



Routine HIV Testing in the Emergency Department: *Tough lessons in sustainability*

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HIV testing in Emergency Departments: UK perspective

- UK guidelines recommend routine testing in general medical settings where local diagnosed HIV prevalence $> 2/1000$ persons ¹
- UK guidance explicitly states Emergency Departments (ED) may *not* be optimal venues for screening:
 - Stringent targets
 - Pressures of work
- But: missed opportunity for diagnosis with unique demographic of attendees and evidence of ED usage in newly diagnosed individuals in UK ²
- HIV Testing in Non-traditional Settings (HINTS) Study included successful ED arm³
- ED based testing has been acceptable and feasible in US and France^{4,5}

1 Guidelines for HIV Testing. British HIV Association; 2008

2 Sullivan, *BMJ*, 2005

3 Rayment, *HIV Med*, 2011

4 d'Almeida, *Arch Intern Med*, 2012

5 Calderon, *AIDS Patient Care STDS*, 2009

HEDsUP North West London

HIV Testing in Emergency Departments: A Universal Offer Program

- *HEDsUP North West London aims to bring the successful outcomes of the Emergency Department (ED) arm of the HIV Testing in Non-traditional Settings (HINTS) Study to a network of Emergency Departments across North West London*



HINTS Study ED Arm: Key Outcomes	
Total eligible attendees	5505
Coverage (%)	4070 (73.9%)
Ineligible (% of all approached)	637 (15.7%)
Total tests offered	3433
Total tests accepted: Uptake (%)	2121 (61.8%)
Reactive HIV tests	6
Newly diagnosed individuals; [HIV seropositivity (per 1000)]	4 [1.9]
Proportion transferred to care	100%

HEDsUP NW London: Aims and Methods

- To sequentially and iteratively generate a model of sustainable HIV testing at each ED site. All adults, not known to have HIV infection, to be offered an HIV test in line with good clinical practice, over fifty-two weeks
- Key methodological principles:
 - *Delivery of testing by ED staff*
 - *Close liaison with local Sexual Health service (training, support, results governance, transfer to care)*
 - *Use of oral fluid HIV testing technology where applicable (see Poster PS6/01)*
 - *Application of sustainability methodology (run charts; PDSA cycles) to each testing service to optimise key outcome measures (test offer rate; test uptake)*



Use of the Oracol + device (left) in the clinical setting requires minimal training, and is highly acceptable to patients



HEDsUP NW London – Progress to date

- Training delivered at all three sites (EDs 1-3)
- Testing has progressed as below:

Emergency Department	Site specific eligibility criteria	Clinical site	Staff group offering testing	HIV Testing Modality
Chelsea and Westminster (ED 1) 60 weeks	Aged 16-65	Majors	Doctors	Oral fluid testing (Oracol+ collection device; Abbott Architect platform)
St Mary's (ED 2) 26 weeks	All ages	Majors and ambulant care	Doctors and Nurses	<i>Ambulant care:</i> Oral fluid testing (Oracol+ collection device; Abbott Architect platform) <i>Majors:</i> Fourth generation serology (Abbott Architect)
Charing Cross Hospital (ED 3) (all fields TBC)	All ages	Majors and ambulant care	TBC	<i>Ambulant care:</i> Oral fluid testing (Oracol+ collection device; Abbott Architect platform) <i>Majors:</i> Fourth generation serology (Abbott Architect)

