Effect of reminder text pages on morning report attendance among medical students, interns, and residents rotating at a single Veterans Affairs hospital

Submission date	Recruitment status No longer recruiting	Prospectively registered		
03/03/2021		☐ Protocol		
Registration date 10/03/2021	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	[] Individual participant data		
08/04/2024	Other			

Plain English summary of protocol

Background and study aims

Regularly scheduled educational conferences are an important method of providing education for medical students, interns, and residents (collectively "learners"). However, due to the complex needs of hospitalized patients under their care, learners often find it difficult to attend conferences because of their clinical responsibilities. While some strategies like providing food at conferences have been shown to increase conference attendance, overall conference attendance at many medical residency programs remains poor. Some residency programs have implemented daily reminder text pages to learners to remind them of upcoming regularly scheduled conferences. These text page reminders may be beneficial, as learners may lose track of time while performing clinical duties. However, text pages also create workflow interruptions, as learners usually stop what they are doing to read the page. A study in 2016 showed that sending a reminder page had no effect on conference attendance for fellows, but no studies are known to have tested the impact of a reminder page on conference attendance for medical students, interns, and residents. The aim of this study is to evaluate the association between receipt of a reminder page and conference attendance among medical students, interns, and residents.

Who can participate?

Medical students, interns, and residents who are rotating on the inpatient medicine, cardiology, patient safety, or medical consult services are eligible to participate.

What does the study involve?

This study involves sending reminder text pages to medical interns and residents 5 minutes before the start of regularly scheduled educational conferences and measuring conference attendance 15 minutes later. In this study, the 6-month study period will be divided up into nine 3-week blocks. All medical interns and residents rotating in the hospital during each 3-week block will be randomly assigned to receive reminder pages (the intervention) or no reminder pages (the control). Attendance will be unobtrusively recorded by study personnel. Rates of

conference attendance, expressed as the proportion of eligible learners in the hospital on a given day who are in attendance, will be compared for the intervention and control periods to determine the effect of receiving a reminder page on conference attendance.

What are the possible benefits and risks of participating?

The possible benefit of participation is increased attendance at conferences, which are educationally useful for physicians-in-training. The possible harms of participation are that learners might be made uncomfortable if they discovered that attendance at morning conferences was being recorded, and receipt of a reminder page could disrupt a learner's clinical work.

Where is the study run from? Veterans Affairs Boston Healthcare System (USA)

When is the study starting and how long is it expected to run for? August 2019 to March 2020

Who is funding the study? Investigator initiated and funded

Who is the main contact? Anthony Breu anthony.breu@va.gov

Contact information

Type(s)

Scientific

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Additional identifiers

EudraCT/CTIS number

Nil known

IRAS number

ClinicalTrials.gov number Nil known

Secondary identifying numbers V109132019

Study information

Scientific Title

Effect of reminder text pages, compared with usual practice alone, on morning report attendance among medical students, interns, and residents rotating at a single Veterans Affairs hospital (Veterans Affairs Boston Healthcare System)

Study objectives

The objective of this study is to determine whether a pre-conference reminder text page increases the attendance of medical students, interns, and residents (henceforth referred to as learners) at regularly scheduled morning report conferences.

Ethics approval required

Old ethics approval format

Ethics approval(s)

The study was reviewed and deemed exempt by the institutional review board at the VA Boston Healthcare System because it involved no more than the usual daily risk to study participants during participation in their normal educational activities

Study design

Single-center multiple-crossover cluster randomized controlled trial

Primary study design

Interventional

Secondary study design

Randomised cross over trial

Study setting(s)

Hospital

Study type(s)

Other

Participant information sheet

No participant information sheet available

Health condition(s) or problem(s) studied

Morning report conference attendance

Interventions

This study involves sending reminder text pages to medical interns and residents 5 minutes before the start of regularly scheduled educational conferences and measuring conference attendance 15 minutes later. The specific content of the reminder page is left to the discretion of the chief medical residents but always includes a reminder of the time and location of the morning report.

The 6-month study period will be divided up into nine 3-week blocks. All medical interns and residents rotating in the hospital during each 3-week block will be randomly assigned to receive reminder pages (the intervention) or no reminder pages (the control).

The first trial period will be randomly assigned to the intervention or control by a coin flip. Trial periods will then sequentially alternate between intervention and control every 3 weeks, and all learners rotating at the study site during each period will be exposed to either the intervention or control. If a learner's rotation spans both an intervention and control period, they will be exposed to both periods and contribute outcome data to both periods.

