



EHFG-FORUM 4 “PERSONALISED MEDICINE 2020”

A Hospital’s Perspective

Bad Gastein, Austria

Antonio L. Andreu
Instituto de Salud Carlos III

Majadahonda Campus



Chamartín Campus



Barriers to access PM in Europe

- Awareness
- Training
- Patients
- Collaboration



- Big Data
- IT and interoperability
- Verification
- Translation
- Research
- Standards
- Regulation
- Reimbursement

Reaches the NHS's defining elements

- ✓ Regulatory
- ✓ Services
- ✓ Evaluation

Reaches the three levels of activity

- ✓ Health care
- ✓ Training and teaching
- ✓ Research

**A new model for PM
in the NHS**

Reaches the three frameworks of action

- ✓ Ministry of Health
- ✓ Regional Governments
- ✓ Hospitals

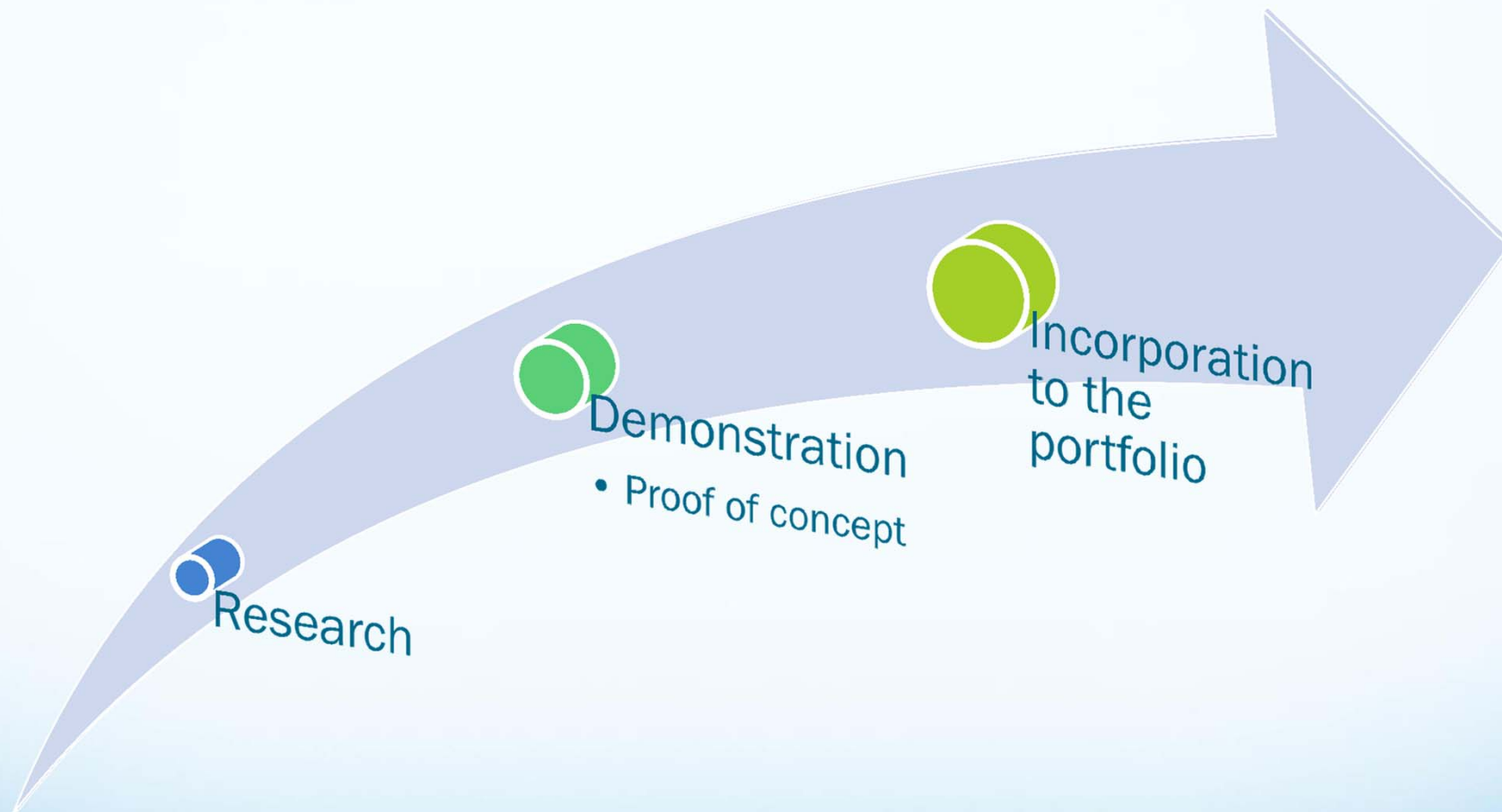
Implementation of PM needs

Develop proofs of concept

Identify mechanisms

Bring basic to clinical

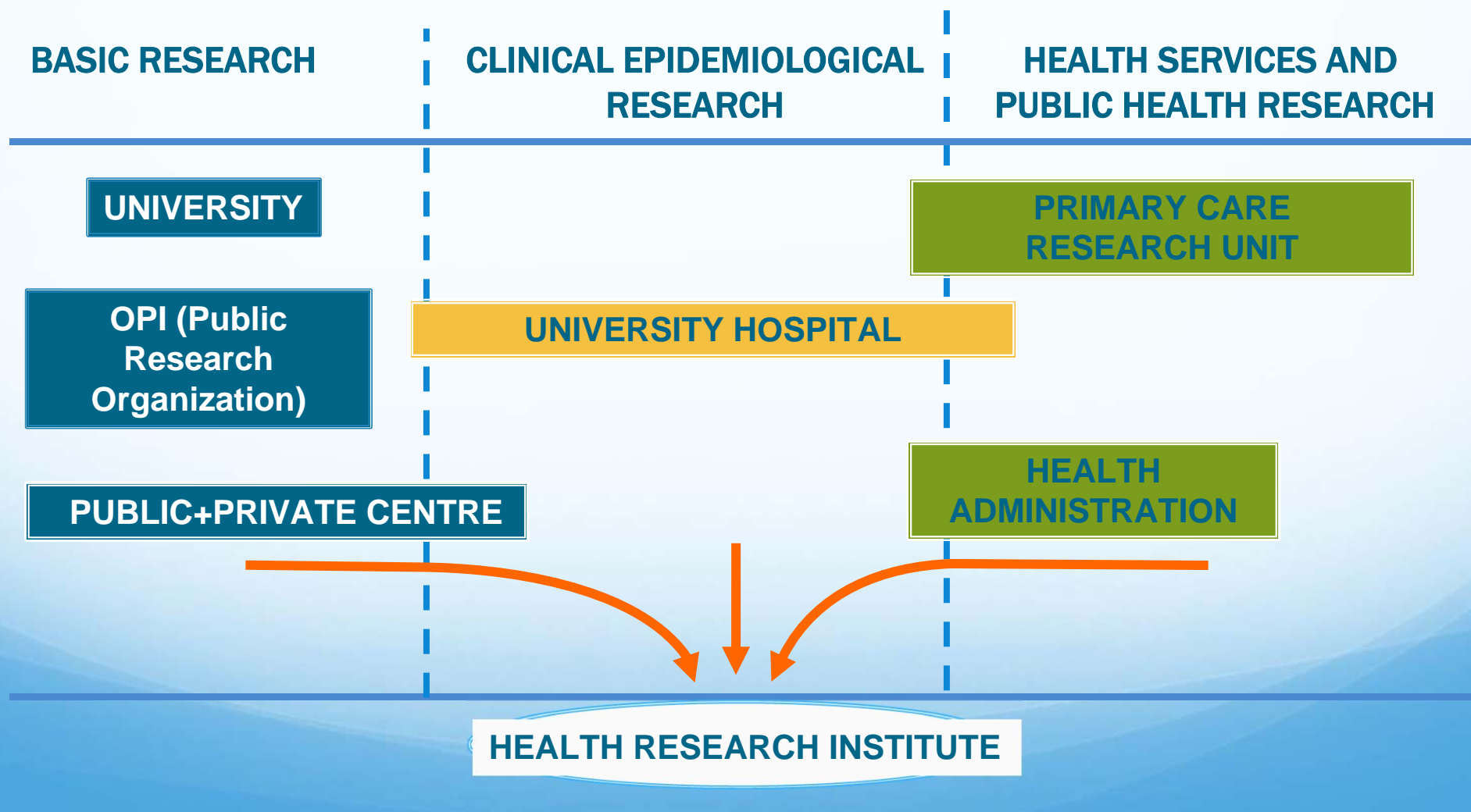
Demonstrate efficient allocation of resources



