

Providing chronic care services in Malawi

What can we learn for DSD for chronic disease?

Presented By:

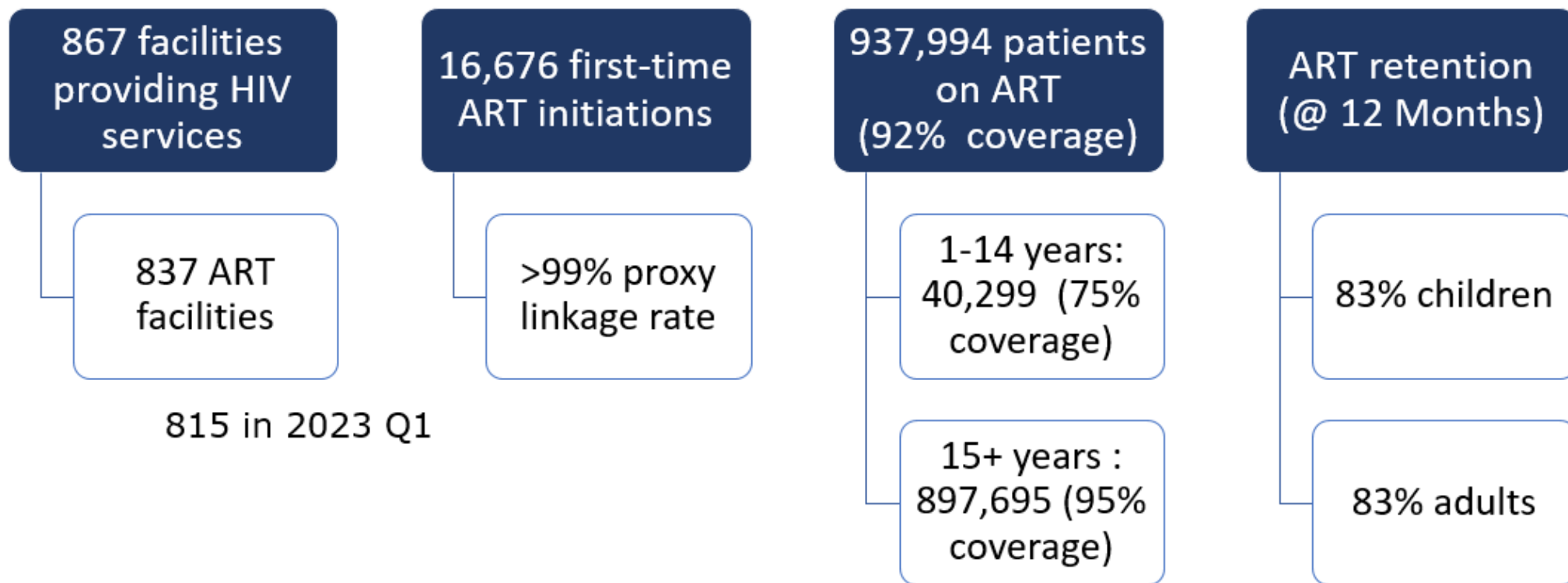
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General background

- Malawi is one of the sub-Saharan African countries that has made significant strides in the fight against HIV/AIDS, currently at 95-99-93
- As of 2023, the overall HIV prevalence is 7.7% with 1,003,235 PLHIV
- The 2023 Spectrum estimates show that:
 - by 2027 more than half of PLHIV in Malawi will be aged 40 years and older (*age is a non modifiable risk factor for some NCDs*)
 - by 2026 non-AIDS related deaths will surpass AIDS related deaths among PLHIV (52% VS 48%)

