

The Role of HIS in Improving Patient's Care

PMRS Experience

Chronic Diseases Center Model



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Chronic diseases

Diseases that usually do not improve with time. They can cause premature death, decrease the quality of life of those who have them, and have a negative economic impact on their families and on society as a whole.

CVD , Hypertension , Type II Diabetes Mellitus and Dyslipidemia

Environmental factors that reduce physical activity and promote overeating



What are the major Non-Communicable diseases ?

	Tobacco use	Unhealthy diets	Physical inactivity	Harmful use of alcohol
Heart disease and stroke	✓	✓	✓	✓
Diabetes	✓	✓	✓	✓
Cancer	✓	✓	✓	✓
Chronic lung disease	✓			



CVD`s : major health challenge of the 21st century

**Of the estimated 57 million global
deaths in 2008,
63% were due to Non-Communicable
Diseases**



Facts

The rapidly increasing burden is in developing countries

- 80 % of NCD deaths occur in low- and middle-income countries **EMR, SEAR & AFR**
- 29% among people < age of 60 compared to 13% in high income countries

NCD epidemic is projected to
kill 52 million people annually by
2030



كيف نحمي أنفسنا من أمراض القلب والسكري



بالتعاون مع
مركز الإغاثة الطبية التخصصي لأمراض القلب
والسكري والسكري

Medical Relief Cardiovascular Diseases Center

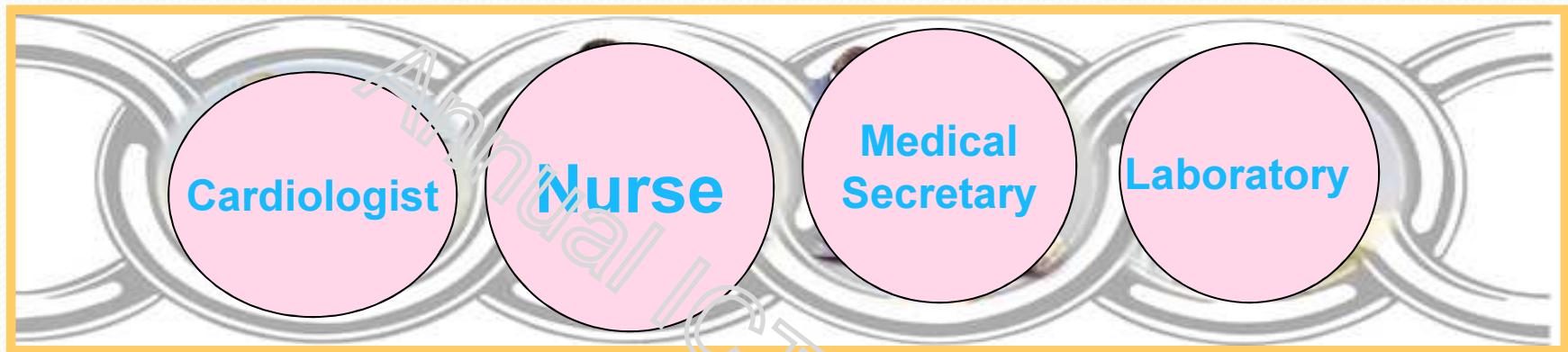
Slogan

Started July / 2001

**Towards reducing the burden of the Cardiovascular Diseases
and the NCD's in Palestine**

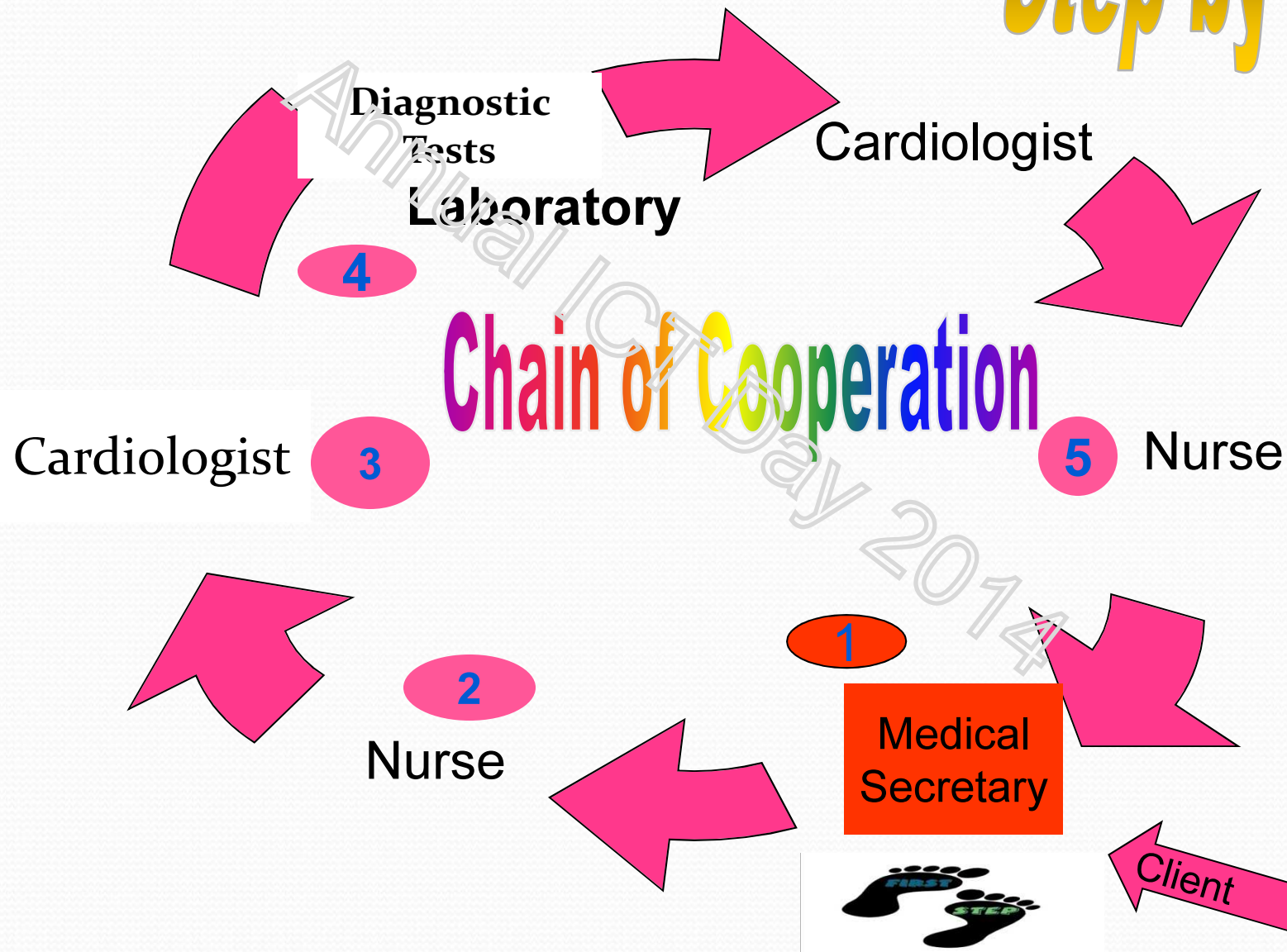


Chain of Cooperation



Pathway Process in the Center

Step by Step



Computerized Medical System

1- Doing appointments

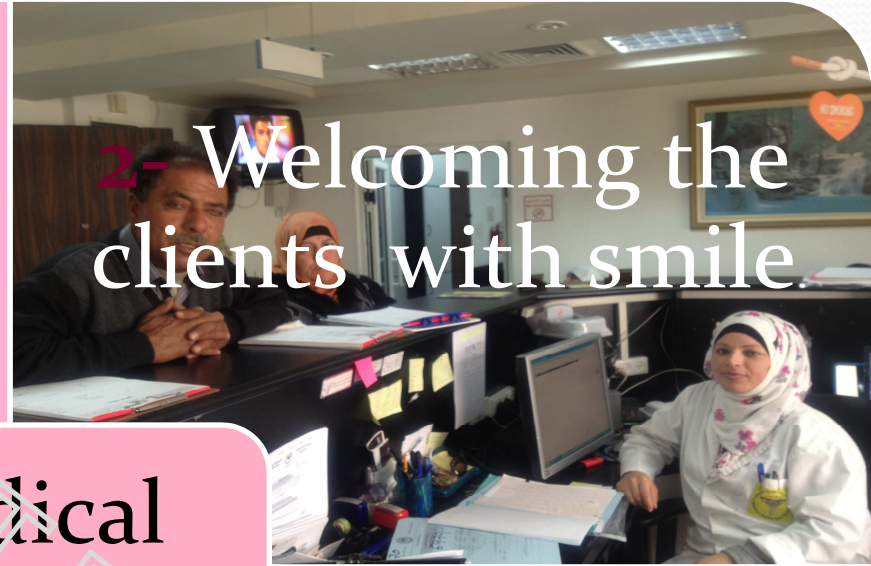
calling and reminding the clients by phone the previous day for their appt. from the *Electronic Medical Records*

2- Welcoming the clients with smile.

