
World Health Organization
NCD HARD TALKS
DELIVERING ON THE PROMISES
WEBINAR
09 JUNE 2022 | 13-14:30 CEST
Harnessing the power of facility data to achieve global NCD targets
A FOCUS ON FACILITY-BASED PATIENT AND PROGRAMME MONITORING

World Health Organization

NCD HARD TALKS

World Health Organization Department for Noncommunicable Diseases

Thank you for joining

- This webinar will be recorded.
- Links to the recording and all slides will be shared.
- Please participate in the discussion by sharing your questions in the Q&A box. Experts are invited to type their answers throughout the session.
- General comments can be shared in the chat box.
- Please be respectful - we are here to learn and exchange ideas.

Agenda

Introductory remarks
Global NCD targets measurement challenges and solutions

Hard Talk Panel

- **Systematic approach toward standardized** NCD facility-based patient and programme monitoring
- **Information policy standards** for effective patient and programme monitoring
- **Comprehensive primary health care NCD solution**: building local health workforce capacities for facility-based patient and programme monitoring
- **Integration of NCD service package in the Iranian PHC,** based on electronic health records
- **Simple**: requirements of a pragmatic digital system for driving improvements in large-scale NCD programs

Moderated discussion / Q&A
Closing remarks

Introductory remarks

Dr Ren Minghui

Assistant Director General, Universal Health Coverage / Communicable and Noncommunicable Diseases, WHO

World Health Organization

Department for Noncommunicable Diseases

Welcome

Dr Temo Waqanivalu

Unit Head, WHO NCD Integrated Service Delivery

World Health Organization

Department for Noncommunicable Diseases

Global NCD targets measurement challenges and solutions

Leanne Riley

Unit Head, Surveillance, Reporting and Monitoring, Department for NCDs

World Health Organization
Department for Noncommunicable Diseases

Harnessing the power of facility data to achieve global NCD targets

Global NCD Targets Measurement Challenges and Solutions

Dr. Bente Mikkelsen

So far, the global response to NCDs is a test we have a failed

SDG target 3.4 on NCDs: The world is off-track

↑ Unhealthy diets

↓ Tobacco use

↑ Physical inactivity

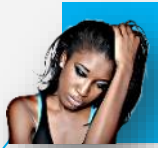
↑ Harmful use of alcohol

↑ Air pollution

NCDs = 5x5 agenda

Only 14/194 countries are on track to reach SDG 3.4 by 2030 for women and 15 for men. **The good news is that all countries can still meet the 2030 targets**. But the window of opportunity for implementing policies with the highest return on investment is now and closing fast.

↑ Mental health conditions



↑ Heart diseases and strokes

↑ Cancers

↑ Diabetes

↑ Chronic respiratory diseases

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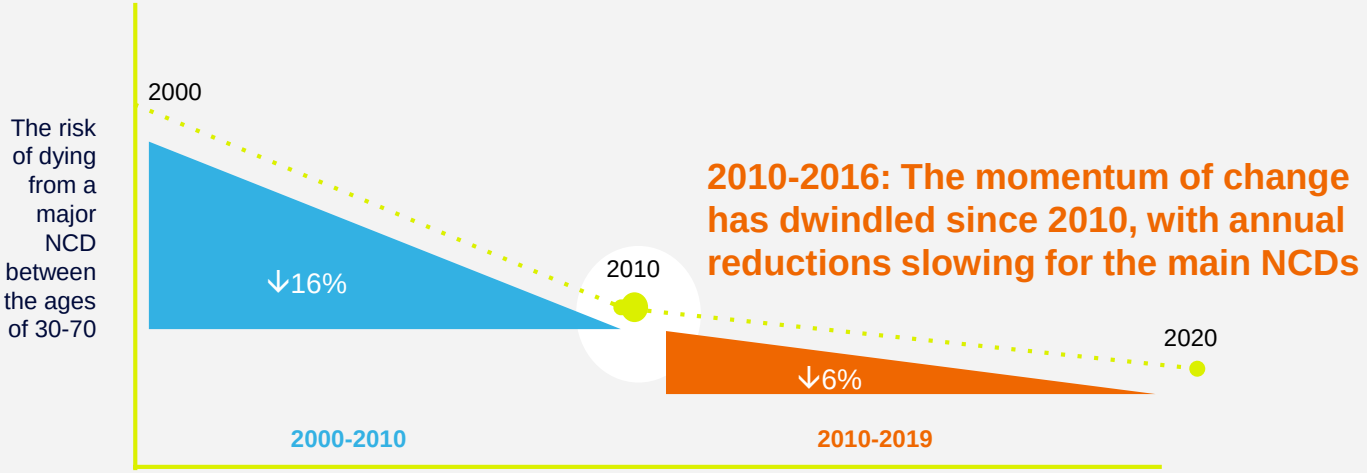
SDG 3.4: 14 countries on track

2000-2010: Rapid decline mainly due to reductions in cardiovascular and chronic respiratory disease mortality, and tobacco use



2010-2016: The momentum of change has dwindled since 2010, with annual reductions slowing for the main NCDs

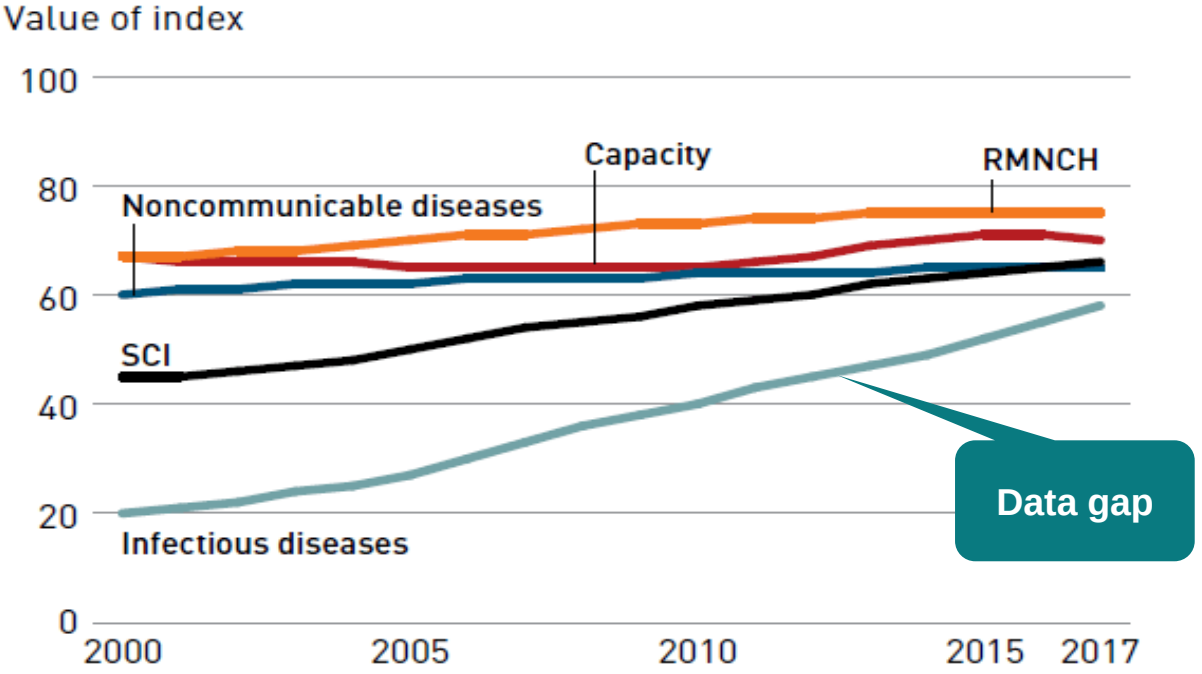
6% of MS

Only 14 countries are on track today to meet SDG target 3.4 on NCDs

No change in service coverage in last two decades

NCD Services: Lagging behind

Rapid improvements in coverage of infectious disease in UHC packages since 2000, vs relatively little change on NCDs



Primary Healthcare on the road to UHC, 2019 Monitoring Report

What are available strategies to address the challenge

STRATEGIC DIRECTIONS

1. Accelerate national response based on the understanding of NCDs epidemiology and risk factors and the identified barriers and enablers in countries

2. Prioritize and invest in scale-up the implementation of most impactful and feasible interventions in the national context

3. Ensure timely, reliable and sustained national data on NCD risk factors, diseases and mortality for data driven actions and to strengthen accountability

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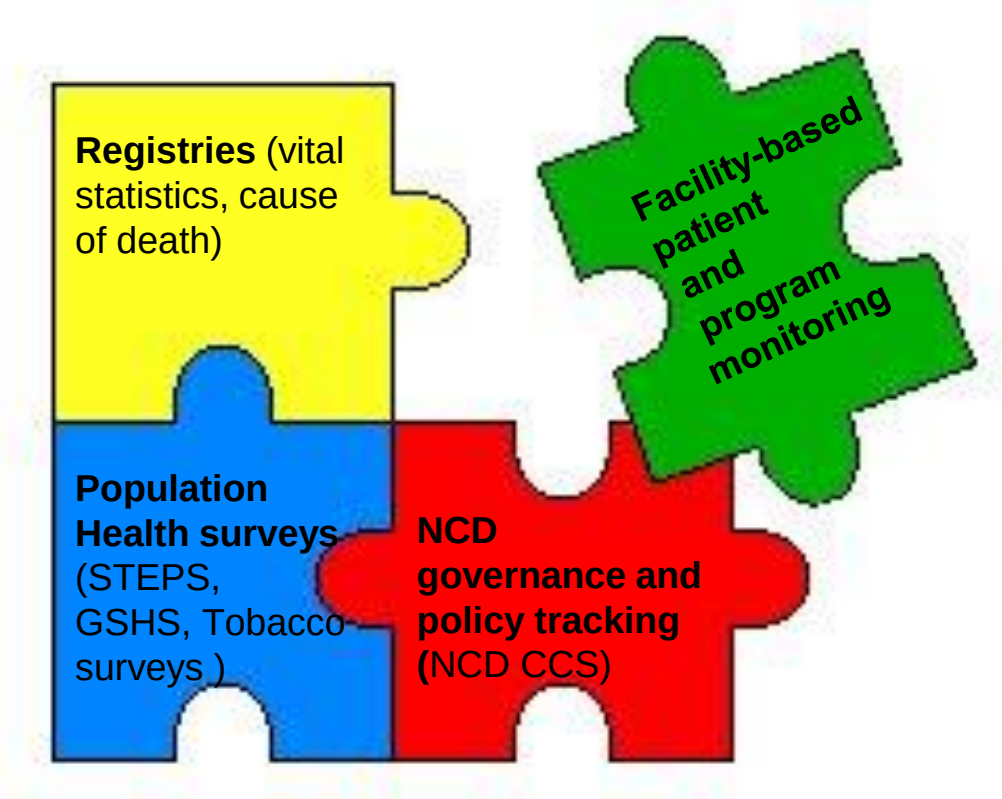
What we do need to complete the picture



Thanks!

@MikkelsenBente_

Do you have any questions?
mikkelsenb@who.int

Systematic approach toward standardized NCD facility-based patient and programme monitoring

Farshad Farzadfar

Scientist, Surveillance, Reporting and Monitoring,
Department for NCDs

World Health Organization

Department for
Noncommunicable Diseases

Harnessing the power of facility data to achieve global NCD targets

Systematic approach towards standardized NCD facility-based patient and program monitoring

Dr. Farshad Farzadfar

Scientist,
SMR Unit, NCD Department, HQ

Facility-based patient and program monitoring major from the development to the implementation

1. Design Phase:

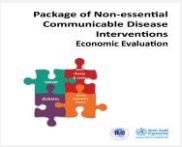
- Standardization of the framework, indicators, and their metadata through a systematic and scientific process
- Development of standardized digital platform for data collection and data visualization
- Capacity building, consultancy, and supporting of the Member States for the implementation

2. Implementation Phase

- Policies and governance
- Implementation
- Capacities
- Data quality
- Data utilization for action

Scope of the first phase of NCD facility-based patient and program monitoring

- Disease: Hypertension, Diabetes, CRD, Cancers, and (Oral Health)



- Used WHO technical packages

- Level of services: Limited to Primary Health Care delivery

- Type of facility: Limited the scope to the public sector

- Type of indicator: No finance indicator

- Type of data: Only the data that can be retrieved from the same healthcare f

Taken steps

- Internal experts' collaboration to develop the list of the indicators and their metadata
    - Hypertension
    - Diabetes
    - Chronic Respiratory Diseases
    - Cancers
- Design the Delphi method for receiving consensus on the list of the indicators and their metadata
    - Quantitative approach
    - Qualitative approach
    - Systematic review

Taken steps

- Technical expert meetings

  1. Meeting on Feb 9th, 2022:

     - Inputs: framework, indicators, their metadata, and Delphi questionnaire
     - Outputs: indicators' scores and comments

