

# **Results-based financing and NCDs**

**An overview of the WB work in the  
Caribbean**

**Carla Pantanali**

**Health, Nutrition and Population**



**WORLD BANK GROUP**

# Outline of the presentation



# 1

Why RBF for NCDs in the Caribbean?

# 2

What are we doing?

# 3

Design and challenges

## Health challenges in emerging markets...

### Rise in non-communicable diseases

such as cardiovascular disease, cancer, respiratory illnesses and diabetes, make up the largest contribution to mortality in most low-income countries and globally.



### Paradigm shift

Chronic conditions require a different skill and workforce mix, centered around primary care. This means fewer hospital specialists, but more nurses and other health professionals.



### Increasing costs and expectations

Ageing populations, more advanced and costly technology and increasing expectations from patients.



# 1

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do not vary significantly...



**1**  
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challenges

**and the Caribbean is no  
exception**

- ✓ **Rise in non-communicable disease burden**
- ✓ **Financial burden is increasing and will increase more**
- ✓ **Spending in health is relatively low and not optimally allocated**
- ✓ **Shortage of trained medical and nursing staff**

**1**  
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## Some data to keep in mind...

**Burden of Disease:**  
around 70% of Years of  
Life Lost in the  
Caribbean due to NCD  
(global avg. 50%)



**Erosion of the countries' workforce and productivity and increase vulnerabilities of the Caribbean population**

**High Expenditure.** NCD  
patients spend 36% of  
total household  
expenditure for care



**Heavy burden on limited resources for both governments and households**




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## Risk factors have worsened...

-Overweight/Obesity  38.4% males, 65.3% females to be obese by 2015.

-Physical Inactivity levels  due to urbanization and sedentary lifestyles

-Smoking responsible for at least 10% of all deaths in the Caribbean.

-Excessive alcohol consumption common across the Caribbean and  in poorer households



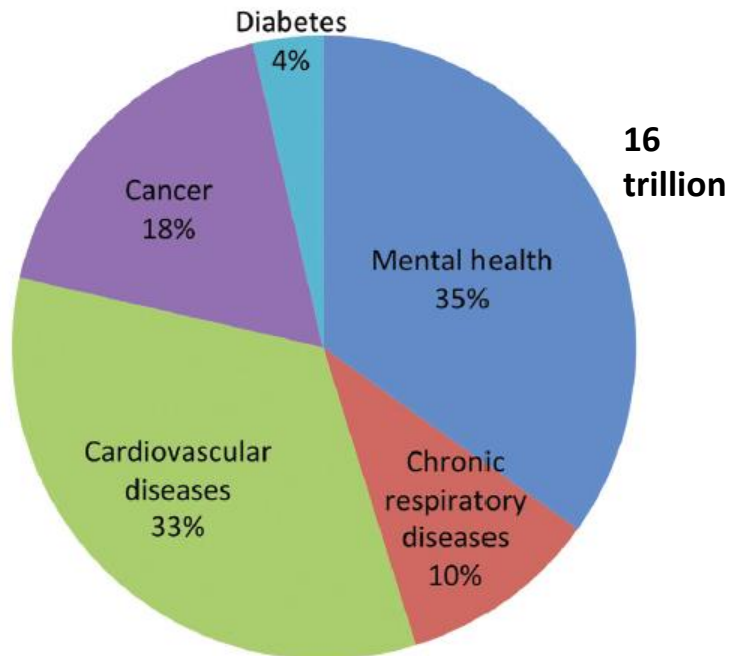
**1**  
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## Lost output due to the five conditions ≈ US\$ 47 trillion

Lost Output 2011-2030, by disease type



In low and middle income countries cumulative economic losses in the period 2011-2025 are estimated to surpass nearly US\$ 7 trillion.

That means...

- Average of nearly US\$ 500 billion per year
- Yearly loss equivalent to approximately 4% of these countries' current annual output

# 1

Why RBF for NCDs in the Caribbean?

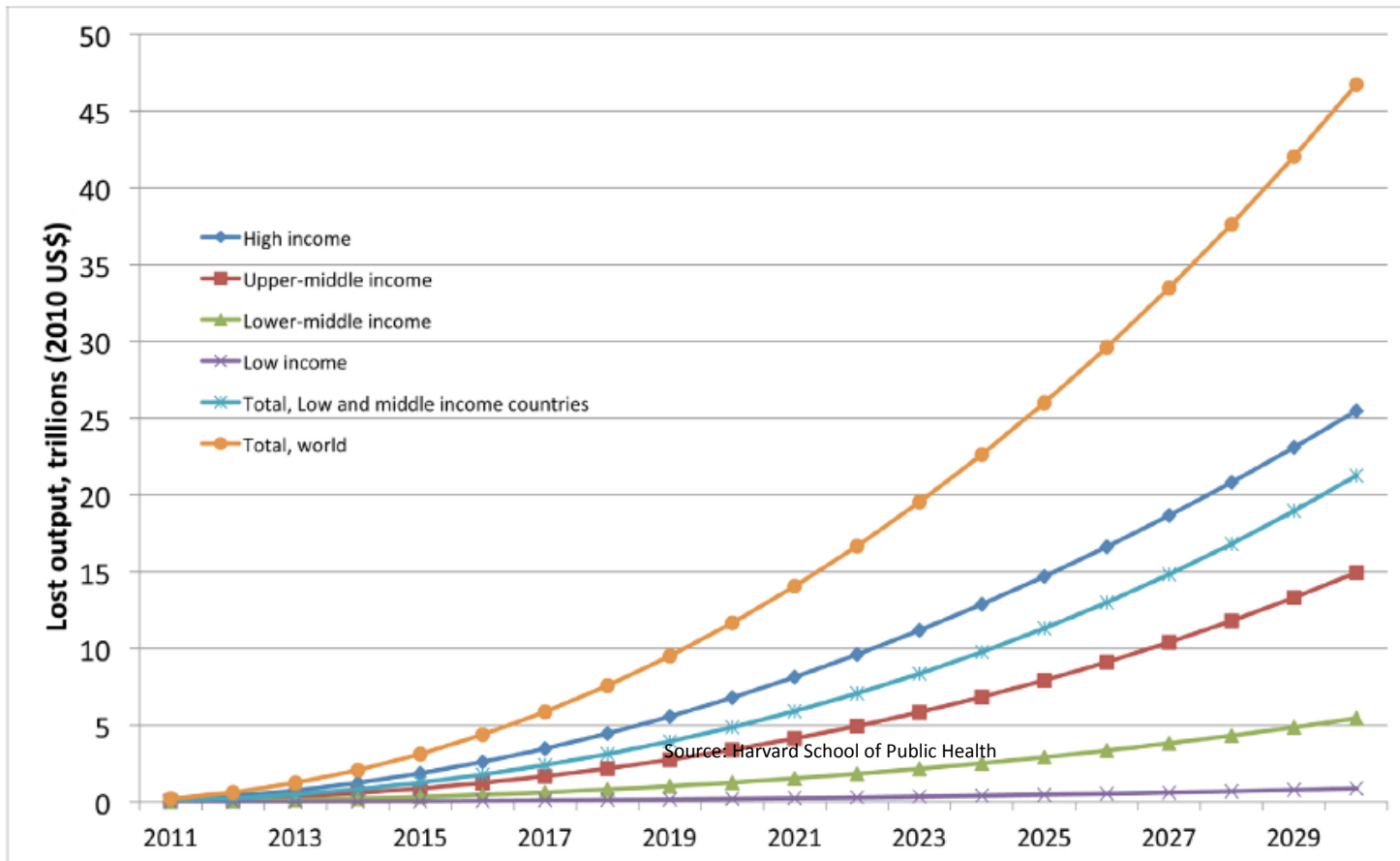
# 2

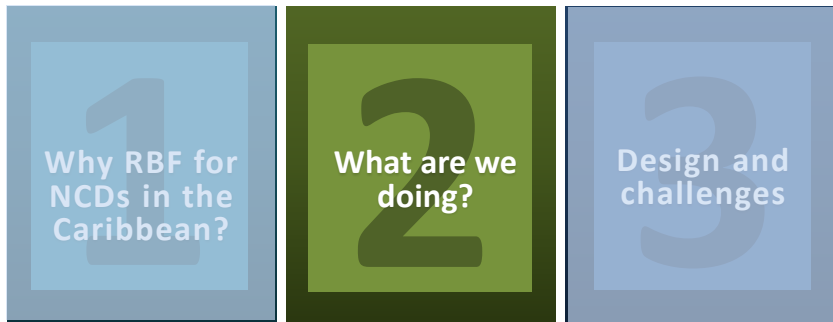
What are we doing?

