Revisiting Implementation: Scaling up Opioid Agonist Therapies in Ukraine

ETERI MACHAVARIANI, MD, MPH

Why integrate services for PWID into primary care?

- **Health outcomes**: people who inject drugs die 10-25 years earlier than those who don't, mostly due to preventable diseases
- **Stigma**: specialty treatment clinics, including those for opioid use disorder, increase stigma due to social marking of those who they serve
- **Accessibility**: major transformations in treatment for opioid use disorders and co-morbid diseases allow primary care clinicians to manage these conditions within primary care settings

Local Context Overview

- ~350,000 PWID in Ukraine, with HIV prevalence of over 20%
- Most of them meet the diagnostic criteria for opioid use disorder (OUD)
- 2016 Healthcare Reform: Prioritized primary healthcare and allowed opioid agonist therapies to be prescribed in non-specialty care clinics
- A pilot study showed that integrating methadone into primary care clinics is feasible and effective

Pre-implementation challenges

- Complex health needs of PWID: overlapping epidemics of HIV, TB, and OUD
- Siloed healthcare system (Semashko model legacy)
- Primary care providers were not confident in providing care for OUD (methadone)
- Physician salaries remained low

Implementation Framework: i-PARIHS

- Integrated Promoting Action on Research Implementation in Health Services
- Developed to support the translation of evidence into routine clinical practice
- Especially suited for complex healthcare settings and multi-level barriers
- Recognizes that successful implementation is a multi-level, interactive process

Implementation Framework: i-PARIHS

- Emphasizes four core constructs:
  - Innovation
  - Context
  - Recipients
  - Facilitation

Successful implementation = Innovation + Recipients + Context, enabled through Facilitation

Why i-PARIHS?

- I-PARIHS was selected to support alignment between EBP and local context
- It offers facilitation component to mitigate systemic barriers
- It is recipient-focused and improves uptake and engagement

i-PARIHS Construct	Barriers	Facilitators
Innovation	• Limited existing models of methadone in PCC • Perceived ineffectiveness of methadone by providers	• Methadone as EBP
Context	• Siloed health system • Low clinician salaries • Overlapping epidemics of HIV, TB, and OUD • PC providers not experienced in OUD	• Legislative changes to enable methadone in PCC
Recipients	• PC providers not experienced in OUD • Patients distrustful or marginalized • Stigma towards PWID	• Pilot data showed high retention/satisfaction • Pre-trial stakeholder engagement with patients and providers
Facilitation	• Resistance to change among staff	• Tele-education for all PCC providers • Quality Improvement sessions • Financial remuneration pay-for-performance

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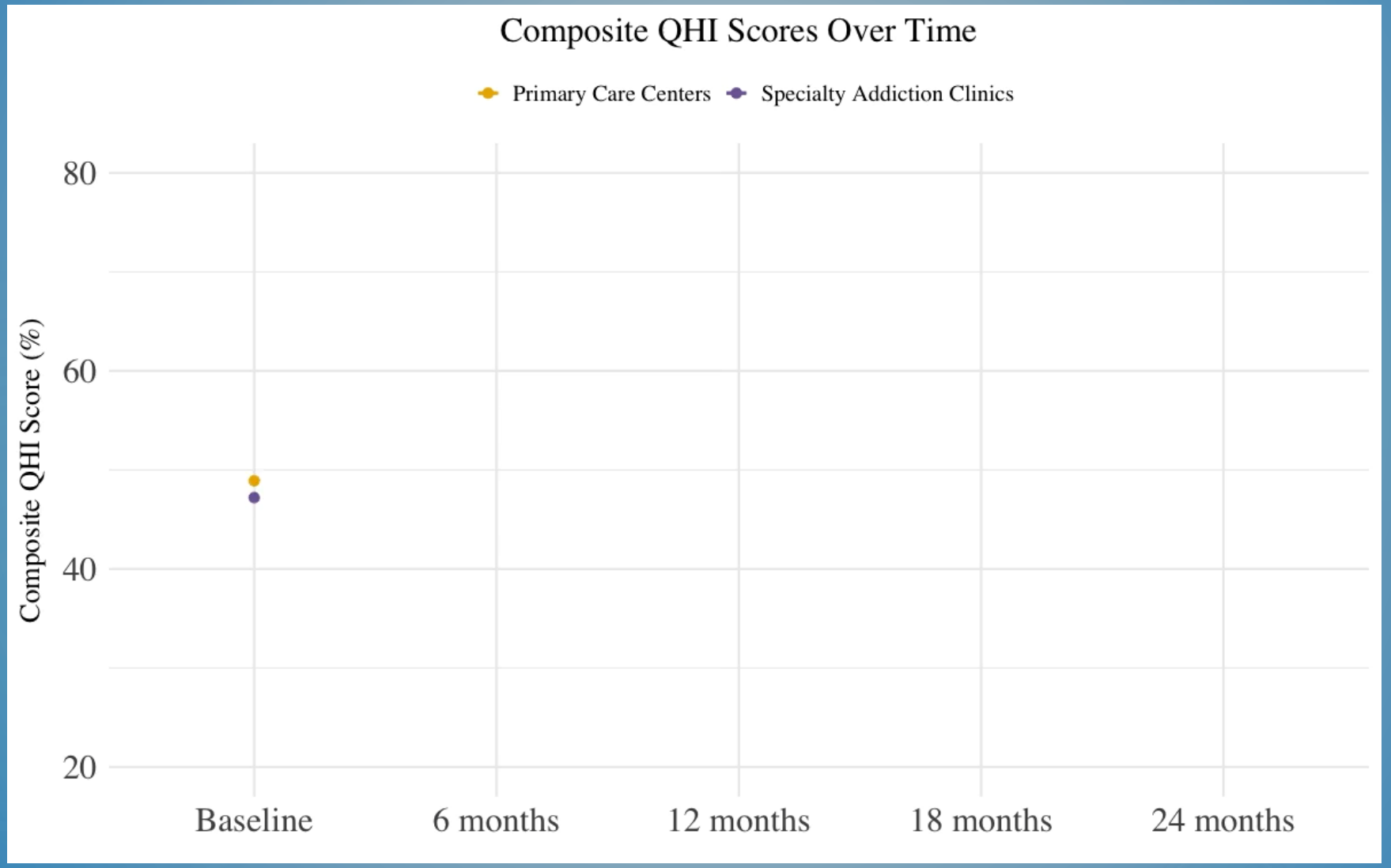
Implementation Tools

