



MOMENTUM

European Momentum for Mainstreaming Telemedicine Deployment in Daily Practice

(Grant Agreement No 297320)

Deliverable 3.1b

Outline of the Momentum Blueprint: *Towards a Personalised Blueprint*

Version 09

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Abstract

This document provides an outline of the Momentum blueprint, with its new provisional title, *Towards a Personalised Blueprint*. This document structured so as to enable readers to understand the eventual structure and content of the blueprint. An introduction (Chapter 1) documents the rationale underpinning the blueprint. The methodology used to start the Momentum is outlined in detail, in terms of the knowledge gathering process (Chapter 2). Chapter 3 describes telemedicine system characteristics. Chapter 4 outlines a method for personalising the Momentum blueprint even further, by focusing on the application to the Momentum “front-end” of a “back-end” which is adapted from the TREAT method, a method originally developed by the Renewing Health project.

In ANNEX, this deliverable provides a set of suggestions for how each special interest group of the

Momentum project should handle the write-up of its analysis of the part of the Momentum questionnaire for which it is responsible, thereby creating first drafts of deliverables, D4.1, D5.1, D6.1, and D7.1. These write-ups will be revised systematically throughout the duration of the Momentum project. The work package as a whole will act as "the architect of a blueprint for European telemedicine deployment, including a consolidated set of methods proposed to support deployment of telemedicine services in daily practice (e.g. what are the right implementation decisions to take, which support to seek from policy programmes), with an identification of the main roadblocks which need to be addressed for deploying telemedicine services in daily practice and with a set of policy recommendations for the creation of enabling environments for telemedicine." (Text extracted from the project's description of work.)

Key Word List

Assessment of outcomes; blueprint; change management; decision-makers; financing; legislation; management; organisational implementation; regulation; security; special interest group (SIG); stakeholders; strategy; technical infrastructure, toolkit.

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- 01 22 August 2012
- 02 23 August 2012
- 03 28 August 2012
- 04 29 August 2012
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- 06 2-3, 27-30 January 2014
- 07 30 January 2014
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Version Changes

- 01 Initial draft
- 02 Extended draft based on comments from M. Lange. Focus of the document at this stage was uniquely on the part of the blueprint to be written up by SIGs 9 (i.e., now ANNEXES 1-4).
- 03 Revised draft based on inputs from M. Lange. A draft was proposed for discussion at a Momentum EXCO conference call on 30 August 2012.
- 04 Draft was revised by removing Appendix E and adding some notes about SIGs.
- 05 Draft was revised as a result of review process by EXCO and team members through a team telephone call on 30 August 2012, the finalisation of the questionnaire v2.0 dated 2 October 2012, and the Huddle approvals mechanism. This version was approved by all SIGs, EXCO and PSC.

- 06 Following the annual technical review of Momentum, held in September 2013, an introductory text was introduced and the description of the methodology expanded. Additional chapters were added on the Momentum maturity and scaling-up process, and the basic characteristics and critical success factors relating to telemedicine deployment. Located in ANNEX is a template that was approved by the consortium, and later used by all the Momentum SIGs in the period March-September 2013 to analyse their work. The template was used in spring/summer 2013 to create the texts described in four separate deliverables, D4.1, D5.1, D6.1 and D7.1, three out of which have been approved by the Commission's selected reviewers.
- 07 Submitted for quality assurance.
- 08 Modifications in the Foreword were made. The abstract and executive summary were further edited. Short introductions were added to each chapter. The structure of Chapter 1 was simplified. The maturity model chapter was removed since it is currently thought to be insufficiently developed. Repetitive phrases were removed, and expressions more commonly used in the Consortium's other deliverables were introduced. Footnotes were added. Re-submitted for a second round of quality assurance.
- 09 Approved and submitted to EC

Statement of originality

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

A consensus statement will be inserted in the eventual blueprint document, at the end of the project, that describes the way in which the blueprint was produced and from where its main contents were drawn. To enhance transparency, the entire range of writers and members of the editorial teams will be identified.

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Executive Summary

This document D3.1b is the second part of D3.1 as defined in the Momentum Grant Agreement. It provides the Outline of the Momentum Blueprint: Towards a Personalised Blueprint, while the first part, called D3.1a reports on the knowledge gathering while the second part.

This document provides an outline of the Momentum blueprint. The blueprint is now entitled provisionally, *Towards a Personalised Blueprint*. The term “personalised” is used primarily because the blueprint is *personal* or specific to the situation of the person, the telemedicine “doer”, asking questions of Momentum.

This document is structured so as to enable readers – particularly telemedicine “doers” – to understand the proposed structure and content of the blueprint. Chapter 1 is an introduction that documents the rationale underpinning the blueprint. Chapter 2 details the methodology used to start the Momentum project – it discusses Momentum's knowledge gathering process. Chapter 3 describes telemedicine system characteristics: this chapter will constitute as important part of the Momentum approach. Chapter 4 outlines a method for personalising the Momentum blueprint even further, by focusing on the application to the Momentum “front-end” of a “back-end” which is adapted from the TREAT method. This method was originally developed by the Renewing Health project.

In ANNEX, this deliverable provides a set of suggestions for how each special interest group of the Momentum project should handle the write-up of its analysis of the part of the Momentum questionnaire for which it is responsible. These templates were used to create a set of deliverables forming an essential part of the Momentum blueprint. The work package as a whole acts as “the architect of a blueprint for European telemedicine deployment.” (Text extracted from the project's description of work.)

Foreword to the re-submission (V09)

The reviewers at the annual technical review of the Momentum project, in September 2013, expressed reservations about various elements of the earlier version of this deliverable D3.1. They referred to this document's lack of: a description of outcomes, the processes adopted in terms of methodology, classifications of telemedicine and stakeholders; and also the need for quality assurance/review.

The reviewers stated specifically that:

"A more structured description of final outcomes should be described as well as a more structured method to represent correlation among different areas and issues should be elaborated.

The methodology should take into account several issues including the processes adopted (e.g. identify different phases of deployment and different verification related to them; selection of participants; data collection; data analysis).

The deliverable should also address a proper classification of Telemedicine service.

Furthermore a better classification of stakeholders to be involved should also be included.

Finally, this deliverable should be quality assured."

In response, to these reservations, a number of changes were made to this document to address them.

Specifically, with regard to the first two criticisms made above, the content of this deliverable has been revised in the following ways:

- Overall, various small editorial changes have been made.
- An executive summary has been added.
- This "Foreword to the re-submission (V09)" has been added, so as to explain all the changes made to the previous version of the document seen by the reviewers (v05).
- Chapter 1 - Introduction: More detail has been added with regard to the scope of the blueprint; its background; its purpose; its target audience/readership; and the titles of new sections that are planned to be added to the ultimate blueprint (i.e., deliverables D3.2 and D3.3).
- Chapter 2: The focus of this chapter is now on the knowledge gathering process and the Momentum methodology. It should be read in close conjunction with two other documents: first, the relevant parts of final version of Momentum's D1.1 Governance and Operations Manual¹; and, second, the re-submitted and revised, *D3.1a Report on the Knowledge Gathering*.
- Chapter 3: This chapter now describes an overview of telemedicine systems' characteristics.
- Chapter 4: This chapter describes the way in which the TREAT model will act as a "back-end" to Momentum's "front-end".
- ANNEXES 1-4: The positioning of former chapters 4-7 of this deliverable (v5, seen by the reviewers) has been modified. They are now attached as four ANNEXES. These annexes provide the templates used by each Momentum special interest group (SIG) to write the first versions of their deliverables, D4.1-7.1.

¹ While these were originally attached to this document as Appendix B, they now feature - in an adapted format - as Chapter 2 Methodology - the knowledge gathering process.

1. Introduction: Why this document?

This section of the blueprint will – in its version Del 3.2 – outline the need for a European Telemedicine Deployment Blueprint; the EU policy background and relevant literature; the context; and the scope, intended use, and application of the blueprint.

In this version (D3.1 V09), it is the scope, intended use, and application of the blueprint which are described in detail.

Several sub-sections of this chapter will be developed further and in more depth in the two future versions of this blueprint document that are to follow before the end of the project, D3.2 and D3.3.

The need for a European Telemedicine Deployment Blueprint

Deploying telemedicine services into **routine care** so that telemedicine becomes part of the daily care delivery process requires **methods and tools**.

While some methods and tools already exist, or are under development, this activity is generally taking place in an uncoordinated manner. Competing initiatives often exist at local, regional, and national levels and even at the level of the European Union. This disparity of tools and methods results in limitations to the large-scale deployment of telemedicine as well as other inefficiencies. Some of the existing methods for deployment suffer from: scope limitation; a lack of robustness; difficulties in use; and a lack of professional acceptance; hence, the solution is this **European Telemedicine Deployment Blueprint**.

In the views of the Momentum Consortium, the need for methods and tools is reinforced by the fact that the innovation process of telemedicine services often suffers from a disease that can be called “pilotitis”. That is, a telemedicine service has been created and successfully tested, but it fails to be deployed and scaled-up in routine care, whether this is either in the organisation or the health care system, for the purpose for which it has been created. Appropriate methods and tools are expected to help avoid such deployment failures in the future.

The Momentum Consortium has further observed from the results of its knowledge gathering process that the reasons for deployment failures could differ. This failure depends not only on the type of telemedicine service concerned, but also on the deployment objectives. Indeed, it has been observed that different deployment factors or constraints could apply: for example, first, when deploying a telemedicine service on a small scale, i.e. within an organisation or, second, on large scale, i.e. at the level of the health care system.

Overall:

- Small-scale deployment aims to respond to the needs of a single healthcare organisation.
- In small-scale deployment, the potential users of the system are the health professionals and patients of the organisation.
- Large-scale deployment aims to respond to the needs of the entire health care system.
- In large-scale deployment, the potential user of the system is the entire population of health professionals and patients.

From these observations, the Momentum Consortium has developed a “deployment gaps” model for telemedicine. It was presented for the first time to the public at the European Telemedicine Conference held in Edinburgh on 29 and 30 October 2013. (See the figure below.)

