



Current status of cervical cancer Screening & Elimination in Bangladesh

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and

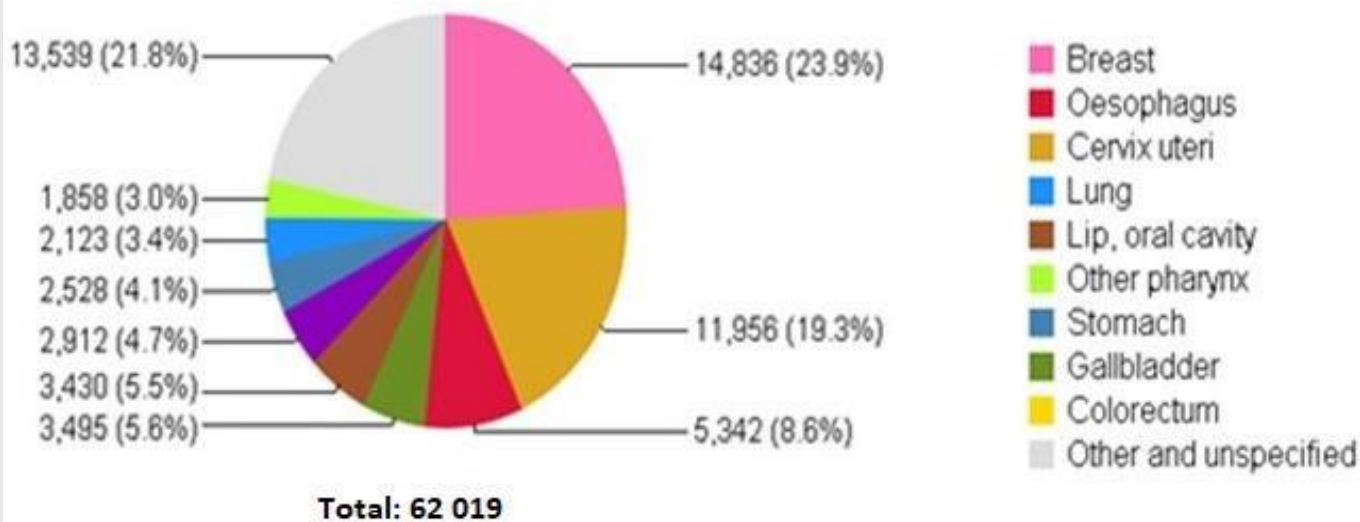
Project Director

Electronic data tracking with population-based cervical and
breast cancer screening and training program

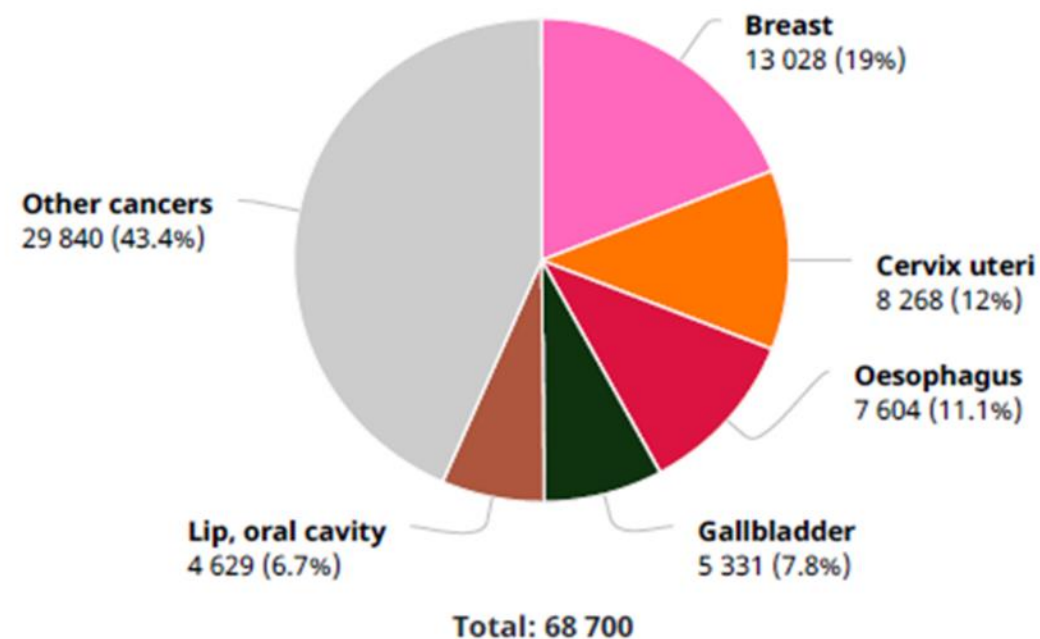
Bangabandhu Sheikh Mujib Medical University

Cervical and Breast Cancer Among Bangladeshi Women

Globocan 2012



Globocan 2020



Type of cancer	2012	2022	Reduction
Breast Cancer	23.9%	19%	4.9%
Cervical Cancer	19.3%	12%	7.3%

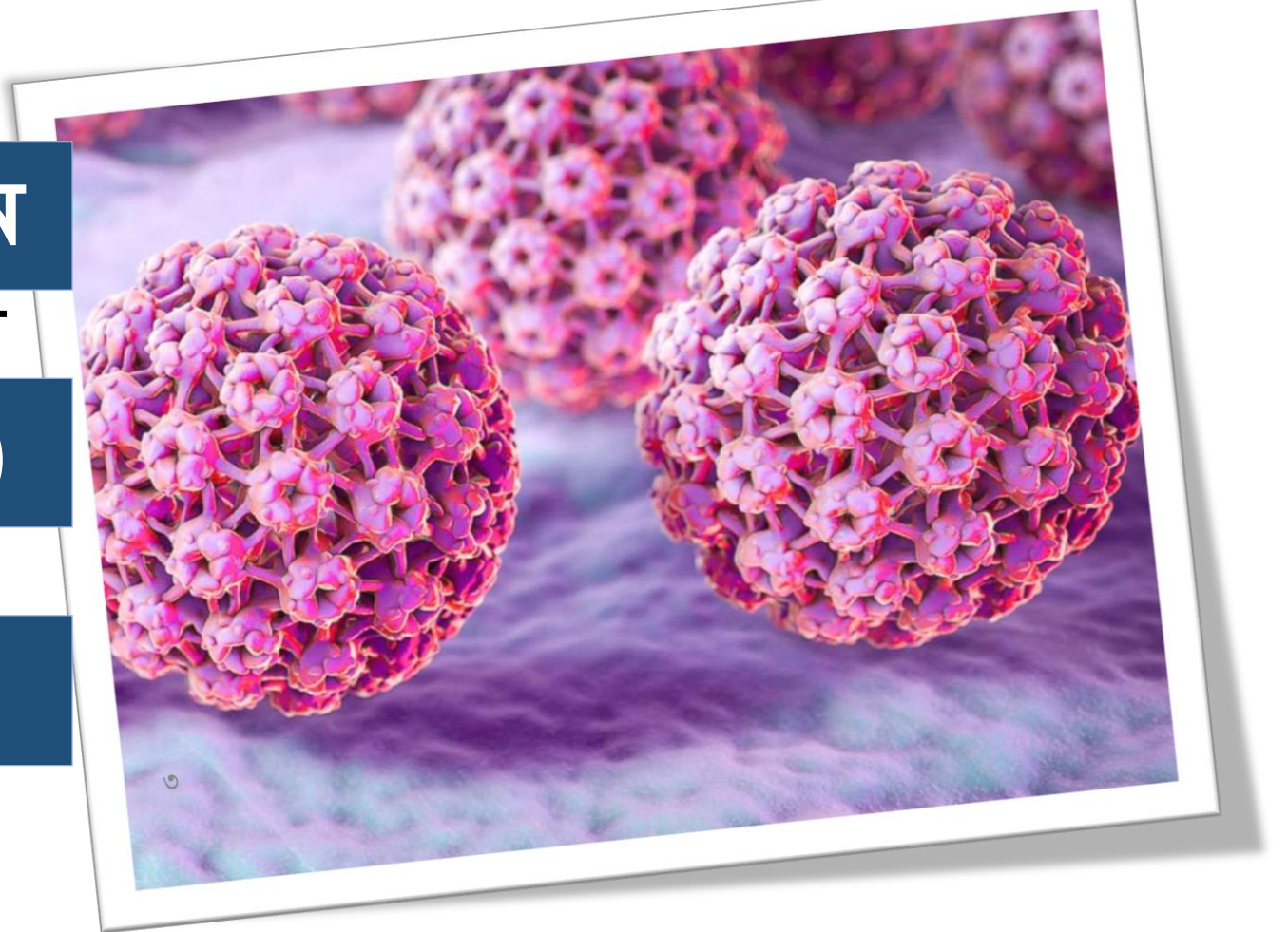
জরায়ু-মুখ ক্যান্সার হঠাৎ করেই হয় না মুখ ক্যান্সারের ক্ষেত্রে দীর্ঘসময় ধরে ক্যান্সারপূর্ব অবস্থা