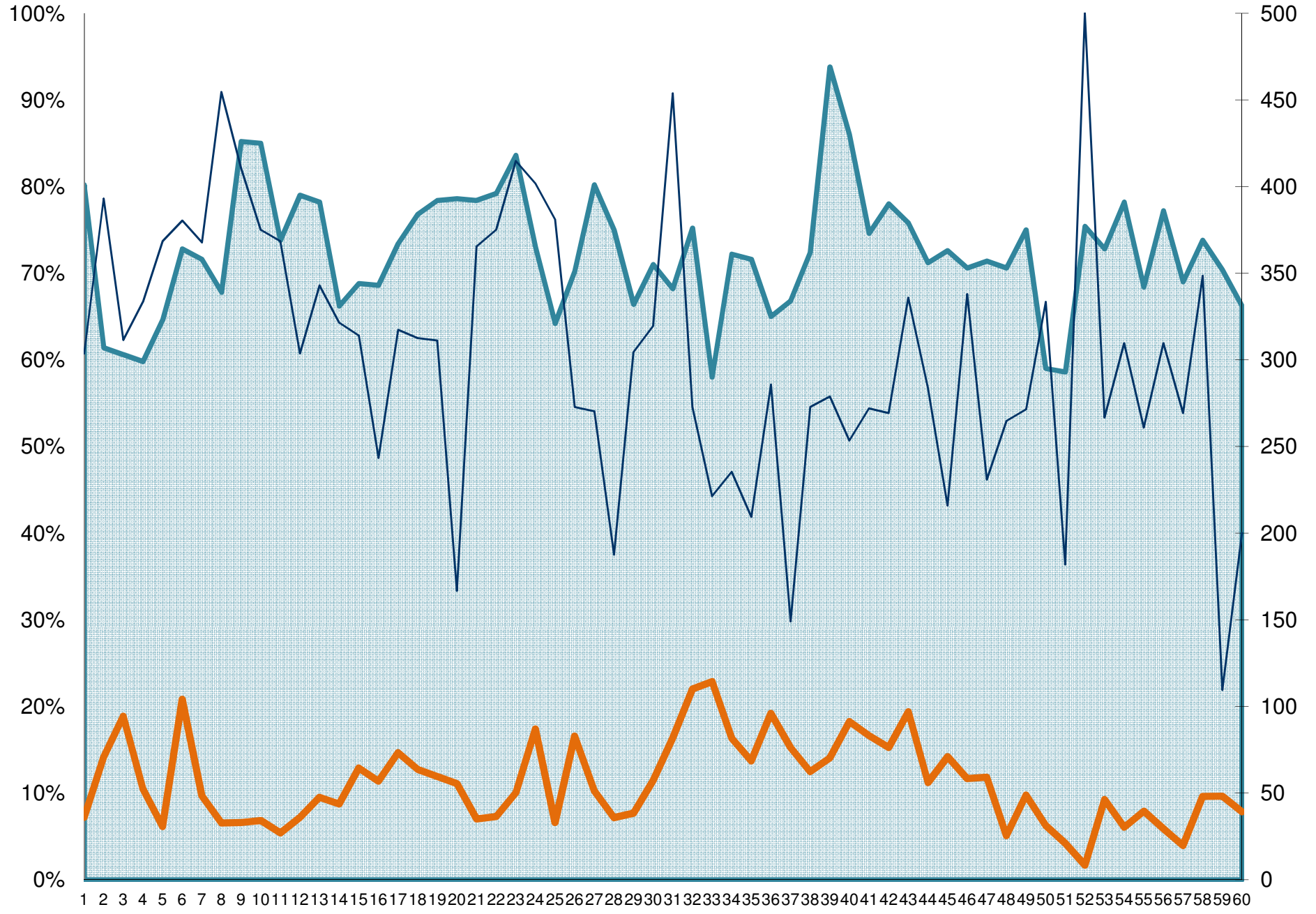
HEDsUP NW London: Overall Results

OUTCOME MEASURE	Chelsea and Westminster (ED 1) (weeks 1-60)
Total age-eligible attendees	21 750
Documented as <i>not offered</i>	1319 (6.1%)
Eligible to be offered	20 431
Offered (Coverage %)	2271 (11%)
Accepted (Uptake %)	1358 (60%)
Reactive tests	5
Confirmed newly diagnosed HIV+ individuals [HIV seropositivity (per 1000)]	3 [2.21]

