

Why teamwork matters in nursing and healthcare



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Why is teamwork of primary concern for present and future healthcare?

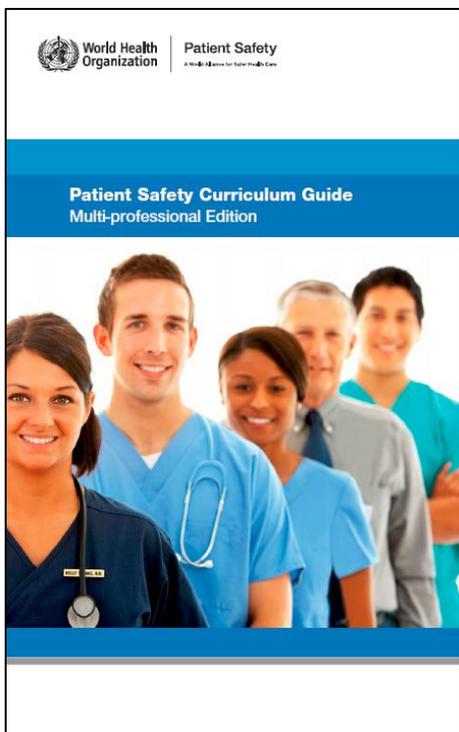
The importance of effective teams in health care is increasing due to factors such as:

- The increased incidence of complexity and specialization of care
- Increasing co-morbidities
- The increasing incidence of chronic diseases
- Global workforce shortages
- Initiatives for safe working hours and safe workplaces

(WHO, 2011).

Patient Safety Curriculum Guide

Multi-professional Edition (WHO, 2011)

