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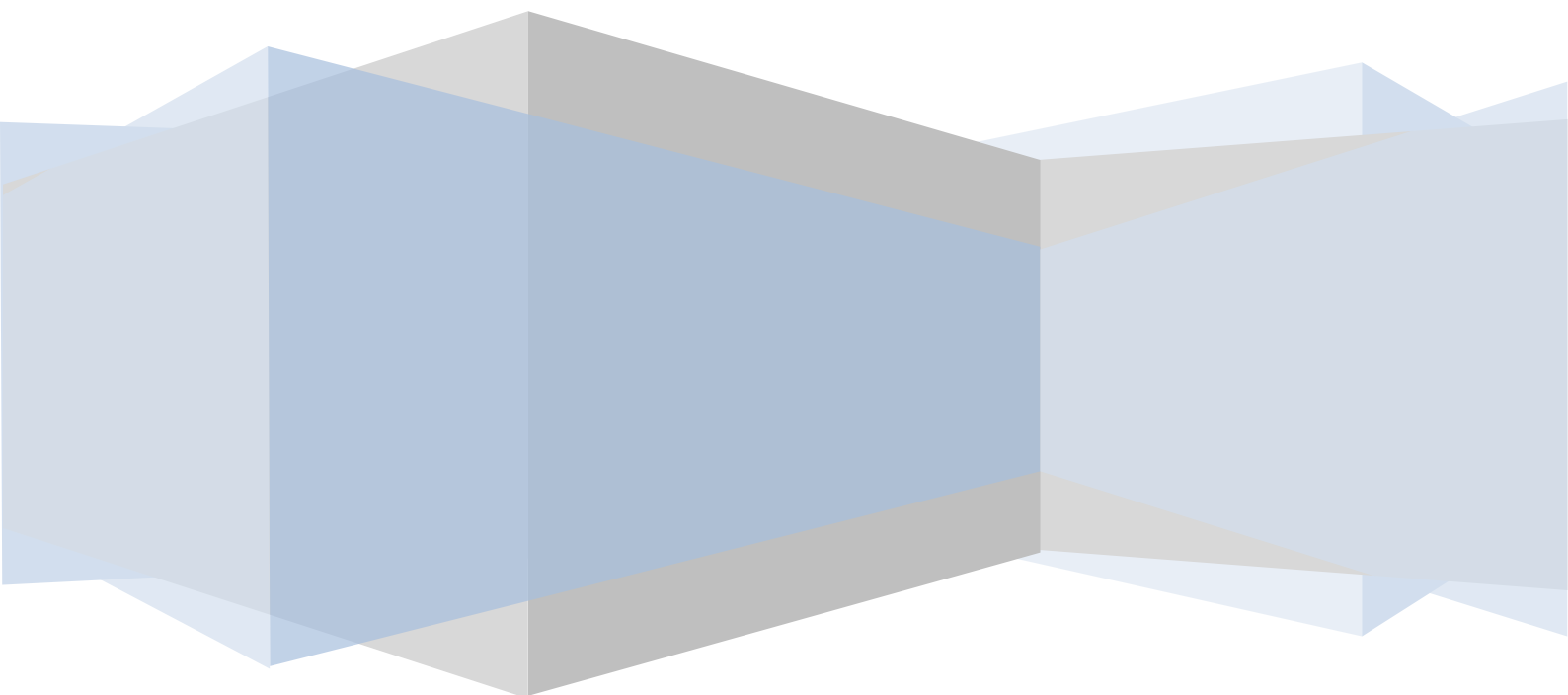
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# Report of the "Interprofessionality" thematic group

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## 2 Executive summary

FOPH (Federal Office of Public Health) presented a draft mandate, previously discussed with the Swiss Conference of the Cantonal Ministers of Public Health, planning the launch of a thematic group "Interprofessionality". The majority of the Platform decided to approach the questions from the training angle. During the meeting of the 25th of January 2012, the Platform confirmed the mandate of the 14th of September 2011 within the following framework:

- base the work on the questions related to education
- develop concrete solutions that are likely to be put in place in short term, as a priority for medical training.
- occasionally associate with these works a support group and a steering group, the composition of which was defined by the Platform.

The members of the thematic group decided to develop a learning concept for interprofessional education (IPE) based on concrete examples of collaborative practice (IPC), taken from the health care models and from the chain of care of current patients or predictable in the medium term, coming mainly from ambulatory primary care, centred on the patient, orientated according to skills, based on the health problem and the journey of the patient through the health care system.

1. IPC within a primary care structure
2. IPC in an acute care team, respectively in an emergency situation
3. IPC "sequential" (ambulatory aftercare of a patient after hospital)
4. IPC in primary care medicine for polymorbid patients, under particular consideration of the "bio-psycho-social" aspects.
5. IPC in a regional network for patients in palliative care
6. IPC as preventive purpose within a primary care structure or a medico-social establishment.

Apart from the IPE training, which is a prerequisite for any IPC, it is important to gather all the tools essential to the success of a collaboration between professional health care partners. A lot of information about such tools can be found in national and international publications. The essential elements were put together as a tool-box for a global interprofessional training from the first to the sixth year of medical school, which allows the development of progressive IPE modules (early-to-late approach) which takes into account the increasing level of skills of the student(s) and learner(s).

This didactic tool should give enough leeway to the training institutions for the realisation of the IPC modules and allow them to be adapted according to the needs and the regional possibilities, or even be put in place together with the Higher education institutions or Vocational and Professional Education institutions in Health Care.

The purpose of this report is to establish a concept for an interprofessional teaching that includes recommendations regarding the skills and the training objectives common to all the professions involved in collaborative practices. It also offers methodological recommendations regarding the transmission of the training contents (interprofessional modules, learning in teams) which take into account existing mediums on the university level but also the systematic and usable mediums for the secondary and third level, as well as the various skills, responsibilities and legal provisions in force (LPMéd = medical professions act, LHES = Higher education institutions Act, LAU= University funding Act, LFPPr = Vocational and Professional Education and Training Act).

These recommendations can be incorporated as part of the programmes and the objectives of the undergraduate medical education. They, however, consider the same standards as regards to the

basic training of the health care professions that are led to work with them interprofessionally. The concept in question represents the first step of a structured and coordinated introduction of the IPE in the medical studies at university and the training for health care professions. The experts of the thematic group recommend the Platform to continue the operationalisation of this concept on a national level as part of a second mandate.

NB : en français, le terme *interprofessionalité* est un néologisme qui correspond au terme anglais *interprofessionality*. Dans certains documents francophones, le terme *interprofessionnalisme* est également utilisé, qui ne nous semble pas adéquat compte tenu du sens du mot *professionnalisme*, se référant plutôt à une compétence générique dans le cadre de ce travail.

### 3 Introduction

The "Future of medical training" Platform was launched in September 2010 on the basis of the mandate issued in the context of the National Health Policy Dialogue. It is made up of representatives of 16 national bodies involved in issues relating to the training of doctors.

Following consultation with the Swiss Conference of the Cantonal Ministers of Public Health (CDS), the FOPH presented a draft mandate at the meeting held on 14 September 2011 aimed at setting up a **thematic group on "Interprofessionalism"**.

The participants held a lengthy debate on which of two main topics – questions relating to training (interprofessional modules, shared skills etc.) or the future distribution of tasks and skills among healthcare professions (skill mix / grade mix) – should have priority.

The make-up of the thematic group was also discussed, in particular the proportion of representatives of training or healthcare, the need for a regional spread of members, for involvement of directly affected groups (medical students, people training in other healthcare professions) and for certain healthcare professions (such as medical technicians) to be represented. See Annexe 2 for the make-up of the thematic group and the support groups.

The majority of the Platform decided to approach the questions from the medical training angle. The FOPH was therefore tasked with re-examining the focus of the mandate, specifying it in greater detail and submitting a new proposal for the make-up of the thematic group.

The FOPH and CDS met on 26 October 2011 to attempt to work out a proposal that would meet the various needs expressed, i.e. incorporate both the training and practical aspects, include all affected professional groups and people in training, reflect geographical spread fairly, etc., while keeping the thematic group small enough to work effectively.

This proposal was submitted to the members of the Platform for comment on 10 November 2011. The designated officers of the thematic group, Nadine Facchinetti and Olivier Glardon, assessed the replies and modified the structure and make-up of the group accordingly. A concept aimed at specifying the mandate in greater detail was also agreed. The aim was to find a compromise acceptable to all parties so that work could start without delay.

The Platform confirmed the mandate of 14 September 2011 in a meeting held on 25 January 2012, raising the following points:

- **The thematic group must gear its work to the questions related to education, not health policy.**
- **Its purpose is to develop concrete solutions that are likely to be implemented in the short term, as a priority for medical training.**
- **To this end, it will occasionally involve in its work a support group and a steering group, the composition of which was defined by the Platform.**

#### 3.1 Definitions

The term **Interprofessionalism** incorporates two complementary aspects (WHO 2010): **Interprofessional Education (IPE)** which leads to patient-centred **interprofessional collaboration (IPC)**.

The term **interdisciplinarity** applies to a form of collaboration that involves partners working in the same profession (for example, doctors specialising in different areas of medicine). We have not drawn

a distinction between interprofessionality and interdisciplinarity for the purpose of developing IPC models and modules, in particular because the proposals are directed primarily at university students rather than people in specialist postgraduate training.

### 3.1.1 Interprofessional training / collaborative practice

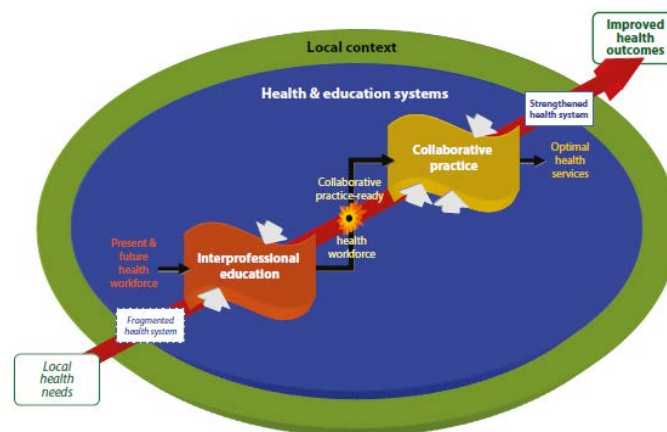
According to the definition put forward by the United Kingdom Centre for the Advancement of Interprofessional Education (CAIPE 1997 and 2006)<sup>1</sup>, **Interprofessional Education (IPE)** exists when two or more professions learn with, from and about each other to improve collaboration and the quality of care.

This is an essential stage in preparing healthcare professionals for collaborative practice so that they can meet local health needs (**collaborative practice-ready health workforces**, see Figure 1).

According to the international definition, **Interprofessional Collaboration (IPC)** exists when several healthcare professionals with different professional backgrounds work with each other, patients, families, carers and the community to offer the best quality of care. This allows healthcare professionals to collaborate with anyone whose skills contribute to achieving local health goals.

However, it is important not to confuse *interprofessionality* with *sharing* skills or certain elements of training. In the case of interprofessionality, the most important feature is **interaction between professionals** (which implies a definition of roles and recognition / acceptance of mutual skills), and is only this interaction allows the desired result to be achieved and **the patient's needs to be met**. In the case of skill sharing, each professional makes their skills available to the group, but interaction is not the key feature of collaboration. This is therefore a less developed form of IPC which we will not examine further.

Figure 1: the interprofessional context of healthcare professions and health



### 3.1.2 Specific generic and professional skills.

The term **skill** is widely used in the interprofessional context. There are many definitions of this term<sup>2</sup>. The definitions suggested by Sottas (2010), Frank et al (2010) and the Canadian Interprofessional Health Collaborative (2010) have been used as a springboard for developing the ideas contained in this concept:

- **Generic skills:** also referred to as *non-specific skills* or *transversal skills*, these describe professional activity through seven roles, as set out in the CanMEDs model<sup>3</sup>. They serve as general learning objectives (SCLO II<sup>4</sup> for medical professions, or Final skills for healthcare

<sup>1</sup> <http://www.caipe.org.uk/resources/defining-ipe/>

<sup>2</sup> <http://australie.uco.fr/~cbourles/OPTION/Competences/Comptran.htm>

<sup>3</sup> <http://www.royalcollege.ca/portal/page/portal/rc/canmeds/framework>

<sup>4</sup> SCLO = Swiss Catalogue of Learning Objectives; SCLO, Swiss Catalogue of Learning Objectives; <http://scllo.smifk.ch/>

professions) and are common to all professions. They meet official expectations of professionals working in a single field (medicine, health, social work) and apply to all regulated professions. **Individuals working in an IP team must not only have already acquired these skills, but also adapt their professional activity in the light of the function and role which is assigned to them or which they take on within the group.**

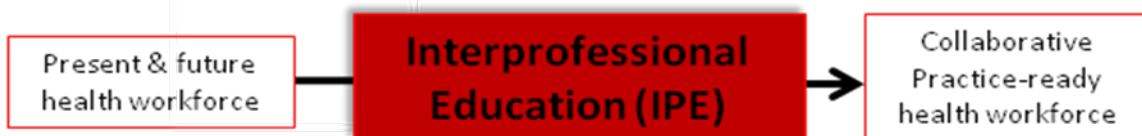
- *Specific professional skills* (also referred to as *exclusive skills*): these are defined according to nationally and internationally recognised standards and describe the knowledge, aptitudes and abilities relevant to the qualification level in question (also referred to as day 1 competencies). They also describe the extent and profile of the exercise of the profession.
- *Key skills*: this term refers to the cognitive and emotional skills that can be acquired. They enable individuals to act and make better use of their professional knowledge. There are various distinct categories, such as personal skills = learning to be (e.g. ethics), action skills (e.g. orientation according to results = learning to do), social skills (learning to live together, e.g. for teamwork, interpersonal communication, problem-solving, dialogue, etc.), methodological and media skills = learning to learn / know (reading publications critically, etc.). A national interprofessionality skills framework was drawn up in 2010, concentrating on six skills areas: interpersonal communication; care that centres on the patient, his/her close friends and family and the community; clarification of roles; teamwork; collaborative leadership; and resolution of interprofessional conflict.

This concept does not arrange the skills to be acquired during IPE for the various professions by any order of priority or value. The members of the thematic group took the view that this aspect of IPE and IPC depended on the principal features of each IPE training module. As the directors of schools and faculties will determine these modules on the basis of the six care models proposed, they will also set the objectives and priorities according to their own approach to IPE.

### 3.2 Analysis of the mandate

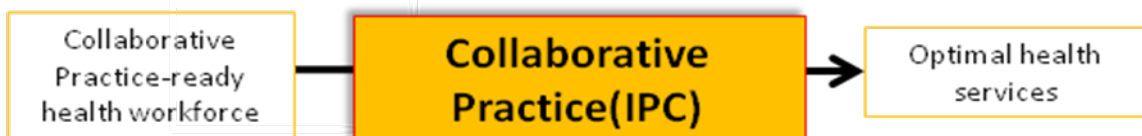
At its first meeting, the thematic group analysed the mandate defined by the Platform. It concluded that the framework met the criteria set by the WHO (2010) for interprofessional education, i.e. it fostered the acquisition of the skills that healthcare professionals need to work effectively as part of a **collaborative practice-ready health workforce** (see Figure 2). It is therefore an introduction to IPC as a mode of professional activity both for individuals (in line with the individual's profile and professional role) and for groups (IP team, IP care network, etc.) (Davies et al., 2011)

Figure 2: interprofessional education



The acquisition of the skills needed to deliver optimum care in the context of collaborative practice (Figure 3) is a second stage and would be dealt with under a subsequent mandate. However, there is no reason not to use collaborative practice models to illustrate the interprofessional education modules that should be developed. This concept has therefore been developed along these lines.

Figure 3: collaborative practice



Consequently, the members of the thematic group unanimously agreed that the objectives set would



be met if, having consulted the support groups and the steering group, the thematic group was able to:

- submit a concrete proposal for the introduction of IPE at undergraduate level<sup>5</sup> (the thematic group's "final product"), highlighting the interprofessional reality, needs and requirements of Switzerland's current and future healthcare system. The aim is not to teach the fundamental principles and theory of interprofessional education and collaboration in general (D'Amour et al., 2008), but the principles allowing students to acquire or strengthen the skills needed for high-quality IPC during their training,
- put forward recommendations to faculties on the introduction of IPE modules in university training for future doctors and coordination with IPE / IPC training given for other healthcare professions,
- formulate a list of proposals (for the Platform) to follow up work on IPE / IPC in Switzerland and with other countries (particularly as regards IPE in postgraduate training for healthcare professions).

To this end, it was decided to **develop an IPE concept based on specific examples** drawn from patient treatment and care chain models that are in use at the moment or are likely to be introduced in the medium term, as described in the report drawn up by the CDS and the FOPH<sup>6</sup>.

The experts in the thematic group have therefore been working to define and take account of the main skills needed for interprofessional collaboration (IPC), distributing them among the various care models and IPC modules (see Annexe 3, General Portfolio, Skills Matrix).

The work has focused primarily on **outpatient primary care**, and on the interfaces between outpatient and inpatient care. This is because IPC training in a hospital setting requires specific and methodological skills in addition to the non-specific and transversal skills already taken into account in this concept. Students generally acquire the former skills only during clinical placements and in particular during postgraduate training. Consequently, it is more appropriate at this stage to concentrate on decision-making skills which require less expertise and professional experience. Furthermore, the quality assurance rules and procedures used by individual hospitals or medico-social facilities have a significant impact on IPC. It would therefore be premature to deal with this issue under this mandate.

It has also been deemed preferable to focus attention on IPC models and modules at bachelor / master level for students of medicine, at bachelor level for courses offered at universities of applied sciences and professional qualification level for relevant courses offered within other higher education establishments. The emphasis has therefore been placed on the tertiary level, incorporating professions involved in interprofessional care activities as needed<sup>7</sup>.

The members of the thematic group are aware that master and advanced practice courses are being prepared for various healthcare professions<sup>8</sup> (OFFT 2012; Delamaire et al., 2010), as are concepts giving patients direct access to some healthcare professions, such as physiotherapy<sup>9</sup>. This is implicitly taken into account in the models proposed in order to allow easy adjustment according to the needs of faculties and schools. However, it was decided that this issue related more closely to professional activity than to learning interprofessionalism, and that it was therefore not covered by the mandate and did not add any real value to an introduction to IPC. They nevertheless recommend that this issue be included in a second stage of operationalisation of the national IPE / IPC concept in Switzerland. The

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<sup>5</sup> The English phrase "undergraduate and postgraduate training" is a translation of the German phrase "Aus- und Weiterbildung" in the case of training delivered at university level; in other cases it refers to "basic and post-qualification training" or to "formal and informal training"

<sup>6</sup> see working group "New care models for primary care medicine" CDS, 2011.

Internet: [http://www.gdk-cds.ch/fileadmin/docs/public/gdk/Aktuelles/MMTq/BT\\_Versmod\\_pub\\_20120402\\_f.pdf](http://www.gdk-cds.ch/fileadmin/docs/public/gdk/Aktuelles/MMTq/BT_Versmod_pub_20120402_f.pdf)

<sup>7</sup> For medical assistants, see <http://www.odamed.ch>

<sup>8</sup> <http://swiss-ano.ch/w/pages/fr/actualites.php>

<sup>9</sup> [http://www.zhaw.ch/fileadmin/php\\_includes/popup/projekt-detail.php?projektnr=1086](http://www.zhaw.ch/fileadmin/php_includes/popup/projekt-detail.php?projektnr=1086)

view of the working group on the Health Professions Act (HPA; prepared by SERI and FOPH) and those of the relevant professional organisations<sup>10, 11</sup>, could also underpin a concept of this kind.

### 3.2.1 Description of the final product

In the light of the points set out above, it was decided that the work of the thematic group would take the form of three main documents:

- Proposals for IPC models and modules (see Annexes 4 - 9), drawn mainly from the practice of outpatient primary care medicine, **centred on the patient, oriented according to skills, focused on the health problem and the patient's journey through the healthcare system**, allowing students to address, understand and carry out the typical elements of interprofessional work (skills, expected outcomes, interacting professions, communication, coordination / behaviour / monitoring patient management, etc.). These models take account of the care chain (**Pflegepfad**), the treatment chain (**Behandlungspfad**) and the various **access routes into the healthcare system**.
- Proposal for an overall interprofessional education toolbox covering years one to six of medical training (see Chapter 5 and Annexe 3: general IPE portfolio), allowing gradually more complex IPE modules to be developed (early-to-late approach<sup>12</sup>) reflecting the growing skills of students and learners. This didactic instrument should give educational establishments enough freedom to design IPC modules that can be adapted to the needs and resources of their region, or to create joint offerings with universities of applied sciences or colleges of advanced vocational education specialising in healthcare professions.
- Proposal for a national IPC / IPE concept (see Chapter 7) to be used as a springboard for broader reflection on future IPC in the context of the evolution of healthcare practices and on the development of IPE which will be necessary in the light of this evolution.

