

# Implementing the TeamSTEPPS® team-training program in a Bachelor of Nursing program

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| <b>Submission date</b><br>15/05/2020   | <b>Recruitment status</b><br>No longer recruiting | <input type="checkbox"/> Prospectively registered<br><input checked="" type="checkbox"/> Protocol |
| <b>Registration date</b><br>28/05/2020 | <b>Overall study status</b><br>Completed          | <input type="checkbox"/> Statistical analysis plan<br><input checked="" type="checkbox"/> Results |
| <b>Last Edited</b><br>12/08/2022       | <b>Condition category</b><br>Other                | <input type="checkbox"/> Individual participant data  |

## Plain English summary of protocol

### Background and study aims

Teamwork performance is a core competency for professional healthcare workers to offer safe and effective care and treatment. The healthcare system is rapidly changing, and the development of new technology, increased complexity and specialization create a need to work in teams. Teamwork must be focused on early in healthcare workers' education, in this context, both in theoretical and practical studies in nursing education.

The overall aim of the project is to evaluate the impact of the implementation of a teamwork program in a Bachelor of Nursing curriculum regarding students' attitudes toward teamwork, team performance, and perceptions of the teamwork program and transfer of learned teamwork skills to clinical placement.

### Who can participate?

Bachelor of nursing students at a Norwegian multicampus university in their first, second, and third years of the bachelor's program in Autumn 2018.

### What does the study involve?

This study involves the implementation of the TeamSTEPPS® teamwork program in a Bachelor of Nursing program at one campus of a multicampus university. The intervention consists of training the students in teamwork skills using lectures, role play, digital learning tools, simulated patient scenarios, and hours of reflection in clinical placements over a two-and-a-half-year period of their three-year education program. Various instruments measure the outcome of the implementation. The students are invited to respond to the TeamSTEPPS Teamwork Attitude Questionnaire (T-TAQ) to measure their attitudes towards teamwork in healthcare. The survey is administered three times in all three groups of students: before the intervention, after one year of their bachelor's program, and after two years of their bachelor's program. Teamwork performance is measured using the TeamSTEPPS® teamwork performance observation tool (TPOT) by both students and expert raters. The students in the intervention group are invited to take part in a simulated patient scenario and score their own team's performance. Expert raters score the teams while watching videos of the scenarios. The simulated scenarios take place in the students' third year of the bachelor's program. Perceptions of teamwork program and the students' perceptions of the transfer of learned teamwork skills in clinical placements are described using focus group interviews after two and half years of the intervention.

What are the possible benefits and risks of participating?  
The benefits of the participants are enhanced teamwork attitudes and skills.  
There are no risks to participating.

Where is the study run from?  
This study is run from the Norwegian University of Science and Technology (Norway) and takes place at three campuses.

When is the study starting and how long is it expected to run for?  
November 2017 to December 2020

Who is the main contact?  
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## Contact information

### Type(s)

Public

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# Additional identifiers

## EudraCT/CTIS number

Nil known

## IRAS number

## ClinicalTrials.gov number

Nil known

## Secondary identifying numbers

Nil known

# Study information

## Scientific Title

Implementing a TeamSTEPPS® team-training program in a Bachelor of Nursing program to enhance teamwork attitudes and skills

## Study objectives

The overall aim is to evaluate the impact of implementing a team training program among Bachelor of Nursing students regarding their attitudes toward teamwork, team performance and perceptions of teamwork in healthcare.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Approved 23/10/2019, Norwegian Centre for Research Data (Harald Hårfagres gate 29, N-5007 Bergen, Norway; +47 55 58 21 17; nsd@nsd.no), ref. 758392

## Study design

Quasi-experimental non-randomised study with qualitative follow up

## Primary study design

Interventional

## Secondary study design

Non randomised study

## Study setting(s)

School

## Study type(s)

Other

## Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

## **Health condition(s) or problem(s) studied**

Bachelor of Nursing students' attitudes toward teamwork and teamwork performance in a simulated scenario. Students' perceptions of the team training program and teamwork in clinical placements.

