



KDIGO - Controversies Conference
Chronic Kidney Disease as a Global Public Health
Problem: Approaches and Initiatives

12-14 October, 2006

Renaissance Amsterdam, Amsterdam

THE IMPORTANCE OF NEPHROLOGY IN PUBLIC HEALTH

(Program for Surveillance and Control of Chronic Diseases)

Santos Depine, MD, MPH and Rafael Burgos Calderón, MD

Committee for the Development of the Nephrology

Latin American Society of Nephrology

THE IMPORTANCE OF NEPHROLOGY IN PUBLIC HEALTH (PROGRAM FOR SURVEILLANCE AND CONTROL OF CHRONIC DISEASES)

As recently as April 2006, CDCs (Centers for Disease Control and Prevention) in the United States of America¹ placed chronic renal disease in the center of public health debate requiring an action plan from country governments. In this way, it was acknowledged in their vision that prevention efforts are yet undeveloped.

For many years now, clinical nephrology has been fostering the need to control the impact of permanent renal disease within the public health environment.

The lack of a systematized control provided through a measurable program has greatly impacted on the level of hospital expense since they have increased their case-mix risk, family economies deteriorate and health care pays for a higher morbimortality that could be avoided with better surveillance and epidemiological control.

However, nephrology associations have paved the way in this effort. The "Sustainable and Tenable Renal Health Model" from the SLANH has already been implemented in 11 countries in the Latin American region.²

1 Schoolwerth, Anton C., Engelgau, Michael M, Hostetter, et al. Chronic Kidney Disease: A Public Health Problem That Needs a Public Health Action Plan. Preventing Chronic Disease. Volume 3: No. 2, April 2006

2 Argentina, Brasil, Chile, Colombia, Ecuador, México, Paraguay, Perú, Puerto Rico, Uruguay y Venezuela

This model incorporates Wagner's³ managed care "Model to Improve Chronic Disease Care", and is enhanced with public health proposals that establish strategies for cardiovascular, cerebral, renal and endocrine-metabolic health.

This is a novel proposal for surveillance and epidemiological control of prevalent chronic diseases in primary health care and in first level of attention, since it integrates medicine and clinical nephrology with public health.

The model favors control of diabetes, hypertension, obesity and dislipemia through systematic follow ups that protect against the progression of endothelium damage, which is a marker of the evolution towards multiorganic failure.

Planned in the Logical Frame and the Matrix of Allocation of Activities and Resources⁴, it facilitates its financing as a national program or with external financing.

3 Wagner EH. Chronic disease management: What will it take to improve care for chronic illness? *Effective Clinical Practice*. 1998;1:2-4.

4 Depine Santos: Guidelines to a Cost-Efficient Assignment of Activities and Resources in Primary Health Attention. UNDP-International Financial Health Unit. Health Ministry, Argentina, 2002

Committee for the Development of the Nephrology. SLANH

DECLARATION OF VALDIVIA

December 2002

ACTION PLAN FOR LATIN AMERICA:

- .- Start a Patients' Identification System depending on the evolutionary stage of the disease, encouraging NKF and Puerto Rico's classification.**
- .- Create a Reference and Counterreference System for an orderly planning of renal patients at Primary Attention.**
- .- Establish Therapeutical Goals and Plans encouraging the use of Flowcharts and Diagnostic & Therapeutical Algorithms.**
- .- Integrate the Renal Health Model and Health National Policies in each of the countries using the Logical Framework and the Activities and Resources Allocation Matrix.**

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CLINICAL NEPHROLOGY

HEALTH POLICIES

WWW.

Título y Contenido	Autor	Fecha Publicación
Lineamientos para la Implementación de un Modelo Sustentable y Sostenible de Salud Renal. Organizacion Panamericana de la Salud Organizacion Mundial de la Salud Administración de Programas Especiales Ministerio de Salud de la Nación (*.pdf 6.8 MB)	Santos Depine	Noviembre 2003
Programa de Salud Renal. Modelo Sustentable y Sostenible de Salud Renal. Programa de Salud Renal para la Seguridad Social de la Argentina. Organizacion Panamericana de la Salud Organizacion Mundial de la Salud Administración de Programas Especiales Ministerio de Salud de la Nación	Santos Depine	Agosto 2004
Resolución Ministerio de Salud (Argentina) Programa de Salud Renal Boletín Oficial - República Argentina	Administración de Programas Especiales	Septiembre 2004
El Programa de Salud Renal para la Seguridad Social de la Argentina. Una estrategia de intervención Sustentable y Sostenible	Santos Depine	Abril 2005
Modelo de Salud Renal para Estado Libre Asociado de Puerto Rico. Una aproximación a una propuesta Sustentable y Sostenible - Taller de Salud Renal para médicos primarios - Taller de Salud Renal para Centroamérica y el Caribe	Rafael Burgos Calderón, Santos Depine	Agosto- Septiembre 2005

- Documentos de Salud Pública
- Documentos de Salud Renal
- Talleres de Salud Renal en los Países

**Year 2003
PAHO / WHO
Document**

**Logical
Framework**

and

**Matrix of
Allocation of
Activities and
Resources**

WWW.



