

Measuring, Monitoring and Managing WAC (Work After Clinic)

Timothy

Tim Ramer MD
Pete Harper MD, MPH

Goals and objectives

First Objective:

Participants will be able to define “WAC” and discuss methods to measure it.

Second Objective:

Participants will be able to compare and contrast several methods to reduce WAC.

Setting

- 4 Urban Family Medicine residency programs in Minneapolis and Saint Paul
- 40+ faculty, 100+ residents.

“WAC” Definition

“Work after Clinic”

Clinical work performed after clinic hours

Includes: Pre Visit planning, documentation, result management,
phone calls, refills, forms

It is time spent when you are not scheduled to do something else.

The WAC we are not talking about

www.thewacpac.com

Whimsical Alternatives Coalition Political Awareness Consortium

161

WAC has always been with us

We estimate that we spent 30-40 minutes per half day of
WAC before EHR

How much do you spend now?

Before EHR

The Good: no one worked on charts on the weekend, work before clinic was non-existent, there were no screens to distract us in the exam room.

The Bad: paper charts were missing 30-40% of the time.

The Ugly: Problem lists, medication lists were out of date, care was relatively unaccountable

After EHR

The Good: EHR downtime is often < 1% of total time. Pre-visit planning for clinic is possible.

The Bad: Everyone works on charts on the weekend,

The Ugly: Problem lists, medication lists and notes are overly long and cluttered, care is accountable, data is overwhelming

WAC

Work after Work: Evidence From PCP Utilization of an EHR System

Brian Arndt, MD; John Beasley, MD; Jon Temte, MD PhD; Wen-jan Tuan, MS MPH; Valerie Gilchrist, MD
 University of Wisconsin Department of Family Medicine and Community Health

Context

- There is growing evidence of EHR systems adoption and safety of health care.
- Less is known about the impact on primary care physicians including:
 - When work hours are increased.
 - How much EHR is used in non-face-to-face work.

Objective

- To assess usage of EHR systems in non-face-to-face work hours from Monday - Friday.

Design

- Retrospective cohort study from 6/30/15 to 6/30/16.
- System access logs for PCP time spent in non-face-to-face work.
- A fuzzy matching algorithm to restructure physician segments, and a manner to depict time spent on EHR systems.

Physician	Time Spent (min)	Time Spent (hr)
1	120	2.0
2	150	2.5
3	180	3.0
4	210	3.5
5	240	4.0
6	270	4.5
7	300	5.0
8	330	5.5
9	360	6.0
10	390	6.5
11	420	7.0
12	450	7.5
13	480	8.0
14	510	8.5
15	540	9.0
16	570	9.5
17	600	10.0
18	630	10.5
19	660	11.0
20	690	11.5
21	720	12.0
22	750	12.5
23	780	13.0
24	810	13.5
25	840	14.0
26	870	14.5
27	900	15.0
28	930	15.5
29	960	16.0
30	990	16.5
31	1020	17.0
32	1050	17.5
33	1080	18.0
34	1110	18.5
35	1140	19.0
36	1170	19.5
37	1200	20.0
38	1230	20.5
39	1260	21.0
40	1290	21.5
41	1320	22.0
42	1350	22.5
43	1380	23.0
44	1410	23.5
45	1440	24.0
46	1470	24.5
47	1500	25.0
48	1530	25.5
49	1560	26.0
50	1590	26.5
51	1620	27.0
52	1650	27.5
53	1680	28.0
54	1710	28.5
55	1740	29.0
56	1770	29.5
57	1800	30.0
58	1830	30.5
59	1860	31.0
60	1890	31.5
61	1920	32.0
62	1950	32.5
63	1980	33.0
64	2010	33.5
65	2040	34.0
66	2070	34.5
67	2100	35.0
68	2130	35.5
69	2160	36.0
70	2190	36.5
71	2220	37.0
72	2250	37.5
73	2280	38.0
74	2310	38.5
75	2340	39.0
76	2370	39.5
77	2400	40.0
78	2430	40.5
79	2460	41.0
80	2490	41.5
81	2520	42.0
82	2550	42.5
83	2580	43.0
84	2610	43.5
85	2640	44.0
86	2670	44.5
87	2700	45.0
88	2730	45.5
89	2760	46.0
90	2790	46.5
91	2820	47.0
92	2850	47.5
93	2880	48.0
94	2910	48.5
95	2940	49.0
96	2970	49.5
97	3000	50.0
98	3030	50.5
99	3060	51.0
100	3090	51.5

Setting / Participants

- 130 family physicians (average 10 years) from 18 clinics (4 residency programs, 14 community) managed by the University of Wisconsin Department of Family Medicine and Community Health.

