

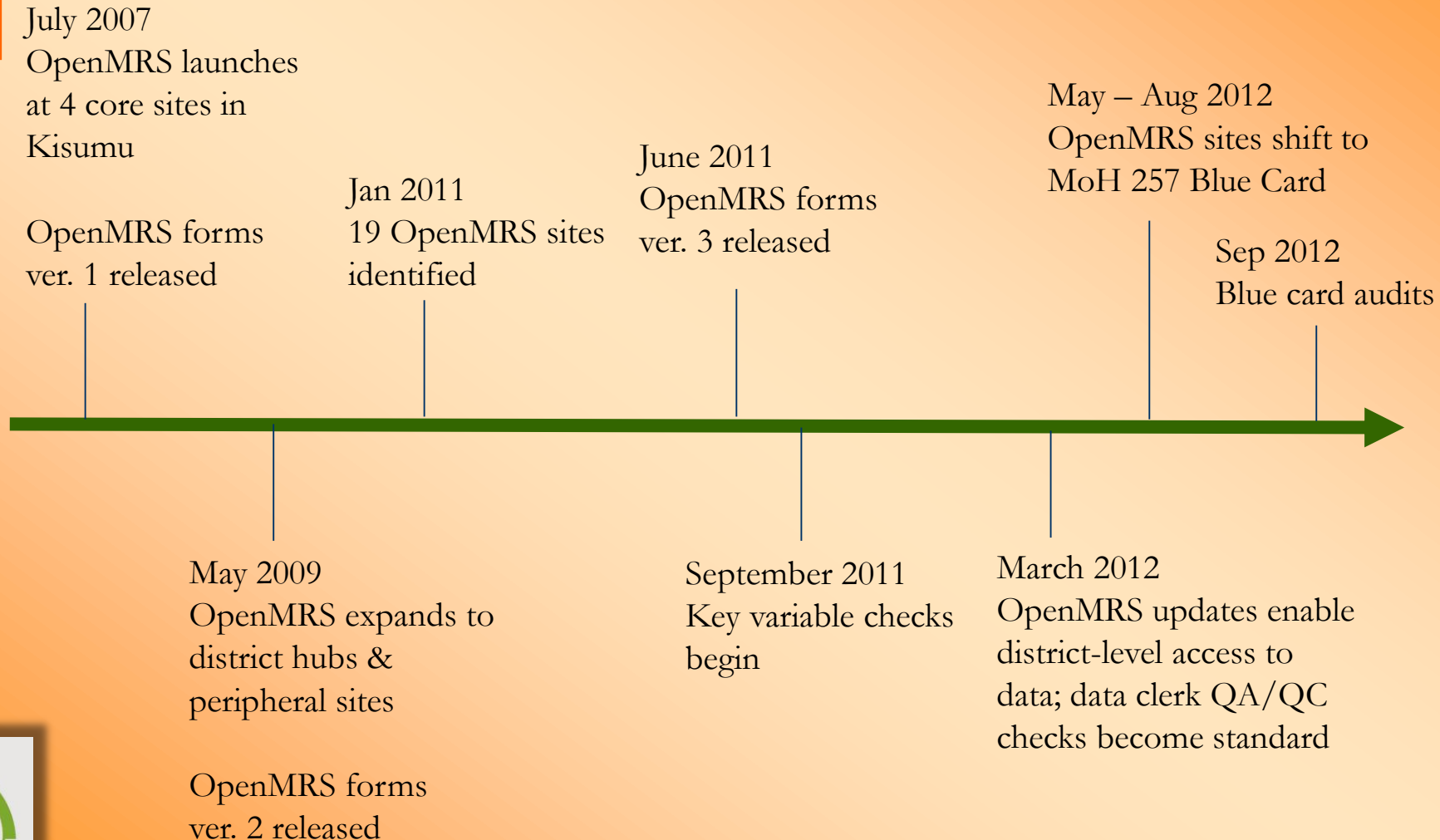


Family AIDS Care and
Education Services

FACES OpenMRS Systems & Data



FACES OpenMRS Timeline



Systems Team



Data Managers
(M&E,
Analysts)