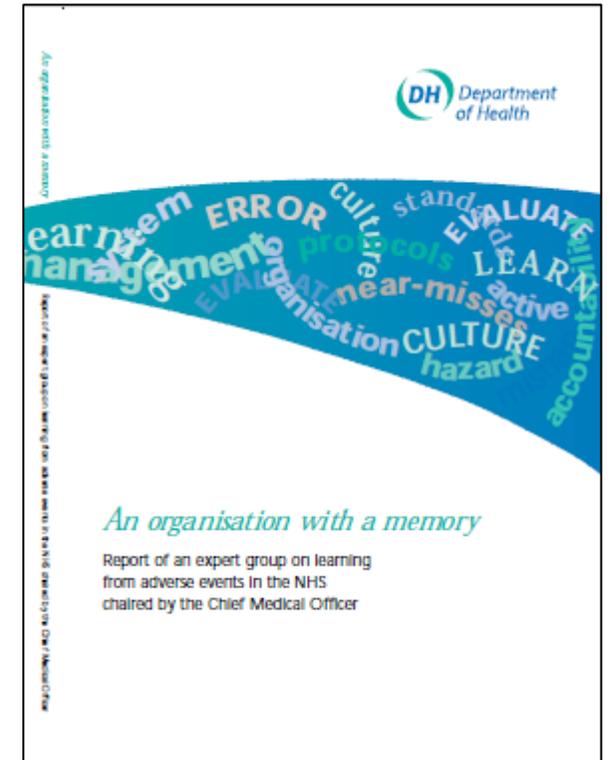
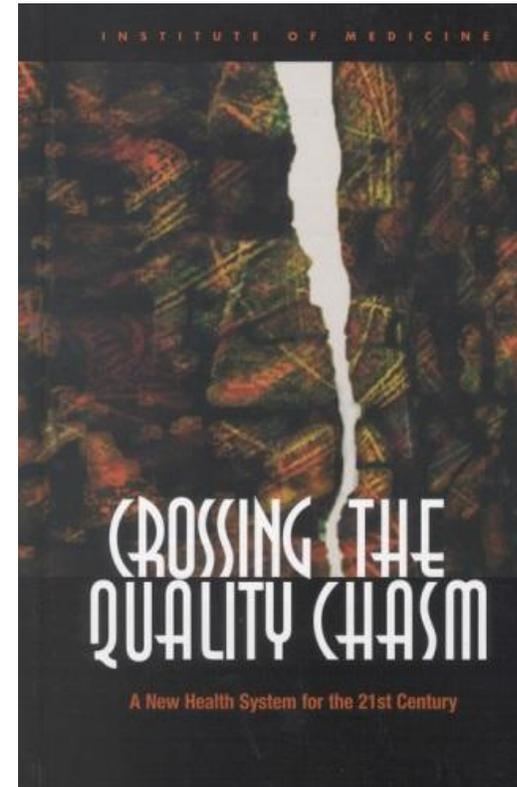
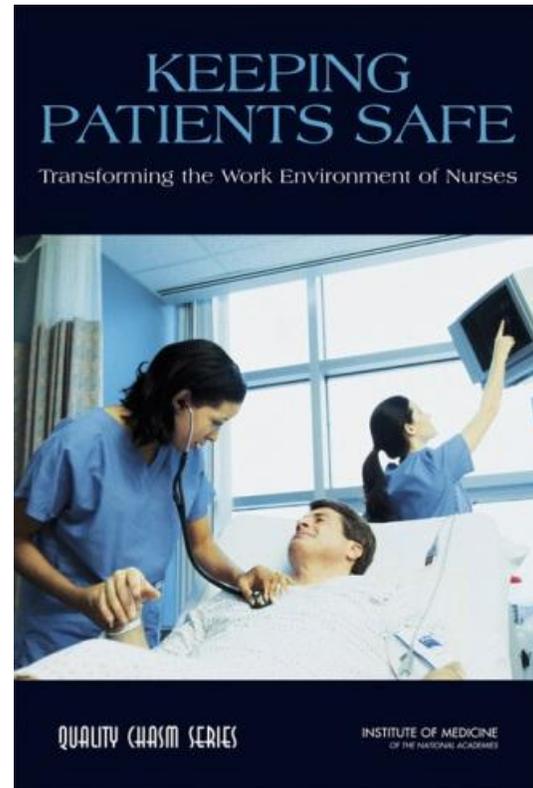
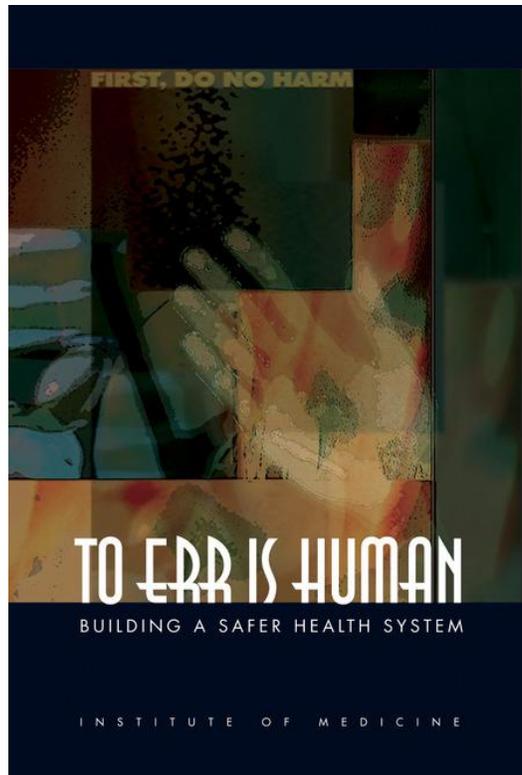