# 3

Design and challenges

## Projections get worse...





## WHAT HAVE WE DONE SO FAR IN THE CARIBBEAN?

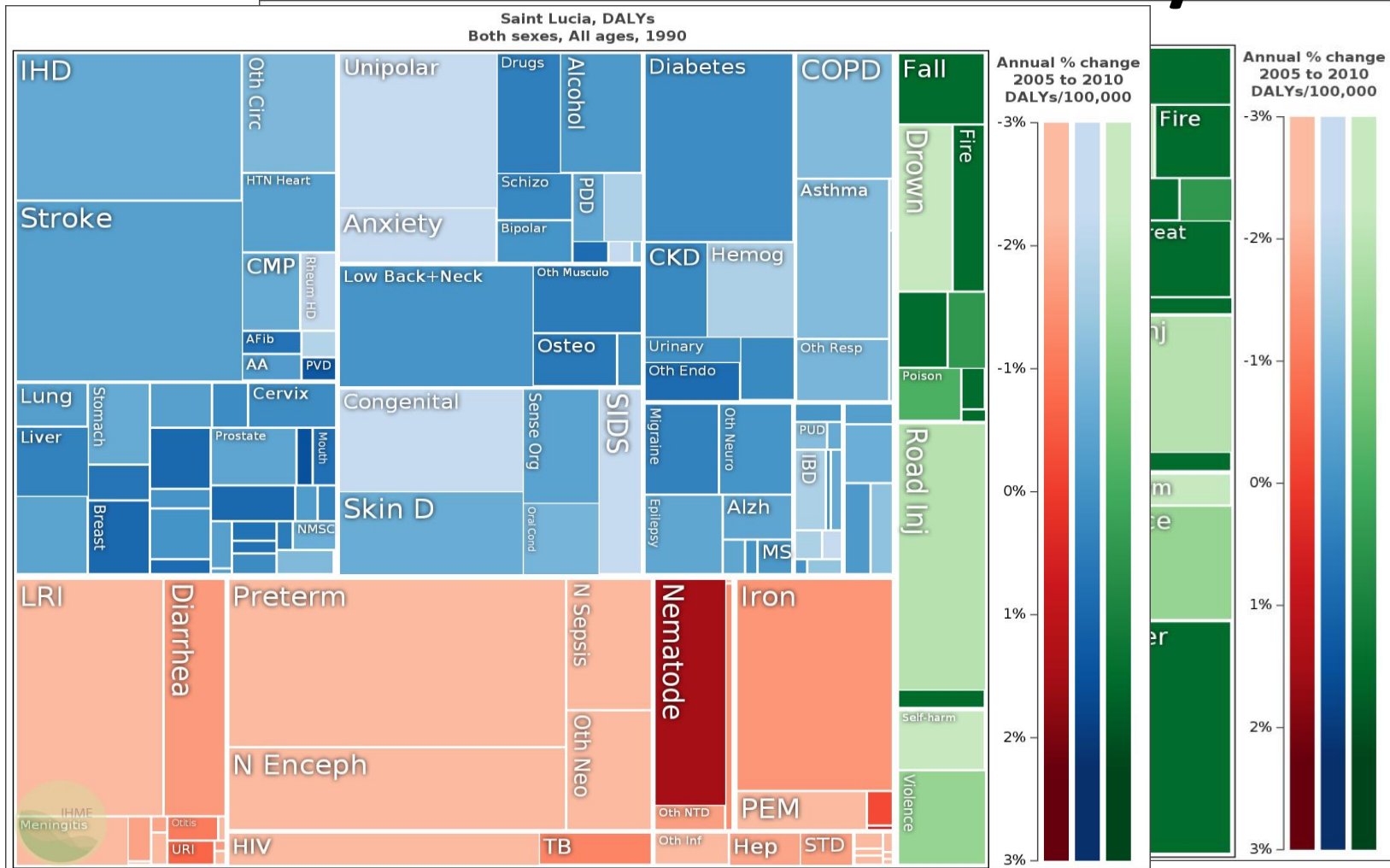


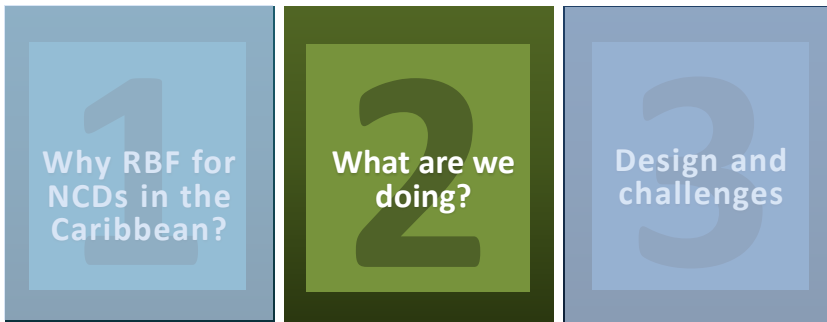
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Why RBF for NCDs in the Caribbean?

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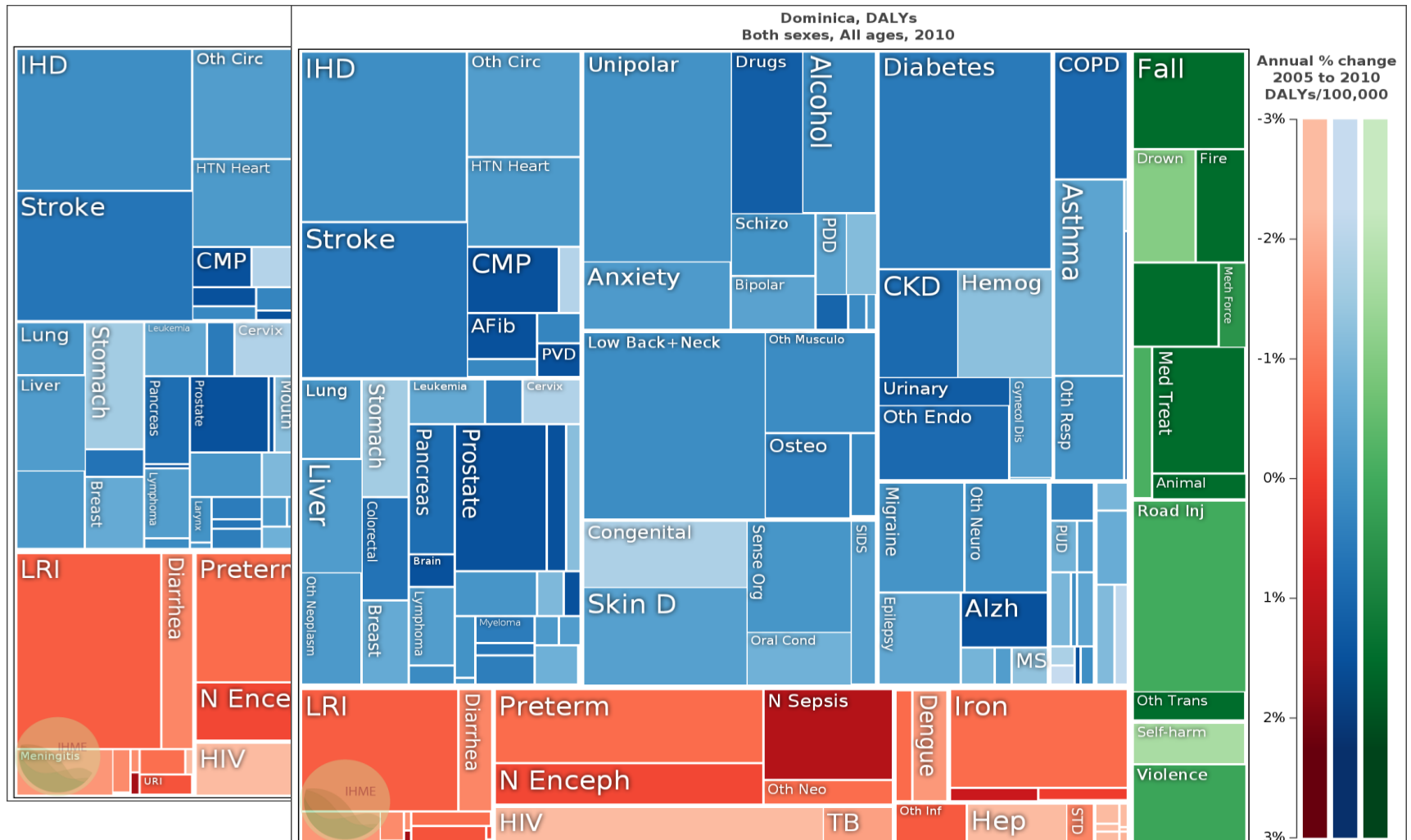
3  
Design and challenges