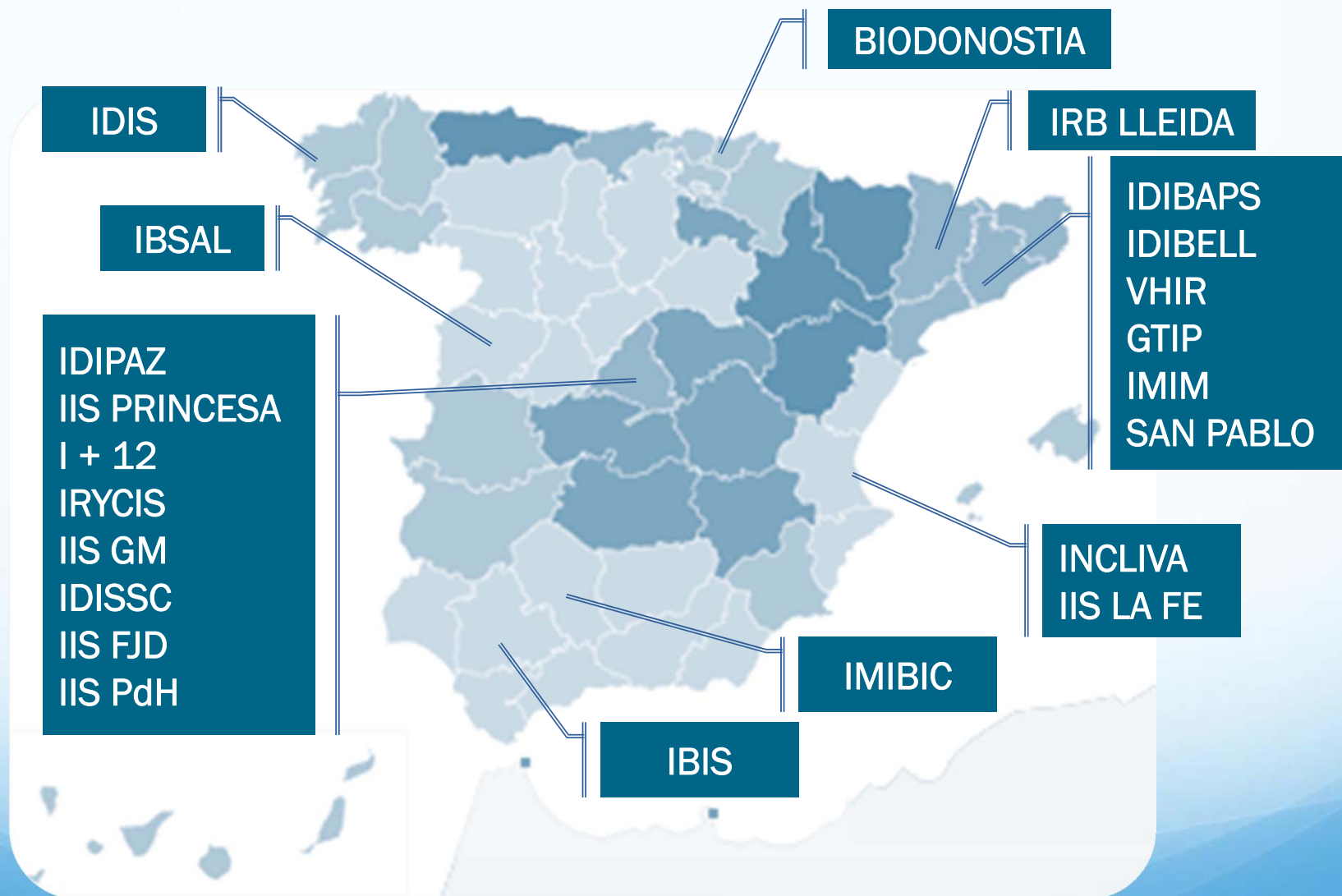
European platforms as a key element for the implementation of PM