HEDsUP NW London: Overall Results

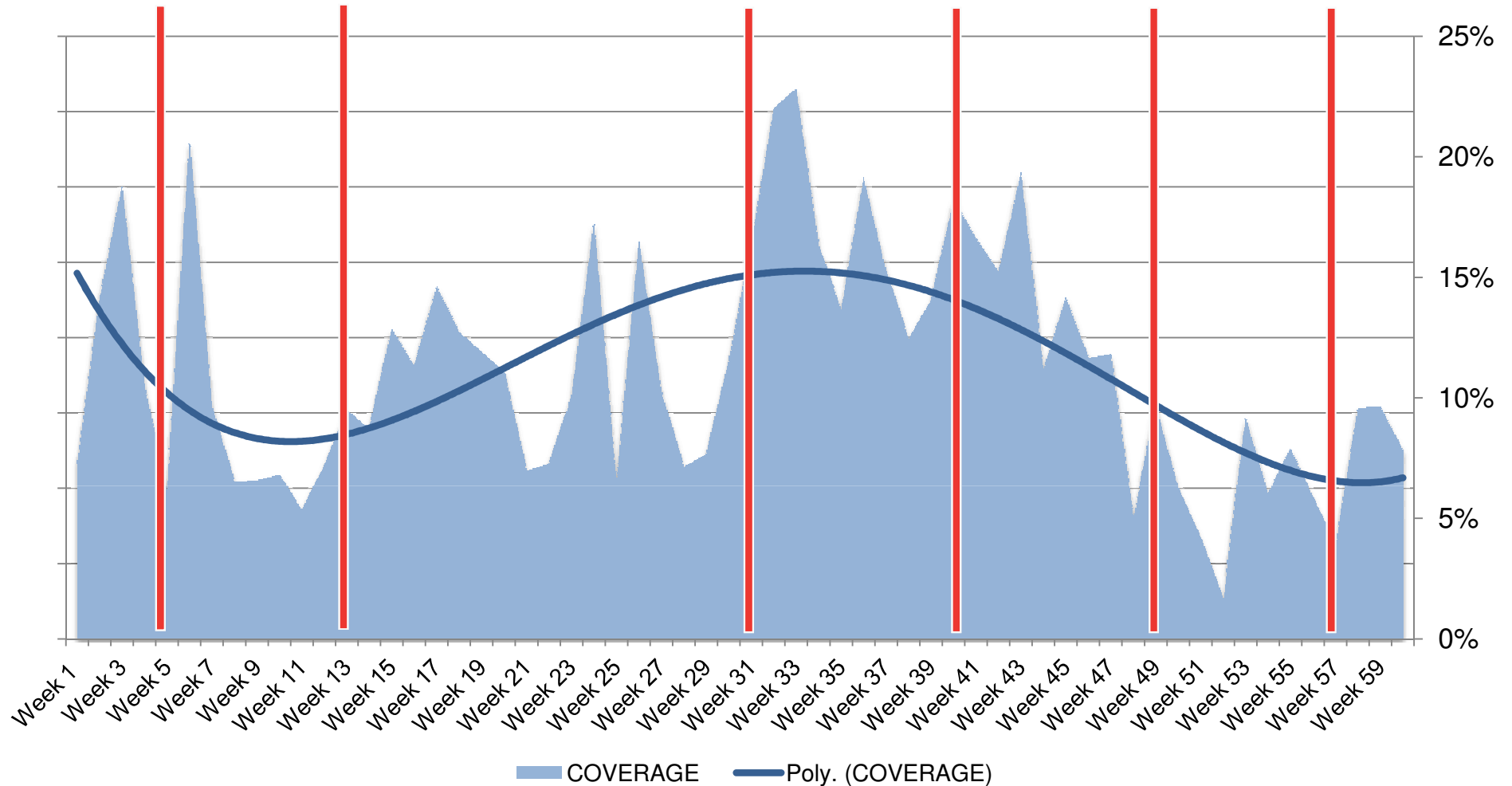
OUTCOME MEASURE	Chelsea and Westminster (ED 1) (weeks 1-60)	St Mary's (ED 2) (weeks 1-26)
Total age-eligible attendees	21 750	15 569
Documented as <i>not offered</i>	1319 (6.1%)	
Eligible to be offered	20 431	
Offered (Coverage %)	2271 (11%)	
Accepted (Uptake %)	1358 (60%)	465
Reactive tests	5	4
Confirmed newly diagnosed HIV+ individuals; [HIV seropositivity (per 1000)]	3 [2.21]	3 [6.45]

