

REPORT

## The state of interprofessional collaboration in Northern Italy: a mixed methods study

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### Abstract

Health care systems are facing continual reorganizations in response to scientific and technological innovations as well as financial constraints. Simultaneously the rising prevalence of chronic diseases call for a kind of health care organization in which interprofessional collaboration (IPC) functions on a high level. This article describes a research project that aims to generate an empirical account of the current state of IPC in the South Tyrolean Health Trust, located in a bilingual region in northern Italy. The study will employ a sequential mixed methods' design. A survey will be followed by individual and focus group interviews. An innovative aspect of the study is that it will include participants from six different health professions (dietitians, nurses, occupational therapists, physicians, physiotherapists, and speech therapists). Qualitative data analysis will draw on the negotiated order/structural ordering approach and on the social world/arena perspective. The results are expected to generate specific recommendations to improve IPC in the South Tyrolean Health Trust and inform further research.

### Keywords

Focus groups, health and social care, interprofessional collaboration, mixed methods

### History

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### Introduction

Health care systems worldwide are facing continual reorganizations in response to technological innovations, financial constraints as well as to demographic developments with rising prevalence of chronic diseases. In Italy, for example, nearly 40% of the residents suffer from one chronic illness while 20% have two or more chronic diseases (Istituto Nazionale di Statistica, 2013). In South Tyrol, a bilingual region in northern Italy (Italian and German), it is estimated that more than a quarter of the total population of nearly 500 000 inhabitants suffers from one chronic illness. Preventing and managing chronic diseases will, therefore, constitute a major challenge for the provincial health care system. One of the key factors to ensure high quality, safe, and cost-effective care in the future is seen in an interprofessional collaboration (IPC) that operates on a highly developed level (Reeves, Lewin, Espin, & Zwarenstein, 2010).

In Italy, research on IPC is scarce, and, therefore, little is known about its quality. This article describes a mixed methods' research project, which intends to explore how six health professions (dietitians, nurses, occupational therapists, physicians, physiotherapists, and speech therapists) perceive and experience the current status of IPC in their daily work. This study has the following research aims:

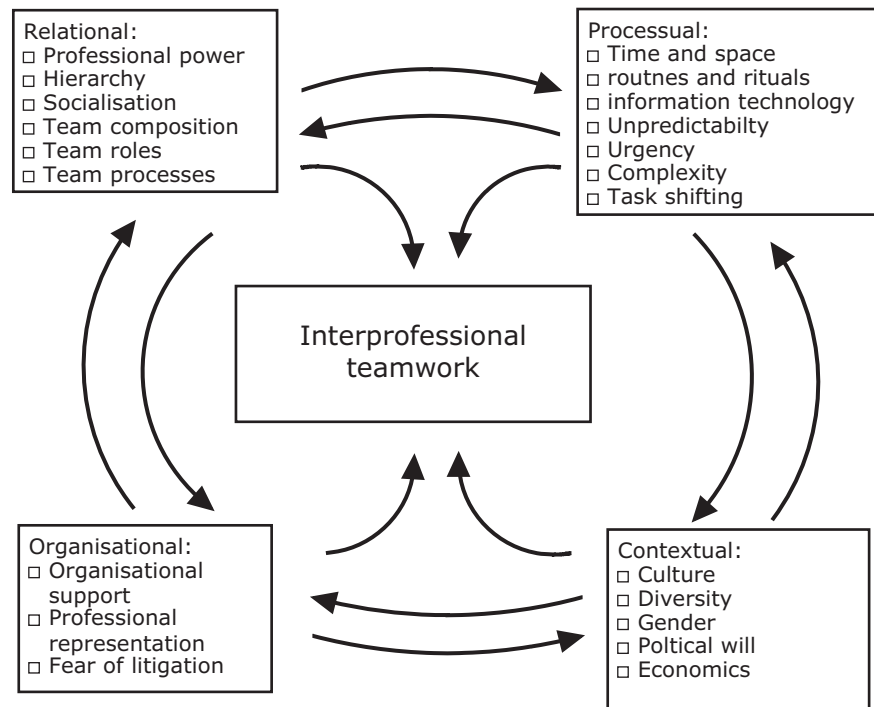
- (1) to generate an empirical account of the current status quo of IPC in the South Tyrolean Health Trust;
- (2) to deeply understand the strengths and shortcomings of the current state of IPC in the South Tyrolean Health Trust;
- (3) to elaborate concrete recommendations for specific interventions on how IPC can be improved in the South Tyrolean Health Trust at the educational, organizational, and practical levels.

### Methods

This project has a sequential mixed methods' design (Creswell & Clark, 2011). It will be divided into three main phases.

