



2019 STFM Conference on Practice & Quality Improvement

Using “Virtual” Scribes For Note Completion

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December 7, 2019

Disclosures

None.

Objectives

- 1- Explain the impact virtual scribes have on the amount of time providers spend on completing visit notes.
- 2- Explain how virtual scribes can positively impact the provider's clinic experience interacting with patients.
- 3- To be able to apply a virtual scribe model in your own practice.



Setting

SIU CENTER FOR FAMILY MEDICINE-DECATUR

- Residency program 5-5-5, Community based University Administered, 40 years old
- Became a Federally Qualified Health Center 2017
- Four full-time and 1 Part Time faculty
- Two community preceptors
- Two APRNs and Three PA-Cs
- Allscripts Touchworks EMR for our clinic



TRIPLE AIM + 1

- Effective
- Equitable
- Efficient
- Enjoyable

Time

My favorite things in life don't cost any money. It's really clear that the most precious resource we all have is time. - **Steve Jobs**

"There is not enough time to do all the nothing we want to do." - **Bill Watterson**

"Time is something that cannot be bought. It cannot be wagered with God, and it is not in endless supply. Time is simply how you live your life." - **Craig Sager**



Lack of Enjoyment + Lack of Efficiency/Time = Burnout

The relation of time spent with EMR burdens on burnout has been well demonstrated

- Losing good providers
- Decreased quality of care
- Delayed billing



EMR BURDEN

Rebekah L Gardner, Emily Cooper, Jacqueline Haskell, Daniel A Harris, Sara Poplau, Philip J Kroth, Mark Linzer, **“Physician stress and burnout: the impact of health information technology”** *Journal of the American Medical Informatics Association*, Volume 26, Issue 2, February 2019, pages 106-114,
<https://doi.org/10.1093/jamia/ocy145>

- “those with time pressures for documentation or those doing excessive “work after work” on their EHR at home had approximately twice the odds (2.81x) of burnout compared to physicians without these challenges”
- “half of physicians reported insufficient time for documentation”
- “time pressure poses a direct challenge to connecting with patients, one of the more sustaining aspects of primary care”



EMR BURDEN

- Arndt, B. G., Beasley, J. W., Watkinson, M. D., Temte, J. L., Tuan, W. J., Sinsky, C. A., & Gilchrist, V. J. (2017). **Tethered to the EHR: primary care physician workload assessment using EHR event log data and time-motion observations.** *The Annals of Family Medicine*, September/October 2017, 15(5), 419-426.
- “Clinicians spent 86 minutes (1.4 hours) after clinic hours in EMR”
- Peak hours 10 a.m. and 10 p.m. on weekends



EMR BURDEN

- Christine Sinsky, MD; Lacey Colligan, MD; Ling Li, PhD; Mirela Prgomet, PhD; Sam Reynolds, MBA; Lindsey Goeders, MBA; Johanna Westbrook, PhD; Michael Tutty, PhD; George Blike, MD. **“Allocation of Physician Time in Ambulatory Practice: A Time and Motion Study in 4 Specialties”**. *Annals of Internal Medicine*. 2016;165(11):753-760.
- “While in the examination room with patients, physicians spent 52.9% of the time on direct clinical face time and 37.0% on EHR and desk work”



Scribes As An Effort To Relieve Documentation Burdens

- Earls ST, Savageau JA, Begley S, Saver BG, Sullivan K, Chuman A, “**Can scribes boost FPs' efficiency and job satisfaction?**”, *Journal of Family Practice*, 2017 Apr;66(4):206-214
- “use of scribes in a busy academic primary care practice substantially reduced the amount of time that family physicians spent on charting, improved work-life balance, and had good patient acceptance”
- “physicians spent an average of 5.1 fewer hours/week (hrs/wk) on documentation”