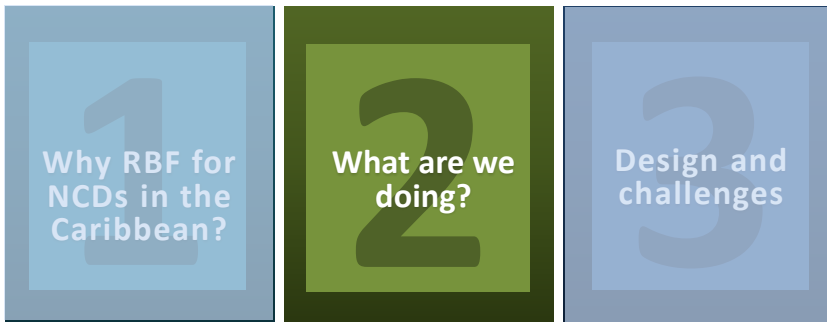
# BOD Saint Lucia 1990/2010





# BOD Dominica 1990/2010





## ASSESSMENT

## CONVENING

## FINANCING

### NCD:

Dominica and Saint Lucia situational analysis



### RBF:

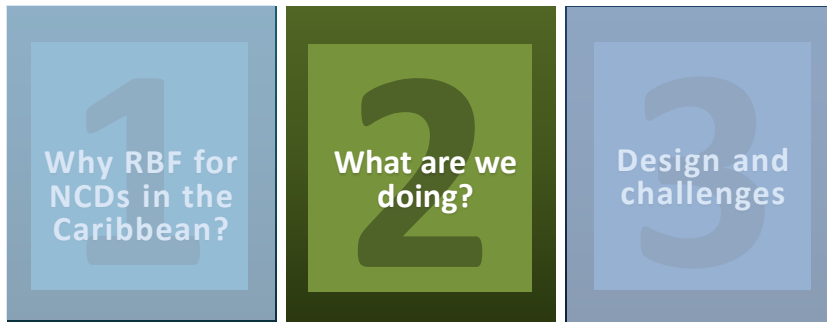
S2S Exchanges to Pilot RBF to address NCDs



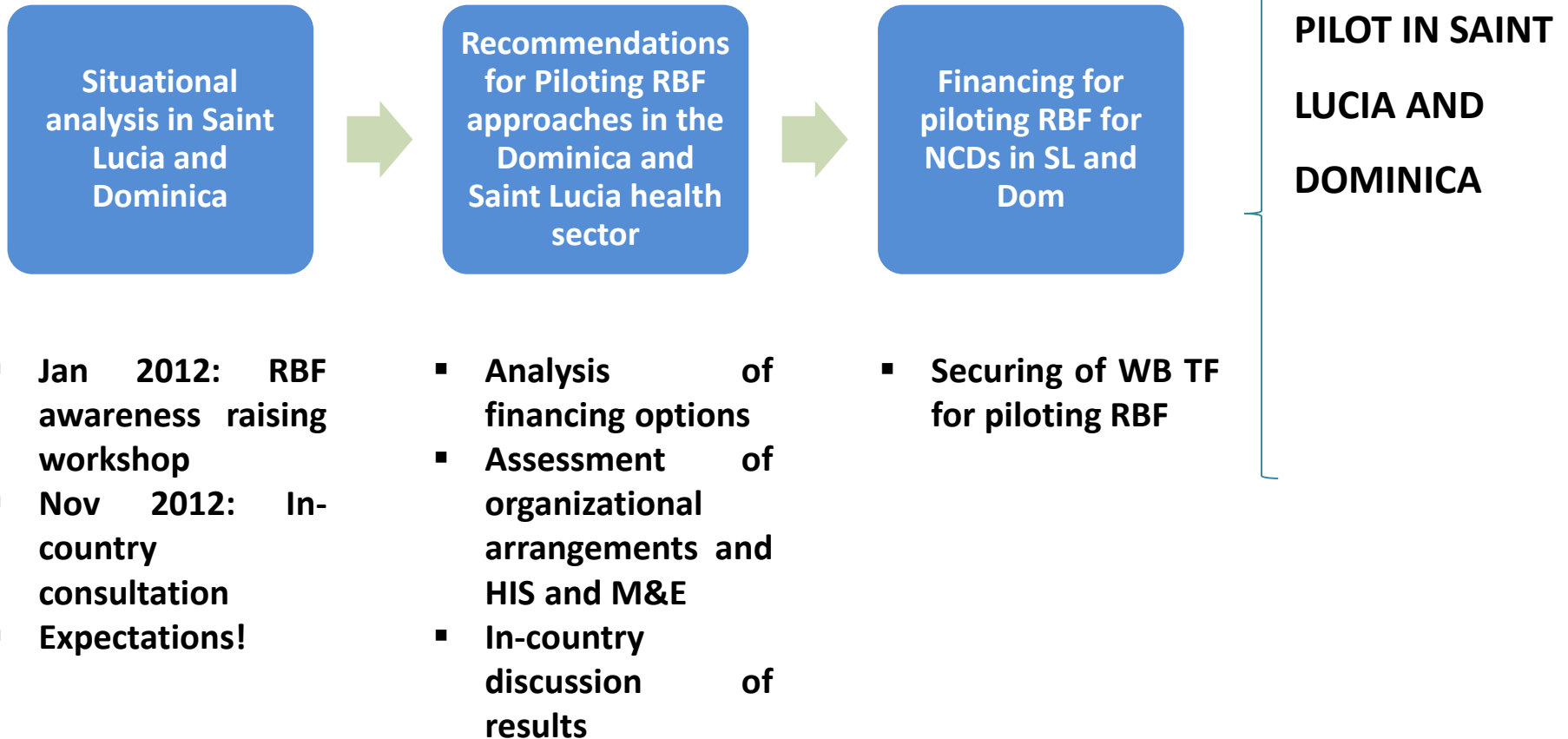
Potential Regional Operation for NCDs

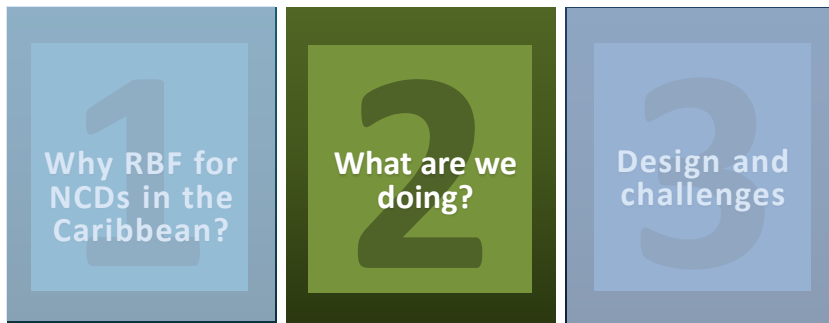
2012

2014



## Phase 1: ASSESSMENT





## Phase 2: Knowledge exchanges



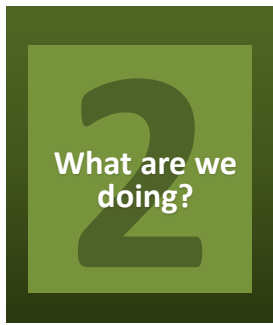
PILOT IN SAINT  
LUCIA AND  
DOMINICA

- FESP Project
- Plan Nacer
- Fiduciary arrangements (audit)