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**Year 2004
PAHO / WHO
Document**

**SIMULATION
MODELS
STRUCTURE**

**Economics impacts
and epidemiological
control**

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From the Latin American Society of Nephrology, we proposed a Renal Health Model, that interconnects community public health and clinical medicine

Kidney International, Vol. 68, Supplement 97 (2005), pp. S23–S30

Sustainable and tenable renal health model: A Latin American proposal of classification, programming, and evaluation

RAFAEL BURGOS CALDERÓN and SANTOS DEPINE

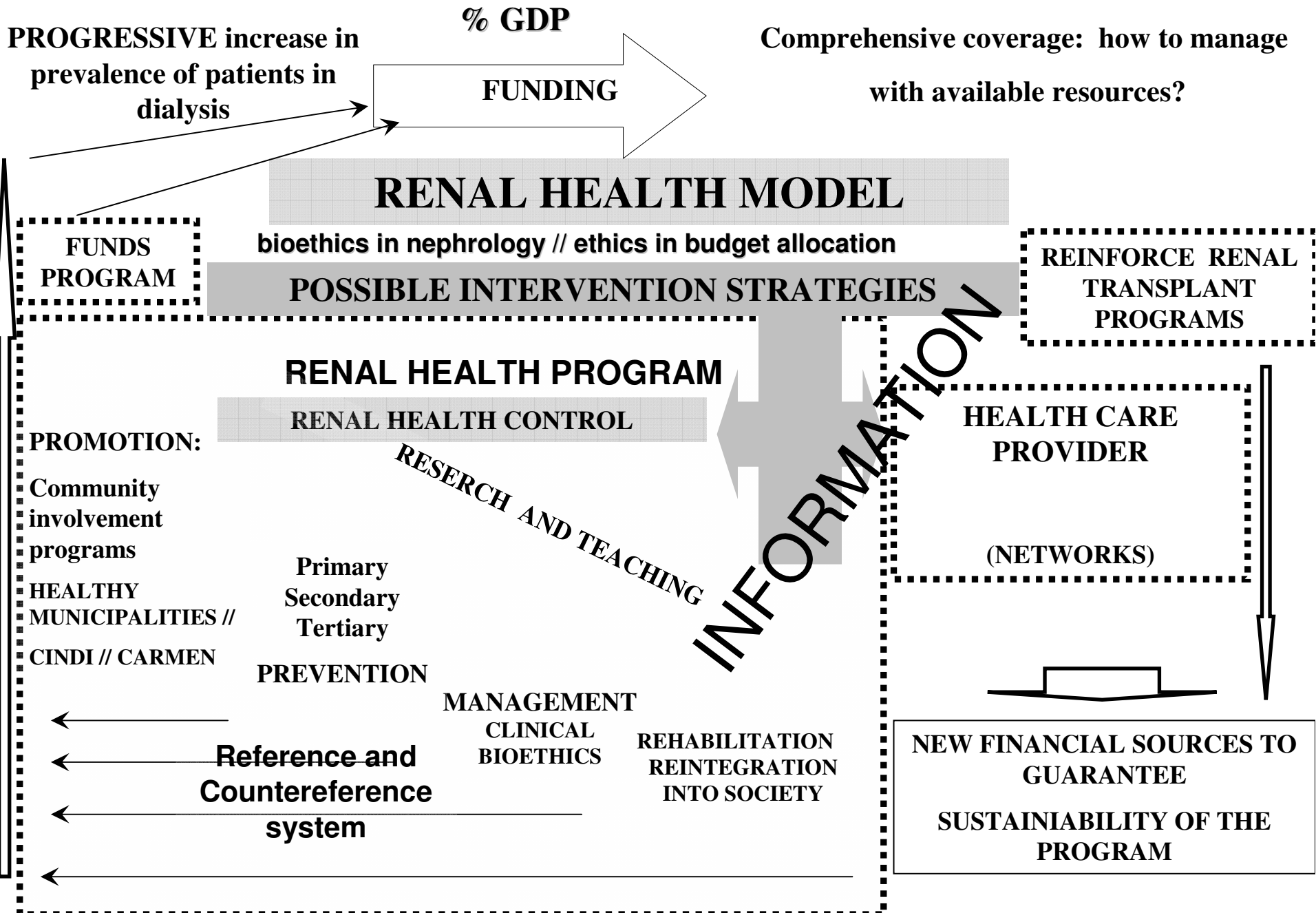
Section of Nephrology, Department of Medicine, University of Puerto Rico, School of Medicine, San Juan, Puerto Rico; Special Program Administration, Ministry of Health, Buenos Aires, Argentina

Sustainable and tenable renal health model: A Latin American proposal of classification, programming, and evaluation.

