Additional file 2. REDCap data extraction form

Reviewer Initials _____

Study ID _____

Author _____
(Last name of author)

Year _____
(Year of publication)

Study Characteristics

What continent was the study conducted in?

- ◯ North America
- ◯ South America
- ◯ Europe
- ◯ Asia
- ◯ Africa
- ◯ Australia/Oceania

What country was the study conducted in?

- ◯ Canada
- ◯ U.S.A.
- ◯ Mexico
- ◯ Germany
- ◯ France
- ◯ Italy
- ◯ Japan
- ◯ China
- ◯ North/South Korea
- ◯ Australia
- ◯ New Zealand
- ◯ Brazil
- ◯ Russia
- ◯ Other

Please specify the country. _____

What type of hospital setting was the study conducted in? Select all that apply.

- ☐ Community hospital
- ☐ Teaching hospital
- ☐ Academic hospital
- ☐ General hospital
- ☐ Specialty care hospital
- ☐ Urban hospital setting
- ☐ Rural hospital setting
- ☐ Single centre
- ☐ Multi centre

What specialty area was the study conducted in? Select all that apply.

- ☐ Trauma
- ☐ Intensive Care
- ☐ Renal
- ☐ Cardiac
- ☐ Neurological
- ☐ Orthopaedic
- ☐ Hematological
- ☐ Paediatric
- ☐ Other
- ☐ All of the above

Who was the intervention applied on? (In other words, who were the study participants?) Select all that apply.

- ☐ Nurses
- ☐ Physicians
- ☐ Pharmacists
- ☐ Occupational Therapists
- ☐ Radiologists
- ☐ Technicians
- ☐ Respiratory Therapists
- ☐ Students
- ☐ None of the above

How many study participants were there?

_____
(Enter '0' if not provided. Enter '.' if not applicable.)

What was the female proportion of participants?

_____
(%)

How many records were used?

_____
(Enter '0' if not provided. Enter '.' if not applicable.)

What intervention was implemented to improve EHR documentation? Select all that apply.

- ☐ New EHR reporting system (e.g. structured, point-and-click, stroke-specific, proforma)
- ☐ New EHR software or vendor
- ☐ New EHR modality (e.g. hand-held computer, laptop)
- ☐ Reminders within EHR system
- ☐ Template/Guideline/Example displayed to EHR user
- ☐ Educational program (e.g. training session, in-service, video, simulation)
- ☐ Feedback provided to EHR user
- ☐ Audit
- ☐ Other

Please describe the intervention used.

_____

What was the study design?

- ◯ RCT
- ◯ Observational
- ◯ Quasi-Experimental

Please specify. Select all that apply.

- ☐ Prospective
- ☐ Retrospective
- ☐ Pre-test/Post-test
- ☐ Interrupted time-series
- ☐ Combination
- ☐ Other
- ☐ Not specified

What was the intervention compared to?

- ☐ Standardized documentation
- ☐ Dictation
- ☐ Non-structured reporting
- ☐ No template provided
- ☐ Paper documentation
- ☐ No education provided
- ☐ Baseline (no further description)

What was the intervention compared to? Select all that apply.

- ☐ Standardized documentation
- ☐ Dictation
- ☐ Non-structured reporting
- ☐ No template provided
- ☐ No education provided
- ☐ Paper documentation
- ☐ Baseline (no further description)

Please select the type of observational study. Select all that apply.

- ☐ Prospective cohort
- ☐ Retrospective cohort
- ☐ Prospective case-control
- ☐ Retrospective case-control
- ☐ Cross-sectional
- ☐ Unsure

What were the control and intervention arms?

_____

Was randomization used?

- ◯ No
- ◯ Yes
- ◯ Not specified
- ◯ Unsure

Was there assessment for bias?

- ◯ No
- ◯ Yes
- ◯ Not specified
- ◯ Unsure

Was blinding used?

- ◯ No
- ◯ Yes
- ◯ Not specified
- ◯ Unsure

Was allocation concealment used?