Scribes As An Effort To Relieve Documentation Burdens

- Pranita Mishra, MPP¹; Jacqueline C. Kiang, MD; Richard W. Grant, MD, MPH, **“Association of Medical Scribes in Primary Care With Physician Workflow and Patient Experience”**, *JAMA Intern Med.* 2018;178(11):1467-1472. doi:10.1001/jamainternmed.2018.3956
- “Compared with nonscribed periods, scribed periods were associated with less self-reported after-hours EHR documentation ...also associated with higher likelihood of...spending more than 75% of the visit interacting with the patient”



SIUCFM-D TIME STUDY 2017

Faculty Providers

- Time spent on note completion outside of dedicated clinic time was 35.7 minutes per day.
- Time spent on other clinical “tasks” outside of dedicated clinic time was 66.6 minutes per day
- Note completion methods varied from typing, using EMR or organization developed note templates, or dictating using M*Modal



SCRIBES

- Previous failed scribing attempts at SIU CFM-D:
 - Use of staff to scribe “WOW” project 2008
 - “Team Care” 2014
- A new model of “virtual” scribes



“Virtual” Scribes Implementation

- What is a “virtual” scribe? Who?
- Setups- Audio vs. visual
- Vendors
- Costs-
 - Equipment
 - Service



“Virtual” Scribes Implementation

- Roll out- Pilot Project
- Clinic workflow
- Does it improve note completion time?

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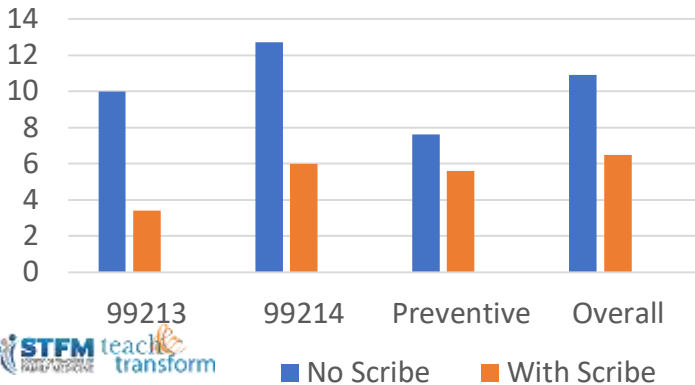
IMPACT- NOTE COMPLETION TIMES

	Note Completion Times Scribe vs. No Scribe							
	By: Note Type							
	Scribe	213 Mean Minutes (Range)	214 Mean Minutes (Range)	215 Mean Minutes (Range)	204 Mean Minutes (Range)	Prev-New Mean Minutes (Range)	Prev-Established Mean Minutes (Range)	Procedure Mean Minutes (Range)
Faculty PA 1	9.35 min/note	5	9.2 (5-20)	-	-	-	15	
NP 1	5.2 min/note	1.5 (1-2)	5.4 (3-9)	-	-	8 (12-16)	-	
NP 2	8.4 min/note	4.7 (3-5-5)	6 (5-7)	10	16.7 (10-30)	-	5	
Faculty MD 1	2.7 min/note	2.4 (1-6)	3.3 (2-5)	-	-	-	2.5 (2-3)	4.5 (2-7)
	Group Ave. 6.5 min/note	3.4 (1-6)	6 (2-20)	10	16.7 (10-30)	8(12-16)	5.6(2-15)	
	No Scribe							
Faculty PA 1	15.7	13.9 (10-30)	18 (10-25)	-	-	-	10	
NP 1	-	-	-	-	-	-	-	
NP 2	12	11.3 (8-15)	13.25 (11-16)	-	-	-	-	
Faculty MD 1	5.07	4.8	6.8	-	-	-	5.2	
	Group Ave: 10.9 min/note	10 (2-30)	12.7 (10-25)	-	-	-	7.6 (5.2-10)	-