  2. Follow up meetings on March 1st to 4th, 2022

     - Inputs: Indicators' scores and comments
     - Outputs: Required Modifications

- Modifying the list of the indicators and their metadata

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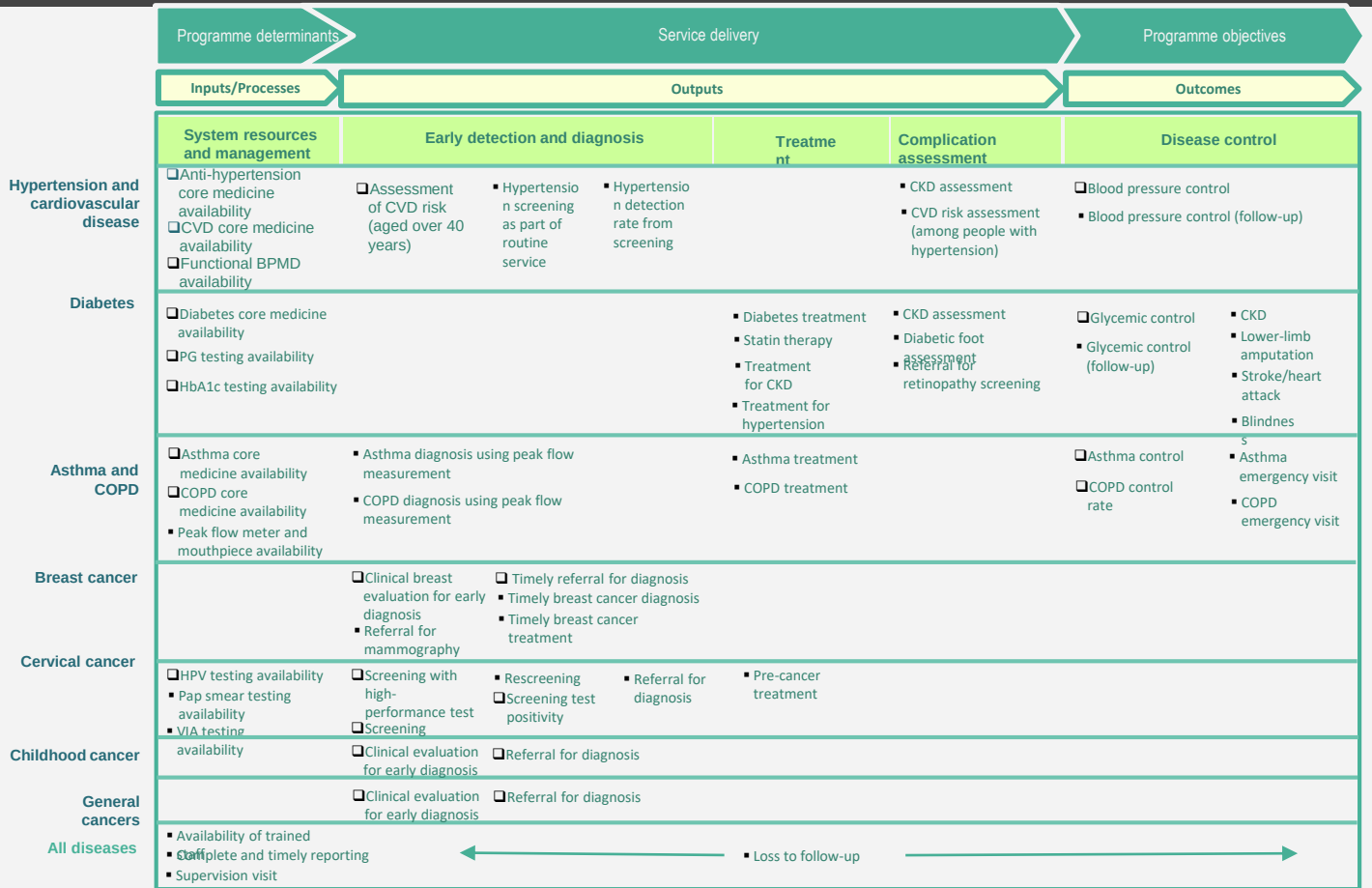
NCDs primary care facility-based patient and program monitoring framework



Core indicators

1. Hypertension:

- C1-Availability of anti-hypertensive core medicines
- C2-Availability of cardiovascular disease core medicines
- C3-Availability of a functional blood pressure measuring device
- C4-Assessment of cardiovascular disease risk among people aged over 40 years
- C5-Blood pressure control among people with hypertension

2. Diabetes:

- C1-Availability of diabetes core medicines
- C2-Availability of plasma glucose testing
- C3-Availability of HbA1c testing
- C4-Glycaemic control among people with diabetes

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Product and publications

- NCD facility-based patient and program monitoring framework
- Health facility data analysis module: for NCD managers
- NCD facility-based patient and program monitoring Implementation package
- Facility level complementary questionnaire/package of STEPS survey
- Digital platform

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Implementation

- Coordination with countries for implementation
- Virtual training workshop
- Evaluation package
- Expansion to hospital and tertiary services

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Lesson learned from the adventure

- Indicators related availability of medicines, device, test, and staff and people in control are crucial in diseases such as HTN, diabetes, CRD
- Indicators that concern timeliness and referral pathway are crucial for cancer group
- List of medications could vary from one country to another one since it includes minimum set of medications introduced by WHO technical packages
- For the sake of consistency across countries, no major modification is possible at country level, which includes title, definition, purpose, numerator and denominator, as well as method of calculation
- Minor modifications including report frequency, data users, and disaggregation could vary from a country to another country
- Cross sectional indicators due to being easier to understand, and easier to obtain needed data are

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Next steps

- Evaluate feasibility
- Assess FBPPM impact and outcome on the Global NCDs Targets
- Data quality concerns
  - Facility level survey
  - Linkage with other data source
- Statistical models to compare the results with available most recent population estimates
- Expansion the model to private sector

Information policy standards for effective patient and programme monitoring

Roberta Caixeta

Advisor, NCD Surveillance, Prevention and control, NCD and Mental health department,
WHO Regional Office for the Americas

World Health Organization
Department for Noncommunicable Diseases

Harnessing the power of facility data to achieve global NCD targets: a focus on facility-based care and programme monitoring

Efforts to improve the availability and quality of healthcare facility data in the Region of the Americas

Roberta Caixeta
Advisor on NCD Surveillance, Prevention and Control
Noncommunicable Diseases and Mental Health Department
Pan American Health Organization

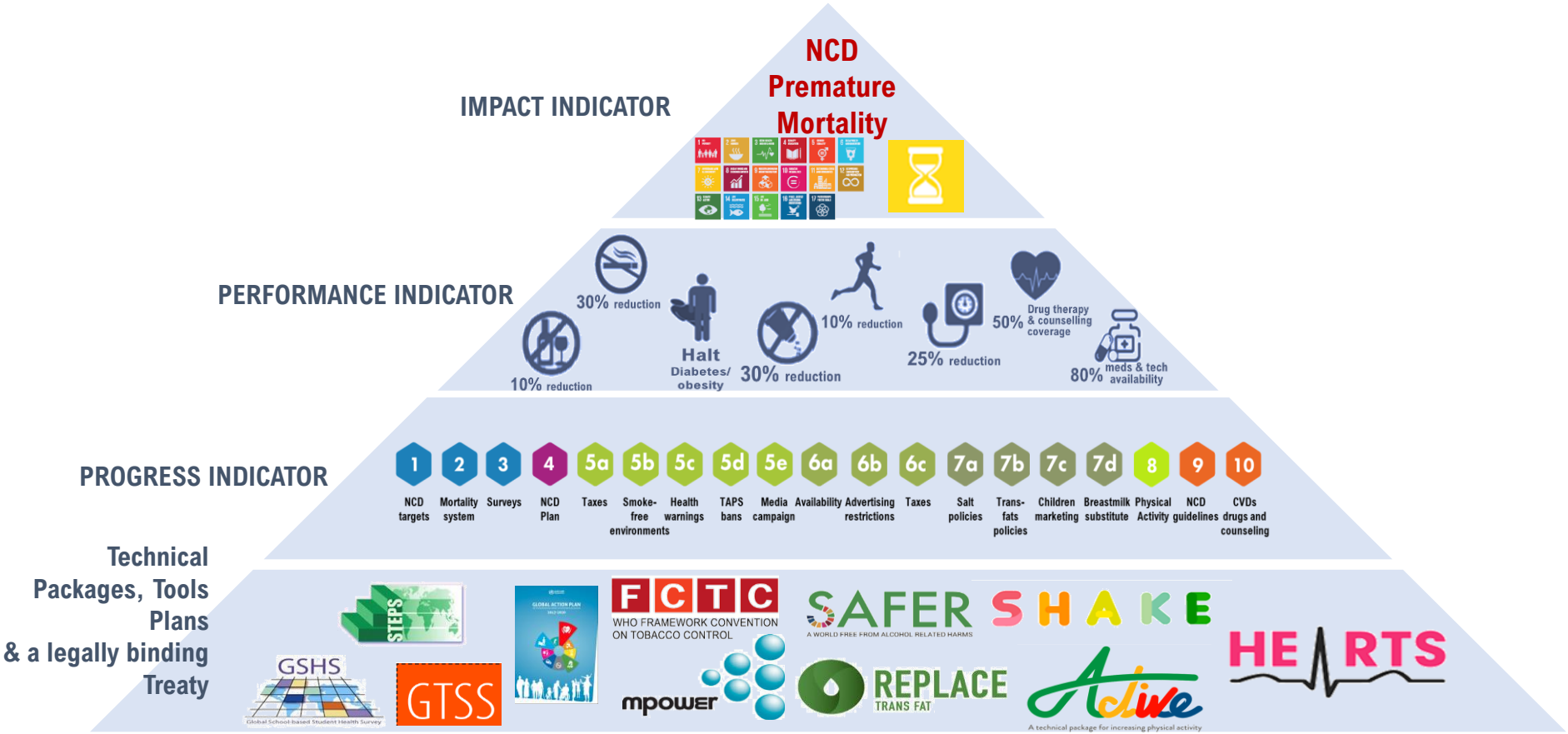
PAHO Pan American Health Organization World Health Organization Americas

Thursday, 9 June 2022

PAHO/WHO interprogrammatic technical working group:
Digital Health and NCDs

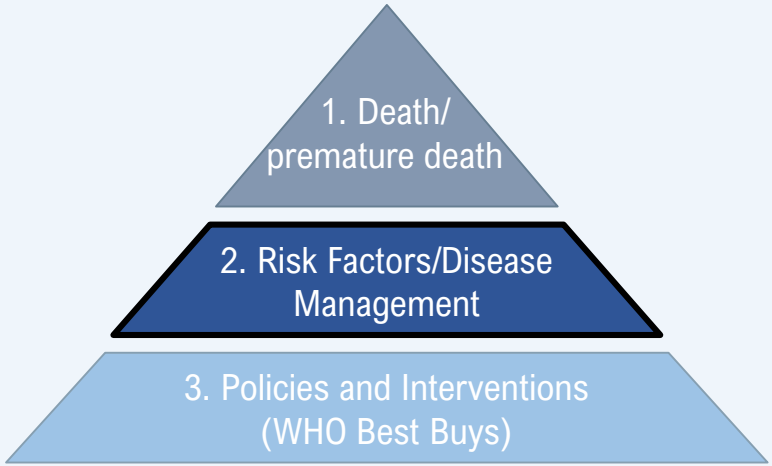
Department of Noncommunicable Disease and Mental Health – NMH:	**Department of Evidence and Intelligence for Health - EIH**
Anselm Hennis Silvana Luciani Pedro Orduñez Roberta Caixeta Daniel Otzoy	Sebastian García-Saisó Marcelo D'Agostino Myrna Marti Daniel Doane

The logical structure: Global Monitoring Framework & Policies and Interventions



The power of healthcare facility data to achieve global NCD targets

Save and improve quality of life



How can healthcare facility data help countries to achieve the global NCD targets?

- Monitor the **continuity** and **quality** of care
- Improve **diagnosis** and **adherence** to treatment
- Improve **quality of care** of those people living with **more than 1 condition (multimorbidity)**

People-centered healthcare

Requires an information system with a people-centered approach instead focusing the data collection on individual disease/condition - *interoperability*

The power of health facility data to achieve global NCD targets

Key features to consider when implementing healthcare facility and program monitoring tools:

Data policy/governance constraints:

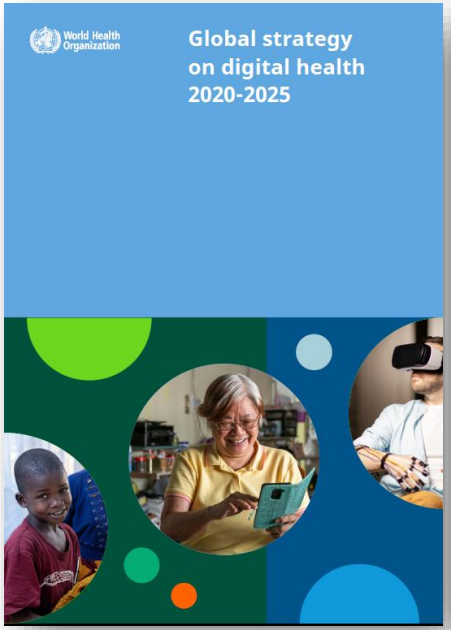
- **National authority** with responsibility for decision-making on data and standards.
- **Policies** related to data **collection, use** and **dissemination**:
  - Protection of personal health information.
  - Mandatory use of data standards and reporting.
- **Policies and SOPs** related to **information management**:
  - Establish the responsibilities for collection, processing, and data analysis.
  - Data quality framework and processes.
- **Capacity building** and personnel training plans.

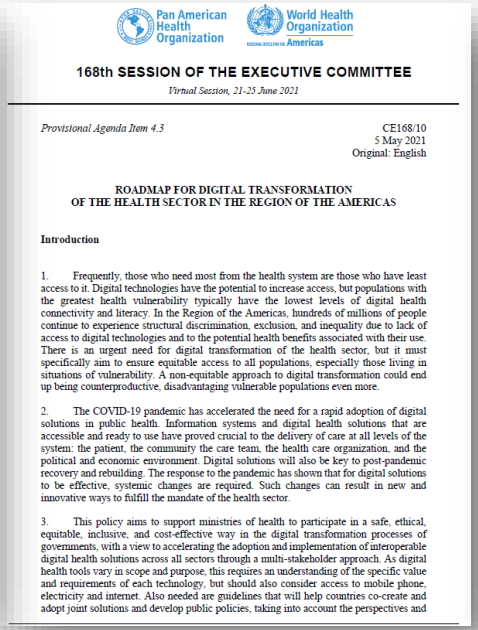
Key data standards:

- Leveraging current standards for **interoperability** (e.g. HL7/FHIR).
- Establishment of **data dictionaries** (definitions of individual data elements).
- **Indicator definitions** aligned with both national and international standards.

Regional Efforts: Digital Health Transformation

Opportunity to improve the facility-based care and programme monitoring




Pan American Health Organization
World Health Organization
Americas

168th SESSION OF THE EXECUTIVE COMMITTEE

Virtual Session, 21-25 June 2021

Provisional Agenda Item 4.3

CE168/10
5 May 2021
Original: English

ROADMAP FOR DIGITAL TRANSFORMATION OF THE HEALTH SECTOR IN THE REGION OF THE AMERICAS

Introduction

1. Frequently, those who need most from the health system are those who have least access to it. Digital technologies have the potential to increase access, but populations with the greatest health vulnerability typically have the lowest levels of digital health connectivity and literacy. In the Region of the Americas, hundreds of millions of people continue to experience structural discrimination, exclusion, and inequality due to lack of access to digital technologies and to the potential health benefits associated with their use. There is an urgent need for digital transformation of the health sector, but it must specifically aim to ensure equitable access to all populations, especially those living in situations of vulnerability. A non-equitable approach to digital transformation could end up being counterproductive, disadvantaging vulnerable populations even more.

2. The COVID-19 pandemic has accelerated the need for a rapid adoption of digital solutions in public health. Information systems and digital health solutions that are accessible and ready to use have proved crucial to the delivery of care at all levels of the system: the patient, the community the care team, the health care organization, and the political and economic environment. Digital solutions will also be key to post-pandemic recovery and rebuilding. The response to the pandemic has shown that for digital solutions to be effective, systemic changes are required. Such changes can result in new and innovative ways to fulfill the mandate of the health sector.

