

14.00 - 15.00

**Medisystem and Medigard - the Multimedia
Hospital Clinical Information Systems -
applications and experiences in Italian
hospitals**

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CSA, Italia**

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**HEALTH CARE
DIVISION**

CLINICAL INFORMATIC SYSTEMS

Roma - Via Domenico Sansotta, 100 - 00144 - Italia

HEALTH CARE STRUCTURES

- INDIVIDUAL ASSISTANCE

HOSPITAL STRUCTURES:

Departments
Ambulatories
Day Hospital
Diagnostic Services
Clinical Specialistic Services

PERI HOSPITAL STRUCTURES:

Ambulatories
Diagnostic Services
Clinical Specialistic Services

- COMMUNITY ASSISTANCE

HOSPITAL STRUCTURES - OPERATING PROCEDURES

- THE PROCEDURES

- ALLOW TO SUPPLY THE CLINICAL ASSISTANCE

- ARE CHARACTERIZED BY:

EVENTS: SIGNIFICANT MOMENTS IN WHICH
CONSOLIDATED CLINICAL INFORMATION ARE
ORIGINATED

PHASES: CHARACTERIZING THE TIME SEQUENCE OF THE
WORKING PROCEDURES
(Prescriptions, Booking, Completion)

- AFFECT, WITH THEIR FUNCTIONALITY:

- THE QUALITY OF ASSISTANCE

- THE QUANTITY OF ASSISTANCE

- THE INFORMATION

- ARE CONNECTED TO THE PATIENT

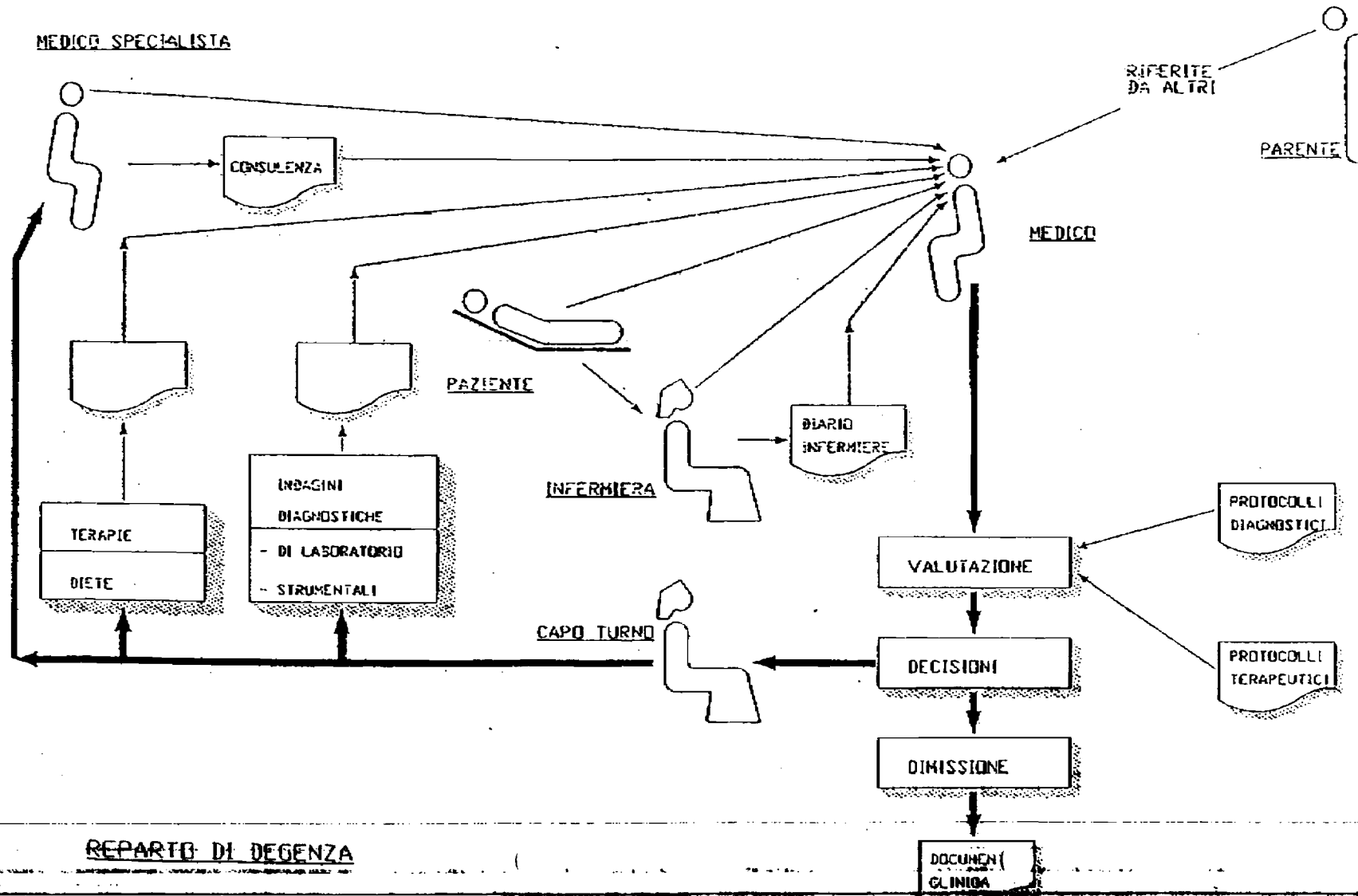
- PREVAILINGLY REPRESENT CLINICAL INFORMATION

- ARE USED BY THE MEDICAL STRUCTURES

- PRODUCE, BY AGGREGATION/EXTRACTION, THE SUMMARY
INFORMATION REQUESTED BY THE MANAGEMENT OF THE
HOSPITAL STRUCTURE

MODALITA' OPERATIVA

Senza il supporto dell'INFORMATICA CLINICA



HOSPITAL STRUCTURES

THE TERM "CLINICAL INFORMATION" INCLUDES:

- NUMBERS
- WORDS
- GRAPHICS
- IMAGES (Diagnostic)
- IMAGES (Electronic copies)
- SIGNALS FROM INSTRUMENTS, ANALYZERS, ETC.
- SOUNDS

ALL INFORMATION MUST BE ACCESSIBLE FROM A SINGLE
INFORMATIC DEVICE:

THE MULTIMEDIA WORKSTATION

HOSPITAL STRUCTURES

CLINICAL INFORMATIC USERS:

DIRECT USERS:

DOCTORS

NURSES

BENEFITERS:

ADMINISTRATION

HEALTH CARE MANAGERS

HOSPITAL STRUCTURES

WHAT DOES THE DOCTOR REQUIRE FROM CLINICAL INFORMATICS:

- CLINICAL DATA ORGANIZATION WHICH ALLOWS A PRECISE GLOBAL OVERVIEW AND COMPREHENSION OF THE PATIENT'S SITUATION
- AVAILABILITY OF EXACT, RELIABLE, COMPLETE, UP-TO-DATE AND TIMELY INFORMATION, AS THE MOST IMPORTANT SUPPORT FOR THE DECISION PROCESS
- EVIDENCE OF ACTUAL OR POTENTIAL HEALTH PROBLEMS OF THE PATIENT, BASED ON PAST AND CURRENT CLINICAL INFORMATION
- SCIENTIFIC AND CLINICAL RESEARCH SUPPORT

HOSPITAL STRUCTURES

WHAT DOES THE NURSE REQUIRE FROM CLINICAL INFORMATICS:

- REDUCTION OF PAPER WORK
- AUTOMATIC CALCULATION OF DERIVED INFORMATION
- TIME SAVING TO BE USED IN PATIENT DIRECT HEALTH CARE
- SUPPORT IN THE HEALTH CARE OF THE PATIENT

HOSPITAL STRUCTURES

WHAT DOES THE HEALTH CARE MANAGER REQUIRE FROM CLINICAL INFORMATICS:

- INCREASE IN EFFICIENCY
- BETTER QUALITY ASSISTANCE
- STRESS REDUCTION ON NURSES

- SYSTEM CHARACTERISTICS MUST BE:
 - FLEXIBILITY, IN ORDER TO ALLOW ECONOMIC MODIFICATIONS TO MEET THE USERS NEEDS
 - CAPABILITY OF EXCHANGING INFORMATION WITH OTHER INFORMATIC SYSTEMS
 - LOW COST OF THE EQUIPMENT
 - HIGH BENEFIT/COST RATIO

- INCREASE OF MOTIVATION IN DOCTORS AND NURSES
- HIGH HOSPITAL QUALIFICATION

TWO COMPLEMENTARY AND INTEGRATED
INFORMATIC ARCHITECTURES

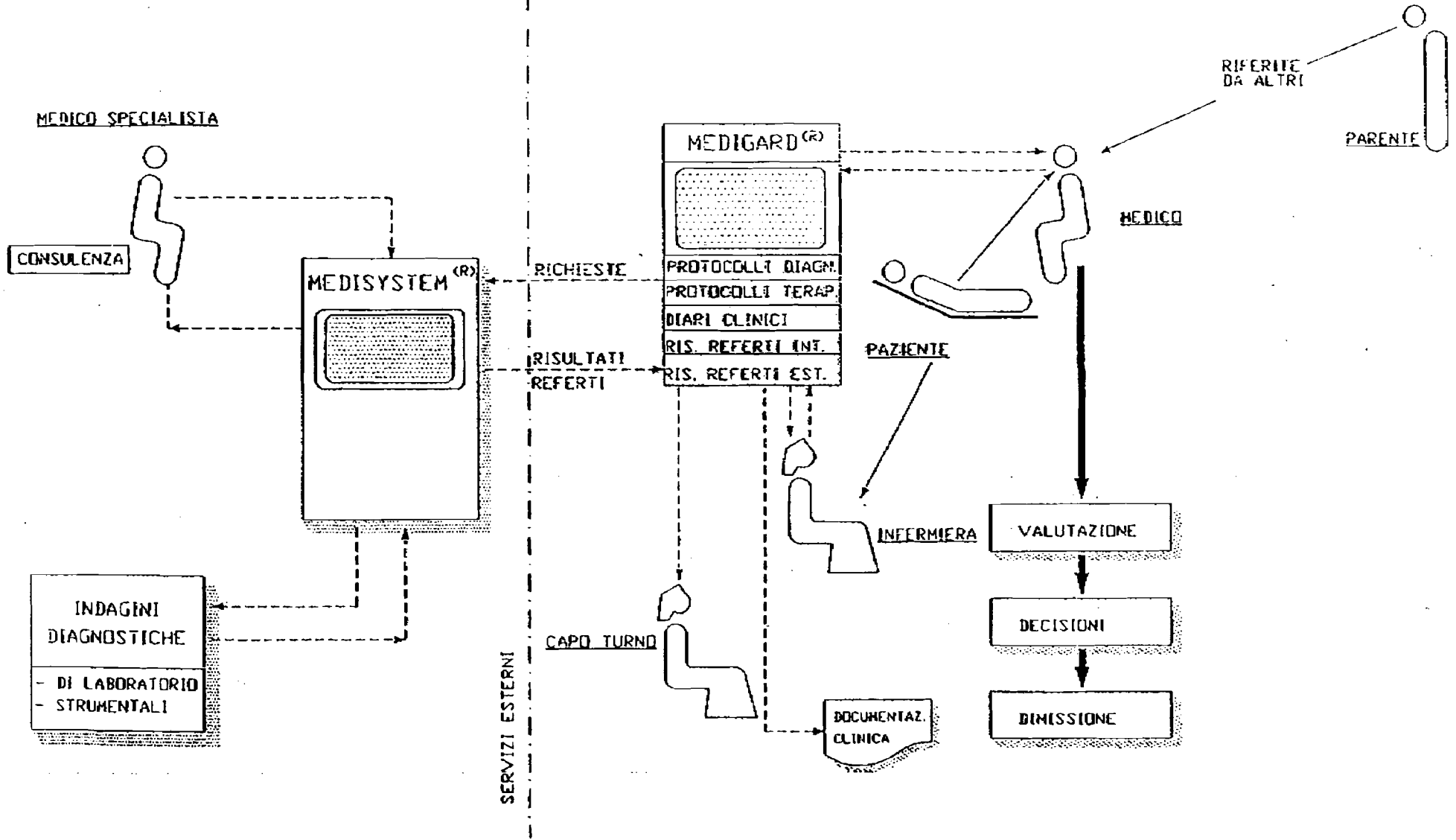
MEDISYSTEM®

MEDIGARD®

PRIMARY GOAL

**ALL INFORMATION,
IMMEDIATELY AVAILABLE,
IN EVERY PLACE WHERE THEY ARE NEEDED.**

MODALITA' OPERATIVA
 Con il supporto dell'INFORMATICA CLINICA



REPARTO DI DEGENZA



MAIN FEATURES OF MEDISYSTEM® AND MEDIGARD®

- MULTIMEDIA ARCHITECTURE, CAPABLE OF MANAGING SIMULTANEOUSLY: NUMBERS, WORDS, IMAGES AND SIGNALS, IN THE BASIC FUNCTIONS:
 - Data Entry
 - Recording
 - Displaying
- EASY AND FAST USER INTERFACES.
- USE OF NATURAL MEDICAL LANGUAGE, IN ORDER TO TALK AND WRITE DIRECTLY WITH THE PATIENT AND THE HOME PHYSICIAN.
- USE OF MULTIPARAMETER CLINICAL INFORMATION CODES, THAT ALLOW THE HEALTH CARE MANAGER TO AGGREGATE AND COMPARE ALL CLINICAL DATA.