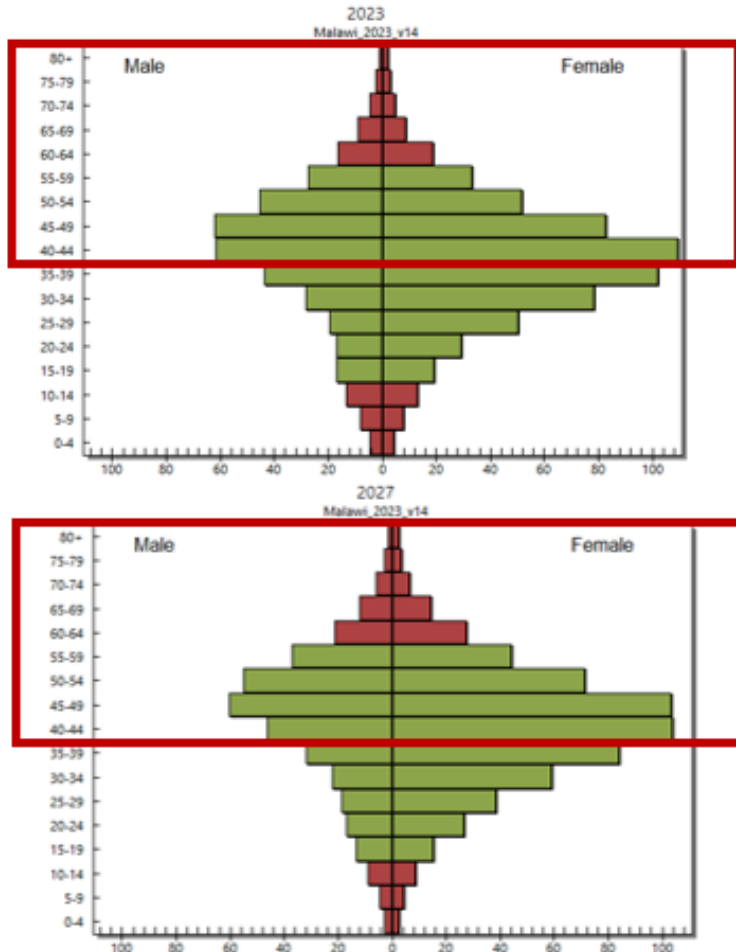


Care and treatment

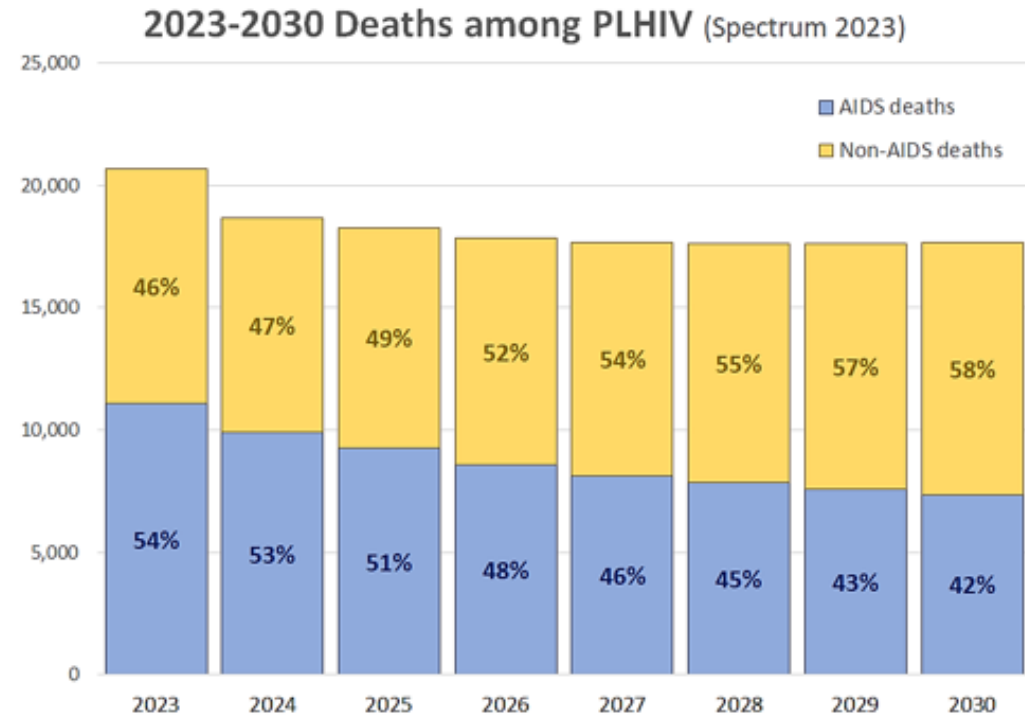


PLHIV AGEING AND TRENDS IN HIV RELATED DEATHS

PLHIV ageing: 2023 and 2027

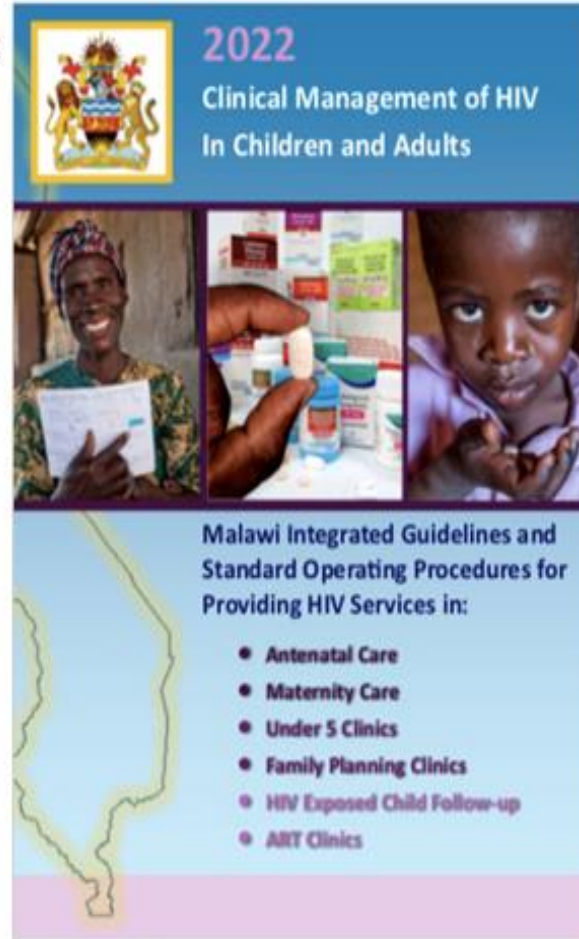


HIV-related deaths: 2023 - 2030



Screening, diagnosis and managing hypertension

- BP check @ all routine clinic visit as standard of care
- Hypertension screening recommended for all PLHIV aged 30 years and older
 - At ART initiation
 - Once a year while on ART
- Those with uncontrolled hypertension/end organ damage are referred to hypertension clinic



2022
Clinical Management of HIV
In Children and Adults

Malawi Integrated Guidelines and Standard Operating Procedures for Providing HIV Services in:

- Antenatal Care
- Maternity Care
- Under 5 Clinics
- Family Planning Clinics
- HIV Exposed Child Follow-up
- ART Clinics

54 Management of non-communicable diseases

12.2 Detecting and managing high blood pressure

Key Facts: BP screening

- 1 out of 4 adults in Malawi have hypertension and over 75% of these have not been diagnosed.
- Even without hypertension, HIV patients have a higher risk of stroke.
- Managing all hypertensive ART patients can prevent many cases of stroke, heart and kidney failure and other complications.
- Screen all adults for hypertension:
 - Record BP on patient card header.
 - Check BP at least once a year for patients 30 years +.

