Extended Tables for Routine Data Analysis

Extended Table 6a: Summaries for ED Attendances

	Inside-Integrated 1	Inside-Parallel 1	Outside-Onsite 1	Control 1
Data Quality	A1	A1	A2 [Note 1]	A1
Trend β_0 β_1 Δ	2.988 10.760 7.771***	0.008 3.034 3.026***	1.092 -5.430 n/a	2.812
Seasonality β_s	118.4	88.9	n/a	81.7
ACF values r1; r2; r3	0.356; 0.177; 0.100	0.409; 0.171; 0.051	n/a; n/a; n/a	0.497; 0.258; 0.072
Site	Inside-Integrated 2	Inside-Parallel 2	Outside-Onsite 2	Control 2
Data Quality	A1	A2 [Note 2]	A3 [Note 4]	A2 [Note 6]
Trend β_0 β_1 Δ	-1.037 _1.116 -0.079	-3.681 2.716 6.398	n/a n/a n/a	0.354
Seasonality β	71.6	19.6	n/a	66.2
ACF values r1; r2; r3	0.417; 0.304; 0.231	0.337; -0.044; 0.237	n/a; n/a; n/a	0.460; 0.348; 0.326
Site	Inside-Integrated 3	Inside-Parallel 3	Outside-Onsite 3	Control 3
Data Quality	A2 [Note 5]	A2 [Note 3]	A1	A1
Trend β_0 β_1 Δ	n/a 2.604 n/a	10.853 5.719 -5.134	1.716 15.518 13.442***	-1.236
Seasonality				

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β_s	316.8	54.8	93.2	145.9
ACF values r1; r2; r3	0.372; 0.158; 0.029	0.537; 0.209; 0.009	0.559; 0.326; 0.175	0.453; 0.197; 0.055
Site		Inside-Parallel 4		
Data Quality		A1		
Trend β_0 β_1 Δ		0.950 6.732 5.782		
Seasonality β_s		73.4		
ACF values r1; r2; r3		0.400; 0.201; 0.042		

[Note 1] Data appear to have two change points, dividing into three phases; the second change point coincides with the intervention point. Summaries given are based on data after the first change point; that is, from t=23 onwards.

[Note 2] Data anomalies observed in pre-intervention; data from t=99 onwards appear to be A1 quality; reported summaries are based on analyses of this subset.

[Note 3] Data contain some potentially anomalous values around the intervention point; reported summaries based on data to t=44 and from t=57.

[Note 4] Multiple issues with data availability; data consistency and provenance.

[Note 5] Only post-intervention data available; study site code issues in routine data

[Note 6] Data show one change point; summaries are based on data up to t=182, before this change point.

Supplementary File 3

Extended Table 7a Summaries for Re-attendances

Site	Inside-Integrated 1	Inside-Parallel 1	Outside-Onsite 1	Control 1
Data Quality	A1	A1	A2	A1
Trend β_0 β_1 Δ	0.009 0.027 0.018**	-0.006 0.009 0.015***	0.005 0.080 n/a	0.009
Seasonality β_s	0.087	0.016	n/a	0.043
ACF values r1; r2; r3	0.123; -0.048; 0.073	0.083; 0.109; 0.043	n/a; n/a; n/a	0.151; 0.088; 0.079
Site	Inside-Integrated 2	Inside-Parallel 2	Outside-Onsite 2	Control 2
Data Quality	A1 [Note 3]	A2	A3	A2
Trend β_0 β_1 Δ	0.002 -0.059 -0.061***	-0.040 0.008 0.048	n/a n/a n/a	0.027
Seasonality β	-0.191	0.247	n/a	-0.196
ACF values r1; r2; r3	0.153; 0.092; 0.082	0.337; -0.044; 0.237	n/a; n/a; n/a	0.542; 0.540; 0.457
Site	Inside-Integrated 3	Inside-Parallel 3	Outside-Onsite 3	Control 3
Data Quality	A2	A2	A1 [Note 2]	A1 [Note 1]
Trend β_0 β_1 Δ	n/a 0.004 n/a	-0.015 0.006 0.021***	0.021 0.185 0.164***	-0.001
Seasonality β_s	0.056	0.035	-0.185	0.732
ACF values				

