

# **The Impact of Enhancing the Effectiveness of Interdisciplinary Working.**

## **Executive Summary**

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# **Executive Summary**

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## **Background**

The increasing number of people surviving to old age but requiring health and social care support, along with financial pressures and patient preference has led to policy drivers encouraging an expansion of community-based rehabilitation and intermediate care. These services require interdisciplinary teams to work closely and effectively together to prevent avoidable admission to hospital and facilitate early discharge. Our previous research 'The impact of workforce flexibility on the costs and outcomes of older peoples' services' (SDO 08/1519/95) indicated variation in the skill mix within teams, their ways of working and impact on patient outcomes.

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## **Aims**

This study aimed to examine the impact of an intervention to improve interdisciplinary working and explore the relationship between team working and impacts on staff and patients.

The study objectives included: exploration of the relationship between different models of interdisciplinary working and related outcomes; description of a range of service models identifying strengths and limitations; and the exposition of characteristics and attributes of effective interdisciplinary team working. These objectives were facilitated by the development, implementation and evaluation of an Interdisciplinary Management Tool (IMT) with 10 teams aiming to optimise outcomes for patients, staff, and services.

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## **Methods**

This is a complex mixed methods study requiring the collection of both quantitative and qualitative data, triangulated to address the research objectives.

### Development of intervention

Three literature reviews supported the development of the interdisciplinary team working intervention (IMT), and its subsequent evaluation. These reviews provided a typology of interdisciplinary practice; a map of workforce implementation tools; and a review of process and outcome information from RCTs of interdisciplinary team working.

### Recruitment of teams and facilitators

12 teams from across England were recruited to take part in the study with the aim of 10 being likely to complete. Seven independent facilitators were recruited and trained to support the teams.

### Data collection-quantitative

*Team Data:* all members of the teams provided individual information using the Workforce Dynamics Questionnaire (WDQ) at the beginning and end of the study.

*Patient Data:* patient data were collected on admission and discharge using the Client Record Pack three months prior to the intervention starting, throughout the intervention and for three months after. The client record pack included: demographic data, Levels of Care, Therapy Outcome Measure, EQ 5D and patient satisfaction survey.

### Data collection- qualitative

Each team met for a facilitated Service Evaluation Conference prior to and following the intervention period (SEC1 & SEC2). SEC1 explored issues effecting team working and developed action plans. SEC2 presented preliminary results and reflected on the intervention.

During the intervention each team participated in three half day Teaching Learning Sets (TLS) at two monthly intervals. Notes and exercises from the SECs and TLSs were transcribed.

The facilitator took notes which supported their involvement in the final facilitators' focus group which was tape-recorded and transcribed.

We undertook 15 interviews with staff from 3 of the participating teams to explore their perceptions of the impact and implementation of the IMT

The final dissemination conference was attended by 100 individuals and included members from each team. Data from the study were discussed. The audience considered what analyses would be of assistance to them in taking intermediate care forward.

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## Analyses

Literature Review: Following Walker and Avant's approach to concept analysis literature review 1 (LR1)-identified issues of concern to this project. Literature review 2 (LR2)-searched seventeen databases and Google using phrase searching for each instrument. Literature review 3-(LR3), a review of process and outcome information from RCTs of interdisciplinary team working, identified relevant randomised controlled trials and the impact of change-management approaches.

Quantitative data: All data were entered into SPSS 18.0 which was used for descriptive analyses and to explore change over time. Further multivariate analyses were undertaken using STATA.

Qualitative Data: Data from the facilitators' focus group and interviews were tape-recorded, transcribed and thematically analysed. Data from the SEC and TLS events were analysed thematically using NVIVO 8.0. Data from event feedback reports were transcribed into MS Excel using pre-coded categories and then thematically analysed in NVIVO.

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## Results

### 1. Literature Reviews

*LR1*- The principal outcome from LR1 was identification of the framework and empirical research conducted by Thylefors et al (1). This represents a significant contribution to the conceptualisation of the differences between multiprofessional, interprofessional and transprofessional teamworking. It also identifies six specific variables that help to define or characterise interprofessional teamworking. The review team critiqued the study and considered it fit for purpose as a framework for subsequent development of the (IMT)

*LR2*- Identified 20 workforce change tools, with 14 common elements, which have been used within the structure of the IMT.