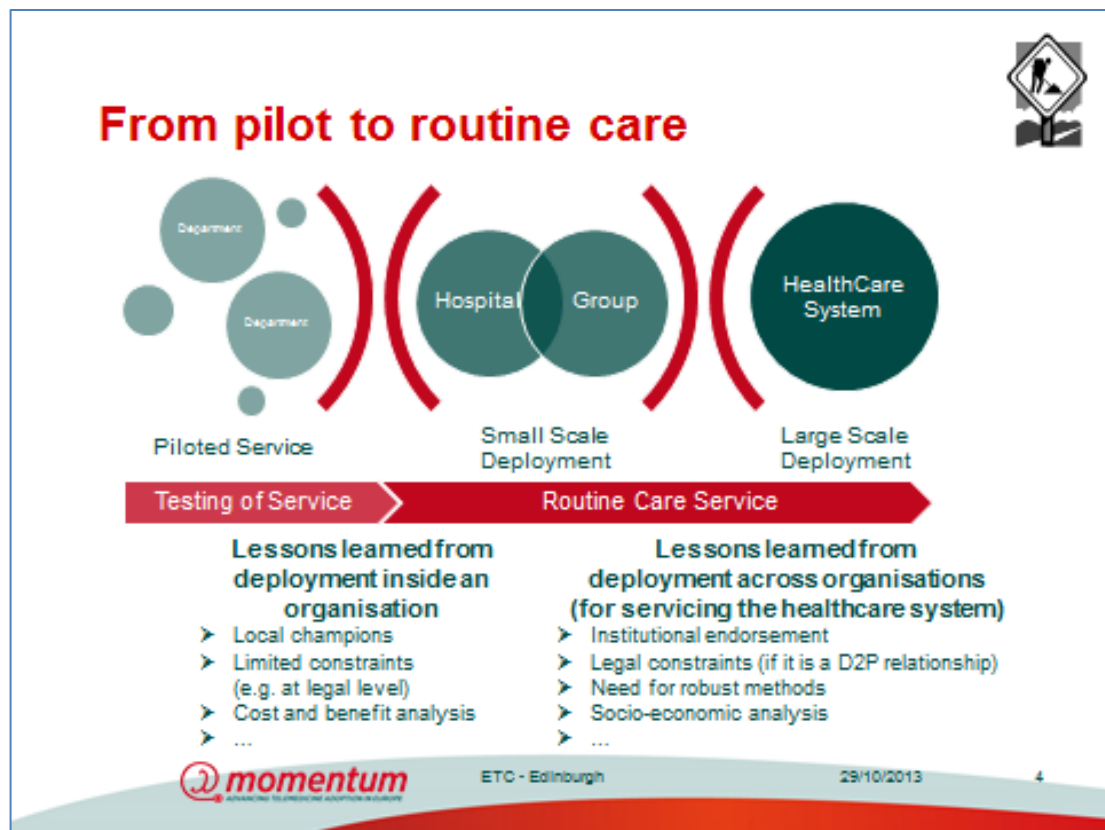


Figure 1: The deployment gaps model for telemedicine

EU policy background and relevant literature

This sub-section will draw on the content of the European Commission 2008 Communication on Telemedicine and its progress between 2008-2011; the 2012 eHealth Action Plan; the relevant elements of the Digital Agenda for Europe, Horizon 2020, and the European Innovation Partnership on Active and Healthy Ageing and its action groups, and ensuing European level work on telemedicine between 2012-2014. It will also describe what is known about the policy orientation of specific European Member States working on telemedicine deployment (e.g., from the 2010 European policies/strategies report² and from work made public by the European eHealth Governance Initiative). Where appropriate, the report will refer, e.g., to the work of the RICHARD project³ which in 2012 developed a "ready, steady, go" toolkit on telehealth⁴ and/or the work of the English Telecare Services Association which has developed a set of guidelines for telecare providers.

This sub-section is seen as focusing on such trends as e.g., demographic shift/care for elderly persons; growth in (personal) responsibility for health and well-being; distributed

² See <http://ehealth-strategies.eu/report/report.html> for the final report. Accessed 2 November, 2012.

³ See <http://www.richardproject.eu>. Accessed 2 November, 2012.

⁴ See <http://clahrc-sy.nihr.ac.uk/resources-toolkits.html>. Accessed 2 November, 2012.

healthcare and social care workforces; and the current and future ranges of pressures on Europe's health systems and services.

Context

This sub-section covers the three areas of health and care policy needs; telemedicine as an enabler of change; and responses to health policy and care policy.

Health and care policy needs

This sub-section will outline the various trends that underpin both healthcare and social care policy needs in reference to telemedicine. Examples might include supply versus demand; patient-centred care; from cure to care; health in all policies; rethinking the basics; sharing benefits and risks; information and incentives; quality and safety imperative; and legislation as a facilitator.

Telemedicine as an enabler of change

This sub-section will outline the reasons and mechanisms why telemedicine can act as an enabler for change in healthcare/social care in Europe.

Responding to health policy and care policy

This sub-section could identify key areas of telemedicine deployment on which the new telemedicine paradigm might concentrate. For the time being, these can be envisaged as constituting strategy and management; organisation and change management; legal, regulatory and security issues; and technical infrastructure and market relations.

What is the Momentum blueprint?

This sub-section of the document describes what the Momentum blueprint is, the planning for the titles of content of its various sections, and the character of its intended target audience/readership.

The Momentum blueprint is essentially a description of possible **critical success factors for deployment** and a **filtering tool** that permits telemedicine doers to “personalise” a route towards wider telemedicine deployment that is feasible for their particular system.

The term “personalised” is used for the following reasons: primarily because the blueprint is *personal* or specific to the situation of the person asking questions of Momentum; and, second, it also relates to the notion of *personalised care* which focuses on the health and care of individual *persons*. Thus, ultimately, the application of the Momentum personalised blueprint will have effects and impacts on the provision of *personalised health and care*. Its end-result will include an improvement in the personal health and care of people themselves.

The blueprint’s starting-point is a **description** of a comprehensive set of **characteristics** belonging to a set of telemedicine systems and organisations.⁵ A set of general **success factors** has been selected from that wide range of characteristics.

⁵ These success factors have been extracted from a set of good practices illustrated by a variety of current – often longstanding – telemedicine deployment experiences. The four specific good practices under review by the Momentum Consortium and the wider Momentum Network, as per January 2014, consist of Chronic Disease Management service of Maccabi (Israel); RXeyes (Sweden); Teledialysis (Norway); ITHACA (Catalonia, Spain).

Out of that set of more general success factors, the Momentum blueprint tool will produce a **report** on the success factors that are most relevant to the telemedicine system at stake.

This report will lead to a **workshop** setting in which the stakeholders involved in the given deployment setting can work together to raise a much more specific set of questions (the TREAT questions). This workshop provides an organisational **change management** and/or **training** and/or **coaching** opportunity for telemedicine doers and health leaders.

Title and sections of the Momentum Blueprint

Given the focus that Momentum pays to personalisation, and the title of this deliverable, it is likely that the European Telemedicine Deployment Blueprint will be called *Towards a personalised blueprint*.

In addition to chapters on the telemedicine blueprint background, rationale, and context, there will be a chapter on methodology.

The methodology chapter will describe the various stages of operation of the Momentum consortium particularly with respect to the literature review, the survey sample, questionnaire design and development, and SIG and stakeholder formation. It will describe in particular the **questionnaire design, development and refinement**, the respondents' relationship to the Momentum project, and any exceptions that affect the questionnaire (e.g., the questionnaire did not cover the wellness domain). It will describe the methods and work processes by which the blueprint was developed by the four Momentum SIGs; the roles of the different participants (e.g., writers and editorial teams; other SIG members); and the various stages of blueprint development e.g., initial drafting, validation, consolidation and testing.

The blueprint will particularly contain four core sections.

- **Possible characteristics:** This section of the blueprint will include a description of the possible characteristics of specific telemedicine systems or organisations.
- **Success factors.** This section of the blueprint will include a list of the general success factors that cover four specific domains. “Success factors” will cover the “elements that are necessary for an organisation or a project to achieve its mission”. In the context of Momentum, a mission is understood as deploying a telemedicine service in routine care and for the benefit of a health care system. A critical success factor drives the deployment forward: it makes or breaks the success of the strategy (hence, it is ‘critical’).”
- **Success factors report.** This section of the blueprint will provide the means to create a specific (individualised or “personalised”) report on the specific success factors of relevance to the particular telemedicine organisation or system. It will detail specificities of the particular telemedicine deployment application.
- **TREAT questions.** This section of the blueprint will deal with a set of questions – currently, they are being called “the TREAT questions” – that the “telemedicine doer” needs to ask to progress to sound deployment. See Chapter 5 of this deliverable.⁶

⁶ As per January 2014, a final decision regarding the TREAT methodology has not yet been made. Further insights into the TREAT methodology are to be shared with the Momentum Consortium, and decisions made on the use of the TREAT method, in spring/summer 2014, by the project's executive committee and consortium.

Who is the blueprint’s target audience/readership?

The chief target audience or readership for the Momentum Blueprint is considered to be what the consortium calls “**telemedicine doers**”. These telemedicine doers incorporate all those people who wish to deploy a telemedicine service into routine care:

- First, directly the telemedicine doers may consist of **leaders** in health or care authorities, **hospital managers, clinicians** or **people involved in industry** (either entrepreneurs or business executives).
- Second, indirectly, another element of the Momentum Blueprint target audience is all those people who support the telemedicine doers such as **public administrators**, and personnel in **innovation agencies and support organisations**.

These sets of persons are, as per January 2014, described in some detail in the revised D2.1, Momentum's *Dissemination Plan*.⁷

Momentum will enable these “doers” to scale up services from simple piloting or testing to a routine care service. This process is based on the Momentum triangle (see the figure below).

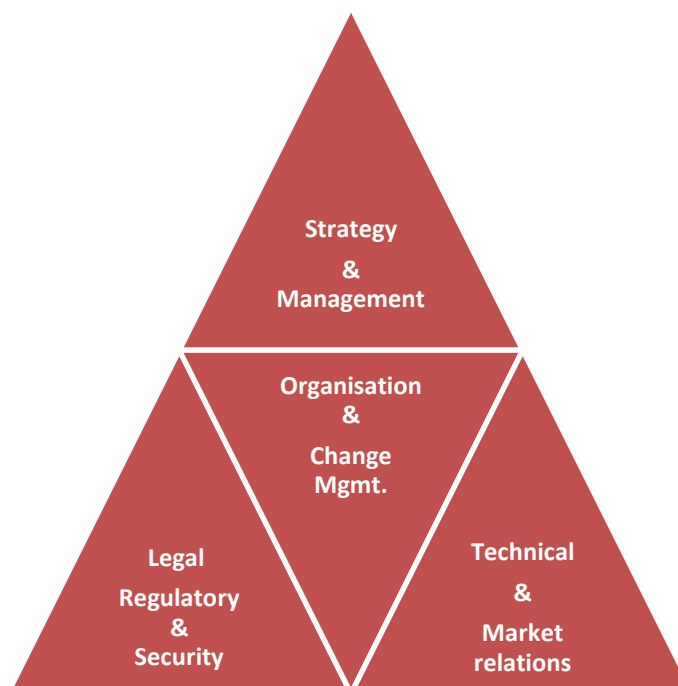


Figure 2: The Momentum triangle

⁷ In D2.1, telemedicine doers are “defined as those who wish to deploy a telemedicine service into routine care, and who may be in a position to do so. They may work in clinical or administrative positions in a hospital or other healthcare service provider, or may work on policy in a local, regional or national government.”

2. Methodology - the knowledge gathering process

This chapter deals with Momentum's knowledge gathering process, the synopsis of the blueprint's content, the work of Momentum's four SIGs, details on the blueprint's original timelines, the Momentum validation process, and the blueprint's eventual consolidation and testing.⁸

The knowledge gathering process

The Momentum knowledge gathering process involves the collection of information, experiences and lessons from existing telemedicine services in Europe, and provides the empirical foundation for the Momentum blueprint.