Supplementary File 3

r1; r2; r3	0.168; 0.019; -0.043	0.124; 0.196; 0.016	0.537; 0.475; 0.417	0.636; 0.586; 0.529
Site		Inside-Parallel 4		
Data Quality		A1		
Trend β_0 β_1 Δ		-0.004 0.131 0.135***		
Seasonality β_s		0.137		
ACF values r1; r2; r3		0.393; 0.188; 0.099		

[Note 1] no obvious linear trend overall, but ACF on de-trended/de-seasonalised data indicates some evidence of non-stationarity.

[Note 2] Data indicates non-stationarity at the intervention point, which may be due to a change in recording practice; ACF of de-trended/de-seasonalised data indicates evidence of non-stationarity.

[Note 3] Data excluded from analysis for t=197 onwards, due to quality issues.

Extended Table 8a: Summaries for Hospital admissions (EDD)

Site	Inside-Integrated 1	Inside-Parallel 1	Outside-Onsite 1	Control 1
Data Quality	A1 [Note 1]	A1	A2	A1
Trend β_0 β_1 Δ	0.010 0.142 0.132**	0.009 -0.001 -0.010	0.030 0.107 n/a	0.013
Seasonality β_s	-2.235	-1.613	n/a	-1.156
ACF values r1; r2; r3	0.582; 0.493; 0.373	0.496; 0.359; 0.307	n/a; n/a; n/a	0.428; 0.389; 0.343
Site	Inside-Integrated 2	Inside-Parallel 2	Outside-Onsite 2	Control 2
Data Quality	A1 [Note 2]	A2	A3	A2
Trend β_0 β_1 Δ	-0.023 -0.069 -0.046	0.045 0.013 -0.032	n/a n/a n/a	0.053
Seasonality β	-2.250	-1.047	n/a	-1.648
ACF values r1; r2; r3	0.570; 0.492; 0.453	0.472; 0.365; 0.235	n/a; n/a; n/a	0.589; 0.514; 0.486
Site	Inside-Integrated 3	Inside-Parallel 3	Outside-Onsite 3	Control 3
Data Quality	A2	A2 {Note 3]	A1	A1
Trend β_0 β_1 Δ	n/a -0.019 n/a	-0.121 0.039 0.159***	-0.013 -0.062 -0.049	0.019
Seasonality β_s	-1.836	-0.459	-1.241	-1.501
ACF values r1; r2; r3	0.862; 0.779; 0.733	0.334; 0.269; 0.150	0.849; 0.776; 0.698	0.463; 0.256; 0.172

Supplementary File 3

Site		Inside-Parallel 4		
Data Quality		A1		
Trend β_0 β_1 Δ		0.019 -0.319 -0.339**		
Seasonality β_s		-0.754		
ACF values r1; r2; r3		0.711; 0.523; 0.456		

[Note 1] Data only included in analysis for t=182 and before; so, a very short post-intervention period

[Note 2] Data only included in analysis for t=195 and before

[Note 3] Data only included in analysis for t=189 and before

Supplementary File 3

Extended Table 9a: Summaries for Medical Investigation Undertaken (Proportion)