- COEXISTENCE OF DIFFERENT INTERNATIONAL CLINICAL INFORMATION CODIFICATION SYSTEMS.
- USE OF ELECTRONIC MEDIA AND CARDS WHERE TO STORE THE PATIENT'S CLINICAL INFORMATION, THAT CAN BE DELIVERED TO THE PATIENT OR USED FOR TRANSFERR BETWEEN LINKED HEALTH CARE STRUCTURES.

MAIN FEATURES OF MEDISYSTEM® AND MEDIGARD®
(Continued)

- COMPLETE USER DEFINABLE MODIFICATIONS OF ALL CLINICAL INFORMATION DEFINITIONS AND DATA ORGANIZATION

- HIGH SERVICE FACTOR, MAINLY AS "RESPONSE TIME" VALUES

- LOW COST EQUIPMENT AND HIGH BENEFIT/COST RATIO

- CLINICAL AND SCIENTIFIC RESEARCH 1.

DATA BASE REVISITATION AND FAST CASUISTRY IDENTIFICATION

- CLINICAL AND SCIENTIFIC RESEARCH 2.

ACCESS TO ALL CLINICAL INFORMATION RESULTING FROM THE PATIENT HEALTH CARE ACTIVITY, WITH THE POSSIBILITY TO EXTRACT ANY PIECE OF DATA, THAT CAN BE ANALYZED WITH STATISTIC PACKAGES OR OTHER ADVANCED SOFTWARE TOOLS

- SAFETY AND SECRECY OF PATIENT CLINICAL INFORMATION

UNITA' MOBILE



BIBLIOTECA 1°P. DEGENZA PED. 1°P.



PREPARAZ. FARM. P.T.



UFFICIO PRIMARIO 1°P



INFERMIERA P.T.



ACCETTAZIONE P.T.



DEGENZA P.T.

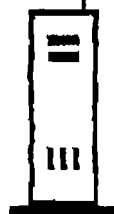


L.A.N.

DEGENZA P.T.