Momentum seeks to gather information only from those telemedicine services that have become embedded in routine healthcare provision, funded or reimbursed as part of the normal healthcare reimbursement system in a given country or region. Momentum, however, also explicitly seeks to collect information from failed attempts to move a telemedicine service into routine operation, so as to learn about what factors impeded the deployment.

Sampling: To identify these services, Momentum relied, in its preliminary phase, on its consortium members, their membership of membership associations and expertise centres, and their own networks. The consortium has members from such example countries as Austria, France, Germany, Portugal, Slovenia, and additional home countries in the United Kingdom (such as England). It is they who are able to provide the additional requisite national data. The project is also seeking to attract to the Momentum community other individuals, groups and organisations that will be able to fill some of these data gaps.⁹ The project is pro-actively seeking to enlarge its community and orbit of stakeholders. It should, however, be emphasised that, nevertheless, Momentum has no intention to cover the entirety of the EU30 Member States. To do so would be beyond its ambition and its resources.

Having sampled a range of telemedicine services in its preliminary phase, Momentum now intends to explore with finer granularity the good practices undertaken by a set of services. These are services which have not only shifted their work into routine care but also scaled them up. They feature in both Chapters 3 and 4 of this document.

Questionnaire design and development: The Region of Southern Denmark (RSD), leader of WP3, developed the questionnaire. It hosts the online version of the questionnaire on its servers.

An initial version of the Momentum questionnaire was tested in May/June 2012 with a small set of invited organisations. A revised and final version was launched in September 2012. At that period, the questionnaire remained open for completion by respondents for a period of four to six weeks before it was closed temporarily. RSD made the questionnaire results

⁸ This sub-section of the blueprint has drawn on the relevant part of Del 1.1 Momentum Governance and Operations Manual. It has also extracted information from the current Chapter 1 in the ANNEX to Del 3.1 (i.e., the chapter entitled "Momentum - Overview of the Data Collection"). It will be adapted as the project moves into its latter phase, and its work develops from a concentration on the Momentum questionnaire results to focusing more on a selection of good practice service descriptions or "use cases".

⁹ Further explanation of this sampling is included in the (re-submitted, as per January 2014), *D3.1a Report on the Knowledge Gathering*.

available to the four work package leaders who then analysed them in coordination with their SIGs before drafting the respective sections of the blueprint (i.e., D4.1, D5.1, D6.1 and D7.1).

Openness of the questionnaire: The questionnaire is not open to the public. Rather, the Momentum Secretariat collects and screens expressions of interest before the RSD server invites respondents to complete the questionnaire with an automatically generated email and a personalised link. This ensures that abuse, spam or nonsensical input is limited, and respondents can re-access their questionnaire content any time before the date of closure of the questionnaire.

At periodic intervals over the duration of the Momentum thematic network, the questionnaire will be re-opened. This will allow additional respondents to insert information, and existing respondents to update their information. These periodic intervals are determined by the project's executive committee (EXCO), in coordination with the SIG leaders. This ensures that the SIGs have the opportunity and capacity to absorb new information at each stage of the questionnaire re-launch. Each time that the questionnaire is re-opened, it will remain open for no longer than six weeks.

In the early stages of the MOMENTUM project, as part of this knowledge gathering process, emphasis was placed on the development of the blueprint and the roles played by the four SIGs.

Blueprint development: The initial synopsis

During the summer and autumn of 2012, with the Secretariat's support, WP3 members developed a synopsis of the blueprint – which was an earlier version (v5, November 2012) of this document. This synopsis consisted of an annotated table of contents with a short summary paragraph proposing content for each section of the blueprint (see ANNEXES 4-7 of this deliverable and their ensuing products, D4.1, D5.1, D6.1 and D7.1).

The design of the synopsis was a collaborative exercise that took place among the Momentum telemedicine experts. Its content was informed by the initial set of responses to the Momentum questionnaire. It was sent to the EXCO for review and criticism in September 2012. Once the synopsis was finalised, it served as the basic skeleton for the eventual blueprint format. Any subsequent changes to the synopsis will be discussed with, and approved by, the EXCO, which convenes both the Momentum project management and all SIG leaders in order to reach agreement on these kinds of matters.

It is important to note that the blueprint is an exercise “developed by telemedicine practitioners”, and evolved from a mix of expertise, experience, professional knowledge, knowledge gathered through conduct of a questionnaire survey, in-depth “use case” or case study exploration, exploration of key success factors, discussion, and overview of relevant literature.

Blueprint development: Special Interest Groups

The blueprint's four content-related sections¹⁰ were written and developed separately by each SIG. Each section corresponds to different, though related and sometimes overlapping, dimensions of telemedicine service deployment. Each SIG developed, and critiqued, the content of each respective section. The work of each SIG corresponds to the work of four

¹⁰ These sections are currently D4.1, 5.1, 6.1 and 7.1. They will ultimately be transformed into D4.2, 5.2, 6.2 and 7.2 and their analysis absorbed into D3.2 and the final blueprint, D3.3.

separate work packages. These are work packages, WP4 through to WP7. Later versions of the blueprint will consolidate the work in a single document, integrating the concepts and analysis developed.

Table 1: List of Special Interest Groups (SIGs)

| SIG | Leader |
|---|---|
| SIG on telemedicine strategy and management | Scottish Centre for Telehealth and Telecare SCTT (NHS24) |
| SIG on organisational implementation and change management | Estonian E-Health Foundation (eTervis) |
| SIG on legal, regulatory and security issues | Norwegian Centre for Integrated Care and Telemedicine NST |
| SIG on technical infrastructure and market relations | Fundació TicSalut |

The four SIGs consist of their SIG leaders, and interested volunteers from the Momentum consortium and Network, who share an interest and expertise in the respective subject matter. An initial call for volunteers was launched at the kick-off meeting. Additional opportunities have been offered in April 2013 and January 2014 for consortium members to come forward and offer to nominate themselves for work on the various SIGs.

In autumn 2012, and specifically after an EXCO call in early September 2012, the SIG leaders convened their SIGs. They have drawn on work undertaken by their list of self-identified volunteers, and approached additional individuals personally or via other means of recruitment. In special circumstances, where there were gaps in expertise or capacity, SIG leaders also invited individuals from outside the consortium to join a SIG. SIG leaders did so after discussing this with the EXCO. In some cases, the individual's organisation then joined the consortium.

Initial blueprint draft and timelines

The first drafts of the blueprint sections were deliverables due in months 12-13 of the Momentum project. Early versions of these deliverables were presented and reviewed at the second workshop, which was held in Berlin in April 2013. Each SIG based its deliverable preparation on the proposed blueprint synopsis delivered by WP3 (see ANNEXES 1-4 of this deliverable), and on the outcomes from the Momentum questionnaire.

The second Momentum workshop yielded additional feedback and insights on the work of the deliverables that led to revisions of the initial drafts. The Secretariat took the lead in making these edits, and consulted with the WP Leaders for advice and input, though it will not yet resolve inconsistencies or duplications among the sections.

Each SIG had a three to four-month period in which to develop its respective deliverable (broadly, February through to August 2013). A timeline that ensured ample time for internal consultation, review, and timely delivery was developed by the project secretariat.

Blueprint draft validated by the stakeholders

The third Momentum workshop will be held shortly after the end of the second year of the project, this corresponds currently to a proposed workshop in Athens in May 2014. Between the second and the third workshop, the SIGs have been engaged – and will continued to be engaged – in consulting with stakeholder groups at both national and European levels to arrive at a refined and validated version of the blueprint. The following activities are included:

- **Stakeholder groups consultations:** The Momentum secretariat has invited European groups from both inside and outside the Momentum network – that represent professions with an interest in telemedicine deployment – to share the SIG blueprint sections or the merged blueprint version with their members and gather their members' views. These professions include physicians, nurses, health managers and administrators, hospitals and other healthcare providers, health insurers, insurance mutualities and sick funds, and others including patient groups. By contributing to this work of constructive criticism and blueprint development, these organisations are becoming *de facto* part of the Momentum network.
- **SIG-driven consultations:** Individual SIGs have convened professionals and volunteers with an interest in their subject matter to develop their blueprint section (deliverable). Using their professional networks they may reach out to additional organisations and individuals for their comments.
- **Outreach and presentations:** Momentum is systematically seeking opportunities to make presentations on the blueprint at dedicated specialist conferences to reach specific audiences and gather their feedback. Momentum's work is also being progressively introduced within the framework of the European Innovation partnership on Active and Healthy Ageing, especially two of its action groups: one working on remote monitoring and the other on business models.
- **Momentum website:** The MOMENTUM website will make the various Blueprint sections available to the public and invite structured feedback by posting an electronic form for submission to the project. The project will also consider using the same system as for the questionnaire, if feasible. All the further consultations (described below) may use this web-based consultation tool – by driving their audiences to the website – or may collect and consolidate feedback in another way.

Sections of the blueprint, due for validation by stakeholders, are now expected to be submitted at a somewhat later date in the project than was originally planned (i.e. the original date was October and November 2013). It is the project Secretariat which proposes a detailed timeline for these activities to the SIG leaders. On completion, the individual SIG sections (deliverables) of the blueprint will be submitted to the European Commission and published on the Momentum website. They will also be presented at various project workshops, including the final workshop. This workshop will take place as a one-day or two-day activity that invites all network participants to comment on and give their structured feedback.

Blueprint development: Consolidation and testing

The third Momentum workshop will conclude the work of the SIGs. The workshop may yield additional feedback and insights that may lead to revisions of the blueprint draft. It will also permit the “consolidation” of the document, i.e., this will be an occasion to resolve any internal inconsistencies and duplications. WP3 will take the lead in making these edits in

consultation with the EXCO. An edited, merged and consolidated version of the entire blueprint will be published on the Momentum website, and will be submitted to the Commission as deliverable, D3.3.

The consolidated Blueprint will be tested in at least one practical context. The plan is that the test site will deploy a real-life telemedicine solution that uses the checklists, suggestions and recommendations made by the blueprint, and test them for their applicability and relevance. If no implementations are available, a simulation in a real healthcare setting will be considered. The test sites' experiences and issues will be documented and shared with the Momentum consortium.

During this testing phase, the Momentum Network members, and in particular the SIG leaders, will be available to provide coaching, specialised feedback or other support to the test site. SIG leaders may also nominate specific SIG members to act as coaches. The opportunity to receive advice and support from Momentum's Network members may be a major incentive for telemedicine deployment initiatives to become part of this testing process.

Based on the experiences and feedback from this or these test site(s), the Consortium will revise and prepare the final blueprint, which will be submitted to the European Commission at the end of the project. The final blueprint will be published on the Momentum website and distributed at the final Momentum workshop. If resources are available (from either the project or external funders), the blueprint may be professionally produced and printed.

3. An overview of telemedicine systems' characteristics

This chapter aims to provide Momentum blueprint readers with a list of possible characteristics of telemedicine systems. Readers can compare this list of characteristics with the terms and conditions under which they intend to deploy their own system or service. Reading about these characteristics should help to personalise the blueprint for the specific telemedicine “doer”. It should also help to prepare for the application of the TREAT process.