### 3.2.2 Planned IPC models

The original concept proposed to the Platform envisaged the development of five care models. The debate within the group and with the invited experts has led to the addition of a sixth model, on prevention. This has the advantage of incorporating important public health issues that can be immediately understood by students in the early stages of their course, which simplifies the task of splitting IPE between the Bachelor and Master levels of university study. The following main topics have therefore been selected:

1. IPC within a particular type of primary care structure (individual practice, group practice, community healthcare services),
2. IPC in an acute care team or emergency situation,
3. "sequential" IPC meeting the outpatient after-care needs of a patient who has recently been discharged from hospital (rehabilitation, psychosocial support, etc.),
4. primary care IPC for polymorbid patients needing long-term after-care and referral to a medico-social institution in the short or medium term, taking particular account of the "bio-psycho-social" aspects,
5. IPC in a regional network for patients receiving palliative care,
6. preventive IPC within a primary care structure or a medico-social establishment.

## 3.3 Bibliography

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<sup>11</sup> <http://swiss-anp.ch/w/media/Akutelles/Positionspapier-ANP-DBFK-OeGKV-SBK-2013-ffinal.pdf>

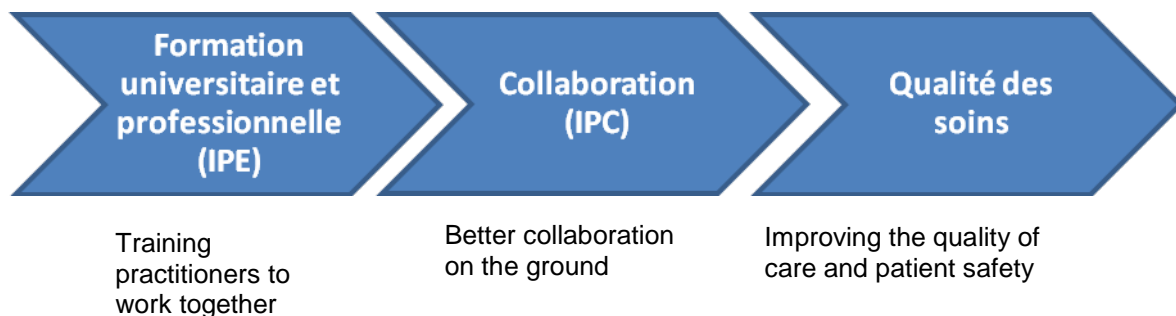
<sup>12</sup> [http://www.educationforhealth.net/publishedarticles/article\\_print\\_93.pdf](http://www.educationforhealth.net/publishedarticles/article_print_93.pdf) (available in English)

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## 4 The current interprofessional context in Switzerland

The Lancet Commission<sup>13</sup> has recently responded to a plea made by the WHO in 1973 for a more interprofessional approach to healthcare. The aim is for this to be achieved not only by promoting IPE and breaking down boundaries between professions, but also by setting up non-hierarchical teams based on the principle of IPC wherever this is possible and useful.

Figure 4: interaction between IPE, IPC and quality of care



To ensure that care is effectively managed in a way that meets the needs and expectations of current and future patients, all groups involved must have the **ability to work in a team**, a **good understanding of the roles played by the other professions**, and a **positive attitude to all the members of the multidisciplinary team** (Hammick et al., 2009). This is not something that can be learnt by improvisation, as students undergoing training at universities, including universities of applied sciences, need to develop specific generic skills<sup>14</sup> as well as acquiring technical knowledge (Frenk et al., 2010).

Information cannot be exchanged or joint medical decisions made unless these activities are learned in an interprofessional context and regularly practised. This is where the challenge of interprofessionality lies, and it is all the more difficult to resolve because, despite numerous publications, there has until recently been no evidence derived from objective scientific studies to demonstrate the benefits that all professionals working in an interprofessional context empirically observe, such as better quality of work and care, professional recognition, personal motivation, better contact with patients, simpler procedures, etc.

Nevertheless, if no plans are made for interprofessional education in collaborative practices, based on a **shared evidence-based vision of interprofessionality starting at the earliest stages of all healthcare professions**, attitudes and habits will not change (Olenick et al. 2013).

An analysis of needs and an evidence-based definition of the advantages and disadvantages of IPC and IPE would be useful for this purpose. This would involve clearly identifying, discussing and, via shared concepts, focusing on the changes that have occurred in the daily work of all healthcare professions.

This issue, which is covered in greater depth in chapters 5 and 6, has been indirectly addressed in accordance with the Platform's mandate by the development of six care models and the preceding discussions.

<sup>13</sup> The Lancet Commission is an independent international scientific committee set up by the respected specialist journal *The Lancet* and tasked with reviewing the state of medical training in the 21st century.

<sup>14</sup> Core Competencies for Interprofessional Collaborative Practice, Interprofessional Education Collaborative, May 2011. Web site: <http://www.aacn.nche.edu/education-resources/ipecreport.pdf>

## 4.1 Legislative context

In Switzerland, the Medical Professions Act (MedPA, art. 4, para. 2, let. c and f; art. 6, para. 1, let. d and f; art. 7, let. a and c; art. 8, let. d, e, f and g.), and the future Health Professions Act (HPA) emphasise the importance of an interprofessional approach to training.

The MedPA states that undergraduate and postgraduate training must equip future doctors with the skills needed to collaborate with members of other professions and to communicate effectively as needed in view of the objective to be achieved (Ayer et al., 2009).

The skills needed for this purpose (ability to organise and cooperate; multidisciplinary knowledge, ability to delegate tasks, ability to set up or activate an interprofessional network, etc.) should be acquired gradually as the individual's specific professional skills grow.

Indeed, some of the "general objectives" and "problems as starting points for training" contained in the Swiss Catalog of Learning Objectives for Undergraduate Medical Training (SCLO II, 2008)<sup>15</sup> take these requirements into account. Unfortunately their application is far from universal, and they have not been systematically assessed, a process that would require significant work to produce reliable outcomes (Bandiera et al., 2006).

These objectives should be taken into account at national level, particularly when defining new normative bases, in the interests of patient safety. The implementation of legislation that is currently in force, undergoing revision or in preparation should be coordinated at this level (MedPA, HPA [in preparation], HEdA<sup>16</sup>).

## 4.2 Professional context

Members of the various healthcare professions all make a vital contribution at their own level to the quality of healthcare provided in Switzerland. They all work for the benefit of patients and all cooperate as closely as possible. **In practice, many healthcare teams are already operating in an interprofessional way.** However, in outpatient care, this collaboration tends to be organised **empirically** via a skill-sharing method rather than as a true interprofessional approach (see Chapter 5).

Furthermore, studies have shown differences of opinion and attitudes among professions with regard to IPC, which is a major obstacle to in-depth IPC (Braithwaite et al., 2013).

This issue is not directly covered by the thematic group's mandate. As the primary purpose of IPE is to prepare learners for this form of collaboration, it is nevertheless important for IPC models currently in force to be known and used as practical examples, if only to give interprofessional groups involved in IPE the opportunity to discuss ways of improving IPC and moving the practice of primary care medicine along this path. However, it would not be reasonable to do this without taking account of the institutional and structural limitations on all the professions that would need to be involved (see chapter 8, Conclusions).

### 4.2.1 Specific problems and challenges in outpatient primary care medicine

Practitioners of human medicine do not exercise their profession in isolation. They are part of an ever-changing system (Cruess, 2008). Public health has undergone developments which have already led to significant changes in the everyday work and professional profiles of healthcare staff, and which will continue to do so (Bauer et al., 2007 et 2011). There have been many noteworthy societal changes which affect present and future collaboration between the various healthcare professions and which also affect medical training, a process which is expected to equip students and learners with the skills needed for this collaboration (Julio et al., 2010; Iglehart, 2010; Penfornis 2010; Schoen et al., 2009; Randin, 2010; Inkster et al., 2005; Pruitt et al. 2005).

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<sup>15</sup> <http://scllo.smifk.ch/>

<sup>16</sup> Federal Act on the Funding and Coordination of the Higher Education Sector (HEdA, 2011). Internet: <http://www.admin.ch/ch/d/ff/2011/7455.pdf>

- Shortage of healthcare staff, especially in outpatient primary care medicine, psychiatry, chronic and palliative care and home support for patients (Jaccard et al., 2009). There is growing political pressure to resolve these problems, as shown by the many interventions at national and cantonal level<sup>17</sup>. This shortage can be offset by new interprofessional collaboration models which ensure that every healthcare professional performs the services to which he or she is most suited and that the best use is made of his or her skills by a group able to meet the patient's needs in an institutional setting such as Spitex or on an ad-hoc basis, for example in a group practice or a regional network (Künzi et al., 2007).
- Multimorbidity: in a recent report, the OECD noted that this issue presented a significant challenge to healthcare staff, as they would have to work harder to ensure that patient care continued to meet the needs of the population (Plochg et al., 2011). The authors criticised excessive specialisation and fragmentation of tasks, arguing for more integrated and more generalist forms of collaboration. This shows the need for a wide-ranging approach to the issue of a shared basis of knowledge to be made available to everyone training to become doctors, pharmacists or nurses (shared learning of basic knowledge, such as anatomy, physiology of locomotion, ethics, communication, etc., as well as aptitudes and terminology).
- Higher care quality assurance standards (audits, certification, accreditation of care facilities, Critical Incident Reporting Systems (CIRS) statistics) which affect working procedures. Pathologies are becoming more complex, and the techniques and knowledge they demand are also progressing all the time, which means that all healthcare professions have to acquire new skills. Optimum patient management depends on all the professions having a clear understanding of their respective roles. This is demonstrated by a study carried out in the United States, which found that up to 98,000 people a year die as a result of avoidable medical errors, some of which are thought to be due to poor communication between different professional groups (Kohn, 2000). An Australian study reached similar conclusions for 40 to 60% of patients with chronic diseases (Chan et al., 2010).
- Internationalisation of healthcare systems: the growing number of foreign doctors and care staff, and of patients with different cultural backgrounds, means that professionals must be able to adjust their behaviour and their modes of collaboration to these new needs (transcultural skills). The issue of patient health literacy is becoming a more acute problem in this context, as insufficient literacy undermines prevention efforts.
- Growing influence of financial considerations in medicine, particularly since the introduction of SwissDRGs [healthcare billing rules] on 1 January 2012. The reorganisation of hospital planning which is currently taking place in almost every Canton, and which is one of the reasons for the closure of hospital structures which were used by primary care doctors (Hoppeler et al., 2012), is likely to be accompanied by a reorganisation of the care and treatment chain and a redefinition of the interfaces between the outpatient and inpatient settings. Regional interprofessional collaboration could help ensure that these changes take place smoothly (Bourgueil et al., 2007)<sup>18</sup>.
- Changes in medical practice caused by sociopolitical trends, such as shifts in family relationships (OECD 2012), sociomedical isolation, weakening of health culture, a growing range of alternative health services, increasing interest in wellness and cosmetic interventions to maintain health or improve an individual's appearance.

<sup>17</sup> Motion 08.3608 submitted by Jacqueline Fehr calls for a "Strategy to combat the shortage of doctors and encourage primary care medicine". Several parliamentary requests, along with the "Yes to GPs" initiative, refer to the "shortage of doctors" and the "numerus clausus" [system used to restrict entry to oversubscribed courses]: examples include the Fetz motion 08.4048; the Graf-Litscher interpellation 09.4031, the Bättig postulate 09.4070, the Lustenberger postulate 09.4299, the motion submitted by the National Council's Science, Education and Culture Committee 10.3886 and the Häberli motion 11.3526. Furthermore, by approving the partial revision of the HInsA Managed Care Health Insurance Act, Parliament has also opened the way for a paradigm shift in medical care.

<sup>18</sup> <http://www.irdes.fr/Publications/Qes/Qes127.pdf>



- Definition of the global "Health 2020" strategy by the Federal Department of Home Affairs<sup>19</sup>, entailing a gradual extension from purely curative activity into preventive, rehabilitative and palliative care. In the light of the new information obtained by "The Future of Swiss Medicine" project<sup>20</sup> and the recent document on sustainable medicine<sup>21</sup> produced by the Swiss Academy of Medical Sciences (SAMS), and in order to implement the "Global strategy 2020", it is essential that guaranteeing quality and patient safety, as well as managing quality and clinical risk are addressed at undergraduate level as well as during postgraduate and ongoing training for medical professions that require university education.
- A wider range of entry routes into the healthcare system. There are currently two opposing views. The first, traditional, opinion seeks to boost the role of the primary care doctor or GP as gatekeeper. The second view, which is more progressive and takes account of socio-economic realities, seeks to widen entry route options. This would be done by replacing the gatekeeper role, reserved to the medical profession, by entry points such as individual or group practices, pharmacies, community care networks, etc., and by permitting members of non-medical professions to see patients in a primary care setting, for example in the context of advanced practices / advanced roles as described by Delamaire et al., 2010., to provide services that are not currently covered by compulsory health insurance. This is particularly important for individuals in a vulnerable socio-economic position, who already seek help from people who are not doctors when they have health problems (because they do not have a GP, in an emergency, etc.). This is why it is so important to develop a **concept that supports patients throughout their journey through the healthcare system**, taking account of the skills and professional profiles of each medical or healthcare profession. The proposals made by the dispensing pharmacists' professional association for greater involvement in the provision of primary care services, especially in the field of prevention, were incorporated into this concept.
- Involvement of close friends and family in supporting patients at home, which requires a new interprofessional approach to care with the assistance of a local or regional institutional or ad-hoc interprofessional network. The requirement for patients to take greater responsibility and be involved in care and treatment decisions also means that communication must be refocused and that doctors, other healthcare practitioners and patients must work together. This goes hand in hand with the idea of lifelong medico-social support, as discussed in the SAMS position paper on sustainable medicine published in 2012, which follows the same path.
- Development of electronic clinical decision-making support tools and the potential development of e-health for use in integrated (interprofessional and interdisciplinary) management models: in the medium term, this will inevitably lead to changes in working methods, while encouraging an interprofessional approach to patients and their records.

#### 4.2.2 Professional roles and profiles

The debate on new care models and new forms of collaboration offers an opportunity to re-examine the respective roles of doctors and other healthcare professionals, and also the way in which the healthcare activities of each profession are distributed (Larson 2012; Okie 2012), as well as considering how any skills transfers that appear necessary could be performed (Buff 2006). The significant changes that have taken place in healthcare training and policy over recent years have led to a redefinition of professional roles and profiles that has unsettled the medical world but that has also given rise to innovative processes and made the issue of interprofessionality more prominent (Ponzer et al., 2004).

<sup>19</sup> <http://www.bag.admin.ch/gesundheit2020/index.html?lang=en>

<sup>20</sup> <http://www.samw.ch/en/Projects/The-Future-of-Swiss-Medicine.html>

<sup>21</sup> ASSM (2012), Sustainable Medicine – Position paper of the Swiss Academy of Medical Sciences. Internet: [http://www.samw.ch/dms/en/Publications/Statements/e\\_PosPaper\\_Sustainable\\_Medicine.pdf](http://www.samw.ch/dms/en/Publications/Statements/e_PosPaper_Sustainable_Medicine.pdf)

However, we must not ignore certain aspects of professional policy (emphasis on professional skills and redefinition of rights and duties (McDonald K., 1995), or the associated civil and criminal responsibility). In the case of doctors, this is accompanied by a redefinition of the doctor-patient relationship that is an inevitable result of a skills transfer connected with more extensive interprofessionalism.

It is not however desirable that the IPE debate should be dominated by professional groups seeking to improve their position on the health policy chessboard (Samuelson et al., 2012), or by political bodies focused too strongly on the economic aspects of medical practice (Travaglia et al., 2011). The members of the thematic group have tried to keep their distance from this type of debate.

### 4.3 Educational context

The representatives of the medical and nursing professions taking part in the thematic group and the support groups agree that in future initial and postgraduate training must place more emphasis on interprofessionalism. Individuals in charge of training at professional, university, non-university and post-university level must therefore discuss and reach agreement on a shared comprehension of role models and expectations of other healthcare professions, and then decide the best way and time of putting across their conclusions, as well as who is best placed to do this (Sottas et al. 2012).

The creation of the thematic group offered an opportunity to start this debate. The Platform has decided to focus on issues related to training rather than to health policy and care provision, which have been dealt with in particular by the working group on "New care models in primary care medicine" set up under the aegis of the CDS and relate mainly to postgraduate training. The thematic group did however take account of the debate launched by the CDS and material published by experts (Giger et al., 2008).

Most universities of applied sciences and vocational colleges have therefore launched interprofessional education programmes for students training in the professions that they teach (mainly nurses, physiotherapists, midwives, occupational therapists and dieticians). Training concepts and modules have been developed, sometimes on the basis of regional collaboration (see Annexe 9). Unfortunately it is proving difficult to involve medical faculties and to enable medical students to take part in this form of teaching, except on a voluntary, ad-hoc basis. The interprofessional education concepts devised by the HES-SO [University of Applied Sciences and Arts Western Switzerland], Lausanne University's faculty of biology and medicine and CHUV [Lausanne University Hospital] (Michaud et al., 2012), and the project being set up between the university of applied sciences, CMU [University Medical Centre] and Geneva University's faculty of medicine are rare exceptions, both in terms of their scope and the interprofessional work which preceded the introduction of these programmes<sup>22</sup>.

As far as the medical professions are concerned, the MedPA requires university training to provide the foundations needed for students to work in their chosen profession on an employee basis. It can therefore be concluded that the primary aim of IPE at undergraduate level is to introduce students to the realities of collaborative practice, while learning the specific form of interprofessional practice relevant to each specialism is a matter for postgraduate training.

**The decision on whether or not to offer interprofessional education depends on the resources and will of training establishments in the context of the learning objectives set out by the Joint Commission of Swiss Medical Schools (SCLO II).** But this is only possible if the individuals responsible for this type of training are prepared to invest a considerable amount of time and energy and are determined to make their project succeed, acting as champions of interprofessional education. Institutional support for these individuals is therefore essential.

Some IP activities have already been carried out in Switzerland, both in inpatient and outpatient settings (Allin et al., 2010; Gaspoz et al., 2011). They are summarised in table 1, where we have concentrated on undergraduate training as required by the working group's mandate. The details of

<sup>22</sup> <http://www.hesav.ch/docs/400-coups/10h45-11h15-gepi-hesav-8-11-2012-final.pdf?sfvrsn=0>



undergraduate and postgraduate IPE activities in the main university training facilities and for other healthcare professions are given in Annexe 9.

Table 1: synopsis of IPE activities undertaken by Faculties of Medicine and nearby Universities of Applied Sciences in Switzerland (correct as of 10 August 2013)

	Geneva		Lausanne		Berne		Basel		Zurich	
	Uni	UAS	Uni	UAS	Uni	UAS	Med uni	INS	Uni	ZUAS
Introduction to IP	X	X	X	X	*	X	*	X		X
Interprofessional contacts (occasional IPE)			X	X	*	X	*	X	*	X
Established IPE						X		X		X
Established collaborative practice (IPC sessions)	(x)	(x)								X
Joint teaching modules	(x)	(x)							*	

(\*) = elective (x) = end of 2013 (in particular in the CIS = healthcare interprofessional simulation centre, opened on 20 November 2013)

(Med uni) = doctor training (INS) = Faculty of Medicine's Institute for Nursing Sciences

**However, there is no real national cooperation or coordination of training provision among the universities, or between universities and universities of applied sciences / advanced vocational colleges** that are responsible for training in healthcare professions. This rather unstructured approach could lead to:

- Lack of robust studies capable of delivering validated (evidence-based) data,
- Multiplication of regional experience with no larger-scale coordination or cooperation,
- Analysis and investigation of IPC / IPE mechanisms at a lower level, with no link to what happens in practice or to current teaching in medicine or healthcare professions (reflecting issues of professional culture, particularly with regard to issues of medical responsibilities, roles and decisions)
- No shared view of the patient among separate professions (nursing, medical, medico-social, etc.)

**An in-depth debate at national level could support efforts towards specific teaching of interprofessionalism in undergraduate medical training and help to respond better to statutory requirements and the "Health 2020" strategy defined by the Federal Council**, as was the case with the implementation of palliative care in Switzerland<sup>23</sup>. But this task goes beyond the remit of the thematic group. Consequently, this report only contains recommendations and suggestions for action to be considered by the partner organisations and the Platform.

More attention should therefore be paid in future to the following aspects:

- the IPE skills acquired by the end of their training by students and learners training in various professions should be defined jointly and in a coordinated manner at university and non-university level, as should the learning resources available in each case,
- the IPC training goals should be harmonised when undergraduate and postgraduate courses for medical and other healthcare professions are being devised,
- the professional profiles offered to future medical staff should be clear and transparent. IPE should give learners a knowledge of the professional viewpoints of other professions, so that everyone knows the conditions in which the work is organised and what skills the IPC partners have.
- Better use should be made of the hands-on training elements (especially the clinical experience year for medical students and the work experience sessions in healthcare establishments for

<sup>23</sup> FOPH (2012), National training concept, "palliative care and training" - strategy document (recommendations)

individuals training in healthcare professions not taught at university), and they should be pedagogically structured to optimise their use in interprofessional training units.

- The potential of new teaching and learning methods (tools used to simulate interventions and technical procedures, e-learning, skills labs, etc.) should be exploited to encourage an interprofessional approach to the patient and his or her health problems, without the risks and problems associated with teaching these skills on real patients.
- IPE should also allow students of all professions to acquire a shared view of patients and their needs in the context of the national healthcare system, and where appropriate (students who drop out, fail their exams or want to retrain in a different field) to make use of bridges between medical training and training for other healthcare professions so that the potential knowledge already acquired is not lost as a result of a change in direction.