Site	Inside-Integrated 1	Inside-Parallel 1	Outside-Onsite 1	Control 1
Data Quality	A1	A1	A2 [Note 1]	A1
Trend β_0 β_1 Δ	-0.001 0.121 0.122*	-0.007 -0.012 -0.005	0.048 0.238 0.191	0.089
Seasonality β_s	-0.305	-0.620	-0.486	-0.477
ACF values r1; r2; r3	0.788; 0.673; 0.602	0.461; 0.410; 0.375	0.297; 0.257; 0.232	0.868; 0.807; 0.743
Site	Inside-Integrated 2	Inside-Parallel 2	Outside-Onsite 2	Control 2
Data Quality	A1	A2	A3	A2
Trend β_0 β_1 Δ	0.028 -0.145 -0.173	0.003 0.148 0.145	n/a n/a n/a	0.020
Seasonality β	-1.862	0.419	n/a	-0.300
ACF values r1; r2; r3	0.539; 0.439; 0.428	0.489; 0.118; -0.066	n/a; n/a; n/a	0.864; 0.772; 0.693
Site	Inside-Integrated 3	Inside-Parallel 3	Outside-Onsite 3	Control 3
Data Quality	A2	A2	A1]	A1 {Note 2}
Trend β_0 β_1 Δ	0.045	-0.116 -0.020 0.096***	-0.026 -0.025 0.001	0.000
Seasonality β_s	-1.737	0.554	0.230	-0.336
ACF values				

Supplementary File 3

r1; r2; r3	0.682; 0.576; 0.523	0.703; 0.513; 0.388	0.841; 0.739; 0.648	0.815; 0.718; 0.626
Site		Inside-Parallel 4		
Data Quality		A1		
Trend β_0 β_1 Δ		0.010 -0.835 -0.845***		
Seasonality β_s		0.226		
ACF values r1; r2; r3		0.769; 0.663; 0.558		

[Note 1] Two further data points (t=203, t-204) excluded

[Note 2] Value of β_0 is +0.000246

Supplementary File 3

Extended Table 10a: Summaries for Medical Treatment Delivered (Proportion)

Site	Inside-Integrated 1	Inside-Parallel 1	Outside-Onsite 1	Control 1
Data Quality	A1	A1	A2	A1
Trend β_0 β_1 Δ	0.075 -0.997 -1.072***	0.087 -0.312 -0.399***	0.361 -0.104 -0.465	0.170
Seasonality β_s	2.159	1.202	-0.375	-0.709
ACF values r1; r2; r3	0.911; 0.851; 0.792	0.830; 0.735; 0.645	0.886; 0.836; 0.768	0.881; 0.830; 0.788
Site	Inside-Integrated 2	Inside-Parallel 2	Outside-Onsite 2	Control 2
Data Quality	A1	A2 [Note 1]	A3	A2
Trend β_0 β_1 Δ	0.058 0.040 -0.019	0.419 -0.277 -0.696	n/a n/a n/a	0.074
Seasonality β	-0.386	4.457	n/a	-0.971
ACF values r1; r2; r3	0.796; 0.687; 0.600	0.868; 0.703; 0.568	n/a; n/a; n/a	0.885; 0.811; 0.728
Site	Inside-Integrated 3	Inside-Parallel 3	Outside-Onsite 3	Control 3
Data Quality	A2 {Note 2]	A2 {Note 3]	A1	A1
Trend β_0 β_1 Δ	0.373	0.151 -0.115 -0.266***	0.015 -0.615 -0.630	-0.001
Seasonality β_s	0.559	0.151	0.737	0.163
ACF values r1; r2; r3	0.954; 0.913; 0.861	0.878; 0.804; 0.746	0.747; 0.678;	0.536; 0.424; 0.371

Supplementary File 3

				0.584	
Site		Inside-Parallel 4			
Data Quality		A1			
Trend β_0 β_1 Δ		0.022 -0.240 -0.262			
Seasonality β_s		0.794			
ACF values r1; r2; r3		0.727; 0.631; 0.565			

[Note 1] Evidence of further data issues

[Note 2] Strong evidence of data issues – data seems to fall into two distinct phases, with data reasonable constant within each phase. One plausible explanation for this is a change in recording practice; a single overall linear trend is not an adequate summary of the data here.