Data Clerks

OpenMRS

Data Quality
officers

Programmers
& IT
Specialists

Data quality

Objectives

- Completeness
 - Forms completed & entered in full
- Accuracy
 - Data fields match paper record

≥95% target

Data quality

Systems

- Automated error prevention
 - Field validations/data parameters, skip patterns

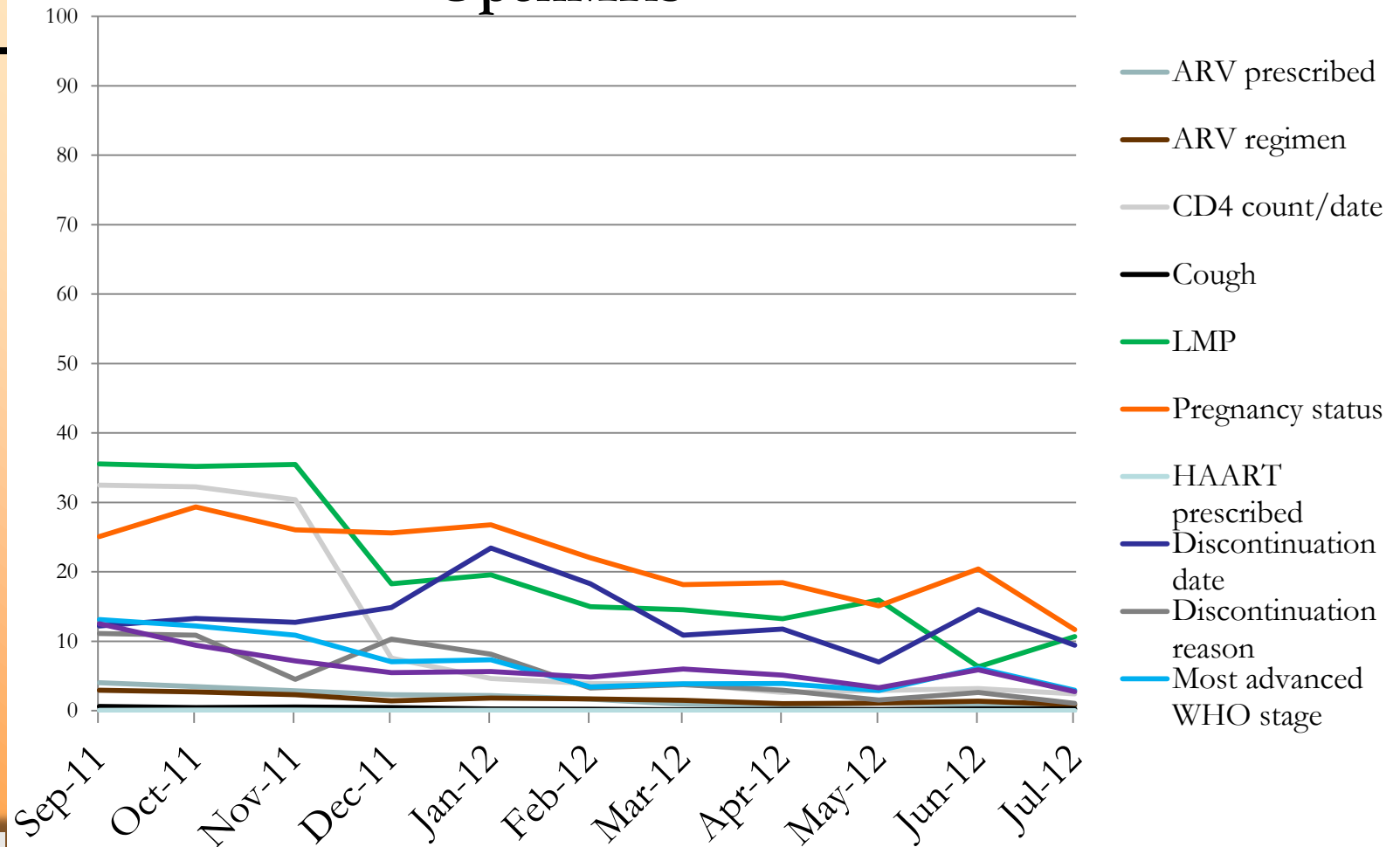
- Monitoring
 - OpenMRS vs. registers (all data; monthly)
 - Daily encounters, enrollments, ART initiations, discontinuations
 - Blue card audits (sample-based at each site; monthly)
 - Rolling key variable queries (all data; monthly)
 - Accuracy audits (sample-based for each clerk; monthly)
 - Data integrity reports (daily)