In German-speaking countries, the *Gesellschaft für medizinische Ausbildung* (GMA) [Society for Medical Training] has set up an international working group on IPE / IPC and tasked it with, among other things, obtaining the scientific evidence needed to set up IPE and IPC. Its written report is due for publication by the end of 2013. The interim findings presented at the GMA's 2012 annual conference<sup>24</sup> show that all the key aspects of IPE have been taken into account. These include in particular:

- scientific findings on IP,
- IP approaches / concepts / projects in practice = outlook for healthcare provision,
- IP approaches / concepts / projects in education = outlook for training,
- Theoretical principles / terms relating to healthcare professions,
- IP skills development / metacognition / acting professionally / professional identity / skills (see also Science Council, 2012)

#### 4.4 Professional profiles

Although this report concentrates on IPE for doctors, it is important for all training to take account of the professional profiles and practices of other professions involved in IPC. The thematic group started from the principle that the process of putting any module into practice must either include information or allow for time to work in an IPE group to define the skills of the various participants.

This report therefore contains only a brief presentation of the professional profiles of the medical professions and the various other healthcare professions. See Annexe 10 for the specific catalogue of skills for each healthcare profession.

It should however be noted that in medicine, professional profiles are defined by the associations of the various disciplines and are therefore related to a specialism (including that leading to qualification as a general practitioner).

As a result of the introduction of the new Act on the Funding and Coordination of the Higher Education Sector (HEdA), the Swiss government has lost the power to regulate the content and oversee professional training in healthcare professions at universities of applied sciences. The new Healthcare Professions Act (HPA), drafted jointly by FDEAER / SERI and FDHA / FOPH, should define minimum training and practice standards, similar to those set out by MedPA for the medical professions.

There is a reasonably broad consensus on these standards at Bachelor level. This is taken into account in the remainder of this report. The debate is still open with regard to skills at Master level in the case of healthcare professions where this qualification exists. The working group therefore plans to use this opportunity as an exercise within the IPE groups, in the form of a debate on current practice and possible developments, particularly in the outpatient field.

##### 4.4.1 Medicine

The objectives and **generic skills** set out by the MedPA are as follows for all medical professions:

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<sup>24</sup> Proceedings of the GMA 2012 annual conference, Aachen

- *to give patients comprehensive high-quality individual care (article 4, paragraph 2, letter a of the MedPA),*
- *to deal with problems by means of scientifically accepted methods, taking account of ethical and financial aspects, and then to take the necessary decisions (article 4, paragraph 2, letter b of the MedPA),*
- *to communicate in an appropriate manner and in the light of the desired objective with patients and other individuals concerned (article 4, paragraph 2, letter c of the MedPA),*
- *to accept their healthcare and social responsibilities in accordance with the particular nature of their profession (article 4, paragraph 2, letter d of the MedPA),*
- *to perform the organisational and management tasks for which they are responsible in the context of their work (article 4, paragraph 2, letter e of the MedPA),*
- *to take account of the skills of individuals working in other recognised healthcare professions (article 4, paragraph 2, letter f of the MedPA),*
- *to have the scientific knowledge needed to take preventive, diagnostic, therapeutic, palliative and rehabilitation measures (article 6, paragraph 1, letter a of the MedPA),*
- *to be able to recognise and assess factors that maintain health and take them into account in their work (article 6, paragraph 1, letter c of the MedPA),*
- *to be able to advise, monitor and care for their patients in collaboration with members of other professions (article 6, paragraph 1, letter d of the MedPA),*
- *to be able to analyse medical data and test results, assess their conclusions critically and apply them in their work (article 6, paragraph 1, letter e of the MedPA),*
- *to be able to learn from interdisciplinary collaboration with members of other professions (article 6, paragraph 1, letter f of the MedPA),*
- *to know the legal principles governing the Swiss welfare and public health system and be able to apply them in their work (article 6, paragraph 1, letter g of the MedPA),*
- *to be able to decide whether the services they provide are effective, appropriate and financially viable, and to be able to act accordingly (article 6, paragraph 1, letter h of the MedPA),*
- *to understand the relationships between the economy on the one hand, and public health and the healthcare system on the other hand (article 6, paragraph 1, letter i of the MedPA),*
- *to recognise and respect the limits of medical activity as well as their own strengths and weaknesses (article 7, letter a of the MedPA),*
- *to be aware of the ethical dimension of their work and accept their responsibilities towards the individual, society and the environment (article 7, letter b of the MedPA),*
- *to respect patients' right to self-determination in the context of their treatment (article 7, letter c of the MedPA),*

Practitioners of human medicine must also, in the light of the objectives and **specific skills** set out by the MedPA:

- *be able to summarise and communicate their observations and interpretations (article 8, letter e of the MedPA),*
- *have an overall understanding of health problems and be able to identify in particular the physical, mental, social, legal, economic, cultural and environmental factors and consequences, and take them into account when resolving health problems at individual and collective level (article 8, letter f of the MedPA),*
- *to promote human health by giving advice and taking the prevention and promotion measures necessary in their field of work (article 8, letter h of the MedPA),*

As regards interprofessional education, it is therefore important for students to learn and define their future professional role as a doctor both individually and within an interprofessional group. They must also be able to comprehend the extent and limits of this role in the context of an interprofessional approach to a patient and his or her health problems, including preventive, rehabilitative and palliative aspects.

The working group drew on the CanMeds skills catalogue and the corresponding primary training

objectives set out in the SCLO as a basis for defining interprofessional training models and modules. The matrix of skills taken on board and their distribution in each model and module are shown in the general portfolio (see Chapter 5 and Annexe 3).

For pedagogical reasons (the level of skills that can be acquired by the end of undergraduate training), it is recommended that specific curative aspects of models and modules only be taken into account in postgraduate training. This is why this report contains few references to learners' level of expertise (see Annexes 4 to 9: sections headed "Training level: doctors" and "Training level: Other professions"). If the issue of decision-making responsibilities in collaborative practice were to be addressed in an undergraduate interprofessional course for medical students, a good basis would be the concept of entrusted professional activities (Carraccio et al., 2010; Mulder et al., 2010; ten Cate et al. 2007), which went beyond the scope of our mandate.

#### **4.4.2 Pharmacy**

The objectives and generic skills of undergraduate interprofessional training for pharmacists are the same as those relevant to doctors. The specific skills set out in the MedPA requires them

- *to be able to give pharmaceutical advice to members of other healthcare professions and work with them to advise patients on health matters (article 9, letter e of the MedPA),*
- *to know the major non-drug treatments for humans and animals (article 9, letter d of the MedPA),*
- *to be able to contribute to health promotion and maintenance and to disease prevention.*

Pharmacists, as members of a medical profession, but also as managers of a pharmacy, a facility which patients are increasingly using as an entry route into the healthcare system, are therefore important interprofessional partners for the other medical and healthcare professions (Guntern, 2012; Bugnon et al., 2012).

#### **4.4.3 Non-graduate healthcare professions**

NB: the term "non-graduate" is strictly accurate (Burla et al. 2012). However, it does not adequately reflect the fact that Bachelor and Master courses in healthcare professions can be taken at universities and universities of applied sciences. For the sake of completeness it should be pointed out that courses leading to the qualification of Master of Nursing Sciences are offered at the Universities of Basel (since 2000) and Lausanne (since 2008).

As far as healthcare professions are concerned, this report has been drawn up on the basis of the skills and professional profiles relevant to Bachelor-level training. It does not pre-empt the details of the HPA which is currently being prepared by SERI and the FOPH, and which should reflect the interprofessional imperatives which have been made necessary by the changes in the Swiss healthcare system and current and future care models.

Skills which are related more closely to the Master level (such as advanced practice nurse training<sup>25</sup>, on which there is not yet a consensus between all training establishments) are taken into consideration only in the context of a prospective study into new care models offered to individuals undergoing IPE (Gut 2007). The main element here is a joint discussion within working groups rather than a search for an interprofessional solution for a specific patient or health situation (Jovic et al., 2009).

The skills and professional roles profiles referred to in Annexe 10 are based on the document prepared for the Rectors' Conference of Swiss Universities of Applied Sciences (Ledergerber et al., 2009; Sottas, 2011), which are recognised by SERI as the basis for training courses. The roles set out in the CanMeds model were used to develop these final skills. This means that a common basis,

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<sup>25</sup> Regulation of the profession of advanced practice nurse (APN): Summary and reasons for specific regulation. Schweizer Berufsverband der Pflegefachfrauen und Pflegefachmänner (SBK/ASI), swiss ANP, Schweizer Verein für Pflegewissenschaft (VfP/APS), CHUV Institut universitaire de formation et recherche en soins (IUFRS). Berne, 10 October 2012.

reflecting university medical training, is available. Additional data taken from documents drawn up by professional associations or in other countries have also been taken into account (Künzi et al., 2007) in order to reflect the views represented in the thematic group and broaden the spectrum of cases taken into account in the various training modules.

Information on the professional profile of medical assistants has also been added to complete the list of professions currently most closely involved in interprofessional collaboration with doctors. Information on other professions that can be involved in IPC is available on the websites of the professional organisations concerned and the SERI website<sup>26</sup>, particularly with regard to the core curriculums.

#### 4.4.4 Generic skills for non-graduate healthcare professions

As healthcare professionals' skills and level of expertise depend on their level of training and how far they have progressed (differences between Bachelor / Master levels), we suggest a list of generic skills which students should acquire during their vocational training (Ledergerber et al., 2009):

- *Knowledge appropriate to the challenges of health policy*
  - they are familiar with the legal foundations and priorities of the health policy governing the Swiss health and welfare system as well as the principles by which it is governed and its limits
  - they are able to work in compliance with these legal foundations while assessing the efficacy, affordability, quality and suitability of the services provided or introduced
  
- *Professional expertise and methodological skills*
  - they have the scientific knowledge necessary to take preventive, diagnostic, therapeutic, palliative and rehabilitation measures
  - they have been given an introduction into scientific research methods in the healthcare field, and in evidence-based practice
  - they are aware of the factors which maintain and promote individual and public health and are able to initiate measures which help improve quality of life
  - they have clinical reasoning skills and are able to devise measures which can be systematically introduced into the management and support of the individual
  - they are able to operate in the healthcare system in such a way as to ensure the quality of management in accordance with the particular nature of their profession and its best practices
  
- *Professional and responsible behaviour*
  - they take responsibility for their actions and recognise and respect their own limits
  - they show commitment towards individuals, society and the environment by complying with ethical principles, and they respect the individual's right of self-determination
  - they are able to innovate and develop their professional activity by acquiring scientific knowledge, and are able to conduct a constant review of their work, thus ensuring that their knowledge and skills are always up to date throughout their lives
  - they are able to take part in research and to incorporate relevant data into their work
  - they operate independently on the basis of a professional evaluation
  
- *Communication, interaction and documentation skills*
  - they actively seek interprofessional collaboration and cooperation with other groups working in the healthcare system
  - they are able to conduct an appropriate professional relationship with patients and their relatives and friends, and to give them appropriate advice

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<sup>26</sup> <http://www.sbf.admin.ch/bvz/index.html?lang=fr> and <http://www.sbf.admin.ch/berufsbildung/01472/01487/index.html?lang=en>



- they are able to present and document their actions in a relevant way that is understood by others. They are familiar with eHealth instruments used to manage patients and care

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## 5 Interprofessional collaborative practice

### 5.1 Bibliographical analysis

The fundamental principle at present, as summed up by the Canadian working group on interprofessionality (Canadian Interprofessional Health Collaborative, CIHC<sup>27</sup>), is that:

**No one profession, working in isolation, has the expertise to respond adequately and effectively to the complexity of many service users' needs.**

In other words, in an effective healthcare system that focuses on quality of care, each professional should primarily carry out the tasks which he or she is best suited to perform in the context of interdisciplinary and interprofessional patient management. From this perspective on health, many tasks currently performed only by doctors could in future be carried out by other professionals (Buff 2006).

Better coordination and distribution of tasks across the care chain could improve the efficacy and safety of care by limiting overmedicalisation, the number of visits to doctors or non-essential hospital admissions or by reducing duplication and the risk of negative interactions between different treatments.

However, this must not lead us to lose sight of the principle of emergency medicine which states that **triage must always be performed by those professionals with the greatest clinical experience.** Nevertheless, delegation of powers in an interprofessional context can only be beneficial to the health system as a whole.

At a scientific level, several research studies have been conducted and found that IPC is usually advantageous (Kilminster et al. 2004, Vanier 2011, Martinez et al. 2012, Zwarenstein et al. 2000, Hammick et al. 2007). We will refer to just two of these in more detail:

- Reeves et al (2012) conducted a systematic review into the efficacy of IPE. They found that five out of six courses meeting set criteria had a positive impact.
- Morey et al (2002) observed fewer errors and better performance in emergency services following specific training in teamwork based on courses given to pilots. The following elements were highlighted:

Parameter assessed	Pre- / post-intervention comparison
Quality of teamwork	Better in the intervention group
Observed error rate	Lower in the intervention group
Self-assessment of teamwork	Better in the intervention group
Self-assessment of support from colleagues and supervisors	More support in the intervention group

Overall, the following outcomes can be expected according to the WHO<sup>28</sup> and various other authors:

- approach to medical problems focused on the patient and his or her close friends and family, allowing care to be better targeted,
- better access to primary medicine (Vannier et al., 2011),
- more appropriate access to specialists,
- better quality of care and health for people with chronic conditions,
- improvement in health prevention and promotion, a task which conventional GP practices are at present not really able to perform in the same way,
- better medical intervention outcomes for multiple healthcare problems (Traynor et al., 2003),

<sup>27</sup> [www.cihc.ca](http://www.cihc.ca)

<sup>28</sup> WHO (2010), Framework for Action on IPE and IPC.



- better quality and safety of interventions, especially with regard to complication rates and the risk of errors or critical incidents,
- improvement in patient satisfaction with medical interventions, and in their cooperation and collaboration with those involved in their care.

Individuals involved, especially healthcare professionals, experience:

- greater satisfaction and professional motivation,
- better understanding among professionals involved in care, and consequently an increase in mutual trust,
- improved and easier joint decision-making.

## 5.2 Factors in successful interprofessional practice

IPC takes place when the nursing or medical team agrees on a concerted strategy and if the intervention plan is adapted to reflect information provided by healthcare and social service professionals working with the patient (Spitex staff [providers of care in the home to sick and elderly people who need support], social workers, self-employed healthcare professionals).

This method of working requires coordinated and concerted efforts on the part of several professionals working in the same or different places. IPC structures have already been established in several countries (France, Sweden, Finland, the UK, the Netherlands, Germany and Norway) and can serve as examples for our healthcare system (Schoen et al., 2009, Bourgueil et al, 2007).

In addition to IPE, which is a prerequisite for all IPC, it is important to bring together the tools that are vital to successful collaboration between professional healthcare partners (Cooper B. et al 2003; Schroeder 2009). Tools of this kind have been developed by various bodies, including the College of Family Physicians of Canada<sup>29</sup> (Nolte et al., 2005) and the *Haute Autorité de Santé* [National Authority for Health] in France. A wealth of useful information can be found on their respective websites<sup>30, 31</sup>. The main elements are summarised below, and should be included in the information given to people training in any profession who are taking IPE courses. They are reflected in the concept devised by the thematic group, as set out in the models and modules (see Annexes 4 to 9).

### 5.2.1 Joint vision of the patient and his or her journey

This is undoubtedly the most important element, and is the cornerstone of all IPC collaboration in outpatient primary care medicine. **Altering this view of the patient's health needs requires considerable upstream interprofessional work, and generally constitutes a challenge to doctors** for which their training does not usually prepare them adequately (Jablow 2013).

Despite the apparent importance each participant's personal effort, and the time and planning required, this stage allows the creation of a basis of understanding and mutual trust within the IP team. It is therefore in fact an investment, the "return" on which is continually confirmed throughout the lifetime of the collaboration or the interprofessional network.

### 5.2.2 Definition and understanding of professional roles

Every professional organisation has its own view of the best way to organise collaboration with other healthcare professionals and patient management. This is why all the professional groups involved (doctors and qualified nurses, but also physiotherapists, pharmacists, medical assistants, psychologists, dieticians, midwives, and where appropriate medical technicians, administrative staff and members of other professions) must together engage in a **critical examination of their own skills, their expectations and their fears, as well as the claims of other professional groups.**

<sup>29</sup> [www.eicp-acis.ca](http://www.eicp-acis.ca)

<sup>30</sup> <http://www.eicp.ca/en/toolkit/default.asp> (toolkit or <http://www.eicp.ca/en/toolkit/default.asp>)

<sup>31</sup> [http://www.has-sante.fr/portail/jcms/c\\_978700/protocole-de-cooperation-entre-professionnels-de-sante-mode-d-emploi](http://www.has-sante.fr/portail/jcms/c_978700/protocole-de-cooperation-entre-professionnels-de-sante-mode-d-emploi)

This exercise can only succeed if the various partners are willing to work together in a spirit of mutual respect. The changes which are needed and the problems which arise in this context must be critically examined by an open discussion of issues of competition and hierarchy. The views of doctors must not overshadow those of nursing or administrative staff.

### 5.2.3 Organisation / structure of the interprofessional team

This process also represents a significant investment of time and staff for most of those involved. It is also one of the weak links in any interprofessional collaboration and a not insignificant source of conflict and personal and professional anxiety.

We restrict ourselves here to mentioning some of the fundamental principles that need to be taken into account when setting up an interprofessional team (Vannier et al., 2011) and, where possible, to specifying guidelines to be used by the various establishments and institutions:

- Assess the specific needs of patients and select the appropriate professionals accordingly,
- Set up the IP team by gradually including the various professionals,
- Ensure that the team members get to know each other on a personal and professional basis,
- Encourage the development of a team spirit based on a shared view of collaboration,
- Set up communication and information-sharing strategies,
- Clearly define the expectations and roles of each participant,
- Review the basic elements of collaboration regularly,
- Define a transparent staff, administrative and salary policy,
- Develop intervention protocols,
- Place the team within a local or regional care structure; verify and coordinate with existing medico-social provision,
- Obtain suitable premises that facilitate effective interaction between the various professionals, nurses and other groups,
- Plan regular (administrative and clinical) team meetings,
- Use a single patient record (computerised if possible),
- Plan interprofessional training activities,
- Create opportunities for the team to socialise outside the workplace,

### 5.2.4 Powers, responsibilities

This aspect of the structure and organisation of the IP team or network must also be clarified in detail, both among separate interprofessional teams and within each team. It is essential to take account of statutory regulations and the principles governing billing and reimbursement of medical or nursing services in this context.

Particular attention should also be given to the interfaces between the respective activities of the members of the IPC group and to the coordination of tasks.

For doctors, who have often been trained in a mindset of **professional autonomy**, the shift toward a clinical **governance** perspective (responsibility for the medical decision chain within an interprofessional team) involves personal and professional adjustments (Hewitt et al. 2007) and is a major change that is not always easy to accept, and that some patients are also unwilling to accept.

When defining models and modules, the thematic group has tried to draw a distinction between

- Medical responsibility<sup>32</sup>
- Organisational responsibility
- Administrative responsibility
- Legal, civil and criminal responsibility
- Individual personal and professional responsibility on the part of team members
- Decision-making powers and institutional, structural and ad-hoc allegiances within the team and between the team and the healthcare system of which it is part.

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<sup>32</sup> [www.eicp-acis.ca](http://www.eicp-acis.ca)

Wherever possible, the impact of administrative decisions and issues of patient management responsibility deserve to be taken into account when preparing individuals undergoing IPE while studying for any profession. This should include vital aspects of risk management, error culture, team reorganisation, challenging decisions, etc.

**We cannot ignore the fact that in Switzerland, the onus of responsibility for medical treatment still rests largely on the shoulders of doctors**, although other medical and healthcare professions are gaining more powers in relation to care and treatment. It is understandable that doctors see this as a form of discrimination if broadening the powers and roles of other professions does not go hand in hand with a redefinition or redistribution of responsibilities and of civil liability. This should be discussed within the group, ensuring that the statutory principles are respected, when roles, tasks and powers are assigned and when the powers of one of the professions are delegated to the IPC team.

### 5.2.5 Starting point for IPC

There is no set rule as to the starting point for interprofessional collaboration. Although it should ideally be possible for it to begin as soon as the patient enters the healthcare system (which requires considerable decision-making autonomy on the part of all the professional partners involved), everything depends on the nature and role of the IPC team.

Fundamentally, three situations can arise, as illustrated by the models and modules developed by the thematic group:

- IPC initiated at the request of the patient or his or her close friends and family,
- IPC initiated by a member of the established IPC team or network, or on an ad-hoc basis,
- IPC initiated in response to the needs / at the request of the individuals in charge of the local or regional healthcare system (institutional network)

**The working group takes the view that the purpose of a national IPE / IPC concept should be that, whichever professional is called on to initiate interprofessional or interdisciplinary collaboration and regardless of the nature of or reason for such collaboration, IPC structures and practices should be organised so as to allow collaboration to be set up without delay and in a way that meets the patient's needs.**

### 5.2.6 Tracking the patient on his or her journey through the healthcare system

Here again there is no set rule, and the principles by which the team operates should make it possible to resolve this issue and make any changes necessary to meet patient needs.

Fundamentally, three situations can arise, as illustrated by the models and modules developed by the thematic group:

- Itinerary set by the patient as decision-maker
- Itinerary influenced by close friends and family as co-decision makers
- Itinerary suggested by the interprofessional team as decision-maker

It is important for the IPC team or network to have resources for regular feedback and for analysing specific positive and negative examples, so that the structure and organisation of the work as well as the interprofessional communication principles and channels can be adapted from time to time.

