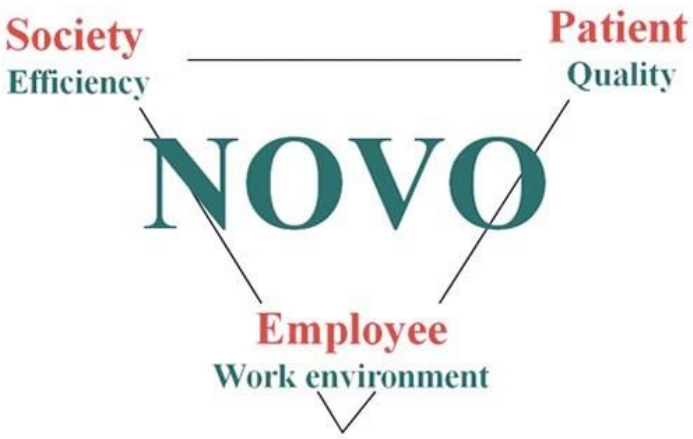
10th NOVO symposium

Sustainable healthcare through professional collaboration across boundaries

Reykjavík 10 – 11 November, 2016



Abstract book

Overview

Abstract book
Sigrún Gunnarsdóttir, Helga Bragadóttir, Kristinn Tómasson (Editors)
Kasper Edwards (Co-editor)

The 10th Novo symposium
Sustainable healthcare through professional collaboration across boundaries

Reykjavík, November 10 - 11, 2016,

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Preface

Welcome to Reykjavík and the 10th NOVO-symposium

The NOVO Network is a Nordic Society promoting research and development for increased organizational sustainability in healthcare. The vision is “a Nordic Model for sustainable systems in the healthcare sector”. This core idea is illustrated by our “NOVO triangle” highlighting their mutual dependency of quality of work environment, quality of care and efficiency. Thus continuous research and development in the field have the potential to benefit integration of these three dimensions.

This year, the topic is sustainable healthcare through professional collaboration across boundaries. Keynote speakers are Birgir Jakobsson, Director of Health, Directorate of Health, Iceland and Lotta Dellve, Professor of Work Science, Caring Science, and Ergonomics at the University of Gothenburg, Sweden.

The present 10th Symposium has received 27 excellent abstracts investigating key aspects of quality in health care, management, leadership, work environment and technical aspects related to these issues. The focus of the symposium will hopefully provide important contributions regarding new evidence and successful strategies for sustainable health care for researchers and practitioners in the field.

The 10th NOVO Network Symposium is organized in collaboration with University of Iceland, Bifröst University, Administration of Occupational Safety and Health and Akureyri Hospital. We are looking forward to discuss interesting and important topics with fellow researchers and wish you a pleasant symposium.

10th NOVO Symposium
Local committee
Sigrún Gunnarsdóttir
Helga Bragadóttir
Kristinn Tómasson

UNIVERSITY OF ICELAND

HÁSKÓLINN Á BIFRÖST
BIFRÖST UNIVERSITY

VINNUEFTIRLITIÐ
ADMINISTRATION OF OCCUPATIONAL SAFETY AND HEALTH

SAk SJÚKRAHÚSIÐ Á AKUREYRI
AKUREYRI HOSPITAL

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Denmark:	Kasper Edwards, chair
	Peter Hasle
	Thim Prætorius
Finland:	Marjukka Laine
	Timo Sinervo
Norway:	Beate André
	Frode Heldal
Iceland:	Sigrun Gunnarsdottir, co-chair
	Helga Bragadóttir
Sweden:	Ewa Wikstrom
	Lotta Dellve

Local committee 2016

The symposium has been organized by the University of Iceland, Bifröst University and the Administration of Occupational Safety and Health in collaboration with Akureyri Hospital. The Local Committee has included Sigrún Gunnarsdóttir, University of Iceland, School of Business Administration and Bifröst University, School of Business, Iceland, Helga Bragadóttir, University of Iceland, Faculty of Nursing, School of Health Sciences and Landspítali University Hospital and Kristinn Tómasson, Medical Director, Administration for Occupational Health and Safety

Scientific review 2016

Each abstract has been reviewed by members of the local committee as the scientific reviewers.

Program

Venue: National Museum of Iceland, Suðurgata 41, 101 Reykjavík

Thursday 10th of November 2016

8.30 **Registration**

9.00 **Symposium opening & welcome**

9.15	**Session 1:** Moderator: Sigrún Gunnarsdóttir	
	Kasper Edwards	*A method for effect modifier assessment in ergonomic intervention research – The EMA method*
	Peter Hasle	*Designing for collaboration and coordination in hospitals*
	Endre Sjøvold	*The origin and effect of professional stereotypes on interdisciplinary team-work in hospitals*

10.00 **Coffee**

10.20	**Session 2:** Moderator: Endre Sjøvold	
	Anders Paarup Nielsen	*Driving performance development in hospitals: the devil is in the details*
	Guðbjörg Erlingsdóttir	*How do physicians understand teamwork? Possible organizational implications*
	Rasmus Jørgensen	*Measuring and developing Communities of Practice in a blood analysis unit*
	Thim Prætorius	*Let's have a meeting! But why should we? An investigation of meetings in the context of hospitals*
	Maria Wolmesjö	*Integrative value based leadership – For a sustainable work life in the care of older people*

11.35 **Lunch** at Aalto Bistro Nordic house (www.aalto.is)

13.00 **Keynote presentation: Birgir Jakobsson, Director of Health, The Directorate of Health, Iceland**

Change management in healthcare - improving quality, patient safety and work environment

13.30

Session 3: Moderator: Peter Hasle	
Sanne Lykke Lundstrom	*Reducing social inequality in inter-sectorial rehabilitation*
Ann-Christine Andersson	*The need for collaboration to improve support to children as relatives*
Annette Nygårdh	*Another approach for patient education*
Guðrún Árný Guðmundsdóttir	*STREYMA: Patient-centered rounds*

14.45 **Coffee**

15.15 **Trip to Friðheimar and Secret Lagoon**

Friday 11th of November 2016

8.30 **Keynote presentation: Lotta Dellve, Professor of Work Science, Caring Science, and Ergonomics, University of Gothenburg, Sweden**
Supporting managerial work and organizing sustainable working conditions in healthcare

9.15	**Session 4:** Moderator: Helga Bragadóttir	
	Guðbjörg Erlingsdóttir	*Healthcare personnel does not consider eHealth service "patient online access to their electronic health record" to be beneficial for work environment and patient safety*
	Stefan Lundberg	*Improved health care accessibility in remote areas*

9.45 **Coffee**

10.05	**Session 5:** Moderator: Beate André	
	Jukka Surakka	*Work ability program produces short-term productivity improvements*
	Gunilla Avby	*Transforming Swedish primary care – Exploring the implementation of a new provider model as a lever for innovative practices*
	Beate André	*What characterizes the communication at a hospital unit with a successful implementation – a correlational study*
	Timo Sinervo	*Workers in reform of services for older people*
	Kasper Edwards	*Effect modifiers in intervention research at hospitals in three Nordic countries*

11.20 **Lunch** at Stúdentakjallarinn (studentakjallarinn.is)

12.30	**Session 6:** Moderator: Thim Prætorius	
	Lisa Björk	*Return to work among patients with stress related mental disorders – An intervention in the Swedish primary care*
	Hanne Berthelsen	*Is organizational justice associated with perceived quality of care and organizational affective commitment? A multilevel study among dental workers in Sweden*
	Aino Rubini	*Exploring physician job control in public and private primary care organizations*

Sigrún Gunnarsdóttir	*Work environment and reported burnout levels among hospital nurses. Comparison of findings from survey studies 2002 and 2015*

13.45 **Short break**

13.55 **Session 7:**
Moderator: Kasper Edwards

Helga Bragadóttir	*Should Indicators of Healthy Work Environments in Nursing be identified as Determinants of Health in the 21st Century?*
Ewa Wikström	*Sustainable leadership and integrated work environment management*
Lotta Dellve	*Managerial work at top- and lower-levels to handle values of quality of care, efficiency and work environment*
Sara L. Fallman	*The impact of restricted decision-making autonomy for operative managers´ work and health during organizational restructuring*

14.45 **Symposium closure, coffee and farewell**

15.30 **NOVO steering group meeting**
Room 303 Háskólatorg

Keynote speakers

Birgir Jakobsson, MD, PhD, Director of Health, Directorate of Health Iceland, previously CEO at Karolinska University Hospital Stockholm.