- Weekly tele-education for primary care providers
- Quality improvement sessions
- Pay-for-Performance financial incentives

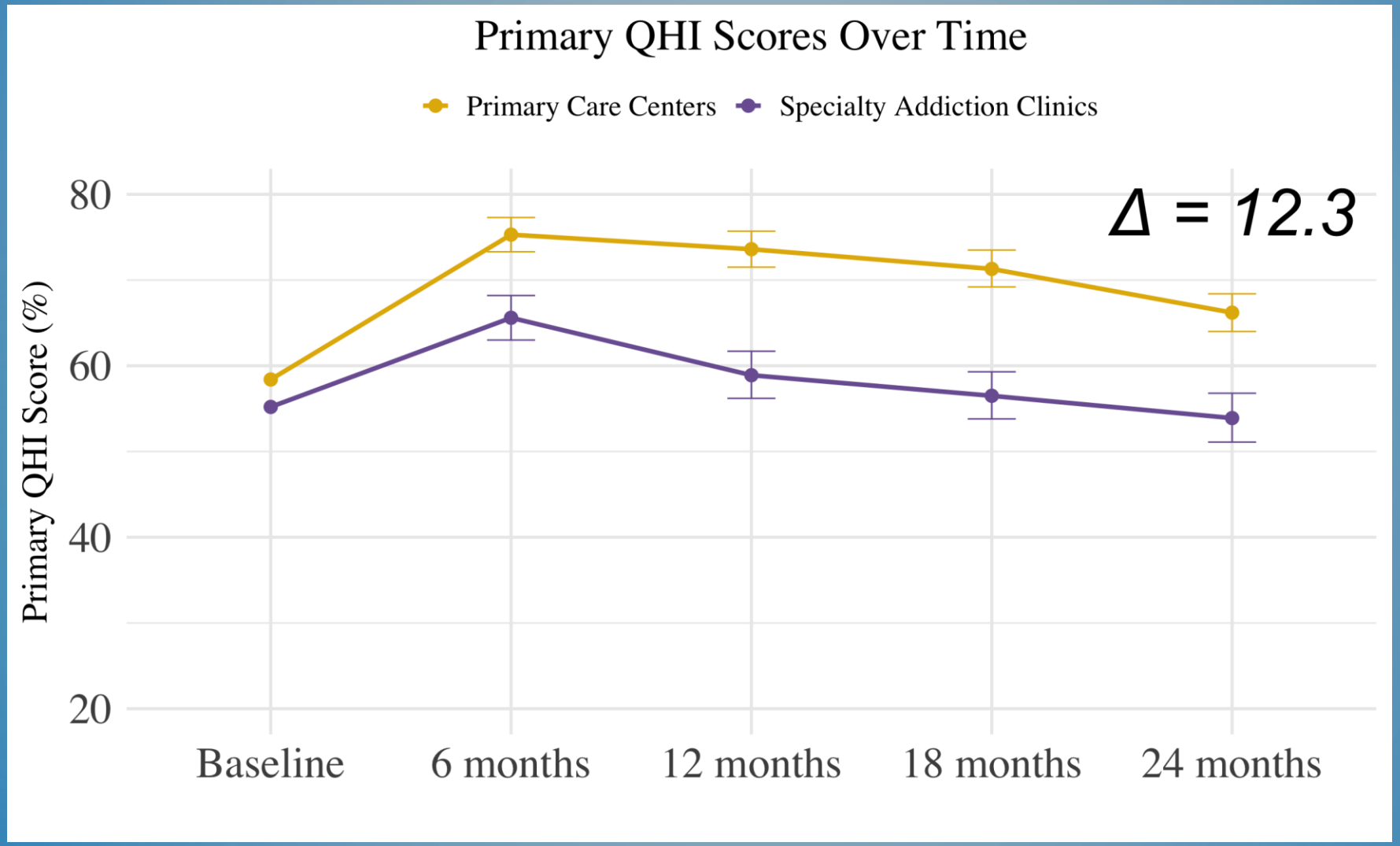
Study Design:

- Two arms: integrated methadone in PCC and control (narcology clinics)
- Outcome: Healthcare utilization score [Quality Health Indicator score, QHI], 17 **primary** and **specialty** care services
- Measurements: self-reported surveys every 6 months for 2 years; EMR data

Results:


Composite QHI Scores Over Time
Primary Care Centers
Specialty Addiction Clinics
Composite QHI Score (%)
80
60
40
20
Baseline
6 months
12 months
18 months
24 months

Results:


Primary QHI Scores Over Time
Primary Care Centers
Specialty Addiction Clinics
Δ = 12.3
Primary QHI Score (%)
80
60
40
20
Baseline
6 months
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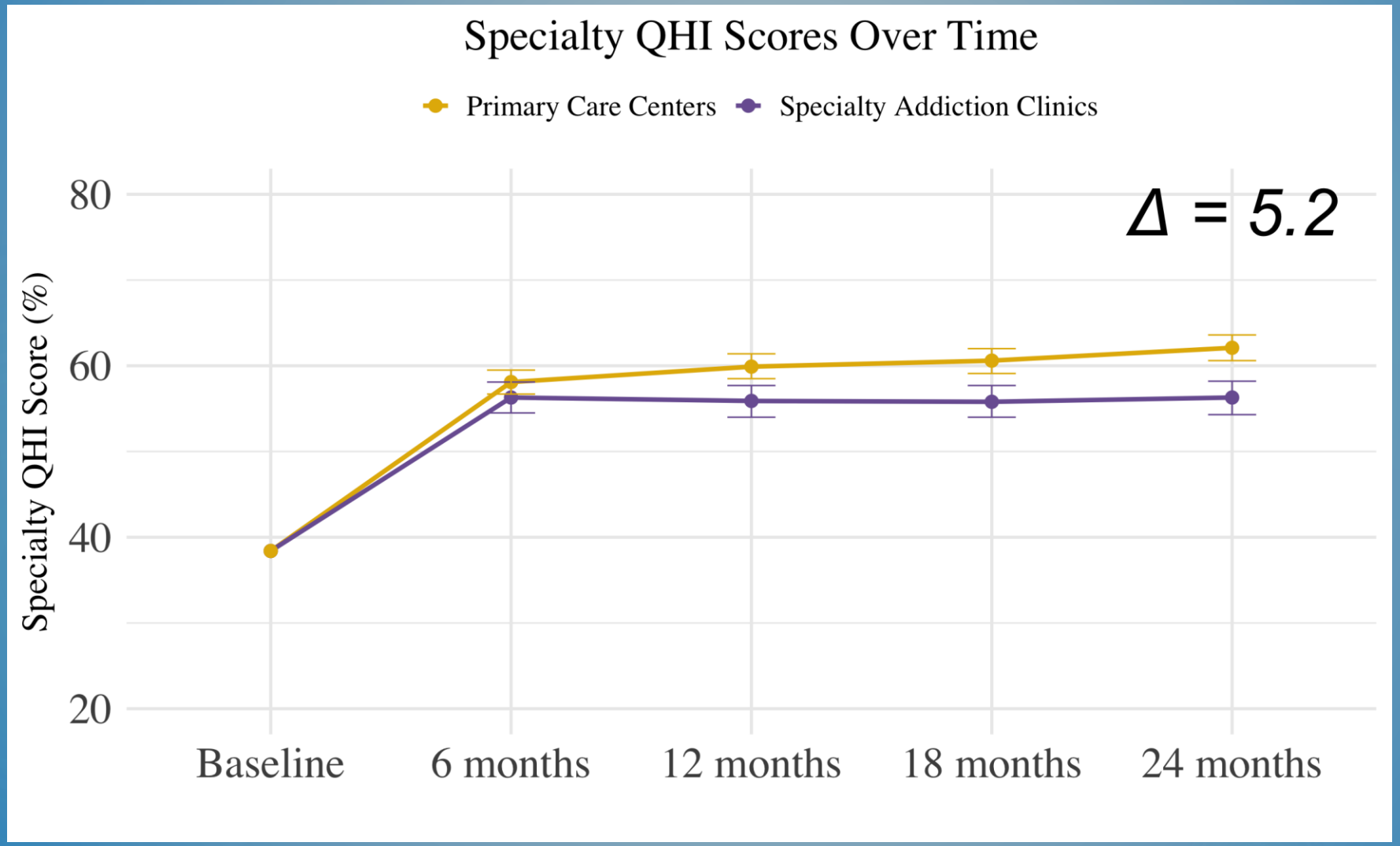
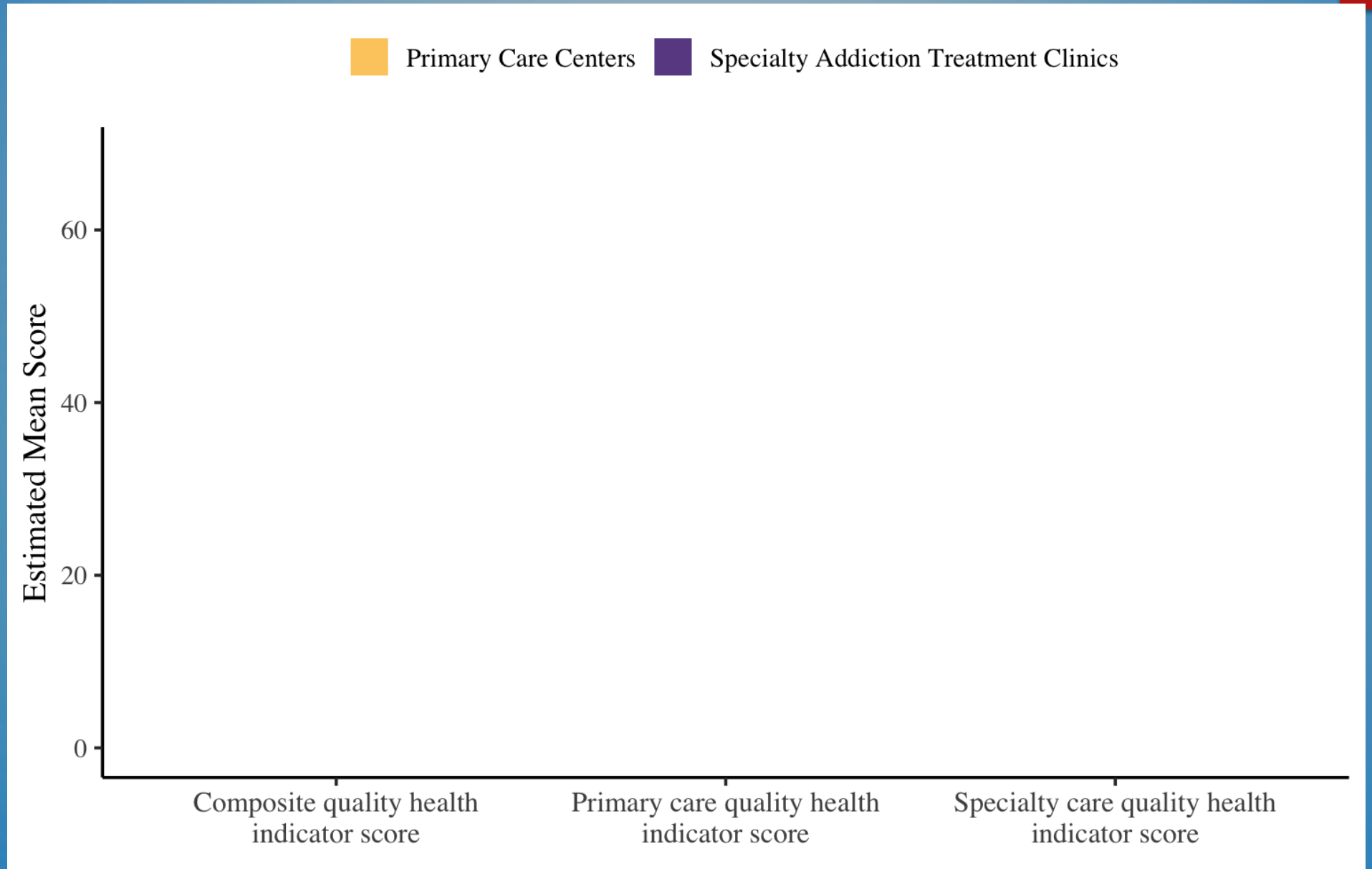
18 months
24 months