Correct BP measurement method

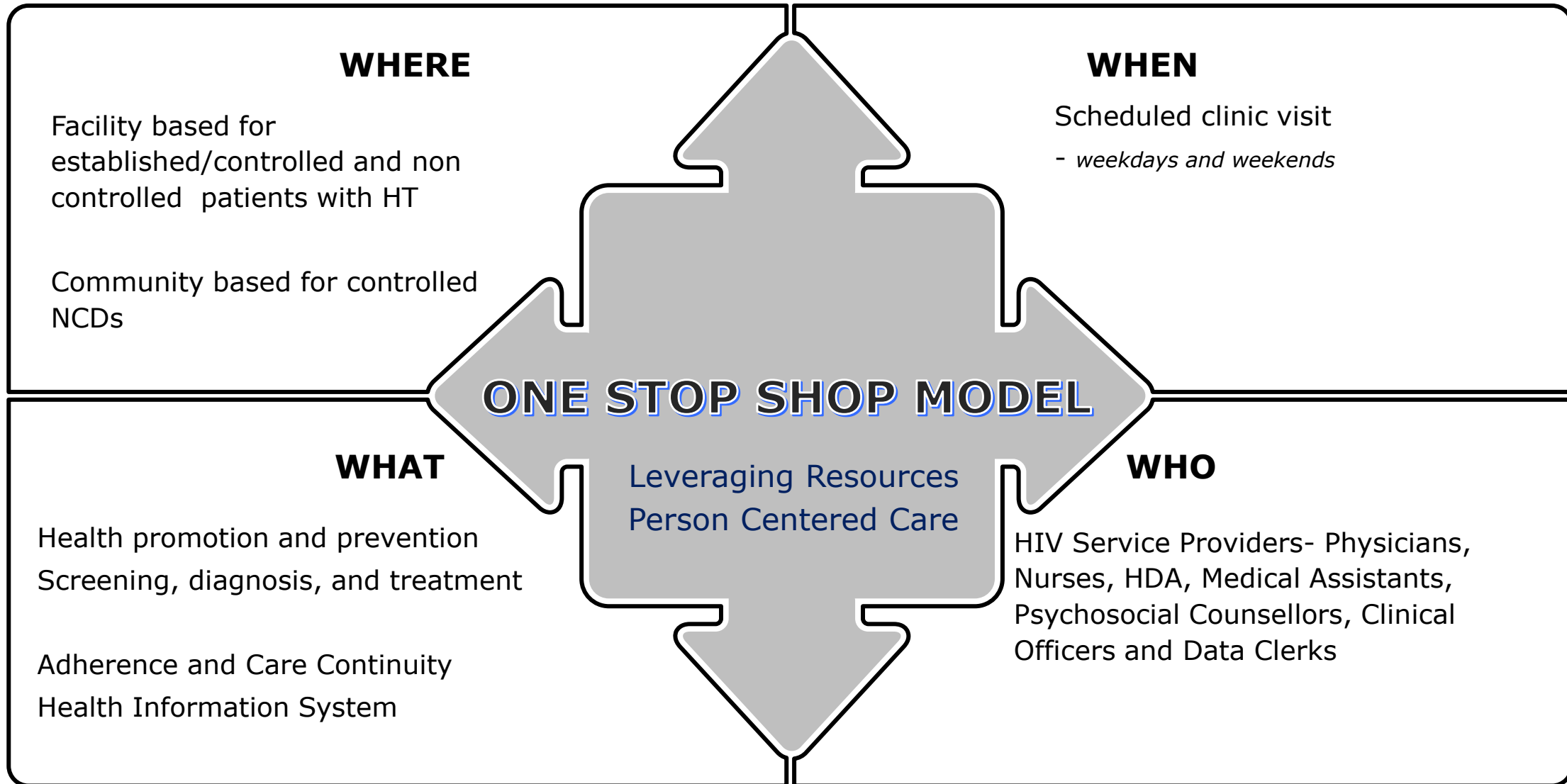
- Make sure the patient is relaxed (rest at least 10 minutes after physical activity).
- Sit upright, remove clothing from upper arm that may restrict blood flow or interfere with BP cuff.
- Make sure BP cuff is the right size: check the arm circumference is within range shown on the cuff.
- If the initial reading is higher than **140** systolic and/or **90** diastolic:
 - Repeat reading twice. Wait for at least 5 minutes between readings.
 - Record the lowest reading

Classification	Systolic	Diastolic	Management
Mild	140-159	and/or 90-99	Try <i>lifestyle measures</i> alone, start stepped treatment if no normalization after 6 months
Moderate	160-179	and/or 100-109	<i>Lifestyle measures</i> + stepped treatment
Severe	>180	and/or >110	Urgent treatment <i>Lifestyle measures</i> + stepped treatment

Management of hypertension

- Start management for hypertension if the lowest reading is higher than **140** systolic and/or **90** diastolic.
- Urgent treatment for severe hypertension if the repeat reading is **180** systolic and/or **110** diastolic.
- Screen for diabetes and symptoms and signs of end organ damage (eye, heart, kidney).
- *Lifestyle measures*: Eat more vegetables and fruits, less meat / fat, reduce salt, stop smoking, exercise regularly, normalize weight, limit or stop alcohol
- See latest **Malawi Standard Treatment Guidelines** for stepped anti-hypertension treatment.

Current Implementation Modality





International AIDS Society

iasociety.org

The Neno eistrict comprehensive HIV & NCD care through integrated chronic care clinic

Increasing access to NCD care by leveraging the HIV program

A case study implemented by Partners In Health



Integrated chronic care platform

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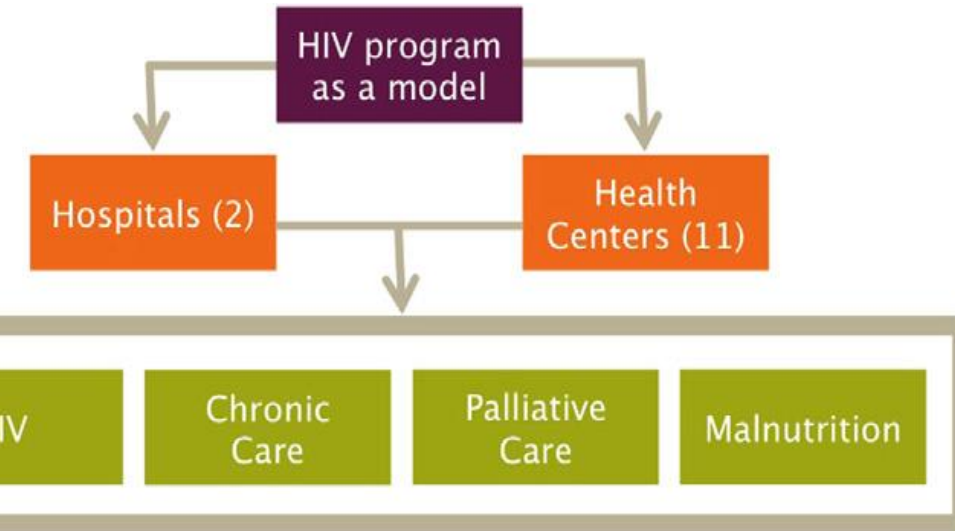