Background. End-stage renal disease (ESRD) presents a major problem to public health, with complex implications for social and economic structures in every nation of the world. Clearly, Latin American and Caribbean countries are not able to meet the needs of every patient requiring dialysis treatment at ESRD. Consequently, a considerable number of patients die

2002, en la ciudad de Valdivia, Chile, se aprobaron las modificaciones a la Clasificación de las Enfermedades Renales de la National Kidney Foundation.

Proyecto. Las modificaciones aprobadas en la Declaración de Valdivia establecen un nuevo modelo de salud renal. Consisten en la inclusión de gráficos del seguimiento ordenado de los pacientes, iniciando desde las etapas iniciales de la IRC así como un modelo que establece la guía para la reasignación de recur-



PROGRESSIVE increase in prevalence of patients in dialysis

% GDP

FUNDING

Comprehensive coverage: how to manage with available resources?

RENAL HEALTH MODEL

Program for Surveillance and Control of Chronic Diseases

FUNDS PROGRAM

REINFORCE RENAL TRANSPLANT PROGRAMS

RENAL HEALTH PROGRAM

RENAL HEALTH CONTROL

PROMOTION:

Community involvement programs

HEALTHY MUNICIPALITIES //

CINDI // CARMEN

Primary
Secondary
Tertiary

PREVENTION

RESEARCH AND TEACHING

INFORMATION

HEALTH CARE PROVIDER

(NETWORKS)

