CROSS-SECTOR COLLABORATION THROUGH A DIGITAL EARLY WARNING SYSTEM TO PREVENT HIV TREATMENT INTERRUPTION IN MOLDOVA

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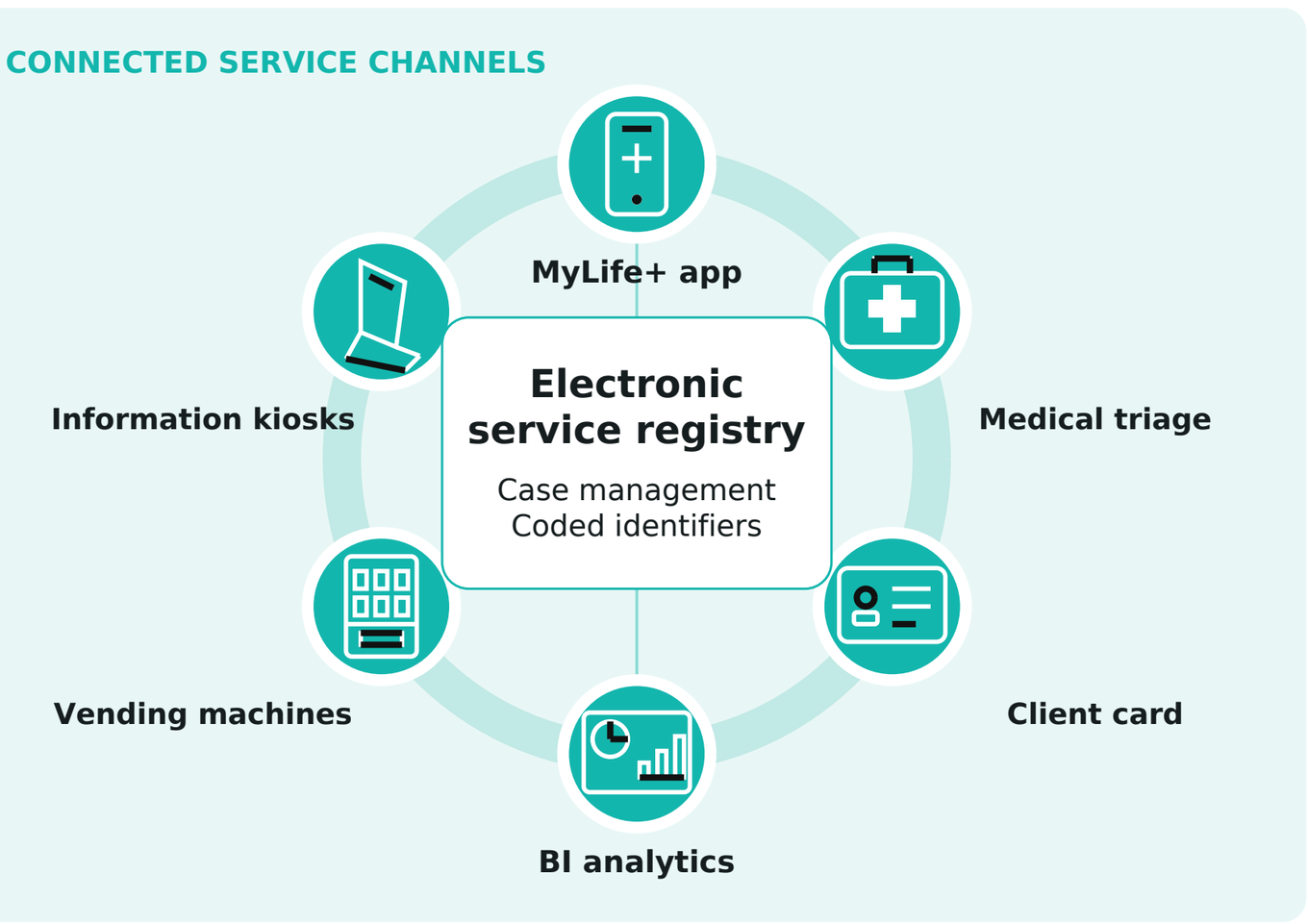
Positive Initiative, Republic of Moldova

Introduction and objectives

As Moldova assumes greater domestic responsibility for financing HIV and tuberculosis responses, sustaining outcomes requires better use of existing systems and workforce capacity. Antiretroviral therapy (ART) interruption threatens viral suppression; retention monitoring remains fragmented between medical and community services.

Objective: reduce treatment disengagement through earlier identification, verification and coordinated community-led support.

The ecosystem and the early warning system



Methodology

35 weighted indicators
Early warning system (EWS)

Developed from routine programme data, coded treatment-interruption cases, community service experience and internal review of more than 300 profiles.

Clinical, behavioural, social and data-quality signals cover ART, viral load, CD4, TB/HBV/HCV, pregnancy, disability, insurance, employment, substance and alcohol use, screening and last contact.