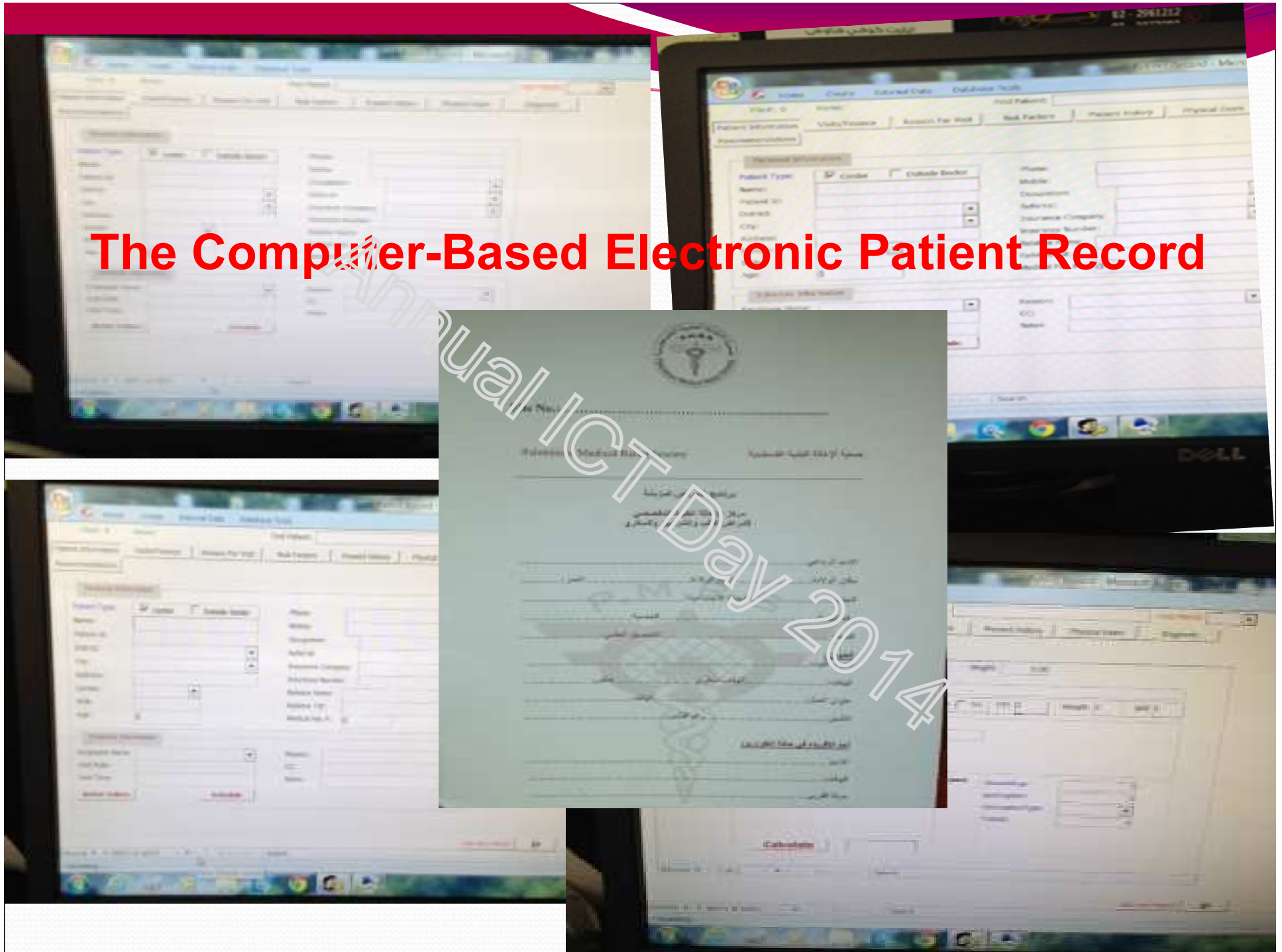
Medical Secretary

3- Entering the data to the *Clinical Information System*

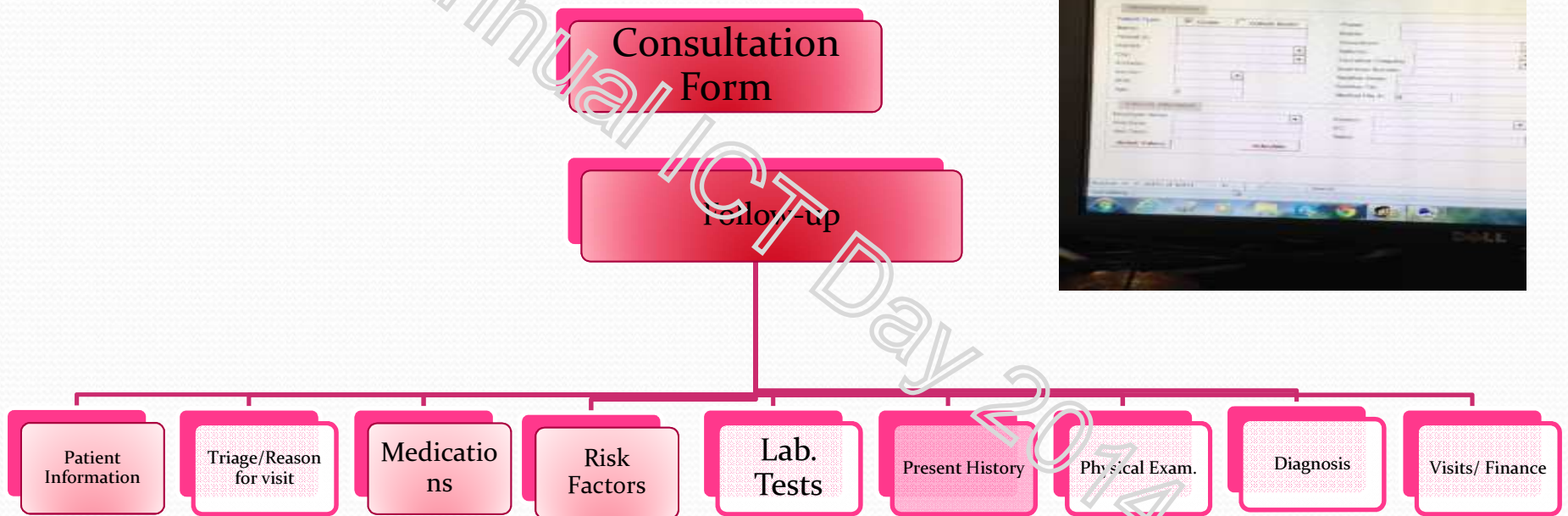
4- Arranging appointments for the next visit



The Computer-Based Electronic Patient Record



The computer-based patient record



The computer-based patient record

Consultation Form

Patient Information

Name: _____ Sex: _____

Age: _____ Date of Birth: _____

Height: _____ Weight: _____ Blood Pressure: _____

Admission Date: _____

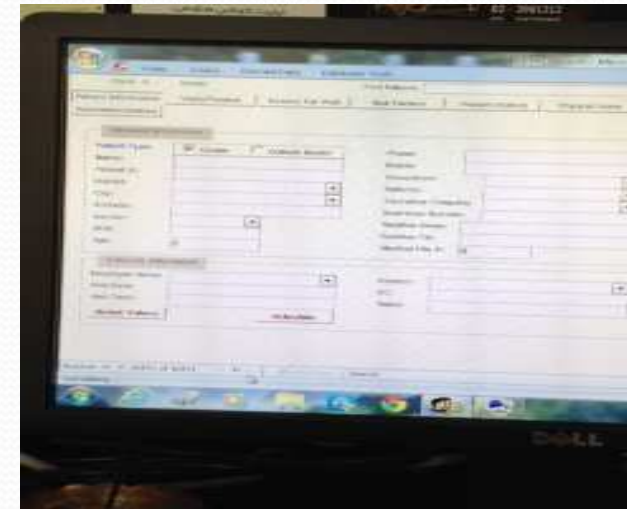
History

Chief Complaint: _____

Presenting Illness: _____

Examination

System	Findings	Diagnosis
General		
Head		
Eyes		
Ears		
Nose		
Throat		
Heart		
Lungs		
Abdomen		
Genitourinary		
Neurological		
Musculoskeletal		
Skin		



Nurse

Patient
Information

Name

Age

Address

Visit Date

Referring
Physician

The computer-based patient record

Classification Form

Personal Information

Name _____ Sex _____
 Age _____ Nationality _____

Physical
 Height _____ Weight _____ Eyes _____ Hair _____
 Complexion _____

Background Data
☐ Civilian ☐ Military ☐ Student ☐ Teacher
☐ Engineer ☐ Scientist ☐ Artist ☐ Other _____

