct Cost (2002)		
Hospitalization	135,464,269 (8%)	84,753,708 (7%)
Clinic/Doctor's Visits	332,500,000 (21%)	415,652,000 (33%)
Drugs	113,800,284 (7%)	203,519,628 (16%)
Laboratory/Diagnostic Tests	873,487,154 (54%)	357,847,984 (29%)
Indirect Cost (2002)		
Productivity Loss	156,291,630 (10%)	186,339,706 (15%)
Total Economic Burden	**1,611,543,337**	**1,248,140,027**

REGIONAL NCD TARGET

By the end of 2012, 80% of persons with chronic diseases will be receiving quality care

(POS declaration 2007).

Caribbean Chronic Care collaborative: Improving the Quality of Diabetes Care Project

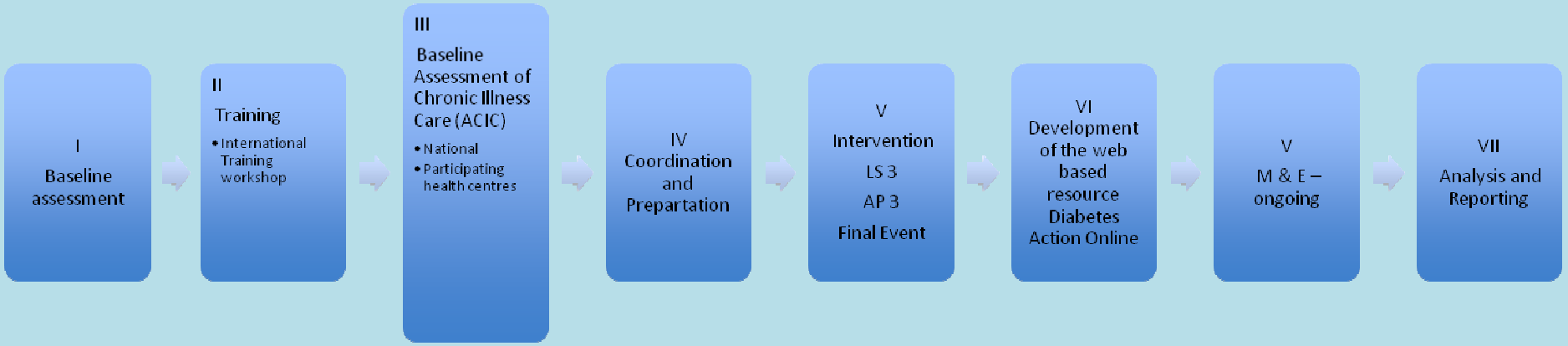
- OBJECTIVE: To achieve real and sustained improvements in diabetes care in 10 Caribbean countries (Jamaica, Antigua & Barbuda, Anguilla, Barbados, Belize, Grenada, Guyana, St. Lucia, Suriname and Trinidad and Tobago.

Theoretical framework

The project uses the Chronic Care Model and the Breakthrough Methodology to promote collaboration between primary care teams to identify gaps in the provided care and find solutions.

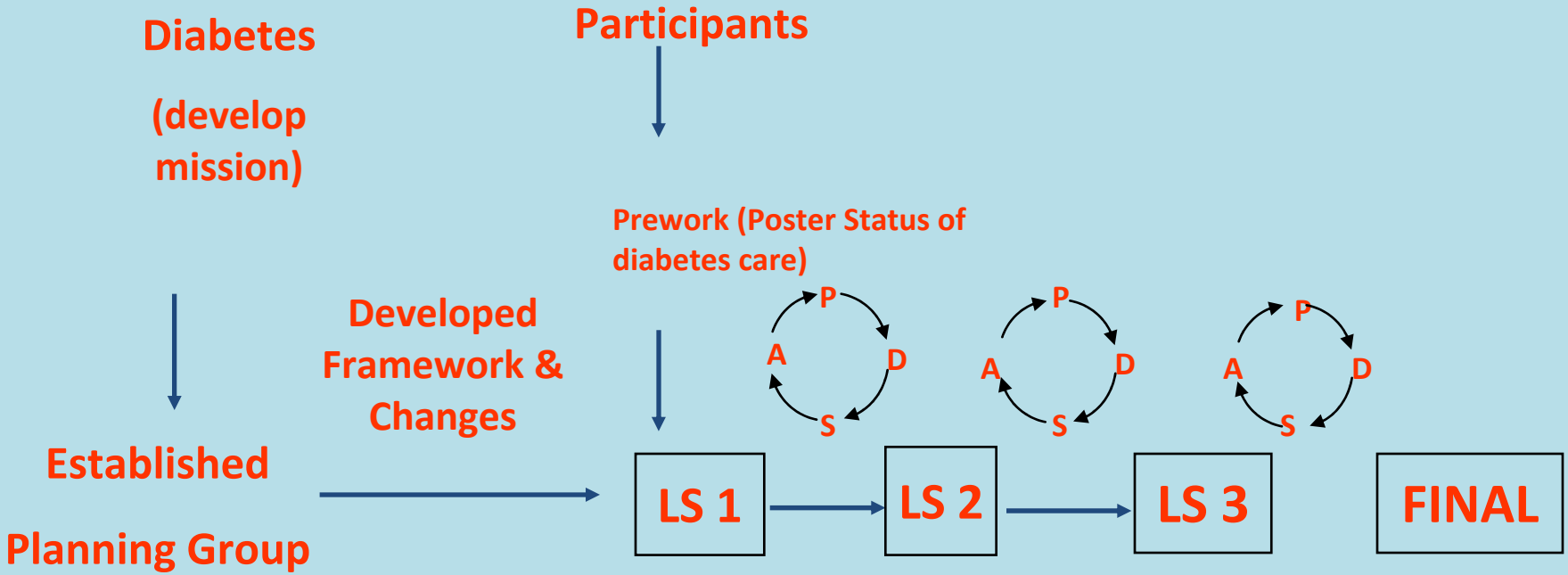
CHRONIC CARE MODEL STATUS OF DIABETES CARE	JAMAICA
Self-Management Support	**Poor patient education.** **Access to monitors**
Delivery System Design	**Inadequate lab. capacity**
Decision Support	**Inadequate knowledge and use of guidelines.**
Clinical Information Systems	**Inadequate system to make decisions.**
Organization of Health Care	**Access to medications and A1c**
Community	**Diabetes association.**