## 5.3 Barriers to and limits on successful IP practice

The best intentions and best IPE training are not sufficient to foresee and detect them in time the problems and difficulties associated with any interprofessional collaboration or to overcome them. It is clearly important not only to resolve potential conflicts as soon as they appear using an established strategy, but also to identify and understand the causes of conflicts or reluctance to engage in IPC.

This topic should be regularly discussed within the team or network. Several publications contain guidance and discuss the main indicators in this sensitive area (Reese et al. 2001), and the main

aspects are summarised below:

- Uniprofessionality (task, professional profiles and codes of ethics defined for a single profession to the exclusion of others)
- Inadequate knowledge of the skills of the other professionals
- Ad-hoc management of the roles and professional activities of other professions on the basis of on-the-job training
- Feeling of inferiority due to excessive respect for knowledge to the detriment of professional capacities, abilities or attitudes
- Structural and socio-economic differences between professions
- Different theoretical and practical views of the patient and of care provision
- Negative standards within an interprofessional group
- Lack of identification with the interprofessional group
- Lack of desire to share activities, burdens and responsibilities fairly
- Refusal to accept the choices and decisions of the interprofessional group
- Differences and divergence of roles and authority within the group
- Poor patient response or poor understanding of patients' attitudes to the team
- Bureaucracy within the group
- Complex, inappropriate methods and channels of communication.

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## 6 Interprofessional training / education

### 6.1 Bibliographical analysis

Numerous studies have been conducted into the delivery and development of IPE programmes (Barr 2003; Cullen 2003; Bridges 2011; Parsell 1997; Morikawa 2007; Reese et al. 2001; Pollard et al. 2004). In accordance with the Platform's mandate, the thematic group starts from the principle that the individual training establishments are responsible for the pedagogical choices made, irrespective of the profession under consideration. This is why the six care models have each been illustrated by three or four modules or patient journeys through the healthcare system, reflecting specific clinical or health situations that are as realistic as possible.

The current reality of the outpatient primary healthcare system has been taken into consideration, along with the ways in which it is most likely to change, as described by the thematic group experts.

In this chapter we will therefore simply discuss the general principles put forward by the Centre for the Advancement of Interprofessional Education CAIPE<sup>33</sup> and the European Interprofessional Practice and Education Network (EIPEN)<sup>34</sup>, which are leading authorities in education. Several recent bibliographical references can be found, particularly in the work done by Vyt (2009), Gallant et al. (2011), Reeves et al. (2012), Virani (2012) and Abu-Rish et al. (2012), Barr and Low (2013)..

It should however be noted that there are two aspects to IPE: **training for interprofessionalism** (or interprofessional collaboration) and **training in interprofessionalism**, which entails delivering the same content to students following different courses (knowledge-sharing or real joint and interactive IPE). At present there is not enough factual data to justify generalisation of training in interprofessionalism for medical students at university. The thematic group has therefore decided to focus its work on training for interprofessionalism.

### 6.2 Gradual learning of interprofessionalism

Medical training should familiarise future practitioners of human medicine with IPC while they are at university, for example through **interprofessional learning modules**. The same applies to any profession whose practitioners will be called upon to work in an interprofessional setting.

In order for teamwork and a joint approach to care and patient management to succeed, it is important not only to encourage the development of **generic skills** (ability to organise and cooperate; multidisciplinary knowledge; ability to delegate) as provided for under the teaching objectives of the respective professions (in human medicine, SCLO II), but also to give learners the chance to **practice these skills in a realistic setting**.

As undergraduate IPE in medicine generally reflects and reinforces skills that are already covered in the syllabus, **this form of teaching does not increase the number of subjects which faculties have to teach**. However, IPE modules should be carefully planned and incorporated into existing teaching so as to **release valencies** and consequently time devoted to the acquisition of non-specific and generic skills which can be acquired more effectively, and in a manner more closely matched to reality, via IPE.

The only appropriate way of doing this is via a **learning spiral**<sup>35</sup> in which skills are first presented, then defined, and finally used.

In other words, IPE should wherever possible be designed in the form of **increasing skill levels** in respect of the complexity of patients' situations and of interactivity among the professions (figure 5).

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<sup>33</sup> <http://www.caipe.org.uk/>

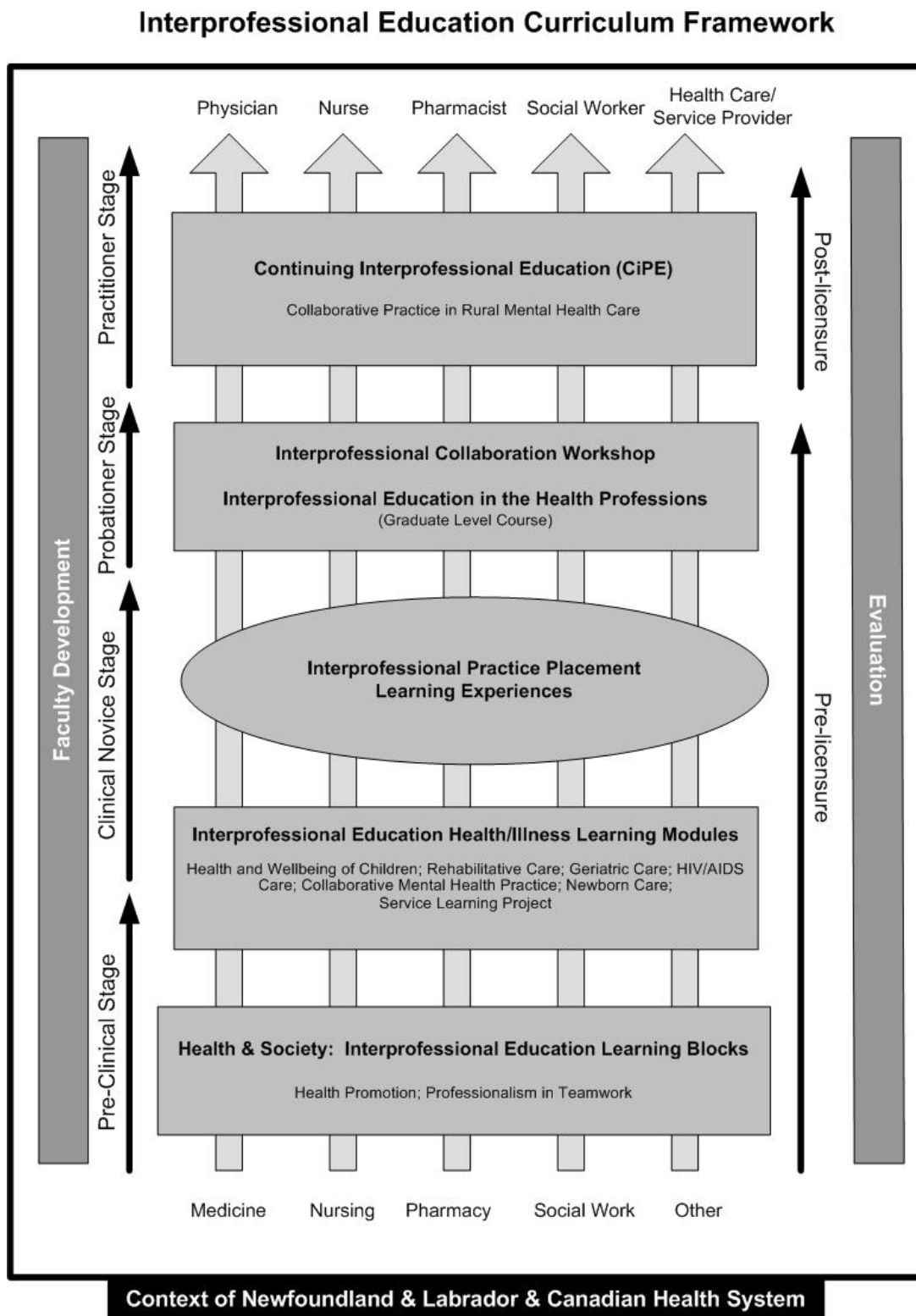
<sup>34</sup> <http://www.eipen.org>

<sup>35</sup> Learning spiral = constant repetition of content / skills in line with a growing level of detail / competence



The outline curriculum developed by the Center for collaborative Health Professional Education of Memorial University of Newfoundland, Canada (Curran et al., 2007) is shown below as an example.

Figure 5: Interprofessional Education Curriculum Framework (Curran et al. 2007)



It is also important to **give students the time and resources to think about** the implications of IPC on their future work and how it is organised. Or, as Pollard (2008)<sup>36</sup> points out:

<sup>36</sup> Pollard (2008), Report for the Higher Education Academy of Health Science and Practice Subject Centre in London

There is a need for Interprofessional Education to go further, in that it should also make students explicitly aware of how organisational factors can affect interprofessional working (and) it is necessary to get students to start thinking about how interprofessional working happens within different organisational contexts; and, in particular, to encourage a habit of thinking creatively about strategies for change within all situations.

The following pedagogical stages are therefore recommended according to the principle of the learning spiral. They should wherever possible form part of a **continuum from undergraduate training (for doctors) to postgraduate and continuing training**:

- Initial interprofessional contacts (introduction to IPC, IPE modules (lessons and practical work) in the basic sciences (anatomy, physiology, etc.),
- Interprofessional discussion of specific cases, involving the definition of individual roles within the IP team on the basis of professional profiles,
- Individual reflection on professional roles and professional profile (individual positioning),
- Specific implications, personal development,
- Subsequent IPC / IPE contacts (higher level of complexity)

In the context of undergraduate training of future doctors or vocational training for healthcare professions, the type of pathology and clinical definition of the medical problems used as examples in the context of IPE are not the most important elements. Or, as Freth et al (2005) point out: "Arguably, process is more important in interprofessional education than content. (...) The essential outcome is the development of transferable skills relevant to collaboration and teamwork skills, such problem solving, and initiating and improving care and the embedding of these in practice". However, "content is nevertheless important (in providing) motivation to learn, by filling recognized gaps in the learners' knowledge, or by capturing their imaginations and harnessing the energy of this enthusiasm. This means that content should be relevant to learners' concerns and professional practice"

**In the working group's opinion, it would in fact be preferable for these elements of content (detailed diagnosis, corresponding treatment etc.) to appear only at the postgraduate training stage.** The models developed by the thematic group, and the modules which illustrate them, have been designed along these lines.

### 6.3 Elements which should feature in IPE<sup>37</sup>

The discussions within the thematic group showed that overall, the elements referred to by the CAIPE (Barr 2011; Barr et al. 2011) also apply in the context of the Swiss education system. We will simply list them below:

#### 6.3.1 Values

Interprofessional Education:

- Focuses on the needs of individuals, families and communities to improve their quality of care, health outcomes and wellbeing; *Keeping best practice central throughout all teaching and learning*
- Applies equal opportunities within and between the professions and all with whom they learn and work; *Acknowledging but setting aside differences in power and status between professions*
- Respects individuality, difference and diversity within and between the professions and all with whom they learn and work; *Utilizing distinctive contributions to learning and practice*
- Sustains the identity and expertise of each profession; *Presenting each profession positively and distinctively*
- Promotes parity between professions in the learning environment; *Agreeing 'ground rules'*

<sup>37</sup> Barr H., Low H. (2011), CAIPE – Principles of Interprofessional Education. Internet: <http://www.caipe.org.uk/resources/principles-of-interprofessional-education/>



- Instills interprofessional values and perspectives throughout uniprofessional and multiprofessional learning. *Permeating means and ends for the professional learning in which it is embedded*

### 6.3.2 Process

Interprofessional Education:

- Comprises a continuum of learning for education, health, managerial, medical, social care and other professions; *Sequencing interprofessional learning progressively throughout pre-registration and post-experience studies*
- Encourages student' participation in planning, progressing and evaluating their learning; *Including them with teachers and others in working groups*
- Reviewing policy and practice critically from different perspectives; *Subjecting policy and practice to critical analysis against experience and evidence*
- Enables the professions to learn with, from and about each other to optimize exchange of experience and expertise; *Facilitating interaction, exchange and co-reflection as they compare perceptions, values, roles, responsibilities, expertise and experience*
- Deals in difference as it searches for common ground; *Showcasing different yet mutually reinforcing roles and expertise in collaborative practice grounded in mutual understanding working towards shared objectives*
- Integrates learning in college and the work place; *Teachers and practice supervisors planning, delivering, assessing and evaluating classroom and practice-based learning together*
- Synthesizes theory and practice; *Deriving theory from and applying it to practice*
- Grounds teaching and learning in evidence; *Citing findings from research including those in systematic reviews of process and outcomes from interprofessional learning*
- Includes discrete and dedicated interprofessional sequences and placements; *Building in dedicated interprofessional learning based on these principles*
- Applies consistent assessment criteria and processes for all the participant professions; *Including summative assessment by the same means to the same standards*
- Carries credit towards professional qualifications; *Negotiating ways in which satisfactory fulfilment of interprofessional assignments meets requirements for professional awards*
- Involves service users and carers in teaching and learning; *Including them in planning, delivery, assessing and evaluating teaching*

### 6.3.3 Outcomes

Interprofessional Education:

- Engenders interprofessional capability; *Devising outcome-led learning delivering collaborative capabilities*
- Enhances practice within each profession; *Enabling each profession to improve its practice to complement that of others*
- Informs joint action to improve services and instigate change; *Applying critical analysis to collaborative practice*
- Improves outcomes for individuals, families and communities; *Responding more fully to their needs*
- Disseminates its experience; *Contributing to the advancement and mutual understanding in interprofessional learning in response to enquiries, at conferences and via the professional and interprofessional literature*
- Subjects developments to systematic evaluation and research; *Collecting data systematically to test against the requirements and expectations of stakeholders, funding, validating and regulatory bodies and to contribute to the evidence base*

## 6.4 When should interprofessional education start?

### 6.4.1 Undergraduate training for doctors

Parsell and Bligh (1998)<sup>38</sup> have suggested that to be effective, IPE should fulfil a certain number of criteria:

- involve all participating departments in planning and implementation
- be seen as relevant by learners
- have balanced group membership
- have participants of equal status
- clarify learners' previous experience
- use common tasks with clear objectives
- use interactive approaches to learning
- use real-life clinical problems to
- stimulate interprofessional problem-solving
- use experiential learning methods
- use small group methods of learning
- provide feedback to learners
- recruit teachers experienced in interprofessional working
- provide appropriate pre-course information to participants
- demonstrate support from senior management
- be evaluated

**The key element highlighted is that learners of any medical or healthcare profession must feel secure in their role and their identity as future professionals, and so feel equal to the others.** It is also apparent that relevant and effective IPE should be based on realistic clinical situations with which learners can identify, while understanding the roles of the other professionals (Finch, 2000).

All this is called into question by the observation that even at the start of their studies, students taking different courses already have their own "view" of their professional identity, which is very stereotypical (Tunstall-Pedoe et al., 2003). Experience shows that IPE should therefore be introduced at a very early stage in order to "break down" these stereotypes (McNair 2005; Horsburgh 2001).

However, in addition to pedagogical considerations, the IPE approach at Bachelor level should also increase the connections between courses in medicine and courses in other aspects of healthcare.

### 6.4.2 Postgraduate training for doctors

IPE should continue on the basis of the clinical context, taking account of gradual specialisation and as appropriate for the postgraduate training route being taken (general internal medicine, surgery, gynaecology, paediatrics, etc.). The skills matrix developed for undergraduate IPE reflects the SCLO II teaching objectives, which are based on CanMeds. A new skills matrix needs to be defined for postgraduate training, reflecting priorities that are appropriate for the needs of professionals who are undergoing postgraduate training and professionals who are already working.

**The thematic group recommends that the CanMeds matrix should continue to be used for all professions at all levels of training (undergraduate, postgraduate and ongoing).** This is particularly relevant as the general objectives of SCLO are an integral part of the Regulations on postgraduate training (WBO) of the Swiss Medical Association, FMH. This means that continuity and consistency between undergraduate and postgraduate training are reflected, as required by the MedPA.

### 6.4.3 Training for interprofessional partners

This is not fundamentally different from the training given to medical students, particularly as university and vocational training should ideally be coordinated within joint IPE modules.

<sup>38</sup> <http://pmj.bmj.com/content/74/868/89.full.pdf+html>

If there are not enough learners to set up balanced IPE groups, consideration should be given to inviting professionals working in different healthcare fields to join the group work as facilitators, making their professional skills available to learners taking the IPE module. It can also be useful to include specialist level learners (working towards a Master in Advanced Practices qualification) to help participants in initial IPE get started.

## 6.5 What teaching methods should be used?

Several IPE teaching methods are described in the literature (Bridges et al. 2011, Lerner et al. 2009, Schmitt M. et al. 2013). For example, Karolinska University in Stockholm (Ponzer et al. 2004) has set up an Educational Ward within the university hospital (Södersjukhuset), in which patients can, if they wish, be managed exclusively by interprofessional groups made up of students of various healthcare professions. Their tutors only have a supervisory role. The same approach has been taken since 1986 in Sweden's Linköping university hospital. Here, medical students have IPE for a total of twelve weeks along with a two-week rotation in an interprofessional unit<sup>39</sup>.

IPE teaching methods should not fundamentally differ according to the course being taken. The most important points are that it should be geared to the patient's health problem (problem-based), that an interprofessional approach should be taken right from the start, and that teaching should be carried out in small groups, following an interactive style including simulated practice (Hean et al. 2012; D'Eon 2004; Curran et al. 2007; Kilminster et al. 2004; Cooper et al. 2001).

In the light of this concept, the thematic group suggests that the following methods in particular should be considered:

- Introductory lectures
- Plenary debates
- Analysis and discussion of video material in an IPE group
- Group work based on scenarios, reflecting the level of training that learners have reached (finding a diagnostic or therapeutic solution to the case is not the key element at undergraduate level. This should be reserved for the postgraduate or advanced vocational training levels (Masters, advanced practice qualification)).
- Interventions / presentations by patients or their close friends and family
- Role play based on specific, targeted examples and focused on a limited number of learning objectives or skills that are to be developed / shared.
- e-learning, as part of remote learning, extending and completing initial IPE
- Personal IPE journal, particularly for work experience sessions and interprofessional clinical rotations
- Self-directed learning (where possible, under the supervision of facilitators who are currently practising)

## 6.6 What assessment methods should be used?

Assessment methods vary at present as IPE is not established in the same way in all faculties of medicine, universities of applied sciences and advanced vocational colleges. IPE should not be an exception to the rule according to which formative or summative assessment should be carried out for all teaching and learning.

With regard to undergraduate courses in medicine, the possibility of incorporating an interprofessional element in the federal diploma of medicine (summative assessment) should be considered.

In the case of postgraduate medical courses which have introduced this method of assessment, IPE and related skills should be tested by means of 360° feedback (Meng et al 2009) or any other method meeting the objectives of the specialist bodies.

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<sup>39</sup> <http://www.hu.liu.se/pedagogisktcentrum/interprofessionellt-larande?l=en>

## 6.7 Barriers and limits to the development of IPE

There are obstacles to the development and introduction of interprofessional modules, which we should like to mention here. In particular:

- Lack of common curriculum development
- Poor integration of skills into the full curriculum
- Lack of resources within institutions (premises, logistics, funding, etc.)
- Lack of support from senior individuals within the institution (recognition of work done for the tutor's career, release from teaching and research duties)
- Lack of motivated IPE "champions" inside and outside institutions
- Students and teaching staff at the institution insufficiently informed
- Insufficient coordination and networking within the institution (module development, introductory lectures), among university and non-university institutions which are called on to set up IPE, and among institutions and facilitators of professional practice
- Lack of relationship between skills and work (see the Entrustable Professional Activities (EPAs) concept)

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## 7 Concept for an introduction to IPC

### 7.1 Objectives

The aim of this document is to make recommendations regarding skills and training objectives common to all professions involved in collaborative practice. It also contains methodological recommendations for transmitting training content (interprofessional modules, team learning) which take account of existing infrastructure at university level, as well as the systems and infrastructure relevant to the secondary and tertiary level, and the various powers, responsibilities and statutory instruments in force (MedPA, UASA, VPETA, etc.).

**These recommendations can be integrated into existing programmes and training objectives.**

Their aim is therefore to complete the data presented in chapters 5 and 6, without citing or listing them again. Interested readers can consult the works cited in the bibliographies to obtain more information.

The Platform's mandate requires the working group to concentrate on university training of doctors. However, this concept also reflects the initial training of future practitioners of other healthcare professions who will be called on to work with doctors in an interprofessional context.

### 7.2 Vision and general principles

#### 7.2.1 Visions

The concept proposed by the thematic group is based on a broadened vision of interprofessionality in Switzerland, which includes the probable changes to healthcare models and consequently to IPC and IPE. **It is therefore part of a dynamic process, and constitutes the first element in this process at national level.**

The thematic group experts advise those in charge of the Platform and of faculties of medicine to acquire the resources needed to support this process of developing interprofessional and interdisciplinary collaboration practices that are critical to the future and quality of the practice of medicine, and consequent the quality of healthcare in Switzerland (Olenick et al. 2013). They are also the foundation of effective postgraduate training, for which professional bodies and hospitals are responsible. The experts suggest that the vision of interprofessionality presented in this report should serve as a discussion basis for subsequent work and decisions.