Chief medical residents, who are normally present in the audience at morning report conferences, will serve as study personnel. Each day during the conference, study personnel will use a printed roster (a facesheet) with identifying photos for all eligible learners to record each learner present at 8:00 am (a secondary outcome) and 8:10 am (the primary outcome). After the conference, study personnel will record the attendance status for each individual learner in an Excel database stored behind a secure firewall. In this manner, the proportion of daily learners present in the conference will be measured and recorded daily during the intervention and control periods. Rates of conference attendance, expressed as the proportion of eligible learners in the hospital on a given day who are in attendance, will be compared for the intervention and control periods to determine the effect of receiving a reminder page on conference attendance.

As part of the routine admitting flow at VA BHS, the number of overnight admissions per team is recorded by the night float residents and shared with the chief residents each day at approximately 6:30 am. This number will be recorded by study personnel for each admitting team every day during the study period. For the purposes of our study, each member of an admitting team will be considered to experience the same workload represented by a given

number of overnight admissions (for example, if a team is assigned two overnight admissions, the number of overnight admissions is recorded as two for the team resident, both team interns, and both team medical students).

Intervention Type

Behavioural

Primary outcome measure

The proportion of eligible learners present at 8:10 am at the morning report conference, expressed as the number of learners attending the morning report conference divided by the total number of learners present in the hospital on that day; recorded by chief medical residents using a printed roster (a facesheet) with identifying photos at each morning report conference daily during the intervention and control periods.

Secondary outcome measures

Recorded by chief medical residents using a printed roster (a facesheet) with identifying photos at each morning report conference daily during the intervention and control periods:

- 1. The proportion of learners present at 8:00 am
- 2. The proportion of learners present by type (student vs house staff)
- 3. The proportion of learners present at the Friday Jeopardy conference
- 4. The number of overnight admissions by the team, recorded by the night float residents every day during the study period

Overall study start date

06/08/2019

Completion date

12/03/2020

Eligibility

Key inclusion criteria

House staff rotating at the study site from four residency programs and medical students rotating from two medical schools during the study period

Participant type(s)

Health professional

Age group

Adult

Sex

Both

Target number of participants

Nine clusters consisting of alternating 3-week intervention and control periods are planned, spanning the middle 6 months of the academic year. We chose to start data collection after the first three months of the academic year have passed to allow learners' conference attendance behavior time to develop, and we chose to stop data collection with three months remaining in the academic year to allow time for data analysis and preparation of the manuscript. With the

exception of holidays 7 federal holidays distributed throughout the study period, each week contributes 4 days of observations for the corresponding study period (intervention or control), for an estimated total of 101 days of observations. On each day, the estimated number of learners eligible to attend conference is 29. Therefore, an estimated total of 3,103 person-days of observations will be included.

Total final enrolment

2457

Key exclusion criteria

- 1. Learners rotating in the medical intensive care unit, night float, or on the resident on duty rotation
- 2. Physician assistant students and pharmacy students

Date of first enrolment

30/09/2019

Date of final enrolment

31/03/2020

Locations

Countries of recruitment

United States of America

Study participating centre
VA Boston Healthcare System
1400 Veterans of Foreign Wars Parkway
West Roxbury
United States of America
02132

Sponsor information

Organisation

VA Boston Healthcare System

Sponsor details

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Sponsor type

Hospital/treatment centre

Website

http://www.newengland.va.gov/

ROR

https://ror.org/04v00sg98

Funder(s)

Funder type

Other

Funder Name

investigator initiated and funded

Results and Publications

Publication and dissemination plan

The study protocol and statistical analysis plan are available upon request from the corresponding author. The results of this study will be compiled in a scientific manuscript for publication in a peer-reviewed general interest journal. De-identified participant-level data and the statistical analysis plan will be provided in an appendix.

Intention to publish date

12/03/2022

Individual participant data (IPD) sharing plan

De-identified participant-level data are available upon request for up to 2 years from the date of manuscript publication from the corresponding author (Anthony Breu, anthony.breu@va.gov). The data will be shared freely with any investigator wishing to replicate the analysis or conduct additional analyses. Data have been fully anonymized (each learner's name has been replaced by a sequentially generated unique ID number) and there is no data included that could be used to identify learners.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article		15/10/2023	08/04/2024	Yes	No