16 community and public providers

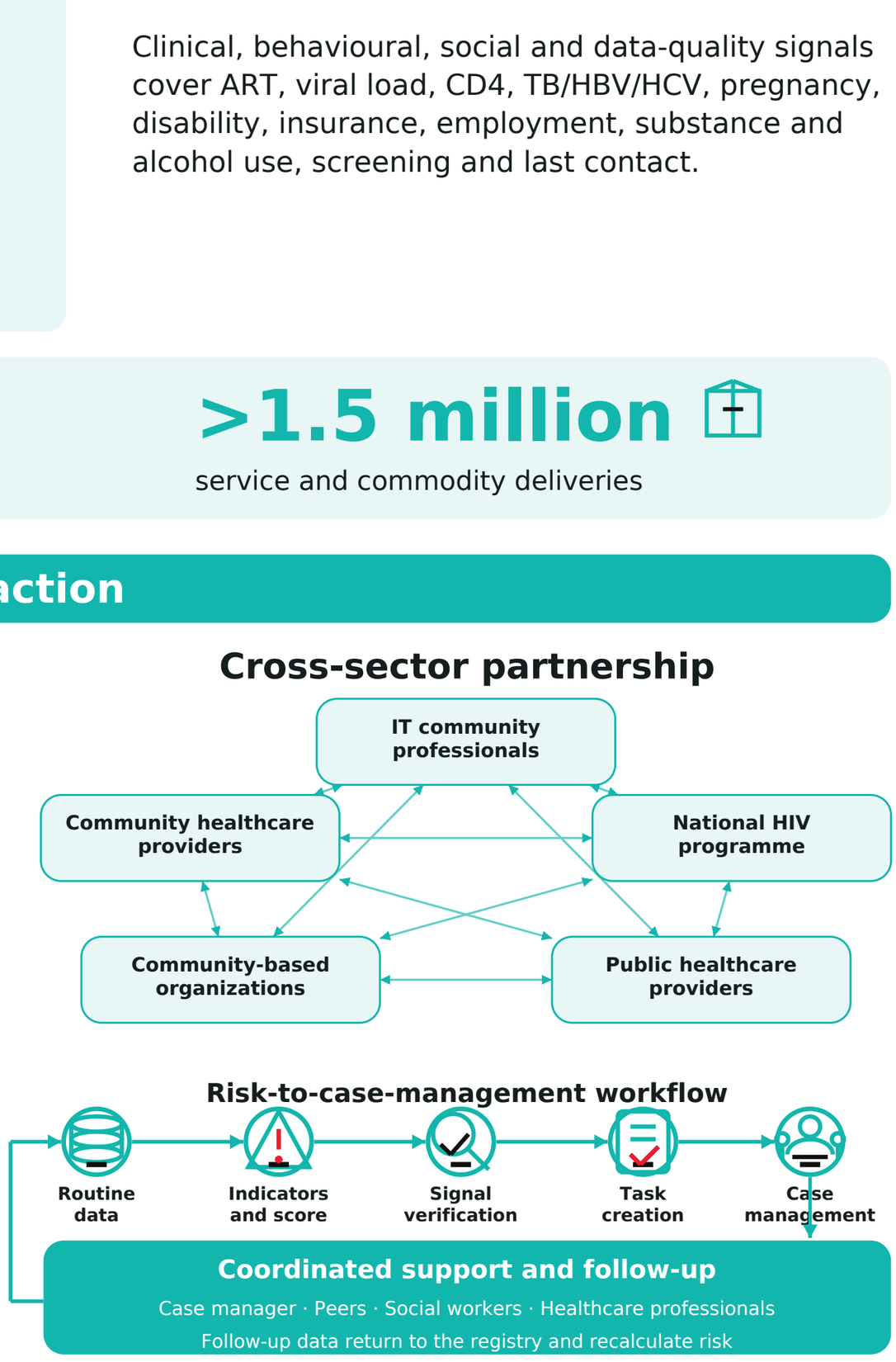
>50,000 beneficiary profiles

>1.5 million service and commodity deliveries

Risk indicators, partnership and coordinated action

No.	Risk indicator	Weight
12	Active tuberculosis	0.055
24	Unemployment	0.020
33	Pregnancy and delay in receiving ART of >=1 day	0.020
34	Pregnancy: missed follow-up visit at 28 weeks	0.020
35	Pregnancy: missed follow-up visit at 36 weeks	0.020
14	Hospitalization together with missed therapy	0.030
13	Hospitalization in the last 6 months	0.045
21	Long duration of living with HIV	0.015
22	Long duration of antiretroviral therapy	0.015
25	Disability or limited mobility	0.020
20	Multiple changes of treatment regimen	0.015
19	Recent change of treatment regimen	0.015
30	Insufficient patient data	0.010

* Example of triggered risk indicators and their weights.



Results and discussion | March-April 2026

419
People living with HIV (PLHIV) flagged among 9,957 active records

4.2%
of active records required focused retention support

69.2%
of those flagged were men

Those flagged were still recorded as receiving ART and were not classified as having interrupted treatment. Common vulnerability markers included alcohol use, injecting drug use and other psychoactive substance use.

Conclusions

The EWS links technology, the national HIV programme, public healthcare providers and community services to prioritize earlier, coordinated support. Next: calibrate thresholds, complete task pathways, monitor responses and treatment continuity, and evaluate impact on ART interruption.

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Supported by Gilead Sciences, Inc.
Study IN-US-985-7689