Case Study

Leveraging HIV platforms to work toward comprehensive primary care in rural Malawi: the Integrated Chronic Care Clinic

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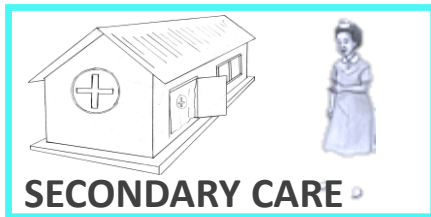
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Nutrition and family planning needs addressed across programs



Integrated Chronic Care Cascade



COMMUNITY HEALTH WORKERS

CHW Household Model

COMMUNITY SCREENING AND EDUCATION

Community Screening

INTEGRATED CHRONIC DISEASE CARE

IC³

ADVANCED CHRONIC DISEASE CARE

Advanced NCD & MH clinics

Why integrated chronic care?

- ❑ The objective was to increase access to NCD care by leveraging the HIV program
- ❑ Provides longitudinal care for patients with **various chronic diseases**:
 - ❑ HIV/TB
 - ❑ NCD (PEN-conditions): Hypertension, diabetes, asthma & COPD, epilepsy, mental health disorders – *since 2015*
 - ❑ PEN-Plus/advanced NCDs: Heart failure, Rheumatic heart disease(RHD), Chronic Kidney Disease (CKD), Sickle cell disease etc. – *since 2018*
 - ❑ Pediatric Development conditions – *since 2021*
- ❑ Services provided include health education, screening & linkage, diagnostics, treatment, psychosocial counselling & palliative care