3. This policy aims to support ministries of health to participate in a safe, ethical, equitable, inclusive, and cost-effective way in the digital transformation processes of governments, with a view to accelerating the adoption and implementation of interoperable digital health solutions across all sectors through a multi-stakeholder approach. As digital health tools vary in scope and purpose, this requires an understanding of the specific value and requirements of each technology, but should also consider access to mobile phone, electricity and internet. Also needed are guidelines that will help countries co-create and adopt joint solutions and develop public policies, taking into account the perspectives and

Health care facility data and monitoring programs

PAHO/WHO Initiative – Regional repository on Digital Public Goods

Digital public goods

Co-create digital public health goods for a more equitable world

Digital public goods must include open-source software, standards, algorithms, data, applications, and content designed with the appropriate architecture and licensing. These attributes should allow to be scaled to diverse populations and contexts, and to be implemented with the appropriated local adaptations.

- Map the needs and **maturity level** of the health information system (IS4H) – scale up approaches (from paper-based to electronic tools).
- **Assessment** of the regulatory frameworks available in countries **and development of tool to** guide the **preparation of regulatory acts/legislation** on Digital Health (including Electronic Health Records/Monitoring health care tools).
- Inventory/**identify certified tools** available to be used **to monitor NCDs at the primary health care level.**
- Dissemination/adaptation of the WHO **set of standard indicators** developed for health care facility.
- **Self-management tools** available to improve disease management by PLWNCD.
- **RACSEL** – *Red Americana de Cooperación sobre Salud Electrónica*.

Thank you!

caixetro@paho.org

Comprehensive primary health care NCD solution: building local health workforce capacities for facility-based patient and programme monitoring

M.A. Balasubramanya

Advisor, Community Processes and Comprehensive Primary Health Care in National Health System Resource Centre, Ministry of Health and Family Welfare, India

World Health Organization

Department for Noncommunicable Diseases

Using a Digital Platform to Enhance Community-based Primary Health Services In India

Govt. of India's CPHC NCD IT System –

Designing and Implementing an Effective NCD patient and Programme monitoring

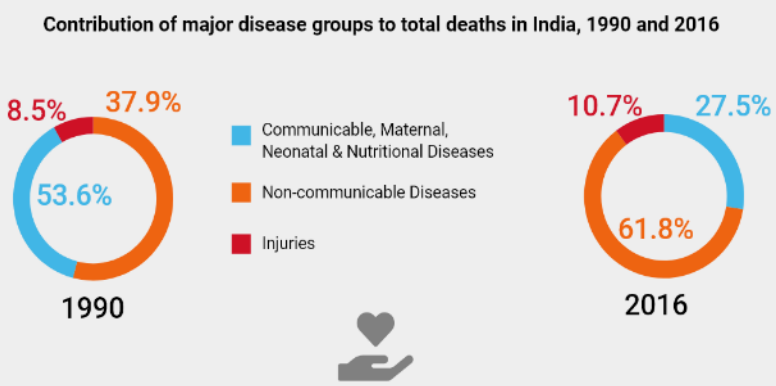
Dr.M.A.Balasubramanya
Advisor, Community Processes and Comprehensive Primary Health Care
Ministry of Health and Family Welfare, Govt of India

June 2022

Indian Context

Rising burden of NCDs

Epidemiological Transition



63% **Of deaths caused by NCDs**

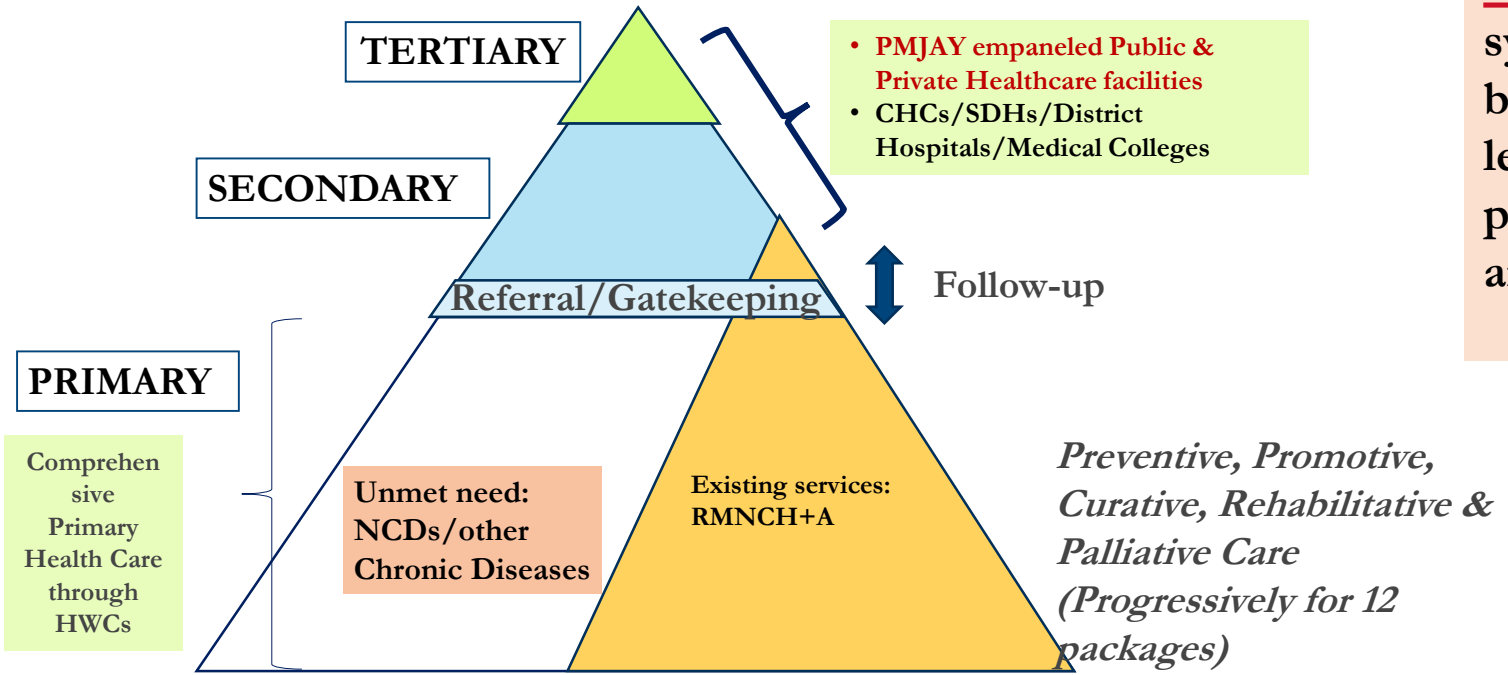
24% **Of men and 21% women suffer from hypertension***

**Elevated blood pressure (Systolic ≥140 mm of Hg and/or Diastolic ≥90 mm of Hg) or taking medicine to control blood pressure -National Family Health Survey 2019-21*

National Health Policy – 2017

- ✓ Change from very **selective to comprehensive primary health care package**
- ✓ **Up to two-thirds or more** of financial resources to be **spent on primary care**
- ✓ **Extensive deployment of digital tools** for improving the efficiency and outcome of the healthcare system.
- ✓ **Inclusive partnerships** –
- ✓ **Integrated health information system** - **Ayushman Bharat Digital Mission (ABDM)** - Enabling Digital Healthcare for all

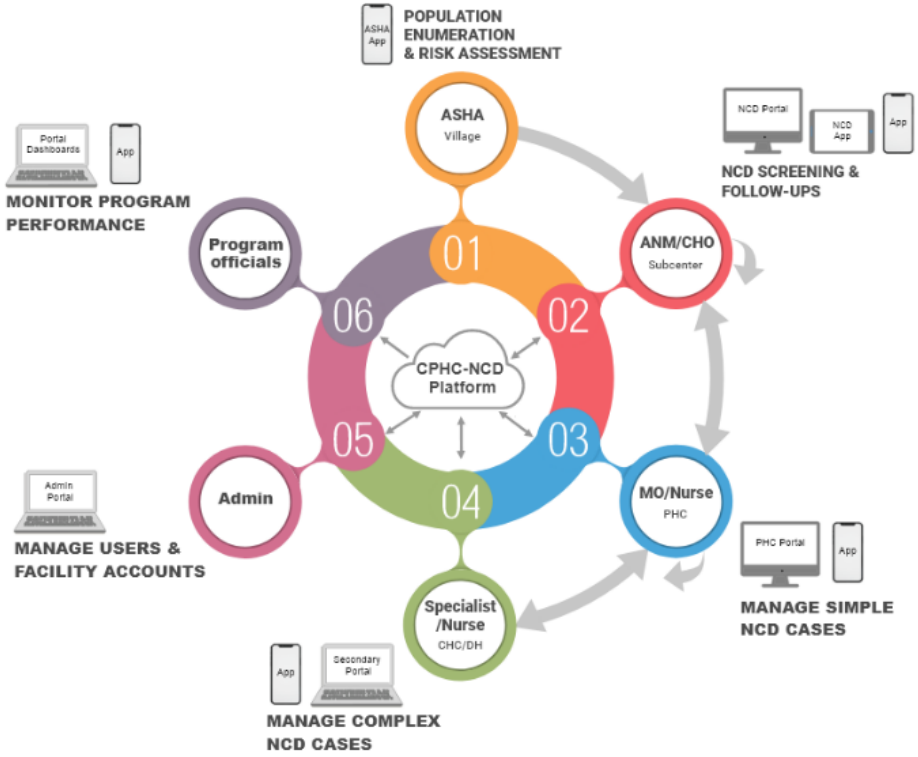
Leveraging digital health for two-way systemic linkages between various levels of care viz., primary, secondary and tertiary



CONTINUUM OF CARE – CPHC & PMJAY

A **Robust IT system** is of they key reforms for transformation of primary health facilities(SHC, PHC) to AB-HWCs.

CPHC NCD IT System - Ministry of Health & Family Welfare, Govt of India



Suite of 6 apps powered by a Platform designed to enable smooth delivery of services

CPHC NCD Objectives

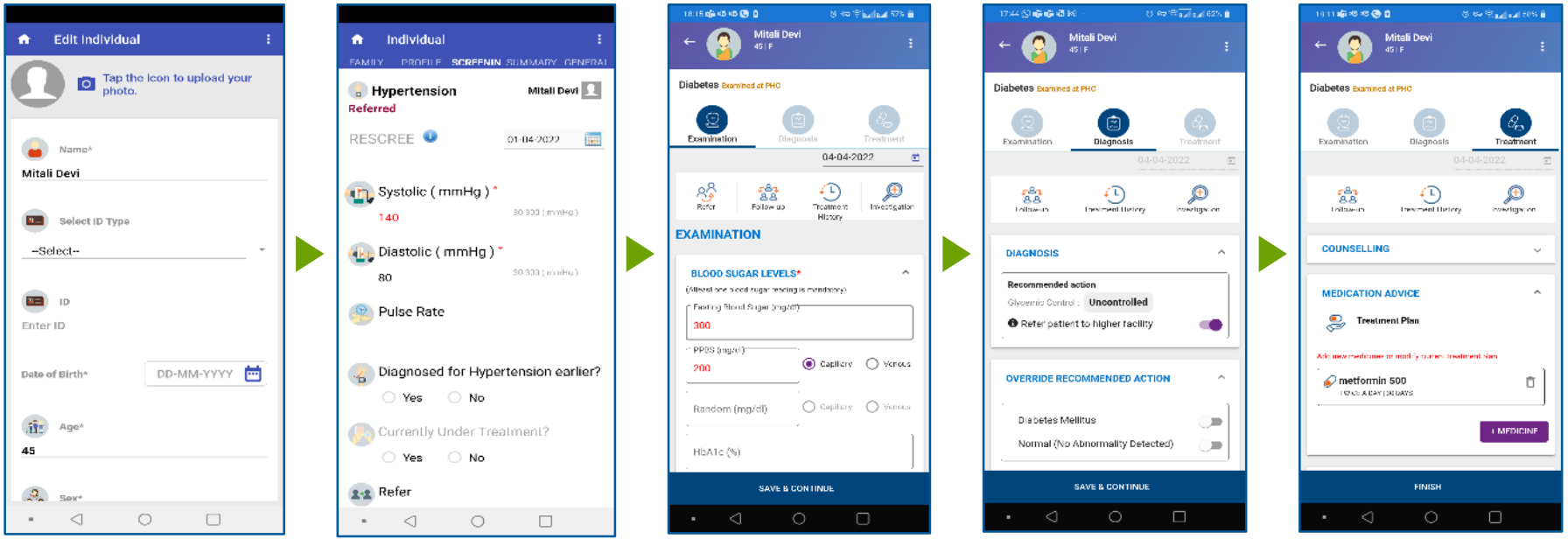
- **Individual: Continuum of Care**
  - Every individual is counted and followed up from enrolment to treatment and management over time
- **Care Providers: Productivity & Quality**
  - Standardizing care quality, task-shifting
- **Health Officials-** Executing at Scale
  - Providing timely, quality data down to village level for program managers and decision makers
  - Dashboards, analytics. Interoperability

231 mn people digitally enrolled

58 mn over age of 30 screened

1,00,000+ Individuals trained *(Data as 30 May'22)*

Application screenshots for each stage



Enrolment | **Screening** | **Examination** | **Diagnosis** | **Treatment**

- Health record portability enabled by unique Health ID
- Beneficiary can walk into any facility; health provider can search & access health record with latest patient status visibility
- SMS sent to beneficiaries - Reminder for preventive screening, Annual Re- screening

SMS to mobilize beneficiaries

Reminder for **preventive screening**

Reminder for **Annual Re- screening**

Reminder to complete **referral visit**

Proactive communication with beneficiaries

Improved follow adherence and continuum of care

Improved awareness of NCD and HWC services

प्रिय Anita
पहचान संख्या
12-3456-7891-6543

आपकी पिछली जांच 8-12-2020 को हुई थी |

कृपया अपने निकटतम आयुष्मान भारत हेल्थ एंड वैलनेस सेंटर पर पुनः स्वास्थ्य जांच अवश्य कराएं|

धन्यवाद - National NCD Program

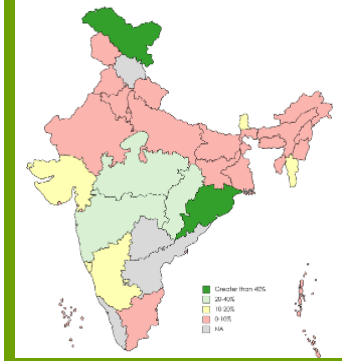
Dear Anita
ID no. 12-3456-7891-6543

Your annual free screening for Diabetes is due on 15-12-2021.
Please visit your nearest Ayushman Bharat Health and Wellness center or any government health center to complete your screening.
Kindly ignore if already done.