Potential characteristics of telemedicine systems

From the work undertaken by the Momentum community, several distinctive characteristics have been developed which typify the telemedicine systems developed by telemedicine doers. These characteristics are not definitive or absolute; rather, they form a kind of “typology”, which needs further elaboration in the future.

The first set of characteristics describes the **organisation**, its **patients**, the relevant **technology infrastructure(s)**, and the deployment characteristics.

Organisation characteristics

The **organisation** may be either:

- i. A publicly-financed organisation, or
- ii. A privately-financed organisation, or
- iii. An organisation which is based on or around a public-private partnership.

Patients' characteristics

The patients that are being served by the service may experience many different health conditions, including multiple chronic conditions: several different types of patient representative associations or organisations may also be involved in the initiative.

Technology infrastructure characteristics

Several different types of technology infrastructures may support the initiative.

Deployment characteristics

The main characteristics of the **deployment** of the telemedicine systems identified by the Momentum community to date cover the type of service and the types of organisations attempting to deploy it:

- a) The telemedicine **deployment** takes place either:
 - i. Within an organisation.
 - ii. Across organisational boundaries.
- b) The deployed telemedicine **service** serves either:
 - i. a Doctor-to-Patient (D2P)¹¹ or
 - ii. a Doctor-to-Doctor (D2D) relationship.
- c) The **wider deployment of the currently deployed telemedicine service** is:
 - i. Replicable in other organisations or another geographic area with minimum adjustments.

¹¹ Rather than the relationship relating specifically to a “doctor”, these relationships could also take place between a health professional e.g., a nurse or a care professional and their client(s).

- ii. Needful of major adaptation before its deployment in either other organisations or other geographic areas.
- d) The **business or socio-economic rationale** motivating the deployment of the service is defined by either:
 - i. A public authority aiming at deploying the service for the benefit of a national or a regional health care system (i.e., services to which several independent organisations are contributing).
 - ii. A health care organisation aiming at deploying the service for its own purpose.
- e) The associated **commercial organisation** is:
 - i. An active partner, alongside one of the above entities, that is seeking to deploy services, or
 - ii. An active partner, alongside one of the above entities, that is seeking to replicate a similar deployed service elsewhere, or
 - iii. Not actively involved in such a partnership.

Four domains of success factors

Basically, there are four domains into which these success factors generally fit. They correspond to the four areas on which the Momentum community has concentrated since the beginning of its work¹²:

- Telemedicine strategy and management.
- Legal, regulatory and security issues related to telemedicine.
- Organisational implementation and change management.
- Technical infrastructure and market relations.

The Momentum community anticipates that it will be possible to stipulate a set of general success factors for **each** of these four domains.

Telemedicine strategy and management: some example success factors

Using just the **first of these four domains** – Telemedicine strategy and management – purely as an example, it is possible to offer some generalisations.

When telemedicine is scaled-up at the healthcare system level, a range of success factors and overall factors matter.

When scaling-up at healthcare system level:

- Legislation can play either an enabling or an inhibiting role.
- Policy support is a pre-condition to scale-up.
- Equal access to the service becomes an issue to be addressed.
- From an economic perspective, telemedicine has to be recognised as an efficient way to deliver quality care.
- Collaboration of several organisations is needed.
- Coaching of local initiatives can be done by a regional or national organisation.

Overall:

- Cultural readiness (on either a system or an organisational level).
- A concrete or compelling problem or need that is met by the telemedicine service.

¹² This in-depth analytical work is in progress as per January 2014. Momentum is now focusing on the potential characteristics of telemedicine systems that can be deployed to scale; the characteristics of that actual deployment; and what are the success factors relating to four crucial aspects of telemedicine deployment.

- A champion (who is either in a position of authority/influence or who is an opinion leader) within the specific organisation or healthcare system.
- Financing and resources.

Relevant success factors: a report

For each of the success factors identified, the Momentum blueprint will determine what are the specific success factors relevant to each particular situation or context. Here, an example is drawn by taking the first five examples identified above that relate to **scaling-up at a healthcare system level**.

When scaling-up telemedicine deployment, it may help to determine what kind of:

- Legislation can play an **enabling/inhibiting** role.
 - Identify which international or national legislative or regulatory elements may play
 - an enabling role
 - an inhibiting role.
- Policy support is a **pre-condition** to scale-up.
 - Identify at what level the policy support can help e.g., national, regional or local levels.
 - Determine the type of support required.
- From an **economic** perspective, telemedicine has to be recognised as an **efficient** way to deliver quality care.
 - Determine how this recognition needs to take place.
 - Determine how best this message can be promoted, publicised and accepted.
 - Decide how much impact assessment and measurement needs to take place to determine efficiency gains.
- **Collaboration** of several organisations is needed.
 - Identify the specific public sector and private sector organisations that may need to be involved in the scaling-up exercise.
 - Determine at what phase of the initiative they may need to become involved.
- **Coaching** of the local initiatives can be done by a regional or a national organisation.
 - Identify the kind of regional or national organisation that may need to be involved in the training element(s) of the scaling-up exercise.
 - Determine at what phase of the scaling-up initiative it may need to become involved.

4. TREAT: A collaborative process to further personalise the blueprint

The Telemedicine Readiness Evaluation Assessment Tool (TREAT) is a collaborative process that seeks to further personalise the Momentum blueprint. This chapter describes briefly the role that the Momentum Consortium is currently considering: that is, that the TREAT methodology would provide a “back-end” to the “front-end” of the Momentum method and process.

TREAT stands for a Telemedicine Readiness Evaluation Assessment Tool. It is a standardised assessment tool that helps leaders in health and care organisations (and all their partners including local and national authorities, and insurers) to assess their readiness to implement telemedicine solutions. TREAT has been created jointly by Cisco and the Region of Southern Denmark (RSD) in the context of their collaboration on eHealth, including the Renewing Health project.

The prime objectives of TREAT are to help leaders:

- Develop insights and understanding of the organisational framework of telemedicine implementation.
- Identify challenges and opportunities for optimising telemedicine implementation in their area.
- Prioritise actions.

TREAT assesses “the readiness to scale-up”: hence, it focuses on policies, infrastructures, processes, and systems for telemedicine services scale-up as well as the organisational context to help organisations assess framework cross-sectoral collaboration.

TREAT is designed to be used as part of a two-step process. It has two phases. First, an online self-assessment survey is carried out. Second, the results generated by the survey can then be used by an expert facilitator to lead a workshop attended by the survey respondents.

- The online tool consists of a pre-formatted questionnaire. It contains three to five general questions for each concept covered. The tool allows the users to add a further two questions of their own, which may then be used to analyse/“tease out” specific local issues. Each section of the tool contains questions on “baseline issues” and on “existing desirable tools”. Baseline issues are those which are considered necessary for a telemedicine service. Existing desirable tools are tools (e.g., devices or applications) which could be leveraged to develop a telemedicine programme where the baseline in the local situation is poorly developed.

The results generated by the users of the online tool help the local managers to assess the current attitude to telemedicine in the key stakeholders in a region. The leaders will then lead discussions which will help the region to identify the changes needed, and prioritise any actions to be taken, before a telemedicine solution can be rolled out.

- The results from the online self-assessment provide the basis for the next step – a leadership workshop with the key players in the local area to brainstorm on three sets of issues:
 - The area’s/organisation’s current maturity in terms of organisational enablers.
 - Patient experience targets.
 - Operational enablers for implementing telemedicine solutions.

The TREAT tool invites workshop participants to examine their strategy under different headings and execution targets. First, the workshop attendees determine their position and their attitudes towards their telemedicine strategy and their execution targets. Once they have completed this assignment, they then work together to identify the main gaps, constraints, and challenges that they need to face in order to achieve their objectives.

The connection of the TREAT tool with the Momentum approach, and their respective “front-end” and “back-end” roles, is illustrated below.

This figure shows that Momentum’s approach permits certain stages to be achieved. First, a set of **characteristics** can be outlined. It is intended that these characteristics will be extracted from Momentum’s case study collection process. Four settings are relevant to each of these case studies. They are: Strategy and Management; Organisation and Change Management; Legal, Regulatory, and Security Issues, and Technical and Market Relations.

A set of appropriate **success factors** that apply to these **four settings** can be extracted.

These success factors are then transposed into a **short report** that specifies and describes each relevant success factor appropriately. There is also a feed-in to the kinds of contextual questions posed in the **TREAT online tool**. This process functions as a front-end element to the TREAT tool.¹³

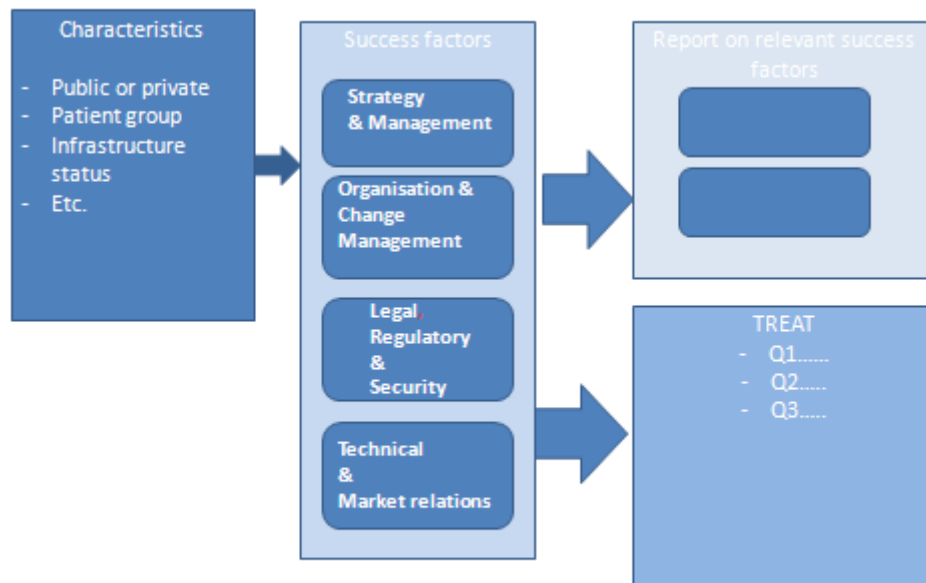


Figure 3: Structure of the TREAT tool in relation to the Momentum approach

¹³ It is intended that the TREAT tool will be explained in more detail in a future TREAT Briefing Paper.

Annex 1: Enabling telemedicine deployment: the strategy and management aspects

This annex contains the template for the four Momentum SIGs to be able to create the content of Deliverables 4.1, 5.1, 6.1 and 7.1. As per January 2014, the actual analysis that resulted from the work of the SIGs in relation to the Momentum questionnaire is included in deliverables, Del 4.1, 5.1, 6.1 and 7.1. The analysis of the content of these four deliverables will ultimately be incorporated in the *Towards a personalised Momentum blueprint*.

This chapter of the blueprint will describe briefly the background to the strategy and management aspects of telemedicine deployment in relation to e.g., policy context, management and leadership, stakeholders, financing, and aspects of the telemedicine service. The sub-section should cover all the questions related to it in the questionnaire.