- PARS 2 Project
- Information system

- Pay-for-performance scheme

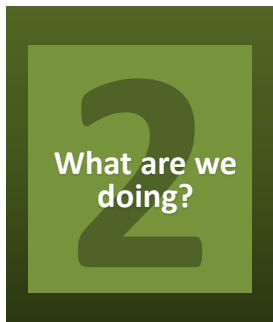




## Essential Public Health Functions Project

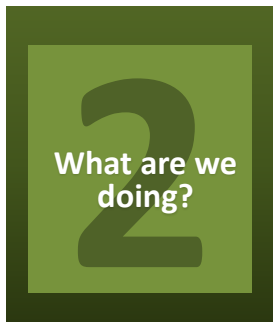
- 1** Strengthen the stewardship of National and Provincial Authorities
- 2** Reduce exposure of population to risk factors associated to NCDs
- 3** Expand coverage of 7 Groups of Diseases and Prioritized Public Health diseases
- 4** Strengthen Health Promotion, Healthy habits and lifestyles and community participation





## **PUBLIC HEALTH ACTIVITIES - WHAT ARE THEY?**

- **Group of actions aimed at strengthening and improving public health results**
- **Effective and standardized activities, with measurable and justifiable value.**
- **At design:**
  - Identify operational unit costs of delivering PHAs**
- **At implementation:**
  - Identify and agree on annual targets to be achieved**
  - Define protocols for each PHA and for the External Audit**



- **Safe Blood Program : Increase voluntary blood donations**
  
- **How the Project tracks the indicator:**
  - 1) Traditional Financing:** Construction of a regional blood banks
  
  - 2) Eligible Medical Supplies:** Procurement of reagents to screen blood
  
  - 3) RBF - PHA:**
    - Blood donation operatives by regional blood banks (25 donors)
    - Unit of measurement: # of operatives
    - Unit cost components: professionals and technicians extra time, travel and meals, promotion materials, data collection
    - Unit cost: UDS 870

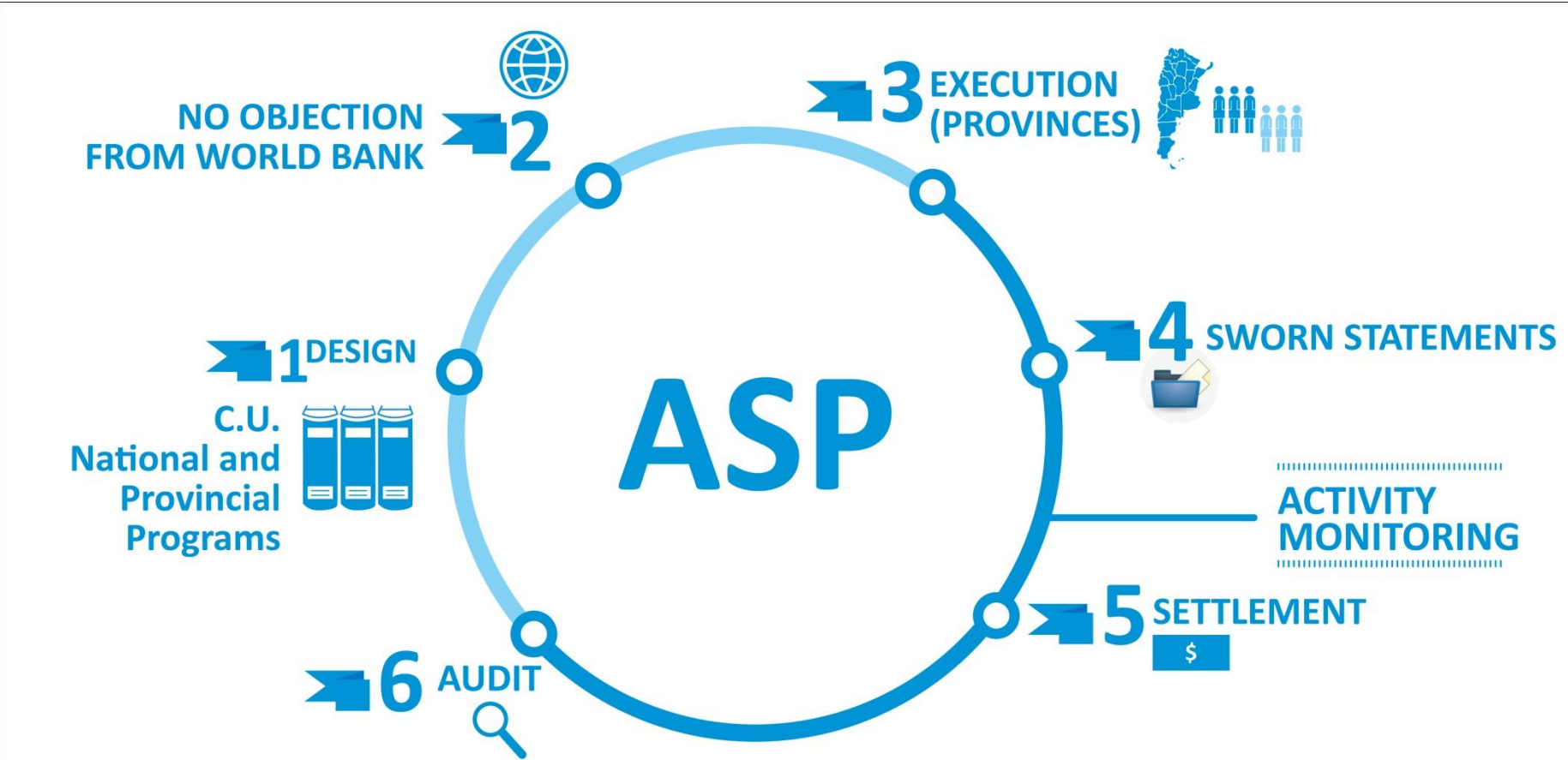
**1**  
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**ARGENTINA**

# LIFE CYCLE OF PHAs



1  
Why RBF for NCDs in the Caribbean?

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Partnerships with the Argentina Association of Bakeries towards salt reduction

7,000 out of 28,000 bakeries engaged in salt reduction strategy



**RECOMENDACIONES PARA LA ELABORACIÓN DE PAN**

Para la elaboración del pan utilizar hasta 750 g. de sal por cada bolsa de 50 Kg. de harina.

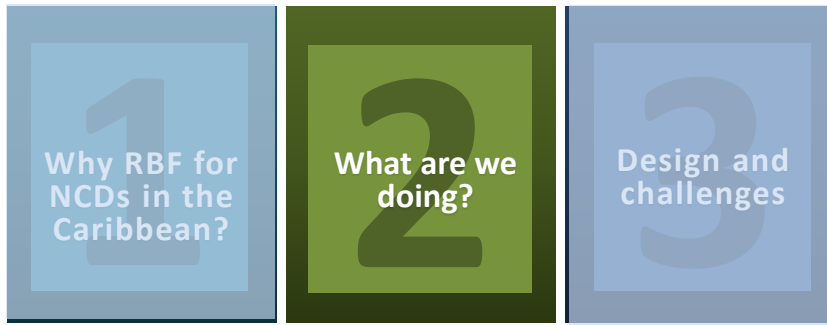
- Para la elaboración del pan sin sal no debe agregarle ese ingrediente en ninguna cantidad, y puede recurrir a condimentos naturales para saborizar (pimienta, ajo, cebolla, ají, etc.)
- Controlar la fecha de vencimiento de los productos antes de usarlos
- Mantener en heladera los alimentos perecederos (leche, mantecas, cremas, etc.)

