

## **MASTERCLASS AND WORKSHOP 7-9 NOVEMBER 2012**

### **Implementing Complex Interventions in Health Care**

#### **ABSTRACT**

Evidence based practice can contribute to transparency and professionalism in health care and better outcomes for patients. However, the implementation of evidence based practice often meets many barriers. Implementation itself therefore needs to be researched and eventually evidence based. In a three day masterclass we intend to add to researchers' knowledge and skills in this area, with a view to capacity building across the Peninsula.

#### **SCIENTIFIC SUMMARY**

##### **Evidence based practice**

Promoting evidence based practice increases professionalism in health care and leads to optimal outcomes for patients. Following Sackett's definition of Evidence Based Medicine (Sackett et al.1996), Evidence Based Practice can be defined as "the conscientious, explicit and judicious use of current best evidence in making decisions about the care for individual patients". This definition stresses the importance of using evidence, while 'judicious use' acknowledges the importance of other factors such as patient preferences and context in the care for individual patients.

Regretfully, many examples from daily practice illustrate how evidence based practice is often not accomplished. Studies on hand hygiene in hospital workers, for instance, consistently demonstrate adherence to hand hygiene prescriptions in less than 50% of all relevant occasions (Pittet et al. 2000). Similar difficulties are found in other areas. For example, difficulties in using effective measures for pressure ulcer prevention (e.g. De Laat et al. 2006) are reported and Segaar and colleagues (2007) demonstrated that implementing effective, nurse-delivered smoking cessation interventions in cardiology wards was also difficult.

These and other examples demonstrate how a gap between current knowledge and current practice often persists. This gap is not merely frustrating to academics who hope to see their research results used, but directly threatens health care workers' professionalism and the safety and quality of patient care. Implementation efforts need not be fruitless however. When carefully planned, clear benefits such as fewer adverse outcomes in patients will be the result, as was demonstrated in a recent project aiming at the prevention of pressure ulcers, urinary tract infections and falls (Van Gaal et al. 2011).

## **Implementation**

Davis and Taylor-Vaisey (1997) define 'implementation' as the introduction of an innovation in daily routines, demanding effective communication and removal of hindrances.

Given common implementation difficulties in practice, careful consideration of strategies to promote implementation is needed. The increasing international awareness of addressing implementation in both practice and research is underlined in the Medical Research Council's Framework for development and Evaluation of Complex Interventions, where Implementation is one of four key elements (Craig et al. 2008).

The international literature describes several frameworks or models that refer to implementation. A prominent model, developed from a general focus on facilitating change in health care practice is Grol and Wensing's (2006) Model for Effective Implementation. More so than with other models, their stepwise approach takes the user through a series of rational and deliberate steps in order to accomplish practice improvement.

The Model for Effective Implementation starts with the identification of relevant practice issues (problems or best practices) and matching research findings or guidelines. This match is a first and essential element in accomplishing change, as without it implementation might not be justified and members of the target group are likely to show strong resistance to change. The model goes on to present a methodic process starting with the description of operational change objectives and a thorough analysis of current practice, the target group and the context where change should take place. The fourth and crucial step in the model, the development or selection of strategies, is facilitated by the previous steps. Here, the authors also refer to Intervention Mapping (Bartolomew et al 2011), a stepwise approach for in-depth consideration of change strategies. Finally, steps five and six go into operationalisation of an implementation plan (who does what, and when) and the evaluation of both process and outcomes.

Whereas the model deals with optimal preparation of planning of implementation of evidence based practice, it is increasingly recognized that, as with practice, a body of evidence should also inform implementation (Van Achterberg et al. 2008). A clear example of development in this area is the BMC journal 'Implementation Science', established in 2006. Currently however, implementation science is still a new area to many researchers and development of knowledge and skills is needed. The proposed masterclass ties in with this need.

## **The Masterclass**

The analytical approach to deliver clear rationale for implementation is an essential feature of the Model of Effective Implementation and allows it to be applied in a large variety of settings. Therefore, we will use the model as a frame of reference for our masterclass. The masterclass will not only focus on careful planning of implementation however, but will have a dominant focus on research into implementation issues. Finally, agenda setting for implementation of evidence based practice as well as research in this area will be highlighted.

## References

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- \* Van Achterberg T, Schoonhoven L, Grol R. Nursing implementation science: how evidence-based nursing requires evidence-based implementation. *J Nurs Scholarsh*. 2008;40(4):302-10.
- \* Van Gaal BG, Schoonhoven L, Mintjes JA, Borm GF, Hulscher ME, Defloor T, Habets H, Voss A, Vloet LC, Koopmans RT, Van Achterberg T. Fewer adverse events as a result of the SAFE or SORRY? programme in hospitals and nursing homes. Part I: Primary outcome of a cluster randomised trial. *Int J Nurs Stud*. 2011 Mar 16.

## Provisional list of speakers & workshop leaders

Prof.dr. Theo van Achterberg,  
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## **Short Curriculum Vitae of the Masterclass Organiser**

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### **Professional training**

2001 Jan M.Sc. in Epidemiology, EMGO institute, Vrije Universiteit, Amsterdam

1999 Aug RN, after bachelor's degree in nursing, HAN Professional, Nijmegen

1997 Jan Ph.D. Health Sciences, Maastricht University

1988 Jun M.Sc. Health Sciences, Maastricht University

### **Professional experience**

2005-present Head of the Nursing & Allied Healthcare Sciences Division

Scientific Institute for Quality of Healthcare,

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2002-present Professor in Nursing Science, Scientific Institute for Quality of Healthcare,

Radboud University Nijmegen Medical Centre, Nijmegen, Netherlands

1996-2001 Assistant professor, Department of General Practice and Social Medicine, Radboud University Nijmegen Medical Centre

1988-1996 Researcher & PhD candidate,

Department of Nursing Science & Department of Medical Sociology, Maastricht University

### **Highlights**

- Author of over 100 publications indexed in PubMed
- Supervision of 18 successfully completed PhD projects since 2003
- Fellow and Board member of the European Academy of Nursing Science
- Community Leader within International Honour Society of Nursing (STTI)

### **Selected: five relevant publications of the last five years**

Van Gaal BG, Schoonhoven L, Mintjes JA, Borm GF, Hulscher ME, Defloor T, Habets H, Voss A, Vloet LC, Koopmans RT, Van Achterberg T. *Fewer adverse events as a result of the SAFE or SORRY? programme in hospitals and nursing homes. Part I: Primary outcome of a cluster randomised trial.* Int J Nurs Stud. 2011 Mar 16.

Perry M, Drašković I, Van Achterberg T, Lucassen P, Vernooij-Dassen M, Olde Rikkert M. *Development and validation of quality indicators for dementia diagnosis and management in a primary care setting.* Journal of the American Geriatrics Society 2010; 58: 557-63.

Van Achterberg T, Schoonhoven L, Grol R. *Nursing Implementation Science - How evidence based nursing requires evidence based implementation.* International Journal of Nursing Scholarship: Journal of Nursing Scholarship 2008; 40: 302-10.

De Laat E, Pickkers P, Schoonhoven L, Verbeek AL, Feuth T, Van Achterberg T. *Guideline implementation results in a decrease of pressure ulcer incidence in critically ill patients.* Critical Care Medicine 2007; 35; 815-820.

Van Achterberg T, Holleman G, Van de Ven M, Grypdonck MHF, Eliëns A & Van Vliet M. *Promoting evidence-based practice: the roles and activities of professional nurses' associations.* Journal of Advanced Nursing 2006; 53; 605-612.