Birgir Jakobsson is the 17th holder of the office of Director of Health in Iceland since the establishment of the Directorate of Health in 1760. He is the former head of Department of Peadiatrics, Chief of Division and thereafter CEO for St. Görans Hospital and then Karolinska Hospital Sweden. The Directorate of Health operates under the authority of the Ministry of Welfare.

Lotta Dellve, Professor of Work Science, Caring Science, and Ergonomics at the University of Gothenburg, Sweden.

Lotta Dellve´s focus of research is sustainable and health-promoting work and leadership in health care and elderly care service across organizational boundaries and from different perspectives and organizational levels. In recent years, her research has also focused on change management and sustainable redesign processes.

Abstracts

Session 1

Session 2

Keynote

Session 3

Keynote

Session 4

Session 5

Session 6

Session 7

A method for *E*ffect *M*odifier *A*ssessment in ergonomic intervention research – The *EMA* method

Kasper Edwards[1] & Jørgen Winkel[1,2]

[1] *Department of Management Engineering, Technical University of Denmark, Denmark*
[2] *Department of Sociology and Work Science, University of Gothenburg, Sweden*

Email of presenting author: kaed@dtu.dk

Introduction:
Ergonomic intervention research includes studies in which researchers arrange (or follow) changes in working conditions to determine the effects in risk factors and/or health. Often this research takes place at workplaces and not in a controlled environment of a laboratory. The effects may thus be due to other factors in addition to the investigated intervention – i.e. due to effect modifiers. Such effect modifiers need to be identified and assessed in terms of potential impact on the investigated outcome before proper inference can be drawn. A preliminary review of the literature revealed lack of or poor consideration of effect modifiers in ergonomic intervention research. We present a method that has been developed over the course of several years parallel to intervention studies in healthcare.

Material and methods:
The EMA method is a type of group interview including 3-6 employees representing the occupational groups in the investigated organization. With reference to the investigated period they are asked to recall important changes/events in and around the ward; 1) in general, 2) in work processes and equipment and 3) regarding their work environment. In each step the participants write their individual answer on post-it notes. The answers are then discussed in plenum, one at a time, and the post-it note is placed on a timeline. At the end this illustrates the sequence of significant events.
All identified events are assessed for being caused by either the investigated intervention(s) or other causes ("the effect modifiers") and their impact on the work environment. Following the workshop, events are entered into a database and reassessed by triangulation based on scientific evidence, researcher knowledge, reading the transcribed audio recorded workshop and other local sources.

Conclusion:
The EMA method seems to offer a feasible procedure to obtain significant knowledge on potential effect modifiers in ergonomic intervention research. However, further development and validation is suggested.

Designing for collaboration and coordination in hospitals

Peter Hasle, Anders Paarup Nielsen, & Thim Prætorius

Center for Industrial Production, Aalborg University Copenhagen, Denmark

Email of presenting author: hasle@business.aau.dk

Introduction:
The need for collaboration and coordination in hospitals keeps growing, e.g., more patients with multiple diagnoses and minimised length of stay and during this short time patients are in touch with an increasing number of staff from different departments. This makes sharing information and securing the right flow the various tasks involved critical. If this is not achieved it becomes a source for frustration and anxiety among patients, a stressor for the staff and a source for inefficiency and quality problems. Thus, this paper aims to identify structures, processes and practices in hospitals which facilitate cross-boundary collaboration and coordination.

Methods:
The paper is based on interviews, observations and archival data from a qualitative multiple, embedded case study of four hospitals in the capital region of Denmark and from which eleven collaboration initiatives are analyzed. Only tentative findings are presented as the analysis is work in progress.

Findings:
The results indicate that a critical factor for successful collaboration and coordination is the design of facilitating and enabling structures and practices that fits the local context. To that end, health professionals need on one hand to acknowledge the necessity for changes and on the other hand also have sufficient leeway for developing local solutions. In the cases studied, we find many examples of such locally designed structures and practices: the most common ones include short morning meetings to plan the day, standards for handing-off patients, lean board meetings to follow up on targets and plans, time out meetings in busy emergency and maternity wards, patient coordinators and temporary teams.

Conclusions:
Structures, processes and practices to secure collaboration and coordination can be designed, but requires local commitment and decision latitude. Top down initiatives may provide a framework but are likely to have little effect without sufficient room for local adaption.

The origin and effect of professional stereotypes on interdisciplinary team-work in hospitals

Endre Sjøvold

Department of Industrial Economics and Technology Management, Faculty of Social Sciences and Technology Management, Norwegian University of Science and Technology, Trondheim, Norway

Email of presenting author: endre@sjovold.no

Introduction:
Strong professional identity tend to create an in-group bias. The stronger the identity to your own profession, or group, the more probably is a distorted perception of other professionals from the out-groups. Mintzberg and Glouberman state in their frequent cited paper on managing care and cure, that hospitals are best described as four separate worlds coexisting within the borders of the hospital organization and its physical space. One of these worlds are inhabited by nurses and another by physicians. Nurses and physicians have a clinical coalition around the patient, and the quality of their joint work depends on a mutual understanding and respect for each other's skills and abilities. However, nurses have a more holistic view of the patient and a more inward focus, while physicians are concerned on the specific cure and more outward focused. The two professions' view of reality is distinct different, which may result in misunderstandings and conflicts.

In this study we investigate how professional identity is reflected in stereotypes, and when such stereotyping is developed during the professional's career.

Material and methods:
To capture professional stereotypes we used the SPGR (Systematizing Person-Group Relation) instrument. The respondents were physicians and nurses working as hospital professionals and nurses and physician students. Each respondent where asked to rate what they see as the *typical physician* and the *typical nurse*. The quantitative data were supplied by interviews.

Results:
We found significant difference in the view of nurses and physicians which clearly indicates the existence of professional stereotypes. Physicians is seen as more influential and task-oriented while nurses is seen as significantly more submissive and people-oriented. One familiar hypothesis is that the building of stereotypes is part of the socialization into the hospital culture. We found, however, that the professional stereotypes were established already during education before the students met the hospital organization.

Conclusions:
Such clear and distinct stereotypes that we found in this study are effective hindrances to smooth inter-disciplinary collaboration, and may in some cases represent a threat to patient security. To prevent dysfunctional stereotype-formation one has to start with the education system.

Driving performance development in hospitals: the devil is in the details

Anders Paarup Nielsen, Thim Prætorius, & Peter Hasle

Center for Industrial Production, Aalborg University Copenhagen, Denmark

Email of presenting author: apn@business.aau.dk

Introduction:
Research has demonstrated that successful implementation of improvement initiatives, such as lean, requires adaptation to the local organizational context. Adaption is particular important in hospitals as they often experience challenges in implementing improvement initiatives and realizing the promised benefits afterwards. By analyzing micro-level organizational mechanisms, processes, and context this paper finds that lasting productivity, quality and employee well-being improvements often can be achieved using simple and well-known mechanisms for improving organizational coordination and collaboration.

Methods:
The paper is based on interviews, observations and archival data from a qualitative multiple, embedded case study of four hospitals in the capital region of Denmark and from which eleven improvement initiatives are analyzed. Only tentative findings are presented as the analysis is work in progress.

Findings:
The analysis indicates that hospitals through relatively simple and well-known concepts, tools, and methods from manufacturing and service operations management can improve hospital operations. Examples include the use of short (team) meetings, visual management and performance boards. Importantly, our tentative results show that these simple and well-known concepts and methods need to be carefully fitted to the local context of each department and that the local management and staff need to be involved in the development process to foster ownership and engagement. The findings also illustrate that to achieve lasting and sustainable improvements it is necessary to build and institutionalize structures which can sustain the changes.