**IMPORTANTE:**

- Lavarse frecuentemente las manos con agua y jabón: después de ir al baño, antes de entrar a la cuadra, luego de manipular desperdicios, después de tocar alimentos frescos (huevos, por ejemplo)
- Mantener el lugar, maquinarias y utensilios de trabajo limpios. Desinfectarlos antes y después de cada elaboración.
- Usar la ropa de trabajo adecuada y limpia: delantales, gorros, cofias.
- Si está resfriado o con enfermedad infectocontagiosa no asista al área de elaboración.

www.faiqa.org.ar • www.inti.gov.ar • www.msaj.gov.ar





**ARGENTINA**

## **WHY PHAs?**

- **Improve need for strategic planning**
- **Collaborate with progress of identification of population**
- **Foster allocative efficiency**
- **Improve data quality**
- **Introduce reimbursement on the bases of public health results**

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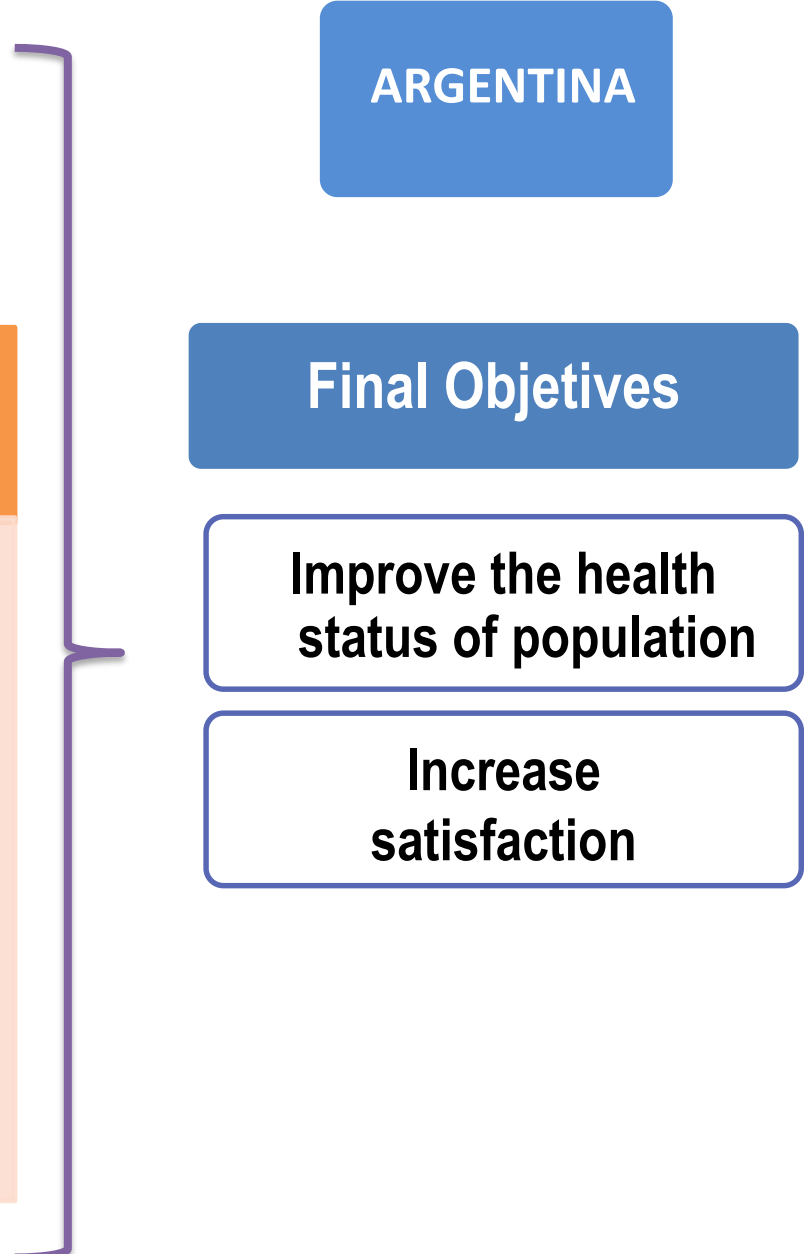
**3**  
Design and challenges

## Before Plan Nacer

- **Implicit** universal public coverage.
- Financed through public **budget**.
- Quality and coverage **gaps**.

## Plan Nacer

- Explicit coverage of prioritized services for the population without formal insurance.
- Additional investment through RBF
- Quality driven strategy.



# Full Capitation payment based on performance

NATION

Enrollment  
(monthly payment)

PROVINCE

HEALTH PROVIDER

60%

40%

Sets a per capita value  
USD2,5

Health outcomes –  
Tracer indicators  
(every four months)

Provincial  
Health Insurance

Fee for  
Service  
(monthly payment)



Performance Agreement

EXTERNAL and INTERNAL VERIFICATION

## USE OF FUNDS

- Staff Incentives
- Staff hiring and training
- Supplies
- Investment
- Maintenance