এইচপিভি (HPV) সংক্রমণ

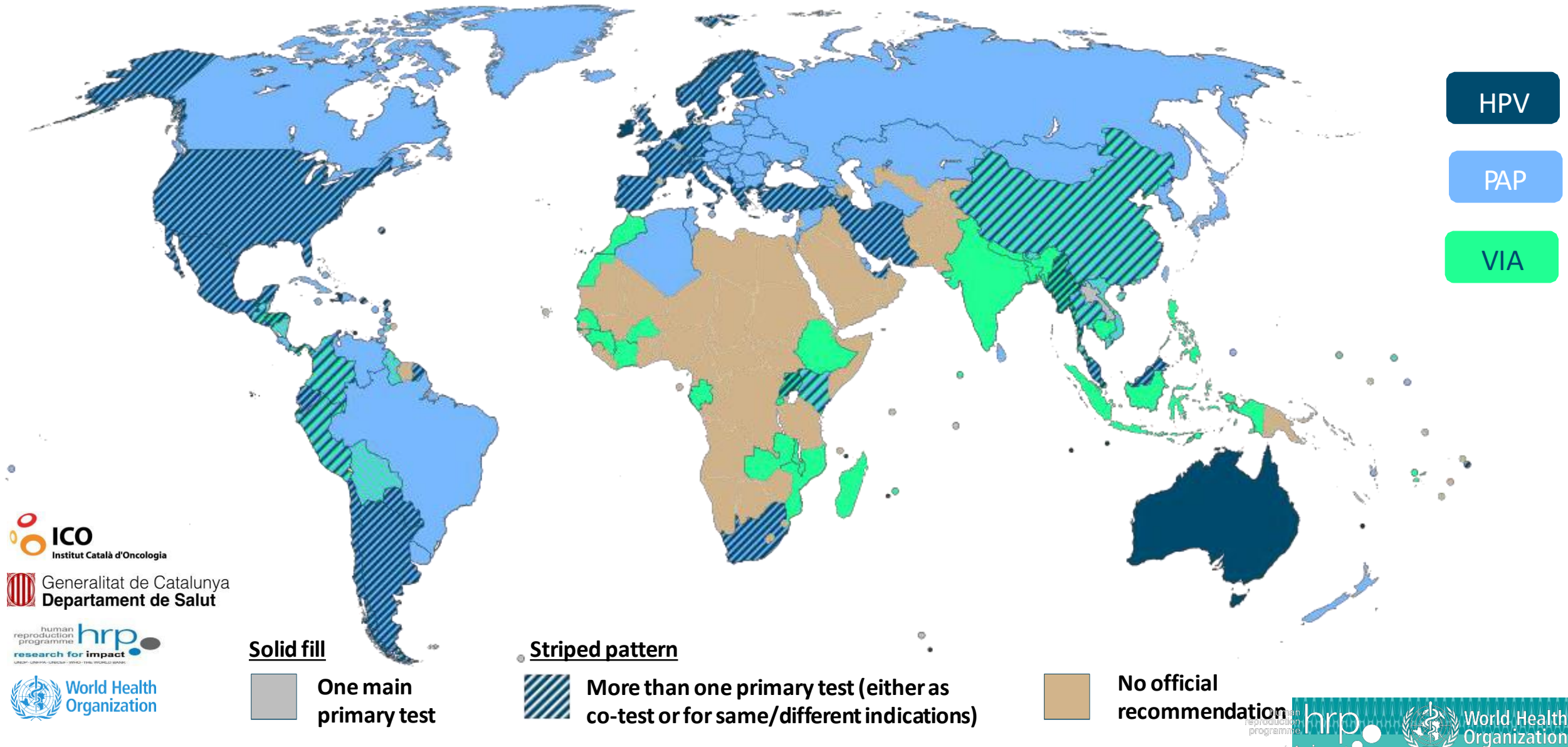
১০-১৫ বছর

ক্যান্সারপূর্ব অবস্থা (CIN)

জরায়ু-মুখ ক্যান্সার



Officially recommended screening tests for cervical cancer screening - 2020



- **PILOT PROGRAM (2005) IN 16 DISTRICTS** by GOB, BSMMU & UNFPA
- **Scale up to the district level by 2010** by GOB, BSMMU & UNFPA.
- “Establishment of National Center for Cervical and Breast Cancer Screening and training” (2012-2018) developed 200 screening centers at Upazila level.
- **MoHFW** (Electronic data tracking with population-based cervical and breast cancer screening and training programme), **MNC&AH, UNFPA and WHO are also involved**



VIA +ve



VIA -ve



3215 healthcare provider
(489 Doctors and 2726 SSN, FWV,
Paramedic)

VIA and CBE Centers in Bangladesh	Number of Centers (N=601)
District Hospitals	59
BSMMU, NICRH, ICMH, MCHs	27
MFSTC, MCHTI, MCWC	61
Upazila Health Complex	424 (among 432, except sadar upazila)
BGB, CMH/Private/Friendship and other NGO	30

🌐 All ever-married women aged 30 years and above/ 30-60 years

🌐 Development of Registry, VIA-ve and VIA+ve card

Paper Based Record Keeping



Register Book

Three sample result cards (light blue, pink, yellow) for VIA and CBE tests, showing fields for patient information and test results.

Result Card

IMPLEMENTATION OF VIA

Identification of precancerous condition and early CC



VIA AND CBE CAMP AT DIFFERENT UHCS/ hard to reach areas



VIA Camp

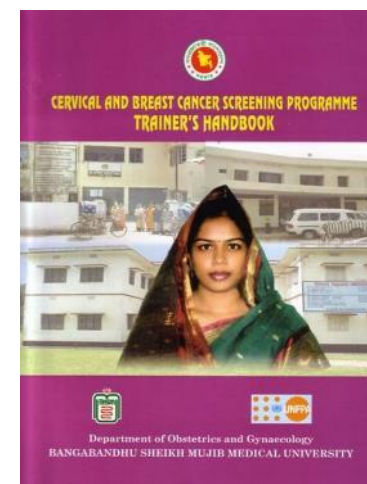
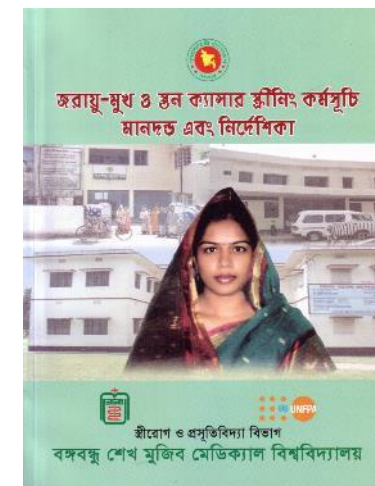
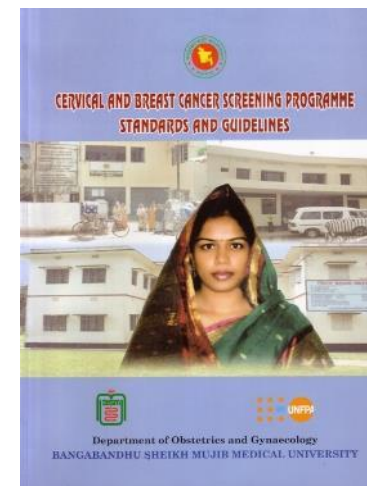


VIA Camp at Mithapukur, Rangpur



VIA Camp at Polash, Narsinghdi

CURRICULUM DEVELOPMENT (2006)