Conclusions:
Even though the analysis is on-going the findings indicate that leaps in productivity, quality and employee well-being in hospitals often can be achieved through simple well-known mechanisms aimed at improving coordination and collaboration as long as there is a strong bottom up or employee involvement. As such, it is apparently not necessary to embark on large scale improvement programs driven top-down to create significant improvements in operational performance as “the devil is in the details”.

How do physicians understand teamwork? Possible organizational implications

Christofer Rydenfält, **Gudbjörg Erlingsdóttir,** & Jonas Borell

Department of Design Sciences, Lund University, Sweden

Email of presenting author: gudbjorg.erlingsdottir@design.lth.se

Introduction:
Interprofessional teamwork is associated with improved patient safety and job satisfaction. Previous research indicates that issues often appear when different professions' perspectives don't match up and it also shows that the use of the concept of teamwork within the healthcare literature is not as clear as could be expected. Therefore it is of interest to study how healthcare professionals *understand* the concept of teamwork as it could be considered the foundation for their expectations on teamwork and their own behavior as part of a team. In this study we investigate how physicians 1) understand the concept of teamwork and 2) think that teamwork could be improved.

Method:
Semi-structured interviews regarding teamwork and the work environment were conducted with 20 physicians, from two hospital units, one intensive care and one emergency unit. The interviews were transcribed and coded in an explorative manner. Themes concerned with the physicians understanding of *teamwork* and *how teamwork could be improved* were selected for further analysis.

Results:
The main organizational traits considered to be required for something to be teamwork were: *specific roles*, *a common goal*, *a group of people* and *a team leader*. However, it was only on *specific roles* that the physicians appeared to agree, with the other traits mentioned much less. Regarding how teamwork could be improved, the physicians had more diverse views. *Communication skills*, *team training*, *to make roles explicit*, an *open climate* and *team stability* were factors associated with improved teamwork.

Conclusions:
Compared to contemporary team theory physicians appear to have a less complex understanding of what teamwork is. The results also show that physicians see many and quite different paths to improved teamwork. However, there were differences between how physicians conceptualized teamwork in the two studied units. As the understanding of the concept of teamwork could affect the physicians' behavior in relation to teamwork, this indicates that some of the issues associated with the implementation of teamwork may be affected by how the concept is understood by different team members. Further research is needed to investigate how teamwork is understood by different professions and what the implications are.

Measuring and developing Communities of Practice in a blood analysis unit

Rasmus Jørgensen & Kasper Edwards

Department of Management Engineering, Technical University of Denmark, Denmark

Email of presenting author: rajor@dtu.dk

Introduction:
Knowledge sharing is essential to develop operational efficiency and quality. However, knowledge sharing is difficult to achieve due to 24-7 shifts, patient contact and little time for meetings. The theory of communities of practice (CoP) proposes an alternate approach to knowledge sharing. A CoP is a social community formed around a practice (e.g. ICU nursing) which induce a propensity to share experiences and thereby constitute knowledge sharing.
CoP was conceived as a descriptive construct but has gained popularity and is found to improve practice performance, but knowledge about developing and measuring CoP is lacking. We propose a method to measure and develop CoP and the method is tested in a blood analysis unit at 'Nordsjællands Hospital' in Denmark.

Material and method:
The practice was operationalized narrowly as employees performing a specific maintenance task. A questionnaire was developed based on a CoP literature review. Using the 'think aloud' method the questionnaire was tested with practitioners investigating if questions were decoded correctly and triggered the desired mental image.
CoP level was measured at baseline and at follow-up (seven weeks after the intervention). Interventions were initiated just after baseline measurement.
The following CoP developing interventions took place: The practice was chosen due to a high frequency and recurring problems. A voluntary CoP facilitator was identified. She then invited her colleagues to participate in the CoP and arranged CoP meetings.
The 'Event Effect Method' was used to control for effect modifiers by identifying events both part and not part of the intervention and estimating their effect on CoP.

Result:
Results will be available for the conference. A response rate of 50-60% is expected.
We expect increased CoP activity in the form of increased levels of reported knowledge sharing and common problem solving and increased amount of improvement suggestions.

Conclusion:
We hope to conclude that the questionnaire identified statistically significant changes ($p<0,05$).
We expect few effect modifiers were identified and assessed as having no impact on the measured CoP.
We expect the change in CoP level to correspond with intervention associated events and interventions are concluded to have produced the desired effect, and that the questionnaire measures this change.

Let's have a meeting! But why should we? An investigation of meetings in the context of hospitals

Thim Prætorius, Peter Hasle, & Anders Paarup Nielsen

Center for Industrial Production, Aalborg University Copenhagen, Denmark

Email of presenting author: tpr@business.aau.dk

Introduction:
During our exploration of hospitals, and as alluded to in the literature, we have come across a plentitude of different types of formal meetings health professionals and managers attend during their work day. This is interesting as such meetings can be considered as instances of increased bureaucracy that potentially infringe on time for patient care and clinical freedom which are key features of these professional organizations. Meetings are also often ridiculed for being a waste, e.g.; unclear aim, too long or of little relevance. This raises the questions why hospital meetings are used, how they are used and when they should be used.

Methods:
The paper combines a systematic review of the management and health care literature about hospital meetings with empirical findings about the use of meetings from a qualitative multiple, embedded case study of four hospitals in the capital region of Denmark. Findings are tentative.

Findings:
Formal meetings are an integral part of how managers and staff manage interdependencies and collaborate about efficiently solving tasks (operational, tactical or strategic) as they create space and time for conversation. Even though more meetings are held, they tend to be short, focused and have a meeting leader assigned and it also appears that they often are inter-disciplinary, thereby supplementing the traditional mono-professional meetings (e.g., doctors' morning conference). This shift holds the potential to develop relations and facilitate coordination, common goals and trust across profession and organizational boundaries: factors attributed to improved patient safety and quality. To be considered helpful, meetings should make sense to those involved. Depending on task characteristics, meetings are held daily (high needs for coordination to solve tasks today, e.g., time-outs/huddles) or weekly/fortnightly (short/mid-term planning where coordination is less urgent, e.g., quality improvement meeting).

Conclusions:
Formal meetings in hospitals can be an efficient way to connect interdependent health professionals together for the purpose of solving joint tasks. It appears particularly important that they are kept short and focused and health professionals experience that meetings make sense and help them solve tasks.

Integrative Value Based Leadership – For a Sustainable Work Life in the Care of Older People

Maria Wolmesjö

Jönköping University, Sweden

Email of presenting author: maria.wolmesjo@liu.se

Introduction:
The knowledge of first line managers values and their preconditions to integrate a value based leadership in the care of older people is important for a sustainable work life, not only for the employed nursing assistants, but also for managers them self. First line managers have to handle different dilemmas and challenges, as well as the solutions related to the employees work environment, job efficiency and quality of care, are often explained by the ability of the leadership.

Methods:
This paper is based on the experiences of almost 500 first line managers who participated in a national educational programme for managers in the elderly care in Sweden, offered at the University of Borås 2013-2015. A questionnaire was distributed to all the participants with the aim of study to describe first line managers' ethical values, dilemmas and organizational preconditions to provide a value based leadership in public or private elderly care. Methods used for the analysis is descriptive, comparable and analytical with regression models and SEM-analysis.

Results:
The analysis of the result shows, first line managers have to handle several different value dilemmas, which is related to specific challenges at different levels as organizational level (buffer- and container problems) and in different sectors (logic conflicts). In private organisations the participants ranked value conflicts and other challenges lower than the managers in public care did. Organizational support lowered the experience of value conflicts and there were some differences according to the managers´ own educational background. This was important for a sustainable work life of the managers, as well as for a value-based leadership. The results also point out; there is a connection between sustainable leadership, active leadership strategies and a relation to a former profession. It can be stated an integrated understanding and the possibility to be prepared to handle, as well as a good organisational support is important to develop a sustainable and value based leadership.

Discussion:
A broader understanding and knowledge of a variety of values, attitudes and strategies as well as good organisational support resources appear to contribute to more sustainable and integrated value based leadership.