Results:


Specialty QHI Scores Over Time
Primary Care Centers
Specialty Addiction Clinics
Δ = 5.2
Specialty QHI Score (%)
80
60
40
20
Baseline
6 months
12 months
18 months
24 months

Results: Quality Health Indicator Score (EMR)



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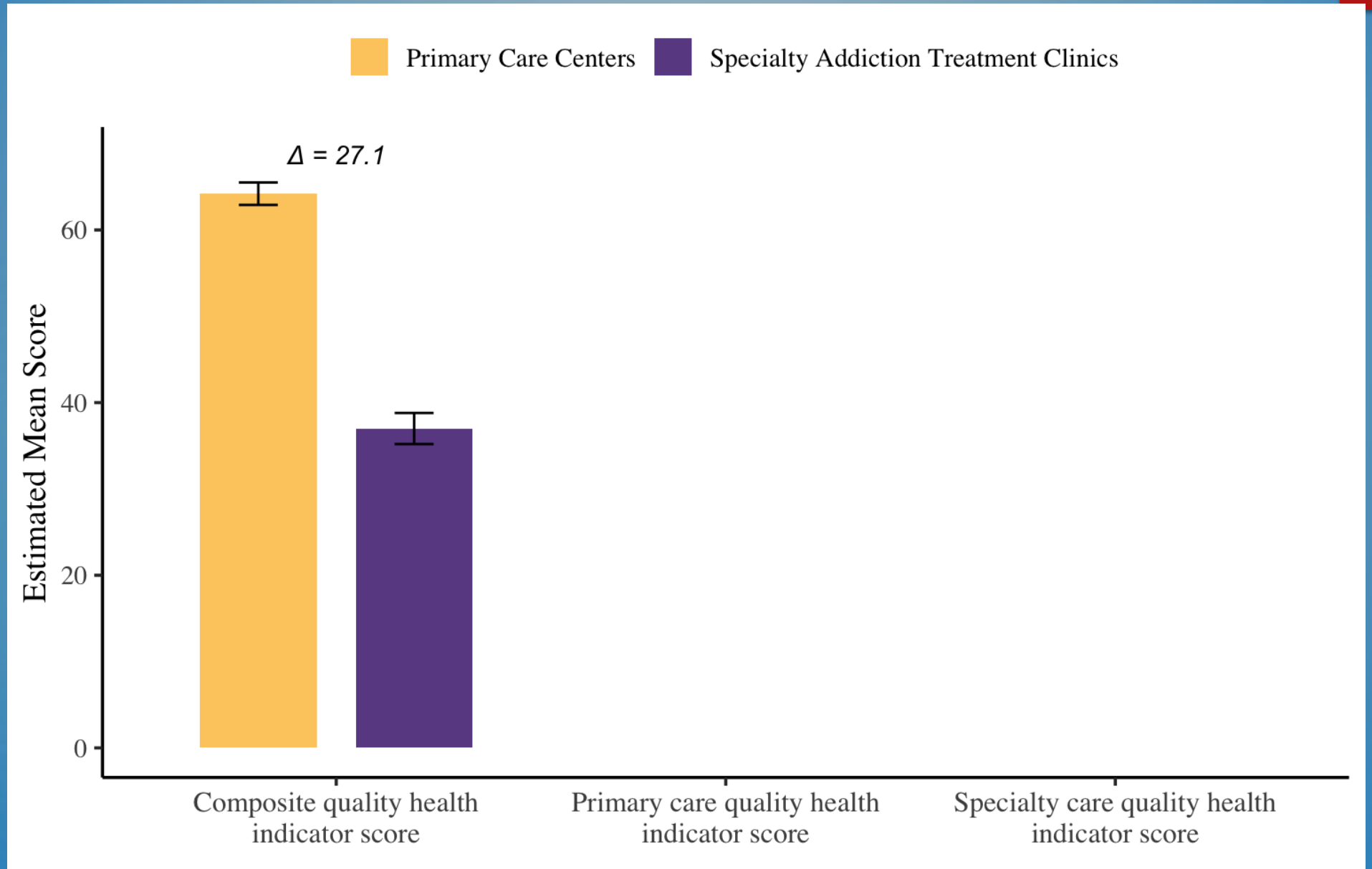