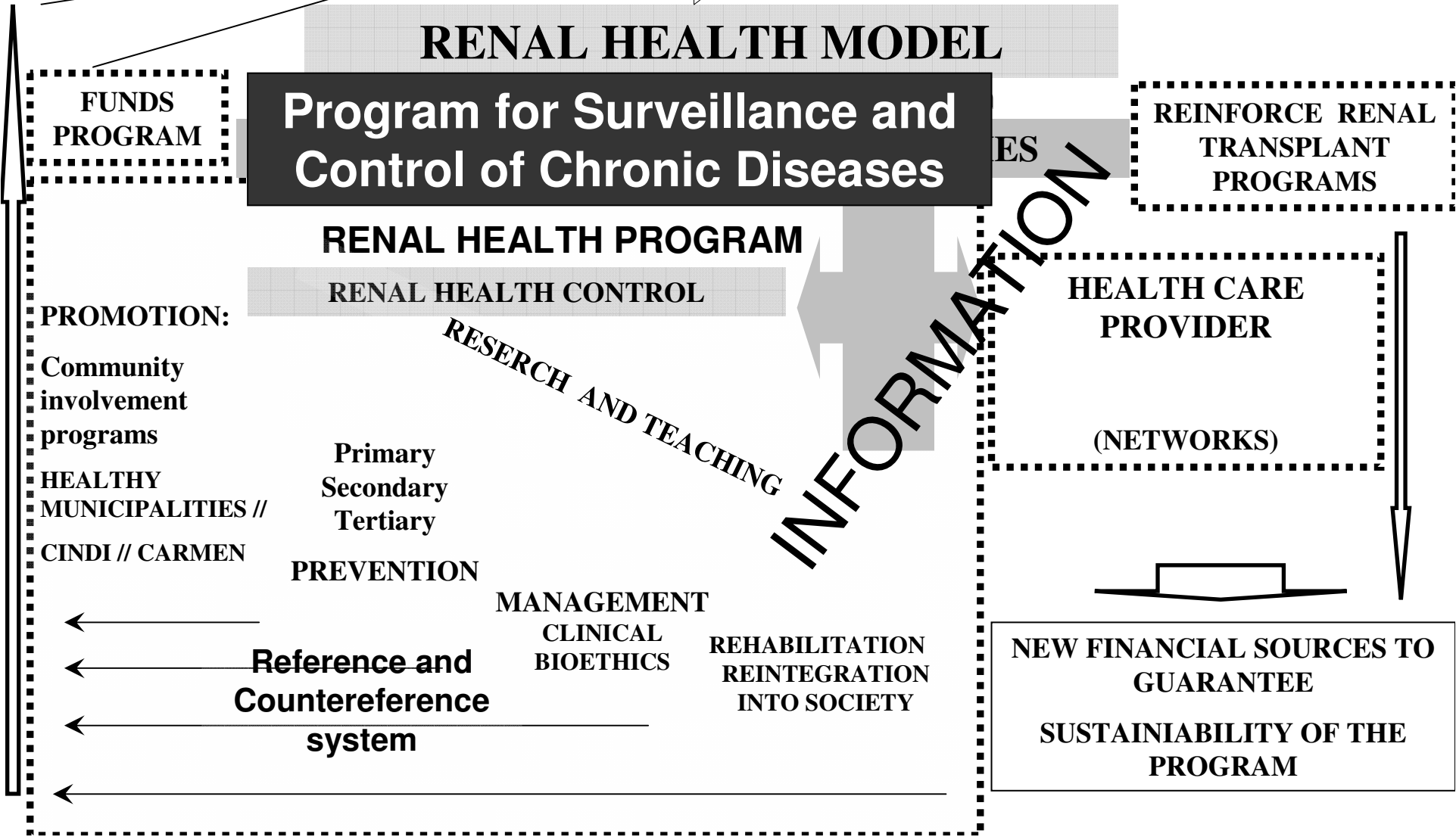
MANAGEMENT

CLINICAL
BIOETHICS

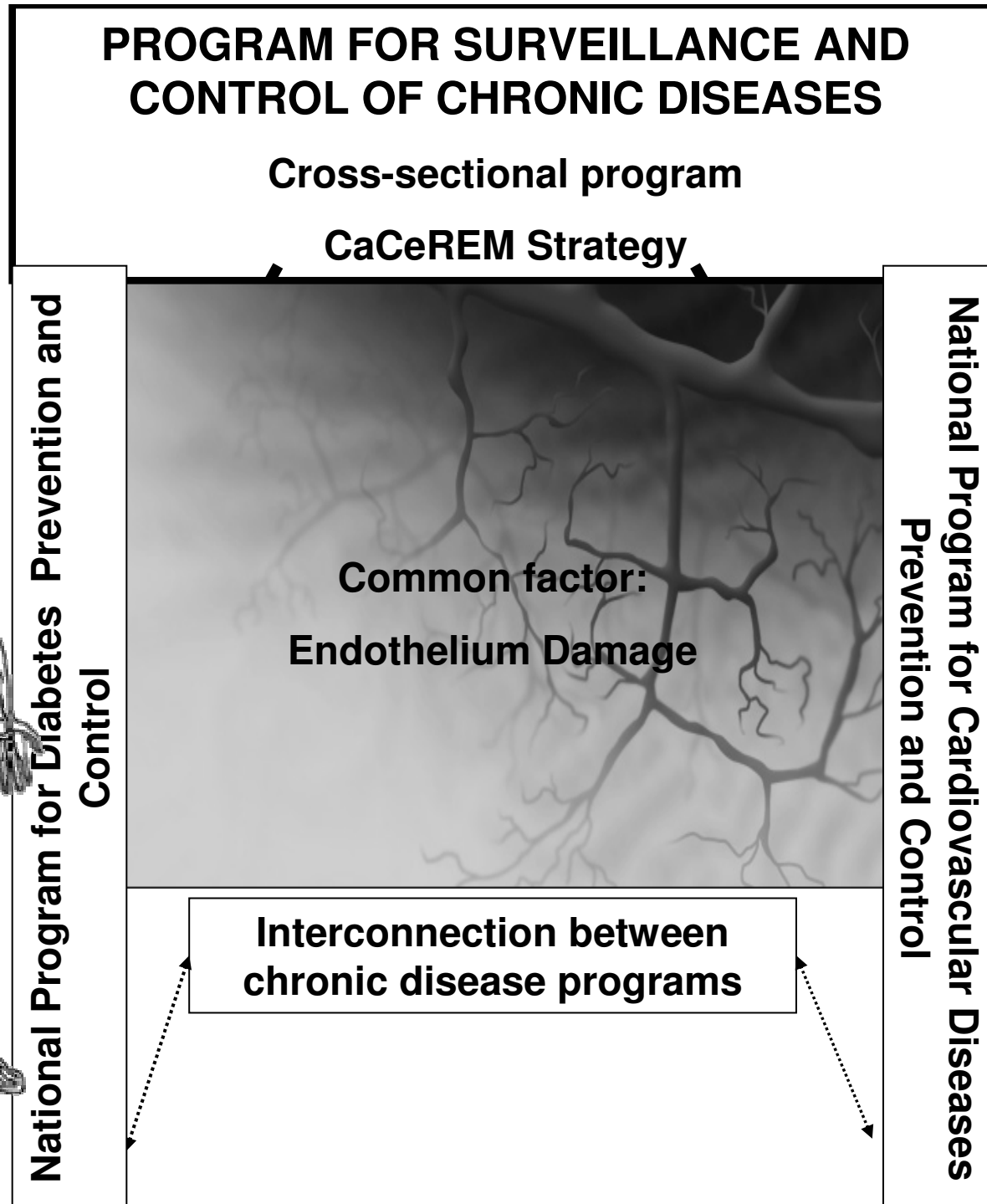
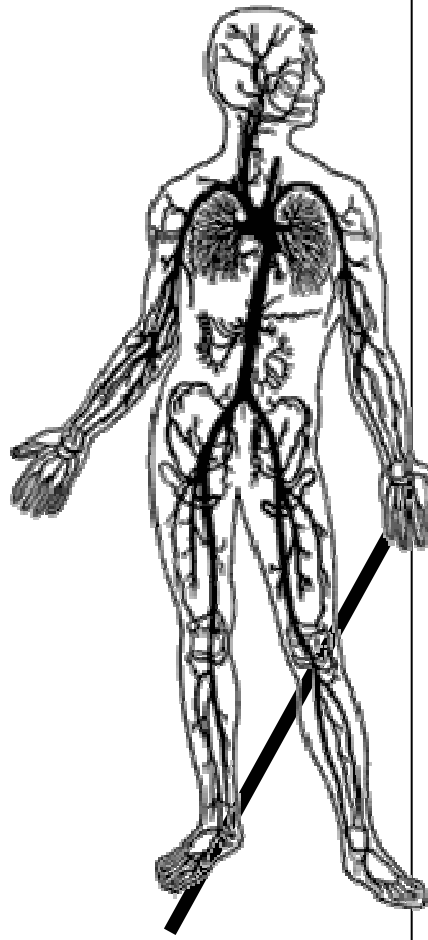
REHABILITATION
REINTEGRATION
INTO SOCIETY