The writers should also check the responses to both the penultimate and the final questions in the Momentum questionnaire (questions 39 and 40) "Comments/final remarks" and "Further information" where they may find relevant additional comments and final remarks that are relevant to the content of this chapter of the report.

The aim of this chapter is to identify the common trends as well as the main differences that occur in terms of the strategy and management aspects of telemedicine services. It is important, since this is a pan-European project, to obtain a sense of the range of findings and the way in which they are associated with particular countries or specific regions as well as what seems to operate most effectively overall.

In terms of this chapter as a whole, it is recommended that the text should be enhanced as far as possible by charts, graphs, and any other relevant illustrations. The figure or a table, a number, a title, and especially the source of the illustration (or its adaptation), if it was not the work of the writing team, all need to be identified.

It is suggested that, for the general literature review throughout this chapter, there may be relevant materials available from the former Methotelemed project,¹⁴ the eHealth strategies (2010) survey,^{15 16} and some sections of the eHealth benchmarking survey III (2011) survey.¹⁷

With regard to any relevant literature, the citation to the source is to be added in Appendix A, the References section of this report in the sub-section that refers to "Enabling telemedicine deployment: the strategy and management aspects". It should follow the citation methods suggested there. In this section, please make sure to add the author(s) names and the year of publication (Barrett, 2011), and the page number of any quotation that you cite: e.g., (Barrett, 2011, p.1).

¹⁴ The MAST Manual, February 2010 [http://www.epractice.eu/files/The_Model_for_ASsessment_of_Telemedicine_\(MAST\)_Manual.pdf](http://www.epractice.eu/files/The_Model_for_ASsessment_of_Telemedicine_(MAST)_Manual.pdf) (e.g., pp30-32 in relation to the legal context). Accessed 2 November, 2012.

¹⁵ See <http://ehealth-strategies.eu/report/report.html> for the final report. Accessed 2 November, 2012.

¹⁶ See <http://ehealth-strategies.eu/database/database.html> for the country-specific database. Accessed 2 November, 2012.

¹⁷ See http://ec.europa.eu/information_society/eeurope/i2010/docs/benchmarking/ehealth_benchmarking_3_final_report.pdf e.g., in relation to telemonitoring, pp. 72-76. Accessed 2 November, 2012.

Any abbreviations, acronyms, or words for the glossary should be kept by the strategy and management aspects SIG in Appendix B.

What follows is a set of instructions that relates specifically to the issues of strategy and management seen in telemedicine deployment.

[Question 9] Policy context and support and role of [the] political environment

This section will describe the policy context, and the support and role of the political environment.

Synthesis from the answers to the questionnaire

There are currently four parts to this question in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section will describe whether any relevant legislation underpins or influences the specific telemedicine service. The name of the policy or legislation should be cited, and the type of domain to which it refers (e.g., healthcare or social care). The types of influence may be in terms of design of the service or its implementation strategy, and the way it has contributed to transforming it into routine care.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes very generally the legal and policy background. This SIG should liaise with the Legal and Regulatory SIG to determine what literature it might be of most use to cite, and so as to ensure no duplication of materials or work.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to decision-makers and stakeholders, and their combinations.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 10] Decision-makers and stakeholders

This section will describe the decision-makers and stakeholders involved in telemedicine deployment.

Synthesis from the answers to the questionnaire

There are currently four parts to this question in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section will describe which of the ten decision-makers and stakeholders listed in the questionnaire made decisions on whether to implement or not the telemedicine service(s). It will describe whether there were combination of decision-

makers and stakeholders involved and, if so, what were the common combinations. It will describe at what institutional level the decision to implement took place, whether the decision-making is at a high e.g., national level or at a regional or local level. It will identify all the levels that took part in this decision-making. It will describe the combination of public-private partnership.

This sub-section will then describe, for the institution that was the most influential in the decision to implement the telemedicine service, who generally makes the final decision(s) among a range of different individuals (e.g., from politicians to department heads). The sub-section will also describe whether there were any external stakeholders with a particular interest in implementation or non-implementation of the telemedicine service. It will outline what were the common combinations, and the degree of national (political) involvement versus local involvement, private sector involvement, and patient involvement.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to telemedicine deployment decision-makers and stakeholders to which the writers have access, e.g., descriptions of national/regional telemedicine initiatives.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to decision-makers and stakeholders, and their combinations.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 11] Financing

This section will describe the financing involved in telemedicine deployment.

Synthesis from the answers to the questionnaire

There are currently seven (multi-part) parts to this question in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes the source of the financing and how whether it differs from other health or care services not using telemedicine; whether a formal business case was prepared; the source of the financing and the preparation of the business case; relevant details on the ownership and authorship of the business plan; the relationship between the intervention, care provision, and collaboration; where the financing of the telemedicine service came from during its project phase; the payment structure of the service; any direct investment required and where that came from; the relationship between the financiers and those recipients who receive the main benefits of the service (in terms of a percentage); and whether a direct user fee applies to the service delivery (in percentage terms).

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to telemedicine deployment financing to which the writers have access e.g., Pro-eHealth project,¹⁸ and insurance schemes, such as the Association Internationale de la Mutualité (AIM).¹⁹

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to financing.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 12] Assessment of outcomes

This section will describe the assessment of outcomes that emerge from telemedicine deployment.

Synthesis from the answers to the questionnaire

There are currently five parts to this question in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes the measurement or evaluation of the effects and consequences of the implementation of the telemedicine service, and the combination of up to seven (or more) different methods that were used. It will describe the methods used to collect evidence or documentation in terms of experimental or non-experimental design. It will indicate the numbers of patients tested or piloted in the telemedicine service (without including the control group). It will describe the seven or more different aspects or themes performed in the evaluation or assessment process e.g., health problems or safety. It will name the five or more overall outcomes or results, e.g., financial consequences/benefits, and clinical effects as well as identify whether the evaluation is still on-going. The description will draw on the five different parts of the questionnaire that relate to the issue of the assessment of outcomes.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

¹⁸ See <http://www.pro-ehealth.eu> Accessed 2 November, 2012.

¹⁹ See <http://www.aim-mutual.org> Accessed 2 November, 2012.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to telemedicine deployment assessment of outcomes to which the writers have access, e.g., individual case study evaluation reports; the eHealth strategies (2011) survey, whether its overall findings or the individual country reports^{20 21}.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to the evaluation or assessment of its outcomes.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

Observations or concerns

In writing up this sub-section, if the writer(s) unearth any particular observations, concerns or reservations that they wish to draw to the attention of their fellow Momentum members, it would be appropriate to do so in this section. This section will be used to enhance the analysis and blueprint development as the project moves along. It may be that this section is eventually dropped by the time the blueprint is finalised.

²⁰ See <http://ehealth-strategies.eu/report/report.html> for the final report. Accessed 2 November, 2012.

²¹ See <http://ehealth-strategies.eu/database/database.html> for the country-specific database. Accessed 2 November, 2012.

Annex 2: Enabling telemedicine deployment: organisational implementation and change management

This annex contains the template for the four Momentum SIGs to be able to create the content of Deliverables 4.1, 5.1, 6.1 and 7.1. As per January 2014, the actual analysis that resulted from the work of the SIGs in relation to the Momentum questionnaire is therefore included in the deliverables, Del 4.1, 5.1, 6.1 and 7.1. The analysis of the content of these four deliverables will be incorporated in the *Towards a personalised Momentum blueprint*.

This chapter will describe briefly the background to the organisational implementation and change management aspects of telemedicine deployment in relation to e.g., involvement in process, patient flow and work processes, collaboration with external institutions/organisations, training and education of professionals, professionals' experience with research and development, and various elements related to patients (training and education, satisfaction, empowerment, and ethical issues). The sub-section should cover all ten of the questions related to it in the questionnaire.

The writers should also check the responses to both the penultimate and also the final questions in the Momentum questionnaire (questions 39 and 40) "Comments/final remarks" and "Further information" where they may find relevant additional comments and final remarks that are relevant to the content of this section of the report.

The aim of this chapter is to identify the common trends as well as the main differences that occur in terms of the organisational implementation and change management aspects of telemedicine services. It is important, since this is a pan-European project, to obtain a sense of the range of findings and the way in which they are associated with particular countries or specific regions as well as what seems to operate most effectively overall.

In terms of this chapter as a whole, it is recommended that the text should be enhanced as far as possible by charts, graphs, and any other relevant illustrations. The figure or a table, a number, a title, and especially the source of the illustration (or its adaption), if it was not the work of the writing team, all need to be identified.

It is suggested that, for the general literature review throughout this chapter, there may be relevant materials available from the various professional associations that are members of the Momentum consortium as well as various telemedicine-related journals.

With regard to any relevant literature, the citation to the source is to be added in Appendix A, the References section of this report in the sub-section that refers to "Enabling telemedicine deployment: organisational implementation and change management aspects". It should follow the citation methods suggested there. In this section, please make sure to add the author(s) names and the year of publication (Barrett, 2011), and the page number of any quotation that you cite: e.g., (Barrett, 2011, p.1).

Any abbreviations, acronyms, or words for the glossary should be kept by this SIG in Appendix B.

[Question 13] Involvement in process

This section will describe the ranges of degree of involvement in the department management team and the top-level organisational team in terms of development and planning and actual carrying out of the telemedicine service.

Synthesis from the answers to the questionnaire

There are currently four parts to this question in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section will describe the ranges of degree of involvement in the department management team and the top-level organisational team in terms of development and planning and actual carrying out of the telemedicine service. The ranges (from lowest to highest) degrees of involvement specified in the questionnaire will be laid out. Where possible, sliding scales should be used.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to telemedicine deployment department management team and top-level organisational team involvement to which the writers have access, e.g., from literature on governance.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance involvement in process in telemedicine deployment.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 14] Patient flow and work processes

This section will describe the patient flow and work processes involved in telemedicine deployment.

Synthesis from the answers to the questionnaire

There are currently three parts to this question in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes the effect that the telemedicine service had on patient flow; the effect on work processes; which personnel groups were affected by shifts in tasks; and how the service affected the resource distribution of the personnel.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum

workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to telemedicine deployment patient flow and work processes to which the writers have access e.g., EHTEL study visits to Denmark, Germany, and Scotland;²² eHealth benchmarking study III.²³

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to patient flow and work processes.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 15] Collaboration with external institutions/organisations

This section will describe the collaboration with external institutions/organisations involved in telemedicine deployment.

Synthesis from the answers to the questionnaire

There is currently one part to this question in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes the extent to which delivery of the telemedicine service is dependent on collaboration with external institutions/organisations. The description will draw on the single question that relates on the assessment of delivery of telemedicine services in relation to external institutions/organisations.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to telemedicine deployment collaboration with external institutions/organisations to which the writers have access, e.g., eHealth benchmarking I,²⁴ eHealth benchmarking III,²⁵ and associated materials

²² See www.ehtel.eu for further details.

²³ See

http://ec.europa.eu/information_society/europe/i2010/docs/benchmarking/ehealth_benchmarking_3_final_report.pdf Accessed 2 November, 2012.