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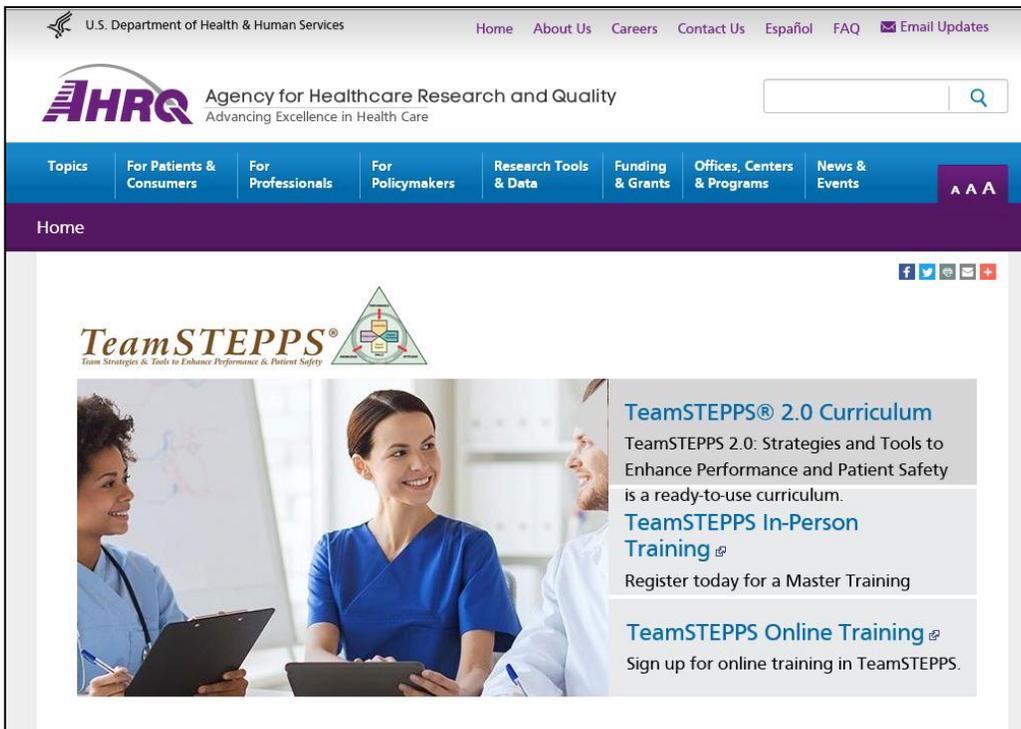
“Commitment to **patient safety** worldwide has grown since the late 1990s. This was prompted by two influential reports: **To Err is Human**, produced by the Institute of Medicine in the USA, in 1999 and **An Organization with a Memory**, produced by the United Kingdom Government’s Chief Medical Officer in 2000. Both reports recognized that error is routine during the delivery of health care and occurs in around 10% of hospital admissions. In a proportion of cases, the harm produced is serious, even fatal.”
(Sir Liam Donaldson, p. 9)

Influential reports on teamwork in patient safety



Evidence-based knowledge on teamwork

TeamSTEPPS®



The screenshot shows the homepage of the Agency for Healthcare Research and Quality (AHRQ) TeamSTEPPS website. At the top, it features the U.S. Department of Health & Human Services logo and navigation links for Home, About Us, Careers, Contact Us, Español, FAQ, and Email Updates. The AHRQ logo is prominently displayed with the tagline "Advancing Excellence in Health Care" and a search bar. Below this is a blue navigation bar with categories: Topics, For Patients & Consumers, For Professionals, For Policymakers, Research Tools & Data, Funding & Grants, Offices, Centers & Programs, and News & Events. The main content area has a purple header with "Home" and social media icons. The central focus is the TeamSTEPPS logo, which includes a triangle with a scale and a person. Below the logo is a photograph of three healthcare professionals in a meeting. To the right of the photo are three promotional boxes: "TeamSTEPPS® 2.0 Curriculum" (describing a ready-to-use curriculum), "TeamSTEPPS In-Person Training" (with a registration link), and "TeamSTEPPS Online Training" (with a sign-up link).

TeamSTEPPS is a teamwork system designed for health care professionals that is:

- A powerful solution to improving patient safety within organizations.
- An evidence-based teamwork system to improve communication and teamwork skills among health care professionals.
- A source for ready-to-use materials and a training curriculum to successfully integrate teamwork principles into all areas of health care.
- Scientifically rooted in more than 20 years of research and lessons from the application of teamwork principles.
- Developed by Department of Defense's Patient Safety Program in collaboration with the Agency for Healthcare Research and Quality.

(<http://www.ahrq.gov/teamstepps/about-teamstepps/index.html> October 10th 2016)

The importance of teamwork in nursing and healthcare

- Teamwork and team-based care is identified as one of the key contributors to safe quality health care, by the World Health Organization and the Institute of Medicine (Kohn et al., 2000; Mitchell et al., 2012).
- To secure future quality nursing care, teamwork has been identified as one of the cornerstones in nursing education (Page, 2004; Sherwood & Barnsteiner, 2012).
- Good teamwork is a part of healthy work environments (AACH, 2016; Pearson et al., 2006; RNAO, 2008; WHO, 2016).

Principles of team-based health care

- Shared goals
- Clear roles
- Mutual trust
- Effective communication
- Measurable processes and outcomes

(Mitchell et al., 2012).



Different types of teams (TeamSTEPPS®)

- **Core teams** – direct patient care teams
- **Coordinating teams** – responsible for day-to-day operational management, coordination functions and resource management for core teams.
- **Contingency teams** – formed for specific event such as rapid response.
- **Ancillary services teams** – primarily to support core teams, may be time limited or task oriented, providing direct patient care.
- **Support services teams** - consist of individuals who provide indirect, task-specific services in a health-care facility.