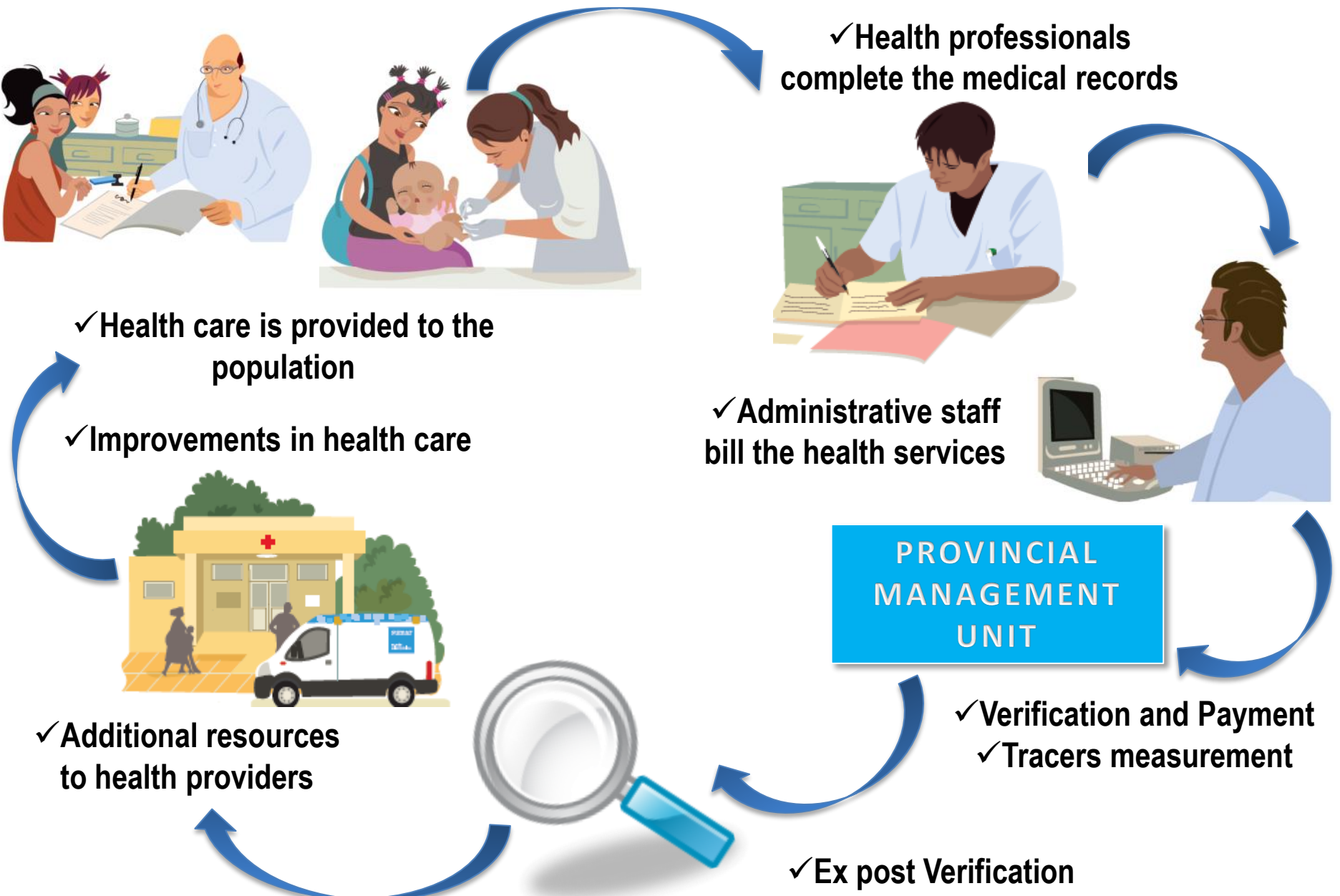
Stewardship

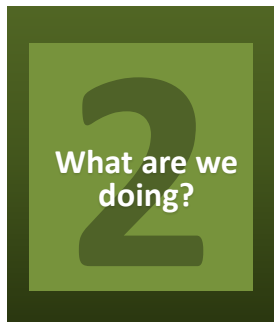
Autonomy in use of funds

Consensus



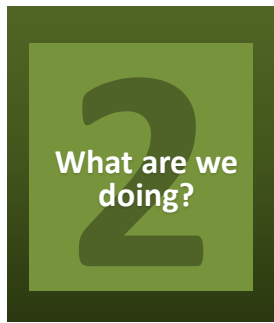
# Virtuous cycle promoted by the Program





# RBF thru Health Sector Reform Project

- Supports GODR overall goal: improve quality of health expenditures & health services
- Primary Health Care focus
- Performance based contracts between MOH and Regions, in coordination with NHI
  - 50% = capitation for essential health services package
  - 50% = regional performance for 10 indicators (MCH & comm. diseases; NCDs) of coverage & quality



- Fosters results-oriented & learning culture**
- Improvements: data recording & info verification systems/mechanisms**
- RBF regions account for ~ 81% of Clinical Mgt. System (CMS) entries nationwide**
- Notable progress in indicators (2011 to 2013)**
  - **% children < than 15 mos. w/ complete vaccination scheme acc. to protocols: 0.01 to 46.7**
  - **% of pregnant women monitored for risk acc. to protocols: 0.43 to 18.8**
  - **% of children monitored for growth & devt. acc. to protocols: 0.27 to 25.8**
  - **% of individuals > 18 years w/ hypertension screening acc. to protocols: 0.89 to 45.2**



## **AFTER ASSESSMENT....DECIDE!**

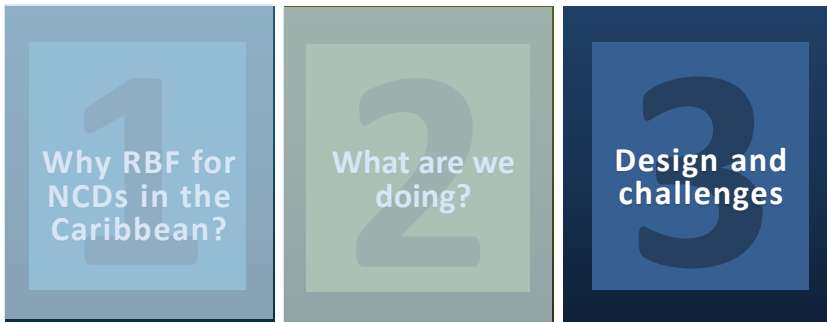
### **Phase 3: Designing the pilot**

**DECIDE**

**What to reward**

**Who to reward**

**How much to  
reward**

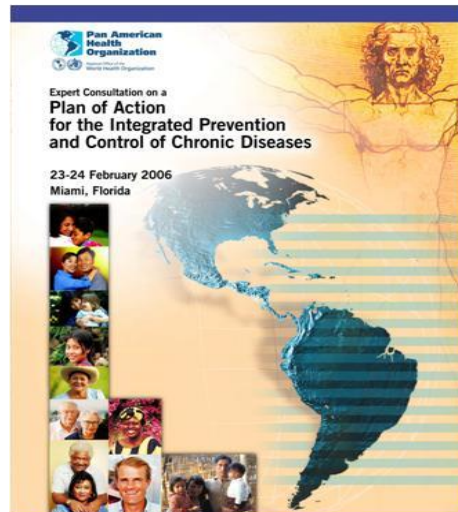
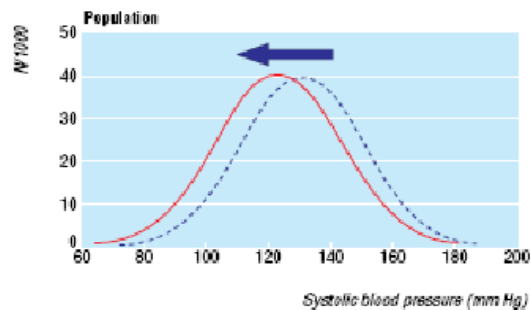


# Strategies for Prevention and Control of NCDs

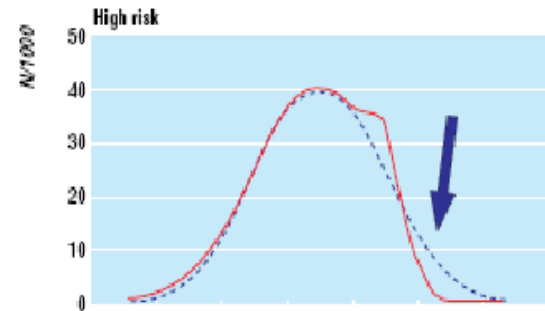
## Focus: DIABETES and HYPERTENSION

Surveillance

Public Health Interventions



Health Facilities



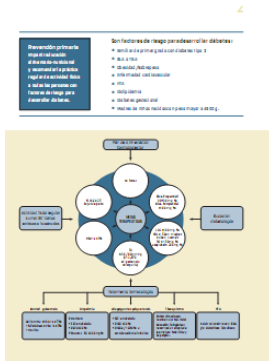
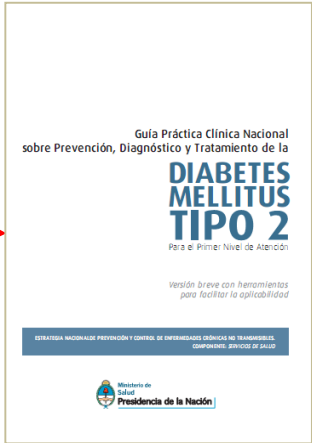
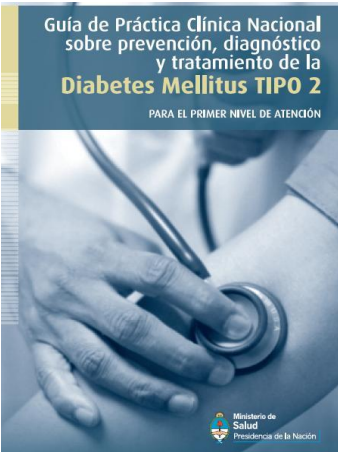
Institutional Strengthening

# 1 Why RBF for NCDs in the Caribbean?

# 2 What are we doing?

# 3 Design and challenges

# Assessment of existing tools, guides & protocols



Algoritmo de diagnóstico del Diabetes

Algoritmo	Primer Nivel	Segundo Nivel	Tercer Nivel	Quinto Nivel	Resolución
1	1	1	1	1	1
2	1	1	1	1	1
3	1	1	1	1	1
4	1	1	1	1	1
5	1	1	1	1	1
6	1	1	1	1	1
7	1	1	1	1	1
8	1	1	1	1	1
9	1	1	1	1	1
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48	1	1	1	1	1
49	1	1	1	1	1
50	1	1	1	1	1



PLAN DE MANEJO PARA EL PACIENTE CON DIABETES MELLITUS TIPO 2

OBJETIVO GENERAL: Mantener al paciente con diabetes mellitus tipo 2 en el mejor control posible, evitando complicaciones agudas y crónicas, mejorando su calidad de vida y reduciendo su mortalidad y morbilidad.