²⁴ See http://ec.europa.eu/information_society/europe/i2010/docs/benchmarking/gp_survey_final_report.pdf Accessed 2 November, 2012.

from the Institute for Prospective Technology Studies.²⁶

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to collaboration with external institutions/organisations.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 16] Training and education of professionals

This section will describe the type, extent and timing of education or training of professionals involved in telemedicine deployment.

Synthesis from the answers to the questionnaire

There is currently a single question in the 2 October 2012, version 2.0 of the Momentum questionnaire on this topic, with three parts. This sub-section describes the extent (percentage) of specific training or education of professionals, a description of the type of training that was needed, the point in time at which the training/education was provided, and whether any additional training/education was required. This description will draw on the three parts to the question on the training and education of professionals.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to the training and education of professionals from organisations to which the writers have access, e.g., from CPME,²⁷ EHMA²⁸ or UEMS.²⁹

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or

²⁵ See

http://ec.europa.eu/information_society/eeurope/i2010/docs/benchmarking/ehealth_benchmarking_3_final_report.pdf Accessed 2 November, 2012.

²⁶ See <http://ftp.jrc.es/EURdoc/JRC64994.pdf> Accessed 2 November, 2012.

²⁷ See <http://www.cpme.eu> Accessed 2 November, 2012.

²⁸ See <http://www.ehma.org> Accessed 2 November, 2012.

²⁹ See <http://www.uems.net> Accessed 2 November, 2012.

guidelines that can enhance telemedicine deployment implementation in relation to collaboration with external institutions/organisations.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 17] Professionals' experience with research, development and telemedicine in general

This section will describe the rate to which healthcare professionals have experience with medical research in general, development projects and innovation in general, and telemedicine services in general (both in projects and in operation).

Synthesis from the answers to the questionnaire

There are currently three parts to this question in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes the rate to which healthcare professionals have experience with medical research, development projects and innovation, and telemedicine services (both in projects and in operation), all in general terms. The description will draw on the three parts of the question on professionals' experience with research, development and telemedicine. It will focus on ratings.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to professionals' experience with research, development and telemedicine in general. Again, it is feasible that this will be based on materials available from e.g., CPME, EFN, and UEMS³⁰ and any other relevant healthcare professionals' associations.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to the experience that healthcare professionals have with medical research, development projects and innovation, and telemedicine services (both in projects and in operation).

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

³⁰ See <http://www.cpme.eu>, <http://www.ehma.org> and <http://www.uems.net> Accessed 2 November, 2012.

[Question 18] Healthcare professionals' satisfaction

This section will describe the rate of healthcare professionals' satisfaction with using the telemedicine service.

Synthesis from the answers to the questionnaire

There is currently one question on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire; it is, however, divided in at least two parts. This sub-section describes the rate of healthcare professionals' satisfaction with using the telemedicine service. It will also explain how the satisfaction was measured and which methods were used, how many healthcare professionals participated in the evaluation, and the extent to which the satisfaction differed among the personnel involved. The description will draw on the two parts of the question on healthcare professionals' satisfaction with using the telemedicine service. It will examine ratings as well as other empirical evidence.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to healthcare professionals' satisfaction with using the telemedicine service. Again, it is feasible that this will be based on materials available from e.g., CPME, EFN, and UEMS³¹ and any other relevant healthcare professionals' associations.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to the rate of healthcare professionals' satisfaction with using the telemedicine service.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 19] Training and education of patients

This section will describe whether patients received any training or education prior to the use of the telemedicine service.

Synthesis from the answers to the questionnaire

There is currently one question on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes whether patients received any training or education prior to the use of the telemedicine service and the type of training

³¹ See <http://www.cpme.eu>, <http://www.ehma.org> and <http://www.uems.net> Accessed 2 November, 2012.

that they received. The description will draw on the single question on patients' training or education prior to the use of the telemedicine service and the type of training.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to patients' education and training. Possible available materials could be found in the work of EPF³² and other international patients' organisations, the patients' group in EHTEL, various patient-related journals e.g., the BMJ,³³ and official telemedicine journals such as e.g., the Journal of Telemedicine and Telecare,³⁴ and Telemedicine and e-Health.³⁵

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to patients' training or education prior to the use of the telemedicine service as well as the type of training.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 20] Patient satisfaction

This section will describe patients' overall satisfaction in relation to telemedicine initiatives.

Synthesis from the answers to the questionnaire

There are currently three parts to this question in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes the rate to which patients are satisfied overall with a telemedicine initiative, whether the satisfaction was measured systematically and in what way, and whether there are any issues of special concern or interest to the patients. The description will draw on the three parts of the question on patients' satisfaction with telemedicine services. Part of it will focus on ratings and the approximate number of patients on which the ratings were measured.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum

³² See <http://www.eu-patient.eu> Accessed 2 November, 2012.

³³ See <http://www.bmj.com> Accessed 2 November, 2012.

³⁴ See <http://jtt.rsmjournals.com> Accessed 2 November, 2012.

³⁵ See <http://www.liebertpub.com/TMJ> Accessed 2 November, 2012.

workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to rate to which patients are satisfied overall with a telemedicine initiative. Possible available materials could be found in the work of EPF³⁶ and other international patients' organisations, the patients' group in EHTEL, various patient-related journals e.g., the BMJ,³⁷ and official telemedicine journals such as e.g., the Journal of Telemedicine and Telecare,³⁸ and Telemedicine and e-Health.³⁹ Findings from initiative such as the three whole systems demonstrator projects undertaken in England⁴⁰ may provide useful references or materials as well as the TeleScope.⁴¹

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to whether patients are satisfied with telemedicine initiatives.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 21] Patient empowerment

This section will describe whether patients' empowerment was an intended goal of the telemedicine initiative.

Synthesis from the answers to the questionnaire

There are currently two questions on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes whether patients' empowerment was an intended goal of the telemedicine initiative and whether it was achieved (deliberately or intentionally) and to what extent. The description will draw on the two parts of the question on patients' empowerment.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop

³⁶ See <http://www.eu-patient.eu> Accessed 2 November, 2012.

³⁷ See <http://www.bmj.com> Accessed 2 November, 2012.

³⁸ See <http://jtt.rsmjournals.com> Accessed 2 November, 2012.

³⁹ See <http://www.liebertpub.com/TMJ> Accessed 2 November, 2012.

⁴⁰ See http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_131684 Accessed 2 November, 2012.

⁴¹ See <http://wwwm.coventry.ac.uk/hdti/Research/Pages/TeleSCoPE.aspx> Accessed 2 November, 2012.

feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to rate to how patients are empowered through a telemedicine initiative. Possible available materials could be found in the work of EPF⁴² and other international patients' organisations, the patients' group in EHTEL, various patient-related journals e.g., the BMJ,⁴³ and official telemedicine journals such as e.g., the Journal of Telemedicine and Telecare,⁴⁴ and Telemedicine and e-Health.⁴⁵ Findings from initiative such as the three whole systems demonstrator projects undertaken in England⁴⁶ may provide useful references or materials as well as the TeleScope.⁴⁷

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to patients' empowerment in relation to the deployment of telemedicine services.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 22] Ethical issues relating to patients

This section will describe any ethical issues relating to patients in terms of the telemedicine initiative. In analysing this issue, the writer(s) may wish to liaise with the writers from the SIG on legal and regulatory issues, specifically in relation to question 26 on consent, ethical approval and concerns.

Synthesis from the answers to the questionnaire

There are currently two questions on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section will describe whether there are or were any aspects or consequences of the service that derived any ethical considerations, and whether an alternative service is able for patients who refuse or are not able to manage the telemedicine treatment. The description will draw on the two questions on ethical issues relating to patients.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum

⁴² See <http://www.eu-patient.eu> Accessed 2 November, 2012.

⁴³ See <http://www.bmj.com> Accessed 2 November, 2012.

⁴⁴ See <http://jt.rsmjournals.com> Accessed 2 November, 2012.

⁴⁵ See <http://www.liebertpub.com/TMJ> Accessed 2 November, 2012.

⁴⁶ See http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_131684 Accessed 2 November, 2012.

⁴⁷ See <http://wwwm.coventry.ac.uk/hdti/Research/Pages/TeleSCoPE.aspx> Accessed 2 November, 2012.

workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature with regard to any ethical issues facing patients involved in a telemedicine initiative. Possible available materials could be found in the work of EPF⁴⁸ and other international patients' organisations, the patients' group in EHTEL, various patient-related journals e.g., the BMJ,⁴⁹ and official telemedicine journals such as e.g., the Journal of Telemedicine and Telecare,⁵⁰ and Telemedicine and e-Health.⁵¹ Findings from initiative such as the three whole systems demonstrator projects undertaken in England⁵² may provide useful references or materials as well as the TeleScope⁵³ and the work of the ETHICAL project.⁵⁴ Last but not least, the 2012 Opinion of the European Group on Ethics in Science and New Technologies to the European Commission/BEPA in relation to information and communication technologies⁵⁵ may contain observations about the ethical needs of patients as may George et al (2012).⁵⁶

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to patients' empowerment in relation to the deployment of telemedicine services.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

Observations or concerns

In writing up this sub-section, if the writer(s) unearth any particular observations, concerns or reservations that they wish to draw to the attention of their fellow Momentum members, it would be appropriate to do so in this section. This section will be used to enhance the analysis and blueprint development as the project moves along. It may be that this section is eventually dropped by the time the blueprint is finalised.

⁴⁸ See <http://www.eu-patient.eu> Accessed 2 November, 2012.

⁴⁹ See <http://www.bmj.com> Accessed 2 November, 2012.

⁵⁰ See <http://jtt.rsmjournals.com> Accessed 2 November, 2012.

⁵¹ See <http://www.liebertpub.com/TMJ> Accessed 2 November, 2012.

⁵² See http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_131684 Accessed 2 November, 2012.

⁵³ See <http://wwwm.coventry.ac.uk/hdti/Research/Pages/TeleSCoPE.aspx> Accessed 2 November, 2012.

⁵⁴ See <http://www.ethical-fp7.eu> Accessed 2 November, 2012.

⁵⁵ See http://ec.europa.eu/bepa/european-group-ethics/docs/publications/ict_final_22_february-adopted.pdf Accessed 2 November, 2012.

⁵⁶ See <http://www.springer.com/law/book/978-3-642-22473-7> Accessed 2 November, 2012.

Annex 3: Enabling telemedicine deployment: legal, regulatory and security issues

This annex contains the template for the four Momentum SIGs to be able to create the content of Deliverables 4.1, 5.1, 6.1 and 7.1. As per January 2014, the actual analysis that resulted from the work of the SIGs in relation to the Momentum questionnaire is therefore included in the deliverables, Del 4.1, 5.1, 6.1 and 7.1. The analysis of the content of these four deliverables will be incorporated in the *Towards a personalised Momentum blueprint*.

This chapter will describe briefly the background to telemedicine legislation; legal issues; national guidelines for clinical responsibility/liability; consent, ethical approval and concerns; data management procedures; information security risk assessment; security issues; privacy training for personnel; and mapping of legal, regulatory and security stakeholders. This chapter should cover all nine of the questions related to it in the questionnaire.