38 hours
 Work after Work
 per month

1 full week/mo

Language Preference	Unmet/Unaware	31,912	24.1
English	160,462	97.6	
Other	2,011	0.4	
Patients not a PCP at this clinic	1,011	0.6	

relationship between EHR workload, job satisfaction, work RVUs (or other measures of efficiency), quality outcomes, and care team function including communication style (in-person vs electronic). This research enhances understanding of PCP workload and may influence development of policy, reimbursement models, and primary care redesign.

WAC Measurement

- Total Patient Care WAC = Documentation WAC + Pre/Post WAC
- Components
 - Documentation WAC (Visit Notes)
 - Pre-Post WAC (forms, refills, pre-visit planning, phone calls, prior authorizations)
- Measurements
 - WAC/ clinic shift
 - WAC/patient

WAC Methodology

- Self-report
 - Paper, then RedCap
 - Tried for consistency
 - Not optimal
 - Other methodologies attempted
 - Pulse Report in Epic
 - Self-made Epic report - 6pm-6am
 - Epic Efficiency Report (new)
-

Total Patient Care WAC

	2010	2012	Fall 2014	Spring 2015	Fall 2015
EMR	Allscripts	Allscripts	Epic	Epic	Epic
N (providers)	16	22	26	21	22
Pt/shift			6.9	6.9	7.45
Total WAC/shift (minutes)	72 min	77 min	90 min	96 min	100 min
Total WAC/pt (minutes)			13.1 min	13.9 min	13.4 min

Total Patient Care WAC is substantial and increasing >1.5 hours per shift.

Documentation WAC

- Documentation WAC is stable or decreasing

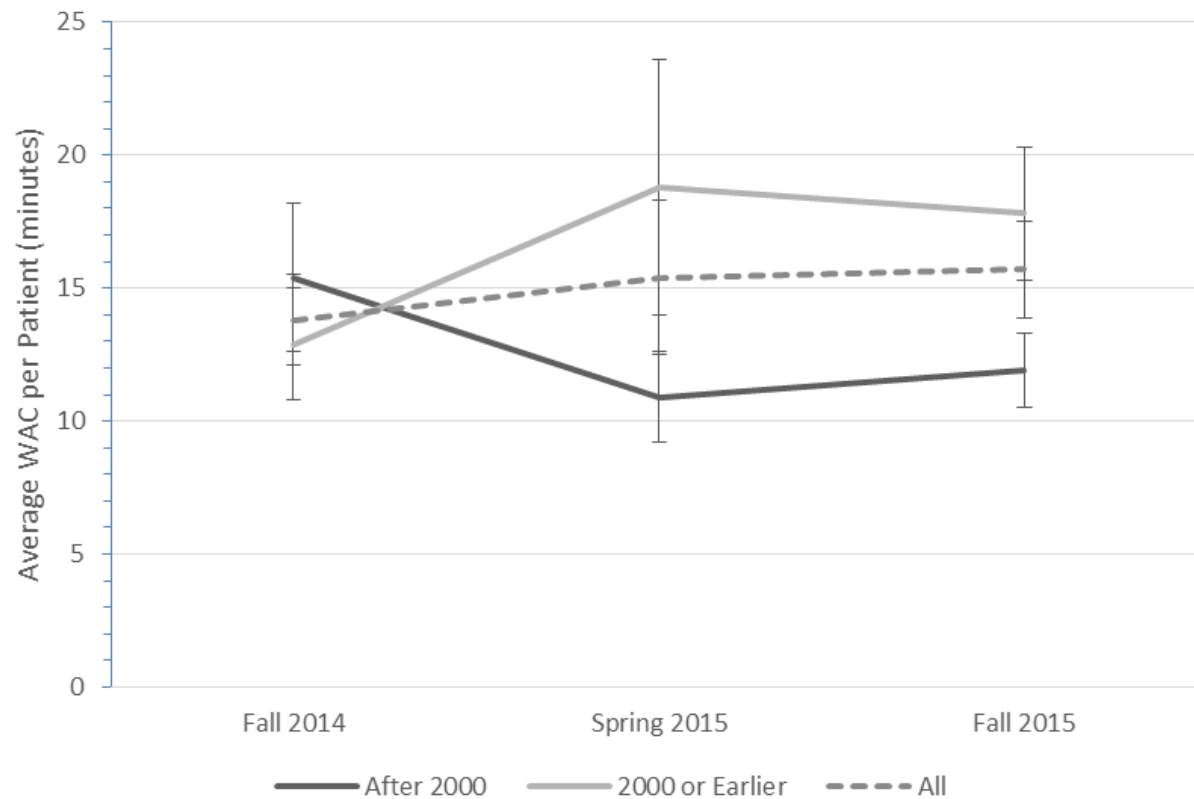
	Fall 2014	Spring 2015	Fall 2015
Doc WAC / shift (minutes)	45.4	42.3	42.0
Doc WAC / patient (minutes)	6.6	6.1	5.6