The first quantitative phase will be devoted for the distribution, collection, and analysis of a questionnaire on the perception of IPC by the health professionals. It will be delivered online to all clinically and active working health professions of interest employed by the South Tyrolean public health care system (approx. 6000 professionals). Conducting information meetings in the hospitals, opening the access to the online survey over a period of 3 months, and reinforcing participation through e-mail reminders, we expect to reach at least 30%. The survey incorporates two validated scales (Kenaszchuk, Reeves, Nicolas, & Zwarenstein, 2010; Schmalenberg & Kramer, 2009) which have been modified to suit the aims of our research. We re-wrote the items in such a way that the meaning and content was retained but could be understood by the different health professionals involved in this study. For both instruments, we employed forward- and back-translations for German and Italian languages.

Figure 1. A framework for understanding interprofessional teamwork (Reeves et al., 2010, p. 58).



The survey was piloted with the members of health professionals who belonged to both language groups.

The second qualitative phase will be devoted to the focus group and individual interviews. Based on the theoretical reflections, we presume to recruit participants primarily from medical, oncological, and rehabilitative wards where high-level IPC is a primary concern. However, this intention may be modified after the analysis of the results of the survey. To facilitate the recruitment process, we included a section in the survey in which respondents are asked if they would be willing to participate in an interview in case we were interested. We intend to conduct focus groups with all the six health professions (uniprofessional and/or multiprofessional groups), expert interviews with health care leaders as well as patient interviews. Interview participants will be invited personally, the size of focus groups will not exceed the number of eight participants.

The last phase includes data triangulation, writing up final reports, and wider scholarly dissemination. Before the study commences, ethical approval will be secured from the ethics committee of the South Tyrol Health Trust as well as from the regulatory bodies of the local College of Health-Care Professions.

### Analysis and synthesis

Quantitative data will be managed using SPSS software (SPSS Inc., Chicago, IL). An assessment of the validity of the questionnaire and analysis of internal consistency will be conducted. Descriptive statistics (frequency, mean, median, and standard deviation) will be calculated and comparative analyses between two groups (using *t*-test and Mann–Whitney test) or more groups (using ANOVA and Kruskal–Wallis test) to identify differences ( $p < 0.05$ , IC 95%) will be produced. Moreover, a correlation analysis will be performed between the perception of IPC and other personal/professional variables.

Qualitative data gathered from the interviews will be used to analyze in depth the factors which foster or hinder a perceived high level of IPC. We intend to employ the analytical devices of grounded theory in the tradition by Corbin and Strauss (2008) such as coding, constant comparison, memos, and diagrams. Due to the complex nature of IPC, the study will interpret data through

two theoretical lenses: The first, drawn from the social sciences, is the concept of negotiated order and structural ordering and the social world/arena perspective (Clarke, 2005). The second one is the conceptual model developed by Reeves et al. (2010) which will be used as a sensitizing framework for coding (Figure 1).

The methodological devices for creating social worlds/arenas and positional maps are grounded in our theoretical background and these will guide our data analysis. This will result in cartographic representations of the commitments of the different social worlds who participate in an IPC endeavor as well as a representation of their mutual overarching IPC commitment (Clarke, 2005). Finally, we intend to confront and compare the different data sets and use the typology for classifying interprofessional intervention outcomes (Reeves et al., 2011).

### Discussion

Little is known about the quality of IPC within health professions in Italy. For the first time, an empirical account of the current state of IPC in the South Tyrolean Health Trust, located in northern Italy, will be generated. This study will allow us to understand the strengths and shortcomings of the current status of IPC. This is necessary for developing recommendations for a wide range of specific interprofessional interventions needed to enhance IPC as well as IPE. Identifying and implementing interprofessional approaches should yield a range of benefits for society and the economy. In countries like the US and the UK, it has been found that the successful development and implementation of IPE and IPC interventions have created economic efficiencies by reducing duplication of effort which have helped health systems make a number of fiscal savings (Reeves et al., 2010). In relation to societal level benefits, the study will also contribute to developing a research community within the territory. This in turn may generate a number of societal gains, including improved knowledge of IPC. Furthermore the study findings could serve as a platform for creating a multi-annual strategic programme for fostering IPC in South Tyrol. The results of this study can be used for strategic planning on different levels: (1) the research level, (2) the educational level, and

(3) the practical level which could also be transferred to other hospital sites in territories across Italy and be of interest for other institutions internationally.

### Declaration of interest

The authors report no conflicts of interest. The authors alone are responsible for the writing and content of the paper. The project is funded by the Agency for Promoting Higher Education, University and Research, Department of Promoting Education, University and Research of the Autonomous Province of Bolzano/Bozen – South Tyrol and supported by the South Tyrolean Health Trust.

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