Reference and Countereference system

NEW FINANCIAL SOURCES TO GUARANTEE SUSTAINIABILITY OF THE PROGRAM



**THE MODEL
OF RENAL
HEALTH CAN
BE SEEN AS:**



KEY ELEMENTS OF THE PROGRAM

1.- Elements for Planning, Programming and Evaluation :

1.1.- Logical Matrix Framework

1.2.- Matrix of Allocation of Activities and Resources

1.3.- Annual Operating Program (Spanish POA)

2.- Intervention Elements

2.1.- Identification of patients on risk

2.2.- Reference and Counterreference within a practical, systematized, multifactorial and customized approach of risk factor for management of non-transmissible diseases.

3.- Implementation axis at the First Level of Attention

3.1.- Early intervention of the Nephrologist at the start of kidney damage within the framework of Health Primary Care

3.2.- Ongoing *Training for First Level Doctors* (primary doctors)

3.3.- Ongoing *Training for Specialists*

3.4.- Program's *Systematized Follow Up* with verifiable indicators and verifying methods

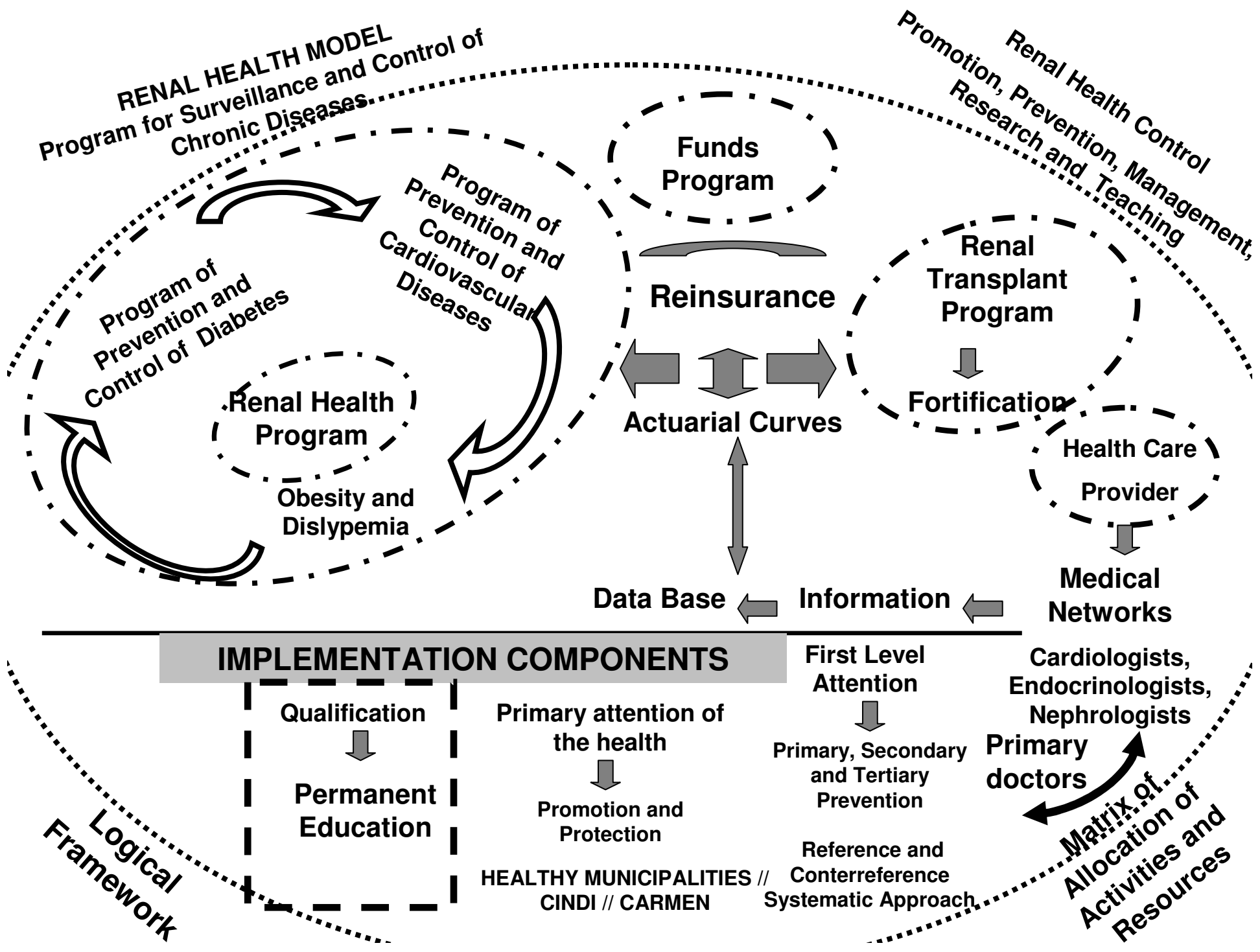
3.5.- *Flow charts and algorithms* of diagnosis and treatment