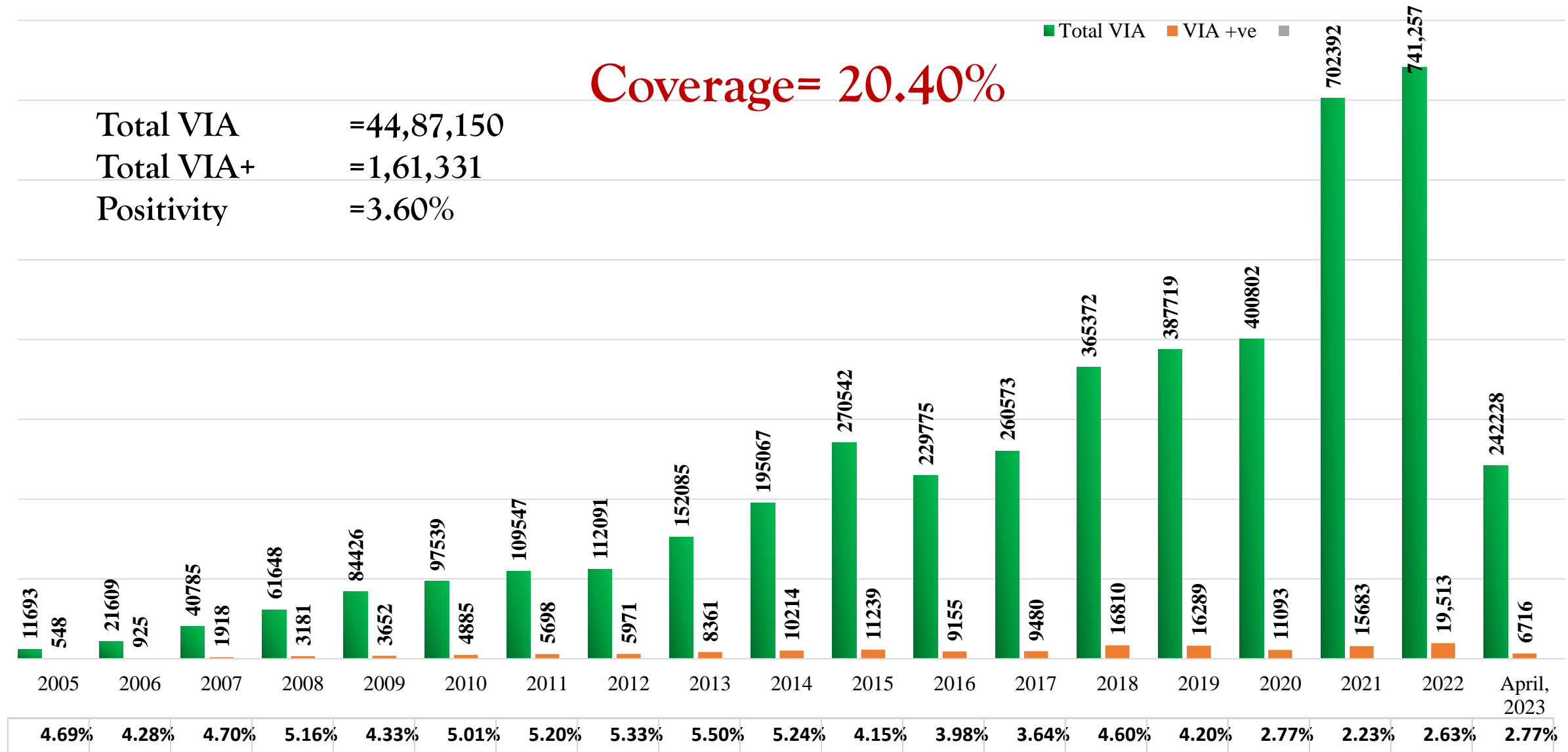
Revision of Curriculum 2014; 2016



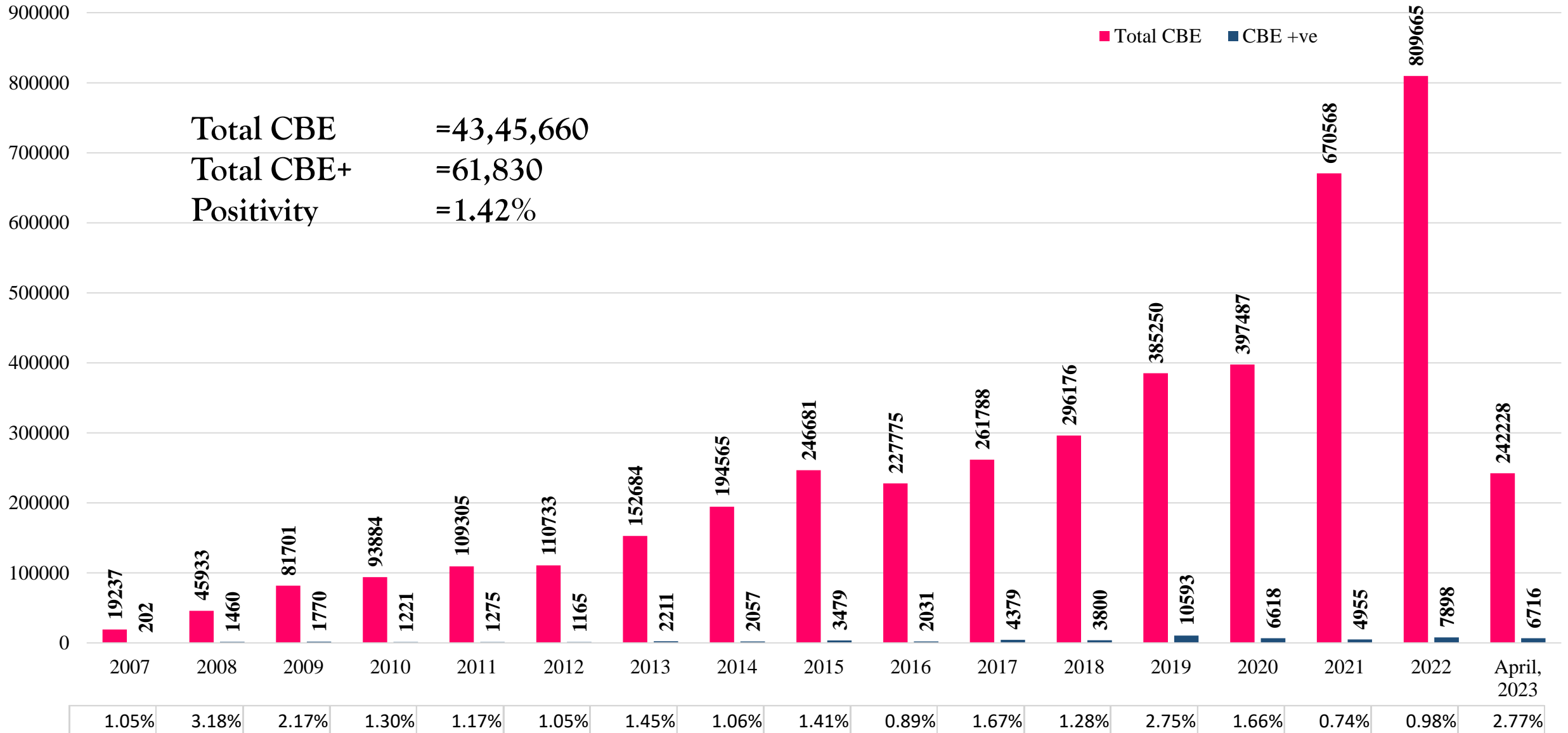
Performance of VIA (2005-April, 2023)

Coverage= 20.40%

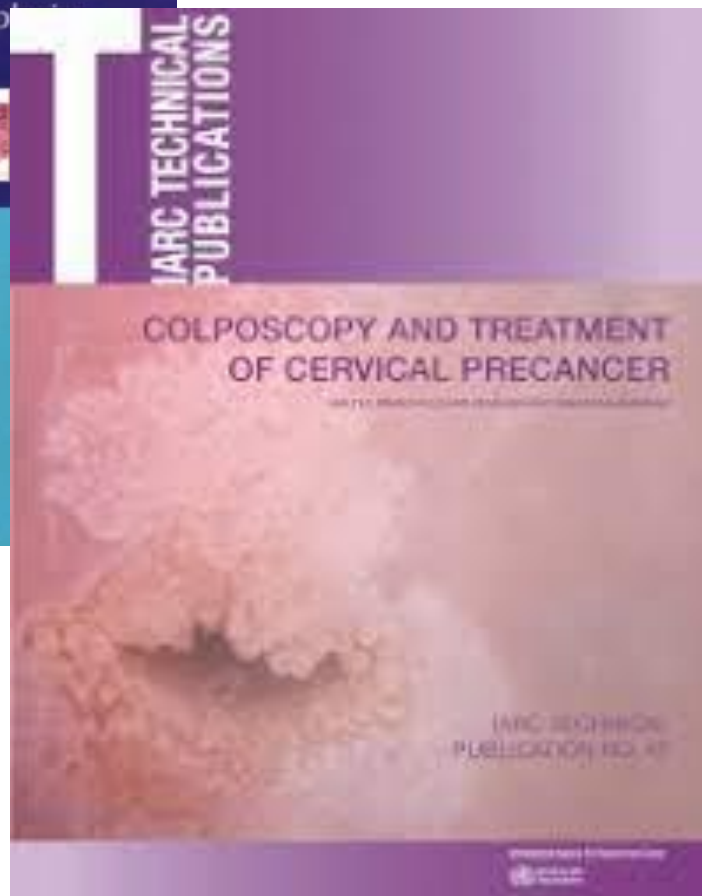
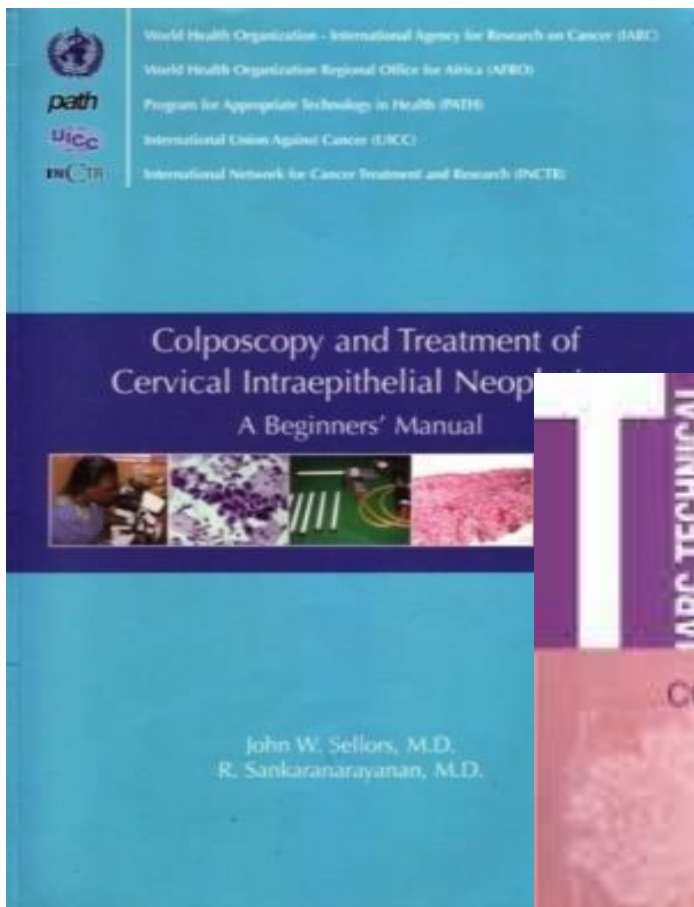
Total VIA =44,87,150
Total VIA+ =1,61,331
Positivity =3.60%



Performance of CBE (2007-April, 2023)



