Implementation of Tele-consultation in pilots

Prof T. Larsson
Tele-consultation work package

The project partners will explore how to overcome professional isolation in the primary health care (PHC) sector in remote areas. This will be achieved by elaborating, implementing and testing methods and tools that support tele-consultation.

Tele-consultation accounts for a substantial part of tele-medicine. It can be generally defined as a (audio-) visual communication link between health professionals. Tele-consultation enables the virtual communication between doctors of different disciplines or with specialists in other health care institutions like hospitals.
Aim with tele-consultation work

As more and more other health professionals in PHC (for example specialized nurses and physiotherapists) have their own consultations and the request for inter-professional collaboration, there is a need for technical and methodological support for communication and consultations between all health professionals in Primary Health Care. The aim is:

• To successfully implement methods and tools for tele-consultation in 7 pilot sites in remote areas of 5 different countries within the Baltic Sea Region

• To validate the transnationally developed tele-consultation solutions in remote primary care in pilot sites

• To prepare the durability and large scale implementation of the piloted solutions in the partner regions
Objectives with tele-consultation work

Objectives are:

• To enhance the connection of health professionals within primary health care and the cooperation with the secondary health care sector.

• To enhance the use of ICT for collaboration of health professionals within primary health care and the cooperation with the secondary health care sector.

• To improve the professional cooperation and quality in remote primary care.

• To counteract professional isolation through tele-consultation.
Work tasks

• **Situation analysis**: analysis of the country specific working models within remote primary health, e.g. communication and division of work between GP and nurse

• **Literature study** on best practices in tele-consultation

• **Needs assessment** in the pilot regions, e.g. what kind of technology and methods, for example webcam, is still needed

• Process assessment on **how to implement tele-consultation** in the daily work routine

• Assessment of **legal aspects** of tele-consultation

• **Pilot deployment**

• **Evaluation**

• Recommendation and **best practices handbook**
Tele-consultation demonstration pilots

- Pilot 1 – Tele-consultation between Blekinge Wound Center and primary care actors (Municipality and County Councils, Sweden)
- Pilot 2 – BelMAPO - Professional support of GPs from remote (Belarus)
- Pilot 3 – KPHCD - Central hospital to home care units (Finland)
- Pilot 4 – VCC - Psychogeriatric in distant rural area (Sweden)
- Pilot 5 – Vilnius University Hospital Santariškių Klinikos (Lithuania)
- Pilot 6 – Estonian Vormsi Health Center GP support - Consultation between nurse and GP; Nurse and specialist doctor; GP and specialist doctor (Estonia)
- Pilot 7 – National Health Service - Supporting GPs from remote areas via tele-consultations - Professional support of doctors from remote areas (Latvia)
Implementation of tele-consultation for improved professional cooperation and quality in remote primary health care

WP4 - Synopsis

MILESTONE 1
- Analysis of existing technical and content solutions in the different countries:
  - Equipment
  - Best Practices
  - Legal aspects
  - Country specific working models

MILESTONE 2
- Elaboration on how to implement tele-consultation in daily work routine
- Exchange of existing experience:
  a) of content
  b) of technical solutions

MILESTONE 3
- Inter-professional collaboration
- Technical support
- Methodological support
- Live tele-consultations
- Data tele-consultations within regions and across borders

MILESTONE 4
- Potential Adjustments in Implementation
- Recommendations and guidelines for large scale tele-consultation implementation
- Sustainable networks between primary and secondary health care providers

Pilot 1: BTH: Blekinge Wound Center
- Pilot 2 (WP5): KPHCD & SOHCD: different locations and professional staff
- Pilot 3 (WP5): ESFD: Estonia Vormsi Health Centre
- Pilot 4: VUHS + LUHS: Family physicians
- Pilot 5: VCC: Psychogeriatric in distant rural area
- Pilot 2: BelMAPO & OCRH: Professional support of doctors from remote areas
- Pilot 7: NHS: Focus + Methods

Linkage to ImPrim

Results

WP3
- Output 4.1

WP1
- Output 4.2

WP2
- Output 4.3

WP5
- Output 4.2

WP6
- Output 4.4

WP4
- Output 4.5
Pilot 1

Sweden: Tele-consultation between Blekinge Wound Center and primary care actors (Municipality and County Councils)

• The purpose with the pilot project is to explore/find out/test best arrangements, structures, equipment, etc for Wound centres tele-support and consultations that also could support collaborative learning, improve professionals competence and counteract professional isolation and brain drain.

• Outcomes

  • Type A – tele-consultation (dialogue) worked well.
  • Type B – tele-consultation based on a photo of the actual wound taken by the Wound nurses and placed on the desktop using the Lync function “Share, worked well
  • Type C - tele-consultation during a patient consultation at the PHC, worked well
  • Type D– tele-consultation with a another wound nurse as a listener and learner (collegial tutoring) tested with positive experiences
Belarus: BelMAPO - Professional support of doctors (general practitioners) from remote areas using tele-consultations.