Thank you - National NCD Program

Dashboards for data driven Program Monitoring

Screening Coverage vs Target Population



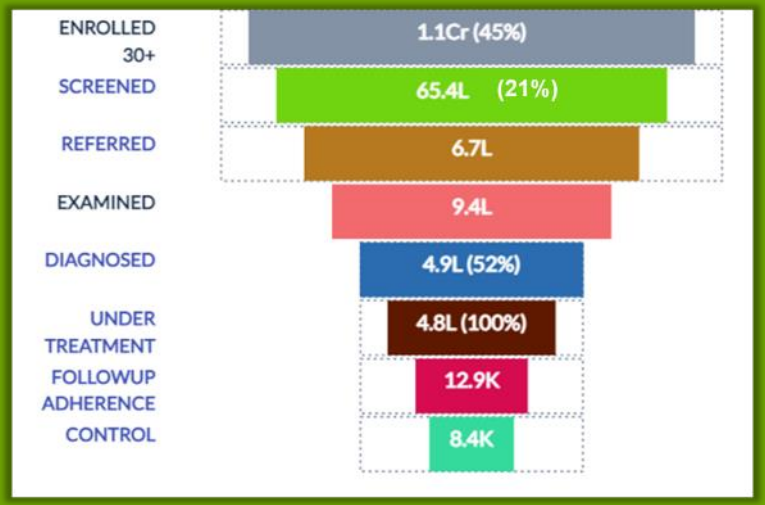
Data insights through **dashboards** enable health officials to **plan and track performance** against targets

User-friendly interface with multiple filter options for data analysis, Drill Down till lowest monitoring catchment level

VIEW AS: Count | Count & percentage

States	Enrolled 30+	Screened First Ti...	Referred To PHC	Examined	Diagnosed	Under Treatment	FollowUp Adher...
Delhi	3,004	505	554	1,386	1,007	858	51
North West	3,004	505	554	1,386	1,007	858	51
A WARD	7	5	3	3	2	2	1
AA Ward	2	0	0	2	2	1	0
Abcd	52	32	5	10	9	9	3
Abc1	51	32	5	8	7	7	2
Mohan Longda	51	32	5	8	7	7	2
Other	46	29	2	6	6	6	2
Qqq	5	3	3	2	1	1	0
Www	0	0	0	0	0	0	0

CPHC NCD Dashboard helps to analyze trends of **Continuum of Care** and identify the unreached population through treatment and follow up.

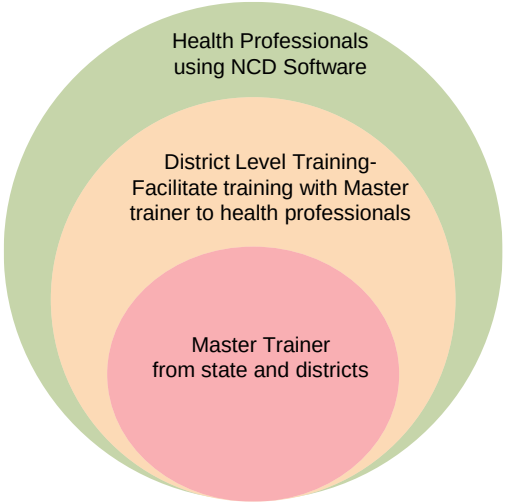


Challenges and Solutions-Human Resources

Challenges	Solutions
1. Human Resource issues **a. Perceived increased work- load** **b. Front line workers** i. Inadequate digital literacy amongst Field Level Functionaries (ASHAs, ANMs); ii. Language preferences iii. Terrain of work with poor internet connectivity **c. Medical professionals** i. Poor adherence to technology	**App-based** ✓ **User-friendly Design-** Participative design, Intuitive layouts, minimal data entry, simple language ✓ **Easy tracking of clients - Creation of ABHA* number with. QR code** ✓ **SMS reminders** to beneficiaries ease the work of field level functionaries to make in-person home-visits. ✓ Apps for **Community health workers** operate in offline mode ✓ CPHC –NCD system supported in **11+ languages** Training support in vernacular languages ✓ Suggestive treatment protocols for faster decision ✓ User level Dashboard for better planning and self monitoring ✓ Peer support **Training and support** ✓ Cascade training and tiered support ✓ Innovative learning mechanisms

Cascade Field Training & Tiered Support Models

- A robust training process tailored for low digital literacy and technology acceptance by users.
- Cascade model of training - sustainable pool of trainers.
- 1,00,000 + health workers & doctors trained.
- Support mechanism is a well-structured SOP driven, 3-tiered system with an escalation matrix.



Cascade Training Model

Support & Escalation structure

Challenges and Solutions-Human Resources

Challenges	Solutions
1. Infrastructure • Inadequate IT hardware • Poor internet penetration in remote, interior, hilly areas	**App-based** ✓ Dedicated NHM funds for IT infrastructure(smartphone, laptop) and internet at AB-HWCs. ✓ Offline data syncing reported in CPHC-NCD system

Inclusive partnerships for the design and implementation

Government

Government of India
Ministry of Health & Family Welfare
Department of Health & Family Welfare

NCD, DGHS, NHM & eGov Divisions of Ministry

NHSRC
National Health Systems Resource Center
The knowledge Gateway to Public Health

NHA
national health authority

NCDIR
ICMR INDIAN COUNCIL OF MEDICAL RESEARCH
NCDIR

NICPR
NICPR NATIONAL INSTITUTE OF CANCER PREVENTION AND RESEARCH

National Informatics Center
NIC National Informatics Centre

Academic Partners

AIIMS

Development Partners

WHO India
World Health Organization India

Dell Technologies
DELL Technologies

TATA TRUSTS
TATA TRUSTS

CCDC

End of Presentation

Integration of NCD service package in the Iranian PHC, based on electronic health records

Ardeshir Khosravi

Head of Health Information and Statistical Group, Deputy for Public Health at the Ministry of Health and Medical Education, Iran (Islamic Republic of)

World Health Organization
Department for Noncommunicable Diseases

Deputy for Public health

World Health Organization

Integration of NCD Service Package in the Iranian PHC Based on Electronic Health Record

Presented by: Ardeshir Khosravi
Technical Deputy of Center for PHC Network Management
Iranian Ministry of Health and Medical Education

Introduction

- In Iran, Health service delivery is based on PHC that was designed and implemented in 1983
- During the last 4 decades, the Iranian health system has made acceptable achievements that the role of PHC in these achievements is undeniable.
- By changing the epidemiological pattern of diseases and increasing non-communicable diseases in Iran, as in other countries, by implementing the Health Transformation Plan in Iran, non-communicable diseases were considered as one of the priorities in the designing new PHC

Iran HTP and integration of NCD in the New PHC

- Revising service packages based on population needs NCD, Nutrition and mental health (with new workforces)
- Integration NCD based on **Package of Essential Non communicable Disease:**
- Prevention of heart attacks and strokes through integrated care for diabetes, hypertension, hyperlipidemia and obesity
- Prevention, early detection and screening of colon cancer, breast cancer, cervical cancer
- Developing Electronic Health Record based

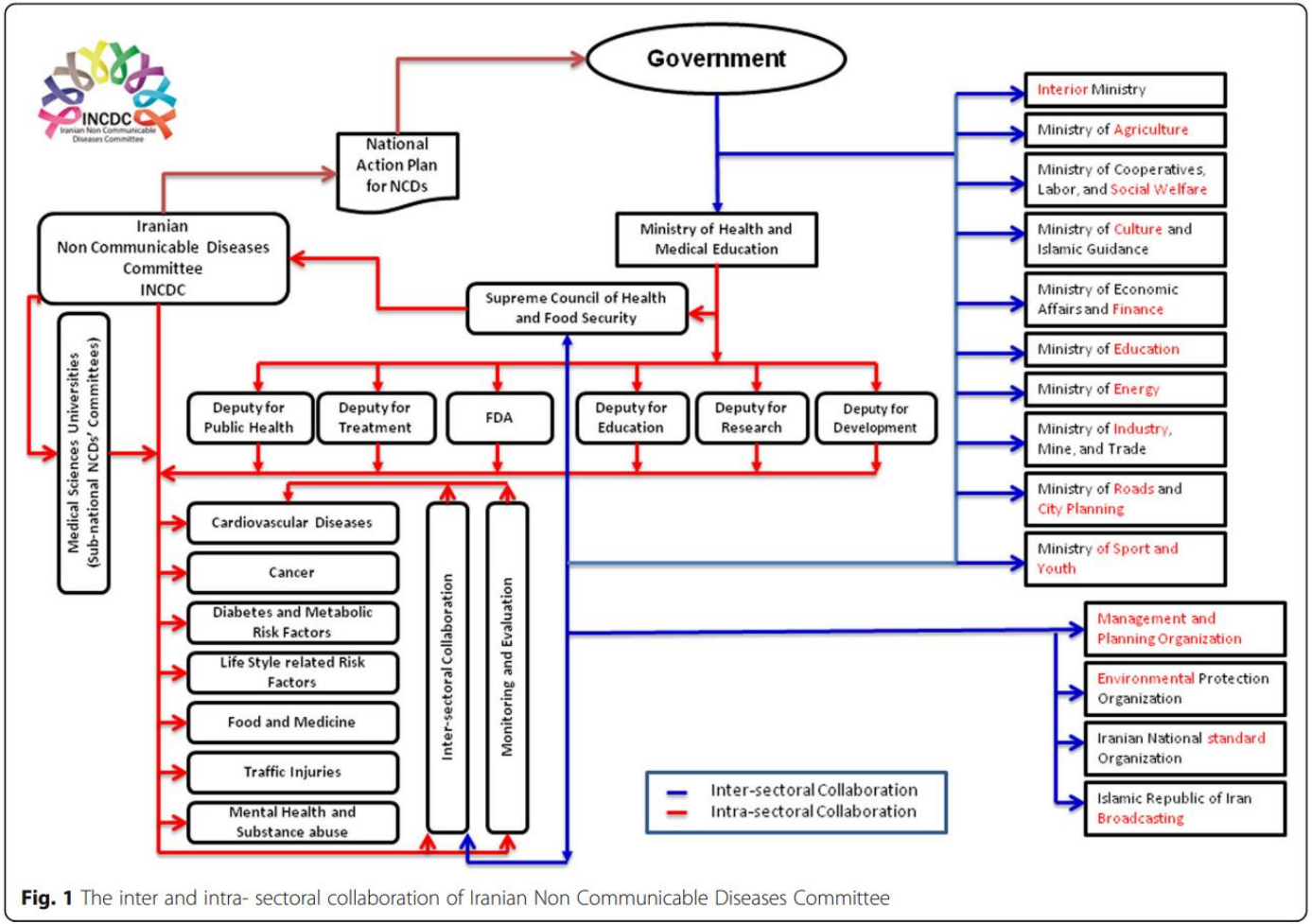
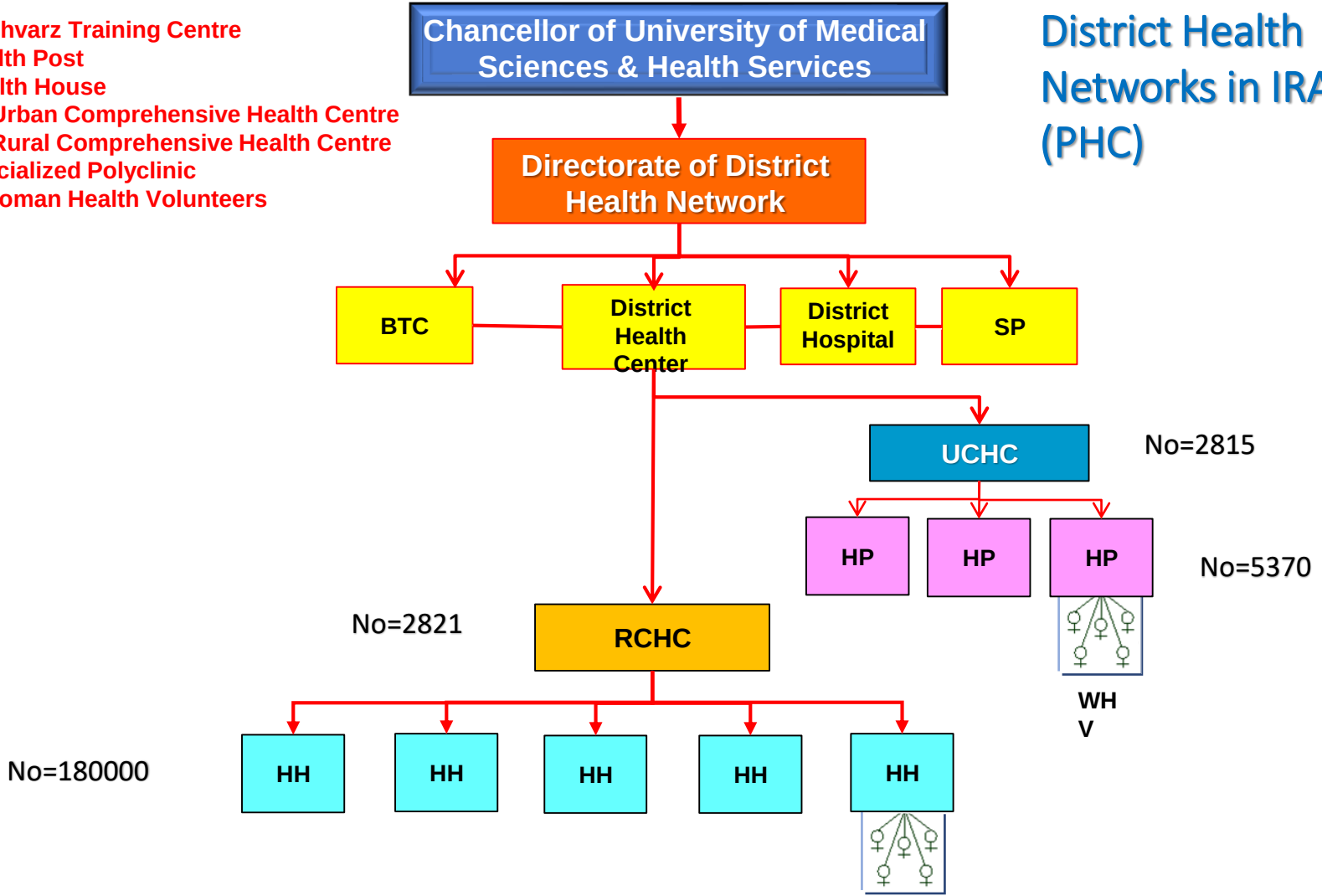
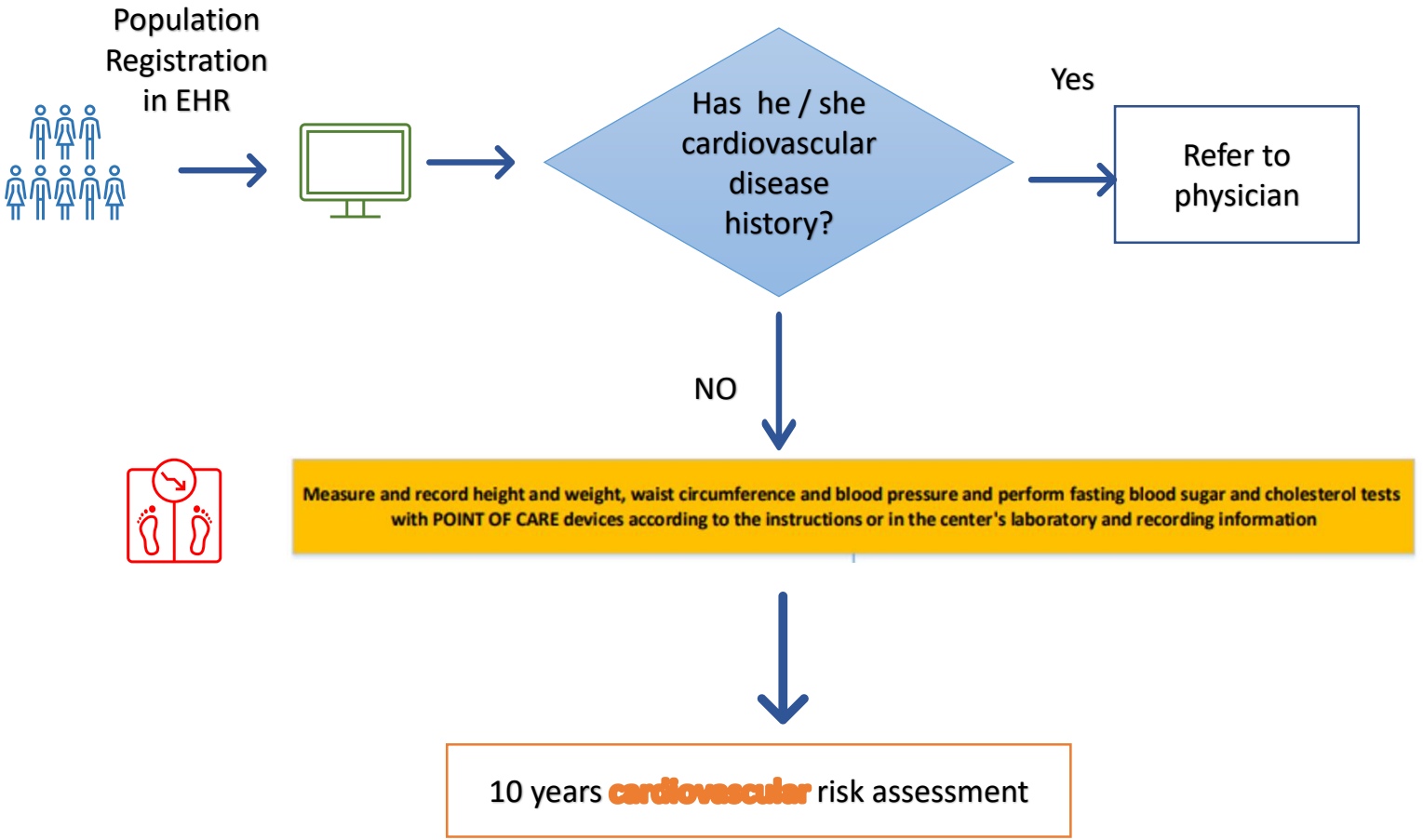