Guideline for Colposcopy

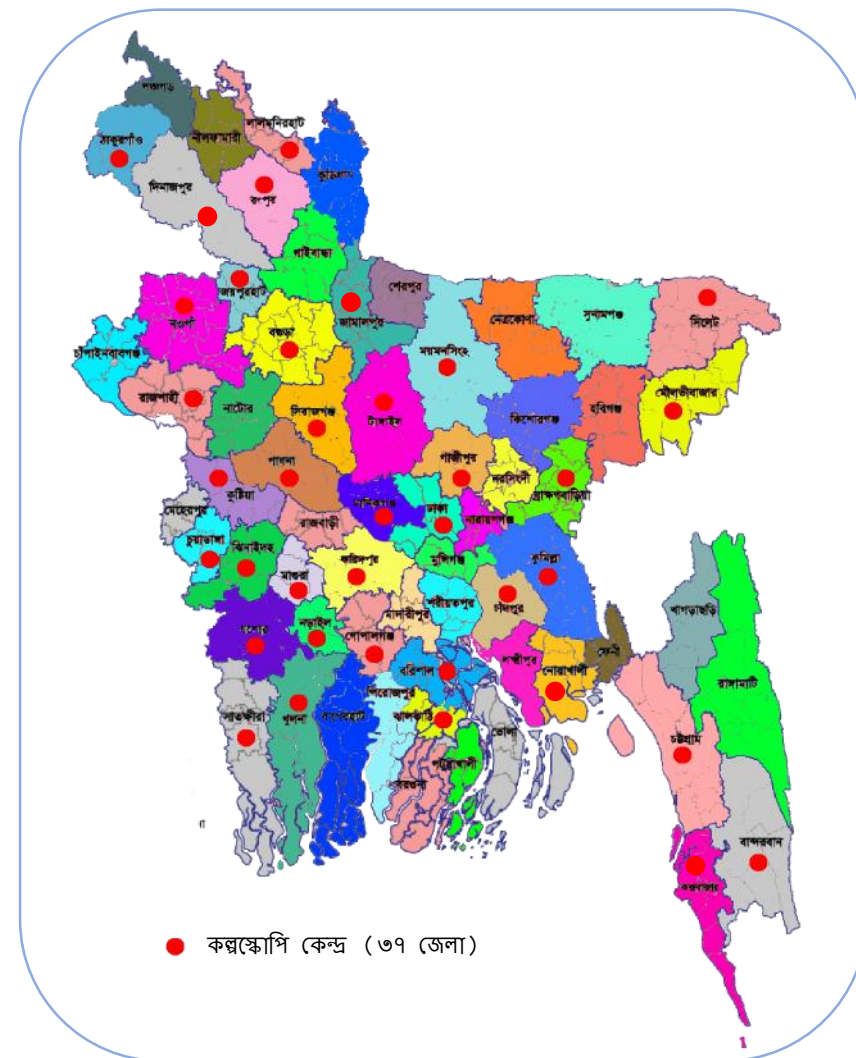


Number of Colposcopists

- 2006 - 18
- 2007 - 19
- 2008 - 13
- 2009 - 17
- 2010 - 12
- 2011 - 13
- 2012 - 10
- 2013 - 6
- 2014 - 12
- 2015 - 17
- 2016 - 13
- 2017 - 28
- 2018 - 30
- 2019 - 48
- 2020 - 24
- 2021 - 26
- 2022 - 32

TOTAL = 334

43 Colposcopy Clinics in 37 districts
20 Colposcopy Clinics- LEEP/TA
23 Colposcopy Clinics- TA
306 Trained Colposcopist



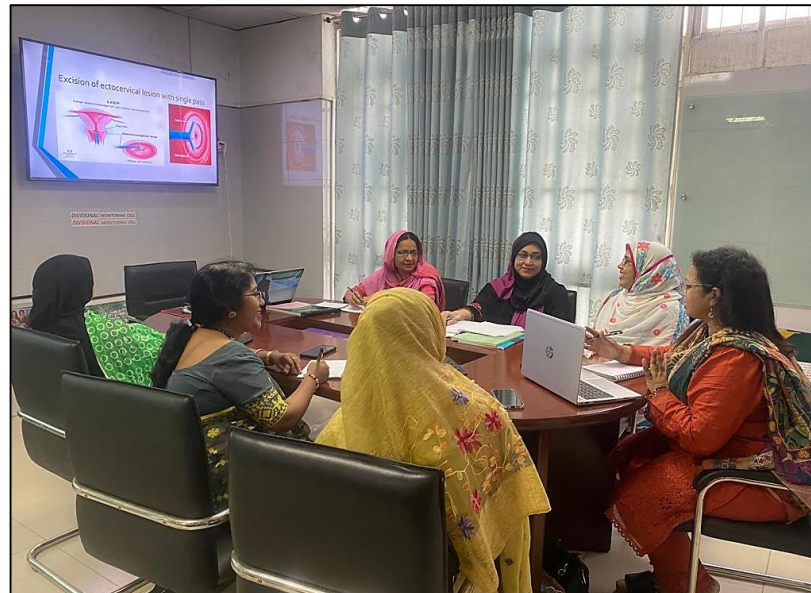
BASIC COLPOSCOPY TRAINING - Since 2006



ADVANCED COLPOSCOPY TRAINING - Since 2007



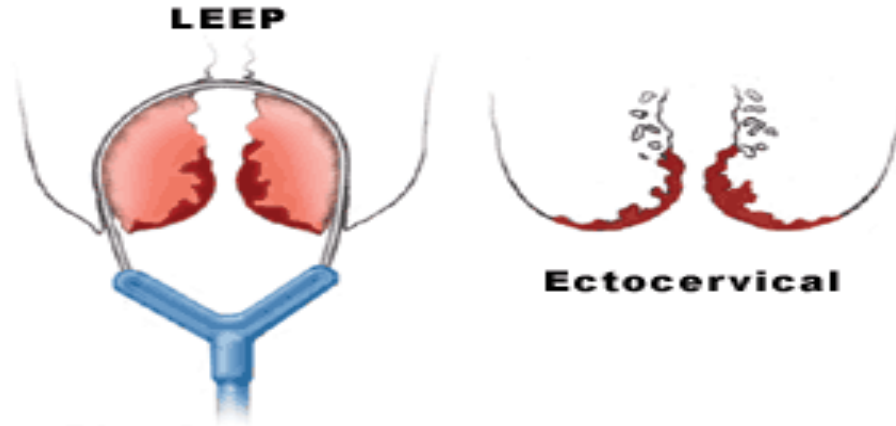
TRAINING AT BARSHI INDIA-2007, 2011, 2016



Equipment for Cervical Precancer Detection and Management



Optical Colposcope



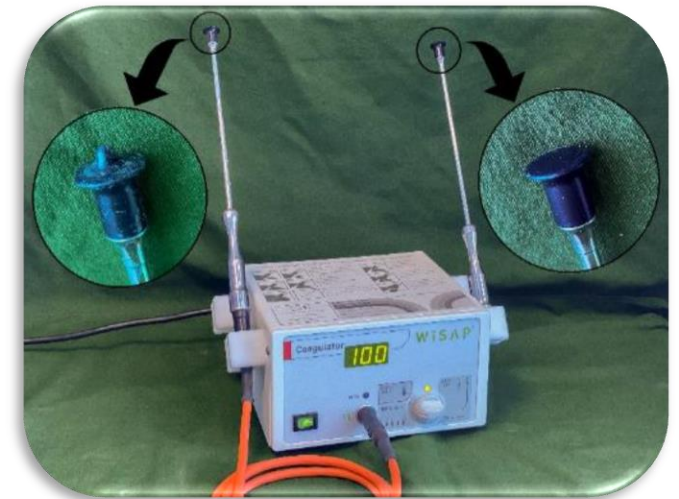
Battery-operated TA



Gynocular



Electrosurgical Power Unit



Thermal Ablation Machine

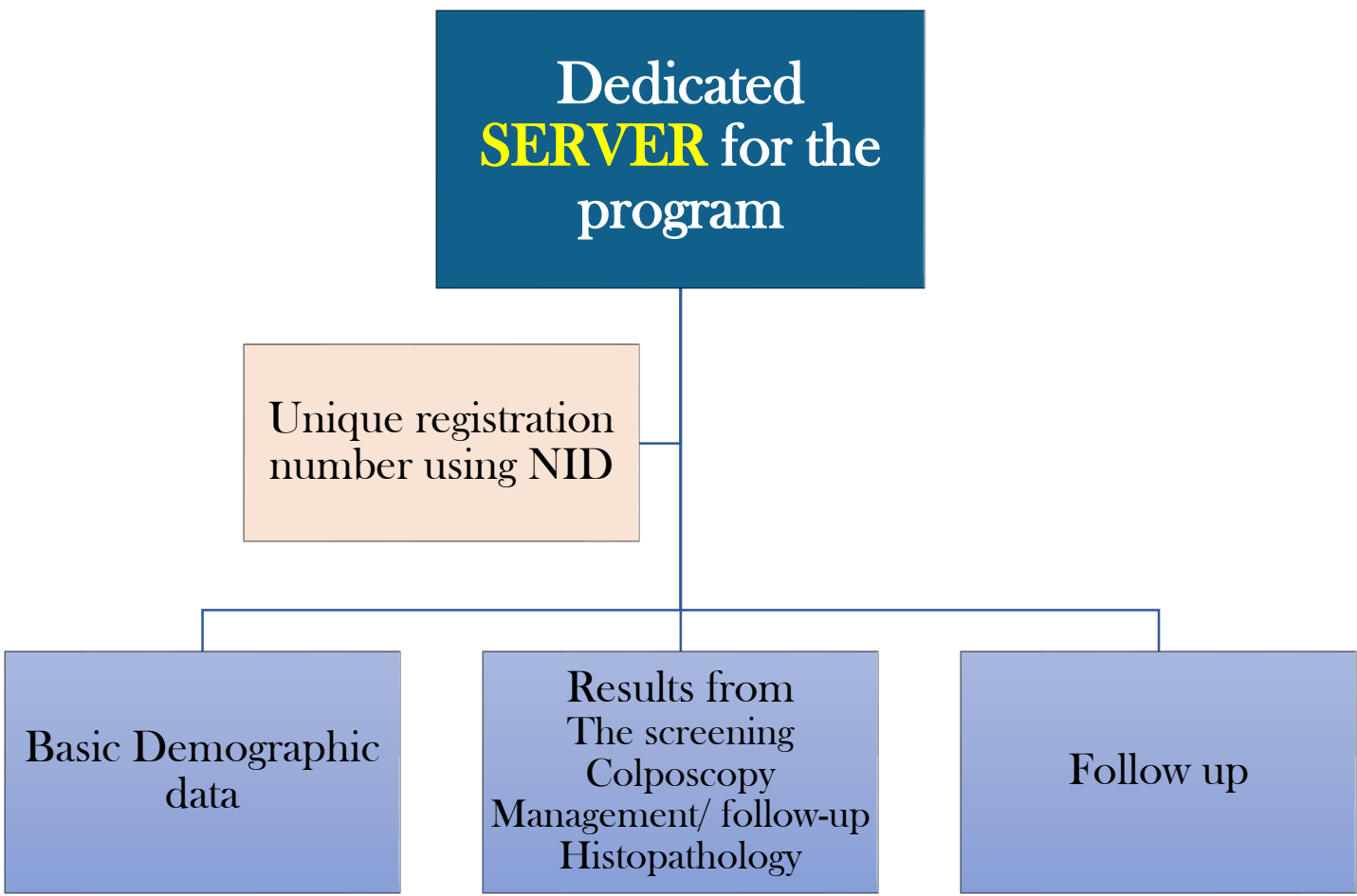
DIFFICULTIES TO ATTEND THE COLPOSCOPY CLINICS

- A significant number of screen positive women from the sub-district did not attend colposcopy clinics
- About half of them could not be communicated over telephone.
- Non-attendance might be - distance, financial crisis, lack of family support and social stigma.
- Services need to be decentralized.
- ‘**One stop services**’ along with referral of difficult cases to ‘MCH colposcopy clinics’ may reduce failure of treatment.
- **See and treat protocol**

