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# Differences in integrated assessment and management of non-communicable diseases (NCDs) for People with HIV across the WHO European Region

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## BACKGROUND

- People with HIV are disproportionally affected by non-communicable diseases (NCD).
- We describe current approaches to management of NCDs for people with HIV attending HIV-clinics across Europe.
- Particular focus on cardiovascular disease (CVD), pulmonary disease, metabolic disorders (including diabetes type 2), malignancies, kidney impairment and mental health.

## METHODS

- Structured electronic questionnaire - 41 multiple-choice and rating-scale questions
- Population: 85 HIV clinics (EuroSIDA) in 39 European countries and Israel (+ main HIV-centers in Armenia, Kosovo, and Moldova).
- One response per clinic, preferably by the senior clinician.
- Time-period: March – May 2023
- Definition of integrated care: “the coordination, co-location, or simultaneous delivery of HIV and NCD services to patients who need it, when they need it”

## RESULTS

- Fifty-one clinics (58.0%; n=51/88) from 42 cities in 34 countries responded – with >100,000 people with HIV under regular follow-up (median 1800 per clinic).
- General-practitioner (GP) model of health care (i.e., a GP is by default the first contact point) common (49.0%) & shared responsibility for NCD assessment with GP was reported by majority (72.6%).
- Self-reported degree of systematic assessment of NCDs was high overall (median 80%; IQR 55–95%) (Figure 1).
- Self-reported degree of delivery of integrated health care was slightly lower overall (median 70%; IQR 50–88%) (Figure 1).
- Kidney impairment, metabolic disorders and CVD were the most regularly assessed NCD categories (Figure 2).
- Eastern Europe has the lowest medians for systematic assessment across all NCDs (data not shown).
- People with HIV ≥50 years (74.5%) and those with chronic hepatitis B or C (54.9%) were prioritized for NCD assessment and management by a majority.