The writers should also check the responses to both the penultimate and also the final questions in the Momentum questionnaire (questions 39 and 40) "Comments/final remarks" and "Further information" where they may find relevant additional comments and final remarks that are relevant to the content of this section of the report.

The aim of this chapter is to identify the common trends as well as the main differences that occur in terms of the legal, regulatory and security aspects of telemedicine services. It is important, since this is a pan-European project, to obtain a sense of the range of findings and the way in which they are associated with particular countries or specific regions as well as what seems to operate most effectively overall.

In terms of this chapter as a whole, it is recommended that the text should be enhanced as far as possible by charts, graphs, and any other relevant illustrations. The figure or a table, a number, a title, and especially the source of the illustration (or its adaptation), if it was not the work of the writing team, all need to be identified.

It is suggested that, for the general literature review throughout this chapter, there may be relevant materials available from various policy and strategy-related documents. Wherever it has been feasible, a general indication of some potential sources are given at the appropriate position in the sub-section.

With regard to any relevant literature, the citation to the source is to be added in Appendix A, the References section of this report in the sub-section that refers to "Enabling telemedicine deployment: legal, regulatory and security issues". It should follow the citation methods suggested there. In this section, please make sure to add the author(s) names and the year of publication (Barrett, 2011), and the page number of any quotation that you cite: e.g., (Barrett, 2011, p.1).

Any abbreviations, acronyms, or words for the glossary should be kept by the legal, regulatory and security SIG in Appendix B.

This SIG may be approached by the strategy and management SIG particularly with regard to their treatment of question 9 on the policy context and support and role of the legal environment.

[Question 23] Telemedicine legislation

This section will describe the overall telemedicine-related legislation.

Synthesis from the answers to the questionnaire

There are currently three questions on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section will describe any changes to healthcare legislation were a prerequisite for the telemedicine services' deployed in the specific country, whether changes to legislation or other legal rules were made as a result of the specific telemedicine service, and whether any further changes in legislation are needed in the country to ensure wider and easier implementation. The description will draw on the three parts of the question on telemedicine legislation.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature with regard to changes made to legislation as the result of telemedicine services' deployed. Relevant materials may be found in e.g., the eHealth strategies survey (2011);⁵⁷ legal and regulatory aspects of the epSOS large-scale pilot;⁵⁸ 4th international CPDP conference/2011 on European Data protection: In Good Health?;⁵⁹ European Journal for Biomedical Informatics, Vol. 8 (2012) on Support of eHealth applications by legal systems in Europe;⁶⁰ Catalina Dima (2012)⁶¹ on "Legal challenges regarding telemedicine services in the European Union"; Isabelle Andoulsi and Petra Wilson (2012) "Towards greater clarity at European Union level eHealth", and the 2012 European Commission White Paper on the legal aspects of telemedicine.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance legislation in relation to telemedicine deployment.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

⁵⁷ See <http://ehealth-strategies.eu/report/report.html> for the final report. Accessed 2 November, 2012.

⁵⁸ See, as a first step, http://www.epsos.eu/fileadmin/content/pdf/epSOS_Legal_Perspectives_2012.pdf Accessed 2 November, 2012.

⁵⁹ For presentations, see <http://www.springer.com/law/international/book/978-94-007-2902-5> Accessed 2 November 2012

⁶⁰ See <http://www.ejbi.org/img/ejbi/ejbi2012-2.pdf> Accessed 2 November, 2012.

⁶¹ In *eHealth: Legal, ethical and governance challenges* (2012), edited by Carlisle George, Diane Whitehouse and Penny Duquenoy. Heidelberg: Springer-Verlag

[Question 24] Legal issues including accreditation, liability, conflicts of law

This section will describe the legal issues involved in telemedicine deployment, including accreditation, liability, and conflicts of law.

Synthesis from the answers to the questionnaire

There are four parts to a single question on legal issues in this questionnaire in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes the legal issues involved in telemedicine deployment, including accreditation, liability, and conflicts of law. It will include whether specific accreditation of health care personnel was required to implement the telemedicine service; whether the terms of liability were clear with relation to the implementation of the service, and what any terms of legal liability are; whether there are any liability or responsibility barriers to the large-scale implementation of the service; and whether any borders relating to legal authorities are crossed. The description will draw on the four parts of the single question that relates to legal issues involved in telemedicine deployment, including accreditation, liability, and conflicts of law.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature with regard to legal issues involved in telemedicine deployment, including accreditation, liability, and conflicts of law. Possible sources of relevant literature are laid out in section 6.1.3.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance the description of the legal issues involved in telemedicine deployment, including accreditation, liability, and conflicts of law.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 25] National guidelines for clinical responsibility and liability

This section will describe the situation in terms of a framework or standards of professional responsibility for a doctor to treat patients without face-to-face contact, national guidelines or recommendations regarding the determination of clinical responsibility between healthcare professionals when they use telemedicine services, and the same between institutions involved in telemedicine services.

Synthesis from the answers to the questionnaire

There are currently two questions on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describe the situation in terms of any

framework or standards of professional responsibility for a doctor to treat patients without face-to-face contact, and national guidelines or recommendations regarding the determination of clinical responsibility between healthcare professionals when they use telemedicine services, and will specify the institution responsible for these guidelines.

The description will draw on the two questions on the framework or standards of professional responsibility for a doctor to treat patients without face-to-face contact, and the national guidelines or recommendations regarding the determination of clinical responsibility between healthcare professionals when they use telemedicine services, and the institutions' responsible for these.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to framework or standards of professional responsibility for a doctor to treat patients without face-to-face contact, and national guidelines or recommendations regarding the determination of clinical responsibility between healthcare professionals, and between institutions, when they use telemedicine services in relation to telemedicine deployment. Possible sources of relevant literature are laid out in section 6.1.3.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines specific to the context of national guidelines or recommendations regarding the determination of clinical responsibility between healthcare professionals when they use telemedicine services.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 26] Consent, ethical approval and concerns

This section will describe issues relating to consent, ethical approval and concerns about telemedicine deployment. In analysing this issue, the writer(s) may wish to liaise with the writers from the SIG on organisational implementation and change management issues, specifically in relation to question 22 on ethical issues in relation to patients.

Synthesis from the answers to the questionnaire

There are currently two questions on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire, each with several parts. This sub-section will describe issues relating to consent, ethical approval and concerns about telemedicine deployment. It will describe whether patients' give their explicit and informed consent in order to receive the telemedicine service; how they do it; how information is provided to them; whether an ethical committee has assessed the service and made any comments or had any

reservations; and whether any ethical issues were raised by anybody (else) and, if so, who raised them and what they were. The description will draw on the various parts of the question on issues relating to consent, ethical approval and concerns about telemedicine deployment. The description will draw on the several parts of the two questions that relate to consent, ethical approval and concerns.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature with regard to any ethical issues facing patients involved in a telemedicine initiative. Possible available materials could be found in the work of EPF⁶² and other international patients' organisations, the patients' group in EHTEL, various patient-related journals e.g., the BMJ,⁶³ and official telemedicine journals such as e.g., the Journal of Telemedicine and Telecare,⁶⁴ and Telemedicine and e-Health.⁶⁵ Findings from initiative such as the three whole systems demonstrator projects undertaken in England⁶⁶ may provide useful references or materials as well as the TeleScope⁶⁷ and the work of the ETHICAL project.⁶⁸ Last but not least, the 2012 Opinion of the European Group on Ethics in Science and New Technologies to the European Commission/BEPA in relation to information and communication technologies⁶⁹ may contain observations about the ethical needs of patients as may George et al (2012).⁷⁰

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance issues relating to consent, ethical approval and concerns about telemedicine deployment.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

⁶² See <http://www.eu-patient.eu> Accessed 2 November, 2012.

⁶³ See <http://www.bmj.com> Accessed 2 November, 2012.

⁶⁴ See <http://jtt.rsmjournals.com> Accessed 2 November, 2012.

⁶⁵ See <http://www.liebertpub.com/TMJ> Accessed 2 November, 2012.

⁶⁶ See http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_131684 Accessed 2 November, 2012.

⁶⁷ See <http://wwwm.coventry.ac.uk/hdti/Research/Pages/TeleSCoPE.aspx> Accessed 2 November, 2012.

⁶⁸ See <http://www.ethical-fp7.eu> Accessed 2 November, 2012.

⁶⁹ See http://ec.europa.eu/bepa/european-group-ethics/docs/publications/ict_final_22_february-adopted.pdf Accessed 2 November, 2012.

⁷⁰ See <http://www.springer.com/law/book/978-3-642-22473-7> Accessed 2 November, 2012.

[Question 27] Data management procedures

This section will describe data management procedures involved in telemedicine deployment.

Synthesis from the answers to the questionnaire

There are three parts to this question on this topic in the 2 October 2012, version 2.0 of the MOMENTUM questionnaire. This sub-section describes data management procedures involved in telemedicine deployment in terms of the obviousness of the organisation responsible for security and legal standards in terms of the telemedicine service; whether a data controller has been identified; and in relation to whether any changes to normal data management procedures had to be modified and the changes that were made. This description should draw on the three parts of the question on data management procedures.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to changes in data management procedures involved in telemedicine deployment.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to data management procedures.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 28] Information security risk assessment

This section will describe information security risk assessment pertinent to telemedicine deployment.

Synthesis from the answers to the questionnaire

There is currently one question only on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes information security risk assessment in relation to whether an assessment to risks to the information security has been performed i.e., risks to confidentiality, information integrity or availability. The synthesis needs to draw on the responses to this single question.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum

workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to information security risk assessment in telemedicine deployment.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to information security risk assessment.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 29] Security issues

This section will describe security issues involved in telemedicine deployment.

Synthesis from the answers to the questionnaire

There are five parts to the question on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes the methods of authentication used to obtain access to the telemedicine service when healthcare professionals or other health service employees; whether the user is logged out after a certain idle time; whether data transfer is encrypted; whether communication is performed via a VPN connection; whether all access to the system or service is logged and whether anyone inspects the logs. This description should draw on the five parts of the question on security issues.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to security issues related to telemedicine deployment. Useful comparisons may be made with the findings from the eHealth benchmarking III study.⁷¹

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to security

⁷¹ See

http://ec.europa.eu/information_society/europe/i2010/docs/benchmarking/ehealth_benchmarking_3_final_report.pdf Accessed 2 November, 2012.

issues.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report).

[Question 30] Privacy training for personnel

This section will describe privacy training for personnel involved in telemedicine deployment.

Synthesis from the answers to the questionnaire

There are two parts to the question on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes whether personnel have received any privacy training, how often the training is repeated, and whether staff contracts or insurance in the organisation adequate for covering their use of telemedicine systems. This description should draw on the two parts of the question on privacy training for personnel.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to privacy training for personnel related to telemedicine deployment. It is currently not so obvious where useful literature on alternative technologies may be located.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to security issues.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 31] Mapping of legal, regulatory and security stakeholders

This section will describe the mapping of legal, regulatory and security stakeholders in relation to telemedicine deployment.