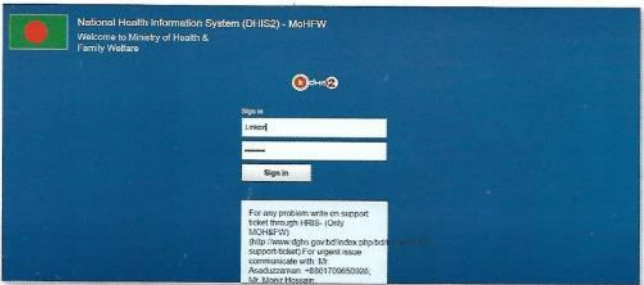
Objective of 'National Strategy for Cervical Cancer Prevention and Control' (2017-2022)

- Introduce and scale up delivery of HPV vaccine to **girls aged 9 to 13 years**
- **Implement and scale up organized population based cervical cancer screening programme**
- **Strengthen health systems and quality assurance mechanism** with particular attention to socioeconomically disadvantaged population groups.
- **Augment management facilities for invasive CC and introduce palliative care services** into the health system as part of a comprehensive cancer control programme.
- **Encourage convergence** with related health programmes
- **Initiate and augment a structured advocacy and educational campaign for CC control**
- **Establish a Monitoring & Evaluation framework for the CC control**

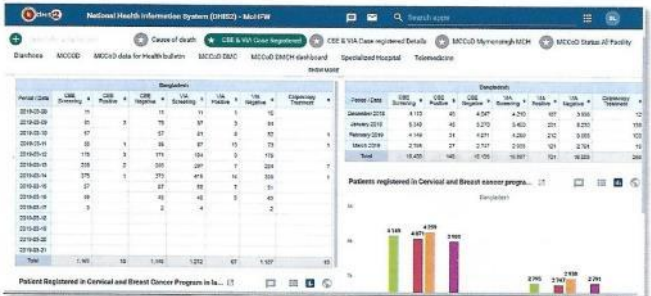
Electronic Data Tracking with Population based Cervical and Breast Cancer Screening Programme (EPCBCSP): 2018 - 2024



এবার এখান থেকে DHIS2 Central এই লেখাটিতে ক্লিক করুন, উপরের চিত্রে বুকের মাধ্যমে দেখানো হয়েছে নীল রং এর লেখা। এই নীল রং দিয়ে লেখা DHIS2 Central এ ক্লিক করলে নিচের পেইজের মত একটি পেইজ আসবে।



উপরের চিত্রে আমরা দেখতে পাচ্ছি যে দুটি বক্সে লেখা আছে Username ও Password, এই দুটি ঘরে আমরা আমাদের প্রতিষ্ঠানের ডাটা পাঠানোর জন্য যে ইউজারনেম ও পাসওয়ার্ড দেয়া হবে, সেটা লিখে তার নিচে যে Sign-in লেখা বাটন রয়েছে তাতে ক্লিক করব অথবা কীবোর্ড এর ENTER বাটনটিতে চাপবো।



আপনার দেয়া ইউজার ও পাসওয়ার্ড ঠিক থাকলে এই রকম পেইজ আসবে যার দ্বারা বোঝা যাবে যে আপনার দেয়া তথ্য সঠিক হয়েছে, যদি তথ্য ভুল হয় তাহলে Sign in এর নিচে ম্যাসেজ দেখাবে Wrong username or password। এটি হল একটি Dashboard যা সবার ক্ষেত্রে প্রযোজ্য নাও হতে পারে, তবে প্রতিটি ইউজার চাইলে তার নিজের ড্যাশবোর্ড নিজে নিজে তৈরি করে নিতে পারে।

Women's motivation and registration are being initiated at the community level



200 Upazilas / 5,500 CC.



NID is required for Unique registration number.



Awareness creation activity- through face to face communication, BCC material.



CHCPs have necessary ICT equipment and they can generate electronic data for DHIS2.



- ✓ Women's motivation and registration are being initiated at the community level
- ✓ One CC serves about 6,000 population, which include about **600 to 800 women** of the **target group (30-60 years)**.
- ✓ One CC staffed with one CHCP/ HA/ FWA/ multipurpose health care volunteers (MHCV) also helps.

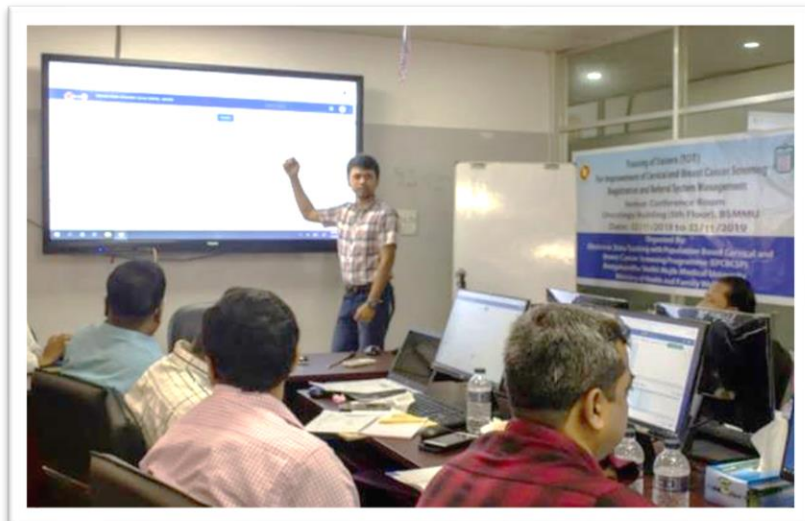
2 Days Training for Capacity Development on Electronic Data Tracking (TOT)
(CSs/ UHFPO/ Doctors/ Colposcopists)
N=600



2 Days Training for Capacity Development on Electronic Data Tracking (TOT)
(SSNs/ Data entry operators) **N=288**

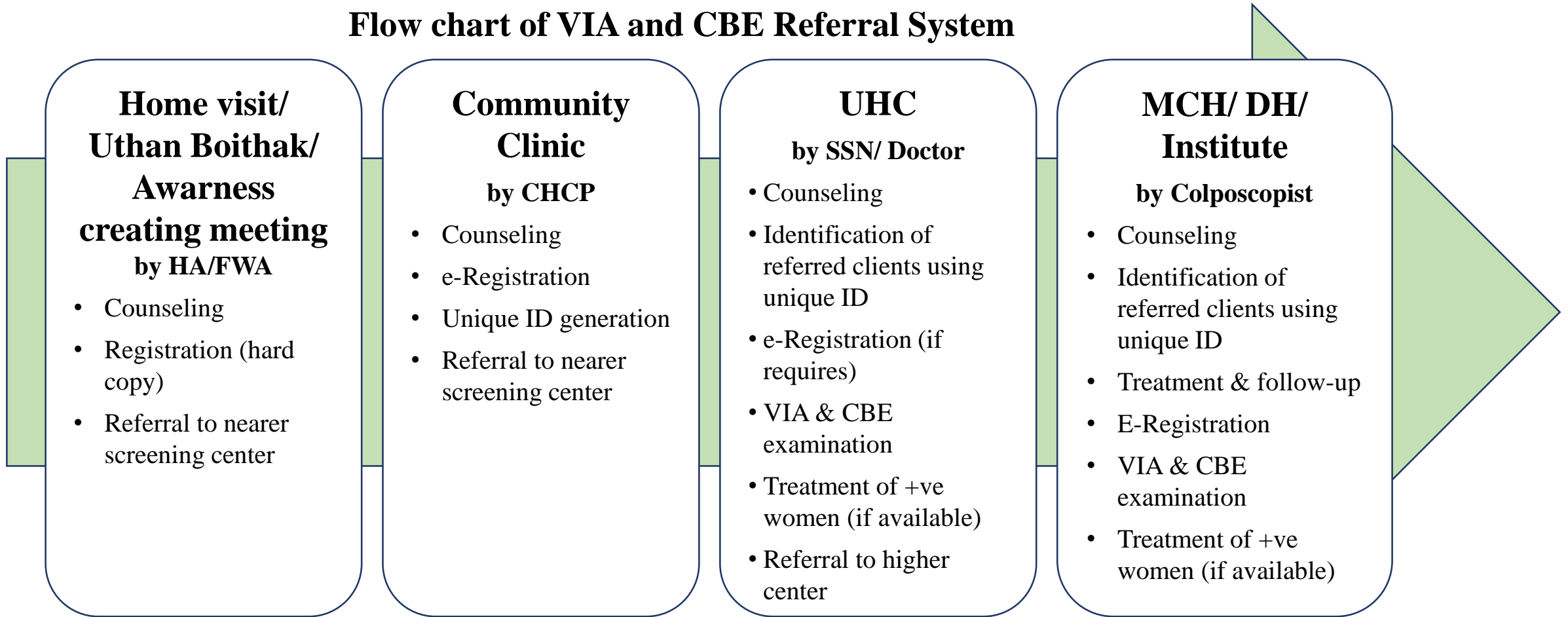


One Day Training on Capacity Development on Population Based Screening Program/ Registration and Referral System
CHCP/ HA/FWA (30 From Each CC),
N=16,500 (Total CC=5,500)