SERVER

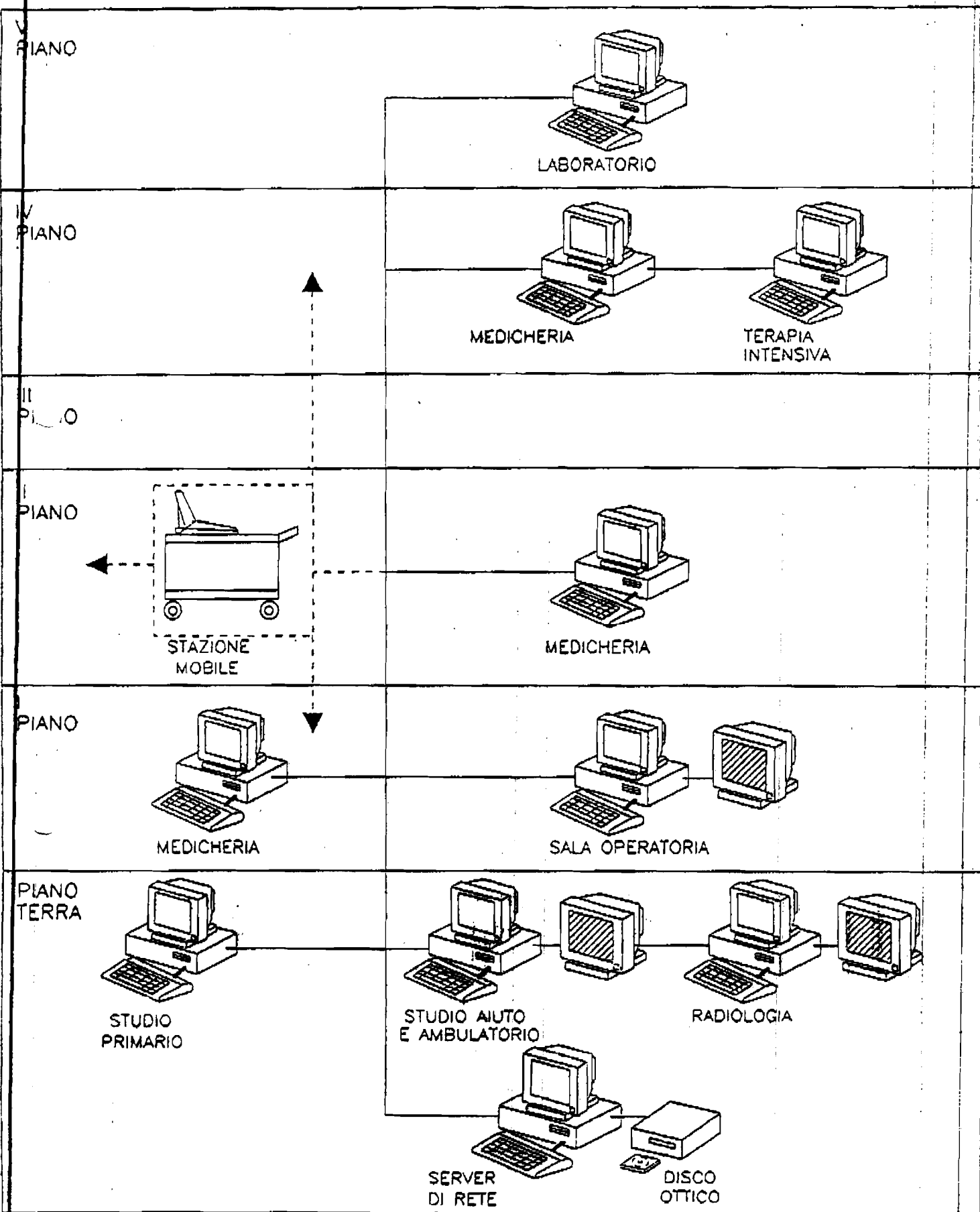


DEGENZA P.T.