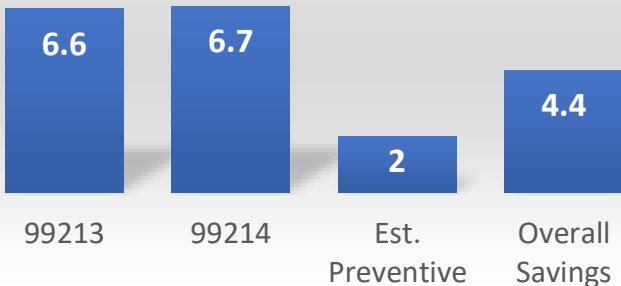


Note Completion Times By Level Of Service Billed in Minutes

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Minutes Saved Per Note By Scribes



IMPACT- 8 patients per clinic session (half-day)

Time Savings:

35.2 minutes per clinic session if seeing 8 patients

105.6 minutes per week if in clinic 3 half-days a week-

ONE HOUR 45 MINUTES SAVED

140.8 minutes per week if in clinic 4 half-days a week- 2

HOURS 20 MINUTES SAVED

281.6 minutes per week if in clinic 8 half-days a week- 4

HOURS 41 MINUTES SAVED!



IMPACT- 10 patients per clinic session (half-day)

Time Savings:

44 minutes a day

132 minutes if in clinic 3 half days a week- **2 HOURS
12 MINUTES SAVED**

176 minutes if in clinic 4 half days a week- **2 HOURS
56 MINUTES SAVED**

352 minutes if in clinic 8 half days as week- **5 HOURS
52 MINUTES SAVED!**



OTHER TIME RELATED POSITIVE OUTCOMES

- Time Saved in Billing Delays
- Notes completed during clinic session

OTHER POSITIVE FEATURES OF VIRTUAL SCRIBES- Provider Feedback

- *Time savings- less time spent outside of clinic on documentation, less time spent after hours or at home on notes
- Closing patient visits is more efficient takes less time
- Trained scribes good at deciphering relevant vs. irrelevant information
- *Refills occurring at time of appt.
- Better problem list clean-up



MORE POSITIVE FEATURES OF VIRTUAL SCRIBES- Provider Feedback

- Patient acceptance positive with rare exceptions
- Higher level of visit billed
- Scribes can capture UDS/other data
- A new model of medical student teaching
- Reduced load on nursing staff



OTHER POSITIVE FEATURES OF VIRTUAL SCRIBES- Administrative Feedback

- Personnel/HR issues are addressed by contacting your scribing entity
- More timely billing
- Improving access to care by allowing an extra patient to be scheduled on provider's schedules



DOWNSIDE TO VIRTUAL SCRIBES- Provider Feedback

- *Technical problems
- *Scribe order entry was taken away!
- Does not change visit encounter times
- Increase schedule volume to offset cost
- *Information not always correctly entered

DOWNSIDE TO VIRTUAL SCRIBES- Provider Feedback

- *Essence and nuance of the visit can be lost
- Background noise can distract
- *We have had patient privacy concern voiced
- Scribe quality variance

DOWNSIDE TO VIRTUAL SCRIBES- Administrative Feedback

- Invoices need to be scrutinized for errors in billing
- We get charged for the scribe's time even if:
 - Patients cancel or no-show
 - The provider has unscheduled absence.



SUMMARY

- Scribe use is growing.
- Low availability of qualified scribes in lower populated areas
- Virtual scribing can help meet the Triple Aim + 1-
 - Efficiency- Time savings and improved delays in billing
 - Effectiveness- Potential improvement in UDS measures
 - Enjoyment- Saving time.
- There are downsides to scribing, mainly when technical issues occur.

REFERENCES

- Rebekah L Gardner, Emily Cooper, Jacqueline Haskell, Daniel A Harris, Sara Poplau, Philip J Kroth, Mark Linzer, **"Physician stress and burnout: the impact of health information technology"** *Journal of the American Medical Informatics Association*, Volume 26, Issue 2, February 2019, pages 106-114, <https://doi.org/10.1093/jamia/ocy145>
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