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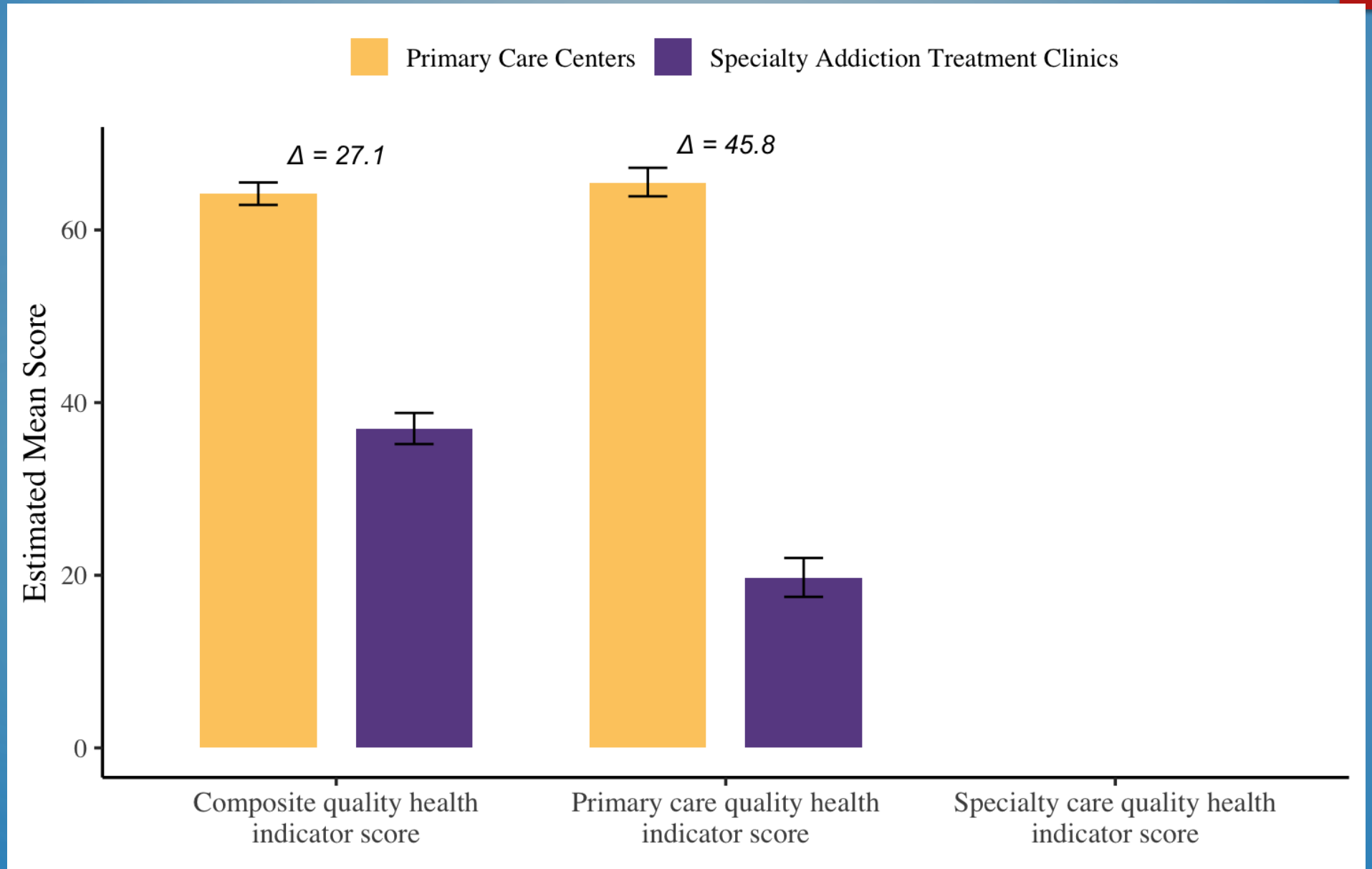