Health Research Institutes as an aggregation model for speeding up translation



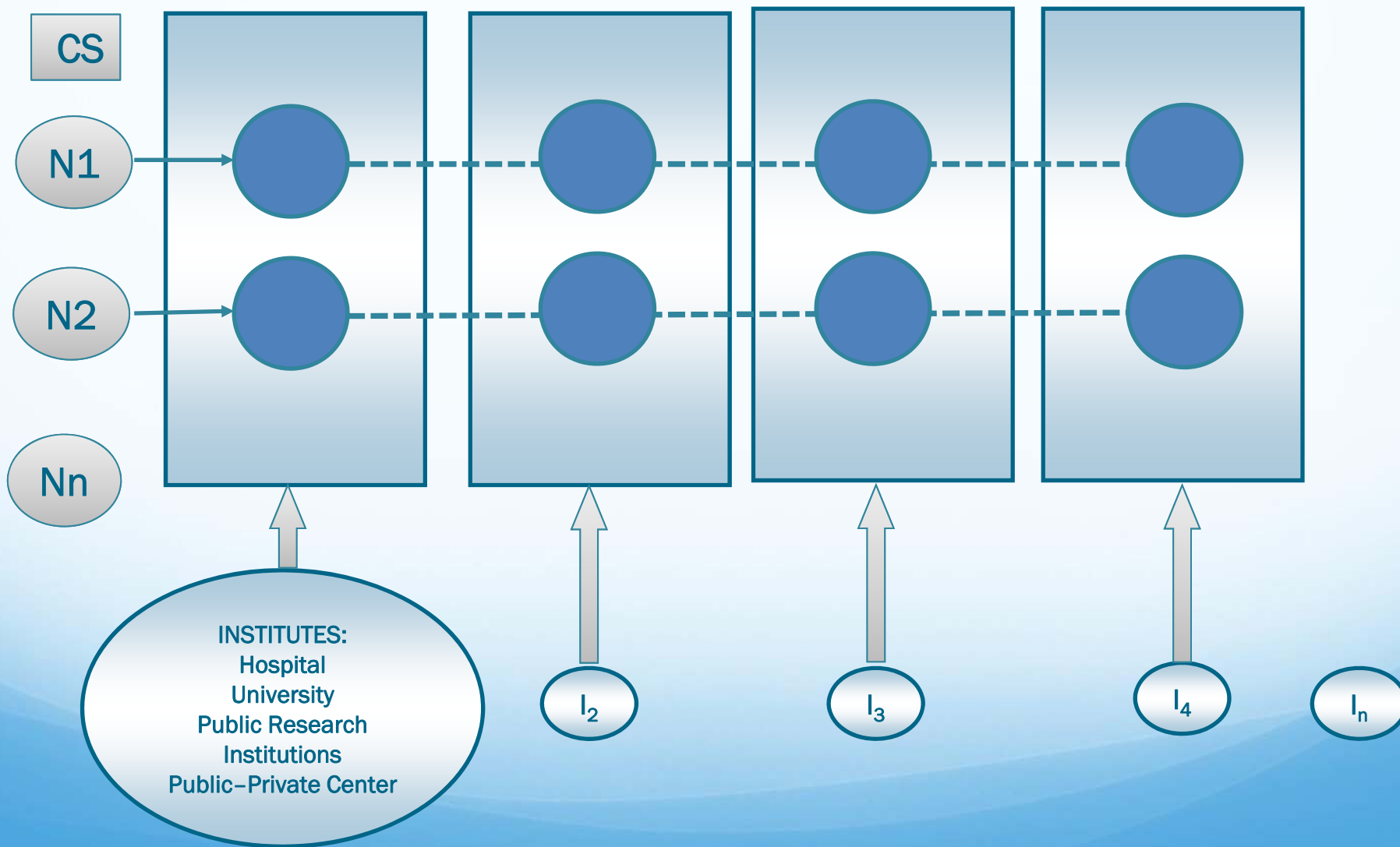