- The goal of the pilot is the professional support of PHC specialists in remote areas by means of information and communication technologies (tele-mentoring and tele-consultations),

<table>
<thead>
<tr>
<th>Evaluation Criteria</th>
<th>Pre-testing</th>
<th>Mid-term testing</th>
<th>Post-testing</th>
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</thead>
<tbody>
<tr>
<td>Satisfaction with technical aspects (%)</td>
<td>50</td>
<td>73</td>
<td>89.3</td>
</tr>
<tr>
<td>(How satisfied were you with the functionality of the used technology during the connection?)</td>
<td></td>
<td></td>
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<tr>
<td>Satisfaction with technical aspects (бала)</td>
<td>2.9</td>
<td>4.1</td>
<td>4.6</td>
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<tr>
<td>Satisfaction with content (%)</td>
<td>70</td>
<td>75</td>
<td>93</td>
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<tr>
<td>(How useful do you consider the content of the session was?)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Satisfaction with content (бала)</td>
<td>4.0</td>
<td>4.2</td>
<td>4.8</td>
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<tr>
<td>Percent of the interested in tele-consultations</td>
<td>100</td>
<td>100</td>
<td>100</td>
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</tbody>
</table>
Pilot 3

Finland: KPHCD - Central hospital to home care units

- The tele-consultation pilots were implemented, between Health Care Units and their doctor professionals (Pilot # 3A), home care units and nursing units (Pilot # 3B) within the Kauhava Primary Health Care District, KPHCD. Tele-consultation is common in the medical field and usually occurs at all levels, from health centers to specialist hospitals and from there to university hospitals both from those in training.
Sweden: VCC - Psychogeriatric in distant rural area

• This Pilot implements a new structured model for Psychogeriatric consultations in two rural Communities, Malå and Sorsele (Sweden).

• The Pilot includes Prime care outpatients as well as patients living in Community Nursing homes supported by GPs from the Healthcare centres at the two sites.

• A Geriatrician has Tele-consultations once a month with the GP, a district nurse and occupational therapist (OT) at the respective Healthcare centres.

• Outcome:
  • Tele-consultation can help to fulfill the commission to support Primary Care with competence about Dementia diseases, Cognitive impairment and Behavioral symptoms
  • The consultations must be integrated and scheduled in the regular work
  • Tele-consultation is a valuable tool for supporting GPs in how to prioritize and refer the right patients to the Geriatric Centre
**Pilot 5**

**Lithuania: Vilnius University Hospital Santariškių Klinikos**

The general objective of WP4 Pilot #5 was to explore and choose the best available tele-monitoring and tele-consulting options in terms of software, hardware and human resource, in order to create a possibility to improve professional skills and reduce professional exclusion of general practitioners (GPs) working in remote areas by using tele-consulting, sharing of patient medical data/images, monitoring of some health functions.

WP4 Interview Protocol questionnaire revealed that pilot organization was rated 7.54 in the scale of 10 (n=11), quality of the information shared in the sessions – 8.36 and outcome of consultations/mentoring sessions - 8.09 respectively.
Estonia: Estonian Vormsi Health Center GP support

- Vormsi island, around 200 inhabitants during winter time and about 400 inhabitants during summer time and weekends in Estonia. Practice is open from Monday-Friday 8 hours per day, and in this time nurse is there. Doctor is visiting island once a week, in other days we communicate over Skype.

- Consultation between
  - Nurse and family doctor using Skype chat
  - Nurse and family doctor using Skype video call
  - Nurse and specialized doctor using Skype chat
  - Nurse and family doctor using SMS messages

- Outcome
  - **What worked and what didn’t and why:** We haven’t had any problems with communication, there were some integration issues between devices at first, but they did not influence our every-day work.
Latvia: National Health Service - Supporting GPs from remote areas via tele-consultations

• The aims of the NHS pilot project is to introduce the first telemedicine solution (tele-consultations) for primary health care in Latvia with further aim to organize bigger network for PHC specialists, to increase primary health care specialists knowledge, understanding and skills in rural areas and to increase treatment quality, safety, professional medical investigation and treatment. It is important to bear in mind that health economic gains from a national health care perspective as well as from an individual patient perspective

• Tele-consultation modes (types of sessions). Until beginning of December there have been totally 26 tele-consultations:
  • 2 between GP’s; 5 in cardiology; 10 in endocrinology; 9 in dermatology.

• Outcomes: As very important key factor for tele-consultation success was mentioned timely response receiving from specialist – no later than in one week. GP’s must have the confidence that they will receive answer in time.
Conclusions

• 7 pilots implemented; All pilots measured attitude and experience changes turning the tele-consultation sessions. Information was collected in each participating organisation with a questionnaire and an interview. Pilots worked together in close cooperation and learned from the experiences of each other.

• Pilots reported that tele-consultation helped to improve professional capabilities in remote areas. Participants felt less isolated and the self-confidence of making decisions and solving cases improved.

• Tele-consultation as a tool for counteracting brain drain was not seen in the study but would be helpful tool for young medical personnel to work in the rural areas and still have access to peer network.

• Tele-consultation is a modern approach and good tool to develop professional experience for younger medical specialists and it could also be one of the factors reducing potential professional isolation and brain drain while working in remote areas.
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Thank you for your attention!