ED 1: Overall Activity Weeks 1-60

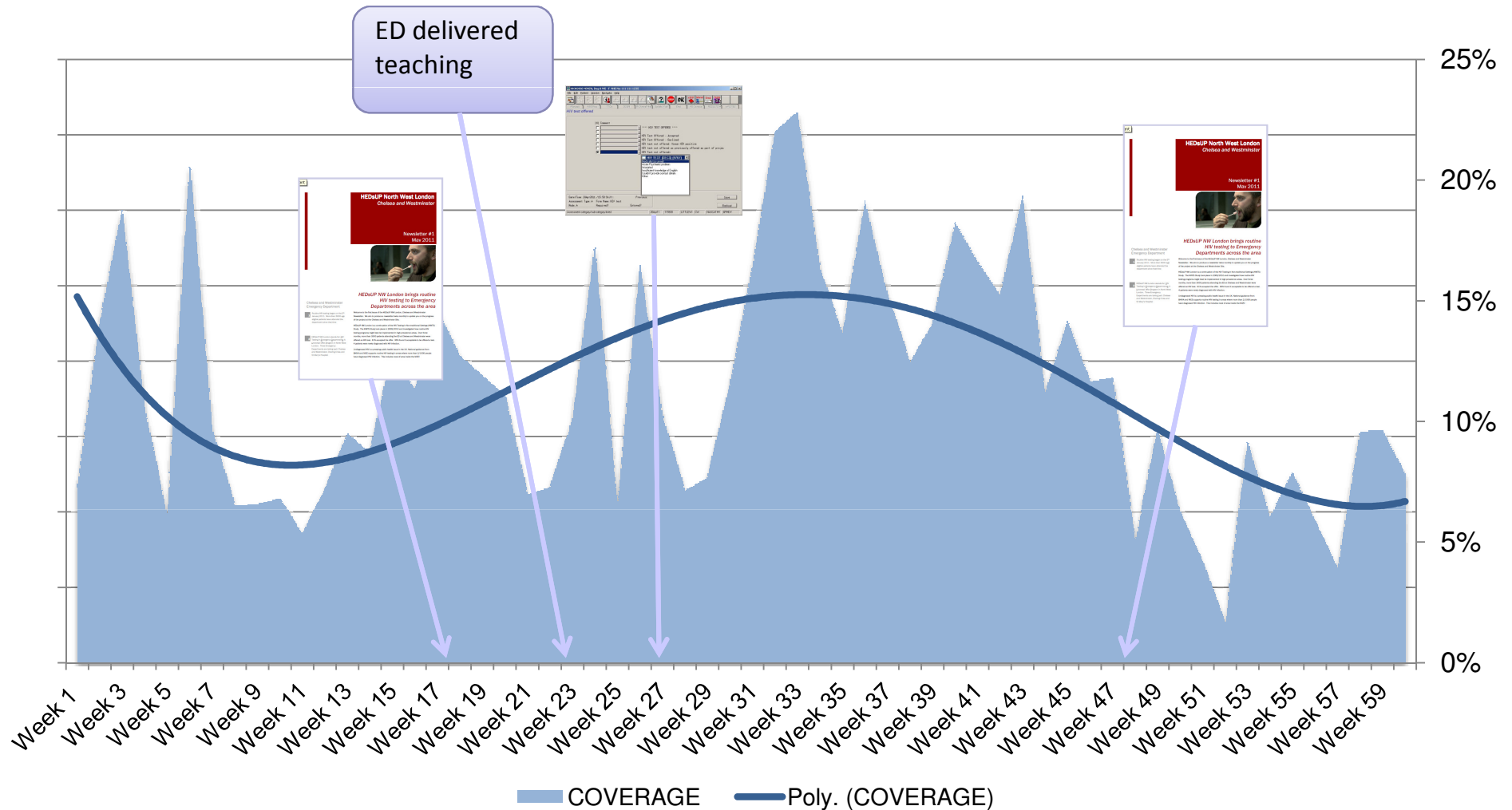


TOTAL AGE ELIGIBLE PATIENTS ATTENDING COVERAGE UPTAKE

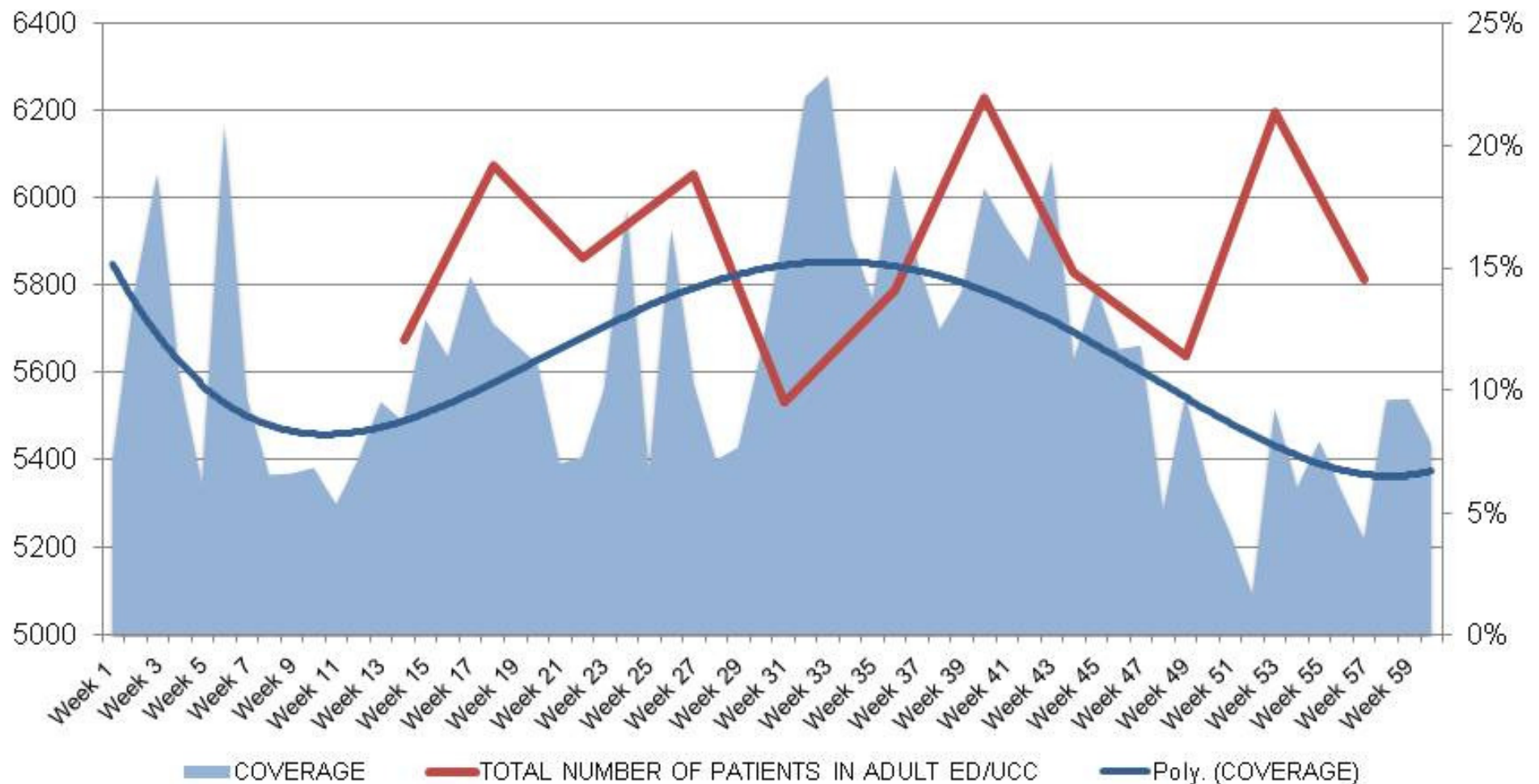
ED 1: Impact of Staff Changeovers



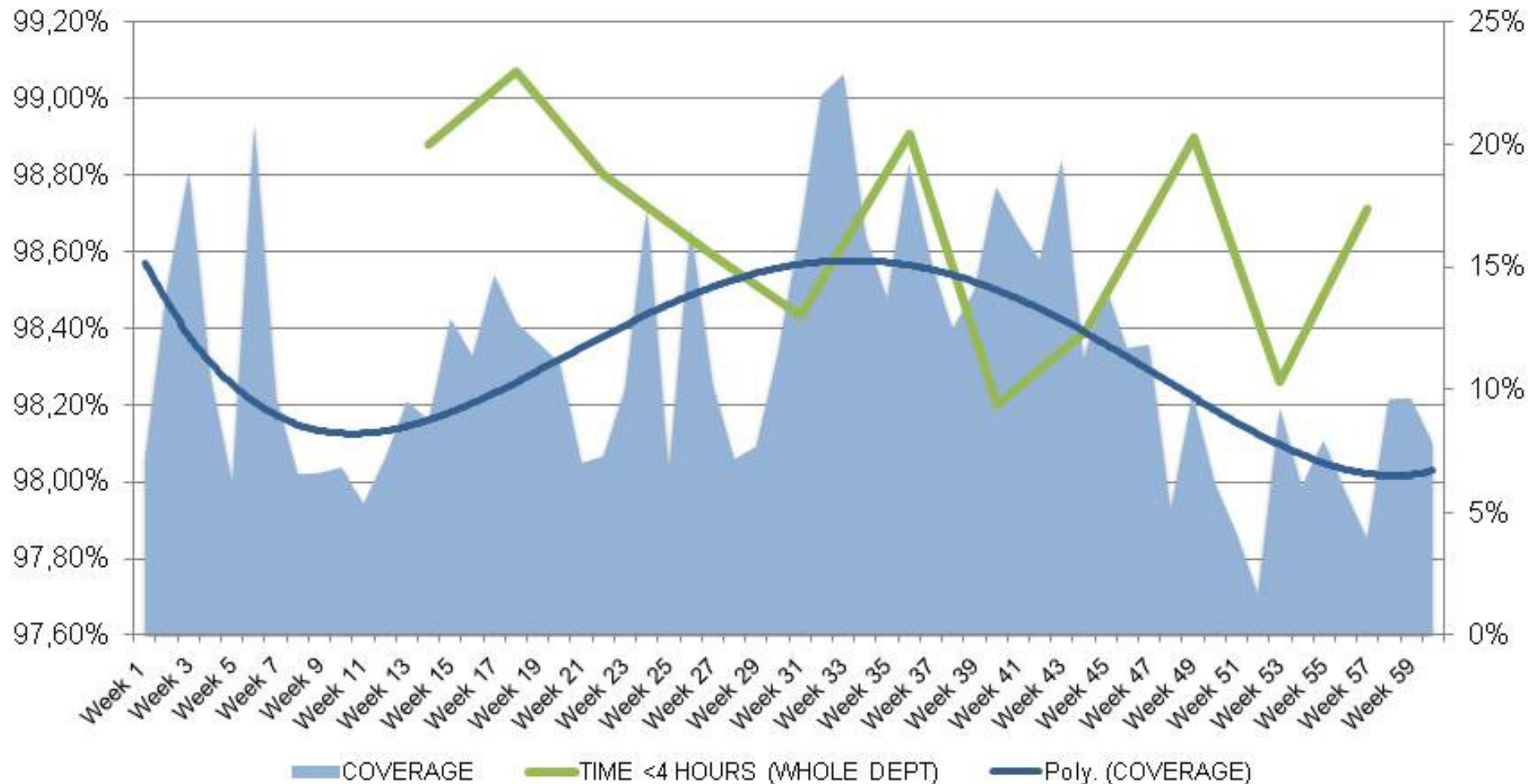
ED 1: Plan-Do-Study-Act Cycles



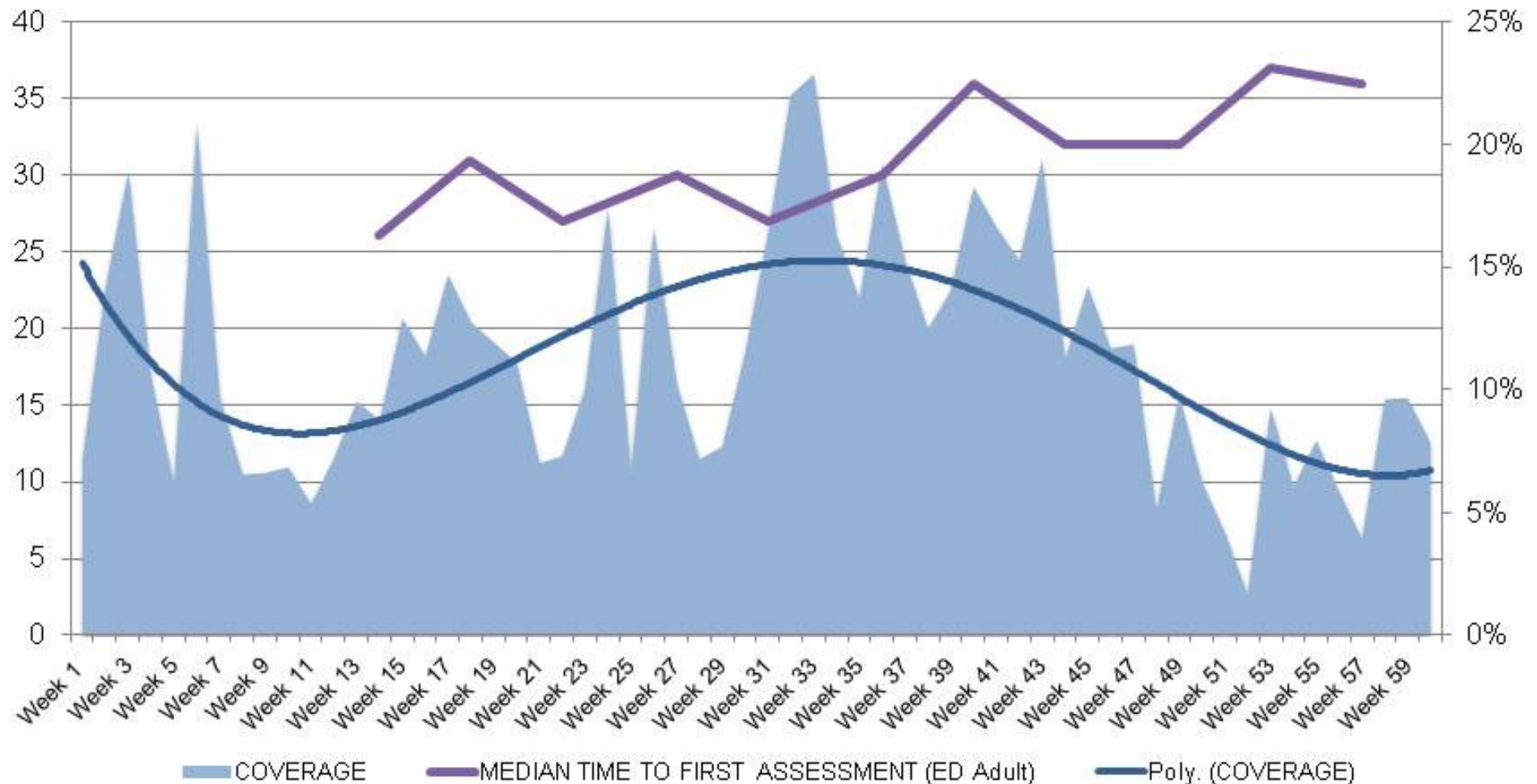
CQI over period: Total attendances



CQI over period: Proportion <4 hour stay in ED



CQI over period: Median time to doctor assessment



Future plans

- Maintain regular staff feedback; fortnightly newsletter
- Changes in delivery model planned in ED 1:
 - Full-time “testing facilitator” posts
- Trust-wide information initiatives
- Roll out of routine HIV testing to other departments across both Trusts: *a paradigm shift*
- Transfer learning to ED 2
- Go live at ED 3
- Cost:benefit modelling

Missed opportunities: SOPHID modelling exercise

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Missed opportunities: SOPHID modelling exercise

OUTCOME MEASURE	Chelsea and Westminster (ED 1) (weeks 1-60)	Modelled seroprevalence over weeks 1-52
Total age-eligible attendees	21 750	
Documented as <i>not offered</i>	1319	
Eligible to be offered	20 431	
Offered (Coverage %)	2271 (11%)	100%
Accepted (Uptake %)	1358 (60%)	100%
Reactive tests	5	
Confirmed newly diagnosed HIV+ individuals; [HIV seropositivity (per 1000)]	3 [2.21]	145

Acknowledgements

- Chelsea and Westminster NHS Foundation Trust
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ED 1: Reasons for non-offer (n=1319)