Interests
☐ Sports ☐ Reading ☐ Music ☐ Travel ☐ Gardening
☐ Other _____

Education
☐ High School ☐ College ☐ University
☐ Graduate ☐ Postgraduate

Occupation
☐ Student ☐ Teacher ☐ Engineer ☐ Scientist
☐ Artist ☐ Other _____

Marital Status

	Married	Single	Divorced	Widowed
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				

[illegible]

Nurse

Triage

BP Rt. & Lt.
arm

Pulse

Hight/Weight BMI

Reason for
visit

Medications

The computer-based patient record

Risk Factors

Smoking: (Tobacco use 1 time or more /day in the last month) ☐ Yes ☐ No ☐ Stopped

Hypertension: (SBP ≥ 140 , DBP ≥ 90)
Hypertension: ☐ Yes ☐ No ☐ Unknown
Status: Treated: ☐ Yes ☐ No
Treatment: ☐ Drugs ☐ Diet

Dyslipidemia: (cholesterol >200 , TG >180 , HDL <40)
Dyslipidemia: ☐ Yes ☐ No ☐ Unknown
Status: Treated: ☐ Yes ☐ No
Treatment: ☐ Drugs ☐ Diet

Diabetes Mellitus: (FBG ≥ 126)
Diabetes: ☐ Yes ☐ No ☐ Unknown
Diabetes Type: ☐ Type I ☐ Type II
Status: Treated: ☐ Yes ☐ No
Treatment: ☐ Insulin ☐ Drugs ☐ Diet

Overweight: (BMI ≥ 25) ☐ Yes ☐ No

Age: (male: ≥ 45 yrs, female: ≥ 55 yrs) ☐ Yes ☐ No

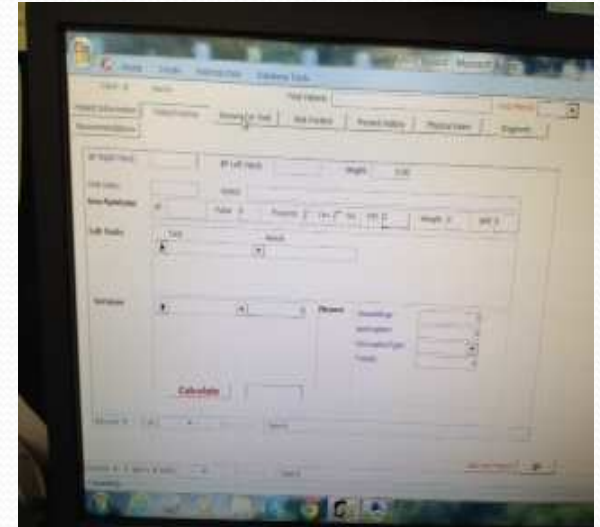
Family History: ☐ Yes ☐ No, if yes: ☐ HTN ☐ Stroke
☐ Diabetes ☐ CAD (M: ≤ 55 yrs, F: ≤ 65 yrs)

Physical Inactivity: ☐ Yes ☐ No (Less than 30 min walk)

Notes: _____

Nurse

Risk Factors



Smoking

Hypertension

Dyslipidemia

Diabetes Mellitus

Overweight/
Obese

Inactivity

Family history

The computer-based patient record

Cardiologist



Present
History

Physical
Exam.