- Progress reports
 - Monthly feedback to data managers, data clerks, facility in charges, providers

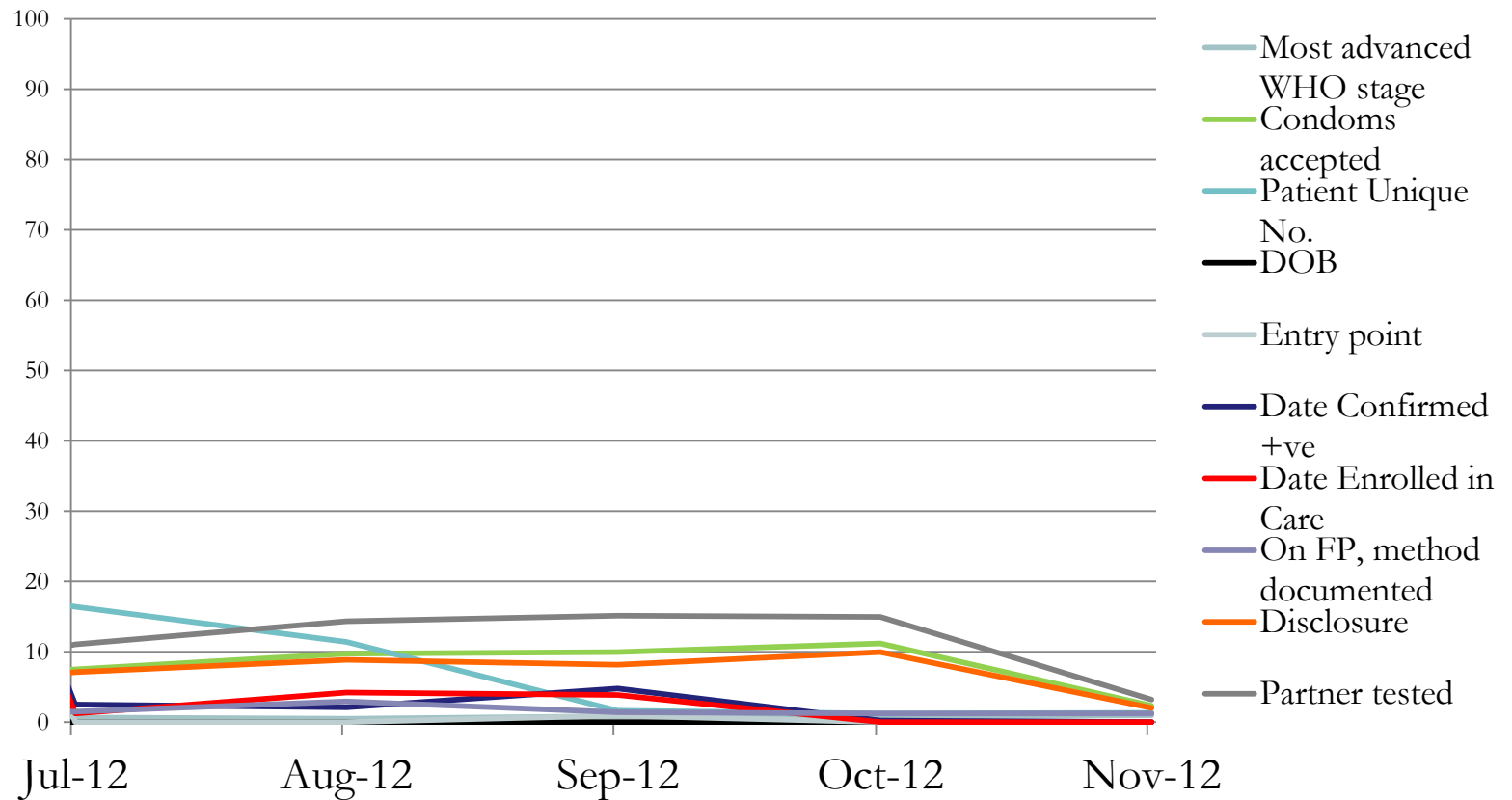
Key Variable Queries

- Database queries of key variable completeness
- Fields phased in and out as targets met ($\geq 95\%$ complete) or forms change
- Current list:
 - Unique Patient Number