Keynote

Change management in healthcare - improving quality, patient safety and work environment

Birgir Jakobsson

Directorate of Health, Iceland

Healthcare is not safe and nations are putting more money into healthcare systems without evidence of improving quality and accessibility. Moreover, in many countries there is increasing difficulties in recruiting competent staff. The reason for this is not mainly a question of salary but probably more important working environment. In order to address these problems, healthcare has to change. So far most improvement projects have included some aspects of introducing economic incentives, tailored systems for reimbursement, privatisation, organisational changes and more or less ad hoc projects. There is no indication what so ever that this approach has been helpful in addressing patient safety, quality of care nor working environment.

In this lecture a different approach will be discussed based on previous experience. Three different strategies will be discussed:

Communicating the strategy through a simple business plan
Introducing a system of continuous improvement and
Improving leadership

The importance of discussing values in the organisation will be pointed out and in this perspective good leadership cannot be overestimated. The aim of every organisation should be to focus on the need of the patient, visualize their goals and results and to implement a culture of continuous improvement which is driven by the employees themselves. There are numerous examples that the first thing to improve when this strategy is successful is working environment and staff wellbeing. The ultimate goal is, however, to increase patient safety and the quality of care.

Reducing social inequality in inter-sectorial rehabilitation

Sanne Lykke Lundstrøm

Research Centre for Prevention and Health, Centre for Health, Capital Region of Denmark

Email of presenting author: Sanne.lykke.lundstroem@regionh.dk,

Introduction:
In Denmark disease management programs have been developed for type 2 diabetic and cardiovascular diseases. They describe the overall interdisciplinary and inter-sectorial treatment and rehabilitation program. Patients who work through the entire rehabilitation program have a better clinical status; have lower risk for relapse and readmission. They also achieve better life quality by attending the rehabilitation program. However, keeping all patients motivated to participate and complete the rehabilitation programs have shown to be a big challenge with a pronounced social bias. Especially patients with lower social economics status and social capital rarely participate in the rehabilitation program, and when they do participate, they have a high dropout rate.
From a public health perspective it would be beneficial to develop a structure there promote participation in relevant rehabilitation programs and reduces social inequality. The meeting between health professionals and patients is essential for participating in rehabilitation programs, especially how health professionals handle when patients says “no thank you” to participate in rehabilitation programs.
The project consists of 4 aims:

1. Observation study: The meeting between health professionals and patients
2. Development of a screening tool to identify vulnerable patients who need rehabilitation
3. Develop social differentiated rehabilitation programs
4. Implement the rehabilitation programs in everyday practice

The first aim has been investigated, second and third aim is in process.

Methods:
The observation study took place at a cardiology rehabilitation ward at a Danish hospital in The Capital Region. Over a period of three months patient who were attending their first rehabilitation consultation where video record. All together 28 patients consultation where recorded, which were carried out by five different nurses. Later the five nurses and nine patients were interviewed.
A literature study was conducted on vulnerability/vulnerable patient in EMBASE, MEDLINE, PSYCINFO, SCOPUS and Web of Science was.

Conclusion:
Most of the patients not participating or dropping out of rehabilitation programs do not feel a need for rehabilitation or they cannot find time to participate in rehabilitation programs. The nurses are balancing between motivating patients to participate in rehabilitation programs and respecting the individual’s freedom of choice.

The need for collaboration to improve support to children as relatives

Ann-Christine Andersson,[1] Marie Golsäter,[2] & Anna Melke[3]

[1]School of Health and Welfare, the Jönköping Academy for Improvement of Health and Welfare, Jönköping University, Sweden
[2]CHILD -research group, Department of Nursing Science, School of Health and Welfare, Jönköping University, Jönköping, Sweden and Futurum Academy for Health and Care Region Jönköping County, Jönköping Sweden
[3]The Göteborg Region Association of Local Authorities, Gothenburg, Sweden

Email of presenting author: ann-christine.andersson@ju.se

Introduction:
In 2010, the Swedish Health Care Act incorporated a new regulation, stating that healthcare professionals were obligated to identify and support children as relatives; children with parents who are physically or mentally ill, addicted to drugs, or dies unexpectedly. Research has shown that children's conditions during their growth affect their lives in long term. Many organizations already offer interventions, but less are working with a systematic approach, which is important to increase the understanding of what to do, for whom and when.

Material and method:
The project, aiming to support caregiving organizations, followed an interactive research approach, which can contribute to practical issues and increase scientific understanding through mutual processes of reflection and learning.
In a council north east of Sweden, which already worked with groups for children as relatives, workshops were carried out with teams from different organizations (county council, municipals and religious communities) two times during half a year. The teams worked on how to improve their collaboration to be able to improve support and care for children as relatives.

Results:
During the project time, no new group was started, but the involved care givers were elaborating on issues about how they could improve their support by better collaboration. Information material and checklists were further developed, and the work was established to the management, which organized a steering group to support the collaboration. A remaining issue was how to more systematic be able to identify, and thereby offer support to the most needing children.

Conclusions:
The participants found it valuable to meet as teams and work together on aims and goals for their work, and to elaborate together with the researchers on how to improve the support for children as relatives. The difficulties and needs for external help, when the goals were so many and none of them easily evaluated, were recognized.
Although the project time was too short to accomplish concrete outcome, the issue was highlighted as important and established onto the top management. This promotes the possibilities that the started work will be ongoing and further developed.

Another approach for patient education

Annette Nygårdh[1] & Berith Hedberg[2]

[1]*School of Health Sciences, Department of Nursing, Jönköping University, Sweden*
[2]*School of Health Sciences, Academy for Quality Improvement and Leadership in Health and Welfare, Jönköping University, Sweden*

Email of presenting author: annette.nygardh@ju.se

Introduction:
A part of everyday life for patients with chronic illness is to communicate regularly with health care professionals e.g. meetings where care and treatment decisions are interwoven. When the individual's needs, values and preferences are emphasized, opportunities for participation in the dialogue is created. Despite the individual's legitimate right to be co-creators of their care, research shows that health professionals often plan care without regard to the individual's needs. The intervention in this study aims to strengthen the possibilities for patients with chronic conditions to cope with their everyday life. The Learning Café is a pedagogical model that facilitate healthy skills to master everyday life and improve health and quality of life.

Aim:
The aim of this study is to evaluate if a health pedagogic model contributes to develop coping strategies for patients with chronic illness.

Material and methods:
Design: Mixed method
Sample: Patients (N=100) participating in Learning Café during 2016-2017 are included in the study.
Data Collection: The Learning Café is followed up by a questionnaire (CollaboRATE) and individual face-to-face interviews (n=12). Demographic data is collected regarding age, gender, marital status, chronic illness, education, and profession.
Data Analysis: Quantitative date will be analyzed by parametric and nonparametric tests and qualitative data are analyzed with content analysis.

Preliminary results:
The data collection for the quantitative analysis is not completed. However, preliminary results show positive trends in the providers' effort to help the patient understanding health issues and include the patient in health care decisions. The qualitative findings include three major themes 1) Supporting communication and interaction, 2) Learning from significant others and 3) Becoming an active patient

Conclusions:
Learning Café as a model for patient education provide supportive environment and self-efficacy for patients. In addition, basing the education from what matters most for the patients', health care professionals get feedback on how to support the patients with chronic illness.

STREYMA: Patient-centered rounds

Guðrún Árný Guðmundsdóttir

Faculty of Nursing, University of Iceland
Landspítali University Hospital, Iceland

Introduction:
The Icelandic word STREYMA (*e: STREAM*) implies that rounds are a flow or a streamlined process. STREYMA is a patient centered, bedside round, where the patient, doctors, nurses and sometimes other specialists exchange information, set goals, plot treatment plan and prepare discharge. In our 670-bed National University Hospital in Iceland, nurses and residents complained how rounds were carried out on the wards. The complaints were mainly regarding time-consuming, unstructured rounds. The residents, who frequently changed wards, found their role during rounds unpredictable. The nurses complained about conflicting duties and not enough time to prepare for rounds. A large amount of professionals' time was spent away from the patient and many decisions were made without his participation or knowledge.
The plan was to coordinate how rounds were performed at most if not all medical wards. Checklists were made for each professional role and responsibilities. The goal was to make rounds effective for all, patient - centered and with emphasis on teamwork, safety and quality of care. All nursing and medical staff participated in training sessions. Training took place in an hour long session, partially presentation and partially role play.