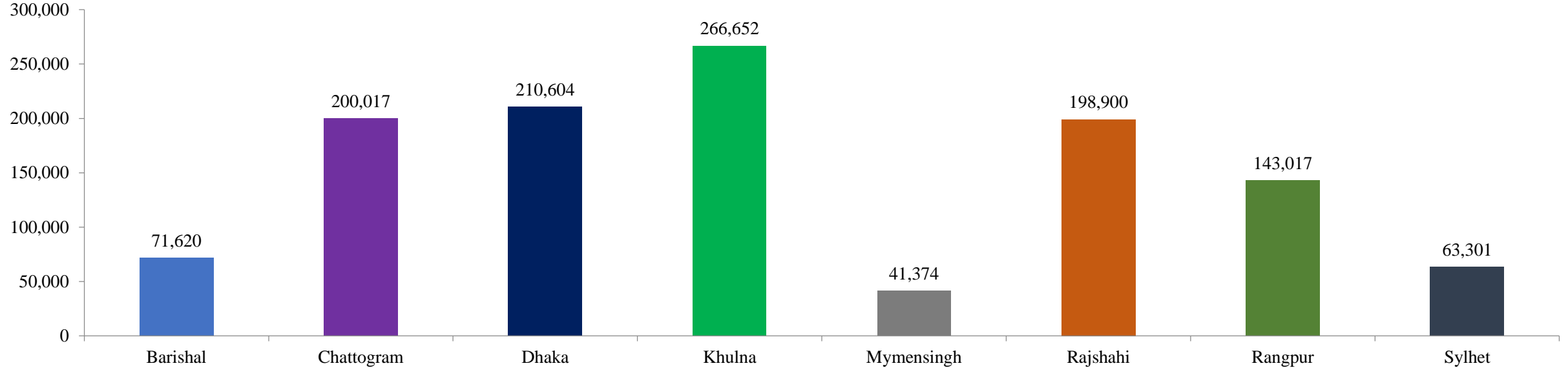
Registration and Referral of the Target Group

Flow chart of VIA and CBE Referral System



Women aged **30-60 years** are registered with **NID (National Identification)** number and an automatically system-generated **unique registration number** are used for identification of each registered woman.

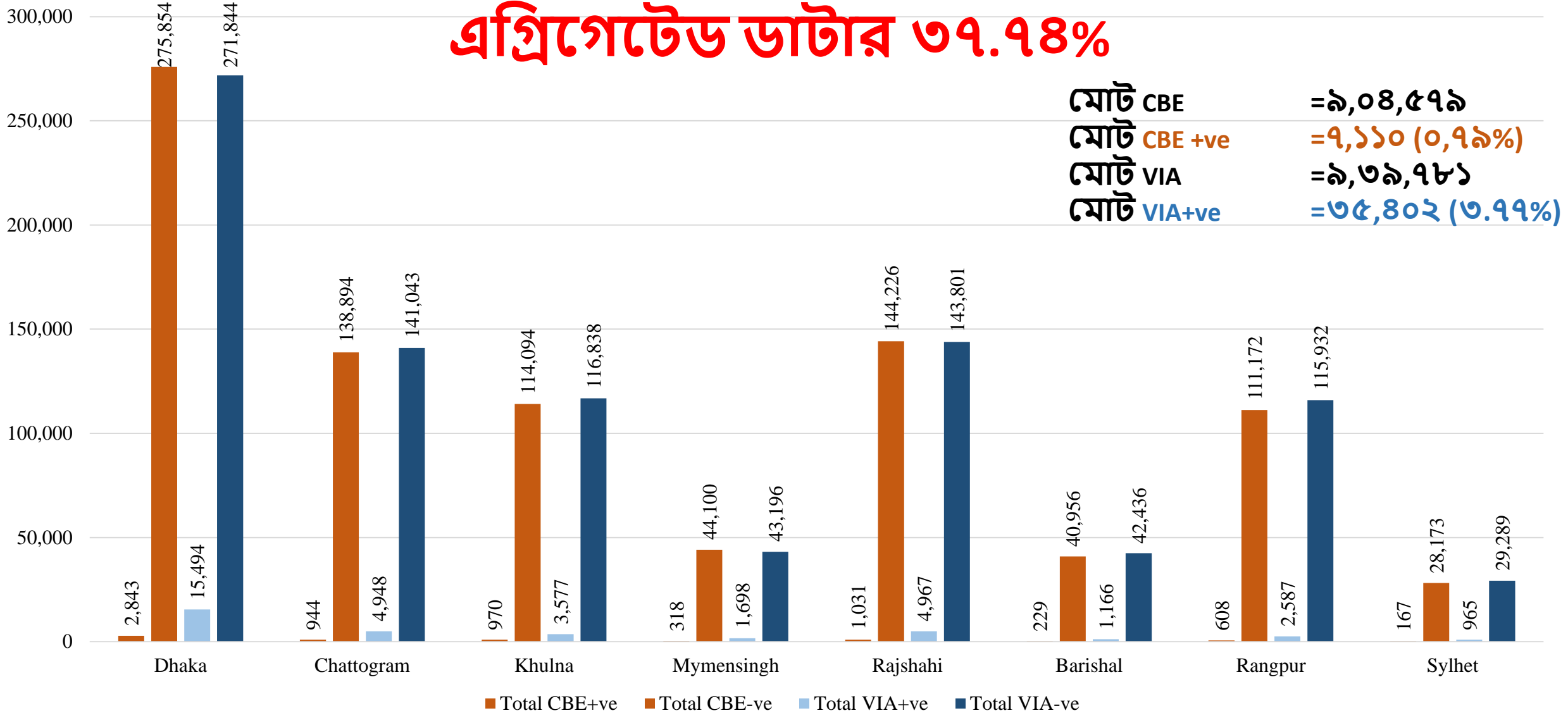
Total Number of Registration at Community Level (N= 11,95,485)



Period	Jul 2019 to Jun 2020	Jul 2020 to Jun 2021	Jul 2021 to Jun 2022	Jul 2022 to Feb 2023	Total
Barishal Division	72	32,638	10,228	28,682	71,620
Chattogram Division	182	65,947	48,902	84,986	2,00,017
Dhaka Division	627	53,713	80,865	75,399	2,10,604
Khulna Division	328	53,611	49,092	1,63,620	2,66,652
Mymensingh Division	7	9,758	12,756	18,853	41,374
Rajshahi Division	6	43,892	63,050	91,952	1,98,900
Rangpur Division	943	77,925	35,583	28,566	1,43,017
Sylhet Division	4	8,712	24,367	30,218	63,301
Total	2,169	3,46,196	324,843	5,22,276	11,95,485

বিভাগভিত্তিক ইনডিভিডুয়াল ডাটা (জুলাই ২০১৭- জুন ২০২২)

এগ্রিগেটেড ডাটার ৩৭.৭৪%

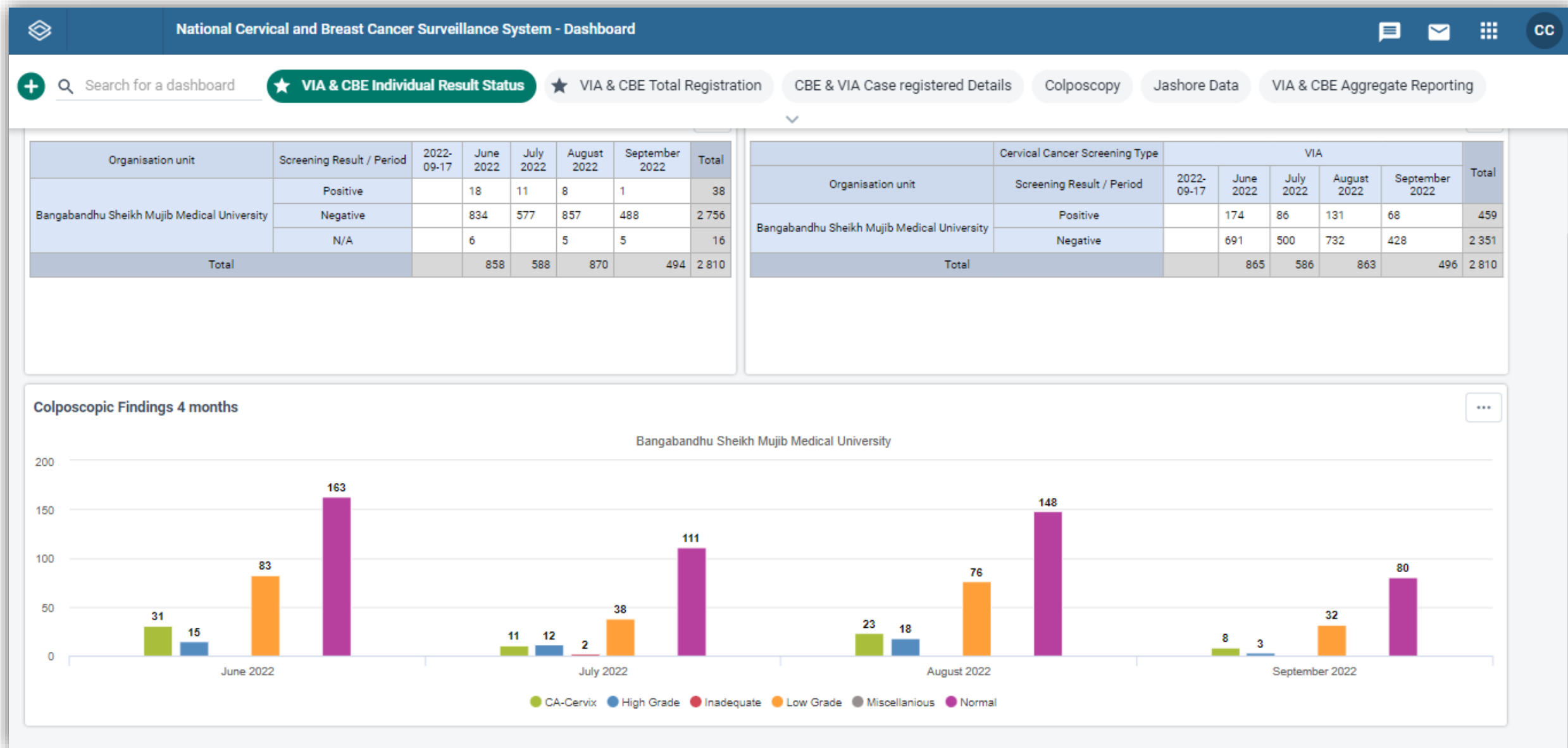


Colposcopy findings : Aggregated Data of Whole Country (Jul 17~Jun 22)