 - Eligibility criteria for HAART initiation
 - Discontinuation date and reason
 - ARV drug adherence
 - WHO stage
 - Advanced WHO with supporting OI
 - IPT-ICF form at each visit
 - ARV regimen documented for HAART clients
 - Adherence form for patients on HAART

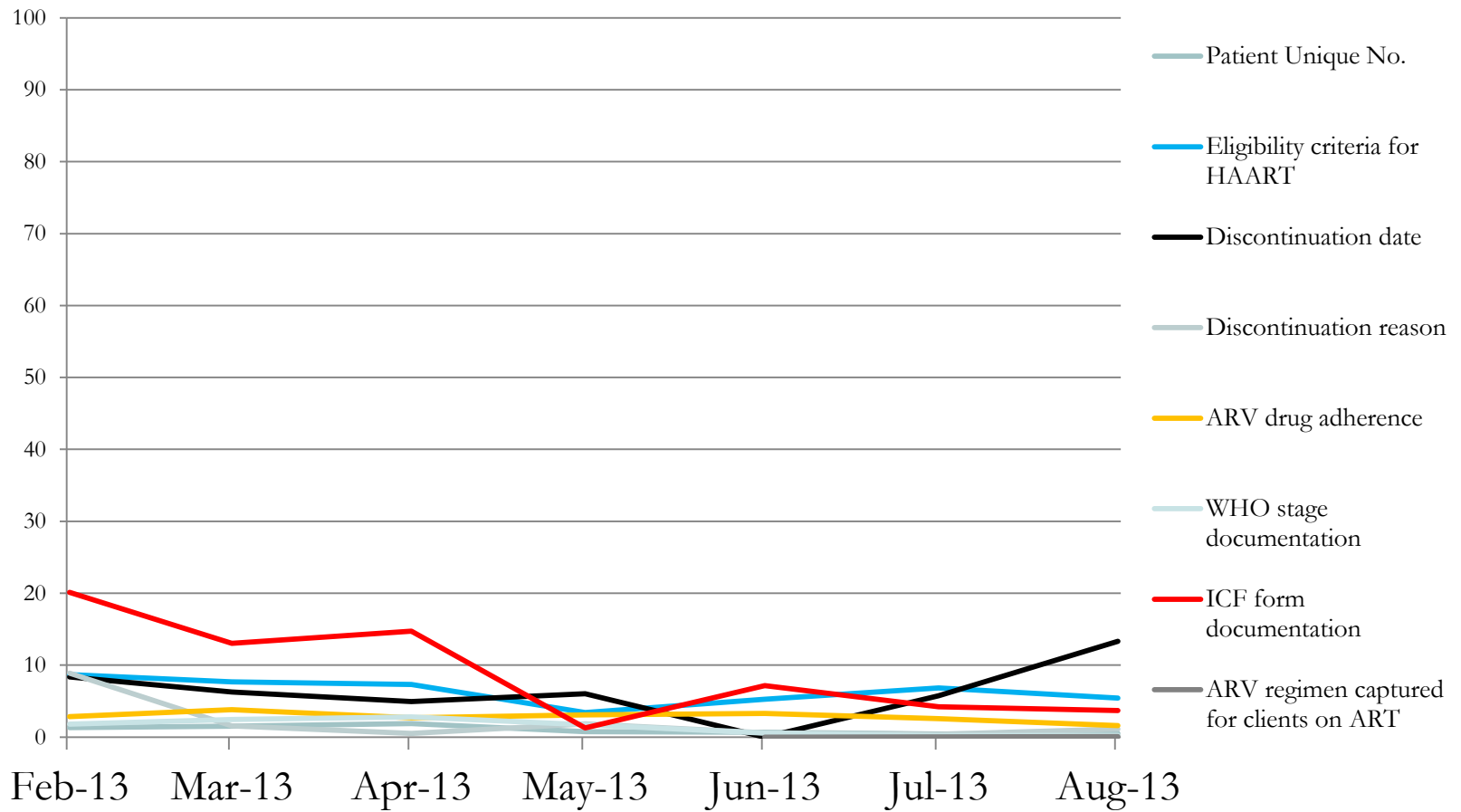
% of encounters missing field value in OpenMRS