Implementation, training and collection of data:
One medical ward as used to pilot the process and that led to some changes. Then the wards implemented the model sequentially at a time when the staff felt interested and ready. The head nurse and medical chief of ward were responsible for the follow-up with a support from the implementation group. Prior to implementation, a short survey of nurses´ and residents´ attitudes to rounds was conducted and is to be repeated 12 months after implementation. Data regarding mortality and length of stay on the wards prior and post implementation was gathered.

Practice:
STREYMA starts on the dot at 10 o'clock and is expected to finish in an hour. In the time between 8 and 10, the nurses and doctors gather information necessary for the round. The doctors examine those patients who are new or the most critically ill, whereas the nurses meet with their patients as they bring their medication. Each patient is included for 3-4 minutes on these rounds. If a complicated or thorough discussions are called for the responsible staff tells the patient that they will come back later for that discussion. After it is clear who does what and what the plan is for the day.

Evaluation:
Overall, the change has been successful. Nurses describe less work load, clearer communication and clearer understanding of who is doing what and when. Residents find the change has put them in a leading role with the specialist by their side. Data on staff attitude and patient mortality is being collected.

Keynote
Supporting managerial work and organizing sustainable working conditions in healthcare

Lotta Dellve

University of Gothenburg, Sweden

Today, most public hospital organizations struggle with restructurings to decrease the costs and develop quality of care. But studies of successful organizational developments points to the importance of management that are balancing the perspectives of effectivity and quality of care with beneficial working conditions. This is also in line with the Nordic tradition of active collaboration between employers and employees. However, the work environment have become more challenging to handle: work demands and the rates of sick leave and turnover among health care professionals have increased during the last years in Sweden and there is severe difficulties to attract physicians and nurses with specialist competence to stay in their jobs. Leadership of high quality is considered a key conditions for creating more attractive work with beneficial working conditions, employees health and work engagement. However, managerial work in health care are complex and characterized by fragmentation, uncertainties, conflicts of values and loyalties, high- performance pressures, a hectic work pace and long working hours. Linked to these conditions, studies have highlighted perceived stress and high turnover-rates among operational managers.

Thus, to build capacity for more sustainable working conditions, managers need organizational preconditions, competence and handling strategies to meet challenges in complex social and organizational working conditions. Recent studies point to the benefit of improved organizational preconditions for health care managers in terms of manageable span of control, shared managerial assignment and support through managerial group, own manager, colleagues and organizational resource functions (e.g. HR, communication). Leadership programs need to support managers' knowledge, awareness and capacity for organizing beneficial psychosocial work conditions – also during organizational changes. Key-factors and conditions for workers health, wellbeing and engagement have been identified through several literature reviews. However the interactions between individual, group and organizational risk resp. resource factors have strong importance. Therefore, managerial work based on knowledge to handle interactions and combinations of risk and resource factors and accumulated conditions across different organizational levels are needed and crucial for sustainable development. Thus, leadership programs should approach more holistic system theories of sustainable working conditions at individual-, micro-, meso-, exo-, macro- and chrono-levels. Our studies have confirmed earlier studies about leadership that are actively bridging across system-levels to integrate perspectives and serve core purposes have more success in sustainable organizational developments. Consequently, it's important to keep focus on and support managers work practices to organize increased resources and sustainability. The key-note will present a leadership program that supports managers capacity to apply and adapt the evidence-based knowledge to the own managerial work practice through dialogues and exercises. In line with the NOVO network, the program focus work environment conditions integrated with efficiency and quality improvement. In line with the labour market traditions in the Nordic countries, the program can benefit from being conducted in collaboration between employers, managers and union. Thus, the leadership program is one example of the efforts to further develop Nordic models of sustainable health care.

Healthcare personnel does not consider the eHealth service "patient online access to their electronic health record" to be beneficial for work environment and patient safety

Guðbjörg Erlingsdóttir & Lena Petersson

Department of Design Sciences, Lund University, Sweden

Introduction:
Government and public agencies in Sweden have promoted the expansion of eHealth. The strategy behind many of the eHealth services is to increase quality of care, enhance efficiency, patient empowerment and patient safety. Patient online access to their electronic health record (EHR) is one of the most important civic eHealth services. By 2017, all patients in Sweden will be able to access their EHR online. In Mars 2014, Region Skåne (RS) introduced the service in somatic care and in September 2015 RS introduced the service in adult psychiatry. The aim of this presentation is to discuss 1) how the employees in somatic care experience the service in terms of effects on work environment and patient safety. 2) How the employees in psychiatric care anticipated that the service would affect their work environment and patient safety.

Material and methods:
The material presented derives from two surveys: 1) A full population web survey distributed to employees in somatic care in RS approximately two years after the introduction of the service (post implementation). Response rate: 20% (n = 2376). 2) A full population web survey that was distributed to employees in adult psychiatry in RS just before the introduction of the service (ante implementation). Response rate: 29% (n = 871).

Results:
The results show that the experience in somatic care and the expectation in adult psychiatric care correspond to a large degree. Respondents in both groups are sceptical to the anticipated positive effects of the service. The comparison between the two surveys further show that the employees with experience of the service (somatic care) are even more negative than the employees without experience (psychiatric care).

Conclusions:
The results from the two surveys indicate that there is a large difference between the aims of the national eHealth strategy and the expectations and experiences of the healthcare personnel and that little attention is given to the negative effects that civic eHealth services may have on the work environment of healthcare personnel. There is thus a need for more research about how eHealth services affect work environment, patient safety and quality of care.

Improved health care accessibility in remote areas

Stefan Lundberg

The School of Technology and Health, the Royal Institute of Technology, Stockholm, Sweden

Email of presenting author: stefan.lundberg@sth.kth.se

Introduction:
The older population in many rural areas are at risk of becoming disengaged from the healthcare system, as it is increasingly difficult to gain access to rapid and high quality medical care. Rural health and social care policy makers have additional concerns about a lack of care resources. There is an emphasis on how to attract more care professionals and enabling technologies, as well as to consider more efficient pathways for delivering care services in these regions. Current ICT-based care services, such as telecare, telehealth and telemedicine, offer a solution to these challenges, however only in part. High-skilled professionals are still needed to provide face-to-face care. Moreover, older people with chronic diseases need additional support and encouragement to self-manage their care, to adhere to their rehabilitation program, and to use high-tech mobile health devices and services. Today's telecare is targeting at the home and with focus on the specific need of the beneficiary. Normally it has to be installed by a technician which makes it tediously and expensive and support has to deal with a distributed web of users. It is not something that is installed just to keep track of health status or to give an early warning of a possible deterioration in health.

Material and methods:
In a trial in Västerbotten council, Sweden an attempt to bridge these problems by using an unstaffed facility for a health self-check has been installed. The result is transferred to the general practitioner 100 to 200 km away. If needed the patient is asked to visit the primary care otherwise a video meeting can be sufficient. Some of the experiences at the GP's facility have been collected by informal interviews.

Results:
The solution save time and resources to the primary care and gives a much easier access to health check-ups for the patient that doesn't have to travel for just a regular health control.

Conclusions:
The response has been largely positive. In particular, some patients express a preference for meeting in the VHR rather than traveling long distances to a clinic.