OBJETIVOS ESPECÍFICOS:

- Mantener los niveles de hemoglobina glicosilada (HbA1c) en el rango de control.
- Mantener los niveles de glucosa en sangre en el rango de control.
- Mantener los niveles de lípidos en el rango de control.
- Mantener los niveles de tensión arterial en el rango de control.
- Mantener los niveles de función renal en el rango de control.
- Mantener los niveles de función hepática en el rango de control.
- Mantener los niveles de función cardíaca en el rango de control.
- Mantener los niveles de función pulmonar en el rango de control.
- Mantener los niveles de función neurológica en el rango de control.
- Mantener los niveles de función psicológica en el rango de control.
- Mantener los niveles de función social en el rango de control.
- Mantener los niveles de función económica en el rango de control.
- Mantener los niveles de función cultural en el rango de control.
- Mantener los niveles de función política en el rango de control.
- Mantener los niveles de función religiosa en el rango de control.
- Mantener los niveles de función filosófica en el rango de control.
- Mantener los niveles de función científica en el rango de control.
- Mantener los niveles de función artística en el rango de control.
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- Mantener los niveles de función educativa en el rango de control.
- Mantener los niveles de función profesional en el rango de control.
- Mantener los niveles de función académica en el rango de control.

ACTIVIDAD FÍSICA RECOMENDADA

El paciente con diabetes mellitus tipo 2 debe realizar actividad física regular y constante, preferentemente aeróbica, con una intensidad moderada a vigorosa, durante al menos 150 minutos por semana.

RECOMENDACIONES ALIMENTARIAS

El paciente con diabetes mellitus tipo 2 debe seguir una dieta saludable y equilibrada, rica en fibra, baja en grasas saturadas y azúcares simples, y con un contenido moderado de proteínas y grasas saludables.

CONTROL GLUCÉMICO

El paciente con diabetes mellitus tipo 2 debe realizar un control glucémico regular y constante, utilizando un método de medición preciso y confiable.

CONTROL GLUCÉMICO

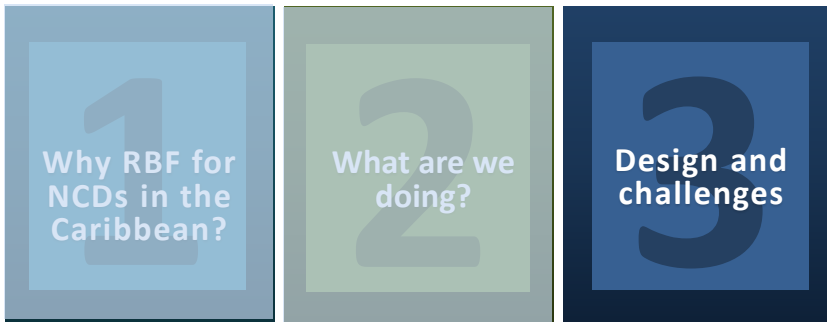
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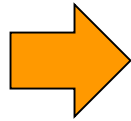
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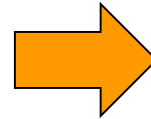


# Provider payment models

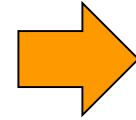
**Paying for inputs**



**Paying for outputs**



**Paying for performance**



- Line item budgets
- Fee-for-service

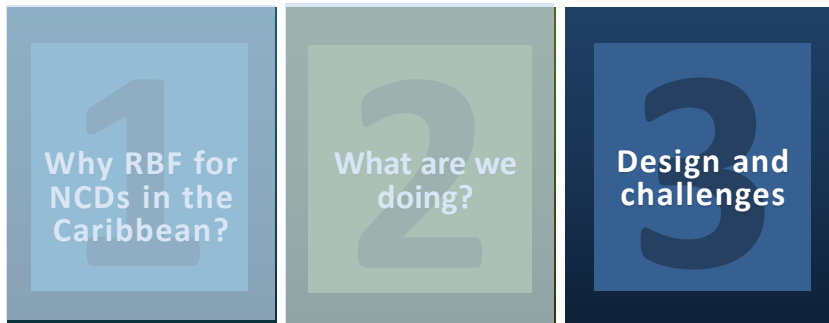
- Fee-for-service

- DRG
- Capitation

P4P

- Mixed models
  - ✓ Full capitation with performance incentives
  - ✓ Episode-based payment with performance incentives

**Paying for outcomes/ results**

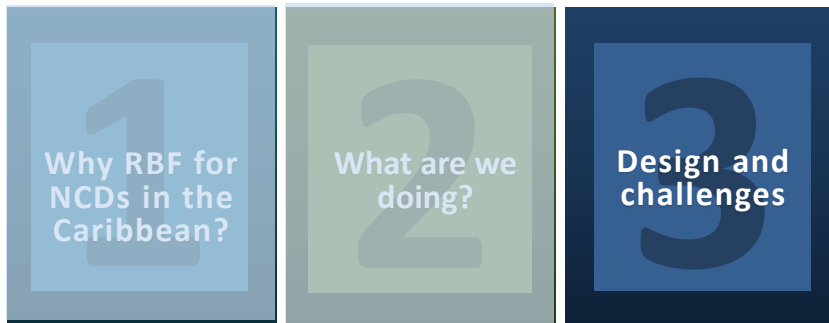


## **2 proposed Components for RBF pilot for NCDs for Saint Lucia and Dominica:**

**1) Output Based Disbursement (PHA or P4P)**

**2) Capitation**





## **1) Output Based Disbursement**

**Payments for Public Health Activities on a production basis**

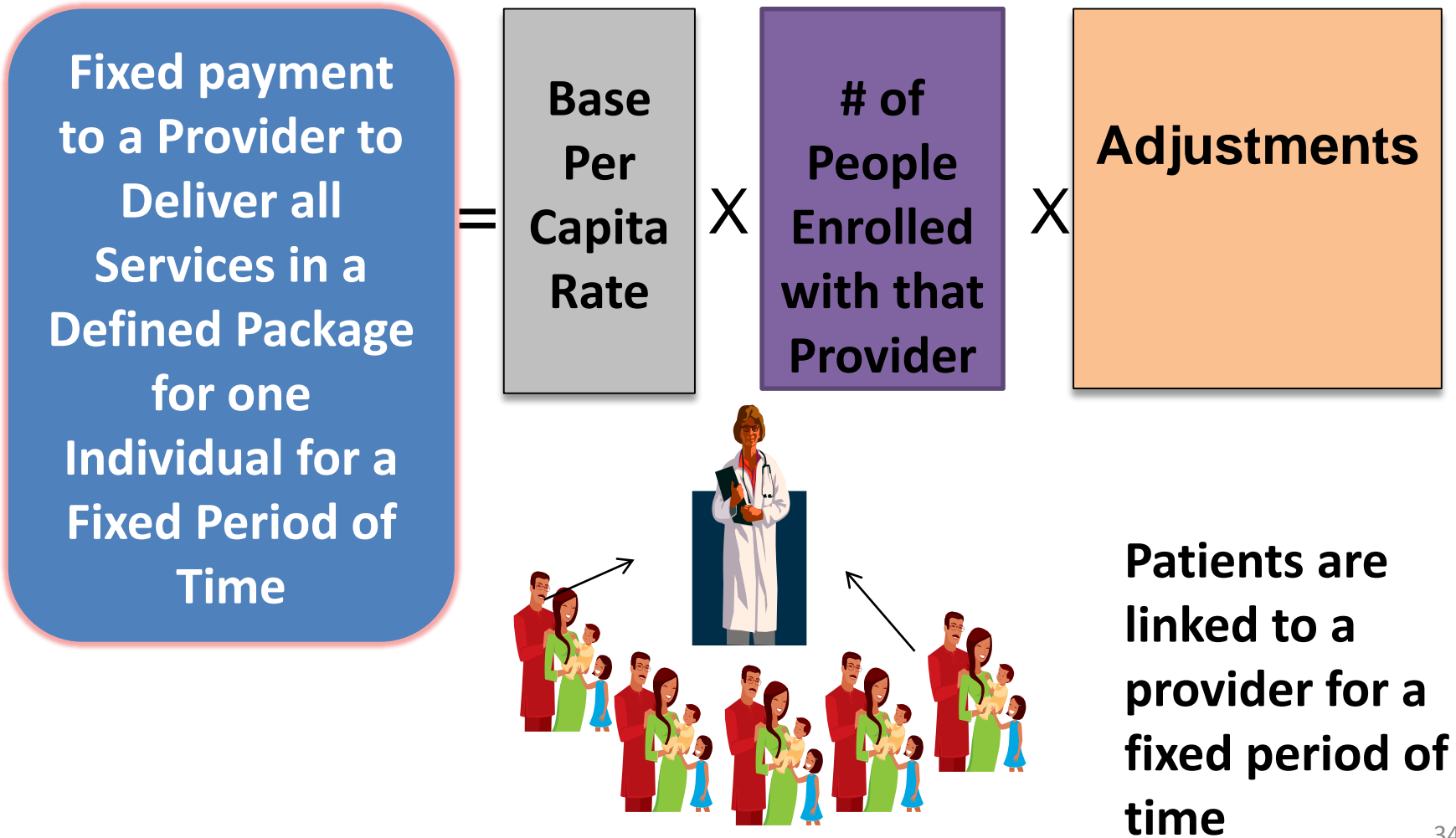
**Payment = Costs of activities \* quantity of activities**