Recommendations

Diagnosis

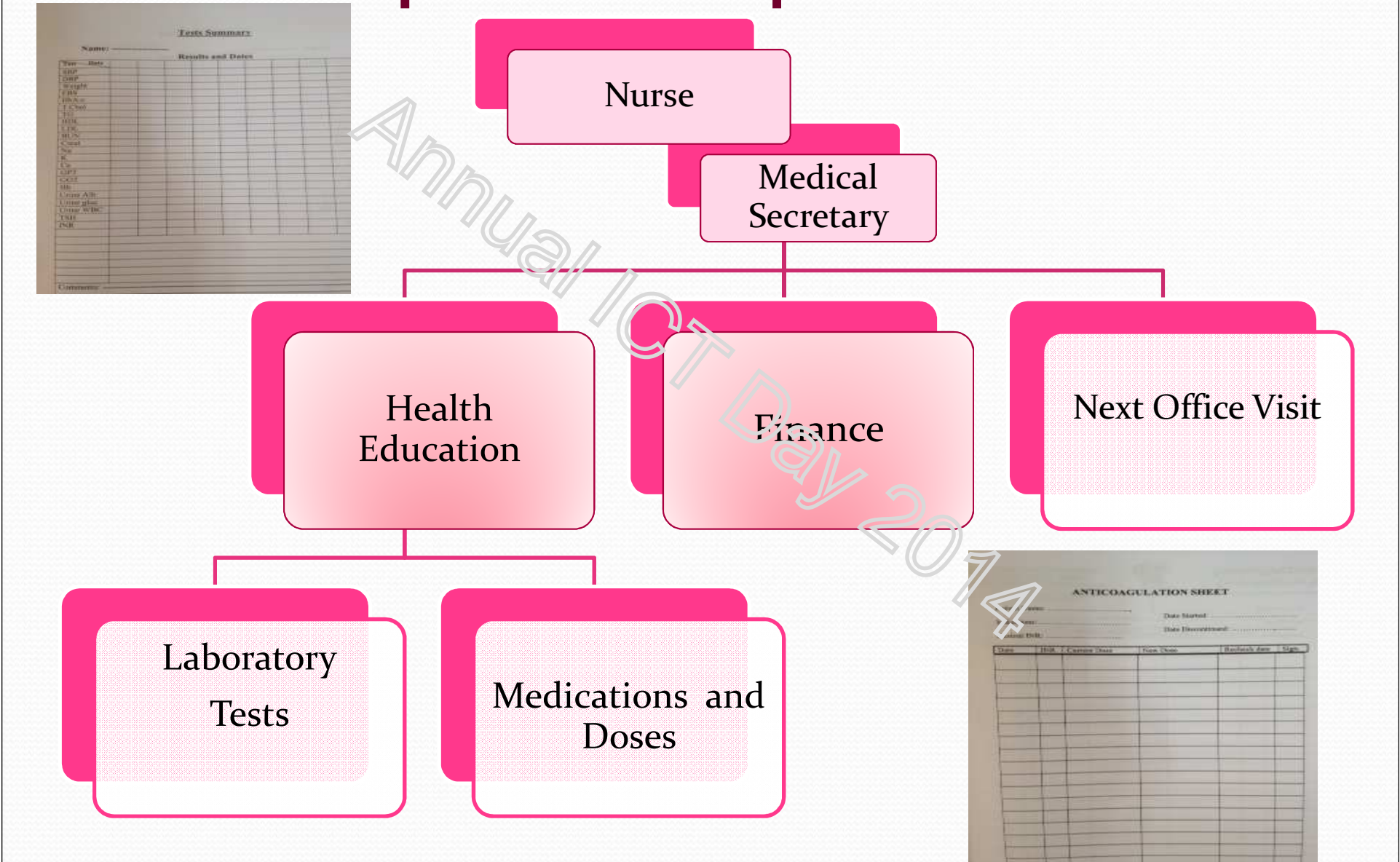
Medications

ECG, ECHO,ETT, Holter
Monitor , Lab, Tests

CHD,CHF, Valvular,
RF.DM,Dlp,HTN,COPD



The computer-based patient record



The Role of : Health Information System in improving Patient's Care?



Health Information System

Input

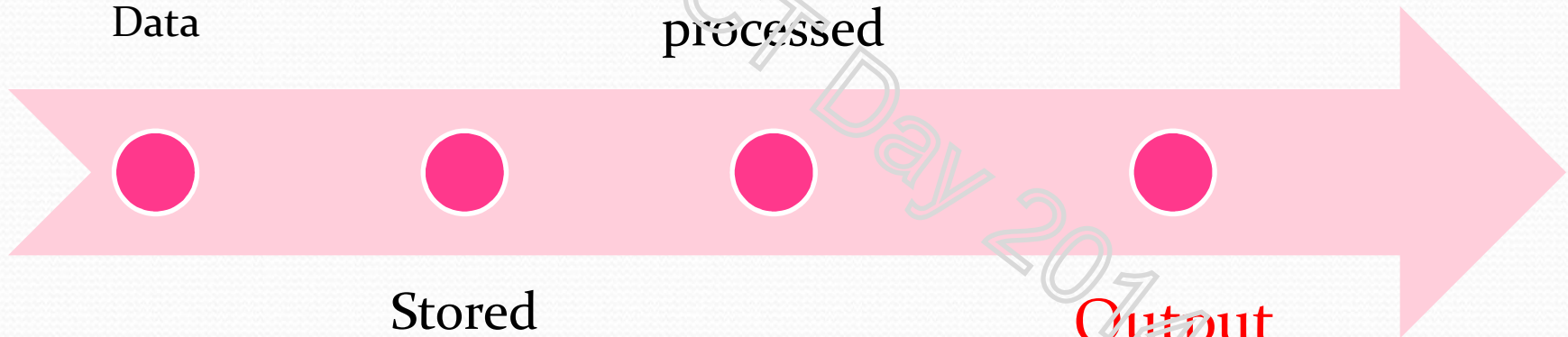
Health
Data

Retrieved
and
processed

Stored

Output

Decision making



Health Information System

The Computer-Based Electronic Patient Record

- Making health research available
- Doing relevant health research
- Publishing research