(<http://www.ahrq.gov/professionals/education/curriculum-tools/teamstepps/index.html>)

Teamwork

- **A team** is a group of 2 or more interdependent individuals with a common purpose.
- **A nursing team** is defined as the nursing staff members - nurse manager, registered nurses, practical nurses, unit secretaries and other nursing assistive personnel - working on a given inpatient hospital care unit (Kalisch et al., 2010).
- **A healthcare team** is a dynamic process involving 2 or more healthcare professionals with complementary backgrounds and skills, who share the same health goals and carry out mutual physical and mental efforts in assessing, planning, or evaluating patient care. This is **achieved through interdependent collaboration, open communication and shared decision-making, generating value-added patient, organizational and staff outcomes** (Xyrichis & Ream, 2007).

Five personal values characteristic for the most effective team-members of high-functioning teams in health care:

- **Honesty** – crucial for mutual trust
- **Discipline** – disciplined work activities including cooperation and following protocols
- **Creativity** – seeing opportunities in every project / problem
- **Humility** – respecting each other – identifying and respecting own and others vulnerability
- **Curiosity** – dedication to learn from experience for continuous improvement

(Mitchell o.fl., 2012)

The Salas model of teamwork

Five core components:

1. **Team leadership** – coordination and support
2. **Collective orientation** – team needs and objectives more important than individual needs
3. **Mutual performance monitoring** – team members observe and monitor each others work
4. **Back-up behavior** – team memembers help each other
5. **Adaptability** – use of adjustment strategies when needed

Three coordinating mechanisms:

1. **Shared mental models** – team members shared concept of their work
2. **Closed-loop communication** – verification of intended message between sender and receiver
3. **Mutual trust** – shared perception that necessary actions will be taken in the interest of the team, to reach the teams goals

(Salas et al., 2005 in Kalisch, 2015)

Good teamwork in nursing and healthcare has shown to

- Decrease latent errors
- Decrease missed nursing care
- Benefit patient outcomes such as falls and pneumonia
- Improve clinical performance such as in surgical procedures
- Decrease nursing staff turnover
- Decrease nursing shortage
- Increase nurses professional commitment
- Increase job satisfaction

(AbuAlRub o.fl., 2012; Brewer o.fl., 2012; Estry-Behar o.fl., 2007; Kalisch o.fl., 2007; Mohr o.fl., 2008; Rafferty o.fl., 2001; Schmutz & Manser, 2013; Wang o.fl., 2012)

Who benefits from good teamwork?

- **The organization** – reduced hospitalization and cost
- **The team** – improved communication and coordination of care
- **The individual healthcare professional** – increased job satisfaction and well-being
- **The patient** – increased satisfaction and health outcomes