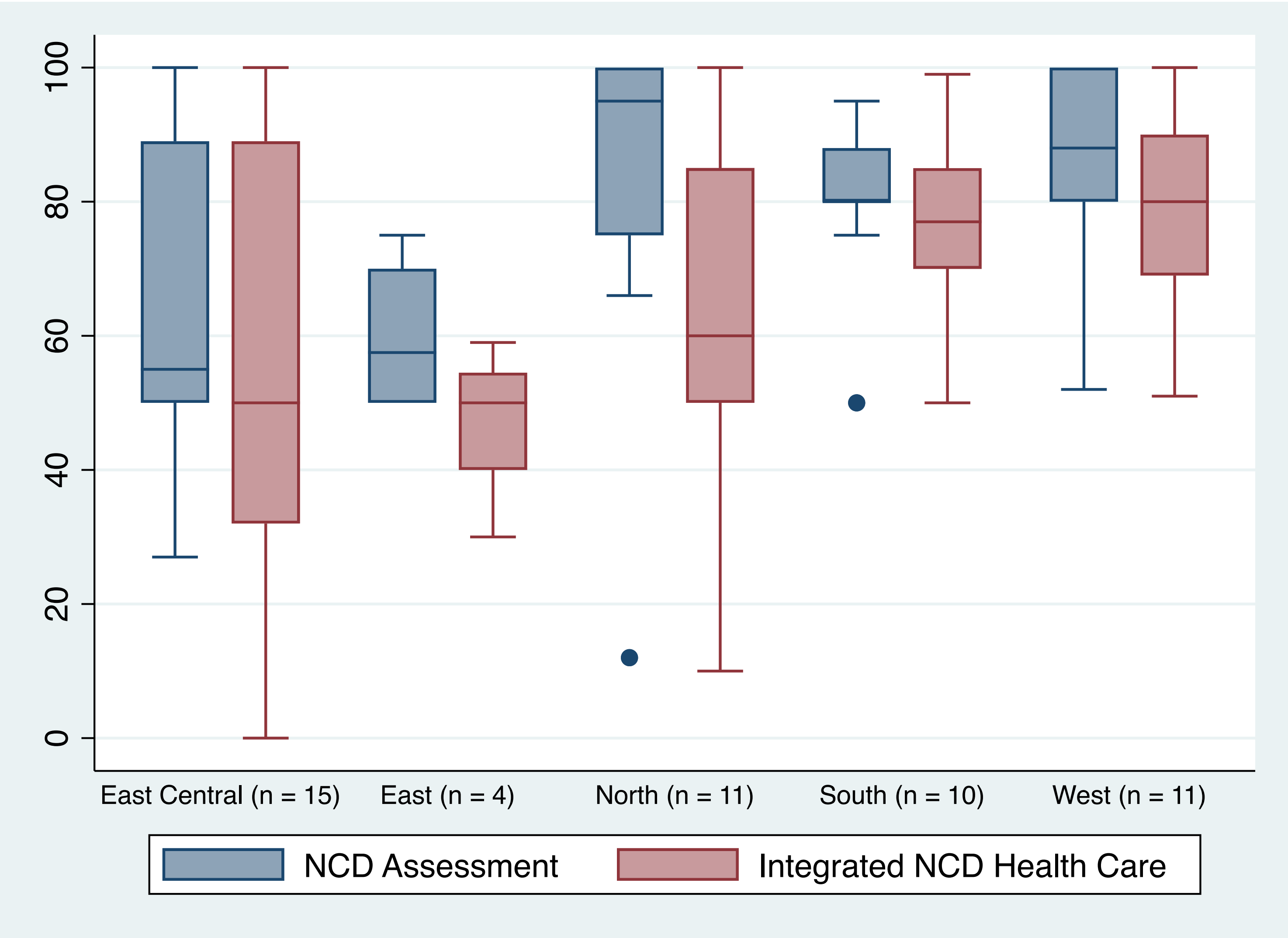


Figure 1. Boxplots of self-reported degree of systematic assessment of NCDs (0% - low agreement to 100% - high agreement) and integrated NCD health care (0% – low agreement to 100% – high agreement) as part of routine care, stratified by European region. Boxes represent interquartile ranges, median indicated by line across the box. Whiskers extend to extreme data points. Dots represent outliers.

- Frequently reported barriers for (further) integration: Lack of human resources, time during outpatient visits, essential equipment and essential diagnostic tests, patients receiving their NCD health care elsewhere (Figure 3)

## LIMITATIONS

- Major university hospitals & self-reported, overestimating assessment/integration
- Small number of Eastern European clinics

## CONCLUSIONS

- Many HIV clinics in Europe report systematic assessment and management of NCDs.
- Gaps among Eastern European clinics for all NCDs.
- Gaps among all regions for mental health and pulmonary diseases.
- Improve patient centered care and prevention (e.g., more time/patient, outcome measures, telehealth tools and NGOs’ engagement in patient education regarding healthy lifestyle)