- There is a uniform understanding of interprofessionality at national level in the sense of collaborative practice and interprofessional teaching. This involves taking account of and combining approaches, ways of thinking and methods that are specific to the various disciplines, and creating synergies that will improve quality of care.
- IPC meets current patient needs, and every member of an interprofessional structure can contribute to this, irrespective of his or her level of training, role, or function within the healthcare system or the IPC team.
- The transversal skills that are common to the various professional groups must be acquired and developed by suitable learning methods (interprofessional modules, transfer from theory to practice, supervision, patient-centred approach, inclusion of close friends and family in defining the patient's needs, etc.).
- Professionals working in interprofessional structures have specific (professional) skills, generic skills (in particular, communication and social skills) and sufficient and necessary professional



autonomy to fulfil the role assigned to them within the IPC team or network. They have been trained to take account of physical, mental, social, cultural and spiritual multidimensionality in their overall approach to the patient.

- IP is an integral and compulsory part of initial, postgraduate and ongoing training for medical professions taught at university (following the revision of the MedPA); it is also part of the initial, post-qualification and ongoing training for healthcare professions (especially tertiary A and B in the context of the HPA). Wherever possible, it is integrated into the training given to future practitioners of other professions who will be called on to work within the health system (medico-social professions, psychology, etc.).
- There are plans to develop a shared training concept for all professional categories in the health system involved in interprofessional activities, and to create a national networking and support body set up along the lines of the palliative care model or the CAIPE. This body could encourage research in areas related to IPE and IPC, and could help fund significant IP activities (see also the IPC support programme of the Robert-Bosch Stiftung<sup>40</sup>).

### **7.2.2 Target groups**

This document has been drawn up for the Platform in the context of the mandate assigned to the thematic group. However, it is also addressed more generally to senior members of the medical and healthcare professions who teach as well as practise. The teaching establishments concerned are, in particular, universities, universities of applied sciences, advanced vocational training colleges, labour organisations, medico-social and healthcare institutions that provide initial, postgraduate and ongoing training to healthcare professionals.

Their directors were invited to participate in the support and steering groups involved in the production of this concept through consultations organised by the thematic group.

The thematic group hopes that this report will be widely circulated and so eventually reach a larger number of specialists, and that this will lead to a change in attitudes to interprofessionalism in education and in the Swiss health system.

### **7.2.3 General principles adopted in the development of models and modules**

The thematic group based its deliberations on the principles of professional practice that are generally recognised by the medical and nursing professions in their relationships with patients and their health problems. They reflect the reality of these professions, but also take account of aspects which will have to evolve or change as primary care medicine practices and structures adapt to meet the needs of new care models. It is important that learners are trained to take account of these imperatives at an early stage of their training, particularly in group work.

- Equal treatment for all patients,
- Institutional or situation-based (ad-hoc) networking of outpatient care to meet the patient's needs as soon as he or she enters the healthcare system, irrespective of the point of entry,
- Recognition and reflection of interfaces (patient, patient's friends and family, workplace, individual practice, group practice, specialist, pharmacy, medico-social structure, hospital, medico-social facility, etc.) that affect a patient's journey through the healthcare system,
- Open and appropriate communication between professionals, with the patient and his or her close friends and family, in accordance with ethical rules, informed consent and any advance decisions,
- Expert support during decision-making processes, including the ability of the patient, or his or her close friends and family if necessary, to choose treatment (conventional and alternative approaches),
- Reflection of the patient's personal environment and the health system as a whole, allowing a multi-dimensional approach to the patient's health problems,

<sup>40</sup> <http://www.bosch-stiftung.de/content/language1/html/44080.asp>

- Compliance with confidentiality and data protection rules throughout the care chain and for as long as the patient remains within the healthcare system.

#### 7.2.4 Skills matrix

The thematic group's work is structured around a skills matrix (see Annexe 3, General portfolio) drawn up on the basis of the CanMeds catalogue and SCLO II. The skills which best reflect the specific features of IPC and IPE in Switzerland were selected by the experts in the thematic group and then distributed among the various models and modules which illustrate them.

The matrix is a proposal aimed at facilitating the work of those in charge of IPE for future doctors while at the same time reflecting the training objectives of other healthcare professions.

Other aspects can also be taken into account depending on the needs and resources of each training establishment. It is however important to start developing modules by drawing up a list of similar skills.

Whatever choices the training establishments make, the thematic group experts advise that the CanMeds matrix be used as a basis for all medical and other healthcare professions throughout undergraduate, postgraduate and ongoing training.

#### 7.2.5 Implementation of the concept / from models to modules

This concept is a first stage in the structured and coordinated introduction of IP into university medical courses and training for other healthcare professions. The **six care models** proposed take account of the requirements of current and future collaborative practice. They reflect the reality of outpatient primary care medicine.

The models and the modules which illustrate them have been designed so that they can be implemented from the first year of medical studies through to the sixth year, according to the training spiral principle. Taking the preparation of participants for IP teaching into account, each model is worth approximately one ECTS credit. The models can be delivered as training weekends or isolated days or half-days spread throughout the year.

**The thematic group recommends that one IPE model should ideally be offered per year of medical study.** If teaching methods are adapted, the clinical experience year should not present a major obstacle to the continuity of IPE planning. **In fact, the thematic group recommends that the tangible IPC contacts which students will make during their clinical experience should be used to allow them to develop particular skills or conduct a concrete, practical IPC project** and to document it, for example by means of a clinical experience report.

Each model proposed by the thematic group is made up of three or four teaching modules, which university training establishments can devise to reflect their specificities, missions, needs and opportunities for collaboration with other training establishments.

### 7.3 Practical organisation of teaching / General portfolio

As shown by the example of the University of Lausanne, CHUV and the University of Applied Sciences and Arts Western Switzerland, IPE must be planned and implemented by an interprofessional working group. The documents suggested in the general portfolio – particularly the facilitator's log – should make it possible to standardise this task. However, each training establishment and each IP working group tasked with creating the teaching programmes must develop its own teaching and assessment instruments (Hean et al.2012; Cooper 2001; D'Eon 2004; Curran et al. 2007).

#### 7.3.1 General portfolio

This principal document is essential to creating IPE programmes. It is also usually the first element to be prepared jointly and interprofessionally by the various groups involved (tutors, facilitators, course directors, etc.). A list of documents that could form part of the general portfolio is given below. It was drawn up on the basis of the thematic group's own experience and proposals made by several experts



invited to take part in the group's discussions.

- Selection of participants, creation of interprofessional groups (drawing by lot, "professions fair", role-play)
- Support for learners from specialists (facilitators)
- Selection and support / training of facilitators (tutors, professionals, simulated or real patients, organisers, etc.)
- Student briefing / debriefing, personal / psychological support for particular training modules where necessary
- Documentation, participant records for the programme as a whole and for each training module
- General bibliography, list of publications and documents for each module, bibliographical search concept and resources for people taking part in the training modules
- Training the trainers, facilitators, briefing / debriefing during training modules (Pollard 2008)
- Timetabling the entire IPE programme (Bachelor, Master) and each training module
- Logistical problems, lecture theatres, group work rooms, meals, breaks, overnight accommodation, etc.
- Funding for IPE and training modules, possible sponsorship
- Interim and final assessment by participants and facilitators of each training module and of IPE as a whole
- General introductory and advanced topics exploring the theory behind IPC and IPE
- General programme and implementation of each IPE training module

## **7.4 Model 1: general practice**

*IPC structure:* outpatient primary care practice

*Training objectives:*

- To highlight the visions and representations of the professions involved
- To understand and incorporate formal and informal forms of interaction, including potential for conflict
- To develop interprofessional collaboration strategies
- To assess the suitability of the model for use in individual practices

### **7.4.1 Module 1a:**

*Patient's trajectory:* Patient's entry into the healthcare system, initial contact

*Scenario:* Paediatric patient visiting the doctor in an individual practice with his mother. The patient has had nasal discharge for 2 days

*Training objectives:*

- To manage the patient (primary care medicine, entry into the healthcare system) and identify his needs
- To recognise the severity of a situation and be able to refer
- To communicate clearly with another professional (written and verbal communication)
- To communicate with and give explanations and information to the patient and his family
- To deal with administrative and medical documents (file, billing)

### **7.4.2 Module 1b:**

*Patient's trajectory:* Entry into the healthcare system; primary care or follow-up in the context of an outpatient consultation

*Scenario:* Elderly patient (aged over 80) with a urological disorder, accompanied by his wife as he has early-stage dementia; simple urinary infection

*Training objectives:*

- To be able to start organising a team approach

- To know the rules for prescribing medicine
- To discuss and explain a drug, its effects and contraindications
- To start the process of organising home care
- To give others involved in collaboration information that is relevant in this context
- To provide information before the patient leaves: what to do in the event of complications, next appointment

### 7.4.3 Module 1c:

*Patient's trajectory:* Initial contact via pharmacy

*Scenario:* Patient in good general condition who does a lot of sport, presenting with lower back pain after moving awkwardly

*Training objectives:*

- To be able to provide advice at the pharmacy (ability to recognise red flags in cases of lower back pain)
- To be able to advise on taking painkillers
- To give the patient clear recommendations on when he might need to see a doctor (consulting Medgate if necessary)
- To give the doctor correct information and receive advice on the patient's behalf
- To be able to refer the patient to the doctor, drawing up a case summary if necessary

## 7.5 Model 2: emergency situations

*IPC context:* Emergency situations, patient able or unable to take decisions, existing IPC care team / structure

*Training objectives:*

- To communicate and collaborate effectively with the other professionals in the team (teamwork, importance of language)
- To understand and incorporate formal and informal forms of interaction, including potential for conflict
- To take leadership of treatment in a way that is geared to the situation
- To define basic action needed to ensure the patient's survival (security of care even when the patient is in another location and when there is too much work)

### 7.5.1 Module 2a:

*Patient's trajectory:* Critical change in state of health

*Scenario:* Obstetric patient in the maternity department; worsening of vital signs after giving birth (e.g. uterine atony, heavy bleeding).

*Training objectives:*

- To consult care protocols and instructions
- To pass on relevant professional information
- To manage the case in an emergency setting, principles of resuscitation

### 7.5.2 Module 2b:

*Patient's trajectory:* Entry into the healthcare system; and/or initial contact

*Scenario:* Post-traumatic management of a young motorcyclist involved in an RTA (in town or in the countryside)

*Training objectives:*

- To know the rules of engagement and operation of a paramedic / air rescue team
- Resuscitation outside hospital
- Communication and collaboration with professionals not working in the healthcare field

### 7.5.3 Module 2c:

*Patient's trajectory:* Critical night-time change in the condition of a hospitalised patient

*Scenario:* 82-year-old patient living in a care home, fell when getting up in the night, cuts to forehead and multiple bruising

*Training objectives:*

- Security of care
- To formulate relevant professional information
- To recognise the dangers of jargon

### 7.5.4 Module 2d:

*Patient's trajectory:* Entry into the healthcare system following sudden deterioration

*Scenario:* Child with febrile convulsions (possible meningitis?) mother telephoned the practice to ask for help

*Training objectives:*

- To recognise and deal with a challenging emotional situation
- To act as a link / conduit between outpatient and inpatient care

## 7.6 Model 3: Sequential IPC

*IPC context:* Sequential interprofessional collaboration, ad hoc IP network according to the patient's needs

*Training objectives:*

- To be familiar with the language used by each profession and the way they operate
- To adapt communication to the patient (including taking the patient's cultural background into account)
- To adapt communication to the other professions
- To know the roles and skills of the various IP participants working in the outpatient care system

### 7.6.1 Module 3a:

*Patient's trajectory:* Return home with interprofessional monitoring

*Scenario:* Obstetric patient who has given birth to her first child (patient may not speak a Swiss national language)

*Training objectives:*

- To be familiar with the language used by the other professions
- To know the various IP participants who might be involved in looking after the health of the mother and child
- To understand the communication interface and multiculturality

### 7.6.2 Module 3b:

*Patient's trajectory:* Returning home with interprofessional rehabilitation and psycho-social reintegration

*Scenario:* Young unemployed man living alone, following RTA with locomotor trauma, psychological post-traumatic after-effects

*Training objectives:*

- To adapt communication to the (needs of the) other professions
- To know the various IP participants who might be involved in the post-traumatic outpatient care system

### 7.6.3 Module 3c:

*Patient's trajectory:* To set up a system for monitoring the care of an elderly multimorbid patient after

an acute hospital stay

*Scenario:* 90-year-old married patient, returning home after treatment of a head injury, caused by a fall due to poorly controlled diabetes or terminal heart failure.

*Training objectives:*

- To include the patient's close friends and family acting as carers in the care project
- Advance decisions and legal impact
- How to improve the interprofessional network looking after the patient to avoid readmission to hospital

#### **7.6.4 Module 3d:**

*Patient's trajectory:* Interprofessional monitoring of a case of chronic pain

*Scenario:* 35-year-old woman with children, suffering for several years from rheumatoid polyarthritis

*Training objectives:*

- To obtain interprofessional scientific information on a poorly understood condition (from the patient's GP)
- To encourage and maintain IP activity for the patient's benefit

### **7.7 Model 4: polymorbid patients**

*IPC structure:* Multimorbid patient, interfaces between outpatient and inpatient management, ad-hoc and/or institutional IP network

*Training objectives:*

- To define an IP vision of the patient and his health problems
- To include the patient's close friends and family acting as carers in the care project, while upholding confidentiality rules
- To anticipate and formulate interprofessional needs
- To anticipate doctor-shopping

#### **7.7.1 Module 4a:**

*Patient's trajectory:* To analyse the problems of an elderly multimorbid patient attending a primary care practice

*Scenario:* 83-year-old widow, suffering from signs of dementia / depression, recurrent cystitis and chronic constipation (including social vulnerability)

*Training objectives:*

- To define an IP vision of the patient and his health problems
- Ideas of delegation of responsibility in management?

N.B.: in this context, another possible scenario could be a polymorbid patient requiring care at home (as a result of hemiplegia, for example). The care would be provided primarily by Spitex together with members of a care team and, where appropriate, members of other healthcare professions. The patient's medical condition would often be monitored by the GP, and would tend to be ad-hoc (Spitex visits three times a week, physiotherapy and occupational therapy as required, check-up every six months or as required, for example if new medical problems arise or the patient's condition worsens). In such cases, care is not an element in monitoring medical treatment, but is an important continuity factor. Consequently, the lead could for example be taken by Spitex, and medical intervention would ideally be based on assessments and information provided by nursing professionals, who would initiate the intervention.

#### **7.7.2 Module 4b:**

*Patient's trajectory:* To prepare an elderly, multimorbid patient for admission to a medico-social facility via IP activity

*Scenario* Married 77-year-old patient, showing signs of dementia and aggression, locomotor problems following hip replacement complications.

*Training objectives:*

- To anticipate and formulate interprofessional needs
- Perceptions and expectations of the patient's friends and relatives, response by IP planning, including prevention of doctor-shopping.

### **7.7.3 Module 4c:**

*Patient's trajectory:* To manage a case of multimorbid infection outside hospital

*Scenario:* Married 67-year-old patient suffering from urinary MRSA

*Training objectives:*

- To include the patient's close friends and family acting as carers in the care project
- By extension, to be familiar with legislation on epidemics and transmissible diseases

## **7.8 Model 5: Palliative care**

*IPC context:* Palliative care IPC, ad-hoc and/or institutional IP network

*Training objectives:*

- To define the support infrastructure (including legal, ethical and other aspects) for a patient receiving palliative care
- To adapt to the patient's approaching death ("end of life" conversations)
- To accept the treatment refusal (advance decisions)
- To define and guarantee confidentiality needs

### **7.8.1 Module 5a:**

*Patient's trajectory:* Patient attending the practice

*Scenario:* Practice work relating to a patient with an untreatable chronic condition inquiring about anticipated decisions

*Training objectives:*

- To accept the treatment refusal (advance decisions)
- To guarantee the patient's dignity

### **7.8.2 Module 5b:**

*Patient's trajectory:* Patient returning home to die (perhaps situation in which the patient may want assisted suicide)

*Scenario:* Patient with terminal cancer, returning home to die; management of palliative care, especially for pain

*Training objectives:*

- To define the support infrastructure (including legal, ethical and other aspects)

### **7.8.3 Module 5c:**

*Patient's trajectory:* Terminally sick patient who needs to be admitted to a palliative care facility

*Scenario:* Woman with children who is suffering from AIDS and at the end of tritherapy, or patient suffering from terminal breast cancer

*Training objectives:*

- To adapt to the patient's approaching death

## **7.9 Model 6: Prevention**

*IPC context:* Interprofessional participation in prevention, in an outpatient (primary care medicine) and/or inpatient setting

*Training objectives:*

- To understand interprofessional decision-making in a practice or institution
- To explain the role and importance of IP in taking preventive measures for a group of at-risk patients
- To know the role of alternative medicine in maintaining health (primary prevention) for certain groups of at-risk patients

### **7.9.1 Module 6a:**

*Patient's trajectory:* Management of groups of at-risk patients by a medical practice

*Scenario:* Opinion-forming on primary prevention topics (vaccines, preparation for birth, HIV, smoking, alcohol) prepared by the postgraduate training assistant

*Training objectives:*

- To increase IP awareness of medico-social problems such as domestic violence
- To understand interprofessional decision-making in a practice

### **7.9.2 Module 6b:**

*Patient's trajectory:* Entry into the healthcare system for routine check-up

*Scenario:* Adult patient attending for a check-up or primary prevention measure (screening campaign organised by the pharmaceutical industry / Swiss Medical Association / FOPH); found to have mild diabetes or to be overweight

*Training objectives:*

- To tell the patient about tertiary prevention options

### **7.9.3 Module 6c:**

*Patient's trajectory:* Risk management for an institution's patients (secondary prevention)

*Scenario:* IP work to introduce a scheme to prevent falls in a medico-social establishment

*Training objectives:*

- To participate in preventive IP measures for a group of at-risk patients

### **7.9.4 Module 6d:**

*Patient's trajectory:* Involvement in primary prevention for at-risk patients

*Scenario:* Elderly patient asking for health maintenance advice at the end of a routine check-up with her GP.

*Training objectives:*

- To know the role of alternative medicine in maintaining health (primary prevention) for certain groups of patients

## **7.10 Other possible models**

*IPC context:* Palliative care (according to the national concept), new care models including advanced practices (nurses, physiotherapists, midwives), medical imaging structure (IPC with MRT / MTRA)

*Training objectives:*

- To set up IPC on the basis of the professional roles envisaged
- To define possible professional roles on the basis of the IPC envisaged



## 7.11 Bibliography

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## 8 Conclusions and recommendations

Members of the various healthcare professions all make a vital contribution at their own level to the quality of healthcare provided in Switzerland. They all work for the benefit of patients and all cooperate as closely as possible. In practice, many healthcare teams already adopt an interprofessional mode of working that is based on skills acquired during postgraduate training. It is essential that the various professional groups start in good time to think carefully about their own role, tasks and responsibilities and those of the other professional groups so that treatment processes can be improved for the benefit of the patient, errors can be avoided, and healthcare staff shortages can be compensated for to some extent through effective collaboration.

The significant changes that have taken place in healthcare training and policy over recent years have led to a redefinition of professional roles and profiles that has unsettled the medical world but that has also given rise to innovative processes and made the issue of interprofessionality more prominent.

The representatives of the medical, pharmaceutical and nursing professions agree that in future initial and postgraduate training must place more emphasis on interprofessionality. Individuals in charge of training at non-university, university and post-university level must therefore discuss and reach agreement on role models and expectations of other healthcare professions, and then decide the best way and time of putting across their conclusions, as well as who is best placed to do this. Framework conditions setting out budget, staffing and organisational aspects should also be defined for hospitals and other establishments providing inpatient care so that patients' needs-centred interprofessional practice can be implemented.

Most universities of applied sciences and advanced vocational colleges have therefore launched interprofessional education programmes for students training in the professions that they teach (mainly nurses, physiotherapists, midwives, occupational therapists and dieticians). Medical faculties are starting to introduce teaching modules that are no longer simply optional and ad-hoc. An in-depth debate at national level could support efforts towards specific teaching of interprofessionality in undergraduate medical training and help to respond better to statutory requirements and the "Health 2020" strategy defined by the Federal Council.

Individuals working in an IP team must not only have already acquired generic skills but also adjust their professional activity (and consequently their specific skills) in the light of the function and role which is assigned to them or which they take on within the group.

The experts in the thematic group have therefore been working to define and take account of the main skills needed for interprofessional collaboration, distributing them among the various care models and IPC modules.

These modules have been focused on bachelor / master level for students of medicine, bachelor level for courses offered at universities of applied sciences and professional qualification level for relevant courses offered within other higher education establishments.

This is why directors of training should start by conducting in-depth discussions at national and regional level to determine the content of interprofessional education which can then be shared and taught, for example, in interprofessional modules. Better coordination among training programmes delivered for the various healthcare professions should make up a key part of this type of approach.

The concept proposed by the thematic group is based on a broadened vision of interprofessionality in Switzerland, which includes the probable changes to healthcare models and consequently to IPC and IPE.