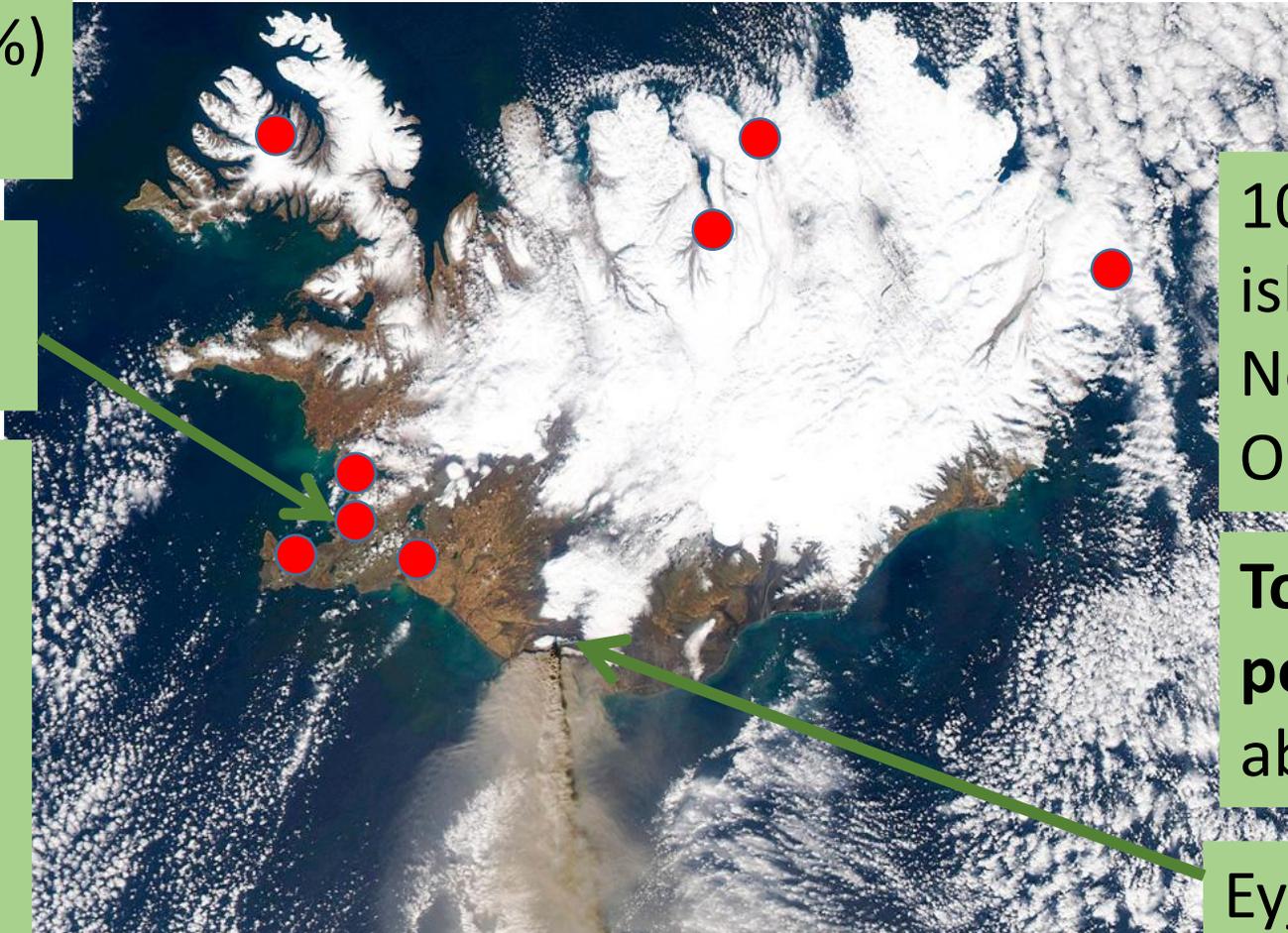
(Mickan & Rogers, 2005)

Looking closer at MNC and nursing teamwork in Iceland

N=864 (response rate 69.3%)
27 units in 8 hospitals

Capital area of Reykjavík
2/3 of the total population

Hospital nursing care is carried out by **registered nurses** (most have a 4 year BS university education) and **practical nurses** (most have 3 year vocational education)



103,000 km²
island in the
North Atlantic
Ocean

**Total
population** of
about 330.000

Eyjafjallajökull
eruption 2010

● Hospital

Missed Nursing Care

- An error of omission referring to any aspect of required nursing care that is omitted either in part or in whole or delayed (Kalisch & Williams, 2009, p. 2011).
- The Missed Nursing Care Model is believed to conceptualize missed nursing care as a universal phenomenon (Kalisch & Lee, 2010).

A nursing team

- Definition from Kalisch, Lee and Salas (2010).
- The nursing team members provide direct and indirect day-to-day patient care to a defined group of patients located in one geographically demarcated area in a hospital.

Questionnaire

- *Background variables*
- *MISSCARE Survey-Icelandic*
 - Part-A (24 items) how **frequently** each element is missed by the nursing staff on their unit on a 5-point Likert-scale ranging from (5) *always missed* to (1) *never missed*
 - Part-B (17 items) **reasons** for MNC
 - 3 subscales asking about reasons for MNC on the unit:
1) **Labor resources**, 2) **Material resources**, 3) **Communication/teamwork**
 - 4-point Likert-scale ranging from (4) *significant reason* to (1) *not a reason*
- *Nursing Teamwork Survey-Icelandic* (33 items)
 - Five subscales on: 1) **trust** (7 items), 2) **team orientation** (9 items), 3) **backup** (6 items), 4) **shared mental model** (7 items), 5) **team leadership** (4 items)
 - 5-point Likert-scale asking about how each statement applies to their team: (1) *rarely*, (2) *25% of the time*, (3) *50% of the time*, (4) *75% of the time*, (5) *always*

Results

- For data analysis n=527
- 79.5% in teaching hospitals
- 65.8% in medical and surgical units
- 98.9% women
- 62.6% RNs
- 37.4% PNs
- 85.4% worked rotating shifts
- 71.7% had work experience >5 years
- 70.8% said that staffing on their unit was adequate $\geq 75\%$ of the time