The Computer-Based Electronic Patient Record Prevalence of Risk Factors

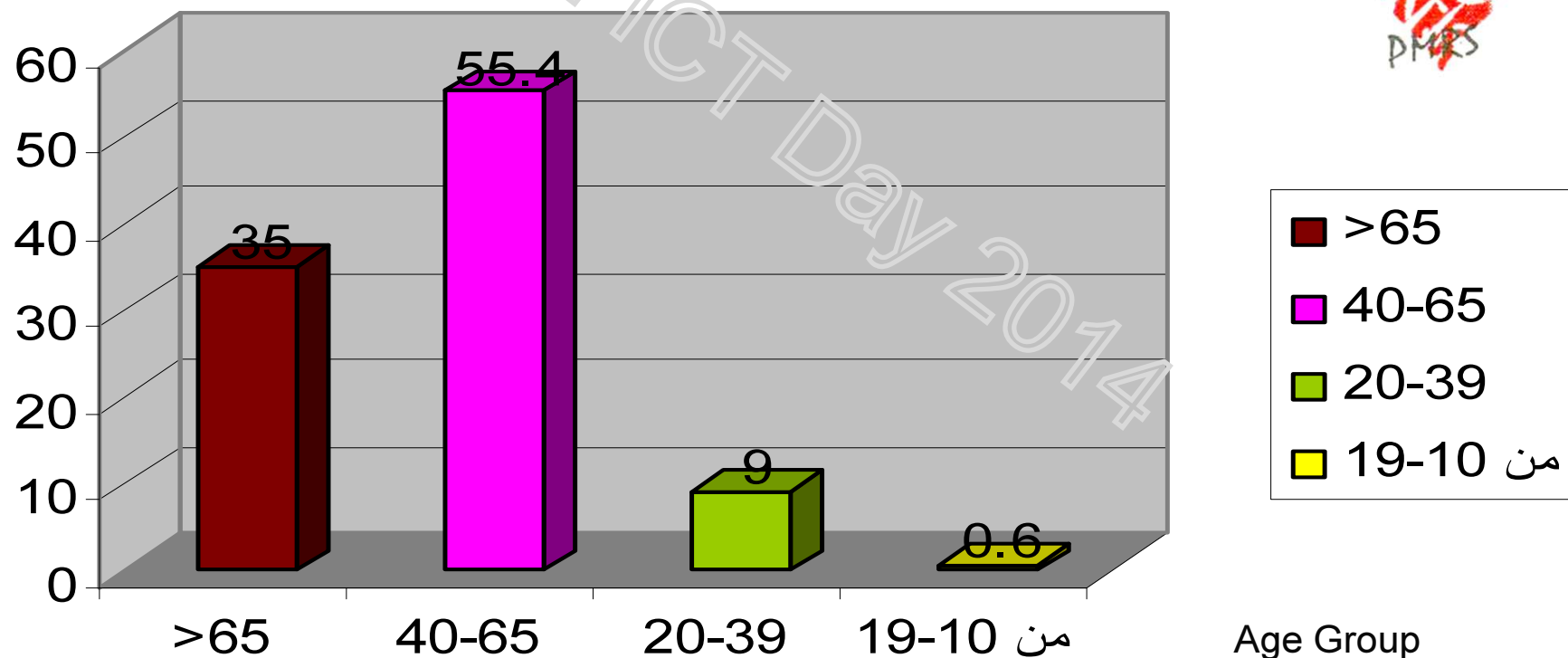
Risk Factors	Prevalence%
Overweight (BMI > 25 and < 30)	71
Obesity (BMI ≥ 30)	43
Hypertension (BP ≥ 140/90 mmHg or use of anti-HTN medication)	31
Diabetes Mellitus (FBS > 126 mg/dl)	12
IFG Glucose level (FBS 111 to 125 mg/dl)	6
Dyslipidemia (TC>200 and/or TG>200 and/or HDL<40 mg/dl)	43