Project activities



Breakthrough Series for the Improvement of Chronic Care

(13 months time frame)



Support				
E-mail	Visits	Assessments	Telephone	Monthly Team Reports

I. Coordination & Preparation Phase

- Meeting held with PAHO, CMO, DHPPD
- Presented and met with RTDs & MOsH
- Established National Planning team & Local experts team
- Established of National Change Package
- Seven health centre sites selected by Regions
- Signing of commitments by Regions
- Administration of the ACIC questionnaire & Assessment of Equipment
- Core leadership team selected

DIABETES CASELOAD AT INTERVENTION SITES

	Total DM	DM & HTN	TOTAL
St. Jago Park	267	452	719
Comprehensive	493	354	847
Maxfield Park	132	375	507
Windward Rd.	159	264	423
Mandeville Comprehensive	182	461	643
St. Ann's Bay	110	458	568
Cambridge	27	96	123

II Learning session I

- Health teams from 7 health centres participated in workshop
- Presentation of posters on status of diabetes care
- Teams sensitized to the Chronic Care Model and PDAS cycle
- GAP analysis conducted general & health-centre based on CCM

II Learning session I

- National Change Package and Implementation plan presented
- Patient testimonies
- Development of Health Centre Workplan/commitments

Goal

Improve the quality of life for people with diabetes by improving the quality of care in seven (7) Health Centres in Jamaica by the end of thirteen months.

Objectives:

① Train health professionals (at relevant site) in the prevention, detection, and control of diabetes and its complications

② Train all the patients and at least 1 caregiver per patient in self-care and glycaemic control

③ Insofar as possible, achieve blood glucose control in all patients [fasting capillary glucose ≤ 7.0 mmol/l (126mg/dl), HbA1c =<7%] to prevent or delay chronic complications

Objectives:

④ Achieve an increase by at least 5% from baseline of patients with HbA1c of <7%

⑤ Achieve a 1% decrease in HbA1c from baseline for at least 30% patients with HbA1c greater than 7%

⑥ Screen all patients for depression

⑦ Establish one support group per Health Centres accessible by all patients and their families

⑧ Strengthen the referral network, support services and follow-up care and rehabilitation of patients with Diabetes

Objectives:

⑨ Make available home monitors for blood glucose for all patients

⑩ Facilitate registration of all patients with National Health Fund

Summary of interventions

- Exercise
- Food demonstration and nutrition counselling
- Foot care
- Training in guidelines

III. First Action Period

- Conduct Baseline Assessment of care of patients- docket review (All patients with diabetes attending the health centre aged 18-75 with Type 1 or 2 diabetes who have been seen at the health centre for at least the 1 year and have had at least one consultation with their physician during the past year).
- HbA1c testing baseline
- Established Group-email
- Submission of health centre workplan/commitment – SERHA
- Monthly reporting

Second learning session

- Exercise prescription
- Nutrition education
- Introduction to indicators
- Referral and counter referral system
- Assessment of First Action period
- Revision of commitments
- Poster exhibition

Key deliverables

Health centre	Reg. commit ment	AICI question. Equipment	Implement ation of commitme nts	Hb A1c DM Register Docket Review	Monthly Report
St. Jago Park	X	X	X	X no HbA1C	X
Maxfield	X	X			
Comprehensive	X	X	X	X	X
Winward Rd.	X	X	X	X	
Cambridge	X	X	X	X	X
Manchester	X	X	X	X initially HbA1c none currently	X
St. Ann's Bay	X	X	X	X	

Second Action period

- Complete revision of commitments
- Analysis of audits
- Begin reporting on indicators
- Chronic Disease Passport and Summary sheet to be implemented