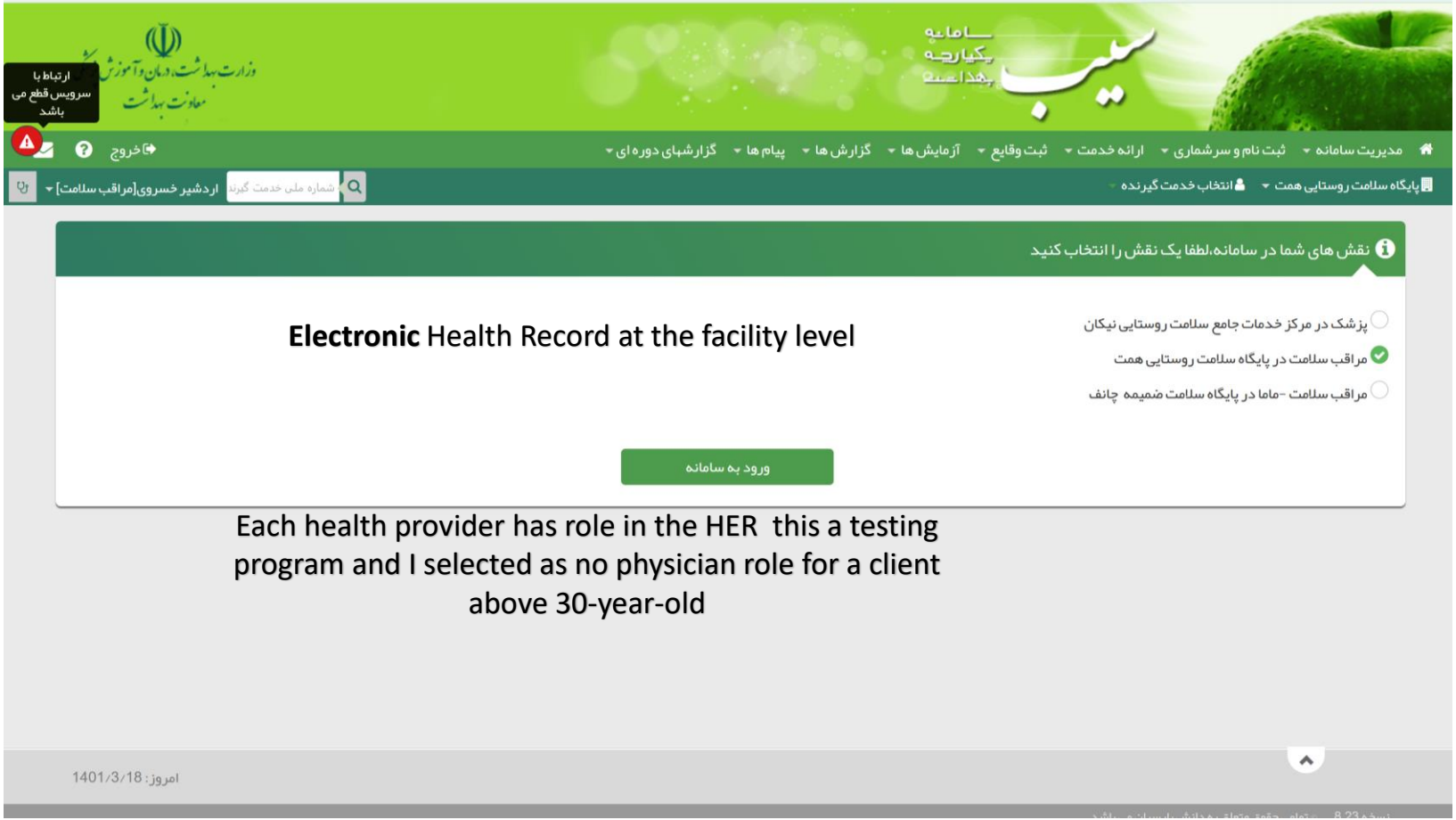
Fig. 1 The inter and intra- sectoral collaboration of Iranian Non Communicable Diseases Committee

BTC: Behvarz Training Centre
HP: Health Post
HH: Health House
UCHC: Urban Comprehensive Health Centre
RCHC: Rural Comprehensive Health Centre
SP: Specialized Polyclinic
WHV: Woman Health Volunteers

District Health Networks in IRAN (PHC)

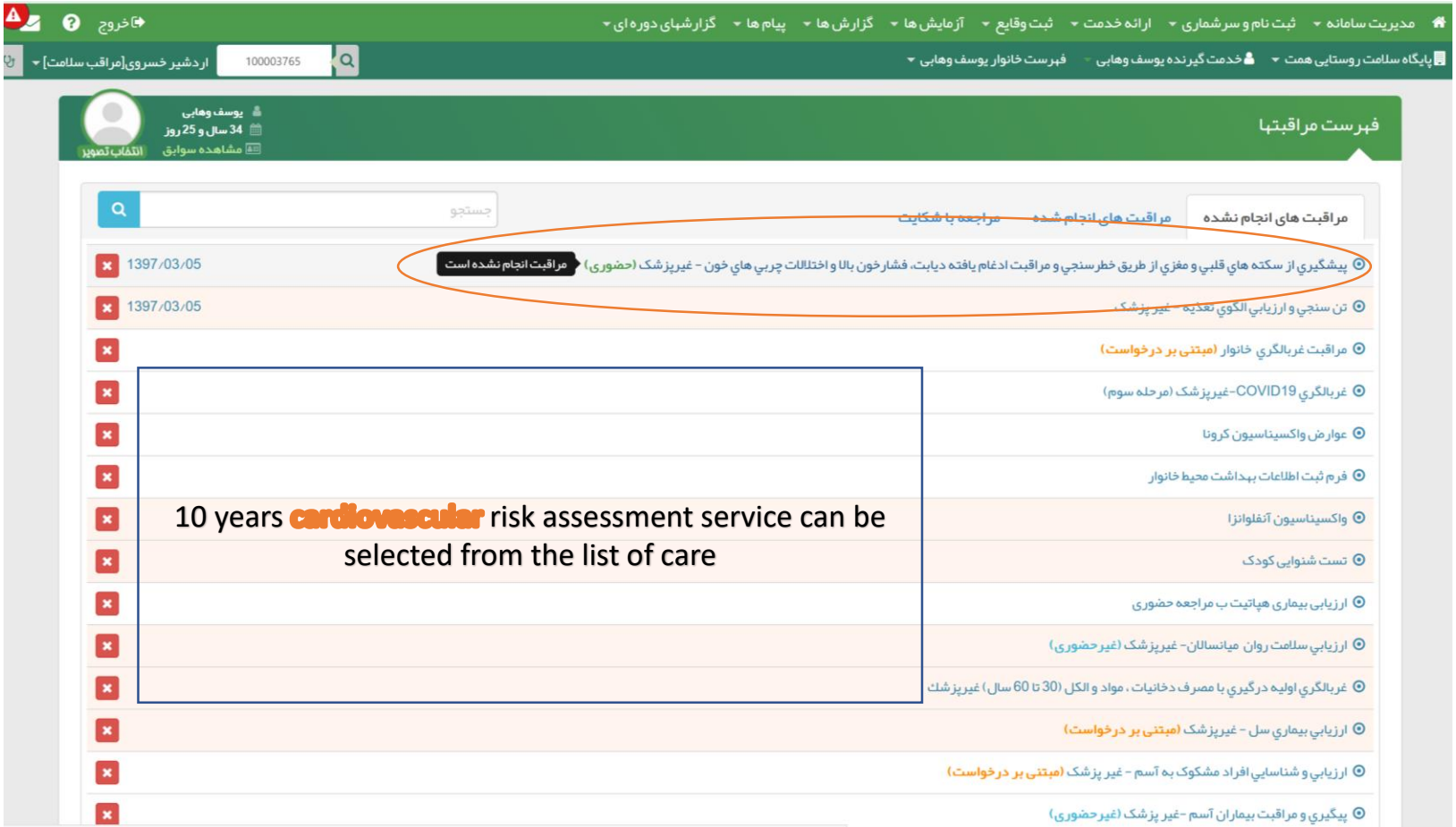



Population Registration in EHR
Has he / she cardiovascular disease history?
Yes
Refer to physician
NO
Measure and record height and weight, waist circumference and blood pressure and perform fasting blood sugar and cholesterol tests with POINT OF CARE devices according to the instructions or in the center's laboratory and recording information
10 years cardiovascular risk assessment

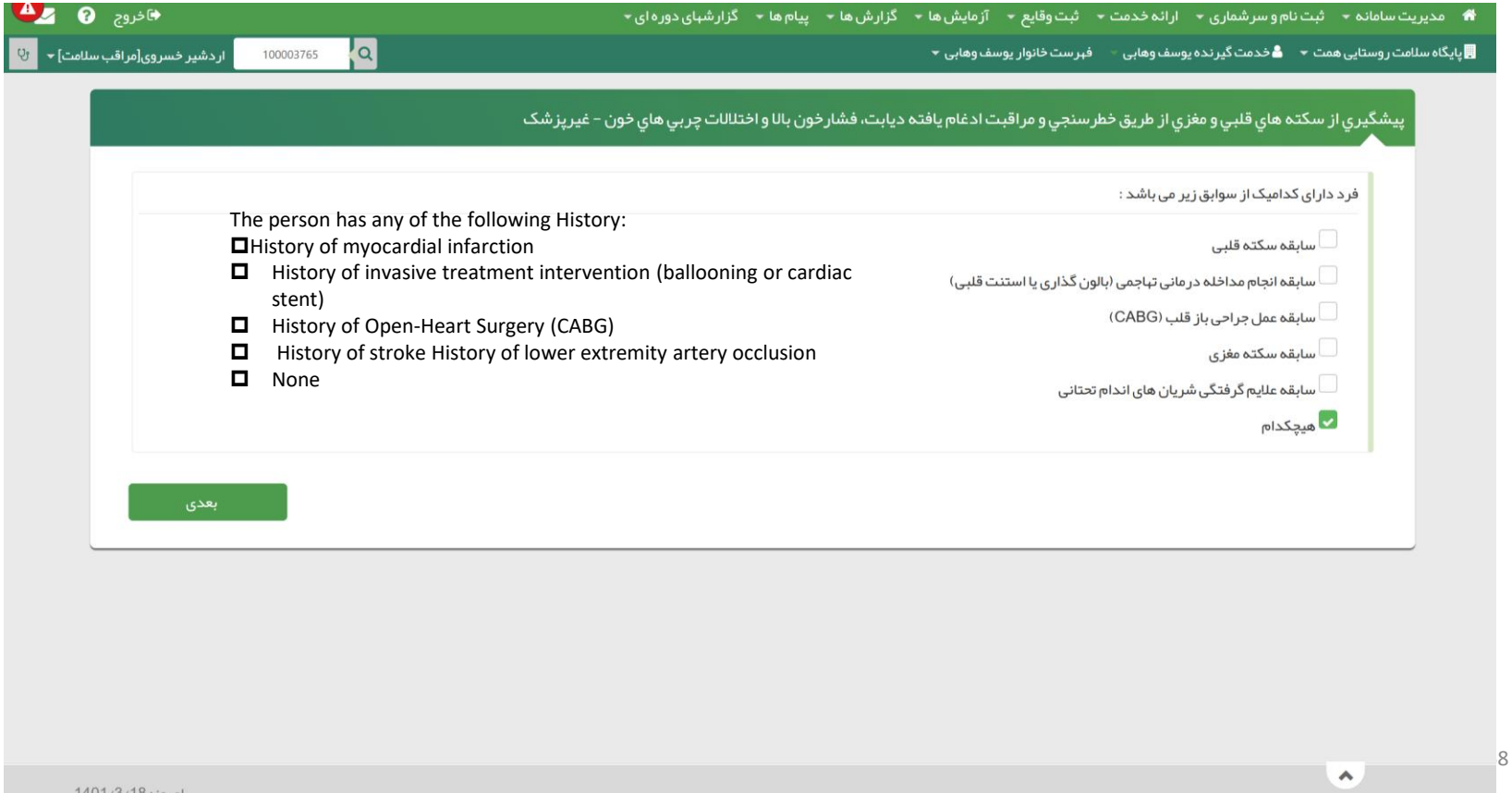


Electronic Health Record at the facility level

Each health provider has role in the HER this a testing program and I selected as no physician role for a client above 30-year-old