(Total Colposcopy= 49,953)

Colposcopy findings	Jul 17~ Jun 18	Jul 18~ Jun 19	Jul 19~ Jun 20	Jul 20~ Jun 21	Jul 21~ Jun 22	Total
CIN~I	2,253	2,765	2,355	1,811	2,652	11,836
CIN~II	438	495	364	183	278	1,758
CIN~III	73	79	74	31	96	353
Ca~cervix	385	549	426	413	553	2,326
Normal	7,780	8,551	5,600	4,123	5,254	31,308
Others*	183	231	241	157	230	1,042
Unsatisfactory	271	307	206	203	343	1,330
Total	11,383	12,977	9,266	6,921	9,406	49,953

DHIS2 Central Dashboard for VIA, CBE Individual Data



Target population of Cervical cancer Screening

Division	Total population (women)	Target population (30-60Years)
Dhaka	1,62,89,951	6,337,253
Khulna	1,44,89,705	34,78,263
Chattogram	78,45,226	25,85,159
Rajshahi	92,27,948	29,77,837
Rangpur	79,05,934	24,73,733
Barishal	49,76,829	13,01,571
Mymensingh	42,36,158	12,79,788
Sylhet	55,35,371	15,97,099
	7,05,07,112	2,20,30,703
	70 mil	22 mil

Source: Gender Statistics of Bangladesh-2012, *Population Census, BBS*

Proposed Elimination Threshold and Targets

**Threshold for Elimination as a Public Health Problem:
Age-adjusted incidence rate $< 4 / 100,000$ women**

2030 Targets

90%

of girls fully vaccinated
with HPV vaccine by 15
years of age

70%

of women are screened
with a high-performance
test by 35 and 45 years of
age

90%

of women identified with
cervical disease
(precancer or cancer)
receive treatment and
care

SDG 2030 Target 3.4:

30% reduction in mortality from NCDs

Summary Recommendations: WHO suggests using the following strategy for cervical cancer prevention

For the general population of women

Screen and Treat **OR** Screen, Triage and Treat

- **HPV DNA as primary screening test**
- Starting at age 30
- Every 5 to 10 years screening interval

For women living with HIV

Screen, Triage and Treat - **ONLY**

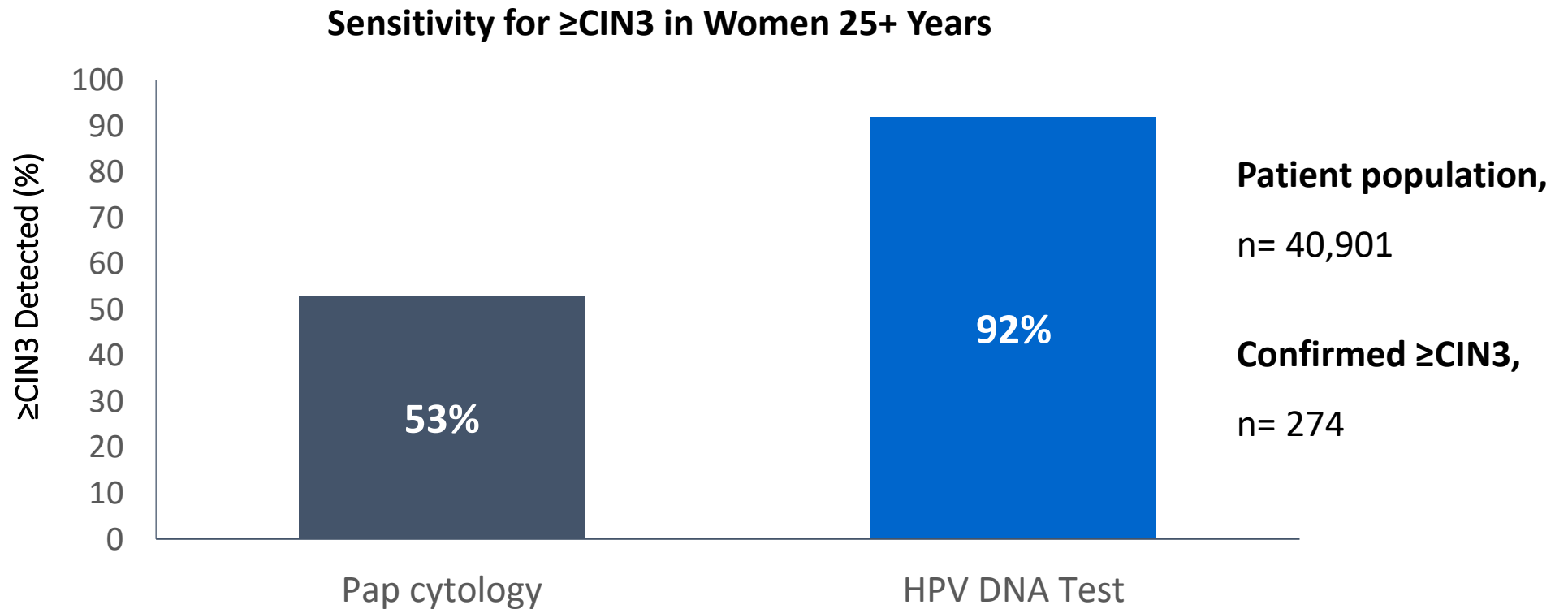
- HPV DNA as primary screening test
- Starting at age 25
- Every 3 to 5 years screening interval

When providing HPV DNA testing, WHO suggests using either provider or self-collected samples

Increased Disease Detection with HPV DNA Test

Superior to Pap cytology in ATHENA

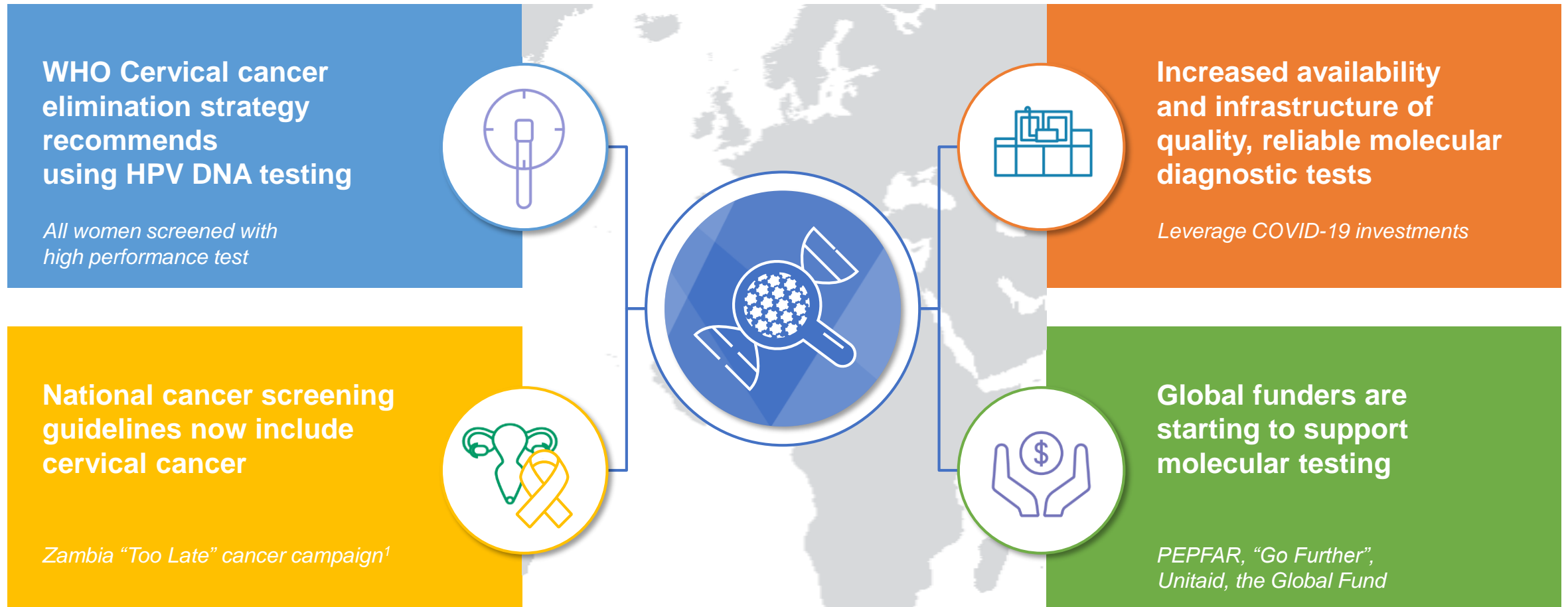
Baseline data



**DNA-based HPV test reduced missed disease vs Pap cytology screening,
with 72% increased sensitivity for \geq CIN3**

Why HPV DNA screening?