Pre-Post WAC

- Pre-Post WAC is increasing substantially

	Fall 2014	Spring 2015	Fall 2015
Pre-Post WAC / shift (minutes)	44.7	53.3	58.2
Pre-Post WAC / patient (minutes)	6.5	7.7	7.8

Figure 1. Change in WAC over time by Physician Graduation Year



WAC Data - What does it mean?

- Total WAC is increasing over time
 - Over 1.5 hours / 4 hour clinic shift
 - Reason for burn-out
- Documentation WAC
 - Number of documentation elements have increased
 - Order entry, billing, referral required fields, AVS
 - No dictation in 2/4 clinics
 - Documentation WAC is stable or decreasing
 - Interventions helping (?)
- Pre-Post WAC
 - Demands have increased - especially PreVisit Planning (PVP)

Interventions

Pre-Post Work

- Forms process
- Refill process
- Prior Authorization process
- Pre-visit planning

Visit documentation

- Enhanced CMA role, agenda collection
- EHR efficiency training
- EHR tool development (SmartSets, preferences etc)

Efficiency Training

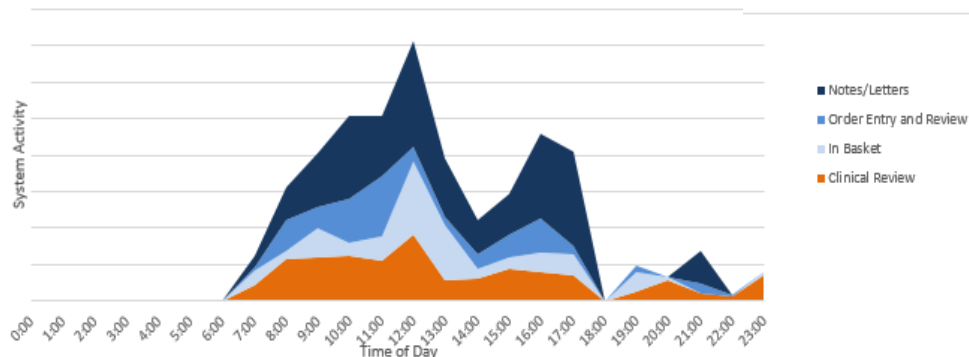
- Difficult to detect changes

Summary

- Need an Automated Collection method of WAC Data
- PEP Data shows between 15-30% of time in system is WAC

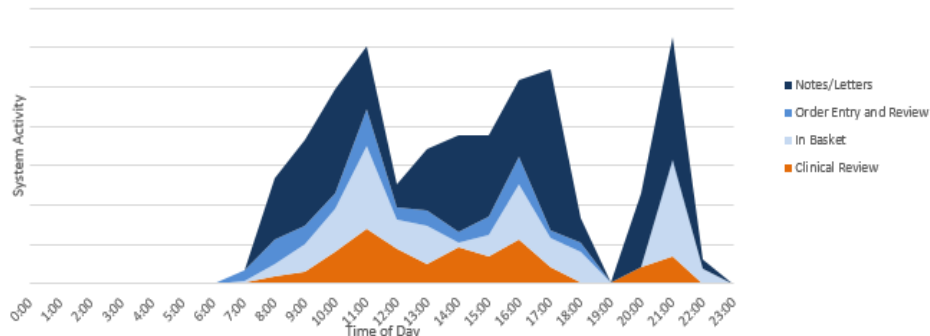
System Activity in Select Workflows for Har, P (170787)

This area chart allows you to see where the user is spending time in the system throughout the day for four key areas. The "Day of the Week" filter does not apply to this graph.



System Activity in Select Workflows for Ram, T (041806)

This area chart allows you to see where the user is spending time in the system throughout the day for four key areas. The "Day of the Week" filter does not apply to this graph.



New project

- check PEP before
- target individual training
- repeat PEP after training

Summary

- Magnitude - huge
 - Over 1.5 hours of WAC / clinic shift
 - Pre-Post WAC is increasing - PVP for complex care?
 - Importance of Reducing WAC
 - Burn-out
 - Displacing other work of residency
 - Driving learners away from primary care?
 - Interventions need to be multimodal
 - Many interventions already done
 - More needed to reduce WAC
 - We hope targeted interventions will be more effective
-