The Computer-Based Electronic Patient Record

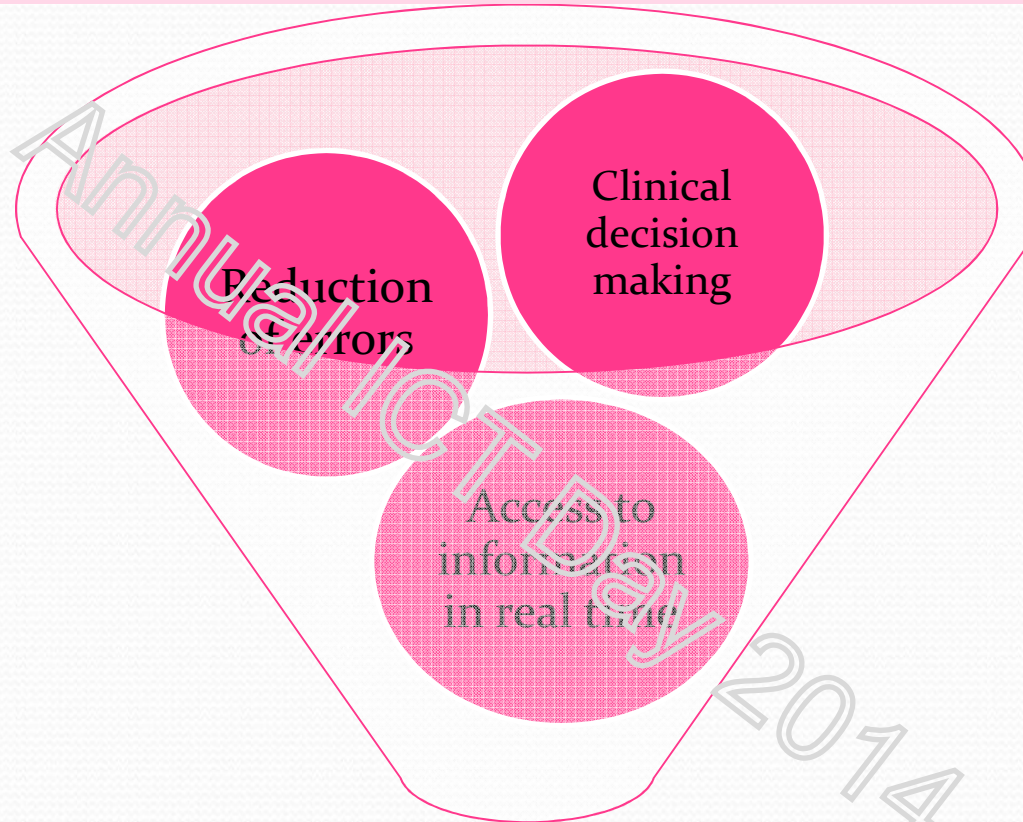
Prevalence of Risk Factors

Prevalence of Hypertension / Age Group

Prevalence of Hypertension %



The Benefits of The Electronic Medical Records



Improve efficiency and quality of care

Improving health outcome

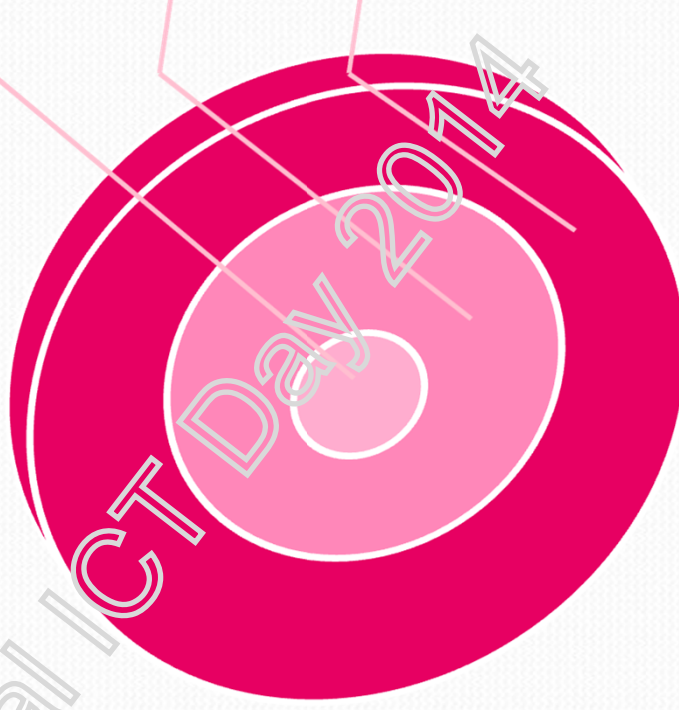
Target Goal



Reducing the
Risk Factors

Healthy
Lifestyle

Improving
The Health
Outcomes



But .. Don't forget the patient





Best wishes 2015

Annual Healthy
New Year! 2014