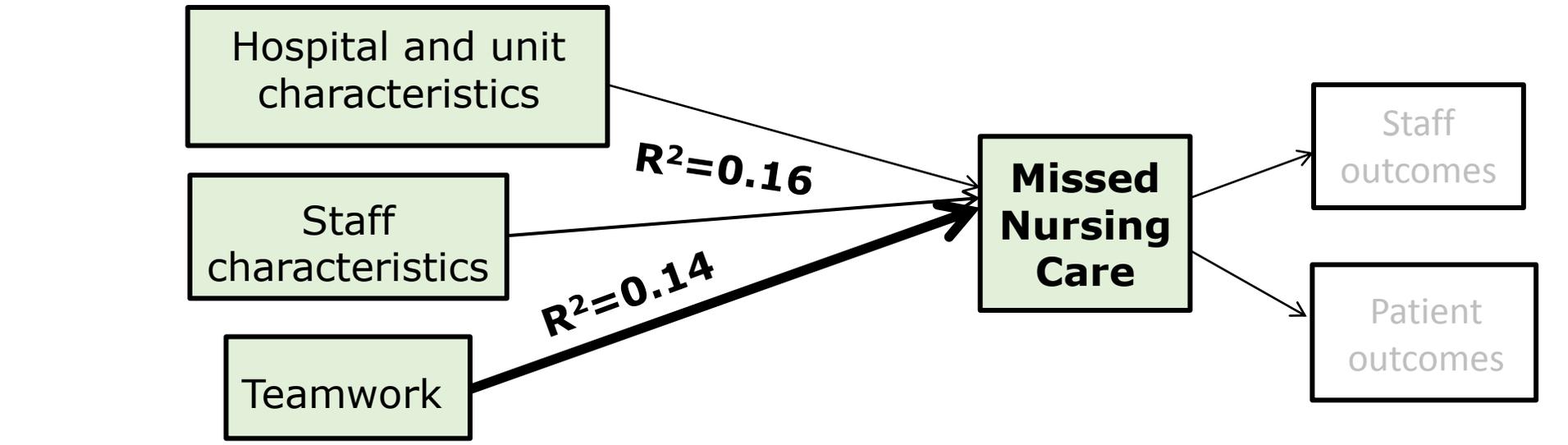
Most frequently identified MNC

	M	sd
Ambulation three times per day or as ordered	2.56	.869
Attended interdisciplinary care conferences whenever held	2.42	.981
Patient teaching about procedures, tests and other diagnostic studies	2.38	.927
Emotional support to patient and/or family	2.25	.915
Mouth care	2.24	.891
Full documentation of all necessary data	2.23	.905
Assess effectiveness of medications	2.18	.897
Monitoring intake/output	2.15	.873
Medications administered within 30 minutes before or after scheduled time	2.12	.819
Patient discharge planning and teaching	2.12	.959
IV/central line site care and assessments according to hospital policy	2.06	.872
Turning patient every 2 hours	2.06	.887

The relationship of MNC to hospital, unit and staff characteristics and NTW

Variable	<i>Test statistics</i>	<i>p</i>
Hospital type: More MNC in teaching hospitals than in other hospitals	t=3.44	.001
Unit type: Less MNC in ICUs than in medical and surgical units	F=14.392	<.001
Age of participants: More MNC when under 35 years of age	F=5.92	.001
Role: RNs reported more MNC than PNs	t=5.406	<.001
Adequate staffing: More MNC with less staffing	F=6.099	<.001
NTW: Less MNC with better NTW	r=-0,436	<.001

The extent to which NTW predicts MNC



Two models tested:

1. The extent to which unit type, role, age and staffing adequacy predicts variance in **MNC** (multiple regression).
2. The extent to which **NTW** predicts **MNC** controlling for unit type, role, age and staffing adequacy (multiple regression).

(Bragadóttir et al., 2016)

Conclusion

- Integrate teamwork teaching and training in health care professionals curriculum
- Train and practice teamwork on the workplace
 - Crew resource management (CRM) and debriefing
 - Simulation and role-playing
- Use Evidence-based knowledge and interventions for improving teamwork in healthcare
- Be a good example

A good example 😊

Ice axe



Climing harness

Crampons

Jóhanna prepares and practices for glacier hiking

Practicing teamwork can take place anywhere

Glacier hiking is teamwork where people are dependent on one another and have to depend on each other.



Hiking tour on Snæfellsjökull