Synthesis from the answers to the questionnaire

There is a single part to the question on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes whether the respondent is aware of authorities, organisations or others working to clarify security, regulation and/or legal aspects of telemedicine in the specific country. This description should draw on the one question on legal, regulatory and security stakeholders.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop

feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to legal, regulatory and security stakeholders. It is currently not so obvious where useful literature on such stakeholders may be located.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment implementation in relation to security issues.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

Observations or concerns

In writing up this sub-section, if the writer(s) unearth any particular observations, concerns or reservations that they wish to draw to the attention of their fellow Momentum members, it would be appropriate to do so in this section. This section will be used to enhance the analysis and blueprint development as the project moves along. It may be that this section is eventually dropped by the time the blueprint is finalised.

Annex 4: Enabling telemedicine deployment: technical infrastructure and market relations

This annex contains the template for the four Momentum SIGs to be able to create the content of Deliverables 4.1, 5.1, 6.1 and 7.1. As per January 2014, the actual analysis that resulted from the work of the SIGs in relation to the Momentum questionnaire is therefore included in the deliverables, Del 4.1, 5.1, 6.1 and 7.1. The analysis of the content of these four deliverables will be incorporated in the *Towards a personalised Momentum blueprint*.

This chapter will describe briefly the background to technical infrastructure and market relations. The sub-section should cover all seven of the questions related to it in the questionnaire.

The writers should also check the responses to both the penultimate and also the final questions in the Momentum questionnaire (questions 39 and 40) "Comments/final remarks" and "Further information" where they may find relevant additional comments and final remarks that are relevant to the content of this section of the report.

The aim of this chapter is to identify the common trends as well as the main differences that occur in terms of the technical infrastructure and market relations. It is important, since this is a pan-European project, to obtain a sense of the range of findings and the way in which they are associated with particular countries or specific regions as well as what seems to operate most effectively overall.

In terms of this chapter as a whole, it is recommended that the text should be enhanced as far as possible by charts, graphs, and any other relevant illustrations. The figure or a table, a number, a title, and especially the source of the illustration (or its adaptation), if it was not the work of the writing team, all need to be identified.

In relation to this part of the questionnaire and its analysis by the specific SIG, it is not immediately obvious what might be appropriate sources of literature.

With regard to any relevant literature, the citation to the source is to be added in Appendix A, the References section of this report in the sub-section that refers to "Enabling telemedicine deployment: legal, regulatory and security issues". It should follow the citation methods suggested there. In this section, please make sure to add the author(s) names and the year of publication (Barrett, 2011), and the page number of any quotation that you cite: e.g., (Barrett, 2011, p.1).

Any abbreviations, acronyms, or words for the glossary should be kept by this SIG in Appendix B.

[Question 32] Infrastructure

This section will describe the overall infrastructure (regional, national or organisational) and the specific infrastructure for the telemedicine services.

Synthesis from the answers to the questionnaire

There are currently two questions on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section will describe up to seven different options in

relation to the different types of infrastructure that support the telemedicine services e.g., Internet Protocol, videoconferencing, message-based communication and public key infrastructure. It will include a more specific description of this infrastructure. This sub-section will draw on the two relevant questions in the questionnaire.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to the overall and specific infrastructure of the telemedicine services.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines with regard to the overall infrastructure for the telemedicine services and how it turns.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 33] Connections and networks

This section will describe the systems, connections and locations on which the telemedicine service is dependent (e.g., wireless network for mobile services or broadband in the home).

Synthesis from the answers to the questionnaire

There is currently one question only on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes the systems, connections and locations on which the telemedicine service is dependent (e.g., wireless network for mobile services or broadband in the home). This sub-section will draw on the single relevant question in the questionnaire.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to the systems, connections and locations to which the telemedicine service is dependent (e.g., wireless network for mobile services or broadband in the home).

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that refer to the systems, connections and locations to which the telemedicine service is dependent (e.g., wireless network for mobile services or broadband in the home).

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 34] Integration, standards and interoperability

This section will describe aspects of the telemedicine service in relation to integration, standards and interoperability.

Synthesis from the answers to the questionnaire

There are currently ten questions on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes the aspects of the telemedicine service in relation to integration, standards and interoperability. It will refer to the degree of integration of the service in terms of the technology used and the basic IT system; whether the integration is achieved by using standards; whether relevant identity verifications are interoperable; whether only certified systems are used (and the types of certification used); whether sensor devices interact with controlling devices; whether seamless transfer of data takes place; whether any of the devices used are certified in relation to other devices e.g., via the Continua Health Alliance; and the family of services used in relation to a plug-and-play context; finally, whether the public authority has a mechanism or procedure to deal with the accreditation/certification of providers. The description will draw on the ten separate questions on the telemedicine service in relation to integration, standards and interoperability.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to the aspects of the telemedicine service in relation to integration, standards and interoperability. It is possible that useful materials are being developed by the epSOS large-scale pilot and by studies commissioned by the European Commission DG Connect and/or DG DIGIT.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that relate to the aspects of the telemedicine service in relation to integration, standards and interoperability.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely

where); a meeting; a specific article, book or report.

[Question 35] Risk management

This section will describe whether methods of risk management are in place, and which ones.

Synthesis from the answers to the questionnaire

There is currently one question only on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes whether methods of risk management are in place e.g., to ensure effectiveness, safety and security, and which methods. The description will draw on the single question on the methods of risk management that are in place.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature on telemedicine deployment in regard to methods of risk management in place e.g., to ensure effectiveness, safety and security, and which methods. Appropriate materials may be available in the eHealth benchmarking III study (at least in terms of in relation to acute hospitals).⁷²

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment in regard to methods of risk management. The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 36] Purchase and procurement strategy

This section will describe how telemedicine services are purchased.

Synthesis from the answers to the questionnaire

There are currently six questions on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes the up to six different types of purchasing of telemedicine equipment. It will also describe the type of equipment purchased; the means of procurement; any service agreements; any relationship with another service provider; and the extent to which the telemedicine infrastructure contains

⁷² See

http://ec.europa.eu/information_society/europe/i2010/docs/benchmarking/ehealth_benchmarking_3_final_report.pdf Accessed 2 November 2012

devices from different vendors. If this is the case, up to five different aspects of how they are integrated can be described. The description will draw on the six separate questions in the questionnaire on how telemedicine services are purchased.

In particular, the final section of the questionnaire – which relates to bespoke solutions – includes many separate sub-sections. Here, the section should cover such issues as the name of the bespoke solution, the reasons for its selection, and the financial conditions under which it was selected. There is a range of up to six different types of financial conditions under which a bespoke solution may be developed e.g., under a European Union framework programme or by industry partners. This section will also cover the wide variety anticipated of proprietary products (whether systems or platforms) that are being used. It will also describe the dozen or so different parties that can be involved in the development of either a bespoke solution or a vendor product.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to different types of equipment purchased; different means of procurement; any service agreements; different types of purchasing of telemedicine equipment; and different devices from different vendors, and their integration. It is possible that literature under development by the Pro-eHealth study may be of use here.⁷³ It is currently not very obvious where useful literature on bespoke solutions may be located.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance telemedicine deployment in terms of the different types of equipment purchased; the means of procurement; any service agreements; any relationship with another service provider; the extent to which the telemedicine infrastructure contains devices from different vendors; and different devices from different vendors, and their integration.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report.

[Question 37] Alternative equipment

This section will describe whether alternative equipment to the telemedicine service equipment is available on the market or is running in the same territory, country or countries.

⁷³ See <http://www.pro-ehealth.eu> Accessed 2 November, 2012.

Synthesis from the answers to the questionnaire

There are currently two questions on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes whether alternative equipment was available to the telemedicine equipment and, if alternatives were available, why the particular technology was chosen; also, what other equipment is running. The description will draw on the two questions in the questionnaire on alternative equipment to the telemedicine service equipment available on the market or currently running.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to forms of alternative equipment to the telemedicine service equipment available on the market, the reasons for particular selections and choices being made, and other equipment that is running. It is currently not so obvious where useful literature on alternative technologies may be located.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance the availability or the selection of alternative equipment on the market.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report).

[Question 38] Integration and documentation of the telemedicine treatment

This section will describe whether the "telemedicine service events" are integrated with electronic health records or whether a separate document system is key (and, if so, of what type).

Synthesis from the answers to the questionnaire

There is currently one question only on this topic in the 2 October 2012, version 2.0 of the Momentum questionnaire. This sub-section describes whether the "telemedicine service events" are integrated with electronic health records or whether a separate document system is key (and, if so, of what type). The description will draw on the single question in the questionnaire on the integration and documentation of the telemedicine treatment.

Synthesis from the stakeholder feedback process

This sub-section will specify any additional commentary that came from the first Momentum workshop (C1 on 20 June 2012/Arctic Lights - Luleå) and the internal Luleå Momentum

workshop/programme steering committee presentation. Eventually, other workshop feedback (e.g., Berlin; Athens) will be absorbed into the analysis.

Synthesis of the literature review

This sub-section draws on and describes any relevant literature in regard to the extent that "telemedicine service events" are integrated with electronic health records. It is currently not so obvious where useful literature on this integration may be located.

Guidelines for implementation

This sub-section specifies in a list of bullets any initial suggestions, recommendations, or guidelines that can enhance the kinds of proprietary vendors of the systems or platforms being used in telemedicine initiatives.

The writer(s) should draw on issues that emerge from the questionnaire, the stakeholder feedback process and the literature review. The original source of the "guideline" should be identified e.g., whether the concept emerged from the questionnaire (and if so, precisely where); a meeting; a specific article, book or report).

Observations or concerns

In writing up this sub-section, if the writer(s) unearth any particular observations, concerns or reservations that they wish to draw to the attention of their fellow Momentum members, it would be appropriate to do so in this section. This section will be used to enhance the analysis and blueprint development as the project moves along. It may be that this section is eventually dropped by the time the blueprint is finalised.

Appendix A for Deliverables D4.1-D7.1 - References

If feasible, the literature sources referred to in each SIG's literature review should be included in a template that corresponds to this appendix. They should follow the referencing system laid out in the Bibliographies section (5.5.4) of the Europa, Publications Office *Inter-Institutional Style Guide*.⁷⁴

At least in an initial stage of development of the blueprint, SIGs should add the literature that they have used under their own domain heading which follows. In future development of the blueprint, it is highly likely that these lists will be integrated into a single set or list of references.

- Literature related to telemedicine deployment: the strategy and management aspects.
- Literature related to telemedicine deployment: organisational implementation and change management.
- Literature related to telemedicine deployment: legal, regulatory and security aspects.
- Literature related to telemedicine deployment: technical infrastructure and market relations.

⁷⁴ See <http://publications.europa.eu/code/en/en-250500.htm - i554> Accessed 2 November 2012.

Appendix B for Deliverables D4.1-D7.1 - Abbreviations and glossary

In the initial stages of development of this blueprint, a record will be kept in a template that corresponds to this table by each SIG of the abbreviations or the terms and definitions that it uses.

| SIG | Full SIG title |
|--|--|
| Abbreviation, acronym of words used | Full meaning of the abbreviation or acronym and/or full meaning of the words used |
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