Health Research Institutes

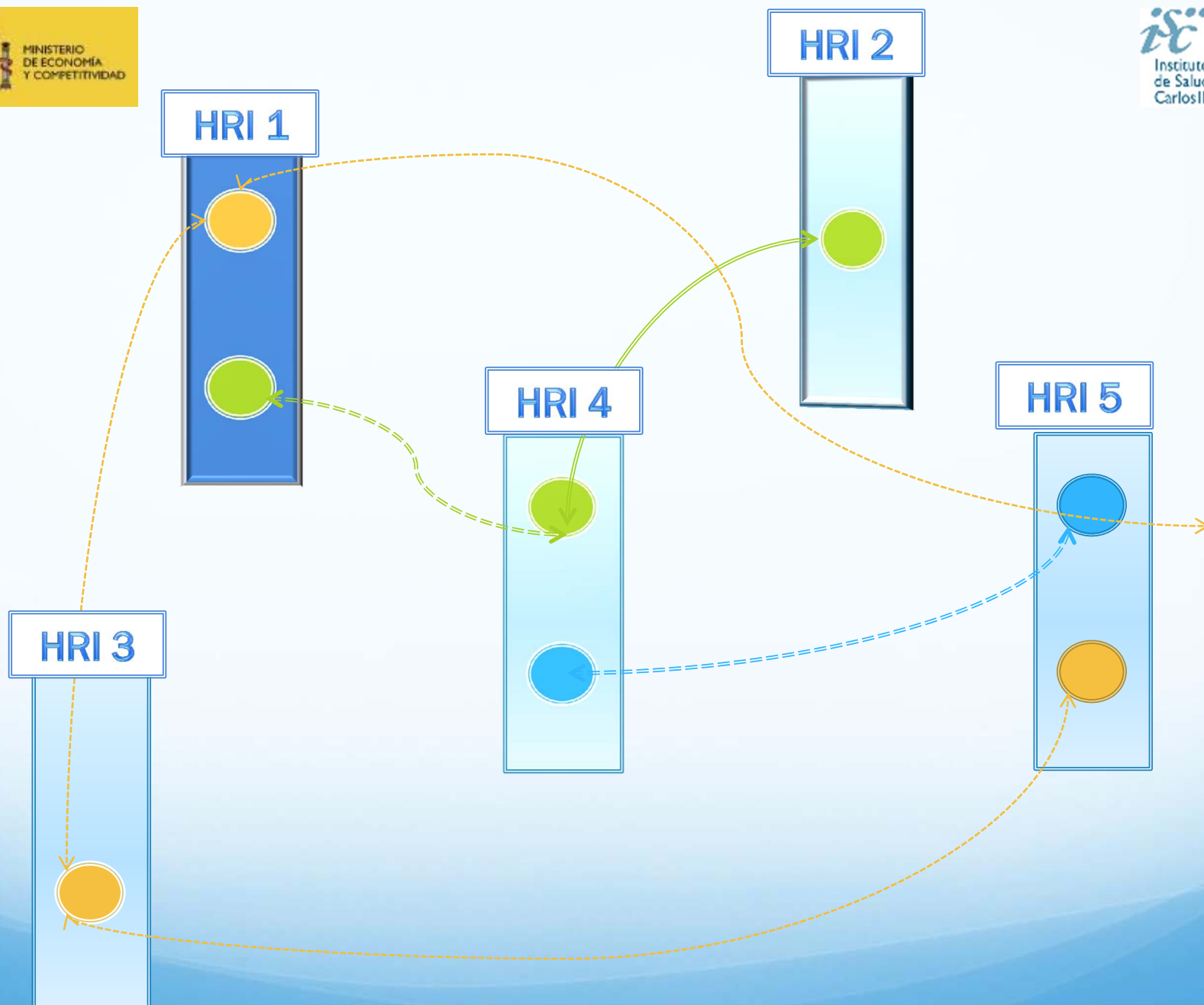