## **Interventions**

A teamwork intervention based on the TeamSTEPPS® program is planned to be implemented among Bachelor of Nursing students. The educational methods used during the implementation of the program are based on the TeamSTEPPS® curriculum and the TeamSTEPPS® implementation guidelines. The intervention is planned and implemented in collaboration with a "change team" of faculty members and is carried out by the faculty. The intervention will last from the students' first to fifth semesters. The interventions consist of lectures, workshops, use of video examples, discussion groups, briefings and debriefings during clinical placement, skills training and simulated patient scenarios. Most of the teamwork training is sought to be implemented as a natural part of the students' scheduled educational activities.

The aim is to evaluate the impact of the implementation of a team training program concerning Bachelor of Nursing students' self-reported attitudes toward teamwork using the previously tested questionnaire (T-TAQ). This study involves students at the intervention campus and two control groups from the two other campuses within the university. The survey is administered on three occasions: before the intervention, after one year of the intervention, and after two years of the intervention. Study participants' demographics were collected, such as age, gender, former higher education and working experience.

Nursing students' teamwork performance during a simulated patient scenario during their third year of the bachelor's program will also be recorded. The students use the TeamSTEPPS® teamwork performance observational tool (TPOT) to rate the team performance. Experts rated the teamwork by watching videos of the scenarios.

The Bachelor of Nursing students' perceptions of the team training program and their perceptions of the use of learned teamwork skills in clinical placements are assessed at follow-up through focus group interviews and will be analyzed based on Elo and Kyngäs' qualitative content analysis process.

## **Intervention Type**

Behavioural

## **Primary outcome measure**

Self-reported attitudes toward teamwork measures, as reflected by the Norwegian version of the T-TAQ on three occasions: before the intervention, after one year of the intervention, and after two years of the intervention

## **Secondary outcome measures**

1. Team performance, measured with the Team Performance Observation Tool (TPOT) during a simulated patient scenario during the third year of the bachelor's program
2. Perceptions of the teamwork program measured by focus group interviews at the end of the study period with nursing students in the intervention group
3. Perceptions of the transfer of learned teamwork skills in clinical placements measured by focus group interviews with nursing students in the intervention group

## **Overall study start date**

01/11/2017

**Completion date**

22/10/2020

## Eligibility

**Key inclusion criteria**

Bachelor of nursing students at a Norwegian multicampus university in their first, second, and third years of the bachelor's program.

**Participant type(s)**

Other

**Age group**

Adult

**Sex**

Both

**Target number of participants**

129 students in intervention and 129 in the control group

**Key exclusion criteria**

None

**Date of first enrolment**

24/08/2018

**Date of final enrolment**

22/10/2020

## Locations

**Countries of recruitment**

Norway

**Study participating centre**

Norwegian University of Science and Technology

Teknologiveien 22

Gjøvik

Norway

2815

## Sponsor information

**Organisation**

Norwegian University of Science and Technology

**Sponsor details**

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**Sponsor type**

University/education

**Website**

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**ROR**

<https://ror.org/05xg72x27>

**Funder(s)****Funder type**

University/education

**Funder Name**

Norwegian University of Science and Technology

**Results and Publications****Publication and dissemination plan**

Planned publication in a peer-reviewed journal.

**Intention to publish date**

31/05/2022

**Individual participant data (IPD) sharing plan**

The current data sharing plans for this study are unknown and will be available at a later date.

**IPD sharing plan summary**

Not provided at time of registration

**Study outputs**

| Output type | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|-------------|---------|--------------|------------|----------------|-----------------|
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|---------------------------------|------------|------------|-----|----|
| <a href="#">Results article</a> | 01/03/2021 | 08/11/2021 | Yes | No |
| <a href="#">Results article</a> | 21/10/2021 | 08/11/2021 | Yes | No |
| <a href="#">Protocol file</a>   | 12/08/2022 | 12/08/2022 | No  | No |