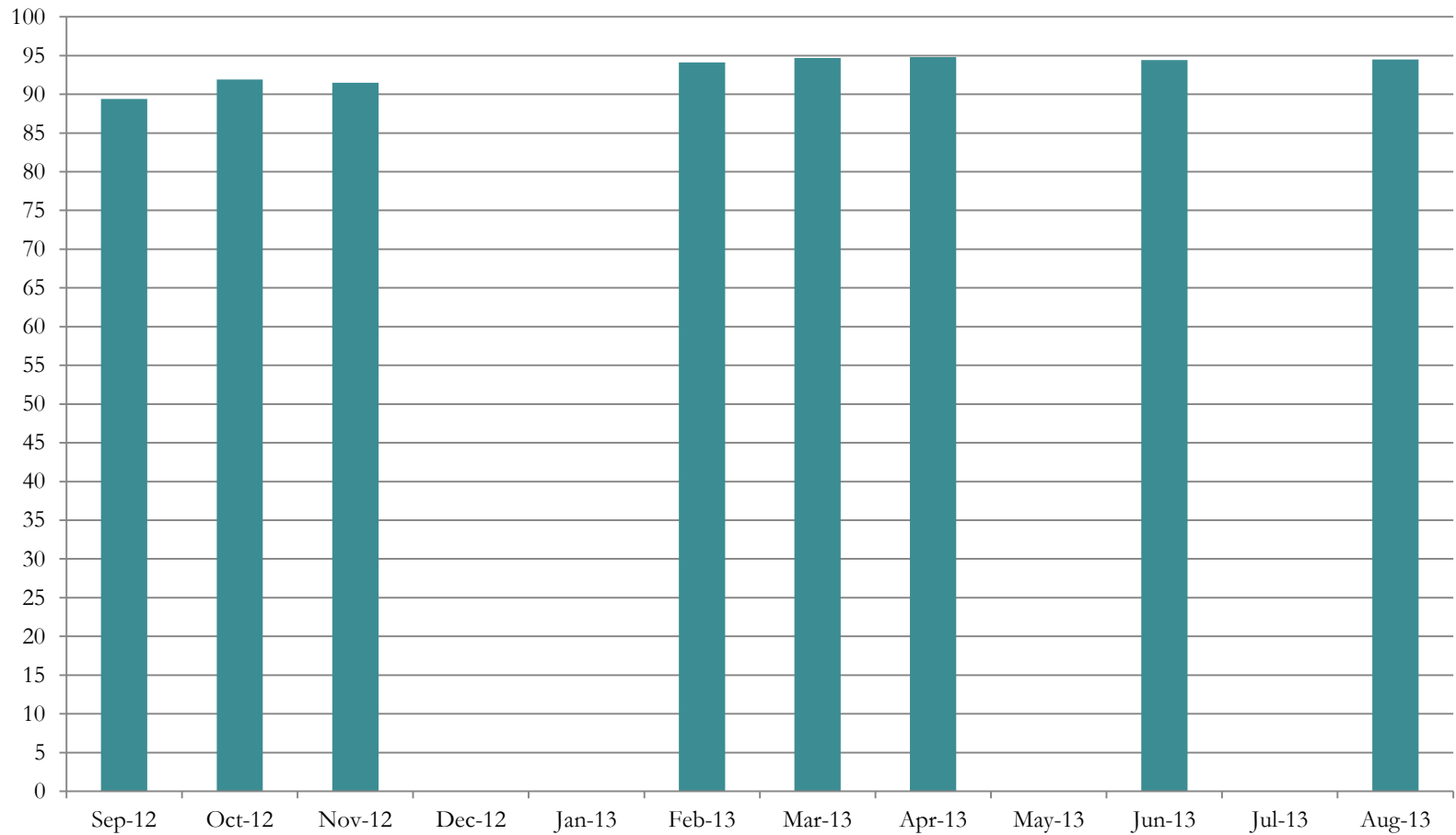
% of encounters missing field value in OpenMRS