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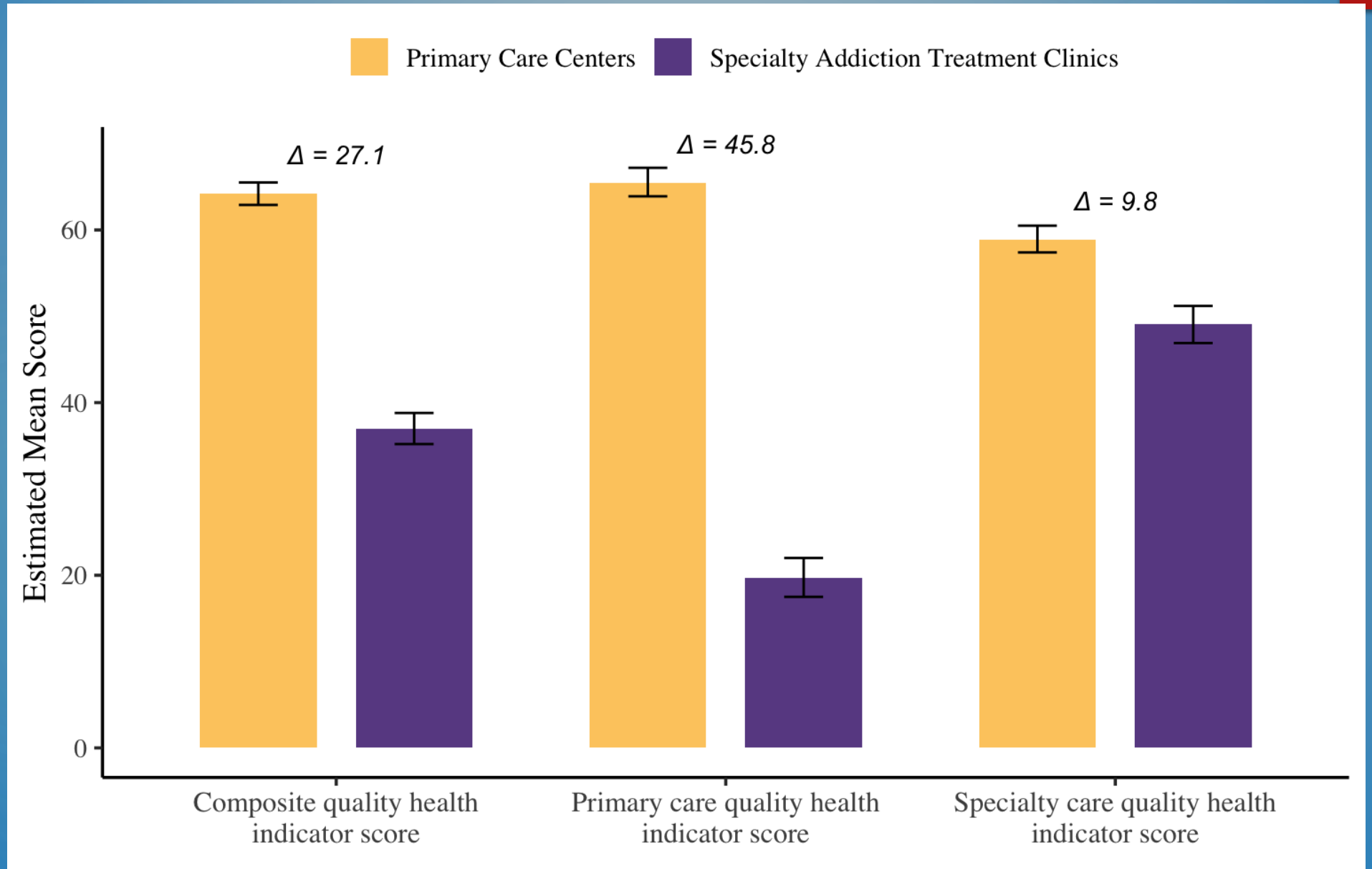