Work ability program produces short-term productivity improvements

Jukka Surakka[1], Risto Tuominen,[2] & Jukka Piippo[1]

[1]*Arcada-University of Applied Sciences, Finland*
[2]*Turku University, Finland*

Email of presenting author: jukka.surakka@arcada.fi

Work ability programs are widely used to answer the challenges related to changing business environment and demands for improved productivity Work ability is perceived as a rather complex concept, and same program may produce varying outcomes depending on the environment it is implemented. Thus, the observed program's benefits should not be directly generalized to any other work environment, but the expected benefits should be carefully studied in each context the program is implemented. When a program proves to be effective, employees benefit by improved work ability, and health. Employers benefit from healthier employees, reduced sick leave and higher productivity. The aim of this work was to study the development of sick leaves and presenteeism during a work ability program that has earlier proved to produce improvements in workers' perceived ability to work. Productivity losses were determined for 70 employees from four organizations and for 42 controls. Numbers of sick leave days (SLD) were collected from employers' records for three months before the program started and each subsequent three months for one year after the initiation. Presenteeism was determined for four weeks before and after one year of the program implementation. In the first three months of implementation SLD reduced among project members by 55% and increased by 27% among controls ($p<0.001$). However, during the last two measurement periods, the project subjects had more SLD than they had before the program started ($p<0.001$), and also more than the controls ($p<0.001$). Overall, during the one year implementation the program subjects had on average 23% increase in SLD, whereas the controls had 35% decrease in their SLD ($p<0.001$). Program participants experienced per month 3.6 hours more presenteeism after the one-year implementation and among the controls presenteeism increased by 2.5 hours. Short term effects of the implemented work ability program on sick leave days seemed beneficial. However, with longer program duration the benefits disappeared. Based on our experience, we would recommend long enough follow-ups to study whether possible short-term benefits remain when the programs are run longer.

Transforming Swedish primary care - Exploring the implementation of a new provider model as a lever for innovative practices

Gunilla Avby[1], Sofia Kjellström[1], & Monika Andersson-Bäck[2]

[1]*Jönköping Academy for Improvement of Health and Welfare, Jönköping University, Sweden*
[2]*Göteborg University, Sweden*

Email of presenting author: gunilla.avby@ju.se

Introduction:
Working life has undergone changes when it comes to both the nature of the work and the emergence of new forms of work, due to among other things new forms of managerialism, including increased application of financial incentives and performance measurements to improve performance or productivity. There is an ongoing debate in the scientific community whether new managerial reforms have unintended consequences, for example less internal motivation and damaged professional autonomy, which in turn hinders creativity and innovation. In 2010 a new reform was implemented in Swedish primary care, introducing a more flexible system for patients to choose between private as well as publicly managed primary care providers. The aim of this study is to explore the new provider model's impact on professional development and the remaking of practices.

Material and methods:
The study was carried out in six primary care practices in Region Jönköping county in Southern Sweden: three public county-driven, two private owned by personnel, and one non-profit unit. 60 interviews with managers and health care professionals (physicians, nurses, nurses' assistants, care administrators, physical- and occupational therapists) serve as the basis for a qualitative thematic analysis. The practices were chosen on the criteria that they were well-functioning units with good leadership, in combination with other strategic variables, such as size and location.

Results:
The growing demands from the public as well as from the regional agency was met by the studied primary care providers quite differently. However, a common aspect seems to be that employees' individual awareness of and shared responsibility for work performance has grown, due to among other things performance becoming more audible and transparent. New and innovative ways to organize practice is experienced, such as developing multi-professional teams to handle a specific clientele with certain problems or diseases, or referring patients directly to the helping professions rather than the doctor, triage. These new ways generated professional development for some professions, such as nurses, care administrators and physical- and occupational therapists.

Conclusions:
Financial incentives can act as drivers for professional development and innovative practices, due to among other things performance becoming more audible and transparent.

What characterizes the communication at a hospital unit with a successful implementation – a correlation study

Beate Andre[1,2] & Endre Sjøvold[3]

[1]*Department of Nursing Science, Norwegian University of Science and Technology (NTNU)*
[2]*NTNU Center for Health Promotion Research*
[3]*Department of Industrial Economics and Technology Management, Faculty of Social Sciences and Technology Management, NTNU, Trondheim, Norway*

Email of presenting author: beate.andre@ntnu.no

Introduction:
To achieve successful changes in health care in general a balance between technology and "people ware", as the human recourses, is necessary. The human aspect of the implementation process has received less attention than the technological issues. The aim was to explore the factors that characterize the communication in a hospital unit with successful implementation compared with one with an unsuccessful implementation.

Method:
The method seeks to explore what aspects dominate communication at the particular work environment identifying challenges, limitations and opportunities. The Systematizing Person-Group Relations (SPGR) method was used for gathering data and for the analysis. This method applies six different dimensions representing different aspects of a work culture (Synergy, Withdrawal, Opposition, Dependence, Control and Nurture) and each dimension has two factors applied. We compared two different unit at the same hospital, one with successful and one with an unsuccessful implementation.

Results:
There were significant statistical differences between healthcare personnel working at a unit with a successful implementation compared with the unit with unsuccessful implementation. There were significant differences between the two different groups in 9 of the 12 factors. It seems like the work environment at successful unit are characterized by high influence by ruling, task-orientation, caring, criticism, loyalty, acceptance, engagement, empathy and less by resignation. Task-orientation, caring, engagement, and empathy can be characterized as positive qualities in the work culture, as long as they do not contribute to unbalance related to the other vectors, while resignation represent more negative qualities in the work culture. Both the vectors ruling and task orientation can be positive qualities in a changing process, because of the properties of the vectors which can cause a more efficient way of dealing with the changes, and can also contributed to a feeling of autonomy and decision-making opportunities in the environments in which they work

Conclusion:
The results of this study show that health care personnel at a unit with a successful implementation have a working environment with many positive qualities. This can indicate a work environment that can handle challenges of implementations and changes, with high focus on goal achievement and task orientation.

Workers in reform of services for older people

Timo Sinervo & Tuulikki Vehko

National institute of health and welfare (THL), Finland

Email of presenting author: timo.sinervo@thl.fi

Background:
The Finnish service system is transition. In services for older the major reform is the move from institutional care towards home-based care and towards rehabilitative work methods. It is supposed that home-based care with new work methods provide higher quality of life for older people, and furthermore functional ability of older people remains better at home.
There has been discussion, however, of care quality and loneliness of older people at home. Also employees stress at home care services has been discussed. This study aims to compare workers' well-being and quality of care at different care services (home-care, institutional care and assisted living facilities).

Methods:
An electronic survey was carried out for personnel in services for older people. All Finnish care organizations were invited to participate to the survey. 2150 employees from 441 work units responded. The employees evaluated their own work (time pressure, job control, role conflict), team climate, leadership (organizational justice) and care quality in their unit.

Results:
The results showed that workers in home care experience more stress (time pressure, role conflict) and their evaluation of team climate, organizational justice and care quality are lower than in institutional care. Job control, on the other hand, is at higher level. Further analysis showed that stressors as well as team climate and organizational justice highly correlate to care quality.

Conclusions:
The development towards home-based services is seen as positive in the point of view of older people. These results show, however, that for workers home care may be a very demanding work-place. The results also indicate that team work and fair management are essential for high care quality. This may be a challenge in home care as the employees are frequently working alone. The results also raise a question of working methods in home care. There are several case studies showing that changing work methods towards rehabilitation in home care is needed. As the workers well-being seems be endangered, there may be a need to change work methods of increase staffing levels.

Effect modifiers in intervention research at hospitals in three Nordic countries

Jørgen Winkel[1,2], **Kasper Edwards[2]**, Caroline Jarebrant[3], Birna Dröfn Birgisdóttir[4], Jan Johansson Hanse[5], Sigrún Gunnarsdóttir[6], Ulrika Harlin[3] & Kerstin Ulin[7]

[1]Department of. Sociology and Work Science, University of Gothenburg, Sweden
[2]Technical University of Denmark, Department of Management Engineering, Denmark
[3] Swerea IVF, Sweden
[4]School of Business, Reykjavik University, Iceland
[5]Department of Psychology, University of Gothenburg, Sweden
[6]School of Business, University of Iceland and Bifröst University, Iceland
[7]Sahlgrenska University Hospital & Sahlgrenska Academy, Department of Health and Care Science, Sweden

Email of presenting author: kaed@dtu.dk

Introduction:
The impact of ergonomic interventions may be offset by other changes at the work place, primarily rationalizations. These have previously been shown to imply a dominant negative effect on health and risk factors, thus causing effect modification (Westgaard & Winkel 2011). The present paper aims to present assessment of potential effect modifiers in intervention studies at hospital wards in Denmark, Iceland and Sweden.