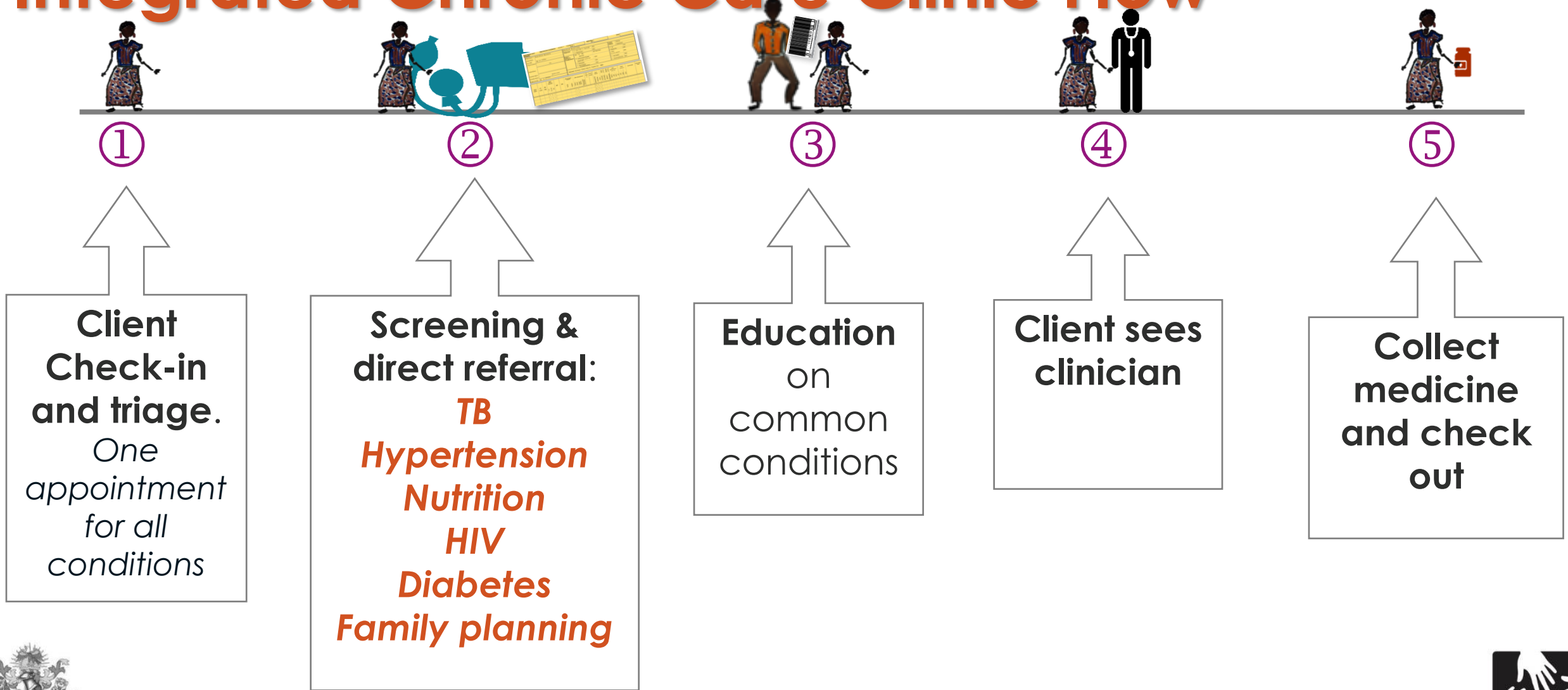
Organization of care

- ❑ IC3 clinics run in all Neno 14 facilities
 - ❑ 2x per week at 2 hospitals (NDH & LCH)
 - ❑ Weekly to fortnightly at primary health centers & community posts;
 - ❑ Home visits for very old or sick patients & unable to come to the clinic appointment
 - ❑ Clinic appointments
 - ❑ NCDs or dual diagnosed-1-3 months visits
 - ❑ RoCs & adolescents 1-3 months
 - ❑ 6-monthly for stable HIV-only clients

- ❑ Run by clinical officers and nurses

- ❑ Other staff includes pharmacy technicians, psychosocial counsellors, expert clients, clerks & medical informatics staff
- ❑ Training based on National NCDs/HIV guidelines
- ❑ Mentorship provided by other COs and nurse mentors, doctors and external specialist

Integrated Chronic Care Clinic Flow



Integrated chronic care clinic

- ❑ Costing of HIV program prior to integration (2013-2014)
 - ❑ \$317 per capita per year
- ❑ Costing of IC3
 - ❑ Annual cost per capita \$260
 - ❑ 41% HR
 - ❑ 27% medications
 - ❑ 12% social support
 - ❑ For patients' receiving stand-alone HIV services, \$327 per capita per year


Impact and economic evaluation of a novel HIV service delivery model in rural Malawi

Ryan K. McBain^a; Elizabeth Petersen^b, Nora Tophof^c, Elizabeth L. Dunbar^d, Noel Kalanga^d, Lawrence Nazimera^e, Andrew Mganga^f, Luckson Dullie^a, Joia Mukherjee^{a,b,g} and Emily B. Wroe^{a,b,g}

Open access

Original research

BMJ Open Economic evaluation of integrated services for non-communicable diseases and HIV: costs and client outcomes in rural Malawi

Emily B Wroe,^{1,2,3} Bright Mailosi,⁴ Natalie Price,⁵ Chiyembekezo Kachimanga,⁴ Adarsh Shah,⁶ Noel Kalanga,⁷ Elizabeth L Dunbar,⁸ Lawrence Nazimera,⁹ Mahlet Gizaw,¹⁰ Chantelle Boudreaux,² Luckson Dullie,⁴ Liberty Neba,¹¹ Ryan K McBain ^{2,10}

Client perspectives

- Will patients living with HIV allow to be treated in the same clinic with HIV-negative clients?
- Will NCD-only clients allow to be treated in the same room as clients living with HIV
- Will integration offer any advantage to dual-diagnosed clients?

“There is an advantage with integrated care.....at first I used to come for the ARTs and they were giving me another date to come for the NCD drugs, so I used to be busy travelling....but when they said we shall start receiving drugs on the same day, I found it to be of an advantage because I do everything at once” 41 years, male.....

“when we are accessing care at this clinic we do not hear any rumours outside that disgrace us....we just come here and receive our drugs then off we go, we don't hear any hearsay.....” 52 years, female

Conclusions and lessons learned

- Integrating care for common chronic conditions is feasible in rural Malawi
- May efficiently address the growing burden of NCDs
- Continue to refine data management, patient flow, and tracking processes for missed visits.