% of encounters missing field value in OpenMRS



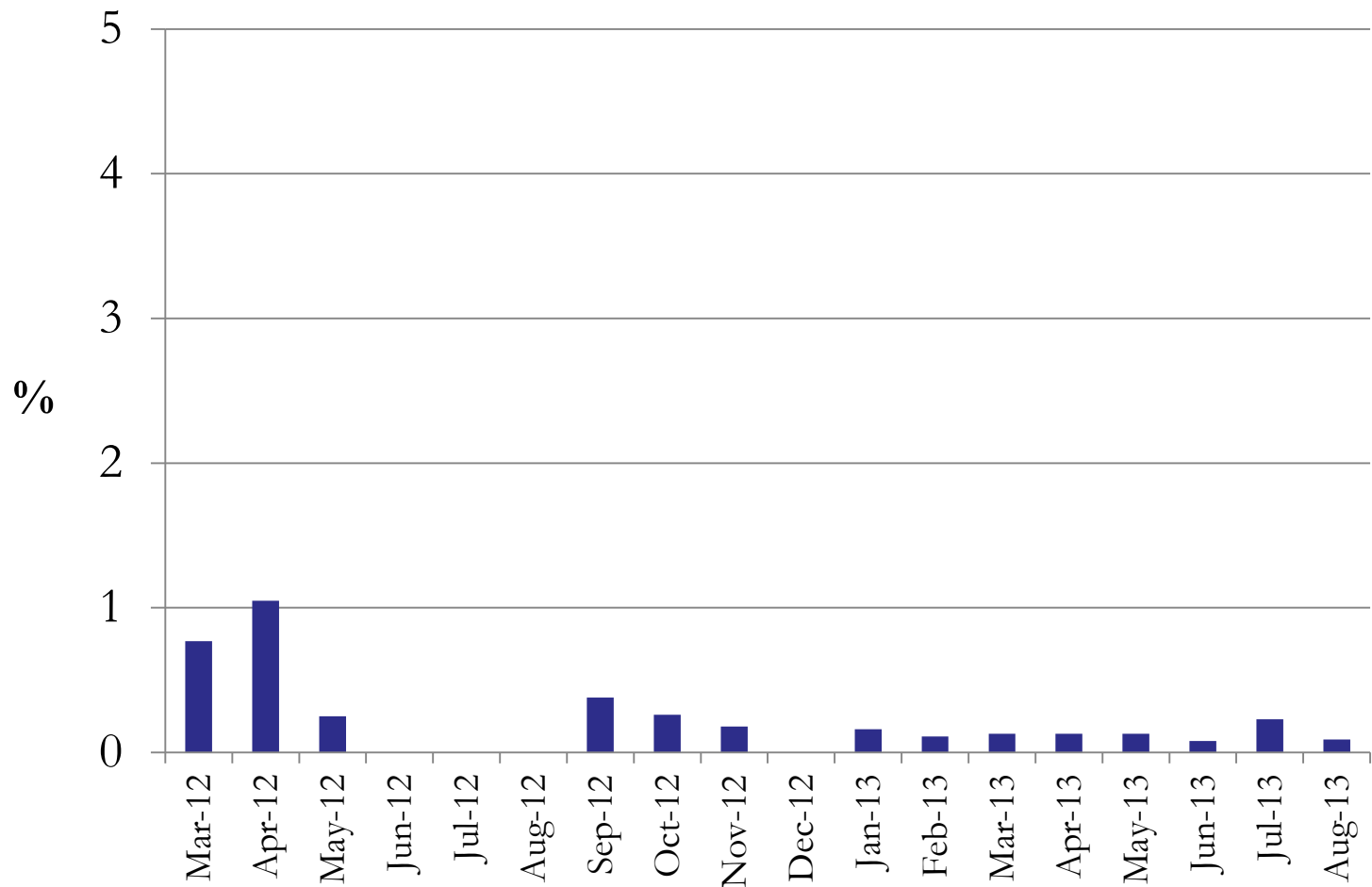
Program-wide Form Completion Audit Results