Material and methods:
The effect modifiers were assessed by a newly developed method (the EMA method; Edwards & Winkel 2016). It is a type of group interview including 3-6 participants representing all occupational groups in the investigated organization. The group is asked to write down significant changes at the workplace during the investigated period. The method also includes a semi-qualitative assessment of the potential Work Environment (WE) impact of each modifier. It aims to capture both the individual and collective account of all significant events that may have caused a significant impact in relation to the specific aim of the investigated intervention. Thirteen hospital wards went through interventions based on either the lean tool VSM (Value Stream Mapping) (6 wards) or the ErgoVSM method (Jarebrant et al, 2010) where additional focus is on ergonomic issues (7 wards).

Results:
In total 120 interventions were implemented. However, 322 significant modifiers were assessed to have occurred during the intervention period. Of these, 120 were assessed to imply impaired WE, 166 a positive impact, 33 no impact and 3 were not assessable.
The number of significant modifier events varied between wards from 8-48, while the number of implemented interventions varied from 0-28. The semi-qualitative assessments suggested a major impact on WE due to modifiers. At seven wards the dominating impact of the modifiers was estimated to improve WE; at two wards the modifiers were estimated mainly to impair WE while four wards showed a mixture of modifiers, some estimated to improve and other to impair WE.

Conclusion:
Numerous effect modifiers occurred parallel to the investigated interventions. This jeopardizes any inference regarding impact of the investigated interventions on WE. The study thereby highlights the significance of considering effect modifiers in ergonomic intervention research.

Return to work among patients with stress related mental disorders – An intervention in the Swedish primary care

Lisa Björk

Institute for stress medicine, Västra Götalandsregionen, Sweden

Email of presenting author: lisa.m.bjork@vgregion.se

Introduction:
Sick-leave rates due to common mental disorders have been increasing dramatically in Sweden in recent years. Despite the fact that primary care centers are key actors for the rehabilitation of patients with stress related mental disorders, they lack of prerequisites for working with workplace-oriented measures. The aim of this project is to develop a model for return to work (RTW) for these patients that takes into account each patient's specific situation; includes the workplace, and is well adapted to the Swedish primary care setting.
There are several previous intervention studies available in this area, but few have been conducted in the primary care setting. The relationship between a poor work environment and the risk for sick-leave due to mental illness is well known, and it is therefore of utmost importance to enable for the primary care to include workplace-oriented measures in the rehabilitation process.

Material and methods:
In late 2016, general practitioners and rehabilitation coordinators at both public and private primary care centers will be offered a one day training about work and workability for patients with stress related mental disorders. Also, the participants will be trained in a specific method which includes the employer early in the rehabilitation process. Alongside studying if the intervention has an effect on the patients' RTW over time, we aim to investigate the mechanisms explaining the effects and the individual and organizational level (primary care units) circumstances necessary for these mechanisms to be triggered.
The project has a quasi-experimental and longitudinal design. The intervention will be conducted on 15 different health care centers which will be matched with a comparison group. To gain deeper knowledge about mechanisms and context, we will conduct interviews with the treatment staff and collect registry data about the primary care units. Return to work for 500 patients will be analyzed using registry data, 6, 12 and 18 months after sick-listing.

Results and conclusions:
We will not be able to present any results from this study in November 2016. Instead, the focus will be on the project design. The project has relevancy for patients, primary care employees and society.

Is organizational justice associated with perceived quality of care and organizational affective commitment? - A multilevel study among dental workers in Sweden.

Hanne Berthelsen[1], Paul Maurice Conway[2], & Thomas Clausen[3]

[1] *Centre for Worklife and Evaluation Studies & the Faculty of Odontology, Malmö University, Sweden*
[2] *Department of Psychology, University of Copenhagen, Denmark*
[3] *The National Research Centre for the Working Environment, Copenhagen, Denmark*

Email of presenting author: hanne.berthelsen@mah.se

Introduction:
According to the planning report 2016 from The Swedish National Board of Health and Welfare, the county councils in Sweden are facing an imbalance between the demand and the supply of dental staff. In particular, the recruitment situation is problematic regarding experienced staff and is expected to remain so in the coming years. Therefore, it is important to find ways to secure future coverage of dental health care services.
Quality of care is closely connected to the core of work and to the professional fulfillment of health care employees. Organizational affective commitment is a predictor of future actual turnover rate. Thus, both quality of care and organizational affective commitment are important for organizational efficiency.
In the present study we aim to investigate whether a central job resource, i.e., organizational justice at the clinical unit level, is associated with staff's perceptions of care quality and affective commitment to the workplace.

Material and methods:
The study adopts a cross-sectional multilevel design. All staff from public dental health services in four county councils in Sweden was invited to participate in an electronic survey and a response rate of 75% was obtained. In the present study we included non-managerial dental nurses, hygienists and dentists working in general practice from units with at least five respondents (n=900 from 68 units). A set of Level-2 random intercept models were built to predict individual-level affective organizational commitment and perceived quality of care from unit-level organizational justice. We controlled for the potential confounding of group size, gender, age and occupation.

Results and conclusions:
The overall results showed that the shared perception of organizational justice at the clinical unit level was significantly associated with perceived quality of care and organizational affective commitment.
The results indicate a potential for preventing turnover rates and enhancing opportunities for quality care delivery by promoting organizational justice at the clinical unit level. The results indicate a potential for enhancing affective organizational commitment and opportunities for quality care delivery by promoting organizational justice at the clinical unit level. This could be part of a strategy for preventing future staff turnover.

Exploring physician job control in public and private primary care organisations

Aino Rubini[1], Timo Sinervo[2], & Jari Vuori[1]

[1]*Department of Health and Social Management, University of Eastern Finland, Finland*
[2]*National institute of health and welfare (THL), Finland*

Email of presenting author: amhakkar@student.uef.fi

Introduction:
The aim of this study was to explore physician job control through investigating physician control over his time use in public and private healthcare organizations. Physician job control has been found to be low especially in primary health care causing negative psychological consequences from job dissatisfaction to psychological symptoms. Problems in job control have been thought to be one of the main reasons for primary care physician shortage.

Material and methods:
This study was a part of Valint-project (Client centered primary care – patient choice and care integration). This paper is based on a part of the project where 32 general practitioners participated semi-structured thematic interviews. These physicians worked in 18 public and contracted out health centers in Southern Finland. Grounded Theory was used for data analysis. Physician time management strategies were charted together with organizational factors supporting or impairing physician control over managing his daily work.

Results:
Physicians were left with narrow scale of options to control their work. Physicians viewed many of these control options nonfunctional or even harmful and they often rejected using them. However, functioning of several organizational processes and practices were found to be affecting substantially physician job control. These practices can be divided into two main groups: making all the work visible allowing better resource allocation and tailoring right services to a right patient. Common to the solutions enhancing physician job control was their nature of creating flexibility and fluency to the work of health center personnel and to the patient treatment. No significant differences were found in job control options or the processes affecting job control between public and private health care organizations.

Conclusions:
Actions enhancing physician job control seem to be profitable to the whole health care organization and its patients due to creating flexibility and fluency to the work processes. In this study the organization type, public or private, didn't seem to be determining factor of physician job control.

Work environment and reported burnout levels among hospital nurses. Comparison of findings from survey studies 2002 and 2015.

Sigrún Gunnarsdóttir[1,2], Jana Katrín Knútsdóttir[1], & Kári Kristinsson[1]

[1]*University of Iceland*
[2]*School of Business, Bifröst University*

Email of presenting author: sigrungu@bifrost.is

Introduction:
Health care demands are of increasing concern among professionals and the general public in Iceland, in particular as the challenge remains to help the health care system recover after the financial crisis in year 2008. For the purpose of shedding light on the work environment of nurses and their well-being at work a cross-sectional survey was conducted among all clinical nurses and midwifes working in Landspítali University Hospital to examine nurses work environment and reported burnout levels. Data was collected autumn 2015 (n=735) and compared to data from previous study using same instruments at Landspítali in the year 2002 (n=695).