[Note 3] Evidence of further data issues

Supplementary File 3

Extended Table 11a: Summaries for Average Time In ED (Minutes)

Site	Inside-Integrated 1	Inside-Parallel 1	Outside-Onsite 1	Control 1
Data Quality	A1	A1	A2	A1
Trend β_0 β_1 Δ	0.197 0.246 0.049	0.139 0.324 0.185	0.294 0.578 0.384	0.126
Seasonality β_s	-2.36	-3.02	-3.04	-12.90
ACF values r1; r2; r3	0.687; 0.609; 0.549	0.360; 0.318; 0.220	0.504; 0.249; 0.107	0.441; 0.341; 0.272
Site	Inside-Integrated 2	Inside-Parallel 2	Outside-Onsite 2	Control 2
Data Quality	A1 [Note 1]	A2	A3	A2
Trend β_0 β_1 Δ	-0.020 0.029 0.050	0.922 0.119 -0.803*	n/a n/a n/a	0.543
Seasonality β	-4.48	-7.43	n/a	-14.14
ACF values r1; r2; r3	0.083; 0.051; 0.090	0.236; 0.145; 0.057	n/a; n/a; n/a	0.505; 0.462; 0.365
Site	Inside-Integrated 3	Inside-Parallel 3	Outside-Onsite 3	Control 3
Data Quality	A2	A2	A1	A1
Trend β_0 β_1 Δ	0.230	0.131 0.338 0.208	0.231 -0.424 -0.605***	0.486
Seasonality β_s	-3.99	-9.58	-7.10	-18.86
ACF values r1; r2; r3	0.389; 0.108; 0.118	0.501; 0.383; 0.163	0.406; 0.378;	0.467; 0.418; 0.275

Supplementary File 3

				0.193	
Site		Inside-Parallel 4			
Data Quality		A1			
Trend β_0 β_1 Δ		0.368 0.583 0.216			
Seasonality β_s		-11.94			
ACF values r1; r2; r3		0.463; 0.255; 0.239			

[Note 1] Further data issues; two points excluded (t=12, t=13)

Extended Table 12a: Summaries for Average Hospital Length Of Stay (Days)

Site	Inside-Integrated 1	Inside-Parallel 1	Outside-Onsite 1	Control 1
Data Quality	A1 [Note 1]	A1	A2	A1
Trend β_0 β_1 Δ	-0.002 0.000 0.002	-0.009 0.007 0.015***	0.002 -0.008 -0.010**	-0.005
Seasonality β_s	-0.005	-0.063	-0.004	-0.001
ACF values r1; r2; r3	0.207; -0.015; -0.035	0.459; 0.274; 0.236	0.514; 0.314; 0.248	0.293; 0.059; -0.013
Site	Inside-Integrated 2	Inside-Parallel 2	Outside-Onsite 2	Control 2
Data Quality	A1 [Note 2]	A2	A3	A2
Trend β_0 β_1 Δ	0.000 0.007 0.007	-0.008 -0.003 0.005	n/a n/a n/a	0.004
Seasonality β	-0.084	0.013	n/a	-0.167
ACF values r1; r2; r3	0.172; -0.084; 0.022	0.472; 0.044; -0.094	n/a; n/a; n/a	0.463; 0.255; 0.233
Site	Inside-Integrated 3	Inside-Parallel 3	Outside-Onsite 3	Control 3
Data Quality	A2	A2 {Note 3}	A1 {Note 4}	A1
Trend β_0 β_1 Δ	-0.003	-0.014	0.002 0.000 -0.001	-0.002
Seasonality β_s	0.021	0.002	0.000	-0.171

Supplementary File 3

ACF values r1; r2; r3	0.455; 0.163; 0.122	0.843; 0.750; 0.672	0.386; 0.203; 0.035	0.235; 0.265; 0.186
Site		Inside-Parallel 4		
Data Quality		A1		
Trend β_0 β_1 Δ		-0.002 -0.054 -0.052***		
Seasonality β_s		0.028		
ACF values r1; r2; r3		0.576; 0.424; 0.340		

[Note 1] β_1 value to 5dp is +0.00036

[Note 2] β_0 value to 5dp is -0.00019

[Note 3] Only post-intervention data is available; and there are issues within this data set

[Note 4] β_1 value to 5dp is -0.00116; β_s value to 5dp is – 0.00049