Data Clerk Accuracy

		Jan-13			
District	Data Clerk Name	No. of forms reviewed	No. of variables	No. of errors	Error rate
Migori					
Migori		20	1060	0	0.00%
Migori		20	1060	2	0.19%
Migori		20	1060	4	0.38%
Migori		20	1088	1	0.09%
Nyatike					
Nyatike		20	1015	1	0.10%
Nyatike		20	1094	0	0.00%
Nyatike		20	1067	0	0.00%
Nyatike		20	1106	0	0.00%
Nyatike		20	1060	1	0.09%
Nyatike		20	1067	1	0.09%
Nyatike		20	1015	1	0.10%
Nyatike			LEAVE		

Program-wide data entry error rates



Research and Evaluation

Evaluation

- “Evaluating the association of treatment buddy (TBy) to ART clinic attendance adherence in Kisumu, Kenya.” Kibaara, Blat et al. ICASA 2013, NACC 2013, UoN 2013. Manuscript under development.
- “The effects of changes in Kenya HIV guidelines on proportion of patients on ART and patient characteristics at initiation in Lumumba Health Center in western Kenya.” Oyaro, Armes, et al. ICASA 2013, UoN 2013.

Research

- Cost, cost-efficiency and cost-effectiveness of integrated family planning and HIV services. Shade, Kevany, et al. AIDS 2013, 27 (Suppl 1): S87-S92.
- Integration of family planning services into HIV care and treatment in Kenya: a cluster-randomized trial. Grossman, Onono, et al. AIDS 2013, 27 (Suppl 1): S87-S92.

Ongoing Development

- Mother/baby documentation of linkages
 - IeDEA sites
- SEARCH study
 - 22 sites total/18 new OpenMRS sites
- KenyaEMR
 - National OpenMRS implementation mandated by MoH, developed by I-TECH
 - Point-of-care system with retrospective entry capabilities
 - Plan to pilot retrospective version at SEARCH site late February

Acknowledgements

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 - Mary Armes, Data Analyst
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 - Evelyne Owenga, Data Quality Officer
 - June Jelagat, Assistant Data Quality Officer
 - Edwin Mulwa, Senior Developer
 - Erick Wafula, Developer