The experts therefore advise the "Future of Medical Training" Platform to

- Support all the initiatives taken by faculties of medicine aimed at **rapidly introducing interprofessional education** in conjunction with the directors of training for other healthcare professions.
- Organise a **national conference on IPE / IPC** within the next few months, presenting this report and the concept developed by the thematic group as well as the possible next steps.
- **Mandate a new thematic group of the "Future of Medical Training" Platform to develop a concept for "Interprofessionality in postgraduate and ongoing training".**

The thematic group's experts also recommend that the "National Health Policy Dialogue" should:

- **Mandate an enlarged working group to produce an IPE / IPC concept based on this report, covering all healthcare professions.**

In the long term, the thematic group could envisage:

- **A national "white paper" on interprofessionality in initial, postgraduate and ongoing training, and in everyday practice**, including in particular elements of health policy, professional policy and training methodology.
- **Support for IPE / IPC innovation and research.**

Liebefeld, 28 October 2013

## 9 List of annexes

Annexe 1: Mandate given to the thematic group charged with coordinating initial and ongoing training for doctors

Annexe 2: Hierarchical diagram and functions of the groups involved in the development of the Platform's IP concept

Annexe 3: General portfolio "Introduction to IP in medicine" - skills matrix

Annexe 4: Model 1 dossier

Annexe 5: Model 2 dossier

Annexe 6: Model 3 dossier

Annexe 7: Model 4 dossier

Annexe 8: Model 5 dossier

Annexe 9: Model 6 dossier

Annexe 10: Summary of non medical IP education / training in Switzerland (As of 22<sup>nd</sup> october 2013)

Annexe 11: Specific competencies for healthcare professions

Appendix 1

## **Appendix 1: Mandate of the thematic group “Interprofessionality”**

The platform “Future of the medical education” entrusts to the **thematic group “Interprofessionality”** the following mandate:

*In order for all health professionals to meet future demands, especially as part of the new care models, it is not enough to clarify the question of the future skills that the members of the various professional groups must acquire; they must also, and that since their university education and postgraduate education, address both their own professional profile and also the profile of the other health professions. A commission from the Swiss Academy of Medical Sciences (SAMS) recommends this approach.*

*Concretely, the thematic group will have to identify the fields of action and the interfaces between the training options of the various health professions, examine the contents and key competences that can be the object of joint teaching and which would allow the creation of interprofessional education modules. The group will then have to make a preliminary draft for interprofessional modules and develop recommendations for the platform “Future of the medical education”, with the aim of seeing the topic addressed explicitly in the training for health professions and reach a better coordination between these courses.*

The proposals for solutions developed by the thematic groups will then be discussed within the platform ; the decisions regarding their implementation remain the responsibility of the partner organisations concerned.

### **Context / problematic**

- In certain fields of public health, a shortage of healthcare staff is already predictable. This shortage could be reduced with new models of interprofessional collaboration assigning each health professional with the responsibility of the service they are best suited for. At the same time new interfaces are formed that have to be managed appropriately.
- Health professionals are severely tested by the increasing number of multimorbid patients for whom it is necessary to deploy additional efforts in order for them to keep benefiting a care that meets their needs. This is what brings the OECD (Organisation for Economic Co-operation and Development) to request a reorientation towards forms of collaborations that are more integrated. Such a reorientation entails the necessity to define education programmes for all the health professions that are capable of coping with the future and are devoted to interprofessionality.
- The guarantee of quality and patient safety, as well as the quality management and the clinical risk must be covered during university and postgraduate education and the continuing education of the university medical health professions. The results obtained in these two fields will depend greatly on the quality of the collaboration between the various health professions.
- It is not just the pathologies that are becoming increasingly complex. The technique and the knowledge that it requires are always progressing. This invites for new forms of collaboration, but means also a constant challenge for health professionals.
- The increasing impact of economic considerations has also already deeply transformed the professional day-to-day life and will keep doing so. In 2012, the flat rates per case related to services will appear in Switzerland with the Swiss DRG (diagnosis related group) and one can expect that the services until now dispensed in the hospitalisation field will be now be transferred to the outpatient field, with the new demands that will ensue for the health professionals.
- The skills the professionals need in order to take up the challenge must be provided already during university and postgraduate education. In Switzerland, the implementation and the spreading of a model of medical education with interprofessional orientation, harmonised with the education of the other health professions, still encounter barriers (resistance, separations, sclerotic structures, shortage of resources, lack of money and time). The collaboration is admittedly experienced on an everyday



basis, but the education is still lacking when it comes to clearly address the topic of interprofessionality, debate it and incarnate it concretely in shared concepts. This is why the people in charge of the education must lead in-depth exchanges in order to, on the one hand, identify the interfaces that exist between various health professions and on the other hand, determine the contents and competencies which learning could be shared and which could be for example taught in interprofessional modules.

### **Tasks and organisation**

- Nadine Facchinetti (FOPH) heads the thematic group.
- For specific questions, the thematic group can consult specialists with the approval of the FOPH.
- The FOPH assumes the financing and administrative support.
- The mandate of the thematic group ends in spring 2013 and can be, if needed, extended by the platform. The thematic group creates the timetable of its tasks.

### **Decision**

- The thematic group puts together fully developed proposals for a decision that will be submitted to the platform. The platform will then vote with a view to its adoption.

Approved on the 14th of September 2011 by the platform « Future of the medical education »

Appendix 2

## Appendix 2: Organisation chart of the groups involved in the concept for interprofessionality (CIP) of the platform

As its mandate foresees it, **the core group** must be formed in the first place of people in charge of education in universities and universities of applied sciences. It targets highly experienced experts, as curriculum managers, senior education directors, etc.

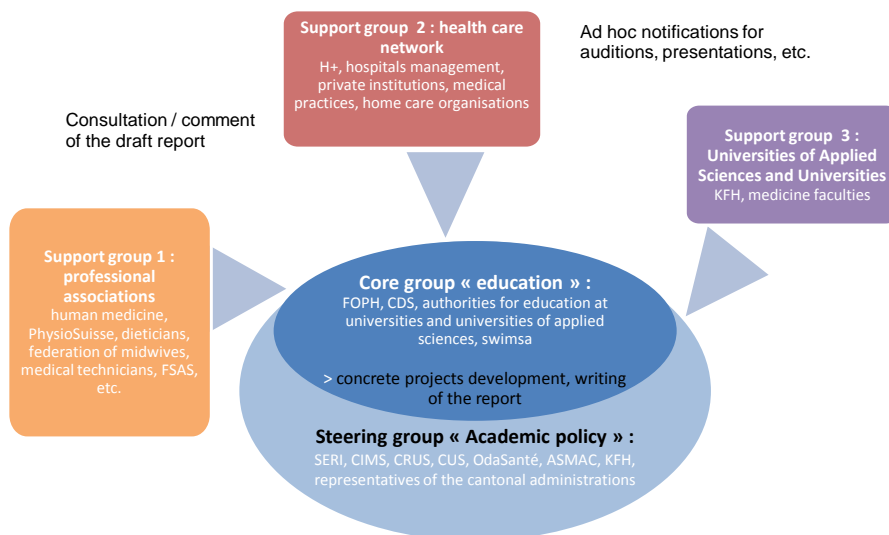
The **decision-makers as regards the academic politic** of the relevant organisations (State secretariat for Education, Research and Innovation (SERI), Committee of the Swiss Medical Faculties (CIMS), Rectors' Conference of the Swiss Universities (RCSU), etc.) are, as **the steering group**, regularly kept informed of the state of the work and are invited, if needed, to participate in writing. They additionally get the possibility to express themselves on the subject of the report of the thematic group as part of the final consultation. **It is however not planned to organise sessions specific to the steering group.**

The core group will be assisted by various **support groups** that will be invited occasionally. This solution allows to maintain the efficiency of the work group, while assuring all the partners that they will be consulted. It is planned to invite separately each support group in its entirety to a session of the core group and to convoke individually various members of these groups depending on the needs (i.e presentations) and the topic discussed. Additionally, the members of the support groups are entrusted with concrete mandates and are consulted by email, particularly as part of the final report. **It is however not planned to organise sessions specific to the support groups.**

*Illustration 1 : Thematic group « Interprofessionality » – structure proposal*

Thematic group: structure proposal :

**a core group focused on education, assisted by a steering group and support groups**



### Composition of the core group (Kerngruppe) :

- 1) **Nadine Facchinetti (FOPH, chairwoman of the group)**
- 2) **Olivier Glardon (FOPH, deputy chairman of the group)**
- 3) Peter Frey (curriculum coordinator of the undergraduate studies, Faculty of Medicine, Berne)
- 4) Werner Bauer, (president Swiss Institute for Medical Postgraduate and Continuing Education SIWF) / Raphaël Stolz (board member SIWF)

- 5) Marcel Mesnil (PharmaSuisse)
- 6) D<sup>r</sup> Monika Brodmann Maeder, Head of the medical training, Inselspital, Berne
- 7) Elisabeth van Gessel, assistant professor for teaching and research, University of Geneva
- 8) Rene Schwendimann, staff member of the Institute of Nursing Sciences INS, University of Basel
- 9) Emanuel Feusi, curriculum director, Zurich University of Applied Sciences ZHAW, Department of Health
- 10) Daniela Schibli (Swiss Conference of the Cantonal Health Directors GDK-CDS), in job sharing with Ewa Mariétoz (GDK-CDS)
- 11) Philippe Carruzzo, president Swiss Medical Students Association (swimsa)
- 12) Peter Marbet, director Bernese School for Higher Health Education, Berner BZ Pflege

**Composition of the steering group :**

- 1) Corina Wirth, delegate SERI
- 2) Simone Hofer, delegate SERI
- 3) Rainer Weber, delegate Committee of the Swiss Medical Faculties
- 4) Kurt Wechsler, delegate Swiss University Conference (SUK), Conference of the Rectors of Swiss Universities (CRUS) or Deans' College
- 5) Michèle Graf, delegate Rectors' Conference of the Swiss Universities of Applied Sciences (KFH)
- 6) Heinz Frey, delegate National Professional Organisation of the Health Workforces
- 7) Mio Savic, staff member Swiss Association of the Medical Assistants and Department Heads VSAO-ASMAC

**Support group 1 : professional associations**

- 1) Marc Müller, delegate GP and family medicine
- 2) Dr. Jürg Nadig, delegate hospital medicine
- 3) Brigitte Neuhaus, delegate Swiss Federation of the Professional Health Associations (FSAS)
- 4) Susanne Clauss, delegate Swiss Federation of the Midwives
- 5) Gabi Fontana, delegate Swiss Association of Diplomate Dietitian
- 6) Bruno Gutknecht, delegate Swiss Association of the Medical Practice Assistant (SVA)
- 7) Claudia Galli, delegate Swiss Association of the Occupational Therapists

**Support group 2 : health care network**

- 1) Robert Paul Meier, delegate Swiss Federation of the Hospitals and Medical Establishments (H+)
- 2) Rita Ziegler, expert in hospital management
- 3) Maja Mylaeus-Renggli, delegate Swiss Federation of Home Care and Nursing Organisations (Spitex)
- 4) D<sup>r</sup> Marc-André Raetzo, (delegate Delta Medical Network, Geneva) or Philippe Schaller, delegate General Practices
- 5) David Gachoud, University Hospital of Lausanne CHUV

**Support group 3 : Universities of Applied Sciences and Universities**

- 1) Omega Huber, Zurich University of Applied Sciences ZHAW
- 2) Klaus Grätz, Faculty of Medicine Zürich
- 3) Cornelia Oertle, delegate Rectors' Conference of the Swiss Universities of Applied Sciences (KFH)
- 4) Nicole Seiler, delegate University of Applied Sciences and Arts of South Western Switzerland HES-SO
- 5) Martina Merz-Staerke, University of Applied Sciences St-Gallen
- 6) Theresa Scherer, (director nursing curriculum Bern University of Applied Sciences)
- 7) Ernst Schläpfer, Training Center for health and social professions

**Experts invited to work sessions of the thematic group**

Catherine Piguet, Mme Katharina Fierz, Mme Anita Manser

Appendix 3

## Portfolio Interprofessionality –

### Documentation for the preparation of the models

<b>Teach the teacher</b>	
<b>Critical points</b>	<p>Principal elements that need special attention (risk of block, understanding difficulties, lack of preliminary skills, etc.)</p> <p>General goal and specific objectives :</p> <ul style="list-style-type: none"> <li>• Level of knowledge</li> <li>• Level of skills</li> <li>• Level of attitude</li> </ul>
<b>Bibliography</b>	List of documents corresponding to the model and the preparation of the modules
<b>Key questions</b>	List of questions regarding the model that would guide the preparation of the modules (students support, the tutors, etc).
<b>Hot-spot</b>	General subjects of interprofessionality that can be correlated with the model (to plan as a workshop/group work or an introductory conference)
<b>Forum = Initial contact between participants</b> (opening of the seminar)	The initial contact can be suggested as an interactive forum (with search for answers to questions, the training/profession of each participant is indicated with a coloured badge), “speed dating” type role play, job exchange centre for the constitution of IPC teams, workshops conducted by facilitators, individual research or group research on factual documentation on a module (internet, documents in the rooms) or any other interactive medium that would create contact and professional dialogue
<b>Prerequisites students</b>	
<b>Knowledge, skills</b>	List of knowledge/ practical experience useful/necessary for the understanding of the model
<b>Bibliography, preliminary documentation</b>	List of documents to be read before the interprofessional seminar
<b>Distribution of roles for the modules</b>	In certain cases, the medical students will have to take on the roles of other professions (lack of participating professions, better interprofessional understanding, etc). Documentation on the professional profile in question will be provided
<b>Evaluation</b>	



<b>Knowledge, skills of the participants</b>	Validation work on one of the modules (in a group or individually)
<b>General IP objectives</b>	Assessment following preliminary indicators, related to the chosen models and modules. Consider common indicators between certain faculties (benchmarking)
<b>Objectives of the seminar and the modules</b>	Global assessment of the weekend or seminar, if possible as a 360° assessment (by the tutors, the students, the facilitators and other participants (patients, simulated patients, etc.)

## Portfolio Interprofessionality –

### Example of documentation for the preparation of modules\*

<b>Teach the teacher</b>	
<b>Critical points</b>	<ul style="list-style-type: none"> <li>• Patient management (primary care, admission in the health care system), identify his/her needs</li> <li>• Recognise the gravity of a situation and know how to refer</li> </ul>
<b>Bibliography</b>	<ul style="list-style-type: none"> <li>• Chan B. et al. (2010), Finding common ground ? Evaluating an intervention to improve teamwork among primary health-care professionals, International Journal for Quality in Health Care, 22(6):519-24.</li> <li>• Hay A.D., Gorst C., Montgomery A., Peters T.J., Fahey T. (2007), Validation of a clinical rule to predict complications of acute cough in preschool children: a prospective study in primary care, British Journal of General Practice, 57:530-537.</li> </ul>
<b>Key questions</b>	<ul style="list-style-type: none"> <li>• How to communicate, explain and inform the family of a patient of the necessity of a consultation by a specialist</li> </ul>
<b>Hot-spot</b>	<ul style="list-style-type: none"> <li>• Communicate clearly with the medical assistant (written and oral) in order to prepare the file for the specialist</li> </ul>
<b>Prerequisites students</b>	
<b>Knowledge, skills</b>	<ul style="list-style-type: none"> <li>• No particular medical knowledge</li> <li>• No particular skills</li> </ul>
<b>Bibliography, preliminary documentation</b>	<ul style="list-style-type: none"> <li>• Kreienbühl S. (2012), Ich wollte einfach mehr wissen, Care Management, 5(3) :6-7.</li> <li>• Schalch E. (2011), Nurse practitioner oder Medizinische Praxiskoordinatorin ?, SÄZ, 92(43):1665-67.</li> <li>• Spirig R. (2012), Nurse practitioner, Medizinische Praxiskoordinatorin – oder Best Practice für Patienten ?, SÄZ, 93(8):295-97.</li> <li>• Okie S. (012), The Evolving Primary Care Physician, New England Journal of Medicine, 360(20):1849-53.</li> <li>• Zaroni U. (2011), Das FUTURO-Betreuungsprogramm: DIE Lösung, PrimaryCare, 11(1):7-8.</li> <li>• ZHAW Dokumentation –CAS in Pädiatrischer Pflege (Nov. 2012)</li> </ul>
<b>Distribution of the roles for the modules</b>	To be determined according to the list of participants

\* see example Model 1 – module 1 (primary care, child)

## Répartition des *CanMEDS Roles* et des *Key competencies* entre les modèles / modules

CanMEDS Role	Key competencies <i>Family Medicine Key competencies</i>	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	SCLO competencies / ME The physician is able to...	
		1	1	1	2	2	2	2	3	3	3	3	4	4	4	5	5	5	6	6	6		6
Medical Expert	Functions effectively as consultant -> patient-centered medical care <i>Integrate all the CanMEDS-FM roles in order to function effectively as generalists</i>	1	2	3	1	2	3	4	1	2	3	4	1	2	3	1	2	3	1	2	3	4	... elicit a relevant, concise and accurate history from the patient and other sources ... conduct an effective physical examination
	Maintains appropriate clinical knowledge <i>Establish and maintain clinical knowledge, skills and attitudes required to meet the needs of the practice and patient population served</i>																						...analyze and interpret data to establish a differential and a working diagnosis and construct a management plan ... carry out under supervision relevant procedures and organize further investigations ... demonstrate appropriate medical data and information management
	Performs assessment to his/her practice <i>Demonstrate proficient assessment and management of patients using the patient-centered clinical method</i>																						... deliver good quality medical care and ensure patient safety ... demonstrate safe prescribing
	<i>Provide comprehensive and continuing care throughout the life cycle incorporating preventive,</i>																						... foster infection control ... promote health of patients and the community



CanMEDS Role	Key competencies <i>Family Medicine Key competencies</i>	M 1	M 1	M 1	M 2	M 2	M 2	M 2	M 3	M 3	M 3	M 3	M 4	M 4	M 4	M 5	M 5	M 5	M 6	M 6	M 6	M 6	SCLO competencies / COM The physician is able to...
Communicator	Develops relationship with patients and families <i>Develop rapport, trust and ethical therapeutic relationships with patients and families</i>																						... develop rapport, trust, and ethical therapeutic relationships with patients and families
	Elicits and synthesizes info of patients and other professionals <i>Accurately elicit and synthesize information from, and perspectives of, patients and families, colleagues and other professionals</i>																						... accurately elicit and synthesize relevant information and perspectives of patients and families, colleagues, and other professionals
	Convey information to patients and other professionals <i>Accurately convey needed information and explanations to patients and families, colleagues and other professionals</i>																						... accurately convey relevant information and explanations to patients and families, colleagues and other professionals and foster the development of a common understanding on issues, problems and plans to develop a shared plan of care
	Develops common understanding on problems with patients and other professionals <i>Develop a common un-</i>																						... convey effective oral and written information about a medical encounter

	<i>derstanding on issues, problems and plans with patients and families, colleagues and other professionals to develop, provide and follow-up on shared plan of care.</i>																						
	Convey effective information about a medical encounter <i>Convey effective oral and written information</i>																						<b>CAVEAT:</b> Under these competencies identified, one finds 21 general objectives for the communicator



CanMEDS Role	Key competencies <i>Family Medicine Key competencies</i>	M 1	M 1	M 1	M 2	M 2	M 2	M 2	M 3	M 3	M 3	M 3	M 4	M 4	M 4	M 5	M 5	M 5	M 6	M 6	M 6	M 6	SCLO competencies / COLL
Collaborator	Participates in an interprofessional healthcare team <i>Participate in a collaborative team-based model and with consulting health professionals in the care of patients</i>	1	2	3	1	2	3	4	1	2	3	4	1	2	3	1	2	3	1	2	3	4	The physician is able to... ... effectively consult with her/his supervisor and other physicians and healthcare professionals, striving for good teamwork aiming at optimal patient care and at patient safety
	Effectively works with other professionals to prevent and resolve IP conflicts <i>Maintain a positive working environment with consulting health professionals, health care team members, and community agencies</i>																						... contribute effectively to other interdisciplinary team activities
	<i>Engage patients or specific groups of patients and their families as active participants in their care</i>																						<b>CAVEAT:</b> Under these competencies identified, one finds 12 general objectives for the collaborator

CanMEDS Role	Key competencies <i>Family Medicine Key competencies</i>	M 1	M 1	M 1	M 2	M 2	M 2	M 2	M 3	M 3	M 3	M 3	M 4	M 4	M 4	M 5	M 5	M 5	M 6	M 6	M 6	M 6	SCLO competencies / MAN The physician is able to...
Manager	Participates to contribute to the effectiveness of healthcare organizations <i>Participate in activities that contribute to the effectiveness of their own practice, healthcare organizations and systems</i>																						... utilize personal time and resources effectively in order to balance patient care, learning needs, and private activities outside the workplace, and to protect her/his own health ... use effectively under supervision finite healthcare resources, while acting in the best interest of the patient
	Manages practice and career effectively																						... work effectively and efficiently in a healthcare organization
	Allocates <i>finite</i> healthcare resources appropriately																						... effectively utilize information technology for patient care, self-learning and other activities ... assure and improve the quality of care and patient safety
	<i>Serve in administration and leadership roles, as appropriate</i>																						<b>CAVEAT:</b> Under these competencies identified, one finds 18 general objectives for the manager