*LR3*- Identified several papers with components of interdisciplinary team working. However, the links between process and outcomes were poorly established. Sixteen qualitative themes around interdisciplinary team working were identified, which have informed the principles of interdisciplinary team working.

### 2. Development of Interdisciplinary Management Tool

The Interdisciplinary Management Tool was developed based on the literature and informed by iterative development by the steering group.

The literature and discussion with the steering group, research team and other experts concluded that the intervention (IMT) should incorporate factors: affecting interdisciplinary team performance e.g. motivation, job satisfaction and career development; affecting performance e.g. team size, integration, team meetings; and leadership e.g. clarity and style of leadership.

### 3. Information on Teams

253 team members from 11 intermediate care teams participated with the average team size being 29 wte. There were large differences in size of team (8.3- 44 staff members). The average ratio of professionals to support workers was 1:0.7 and team leaders on average had responsibility for 40 staff. The length of care by the teams varied between 22 and 128 days with a mean of 41 days.

### 4. Impact of the IMT

Overall, the integrated qualitative and quantitative findings showed that IMT was seen to positively influence team communication, leadership, personal development, focus on goals and outcomes, team working, team clarity, team reputation and team understanding of the change processes. The qualitative data indicated a positive impact on team integration, but this was not reflected in the quantitative data, which may have been due to the lack of the specificity of the chosen tools. The negative aspects of involvement were the time taken away from patient care, the time required to complete the documentation, lack of goal completion by teams, and the uncertainty affecting team direction and morale.

#### Staff Outcomes

84 members of staff completed the WDQ before and after the intervention. Improvement was in the areas of: role flexibility, team working ( $p<0.05$ ), quality and management. No change was detected in role perception and access to resources. Over the period of the study deterioration in outcomes was noted in career progression, autonomy, uncertainty, overall satisfaction, intention to leave employer and intention to leave profession. This was significant ( $p=<0.05$ ) in career progression and uncertainty.

#### Patient Outcomes

Four teams showed an improvement in the amount of change in the EQ-5D experienced by patients over the duration of the intervention; four teams showed little or no change; and the amount of change in EQ-5D in three teams declined. We are unable to attribute these changes to the intervention.

#### **Primary Outcomes of Research**

This study has three primary outcomes. The first is an evidence-based and empirically tested Interdisciplinary Management Tool. The tool addresses the key factors which influence team working: 1) communication, 2) integration, 3) leadership, 4) personal development, 5) focus on goals and outcomes, 6) team working, 7) team clarity, 8) team reputation, 9) team understanding of the change processes.

The second outcome of this project is an enhanced conceptualisation of the concept of interdisciplinary team working, which we have presented as 10 principles.

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- 1 Morale and motivation
- 2 Role mix and professional role
- 3 Management, leadership and decision making
- 4 Joint working
- 5 Service development activities
- 6 Communication and relationships
- 7 Clarity of vision
- 8 Shared vision of patient treatment
- 9 Facilities and resources
- 10 Professional development

A further outcome is detailed information which can be used for benchmarking purposes.

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## Discussion

Our previous published research in the area of intermediate care indicated substantial differences in team make up and patient outcomes across England. We hypothesised that some of this variation could be attributed to the effectiveness of team working.

The IMT tool, based on the conceptual framework that we developed which incorporated ten themes, aimed to bring together different types of knowledge to implement an evidence-based approach with local applicability to the needs and requirements of the intermediate care team. The approach in general was appreciated and had positive outcomes. However, the staff found it difficult to make time available and frustrating when they could not influence factors beyond their control. Our study was particularly constrained by substantial changes to the provision of NHS care in the community causing anxiety and lack of certainty. In the three months after the end of the study, one team had been disbanded and substantial changes have taken place for two further teams.

The facilitators and team members became increasingly aware of the lack of opportunity for shared reflection of practical issues, which bring the team together operationally and strategically. Time put aside for facilitated

activities has had an impact in improving coherence in several areas of work.

Appropriate leadership can improve team cohesion, clarity and staff satisfaction. This was recognised by those attending the SECs and TLSs. It was also recognised that team members had a role to play in supporting their leaders.

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## Conclusions

The IMT had a positive and measurable effect on team working and was valued by team members. Whilst patient outcomes of some teams improved following the intervention this was not consistent for all teams. We suspect that the uncertainties faced by many of our teams due to the political and strategic changes may have had an impact on our results. Furthermore, it is possible that the length of follow-up was insufficient to demonstrate impact on patients.