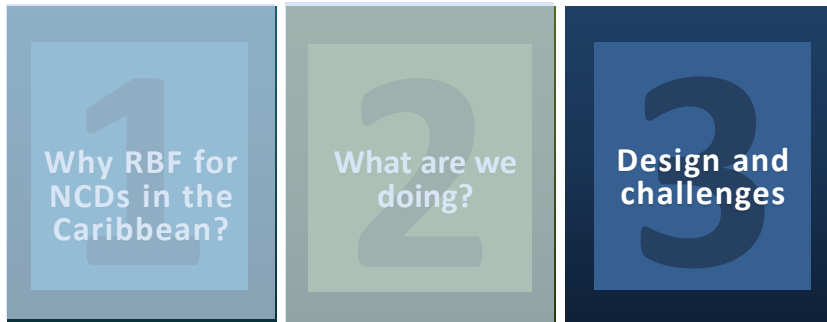
**1**  
Why RBF for NCDs in the Caribbean?

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Design and challenges

## 2) Capitation





## Who are the stakeholders involved?

### Ministry of Health (MOH)

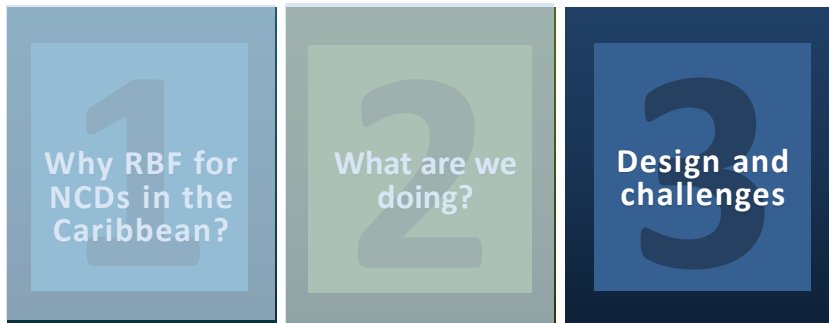
- Define Protocols
- Budget allocation

### Chief Health Planner (CHP)

- Establish goals
- M & E
- Determine allocation to clinics

### Clinics

- Enroll target population
- Provide services
- Report clinic records
- Allocate funds



## DECISIONS TO MAKE:

$$SF = 30\% * (K * PE) + 70\% * (K * PE * GA)$$

PE = number of target population enrolled

K = Capita

GA = Percentage of Goals Accomplished

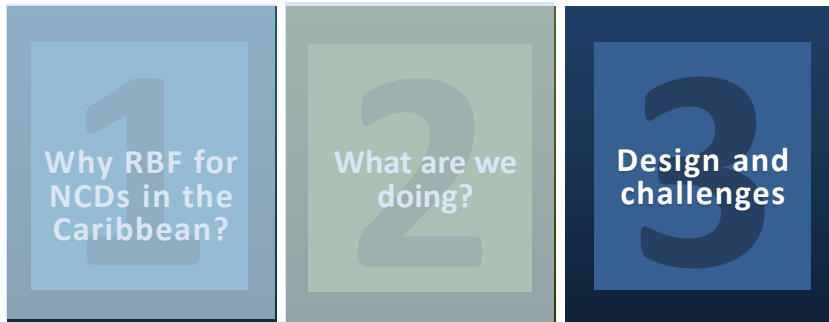
Allocation of funds

Decision 1: Population to cover

Decision 2: Amount of the Capita. Significant enough to change behaviour

Decision 3: Type of indicators

Decision 4: Definition of eligible items

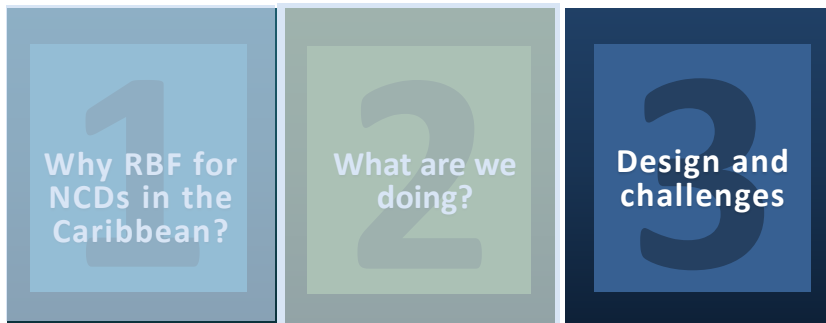


## **TO KEEP IN MIND....**

**CLEARLY DEFINE THE GOAL OF THE PROJECT : Standardization of care or Reduction of Incidence of Diabetes and Hypertension?**

**Do we want to improve the quality of life through the effective management of Diabetes Mellitus & Hypertension?**

**Or Improve the effective standardization of care in the approach to the management of NCDs and the reduction of the incidence and complications among the population?**

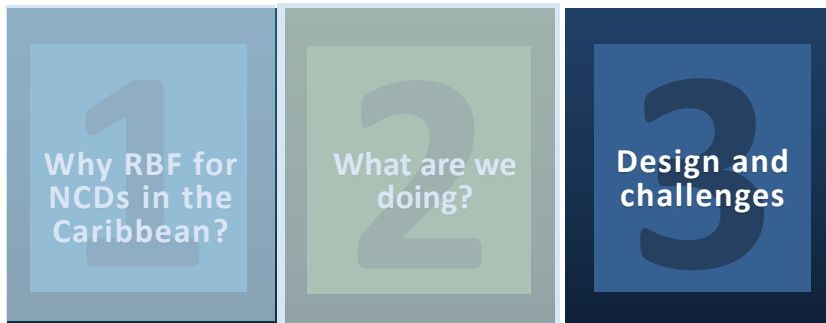


**CHOOSE YOUR TARGET POPULATION for each specific intervention**

**Indicators: Need to be measurable and attainable within the project timeframe. If using PHAs, align them with result indicators**

**Given the importance of quality assurance, consider selecting initial indicators that would focus on updating of and training on protocols and dedicating HR to enforce compliance**

**PHA: Need to develop guidelines and protocols for each PHA as well as information systems for record-keeping**



## **IMPLEMENTATION ARRANGEMENTS: ASSESS RBF IMPACT AT THE SYSTEM LEVEL**

**-Decentralized system in Dominica will require funding for RBF allocated to the districts and managed at that level.**

**-Centralized system in Saint Lucia: few organizational changes due to RBF. The MOH will remain the payer of services through the Primary Health Care Services.**

**HUMAN RESOURCES: RBF scheme may result in a redistribution of personnel**

**Thank you!**  
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