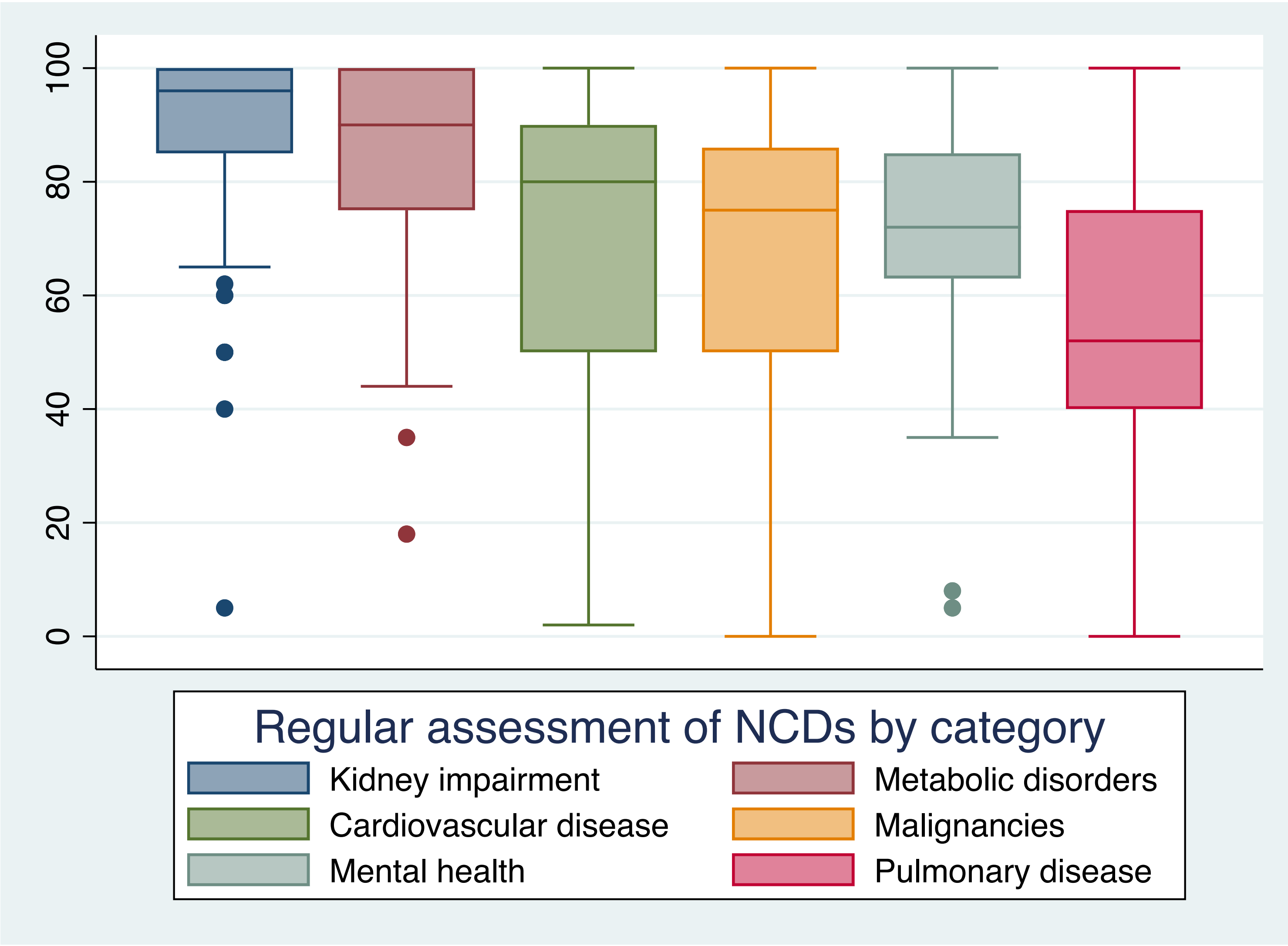


Figure 2. Boxplots of self-reported degree of systematic assessment of NCDs as part of routine care (0% - low agreement to 100% - high agreement) by NCD category. Boxes represent interquartile ranges, median indicated by line across the box. Whiskers extend to extreme data points. Dots represent outliers.

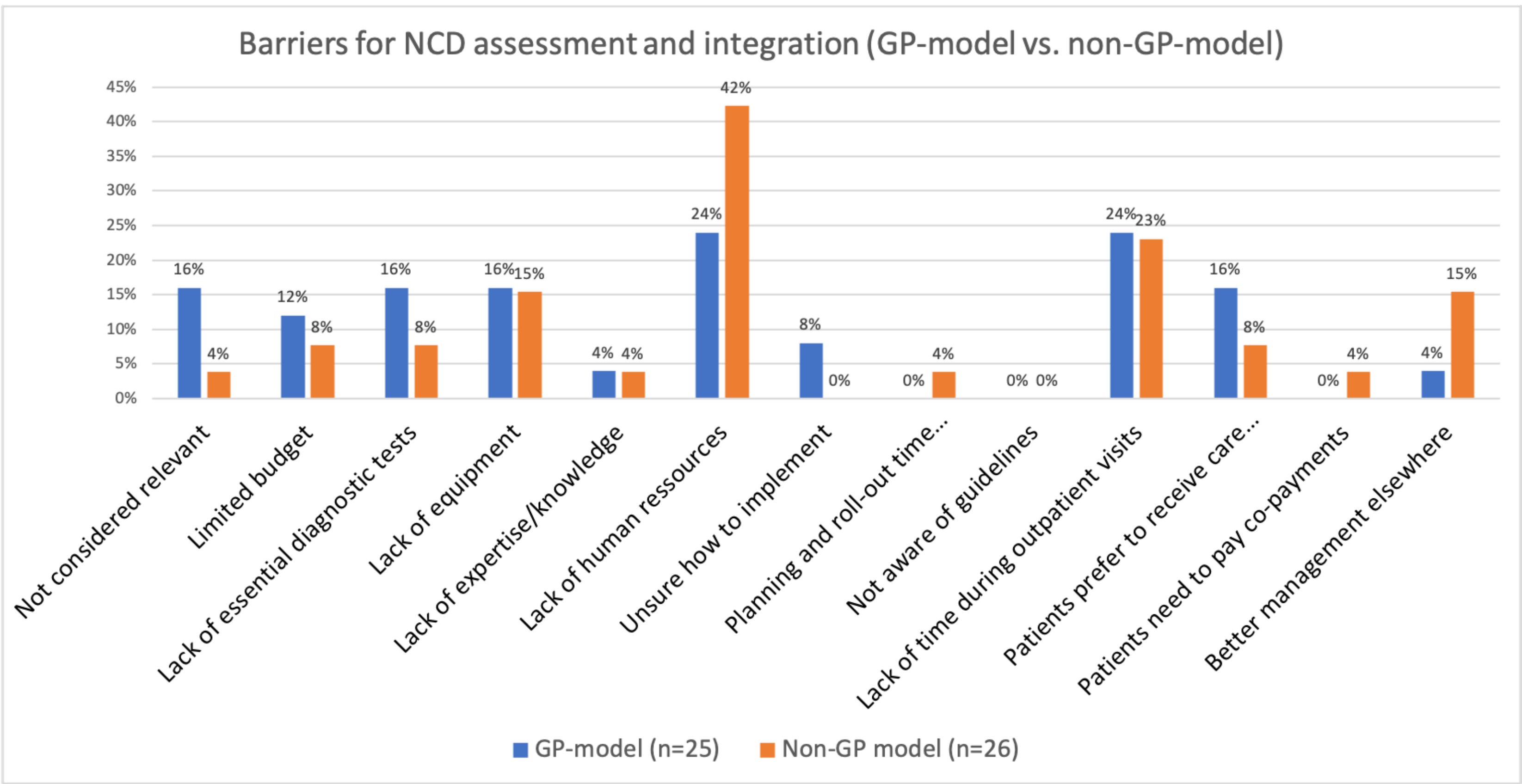


Figure 3. Proportion of clinics reporting barrier category for NCD assessment and integration, stratified by the clinic’s health systems default mode of primary contact (GP-model vs. non-GP model). GP: General practitioner.