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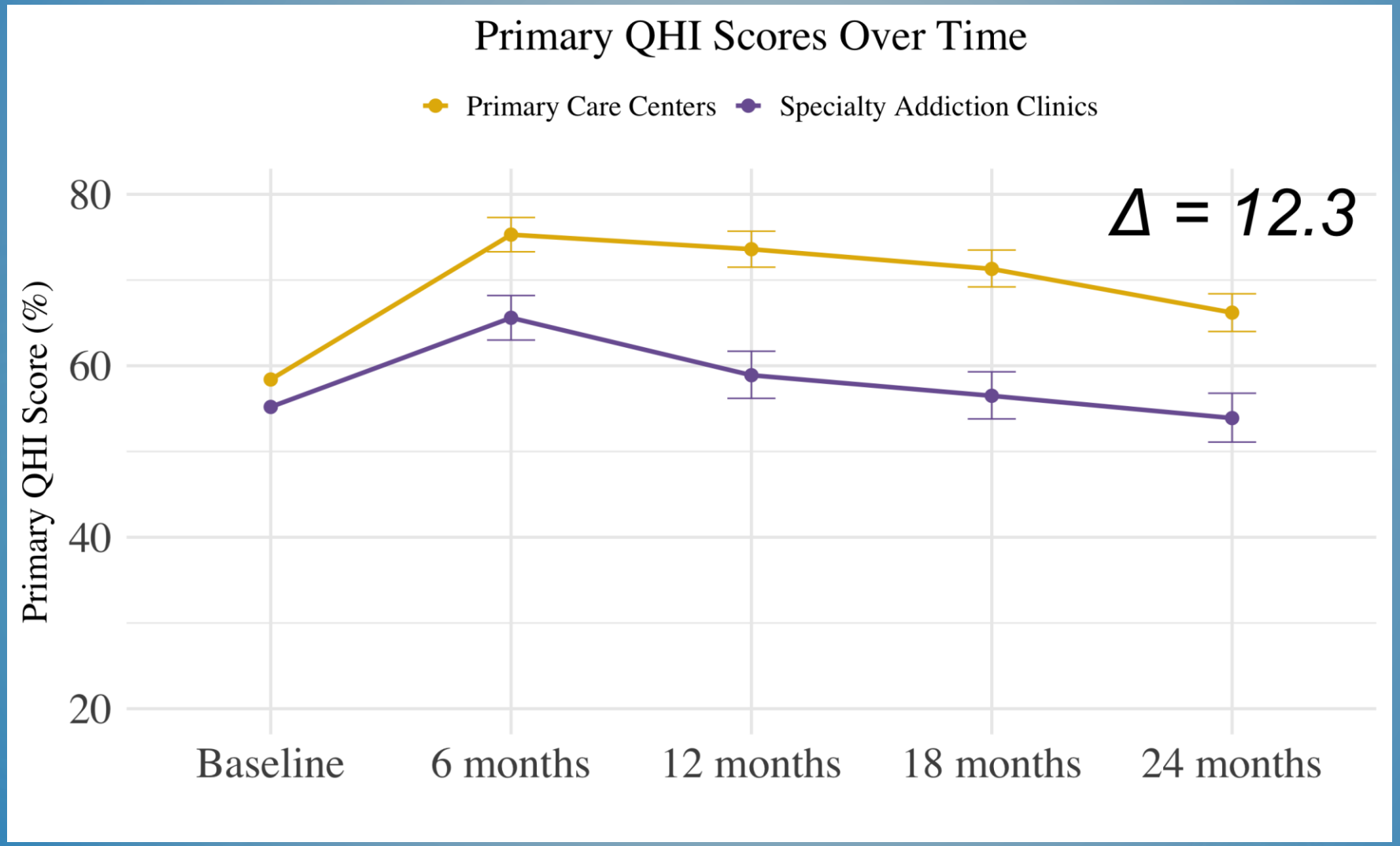
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Real-World Challenge: Outcomes

- Healthcare utilization outcome self-reported
- We had EMR data which was accurate for on-site services (more services in PCCs)
- However, not possible to get EMR data for off-site services (most services for the control arm)
- Finally, healthcare utilization does not directly measure health outcomes

Outcomes: Future Steps

- For more accurate results, unified EMR system between study sites and off-site clinics would be preferable
- Can be set up by creating partnerships with specific clinics that provide off-site services and referring patients to them
- Healthcare indicators instead of healthcare utilization indicators may provide more accurate health outcomes data

Real-World Challenge: Low Engagement

- Limited provider time and inconsistent tele-education participation
- Primary care providers were often overworked, overwhelmed and did not have time to participate in tele-education

Increasing Engagement: Future Steps

- Work with administrative staff to provide protected time for PCC providers to participate in tele-education
- Incentivize participation in tele-education sessions

Real-world challenge: Financial Incentives

- Financial incentives were ineffective/insufficient
- Mid-study, national healthcare changes introduced a capitated payment system in primary care settings and special funding packages for treating specialty conditions like HIV and OUD
- This led to increased baseline physician remuneration

Financial Incentives: Future Steps

- Engage policymakers early and monitor planned reforms
- Design flexibly (scalable, tiered, or adaptable financial models)
- Co-design with providers to ensure relevance and buy-in
- Regularly assess incentive effectiveness mid-study

Real-world challenge: Full-Scale War

- Full-scale Russian invasion in 2022 disrupted care delivery in several sites
- In frontline regions, sites were closed, infrastructure damaged, staff and patients displaced
- Patient displacement caused an increased burden of service demand in Western regions
- Providers and patients were under heightened psychological stress

Mitigating Effects of War: Future Steps

- Plan ahead with mobile or backup sites
- Set up remote tele-services for emergencies
- Set up partnerships with NGOs and local civil society for rapid service shifts
- Ensure that portable and/or virtual patient records are easily shareable across clinics in case of migration

Lessons Learned

- Real-world implementation is multifaceted and challenging
- It is important to design to address foreseeable disruptions
- Some, but not all disruptions can be foreseen
- Being flexible and adapting to the rapidly-changing context is key to successful implementation

Acknowledgements

Study participants

Clinical teams involved in the study

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Yale School of Medicine team

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