3.6.- *Medical Networks*

3.7.- Database generation for program and patients control

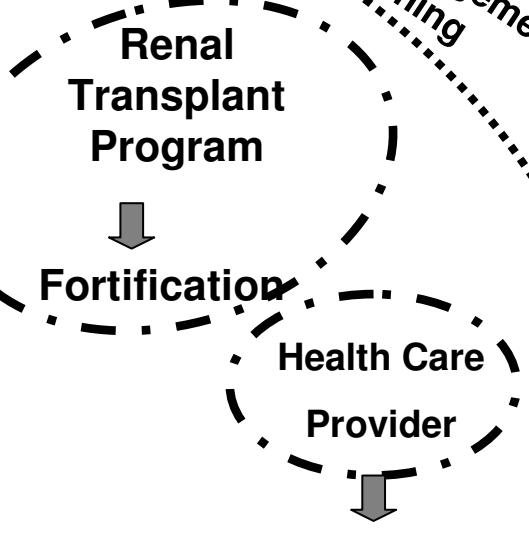
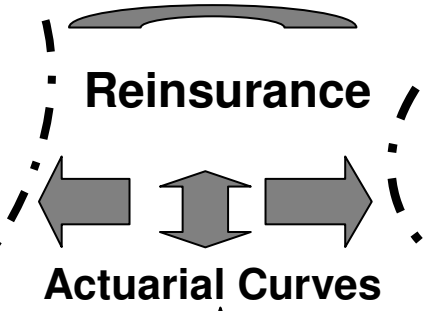
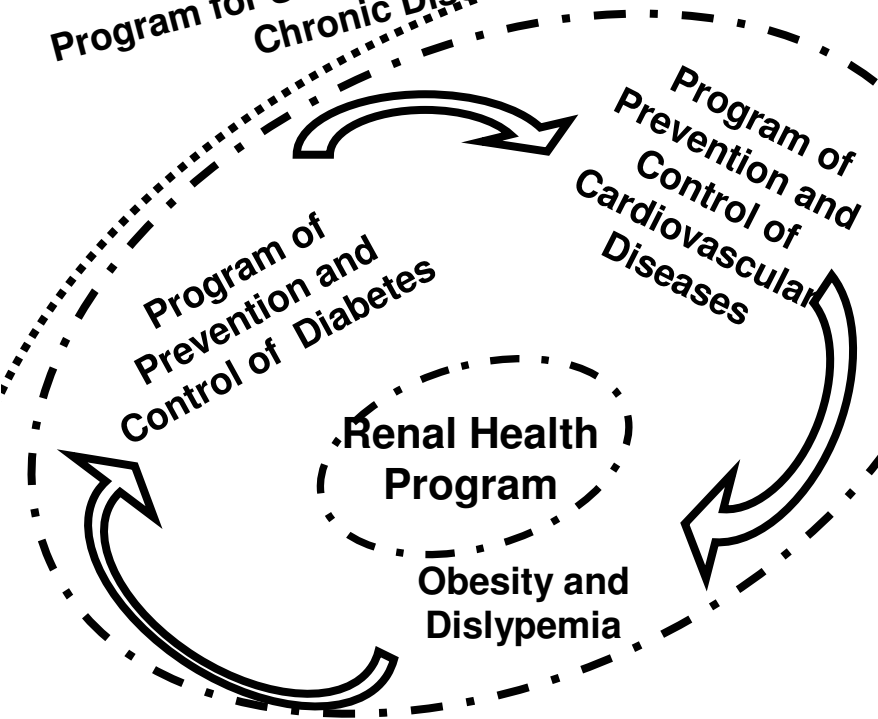
3.8.- Actuarial Curves