Growing trends towards molecular testing, globally

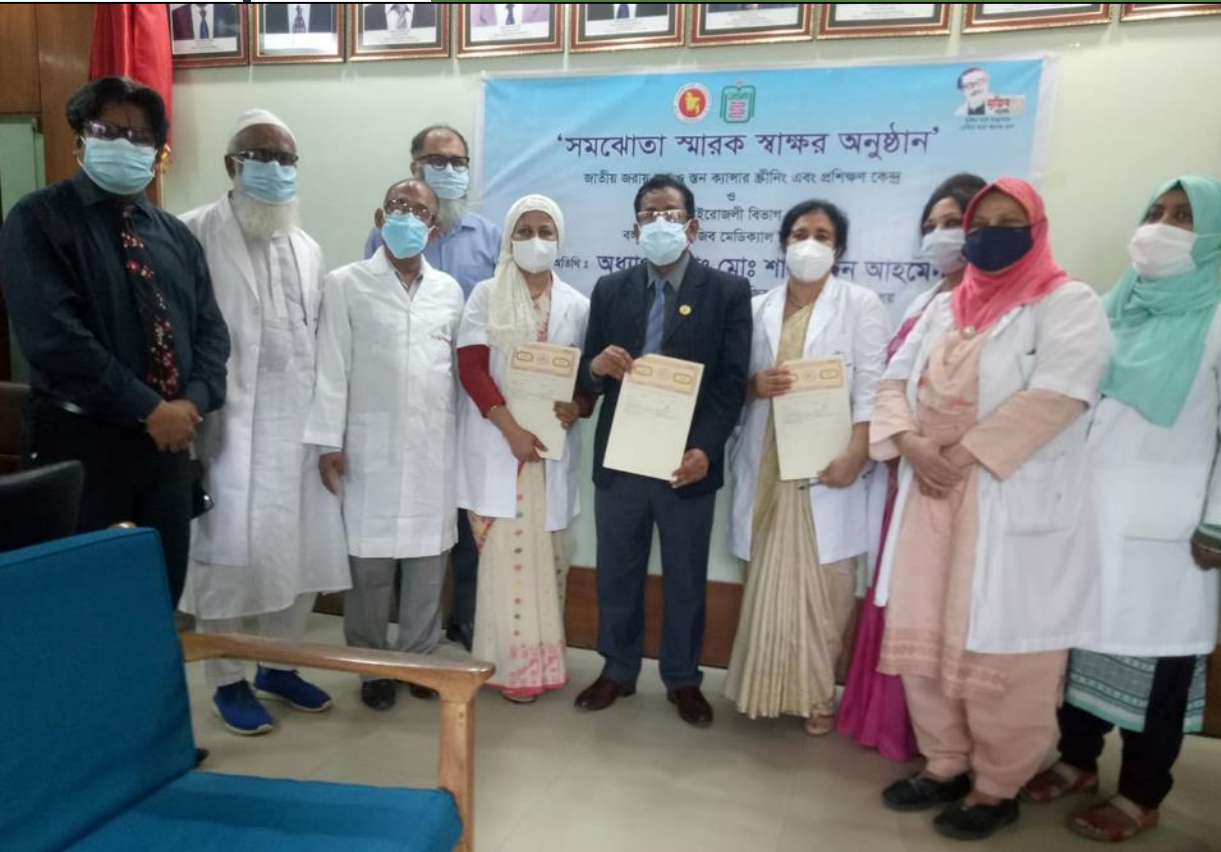


1. <https://www.afro.who.int/news/digital-messaging-taking-too-late-out-cancer-diagnosing-zambia>

Achieving 70% Coverage of Screening and 90% Treatment of Precancer: Strategic Actions

- **National scale-up of screen & treat**
 - Simple algorithms need to be introduced and adapted to settings
- **Increased quality and coverage of service delivery**
 - Countries detailed implementation plans to introduce and scale-up products and delivery models
 - Strengthen patient retention and linkage to treatment
- **Sufficient, affordable supply of screen and treat technologies & products**
 - Prompt certification of new products
 - Price reductions
- **Monitor progress**

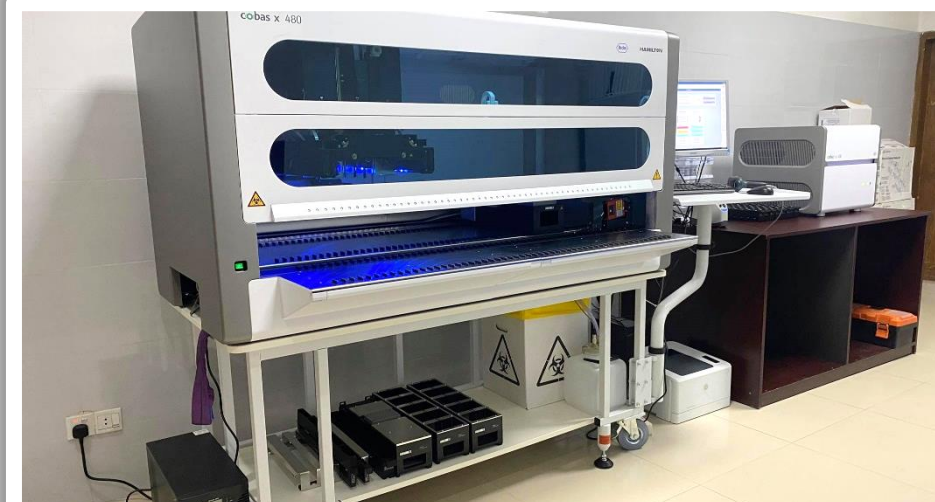
MoU with Department of Virology, BSMMU



A MoU between NCCBCST and Department of Virology of BSMMU has been done to improved research and diagnostic capacity of HPV-DNA test.

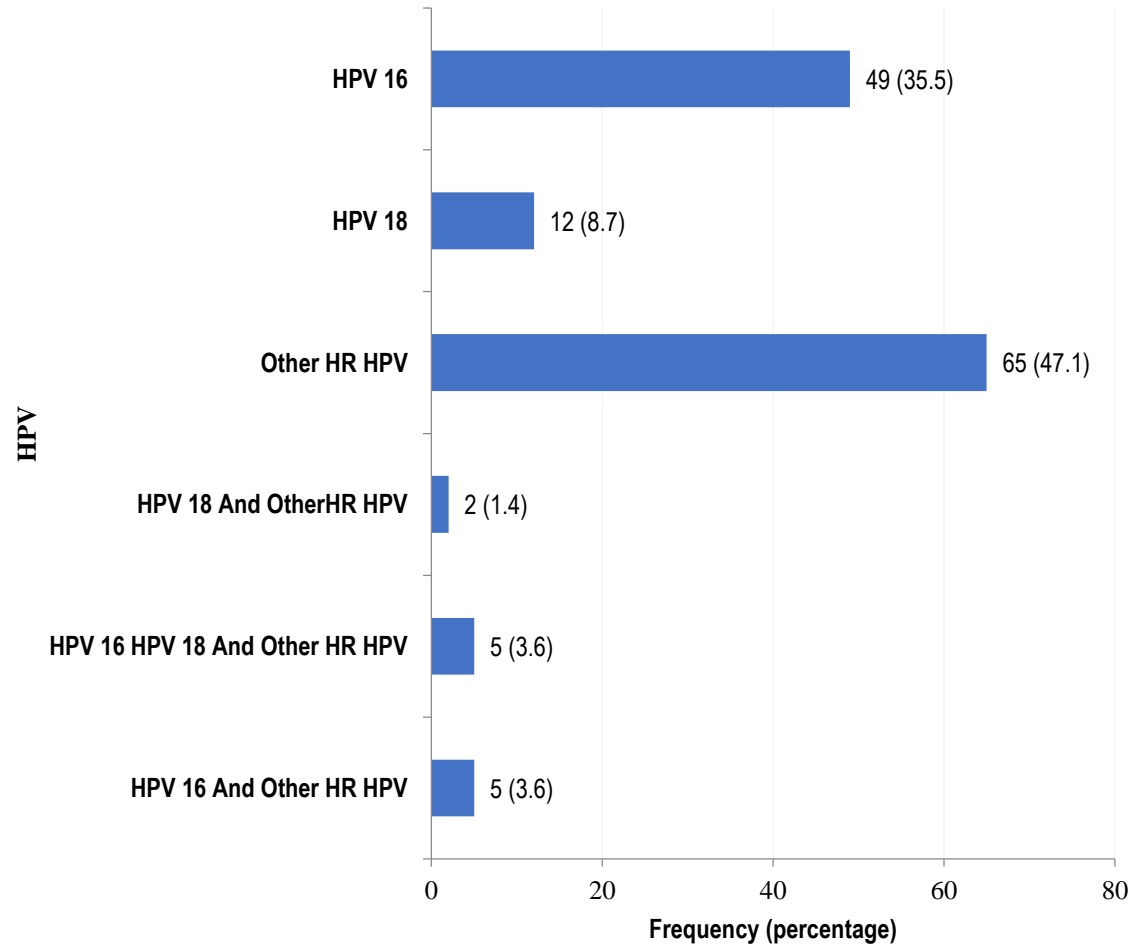
Introduction of HPV test at National VIA & CBE Screening Center

INAUGURATION CEREMONY OF HPV RESEARCH LABORATORY AT NCCBCST



A total of 3856 asymptomatic women underwent HR-HPV test before VIA-based CCS and among them 138 (3.6%) women were HR-HPV positive.

HR-HPV genotypes among total screen positive women (n= 138)



Acknowledgements

- Ministry of Health and Family Welfare (MOHFW)
- Directorate General of Health Services/ Family Planning/ Nursing and Midwives
- All Govt. Health Institutes (CS office, UHCs, DHs, MCWCs, NICRH, MCHs and specialized institutes)
- UNFPA Bangladesh/ WHO Bangladesh / OGSB /BDSCCP
- International Agency for Research on Cancer (IARC)/ International consultants
- Authority and colleagues of BSMMU
- All Doctors, Secretarial Support and support staffs of the programmes
- Women/ patients

A large, vibrant red tomato is the central focus, surrounded by a dense cluster of green leaves. The tomato has a slightly textured surface with some lighter and darker red patches. The leaves are various shades of green, some appearing more saturated than others, and they are arranged in a circular pattern around the tomato. The entire image has a soft, slightly blurred quality, giving it a natural, organic feel.

THANK YOU

MAKE THE WORLD SAFER FOR EVERYONE