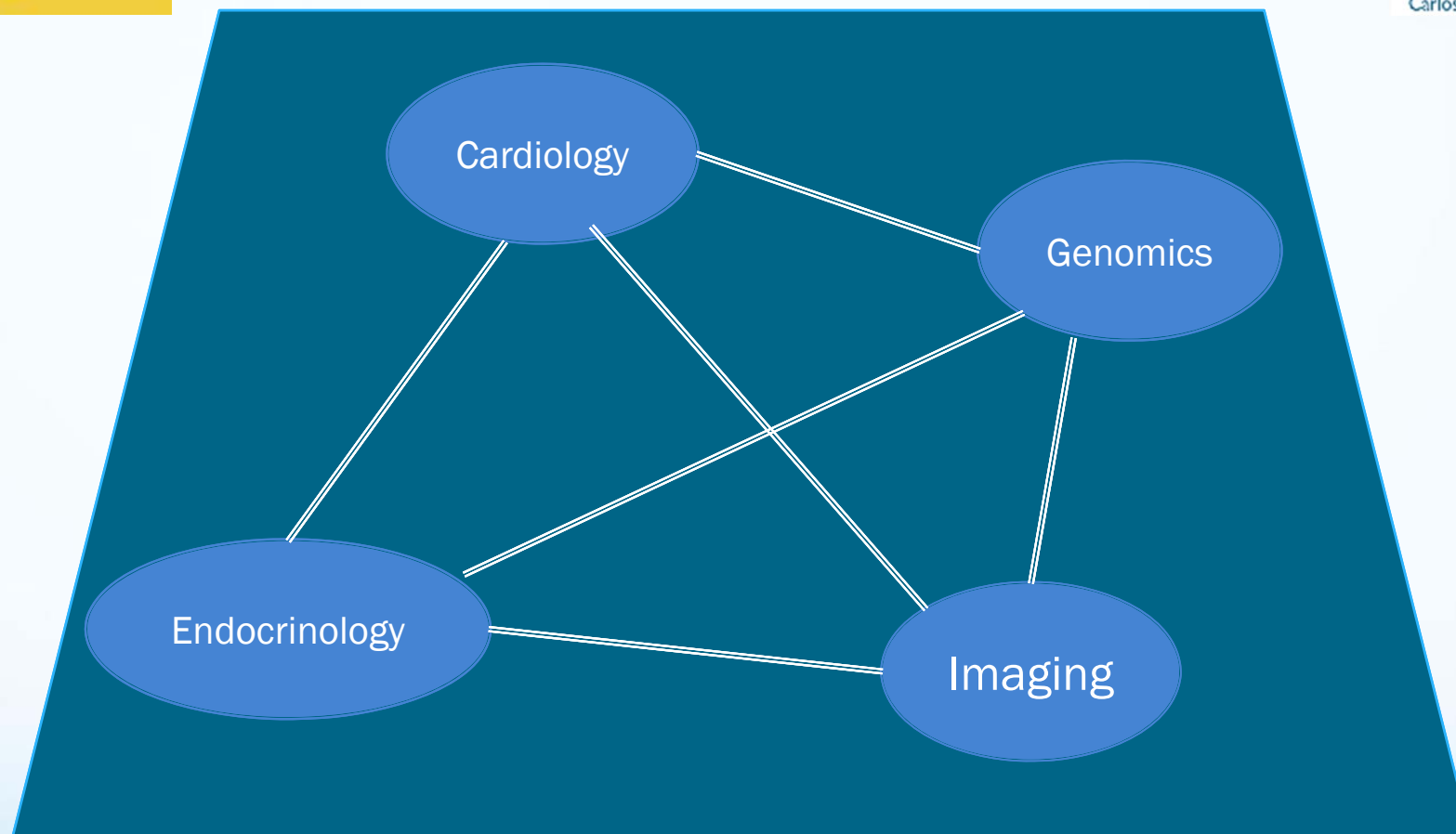
Examples of specific instruments to foster PM in Health Research Institutes