3.9.- Global Evaluation (Verifiable Indicators and Verifying Methods)

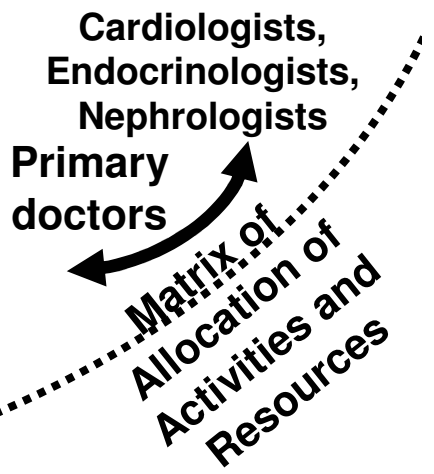
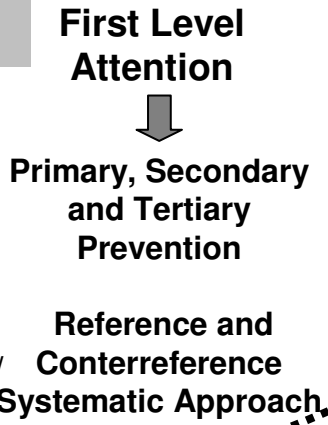
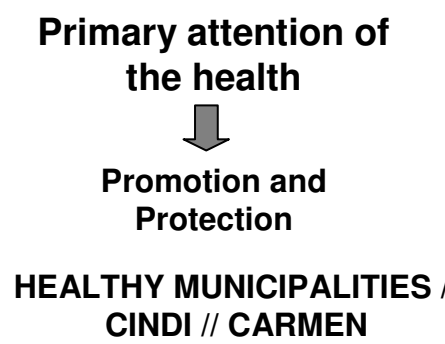
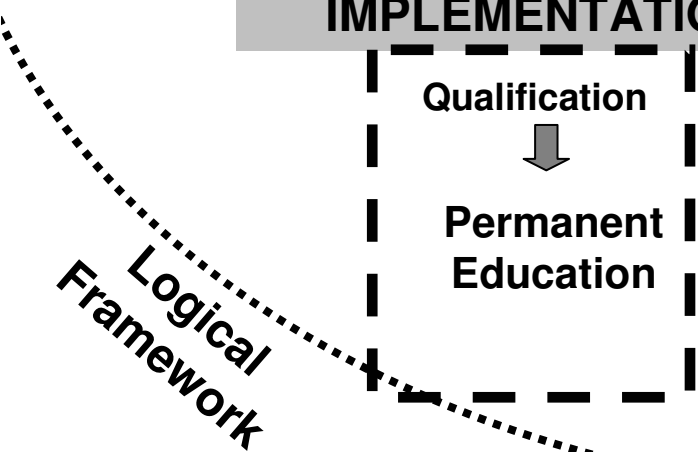