FACILITATORS

- High commitment of teams
- Regional buy-in and support for activities
- NHF support medications & A1C testing
- Abolition of User Fees
- Technical cooperation PAHO – support for training, guidance on project implementation

Challenges

- High staff turnover
- Inadequate access to HbA1c testing
- Financial crisis
- Inadequate funding for learning sessions
- Funding to support intervention activities i.e. printing of passports
- Reorientation of HCW to a Chronic Care approach at intervention sites

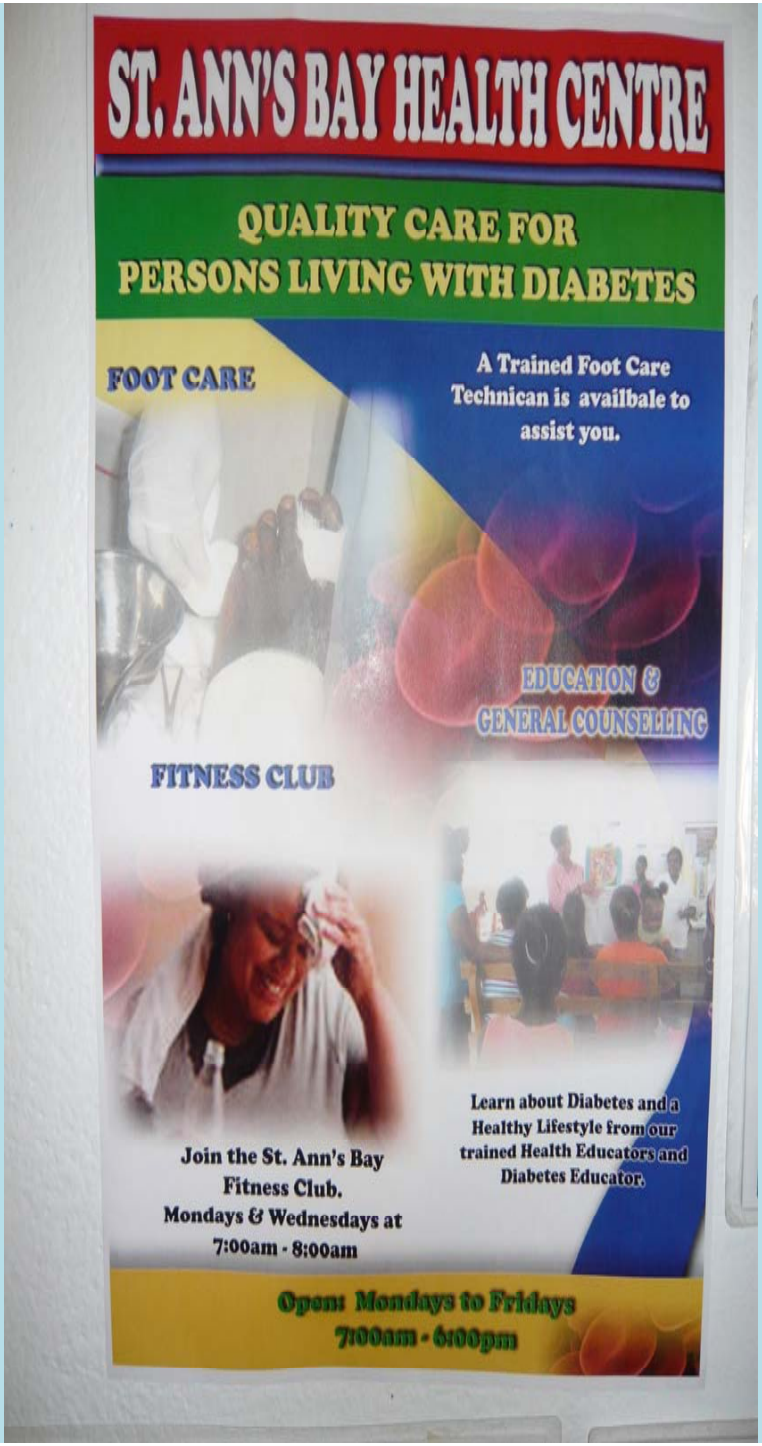
Next Steps

- Continue the cycle of improvement
- Submission of proposal to NHF and CHASE to support activities i.e. chronic disease passport, clinical information system, IEC materials, training of clinicians
- Bring parties together to find solution to improve access to Hb A1c testing.

To Be Successful at Improvement You Need the Following:

- **Will** - for improvement
- **Ideas** - for changes that will lead to improvement
- **Execution** – a framework for action to adapt the changes to achieve improvement

Chronic Disease and Injuries Unit


ST. ANN'S BAY HEALTH CENTRE
QUALITY CARE FOR
PERSONS LIVING WITH DIABETES
FOOT CARE
A Trained Foot Care Technican is availbale to assist you.
EDUCATION &
GENERAL COUNSELLING
FITNESS CLUB
Join the St. Ann's Bay Fitness Club.
Mondays & Wednesdays at
7:00am - 8:00am
Learn about Diabetes and a Healthy Lifestyle from our trained Health Educators and Diabetes Educator.
Open: Mondays to Fridays
7:00am - 6:00pm

THANK YOU