CanMEDS Role	Key competencies <i>Family Medicine Key competencies</i>	M 1	M 1	M 1	M 2	M 2	M 2	M 2	M 3	M 3	M 3	M 3	M 4	M 4	M 4	M 5	M 5	M 5	M 6	M 6	M 6	M 6	SCLO competencies / HA
		1	2	3	1	2	3	4	1	2	3	4	1	2	3	1	2	3	1	2	3	4	The physician is able to...
Health advocate	Responds to individual patients <i>health needs and issues as part of patient care</i>																						... identify the important determinants of health that affect individual and population health, so as to have basic abilities to contribute to improving individual and societal health in Switzerland
	Responds to health needs of the community <i>that they serve</i>																						... recognize issues, settings, circumstances, or situations which require advocacy on behalf of patients, professions, or society
	Identifies the determinants of health of the population / <i>within their communities</i>																						
	Promotes the health of <i>individual patients, communities and populations</i>																						<b>CAVEAT:</b> Under these competencies identified, one finds 7 general objectives for the health advocate

CanMEDS Role	Key competencies <i>Family Medicine Key competencies</i>	M 1	M 1	M 1	M 2	M 2	M 2	M 2	M 3	M 3	M 3	M 3	M 4	M 4	M 4	M 5	M 5	M 5	M 6	M 6	M 6	M 6	SCLO competencies / SCHO
Scholar	Performs ongoing learning <i>Maintain and enhance professional activities through ongoing self-directed learning based on reflective practice</i>	1	2	3	1	2	3	4	1	2	3	4	1	2	3	1	2	3	1	2	3	4	The physician is able to... ... develop, implement, and document a personal continuing education strategy
	Critically evaluates information and applies this to practice decisions <i>Critically evaluate medical information, its sources, and its relevance to their practice, and apply this information to practice decisions</i>																						... apply basic principles of critical appraisal to sources of medical information. This involves developing scientific curiosity and use of scientific evidence in clinical decision making
	Facilitates the learning of patients, families, and other collaborators <i>Facilitate the education of patients, families, trainees, other health professional colleagues, and the public, as appropriate</i>																						... facilitate the learning of patients, students and other health professionals  ... contribute to the development, dissemination, and translation of new knowledge and practices
	Contributes to the creation, dissemination application and translation of new knowledge and practices																						<b>CAVEAT:</b> Under these competencies identified, one finds 15 general objectives for the scholar

CanMEDS Role	Key competencies <i>Family Medicine Key competencies</i>	M 1	M 1	M 1	M 2	M 2	M 2	M 2	M 3	M 3	M 3	M 3	M 4	M 4	M 4	M 5	M 5	M 5	M 6	M 6	M 6	M 6	SCLO competencies / PROF
		1	2	3	1	2	3	4	1	2	3	4	1	2	3	1	2	3	1	2	3	4	The physician is able to...
Professional	Demonstrates commitment to <i>their</i> patients, profession, society through ethical practice																						... deliver under supervision high quality care, exhibiting appropriate personal and interpersonal professional behavior
	Idem, through <i>participation in</i> profession-led regulation																						... practice medicine in an ethically responsible manner that respects the medical, legal and professional obligations of belonging to a – in many respects - self-regulating body
	Demonstrate a commitment to physician health and sustainable practice																						<b>CAVEAT:</b> Under these competencies identified, one finds 23 general objectives for the professional
	<i>Demonstrate a commitment to reflective practice</i>																						

Keys competencies = CanMed general / family doctor

Concerns doctors

Concerns other professions

## **Framework for the organisation of the seminars**

(example over one weekend)

### First day

08 :30 – 09 :00 Come together

09 :00 – 09 :15 Greetings, introduction

09 :15 – 10 :00 Introduction to interprofessionalism (IP theory)

10 :00 – 10 :45 Presentation of the model and the modules A and B (or A and A')

10 :45 – 11 :45 Forum

11 :45 – 12 :15 Setting up of module A

12 :15 – 13 :30 Lunch

13 :30 – 15 :00 Module A

15 :00 – 15 :30 Break

15 :30 – 16 :15 Debriefing Module A in groups with tutors

16 :15 – 17 :00 General discussion

17 :00 End of the first day of seminar

### Second day

08 :30 – 09 :00 Come together

09 :00 – 09 :15 Greetings, introduction, questions regarding the first day

09 :15 – 10 :00 Introduction to interprofessionalism (IP theory) or conference Hot-spot

10 :00 – 10 :45 Presentation of the model and modules A and B (or A and A')

10 :45 – 11 :45 Forum

11 :45 – 12 :15 Setting up of module B

12 :15 – 13 :30 Lunch

13 :30 – 15 :00 Module B

15 :00 – 15 :30 Break

15 :30 – 16 :15 Debriefing Module B in groups with tutors

16 :15 – 17 :00 General discussion

17 :00 End of seminar

## **Possible topics for the introduction to interprofessional**

1. Perception of a situation: different professional points of view
2. Provide leadership in a collaboration
3. Roles clarification, roles understanding, roles creation
4. Recognition of the equivalence between the collaborating professions
5. Collaborative practice – interprofessional learning : validated influence on the quality of the learning and the quality of the care
6. Group dynamic, group work: strengths and problems
7. Core competencies – competencies profile
8. Conflicts solutions within an interprofessional team
9. Relation between Competences and Entrustable Professional Activities (EPAs)



Appendix 4

## Development matrix of the interprofessionality models – Model 1 (General Practice/primary care structure)

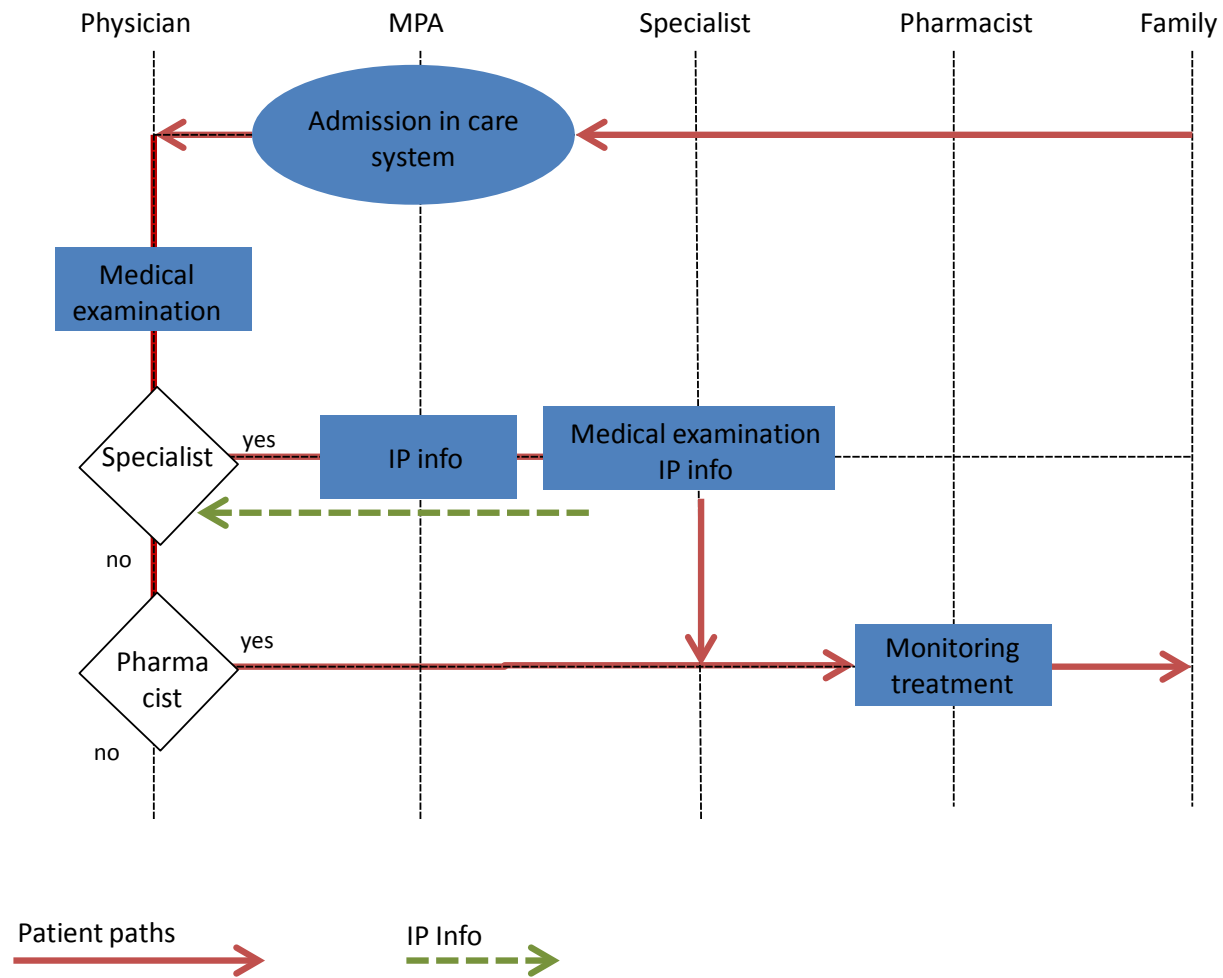
Model 1	Module Practice-Case1	Module Practice-Case2	Module Practice-Case3
Training objectives of Model 1 : At the end of this model, participants must be able to : <ul style="list-style-type: none"> <li>○ Highlight the outlooks and representations of the professions concerned</li> <li>○ Apprehend and integrate the formal and informal forms of interaction, including conflicts potential</li> <li>○ Develop strategies of interprofessional collaboration</li> <li>○ Evaluate if the model can be put into practice in a general practice (GP)</li> </ul>			
<b>Patient trajectory</b>	Admission in care system ; and/or first contact	Admission in care system ; and/or first contact Can also be a case of follow-up care in ambulatory consultation	Pharmacy : 1 <sup>st</sup> contact
<b>Scenario</b>	<ul style="list-style-type: none"> <li>• Pediatric patient in individual practice ; arrives with his/her mother regarding a runny nose for two days</li> </ul>	<ul style="list-style-type: none"> <li>• Elderly patient (&gt;80) with urological disorder, comes with his wife because of early dementia; case of simple urinary infection</li> </ul>	<ul style="list-style-type: none"> <li>• Sporty patient in usual good health, shows signs of lumbago following a wrong move</li> </ul>
<b>Possible composition of the group/team</b>	<ul style="list-style-type: none"> <li>• GP, medical practice assistant (MPA), medical consultant/specialist, family</li> </ul>	<ul style="list-style-type: none"> <li>• GP, medical practice assistant (MPA), pharmacist, family, home care nurses, occupational therapist</li> </ul>	<ul style="list-style-type: none"> <li>• Pharmacist + pharmacy assistant ; physician and MPA</li> </ul>
<b>IP team</b>	<ul style="list-style-type: none"> <li>• Medical practice</li> </ul>	<ul style="list-style-type: none"> <li>• Medical practice + ad hoc network</li> </ul>	<ul style="list-style-type: none"> <li>• Pharmacist + medical practice+ physiotherapist</li> </ul>
<b>Set up, IP activation (by the doctor)</b>	<ul style="list-style-type: none"> <li>• Active</li> </ul>	<ul style="list-style-type: none"> <li>• Active</li> </ul>	<ul style="list-style-type: none"> <li>• Reactive</li> </ul>

<b>Lead team IP</b>	<ul style="list-style-type: none"> <li>Physician</li> </ul>	<ul style="list-style-type: none"> <li>Doctor, family</li> </ul>	<ul style="list-style-type: none"> <li>Pharmacist</li> </ul>
<b>Possible interfaces</b>	<ul style="list-style-type: none"> <li>Patient – doctor</li> <li>Patient – MPA</li> </ul>	<ul style="list-style-type: none"> <li>Patient / family – GP</li> <li>Patient / family – medical assistant</li> <li>GP – home care nurse</li> <li>GP – occupational therapist</li> </ul>	<ul style="list-style-type: none"> <li>Patient – pharmacist / pharmacy assistant</li> <li>Pharmacist – MPA</li> <li>Pharmacist – GP</li> <li>Patient – occupational therapist</li> </ul>
<b>Roles canMEDS</b>	<ul style="list-style-type: none"> <li>Expert</li> <li>Communicator</li> <li>Collaborator</li> </ul>	<ul style="list-style-type: none"> <li>Communicator</li> <li>Collaborator</li> <li>Manager</li> <li>Health Advocate</li> </ul>	<ul style="list-style-type: none"> <li>Expert*</li> <li>Communicator*</li> <li>Professional*</li> </ul> <p>* = for the pharmacist</p>
<b>Key competencies</b>	<ul style="list-style-type: none"> <li><i>Integrate all the CanMEDS-FM roles in order to function effectively as generalists</i></li> <li><i>Provide coordination of the patient care including collaboration and consultation with other health professionals and caregivers</i></li> <li><i>Accurately elicit and synthesize information from, and perspectives of, patients and families, colleagues and other professionals</i></li> <li><i>Participate in a collaborative team-based model and with consulting health professionals in the care of patients</i></li> </ul>	<ul style="list-style-type: none"> <li><i>Develop a common understanding on issues, problems and plans with patients and families, colleagues and other professionals to develop, provide and follow-up on shared plan of care.</i></li> <li><i>Engage patients or specific groups of patients and their families as active participants in their care</i></li> <li><i>Allocates finites healthcare resources appropriately</i></li> <li><i>Responds to individual patients health needs and issues as part of patient care</i></li> </ul>	<ul style="list-style-type: none"> <li>Functions effectively as consultant → patient-centered pharmaceutical care</li> <li>Seeks consultation from other health professionals (own limits)</li> <li>Convey info to patients and other professionals</li> <li>Demonstrates commitment to patients, profession, society through ethical practice</li> </ul>

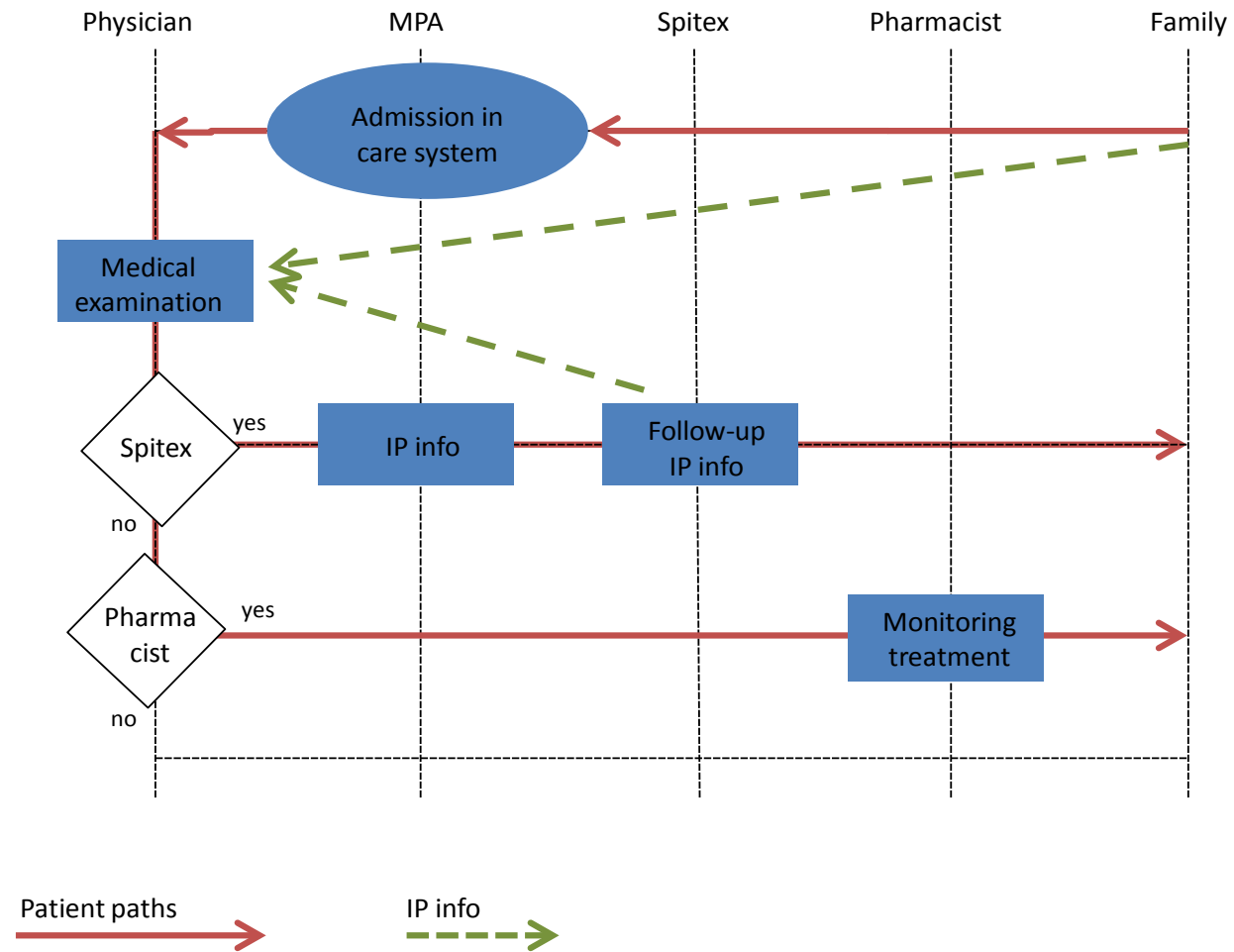
<b>Training objectives</b>	<ul style="list-style-type: none"> <li>• Manage the patient (primary care, admission in care system), identify his/her needs</li> <li>• Recognise the gravity of a situation and know how to refer</li> <li>• Communicate clearly with another professional (oral and written)</li> <li>• Communicate, explain and inform the patient and his/her family</li> <li>• Process admin and medical documents (files, bills)</li> </ul>	<ul style="list-style-type: none"> <li>• Know how to initiate an organisational approach to the team</li> <li>• Know the rules of medical prescription</li> <li>• Discuss and explain a medicine, its effects and its contraindications</li> <li>• Initiate the organisation of home care</li> <li>• Relay relevant information to the collaborators in that context</li> <li>• Information before the patient's discharge: how to react in case of complications, next appointment</li> </ul>	<ul style="list-style-type: none"> <li>• Know how to give clinical pharmaceutical advice (recognise the red flags in the lumbagos)</li> <li>• Know how to advise on the intake of analgesics</li> <li>• Give clear instructions to the patient in case of a consultation (if necessary Medgate consultation)</li> <li>• Inform the doctor correctly, in order to be advised for the patient</li> <li>• Know how to refer to the doctor by summarising a case, if required</li> </ul>
<b>Outcomes (what are we evaluating?)</b>	<ul style="list-style-type: none"> <li>• The medical file and important information</li> <li>• The summary of a case for a professional statement</li> <li>• Bills with the Swiss Tarmed system</li> </ul>	<ul style="list-style-type: none"> <li>• A prescription (by the book)</li> <li>• Whether the needs for help have been identified with other health professionals</li> <li>• The organisational approach : for example planned control</li> </ul>	<ul style="list-style-type: none"> <li>• Communication and information to the patient</li> <li>• Communication and information to the doctor or other health professional</li> <li>•</li> </ul>
<b>Level of education doctor</b>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup>-2<sup>nd</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>• 5<sup>th</sup> – 6<sup>th</sup> year (CAVE := medically complex case)</li> </ul>	<ul style="list-style-type: none"> <li>• 3<sup>rd</sup> – 4<sup>th</sup> year</li> </ul>
<b>Level of education other professions</b>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup> – 2<sup>nd</sup> year Bachelor</li> </ul>	<ul style="list-style-type: none"> <li>• 2<sup>nd</sup> – 3<sup>rd</sup> year Bachelor</li> </ul>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup> – 2<sup>nd</sup> year Bachelor</li> </ul>
<b>Informative method</b>	<ul style="list-style-type: none"> <li>• Group work on case reports</li> <li>• Communication role-play, filmed (ECOS station type) + feedback</li> <li>• Use of the computerised patient file</li> </ul>	<ul style="list-style-type: none"> <li>• Oral role-play (phone)</li> <li>• Group work (write prescriptions)</li> <li>• Use of various documents (prescription, treatment request, communication...)</li> </ul>	<ul style="list-style-type: none"> <li>• Oral role-play (phone)</li> <li>• Communication role-play, filmed (ECOS station type) + feedback</li> </ul>
<b>Group work guidance documents</b>	<ul style="list-style-type: none"> <li>• Medical file extract</li> <li>• Computer research in accordance with eb-medicine</li> <li>• Brief organisational directives (see practice white book)</li> </ul>	<ul style="list-style-type: none"> <li>• Medical file extract</li> <li>• Access to information regarding simple/complicated urinary infections</li> </ul>	<ul style="list-style-type: none"> <li>• No medical file</li> <li>• Knowledge of the “red flags”</li> <li>• Know how to obtain information (for example up-to-date)</li> </ul>

