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'UW-IPASS' curriculum to decrease errors in health-care provider communication

Submission date
24/01/2017

Recruitment status
No longer recruiting

Registration date
27/01/2017

Overall study status
Completed

Last Edited
14/02/2018

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
Recent studies estimate that 40,000-100,000 deaths per year occur in American hospitals as a result of medical errors. It is estimated that around a third of these deaths are due, at least in part, to communication errors among health-care providers. It is therefore vital to introduce a standardized method of communicating patient information to staff when shift changes take place (hand off). The aim of this study is to look at a standardized verbal hand-off curriculum for communication between staff in intensive care units (ICUs). The curriculum is passed on “IPASS", a hand-off bundle which was developed at Boston Children's Hospital. The aim of this study is to find out whether this communication handoff curriculum will decrease health-care provider communication errors.

Who can participate?
Health-care providers in participating intensive care units.

What does the study involve?
Participating ICUs are randomly allocated in blocks of two to one of two groups. Those in the first group receive the new communication handoff curriculum. This involves an online learning module and training on-site about how to implement the curriculum, followed by starting to use it on the ward. Those in the second group continue to use their usual hand off communication procedure. Every day, participants complete text message based surveys to give their views on the curriculum. Participants in both groups are followed for eight months, having their hand offs observed each week. At the end of the study, patient databases are assessed to see if the new curriculum has affective patient death and complication rates.

What are the possible benefits and risks of participating?
There are no direct benefits or risks to those taking part in the study.

Where is the study run from?
Eight ICUs in University of Washington Medical Center (USA)

When is the study starting and how long is it expected to run for?
March 2015 to October 2016

Who is funding the study?
The University of Tampa (USA)

Who is the main contact?
Dr Brodie Parent
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Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
UWIPASS17

Study information

Scientific Title
A standardized handoff curriculum and provider preparedness in the ICU

Acronym
UW-IPASS

Study objectives
A standardized communication handoff curriculum will decrease health-care provider communication errors.

Ethics approval required
Old ethics approval format

Ethics approval(s)
University of Washington Internal Review Board, 21/08/2015, ref: 50266

Primary study design

Interventional

Study design
Single-centre cluster randomised stepped wedge trial

Study type(s)
Other

Health condition(s) or problem(s) studied
Health care provider communication errors

Interventions
Participating ICUs are randomised in clusters of 2 ICUs, using a random number generator to one of two groups. Allocation is concealed from all ICU staff until launch date for each treatment arm. Blinding is not possible given the nature of the intervention.

Intervention: Providers receive the UW-IPASS Handoff curriculum, which includes:
1. An online learning module 1 month before starting an ICU rotation. The online training module is about 15 minutes and is an interactive presentation of information and self-directed learning via multiple choice questions. It is emailed to providers 1 month ahead of their time in the ICU. It introduces the concept of 'IPASS' and how it is used in handoffs. Basically, it tells providers to use the mnemonic to communicate to other providers. The mnemonic is as follows:
I= illness severity (sick or not sick patient)
P= Patient summary (details of medical history and current reason for admission)
A= Action items (a 'to-do' list for the care provider)
S= Situation awareness (If x then do y)
S= Synthesis (the receiver summarizes what they heard)
Handoff communications before this system usually only included the 'Patient summary' and 'action items' elements. This system standardizes communication so that everyone is expected to communicate these baseline elements.
2. Personal training on site on how to use the IPASS mnemonic effectively. This involves a brief 5 slide powerpoint by a local ICU expert in IPASS. They then run an interactive demonstration of how to use it in a handoff.
3. Observed weekly structured feedback on their handoffs
4. An IPASS rounding tool integrated into the electronic medical record

Control: Providers perform handoff communication per local culture and individual preference.

Both arms are surveyed throughout the study on a daily basis regarding their perceptions and experiences with handoff. Total duration of data collection/followup is 8 months.

Intervention Type
Behavioural

Primary outcome(s)
Provider perceptions related to handoff quality, efficiency, avoidable adverse events, and plan of care advancement are assessed via text-message based surveys to providers, sent daily after working a shift in the intensive care unit.

Key secondary outcome(s)

1. Patient days of mechanical ventilation is assessed at the end of the study via a de-identified aggregate patient database
2. ICU length of stay is assessed at the end of the study via a de-identified aggregate patient database
3. Reintubations within 24 hours are assessed at the end of the study via a de-identified aggregate patient database
4. Order work-flow patterns are assessed at the end of the study via a de-identified aggregate patient database

Completion date
01/10/2016

Eligibility

Key inclusion criteria
1. Aged 18 or older
2. Male or female
3. Employed as an advance-practice provider, a resident physician, fellow physician, or attending physician in one of eight adult intensive care units

Participant type(s)
Health professional

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Sex
All

Key exclusion criteria
No exclusion criteria.

Date of first enrolment
01/08/2015

Date of final enrolment
01/06/2016

Locations

Countries of recruitment
United States of America

Study participating centre
University of Washington Medical Center
1959 NE Pacific Street
Seattle
United States of America
98195

Sponsor information

Organisation
University of Washington

ROR
https://ror.org/00cvxb145

Funder(s)

Funder type
Research organisation

Funder Name
Patient Safety and Innovations Project

Results and Publications

Individual participant data (IPD) sharing plan
The datasets collected in this study contain sensitive information regarding communication errors which the researchers are not authorized to disclose to the general public. The data is held in a secure server at the University of Washington.

IPD sharing plan summary
Not expected to be made available

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/05/2018		Yes	No