- ◯ No
- ◯ Yes
- ◯ Not specified
- ◯ Unsure

Was EHR documentation improved?

- ◯ No, it worsened
- ◯ Yes
- ◯ Yes and No
- ◯ No, it stayed the same

How was the intervention measured? Select all that apply.

- ☐ Medication accuracy (e.g. med. errors/reconciliation)
- ☐ Timeliness (e.g. time to complete documentation, time to availability of documentation)
- ☐ Completeness (missing information in document)
- ☐ Capture of documentation (more or less reports)
- ☐ Documentation accuracy (e.g. errors, discrepancies)
- ☐ Quality (e.g. quality indicators, overall quality)
- ☐ Clarity (as judged by reviewer of document)
- ☐ Length
- ☐ Other

Please describe the intervention measure.

_____

Was documentation improved according to medication accuracy?

- ◯ No, it was worse than control group
- ◯ No, it stayed the same
- ◯ Yes, it improved
- ◯ Unsure

Was documentation improved according to timeliness?

- ◯ No, it was worse than control group
- ◯ No, it stayed the same
- ◯ Yes, it improved
- ◯ Unsure

Was documentation improved according to completeness?

- ◯ No, it was worse than control group
- ◯ No, it stayed the same
- ◯ Yes, it improved
- ◯ Unsure

Was documentation improved according to capture of documentation?

- ◯ No, it was worse than control group
- ◯ No, it stayed the same
- ◯ Yes, it improved
- ◯ Unsure

Was documentation improved according to documentation accuracy?	◯ No, it was worse than control group ◯ No, it stayed the same ◯ Yes, it improved ◯ Unsure
Was documentation improved according to quality?	◯ No, it was worse than control group ◯ No, it stayed the same ◯ Yes, it improved ◯ Unsure
Was documentation improved according to clarity?	◯ No, it was worse than control group ◯ No, it stayed the same ◯ Yes, it improved ◯ Unsure
Was documentation improved according to length?	◯ No, it was worse than control group ◯ No, it stayed the same ◯ Yes, it improved ◯ Unsure
Was documentation improved according to this other measure?	◯ No, it was worse than control group ◯ No, it stayed the same ◯ Yes, it improved ◯ Unsure
What quantity of improvement was reported for medication accuracy?	_____ (Specify if mean, rate, improved, worsened, etc.)
What quantity of improvement was reported for timeliness?	_____ (Specify if mean, rate, improved, worsened, etc.)
What quantity of improvement was reported for completeness?	_____ (Specify if mean, rate, improved, worsened, etc.)
What quantity of improvement was reported for capture of documentation?	_____ (Specify if mean, rate, improved, worsened, etc.)
What quantity of improvement was reported for documentation accuracy?	_____ (Specify if mean, rate, improved, worsened, etc.)
What quantity of improvement was reported for quality?	_____ (Specify if mean, rate, improved, worsened, etc.)
What quantity of improvement was reported for clarity?	_____ (Specify if mean, rate, improved, worsened, etc.)
What quantity of improvement was reported for length?	_____ (Specify if mean, rate, improved, worsened, etc.)
Please provide a p-value for medication accuracy, if available.	_____
Please provide a p-value for timeliness, if available.	_____
Please provide a p-value for completeness, if available.	_____
Please provide a p-value for capture of documentation, if available.	_____
Please provide a p-value for accuracy, if available.	_____
Please provide a p-value for quality, if available.	_____

Please provide a p-value for clarity, if available.	_____
Please provide a p-value for length, if available.	_____
Please provide a p-value for this other measure, if available.	_____
Was there a difference in EHR documentation between study participants?	◯ No ◯ Yes
What factor influenced the difference in documentation between study participants? Select all that apply.	☐ EHR documentation setting ☐ Student versus non-student ☐ Years of experience ☐ Age ☐ Gender
Were study participants followed-up?	◯ No ◯ Yes ◯ Unsure
For how long?	_____ (Please specify unit (days, weeks, months, years).)