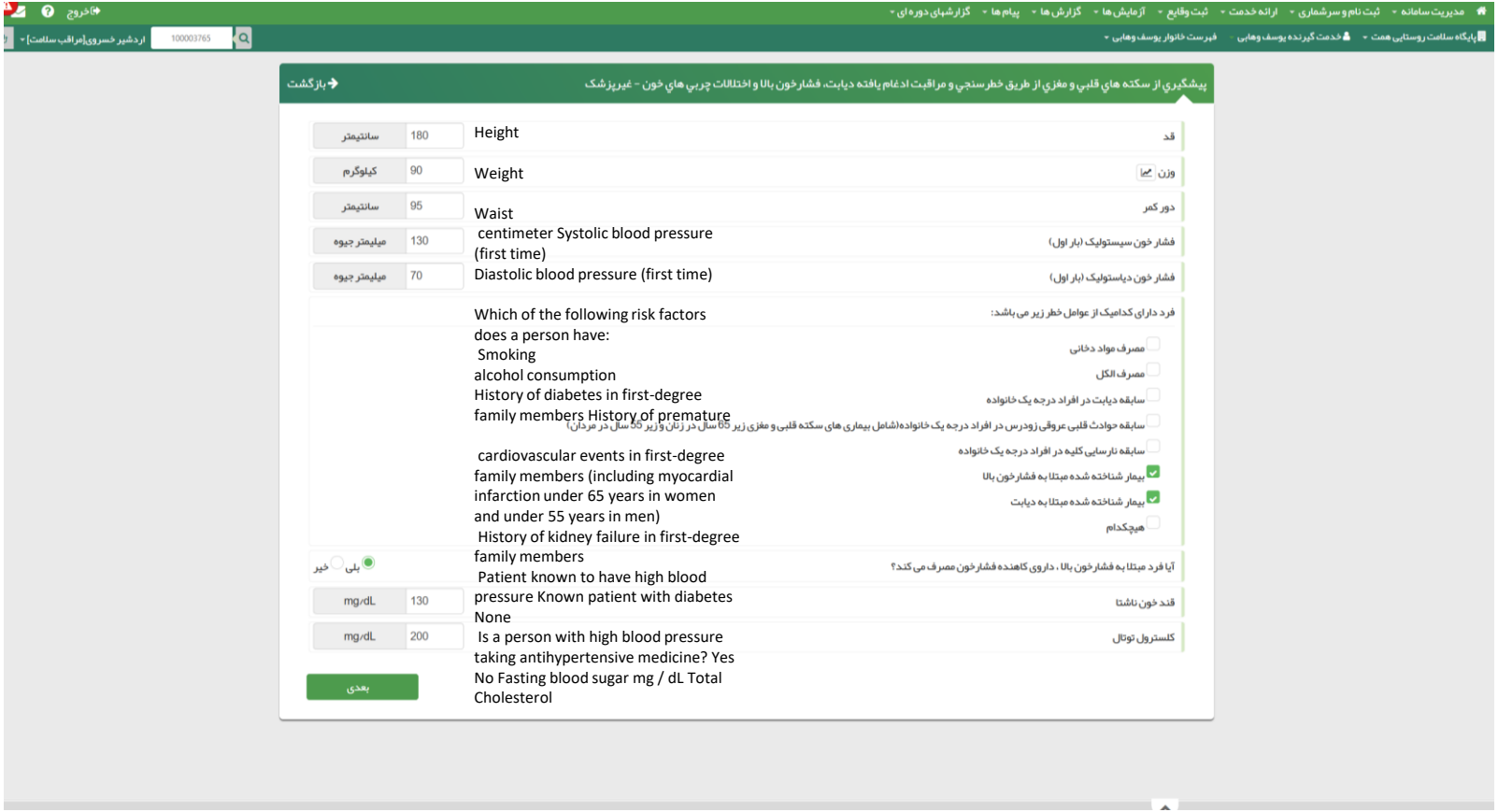


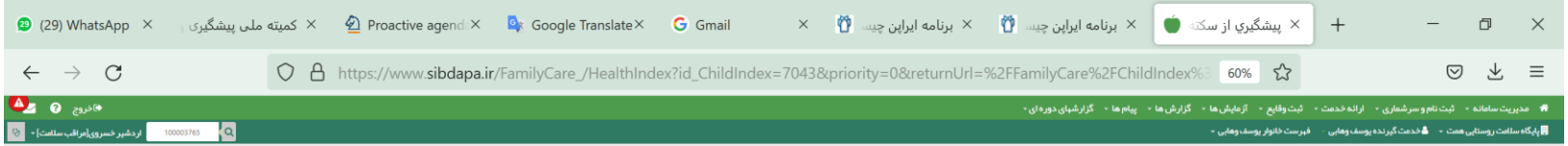
10 years **cardiovascular** risk assessment service can be selected from the list of care



The person has any of the following History:

- ☐ History of myocardial infarction
- ☐ History of invasive treatment intervention (ballooning or cardiac stent)
- ☐ History of Open-Heart Surgery (CABG)
- ☐ History of stroke History of lower extremity artery occlusion
- ☐ None


پیشگیری از سکته های قلبی و مغزی از طریق خطر سنجی و مراقبت ادغام یافته دیابت، فشارخون بالا و اختلالات چربی های خون - غیرپزشک
بازگشت
قد
180
سانتیمتر
Height
وزن
90
کیلوگرم
Weight
دور کمر
95
سانتیمتر
Waist
فشار خون سیستولیک (بار اول)
130
میلیمتر جیوه
centimeter Systolic blood pressure (first time)
فشار خون دیاستولیک (بار اول)
70
میلیمتر جیوه
Diastolic blood pressure (first time)
فرد دارای کدامیک از عوامل خطر زیر می باشد:
Which of the following risk factors does a person have:
مصرف مواد دخانی
Smoking
مصرف الکل
alcohol consumption
سابقه دیابت در افراد درجه یک خانواده
History of diabetes in first-degree family members
سابقه حوادث قلبی عروقی زودرس در افراد درجه یک خانواده(شامل بیماری های سکته قلبی و مغزی زیر 65 سال در زنان و زیر 55 سال در مردان)
History of premature cardiovascular events in first-degree family members (including myocardial infarction under 65 years in women and under 55 years in men)
سابقه نارسایی کلیه در افراد درجه یک خانواده
History of kidney failure in first-degree family members
بیمار شناخته شده مبتلا به فشارخون بالا
Patient known to have high blood pressure
بیمار شناخته شده مبتلا به دیابت
Known patient with diabetes
هیچکدام
None
آیا فرد مبتلا به فشارخون بالا ، داروی کاهنده فشارخون مصرف می کند؟
بلی
خیر
Is a person with high blood pressure taking antihypertensive medicine? Yes No
قند خون ناشتا
130
mg/dL
Fasting blood sugar mg / dL
کلسترول توتال
200
mg/dL
Total Cholesterol
بعدی



پیشگیری از سکته های قلبی و مغزی از طریق خطر سنجی و مراقبت ادغام یافته دیابت، فشارخون بالا و اختلالات چربی های خون - غیر پزشک

بازگشت

طبقه بندی

نتیجه بررسی فشارخون :

مبتلا به فشارخون بالا

فشار خون کنترل شده

نتیجه بررسی قندخون :

مبتلا به دیابت

بیماری دیابت با کنترل مطلوب قند ناشتا

نتیجه بررسی چربی خون:

احتمال ابتلا به اختلال لیپید

نتیجه بررسی نمای توده بدنی :

نمای توده بدنی 27.78

اضافه وزن

چاقی شکمی دارد

نتیجه بررسی سطح خطر :

سطح خطر کمتر از 10٪

اقدامات

پیگیری و مراقبت توسط بهورز/مراقب سلامت یک ماه بعد و توسط پزشک سه ماه بعد

تاریخ پیگیری بعدی 1401/04/17

ارجاع به کارشناس تغذیه برای مشاوره تغذیه

ارجاع به مرکز سلامت جامعه (پزشک/کارشناس تغذیه)

12 ماه بعد پیگیری کنید

تاریخ پیگیری بعدی 1402/03/18

ارجاع غیرفوری به پزشک

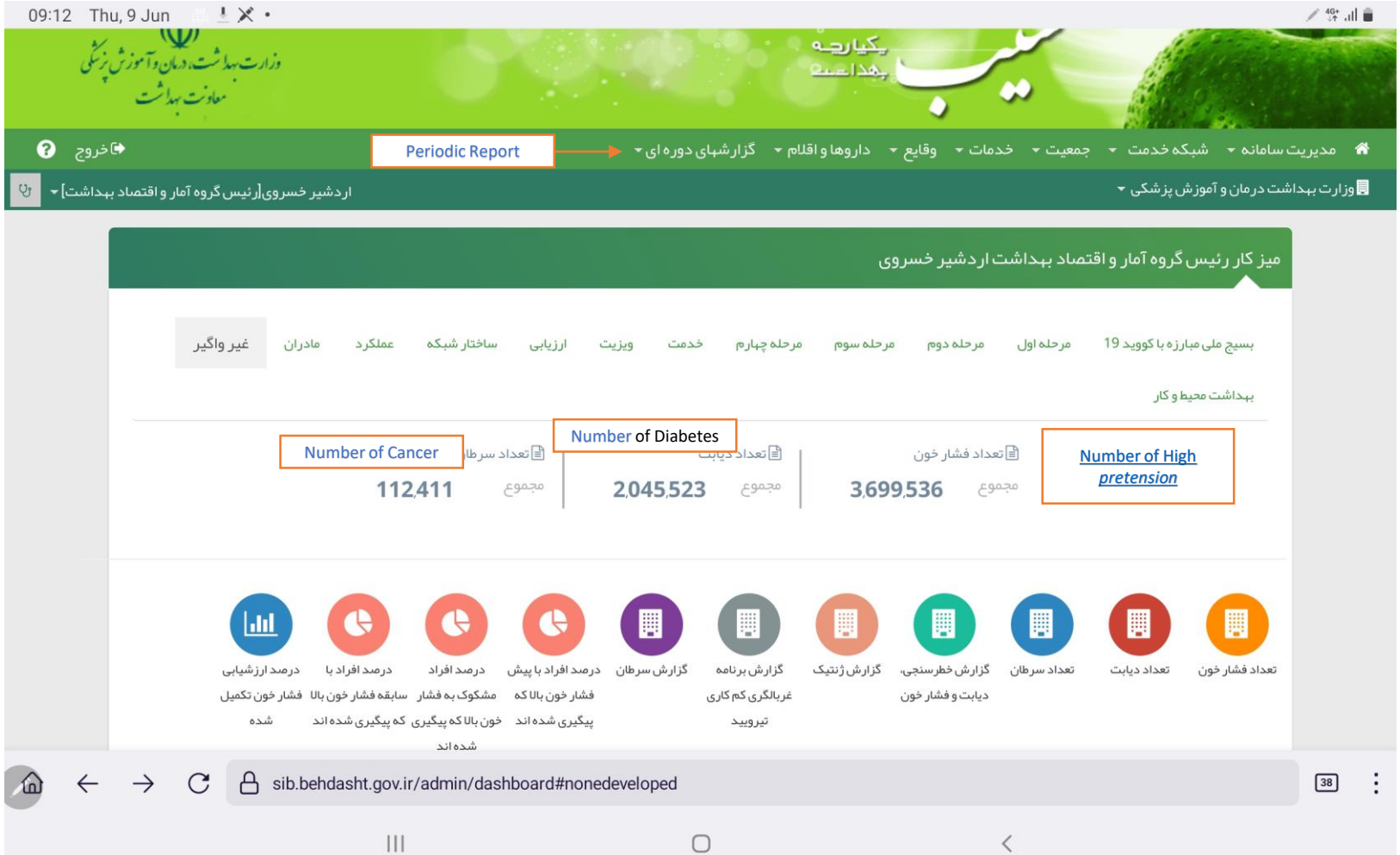
توضیحات

تایید نهایی

ارجاع

Blood pressure test result:
Suffering from high blood pressure
Controlled blood pressure
Blood sugar test result:
With diabetes
Diabetes with optimal control of fasting sugar Blood lipid test result:
Possibility of lipid disorder The result of examining the appearance of body mass:
Body mass view 27.78
Overweight
He has abdominal obesity
Result of risk level assessment:
Risk level less than 10%

Actions
Follow-up and care by a health worker one month later and by a doctor three months
Next follow-up date
Refer to a nutritionist for nutrition advice
Referral to Community Health Center (Physician / Nutritionist)
Follow up 12 months
later Next follow-up date
referral to a physician
Description


09:12 Thu, 9 Jun
وزارت بهداشت، درمان و آموزش پزشکی
معاونت بهداشت
یکپارچه بهداشت
خروج
Periodic Report
گزارشهای دوره ای
داروها و اقلام
وقایع
خدمات
جمعیت
شبکه خدمت
مدیریت سامانه
اردشیر خسروی[رئیس گروه آمار و اقتصاد بهداشت]
وزارت بهداشت درمان و آموزش پزشکی
میز کار رئیس گروه آمار و اقتصاد بهداشت اردشیر خسروی
بسیج ملی مبارزه با کووید 19
مرحله اول
مرحله دوم
مرحله سوم
مرحله چهارم
خدمت
ویزیت
ارزیابی
ساختار شبکه
عملکرد
مادران
غیر واگیر
بهداشت محیط و کار
Number of High pretension
تعداد فشار خون
مجموع
3,699,536
Number of Diabetes
تعداد دیابت
مجموع
2,045,523
Number of Cancer
تعداد سرطان
مجموع
112,411
تعداد فشار خون
تعداد دیابت
تعداد سرطان
گزارش خطرسنجی دیابت و فشار خون
گزارش ژنتیک
گزارش برنامه غربالگری کم کاری تیرویید
گزارش سرطان
درصد افراد با پیش فشار خون بالا که پیگیری شده اند
درصد افراد مشکوک به فشار خون بالا که پیگیری شده اند
درصد افراد با سابقه فشار خون بالا که پیگیری شده اند
درصد ارزشیابی فشار خون تکمیل شده
sib.behdasht.gov.ir/admin/dashboard#nonedeveloped
38