CENTRO DI RIANIMAZIONE
OSPEDALE CIVILE GARIBALDI
CATANIA

CASA DI CURA
S A N A T O R I X



ARCHITETTURA DI SISTEMA

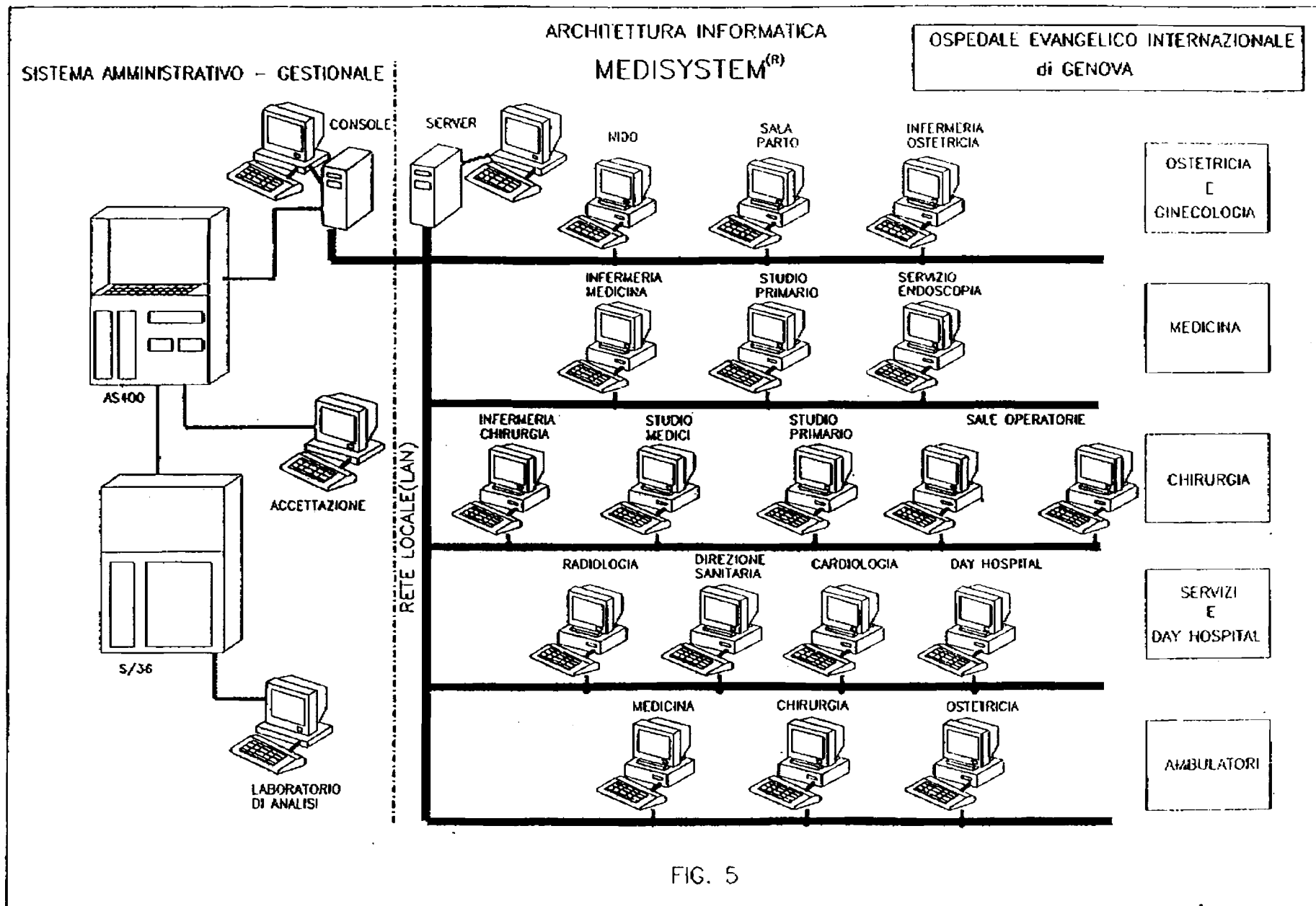


FIG. 5