Results and conclusions:
Findings show that symptoms of burnout among nurses and midwifes at the hospital have increased significantly compared to previous study and reported job satisfaction has decreased. The most important work environment factors for better nurse outcomes remain adequate staffing and managerial support at the unit level. The findings also suggest that staffing and relations to management have declined compared to previous study.
The study is an important contribution for understanding better the working environment for nurses and midwifes at Landspítali for the purpose of quality of working life and quality of patient care. The study also provides important messages to guide implementation of preventive measures to support the well-being of personnel and quality of patient care.

Should Indicators of Healthy Work Environments in Nursing be identified as Determinants of Health in the 21st Century?

Helga Bragadóttir

Faculty of Nursing, School of Health Sciences, University of Iceland, Iceland
Landspítali University Hospital, Iceland

Email of presenting author: helgabra@hi.is

Introduction:
A paradigm shift is occurring in the definition of health and therefore also in the determinants of health, not the least in the Nordic countries. As identified by the World Health Organization, global determinants of health include the social and economic environment and the physical environment as well as an individual's characteristics and behavior. Social determinants of health, considered by many to be the basis of good health and a purposeful life, are now the focus of attention in determinants of health. These determinants of health bring attention to the conditions in which people are born and live and work.

Material and methods:
Theoretical and empirical characteristics of healthy work environment in nursing as identified in *the conceptual model for healthy work environments for nurses* published by the Registered Nurses Association of Ontario and the *AACN* (*American Association of Critical Care Nurses) standards for establishing and sustaining healthy work environment* are compared to and reflected in the *global determinants of health* and *the five-keys to healthy workplace* identified by the World Health Organization. A critical thought is given to the perspective that in the past century we have moved from the Industrial Age through the Information Age to the Quantum Age, in which complexity and chaos are acknowledged, and systems thinking is required to explore and explain matters being studied.

Results:
This paper proposes that indicators of healthy work environments in nursing can and should be identified as determinants of health. Study findings from around the world confirm that the health and well-being of nurses and their patients is related to nurses' work and work environments and staff outcomes such as job satisfaction, burnout, and teamwork contribute significantly to the quality of the nursing care and, consequently, patient outcomes.

Conclusions:
The working lives of nurses should be identified as an inseparable part of their personal lives, leading to consideration of work environments and thereby the quality of nurse's work lives as determinants of health in the 21st century.

Sustainable Leadership and Integrated Work Environment Management

Ewa Wikström & Lotta Dellve

University of Gothenburg, Sweden

Email of presenting author: ewa.wikstrom@gu.se

Introduction:
Developed forms of integrated work environment benefits both the employees and the business, and can increase job satisfaction and performance and reduce absenteeism. Leaders are crucial for a health promotive work environment. A key challenge in the development of a health promotive work environment is that it integrates with management models. This requires cooperation between managers, occupational health services (OHS) and human resource (HR).

Material and methods:
This presentation presents integrated conclusions from two research programs of sustainable leadership and collaboration between OHS, HR and managers. The main data used is qualitative: interviews, observations and document with managers, human resource (HR) personnel and personnel in occupational health services.

Results:
Cooperation involves a continuous interaction between these actors, and between managers at various levels. Key conditions for the cooperation is a trusting relationship between these actors, managers who perceive themselves to "own" the process when it comes to developing the work environment and that HR and OHS are seen and used by managers as functional supportive resources. Our studies reveal the importance of working with early, weak signals. Further, the focus on crafting resources among individuals, groups and organizations have importance to build capacity for sustainability. Work environment management including an organizational perspective is central, in terms of operational performance and quality, but also related to developing forms of integrated work environment. If the work environment is strategic and important to the operations, it must be visible in the management model.

Conclusions:
Prevention and health promotion is counteracted by the informal boundaries between line managers, HR and OHS, and difficulty to catch up and give legitimacy to the weak signals of the risk of illness. Major components of what flaws to achieve cooperation between the actors in itself are the level of trust that is needed to make outside expert knowledge current. Crafting sustainable leadership includes building capacity to early identify and manage risks and resources, and have knowledge of the factors that are favorable from a holistic perspective in the workplace as well as at the individual, group and organizational level.

Managerial work at top- and lower-levels to handle values of quality of care, efficiency and work environment

Lotta Dellve & Ewa Wikström

University of Gothenburg, Sweden

Email of presenting author: lotta.dellve@gu.se

Introduction:
The critique of NPM of health care service is vast especially regarding consequences for work environment and professional autonomy. However, implications of new concepts and management trends, e.g. value-based leadership and open management, for lower-level managerial work practice and the outcomes of their work are less known. This study focuses top and lower level managers' work and communication of values of quality of care, efficiency and work environment through Key Performance Indicators (KPI).

Material and methods:
A qualitative driven mixed method study-design was used with statistical analysis (mixed models repeated measures) of the generated hypothesis. Data from 5 Swedish public hospitals (2012-2015) was used: interviews with managers at top- and lower levels (n=198), the yearly questionnaire to managers (n=429) and employees' (n=1361) and observations at the work units.

Results:
Top managerial approaches in managing and communicating KPI was observed related to how logics of control vs. trust, vision and visualization formed the interaction between managers at top- and lower levels: (a) Intervening governance to create clarity of prioritized KPI, (b) Practice-serving prioritizing of KPI to create trust and enthusiasm at lower levels as well as meta-learning, (c) Store front strategies showing success and "best practice" to stimulate internal interest and support external accountability. The top management approaches had impact on the lower level managers' work with improvements and KPI: what KPI that was prioritized, their work situation, stress and job satisfaction. The two-year follow-up showed different patterns of outcomes regarding efficiency, quality of care and work environment conditions, as well as workers stress and engagement, related to the top-level managerial approaches.

Conclusions:
Value-based leadership and open management have various grounds, logics and practice. Top management approaches have substantial impact on lower-level managers' work with improvements of values and prioritizing of key performance indicators as well as on the outcomes and working conditions.

The impact of restricted decision-making autonomy for operative managers' work and health during organizational restructuring

Sara L. Fallman[1,2], Göran Jutengren[1] & Lotta Dellve [1,2,3]

[1] *Faculty of Caring Science, Work Life and Social Welfare, University of Borås, Sweden*
[2] *KTH – Royal Institute of Technology, School of Technology and Health, Stockholm, Sweden*
[3] *Department of Sociology and Work Science, Gothenburg University, Sweden*

Email of presenting author: sara.larsson@hb.se

Introduction:
Health care managers at operational level are often exposed to a strenuous work-situation, with tough demands and challenging work. Research indicates that these demands increase during times of restructuring. When ideas from free marketing, in line with new public management (NPM), were introduced in public health-care, focus on measurability and result increased. NPM with its strict top-down management control have been heavily criticized for, among others, increase the administrative work load. During the last decades, the health-care system has undergone continuous restructuring in order to increase efficiency and quality of care. Process-based governance has been introduced in health-care and research has implied that such governance may leave less room for managers' decision-making. Few studies have focused on what impact strict top-down management control during reorganizations has on operational managers' health. The aim of the study is to investigate the impact of restricted decision-making autonomy and conflicting demands for operational managers' work and health. This was studied during a time where there were intensive organizational restructurings from line organization towards process organization.

Materials and methods
A prospective design with questionnaire data from a total sample of operational managers (n=162) at five hospitals active with reorganizations were used. The operational managers responded at the questionnaire at two times, one year apart. Structured equation model (SEM) analysis with cross-lagged paths were used to examine managers experience of being exposed to restricted decision-making autonomy and conflicting demands regarding their self-rated health and how they perceive their ability to fulfill their managerial assignment.

Results and conclusion:
The result showed that restricted decision-making autonomy (such as having to implement decisions taken by the superior management that you do not fully agree with) had negative effect on managers' self-rated health ($\beta = -.14$, $p = .037$). Restricted decision-making autonomy were also a predictor for lower expected possibility to fulfill their managerial assignments ($\beta = -.15$, $p = .048$). Conflicting demands (i.e. there are a conflict between administrative work, organizational development and contact with the employees) is described as a stressor in earlier studies. In this analysis conflicting demands were not statistically associated with Self-rated health or their ability to fulfill their managerial assignments. Restricted decision-making autonomy has found to be negative for operative managers during reorganizations.

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