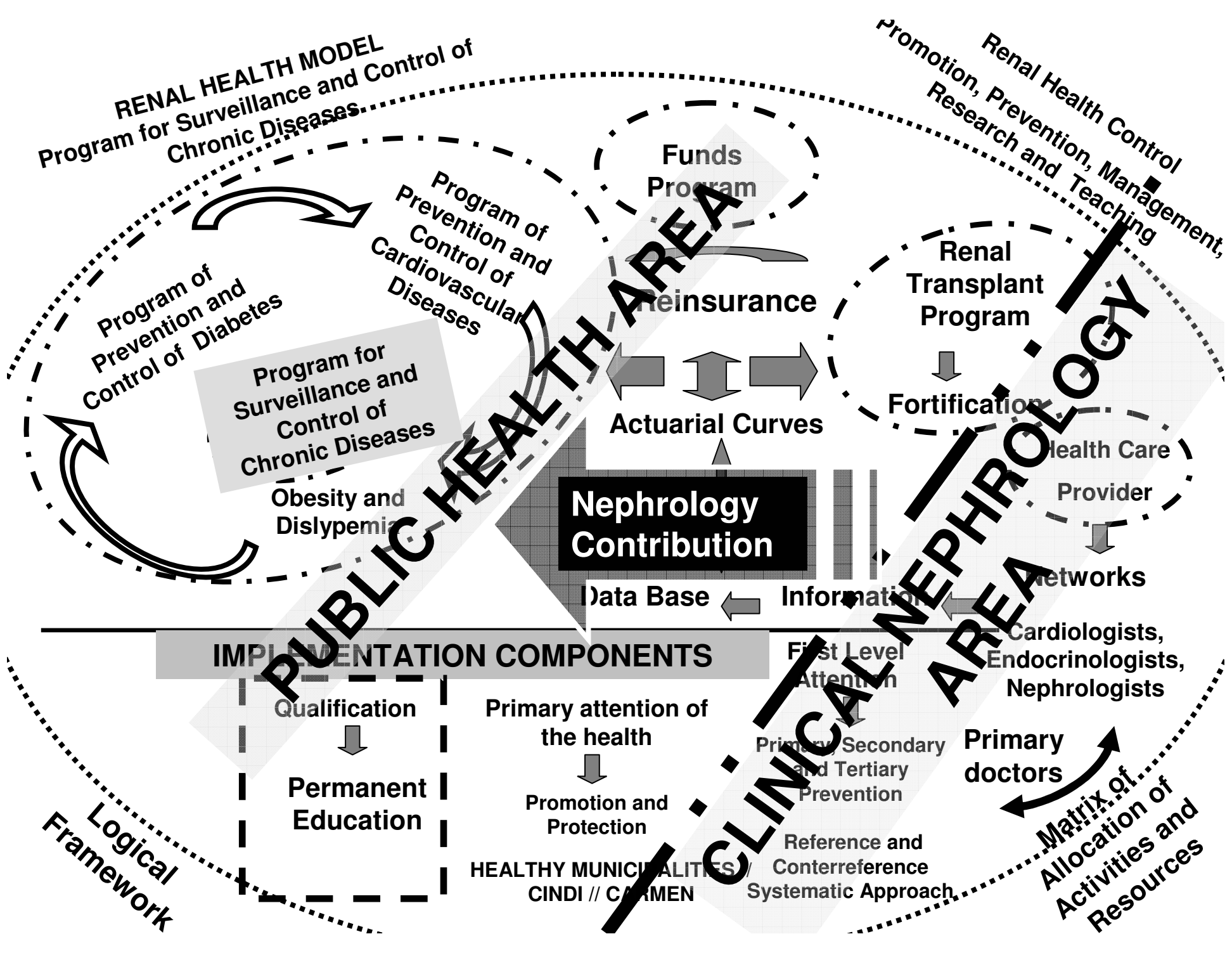
RENAL HEALTH MODEL
Program for Surveillance and Control of Chronic Diseases

Renal Health Control
Promotion, Prevention, Management, Research and Teaching



IMPLEMENTATION COMPONENTS





RENAL HEALTH MODEL
 Program for Surveillance and Control of
 Chronic Diseases

Renal Health Control
 Promotion, Prevention, Management,
 Research and Teaching

Program of
 Prevention and
 Control of Diabetes

Program of
 Prevention and
 Control of
 Cardiovascular
 Diseases

Funds
 Program

Reinsurance

Renal
 Transplant
 Program

Program for
 Surveillance and
 Control of
 Chronic Diseases

Actuarial Curves

Fortification

Obesity and
 Dislypemia

**Nephrology
 Contribution**

Health Care
 Provider

Data Base

Information

Networks

IMPLEMENTATION COMPONENTS

First Level
 Attention

Cardiologists,
 Endocrinologists,
 Nephrologists

Qualification

Primary attention of
 the health

Primary, Secondary
 and Tertiary
 Prevention

Primary
 doctors

Permanent
 Education

Promotion and
 Protection

HEALTHY MUNICIPALITIES /
 CINDI // CARMEN

Reference and
 Counterreference
 Systematic Approach

Matrix of
 Allocation of
 Activities and
 Resources

Logical
 Framework

Program for Surveillance and Control of Chronic Diseases

.- Workshops between SLANH and national health authorities, local Nephrology Society and others health actors in 11 countries of Latin America from 2003 until 2006

**.- Implementation of Program; at different pace of development, on the basis proposed by the Committee for the Development of the Nephrology (SLANH):
Argentina, Uruguay, Colombia, Venezuela, Chile, Brazil, Puerto Rico, Peru, México, Paraguay and Ecuador (1)**

(1) Santos Depine and Rafael Burgos Calderón. Renal Health Models in Latin America. Development of National Programs of Renal Health. Renal Failure. In press

.- Follow up worksheet and estimation GFR formulas (i.e. Argentina Program)

**Activities already made and in future planning altogether
between the Committee for the Development of the
Nephrology and the PAHO / WHO**

- 1.- Meeting of Consensus in PAHO / WHO. Central Office
WDC. June 16. 2006**
- 2.- Planning of a regional meeting altogether with PAHO /
WHO to consolidate the monitoring epidemiologist and
control of non transmissible chronic diseases and the renal
disease. In planning stage (PS)**
- 3.- Planning of a workshop of Renal Health for Central
America and the Caribbean countries (PS)**
- 4.- Proposal of a program pilot for its implementation within
the framework of the Program of Non - Transmissible
Diseases of PAHO / WHO (PS)**
- 5.- Planning of a workshop of Renal Health for MERCOSUR.
PAHO /WHO (PS)**

¡THANK YOU VERY MUCH !

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