- Integrated Projects of Excellence
- PhDs Health Research Institute – Health-oriented Companies. (Partnership Public-Private Sector)

Model of Institutes and cooperative structures (CS)







Patient-based solutions



Health
Research
Institute



Health-Oriented
Company

PhD program

Funded Projects PM 2013

INNOVATIVE STRATEGIES TO SEEK NOVEL BIOMARKERS AND PREDICTIVE MODELS IN SOLID ORGAN TRANSPLANTATION: ESTABLISHING PERSONALIZED TRANSPLANT MEDICINE.

TRANSLATING HYPOXIA RESEARCH TO A CLINICAL SETTING: O₂ DEFICIENCY TOLERANCE, BRAIN DYSFUNCTION, INFECTION, AND CANCER

MICROENVIRONMENT INTERACTIONS IN THE PATHOGENESIS OF LYMPHOID NEOPLASMS AND CHRONIC INFLAMMATORY DISORDERS. IDENTIFICATION OF BIOMARKERS AND DESIGN OF NEW THERAPEUTIC STRATEGIES

A PILOT PROJECT FOR PERSONALIZED CANCER MEDICINE: ONCOPROFILE

THE OBESITY PARADOX IN MULTIPLE PREVALENT DISEASES: A TRANSLATIONAL APPROACH.

BLOOD-BASED CANCER DETECTION: DEVELOPMENT OF AN ECONOMICAL, SENSITIVE AND RAPID PAPER-BASED DEVICE TO DETECT CELL FREE NUCLEIC ACIDS

COMPREHENSIVE, INTEGRATIVE AND GENOMIC APPROACH TO THE UNDERSTANDING AND TREATMENT OF CANCER AND LEUKEMIA

DIABETESCANCERCONNECT: TARGETING COMMON INFLAMMATORY MARKERS AND SIGNALING PATHWAYS IN DIABETES MELLITUS AND CANCER.

IMMUNOREGULATORY MOLECULES AS BIOMARKERS PREDICTING RESPONSE TO BIOLOGICAL THERAPIES AND DISEASE SEVERITY IN IMMUNE-MEDIATED INFLAMMATORY DISORDERS . BIOIMID PROJECT

PREVENTING CARDIOVASCULAR ISCHEMIC EVENTS AND ARRESTING THEIR CONSEQUENCES IN TYPE 2 DIABETIC POPULATION: A MULTIDISCIPLINARY CLINICAL AND EXPERIMENTAL APPROACH

MODULATION OF CELLULAR MICRO RNAs AS A THERAPEUTIC STRATEGY FOR THE CURE OF HIV INFECTION

CALL FOR PROJECTS 2014

INTEGRATED PROJECTS OF EXCELENCE	Requested	
	Applications	Total requested
CANCER	8	6.897.347
CARDIOVASCULAR DISEASES	6	5.121.397
NEUROLOGICAL AND MENTAL DISEASES	5	4.321.697
INFECTIOUS DISEASES AND AIDS	3	2.637.612
CHRONIC, INFLAMMATORY, NEPHROLOGIC AND RESPIRATORY DISEASES	7	6.580.708
ENDOCRINE, DIGESTIVE DISEASES AND SURGERY	2	1.711.423
PEDIATRICS, PERINATAL MEDICINE, CONGENITAL ANOMALIES	2	1.954.000
BIOTECHNOLOGY, BIOENGINEERING AND GENOMIC TECHNOLOGIES	2	1.736.596
TOTAL	35	30.960.780