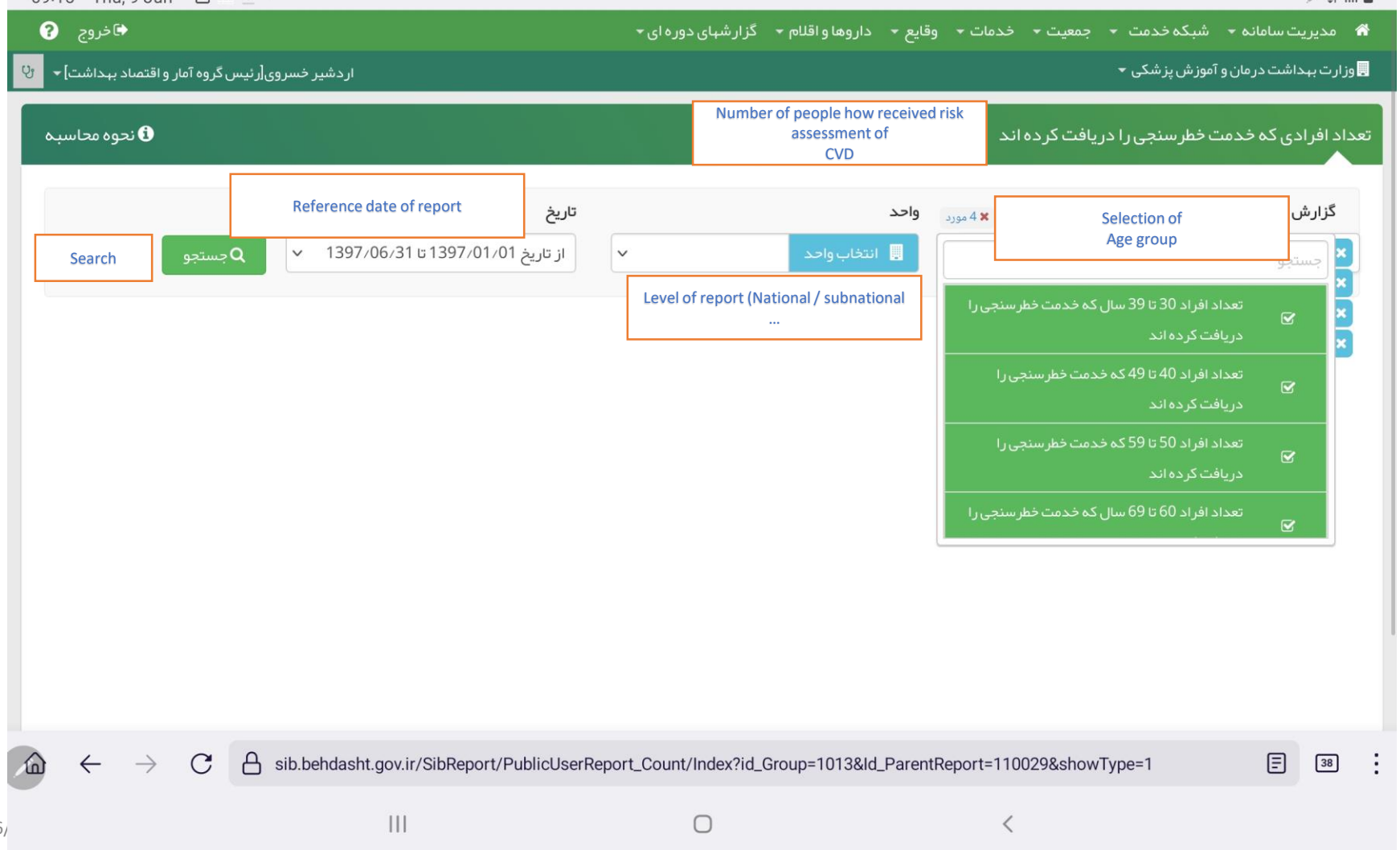
09:15 Thu, 9 Jun

خطرسنجی، دیابت، فشارخون

110001	جمعیت گروه هدف	به تفکیک شبکه	به تفکیک دانشگاه
110029	تعداد افرادی که خدمت خطرسنجی را دریافت	به تفکیک شبکه	به تفکیک دانشگاه
111952	تعداد افراد 30 تا 40 ساله که خدمت پیشگیری از سکته های قلبی را دریافت کرده اند و هیچ عامل خطری نداشته اند		به تفکیک دانشگاه
112330	تعداد افراد با سابقه سکته قلبی(خطرسنجی)	به تفکیک شبکه	به تفکیک دانشگاه
112351	تعداد افراد با سابقه سکته مغزی (خطرسنجی)	به تفکیک شبکه	به تفکیک دانشگاه
110049	تعداد افراد با سابقه دیابت (خطرسنجی)	به تفکیک شبکه	به تفکیک دانشگاه
110062	تعداد افراد با سابقه فشارخون بالا (خطرسنجی)	به تفکیک شبکه	به تفکیک دانشگاه
112359	تعداد افراد با سابقه فشارخون بالا که داروی کاهنده فشارخون مصرف میکنند(خطرسنجی)	به تفکیک شبکه	به تفکیک دانشگاه
110064	تعداد افراد با سابقه بیماری های فشارخون و دیابت (خطرسنجی)	به تفکیک شبکه	به تفکیک دانشگاه
112370	تعداد افراد با سابقه خانوادگی مثبت دیابت (خطرسنجی)	به تفکیک شبکه	به تفکیک دانشگاه
112382	تعداد افراد با سابقه خانوادگی بیماری کلیوی (خطرسنجی)	به تفکیک شبکه	به تفکیک دانشگاه

Number of people how received risk assessment of CVD

sib.behdasht.gov.ir/report_/GeneratedReport?id_Group=1013


خروج
گزارشهای دوره ای
داروها و اقلام
وقایع
خدمات
جمعیت
شبکه خدمت
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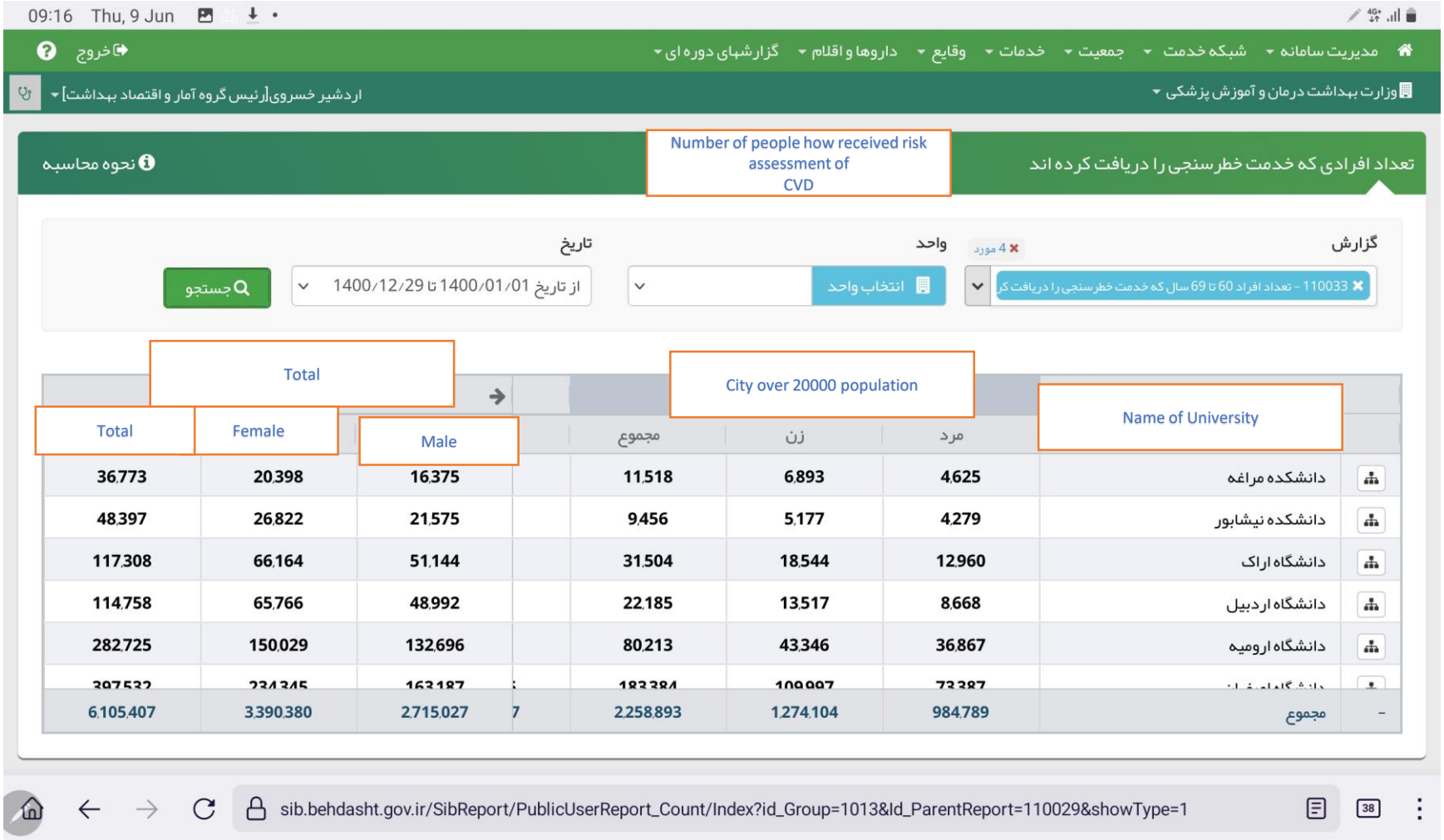
اردشیر خسروی[رئیس گروه آمار و اقتصاد بهداشت]
وزارت بهداشت درمان و آموزش پزشکی
نحوه محاسبه
تعداد افرادی که خدمت خطرسنجی را دریافت کرده اند
Number of people how received risk assessment of CVD
Reference date of report
Selection of Age group
Search
Level of report (National / subnational ...
گزارش
واحد
تاریخ
4 مورد
جستجو
انتخاب واحد
از تاریخ 1397/01/01 تا 1397/06/31
جستجو
تعداد افراد 30 تا 39 سال که خدمت خطرسنجی را دریافت کرده اند
تعداد افراد 40 تا 49 که خدمت خطرسنجی را دریافت کرده اند
تعداد افراد 50 تا 59 که خدمت خطرسنجی را دریافت کرده اند
تعداد افراد 60 تا 69 سال که خدمت خطرسنجی را
sib.behdasht.gov.ir/SibReport/PublicUserReport_Count/Index?id_Group=1013&Id_ParentReport=110029&showType=1



09:16 Thu, 9 Jun

خروج | گزارشهای دوره ای | داروها و اقلام | وقایع | خدمات | جمعیت | شبکه خدمت | مدیریت سامانه

اردشیر خسروی[رئیس گروه آمار و اقتصاد بهداشت] | وزارت بهداشت درمان و آموزش پزشکی

نحوه محاسبه

Number of people how received risk assessment of CVD

تعداد افرادی که خدمت خطرسنجی را دریافت کرده اند

گزارش: 110033 - تعداد افراد 60 تا 69 سال که خدمت خطرسنجی را دریافت کر

واحد: 4 مورد | انتخاب واحد

تاریخ: از تاریخ 1400/01/01 تا 1400/12/29

جستجو

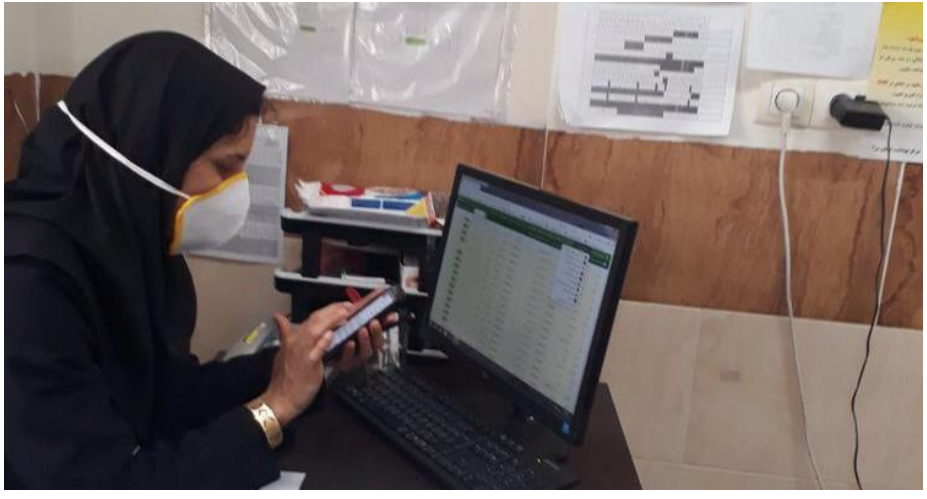
Name of University	City over 20000 population			Total		
	مرد	زن	مجموع	Male	Female	Total
دانشکده مراغه	4,625	6,893	11,518	16,375	20,398	36,773
دانشکده نیشابور	4,279	5,177	9,456	21,575	26,822	48,397
دانشگاه اراک	12,960	18,544	31,504	51,144	66,164	117,308
دانشگاه اردبیل	8,668	13,517	22,185	48,992	65,766	114,758
دانشگاه ارومیه	36,867	43,346	80,213	132,696	150,029	282,725
	73,387	109,997	183,384	163,187	234,345	397,532
مجموع	984,789	1,274,104	2,258,893	2,715,027	3,390,380	6,105,407

sib.behdasht.gov.ir/SibReport/PublicUserReport_Count/Index?id_Group=1013&Id_ParentReport=110029&showType=1

Conclusion

- Near to all PHC facilities are using EHR (about 30000 units)
- NCD service packages have been integrated in the PHC based on the EHR
- Many NCD information and indicators can be produced based on the EHR
- Limitations:
  - ❖no data from private sector are included in the EHR
  - ❖We need to devolve a Comprehensive technical formwork for the EHR data quality

Thanks for your attention



Simple: requirements of a pragmatic digital system for driving improvements in large-scale NCD programs

Andrew Moran

Director, Global Hypertension Control
Resolve to Save Lives and Associate Professor of Medicine, Columbia University

World Health Organization
Department for Noncommunicable Diseases

Requirements of a pragmatic digital system for driving improvement in large-scale NCD programs.

Lessons learned from creating an NCD management system used in over 10,000 clinics in India, Bangladesh, Ethiopia, and Sri Lanka.

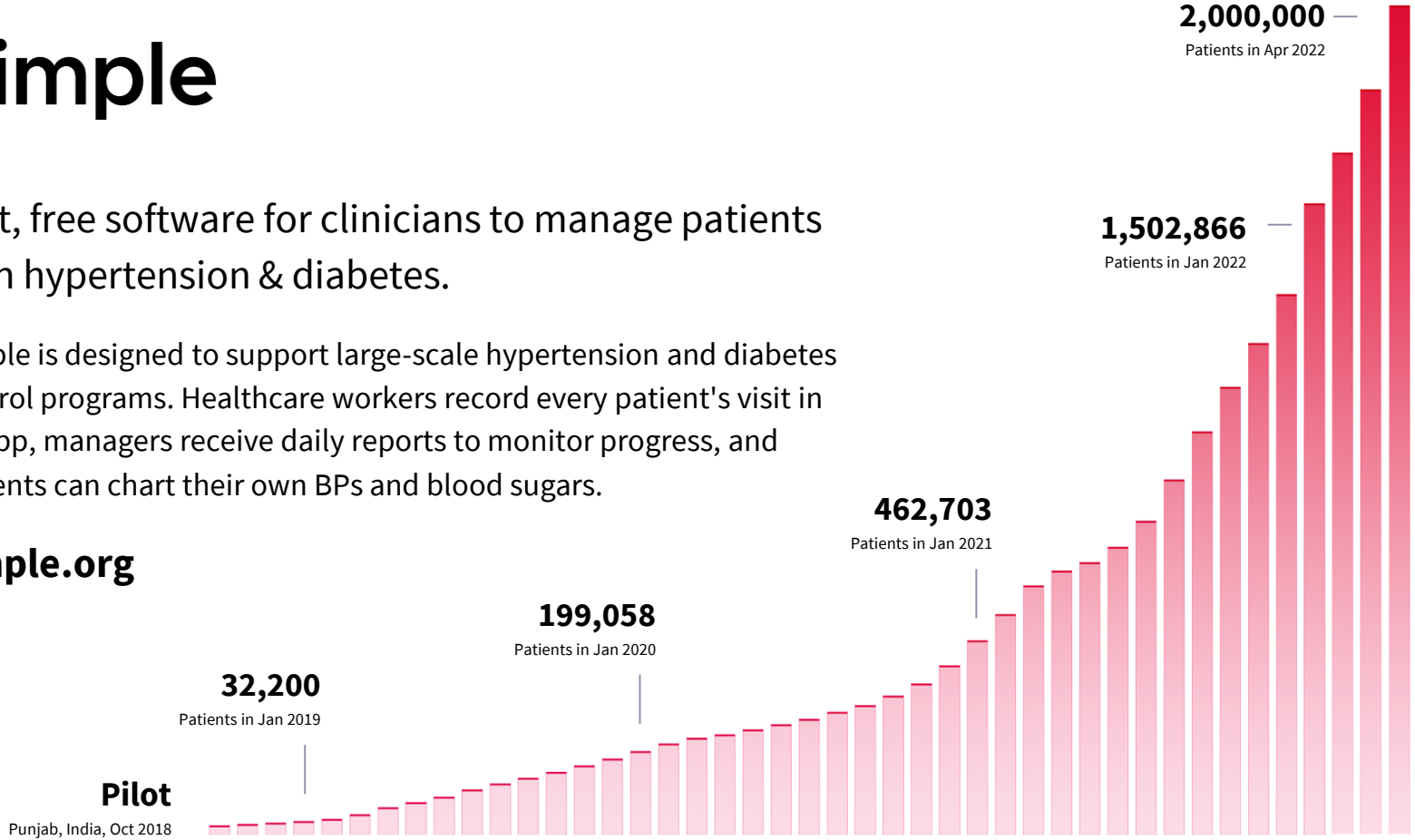
simple.org

Simple

Fast, free software for clinicians to manage patients with hypertension & diabetes.

Simple is designed to support large-scale hypertension and diabetes control programs. Healthcare workers record every patient's visit in an app, managers receive daily reports to monitor progress, and patients can chart their own BPs and blood sugars.

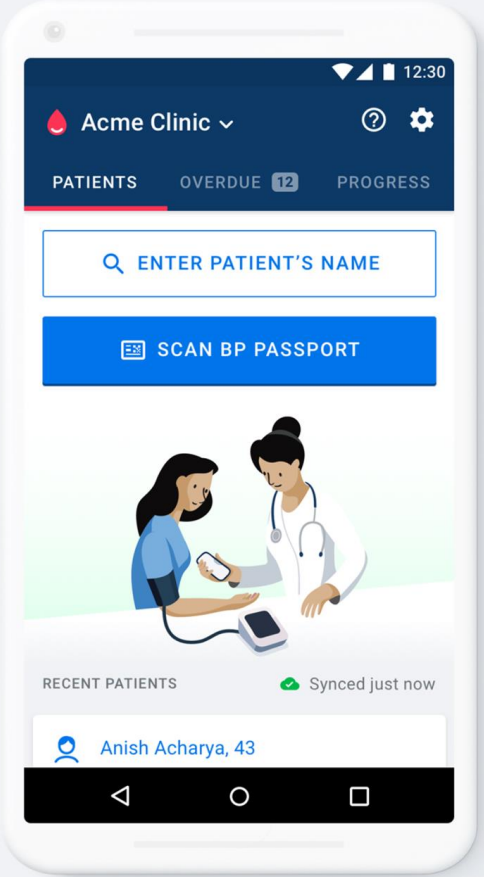
simple.org



Managers monitor where the hypertension or diabetes program is succeeding and where interventions are required.

- Track BP control
- Track registrations
- Track retention in care
- Retain patients with auto-SMS and call lists
- Track treatment trends
- Monthly feedback loops

NOTE: Because Simple is fast and easy-to-use, a high % of follow-up visits are recorded. Last month over 850,000 patients had a follow-up recorded.



Why does Simple work?

- ❏ Easy to train and learn
- ❏ Fast to use during clinical care
- ❏ Feedback loops for clinicians *and* public health officials
- ❏ Offline-first

NCD care is ***very high volume***. A typical clinical visit in Bangladesh is under 4 minutes.

High volume makes everything more difficult for recording patient info on NCDs.

Aim for recording follow-up visits in

Less than 20 sec

Measure only what matters

Correct patient

Name

National ID

Sex

Age

Mobile number*

Home address

Light history

- Heart attack
- Stroke
- Kidney disease
- Diabetes

Visit data (each visit)

BP measure

SBP

DBP

Blood sugar measure

mg/dL

FBS

Current HTN+DM meds/ dosages

Pick list of common medications...

Next expected visit date

Choose date...

Key measures for a hypertension control program

Health system managers

How many patients are enrolled?

How many patients visit regularly?

How many patients have their BP under control?

Healthcare workers

Is patient's BP lowering?

What was patient's previous treatment?

Which patients are overdue?

Patients

Am I getting healthier?

When should I return?

Simple Dashboard: 3 Key Indicators

1. **BP controlled**
   % of patients that visited in last 3 months with BP <140/90 at their most recent visit

2. **Patients with no recent visit**
   % of patients with no BP measure recorded or did not receive medications in the last 3 months

3. **Registered patients**
   Cumulative and monthly enrolled patients

Using data to drive quality improvement

Implement

The hypertension package has 5 components to be implemented.

Review data

The Simple Dashboard and data analysis used to identify gaps and areas for improvement.

Interventions

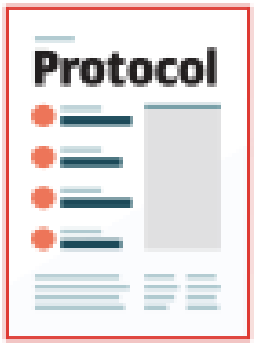
QI cycles generate feedback loops, to identify what is effective.

Improved Outcomes

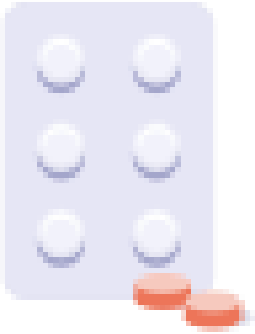
Improve BP control %

3 drivers of low BP control

Poor retention in care



Therapeutic Inertia



Lack of consistent drug supply

Retention in Care

Calls made to overdue patients

Monthly

We count a patient as being "called" if any reason was added to a patient in the Overude list for "Result of call"

	Aug-2020				Sep-2020			
Facilities	Overdue patients	Overdue patients called by staff		% overdue patients that later visited	Overdue patients	Overdue patients called by staff		% overdue patients that later visited
All	10,456	1,490	0%	0%	10,456	1,490	0%	0%
HWC Strawberry	567	56	3%	3%	567	56	3%	3%
PHC Blueberry	423	45	4%	4%	423	45	4%	4%
PHC Peach	123	12	4%	4%	123	12	4%	4%
SDH Pomegranate	8	-	5%	5%	8	-	5%	5%
PHC Grape	9	-	5%	5%	9	-	5%	5%

Overdue Calls Report
Monitor facility performance contacting overdue patients

Therapeutic Inertia

Medication titration

Follow-up visits with high BP where medications were titrated (increased dose or addition of new HTN medicatio

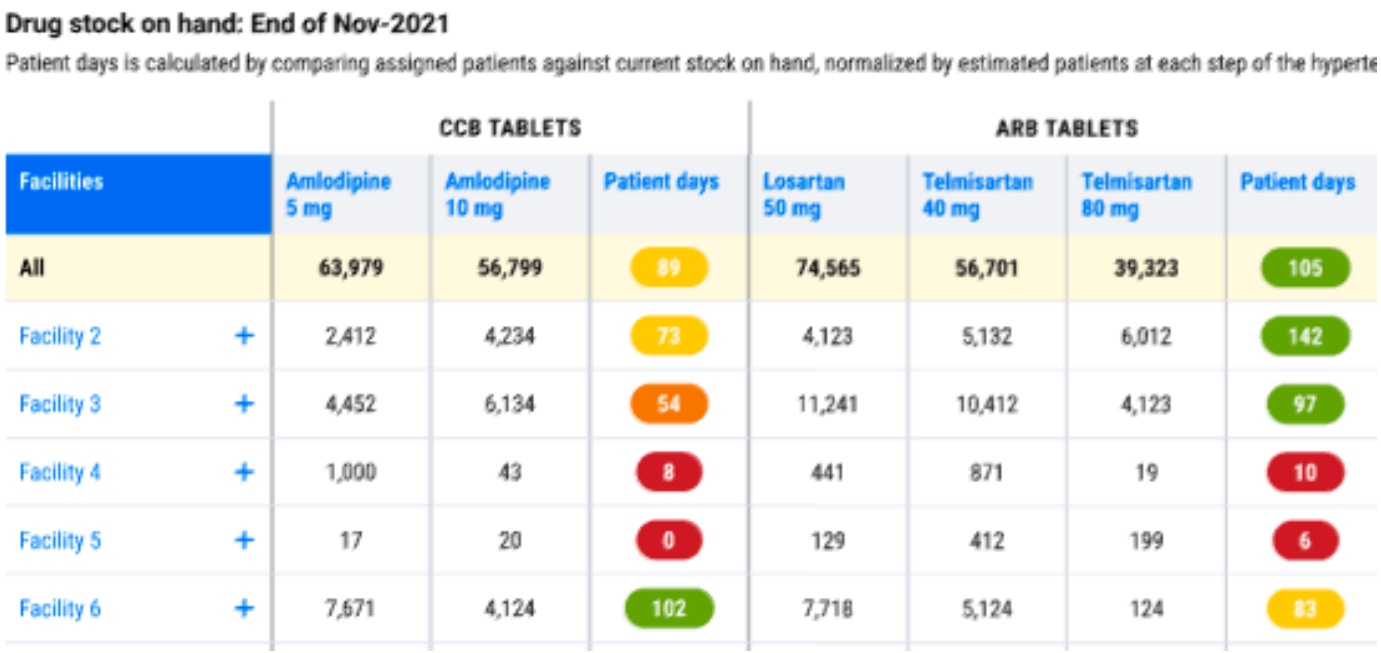
	Jul-2020		Aug-2020	
Facility	**Follow-up visits with BP ≥140/90**	**Visits with medication titrated**	**Follow-up visits with BP ≥140/90**	**Visits with medication titrated**
All	**823**	**201 24%**	**785**	**310 39%**
PHC Jersey City	174	104 60%	160	123 77%
HWC Queens	199	94 47%	192	76 40%
DH Manhattan	216	78 36%	218	88 40%
HWC Brooklyn	234	25 11%	215	23 11%

Numerator: Follow-up patients with BP ≥140/90 where medications were titrated (increased dose or addition of n

Denominator: Follow-up patients who visited that month with BP ≥140/90

Medication Titration Report
Identify facilities with low titration to implement quality improvement interventions

Facility Drug Stock



Drug stock on hand: End of Nov-2021

Patient days is calculated by comparing assigned patients against current stock on hand, normalized by estimated patients at each step of the hyperte

	CCB TABLETS			ARB TABLETS			
Facilities	Amlodipine 5 mg	Amlodipine 10 mg	Patient days	Losartan 50 mg	Telmisartan 40 mg	Telmisartan 80 mg	Patient days
All	63,979	56,799	89	74,565	56,701	39,323	105
Facility 2 +	2,412	4,234	73	4,123	5,132	6,012	142
Facility 3 +	4,452	6,134	54	11,241	10,412	4,123	97
Facility 4 +	1,000	43	8	441	871	19	10
Facility 5 +	17	20	0	129	412	199	6
Facility 6 +	7,671	4,124	102	7,718	5,124	124	83

Drug Stock Report
Monitor and address supply chain in facilities with low days supply before a stockout happens

Keep. It. Simple.

- ❏ Design with healthcare workers: Give them value
- ❏ Fast to Use: Measure only what matters
- ❏ Focus on few key indicators:
  BP control, missed visits, registrations
- ❏ Provide actionable real-time data that program managers can use to drive performance improvement

Thank you!

Many thanks to our partners and the health workers and patients who make this work possible

Moderator

Leanne Riley

Unit Head, Surveillance, Reporting and Monitoring, Department for NCDs

World Health Organization
Department for Noncommunicable Diseases

Moderated discussion and Q&A

World Health Organization
Department for Noncommunicable Diseases

Thank you for joining

See you next time

World Health Organization

#UHCPartnership