<p><b>Examples of bibliographical references</b></p>	<ul style="list-style-type: none"> <li>• Kreienbühl S. (2012), Ich wollte einfach mehr wissen, Care Management, 5(3) :6-7.</li> <li>• Okie S. (2012), The Evolving Primary Care Physician, N Engl J Med, 366(20):1849-1853)</li> <li>• Weber H., Langewitz W. (2011), Basler Visitenstandard – Chance für eine Gelingende Interaktionstriade patient – Arzt – Pflegefachperson, Psychother Psych Med, 61:193-95.</li> <li>• Hay A., Gorst C., Montgomery A., Peters T., Fahey T. (2007), Validation of a clinical rule to predict complications of acute cough in preschool children, British Journal of General Practice, 57:530-537.</li> </ul>	<ul style="list-style-type: none"> <li>• Schalch E. (2011), Nurse practitioner oder Medizinische Praxiskoordinatorin ?, SÄZ, 92(43):1665-67.</li> <li>• Spirig R. (2012), Nurse practitioner, Medizinische Praxiskoordinatorin oder Best Practice für Patienten ?, SÄZ, 93(8):295-295.</li> <li>• Zanoni U. (2011), Das FUTURO-Betreuungsprogramm: DIE Lösung, PrimaryCare, 11(1):7-8.</li> </ul>	<ul style="list-style-type: none"> <li>• Niquille Charrière A., Ruggli M., Buchmann M., Jordan D., Bugnon O. (2012), Die Auswirkung der Qualitätszirkel Ärzte – Apotheker auf die Medikamentenverschreibungen von 1999 bis 2010, PrimaryCare, 12(2):27-28.</li> </ul>
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### Patient / file paths – Model 1 / Module 1

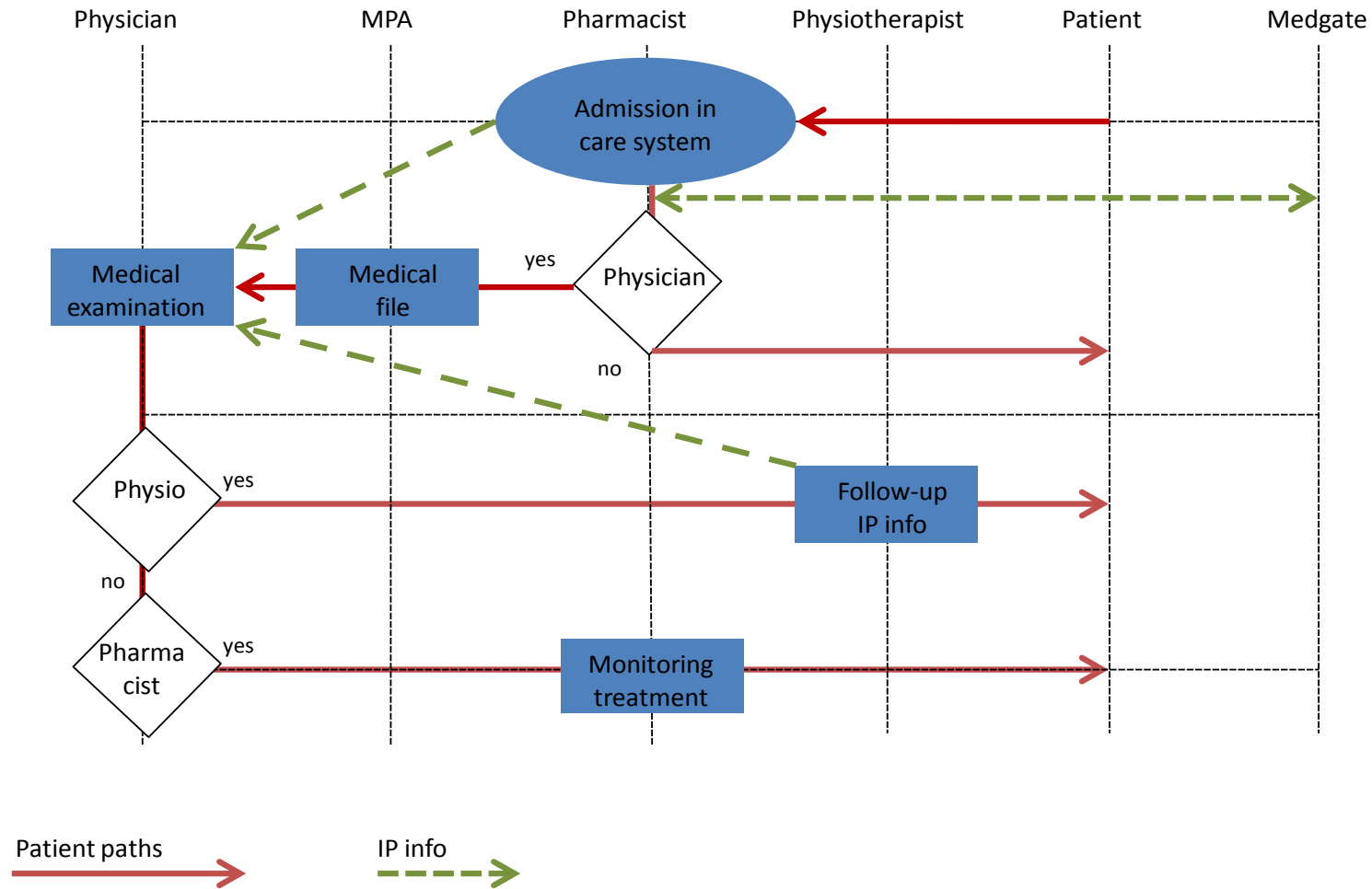


## Patient / file paths – Model 1 / Module 2





### Patient / file paths – Model 1 / Module 3



Appendix 5

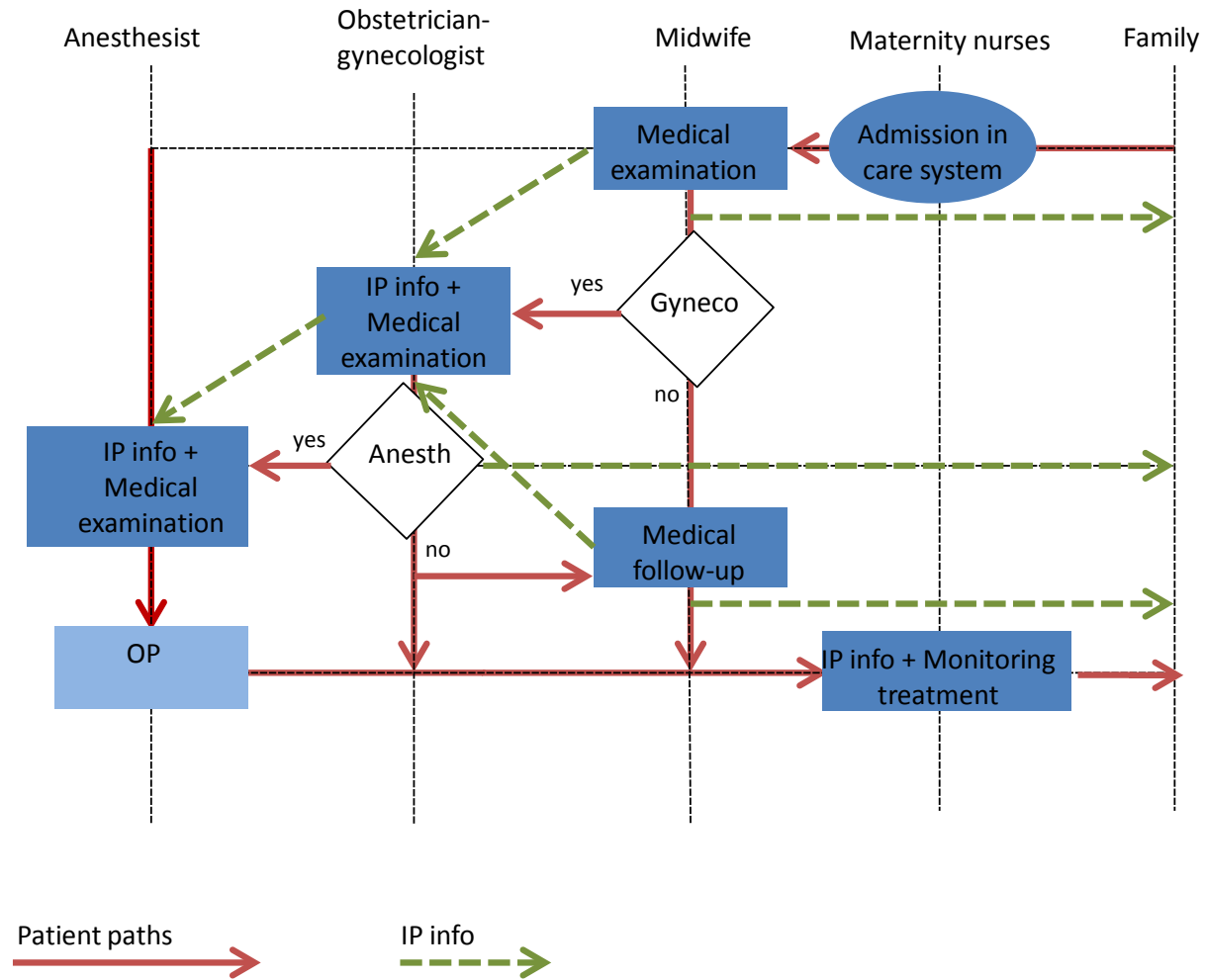
## Development matrix of the interprofessionality models – Model 2 (Emergency situations)

Model 2	Emergency Module-Case1	Emergency Module-Case2	Emergency Module-Case3	Emergency Module-Case4
<p>Training objectives for Model 2 :</p> <p>At the end of this model, the participants must be able to :</p> <ul style="list-style-type: none"> <li>○ Communicate and collaborate efficiently with the other professionals in the team (teamwork, importance of language)</li> <li>○ Apprehend and integrate formal and informal forms of interaction, including potential conflicts</li> <li>○ Take the leadership of the treatment in a situational manner</li> <li>○ Define the fundamental actions for the survival of the patient (safety of the care even when from a distance (for example on the phone) and when overworked)</li> </ul>				
<b>Patient trajectory</b>	Critical evolution of a health condition	Admission in the care system; and/or first contact Post-traumatic patient management	Critical night-time evolution of a hospitalised patient	Admission in care system following a sudden aggravation of the health condition
<b>Scenario</b>	<ul style="list-style-type: none"> <li>• Obstetric patient in maternity; deterioration of the vital parameters following labour (I.e, uterine atony, extensive bleeding).</li> </ul>	<ul style="list-style-type: none"> <li>• Young motorcyclist with road traffic injury (in town or in the countryside)</li> </ul>	<ul style="list-style-type: none"> <li>• 82 year old patient in a care home falls when trying to get up at night, cut on the forehead and multiple bruising</li> </ul>	<ul style="list-style-type: none"> <li>• Child showing signs of a febrile seizure (possible meningitis ?) ; the mother is asking the medical practice for help on the phone</li> </ul>
<b>Possible composition of the group/team</b>	<ul style="list-style-type: none"> <li>• Midwife, gynecologist/obstetrician, anesthesiologist</li> </ul>	<ul style="list-style-type: none"> <li>• Emergency doctor, paramedic, intensive care nurse, the nearest hospital</li> </ul>	<ul style="list-style-type: none"> <li>• Nurse on duty, assistant on duty, surgeon on duty, family</li> </ul>	<ul style="list-style-type: none"> <li>• Pediatrician on duty, MPA, emergency nurse, hospital emergency doctor</li> </ul>
<b>IP team</b>	<ul style="list-style-type: none"> <li>• Maternity team</li> </ul>	<ul style="list-style-type: none"> <li>• Paramedics team or helicopter</li> </ul>	<ul style="list-style-type: none"> <li>• Hospital duty team</li> </ul>	<ul style="list-style-type: none"> <li>• Pediatric emergency team or pediatric primary care practice</li> </ul>
<b>Set up, IP activation (by the doctor)</b>	<ul style="list-style-type: none"> <li>• Active</li> </ul>	<ul style="list-style-type: none"> <li>• Active (emergency team doctor)</li> </ul>	<ul style="list-style-type: none"> <li>• Active (nurse on duty), reactive (doctor on duty)</li> </ul>	<ul style="list-style-type: none"> <li>• Active (pediatrician on duty or MPA)</li> </ul>

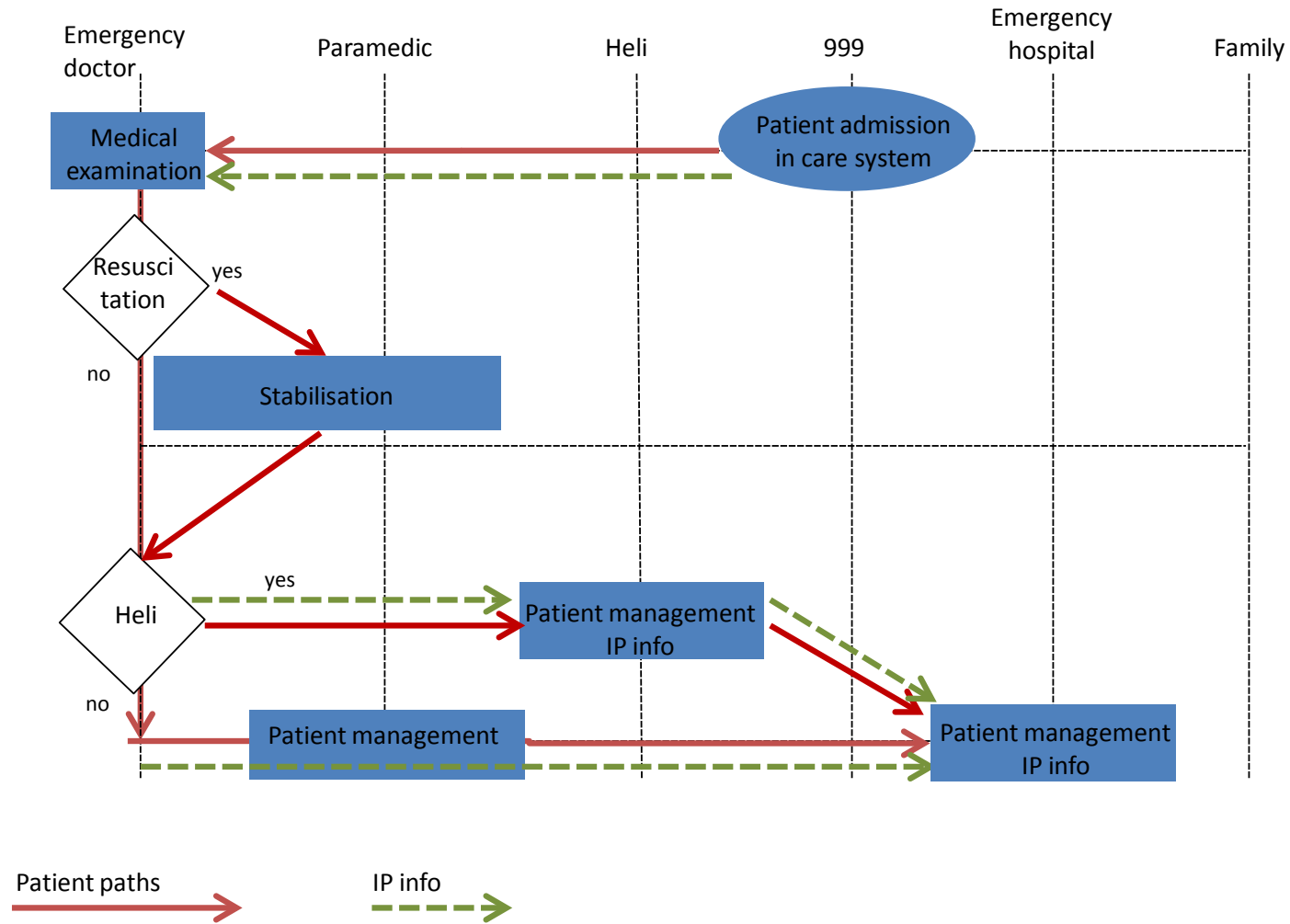
<b>Lead team IP</b>	<ul style="list-style-type: none"> <li>• Midwife, then gynecologist</li> </ul>	<ul style="list-style-type: none"> <li>• Situational</li> </ul>	<ul style="list-style-type: none"> <li>• Nurse on duty, maybe medical consultant (not on site)</li> </ul>	<ul style="list-style-type: none"> <li>• Pediatrician</li> </ul>
<b>Possible interfaces</b>	<ul style="list-style-type: none"> <li>• Patient – maternity</li> <li>• Family (father) – maternity</li> <li>• Midwife – gynecologist</li> <li>• Gynecologist/ midwife – mother – family</li> </ul>	<ul style="list-style-type: none"> <li>• Basic/Advanced life support team – hospital</li> <li>• BLS/ALS team – helicopter</li> </ul>	<ul style="list-style-type: none"> <li>• Establishment – surgeon on duty</li> <li>• Establishment – family</li> </ul>	<ul style="list-style-type: none"> <li>• Pediatric primary care practice – hospital</li> <li>• Emergency services – intensive care</li> <li>• Parents – on-call service</li> </ul>
<b>Roles canMEDS</b>	<ul style="list-style-type: none"> <li>• Expert</li> <li>• Communicator</li> <li>• Collaborator</li> <li>• Scholar</li> </ul>	<ul style="list-style-type: none"> <li>• Expert</li> <li>• Collaborator</li> </ul>	<ul style="list-style-type: none"> <li>• Expert</li> <li>• Communicator</li> <li>• Collaborator</li> <li>• Health advocate</li> </ul>	<ul style="list-style-type: none"> <li>• Expert</li> <li>• Communicator</li> </ul>
<b>Key competencies</b>	<ul style="list-style-type: none"> <li>• Uses medical interventions effectively</li> <li>• <i>Develop rapport, trust and ethical therapeutic relationships with patients and families</i></li> <li>• Participates in an interprofessional healthcare team</li> <li>• <i>Critically evaluate medical information, its sources, and its relevance to their practice, and apply this information to practice decisions</i></li> </ul>	<ul style="list-style-type: none"> <li>• Demonstrates appropriate use of skills</li> <li>• Participates in an interprofessional healthcare team</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Provide coordination of the patient care including collaboration and consultation with other health professionals and caregivers</i></li> <li>• Convey effective information about a medical encounter</li> <li>• Effectively works with other professionals to prevent and resolve IP conflicts</li> <li>• Responds to health needs of the community <i>that they serve</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Attend to complex clinical situations in family medicine effectively</i></li> <li>• <i>Accurately convey needed information and explanations to patients and families, colleagues and other professionals</i></li> </ul>
<b>Training objectives</b>	<ul style="list-style-type: none"> <li>• Confrontation with directives and care protocols</li> <li>• Transmission of pertinent</li> </ul>	<ul style="list-style-type: none"> <li>• Know the work and engagement rules of an ambulance/helicopter rescue team</li> </ul>	<ul style="list-style-type: none"> <li>• Safety of care</li> <li>• Formulation of pertinent professional information</li> <li>• Recognise the dangers</li> </ul>	<ul style="list-style-type: none"> <li>• Recognise and control an emotionally challenging situation</li> <li>• Act as the link/transmission between ambulatory and</li> </ul>

	<ul style="list-style-type: none"> <li>professional information</li> <li>Emergency patient management, basic principles of resuscitation</li> </ul>	<ul style="list-style-type: none"> <li>Extra-hospital on-site resuscitation</li> <li>Communication and collaboration with non-health professionals</li> </ul>	<ul style="list-style-type: none"> <li>of an idiomatic language (specific to one profession)</li> </ul>	<ul style="list-style-type: none"> <li>hospital</li> </ul>
<b>Outcomes (what are we evaluating?)</b>	<ul style="list-style-type: none"> <li>Professional positioning (role) within a team</li> </ul>	<ul style="list-style-type: none"> <li>Definition of lead and changing subordinations during an intervention</li> </ul>	<ul style="list-style-type: none"> <li>Formulation of pertinent and necessary information</li> </ul>	<ul style="list-style-type: none"> <li>Content of the information for the hospital</li> <li>Content of the information for the family</li> </ul>
<b>Level of education doctor</b>	<ul style="list-style-type: none"> <li>5<sup>th</sup> – 6<sup>th</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>1<sup>st</sup> – 2<sup>nd</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>3<sup>rd</sup> – 4<sup>th</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>3<sup>rd</sup> – 4<sup>th</sup> year</li> </ul>
<b>Level of education other professions</b>	<ul style="list-style-type: none"> <li>2-3<sup>rd</sup> bachelor</li> </ul>	<ul style="list-style-type: none"> <li>1-2<sup>nd</sup> bachelor</li> </ul>	<ul style="list-style-type: none"> <li>1-2<sup>nd</sup> bachelor</li> </ul>	<ul style="list-style-type: none"> <li>2-3<sup>rd</sup> bachelor</li> </ul>
<b>Informative method</b>	<ul style="list-style-type: none"> <li>Group work on case reports</li> <li>Communication role-play, filmed + feedback (from patients?)</li> <li>Simulation</li> </ul>	<ul style="list-style-type: none"> <li>Filmed communication role-play</li> <li>Role-play</li> <li>On-site simulation</li> </ul>	<ul style="list-style-type: none"> <li>Team formulation of a common vision of the patient and his or her medical problem</li> <li>Role-play by phone, video conference</li> </ul>	<ul style="list-style-type: none"> <li>Group work on the information to transmit orally</li> </ul>
<b>Group work guidance documents</b>	<ul style="list-style-type: none"> <li>Algorithms and emergency management protocols</li> <li>ANTS-OTAS (anesthesia non technical skills and observational teamwork assessment for surgery)</li> </ul>	<ul style="list-style-type: none"> <li>BLS-ATLS</li> <li>CRM and checklists</li> </ul>	<ul style="list-style-type: none"> <li>To be discussed</li> </ul>	<ul style="list-style-type: none"> <li>To be discussed</li> </ul>

### Patient / file paths – Model 2 / Module 1

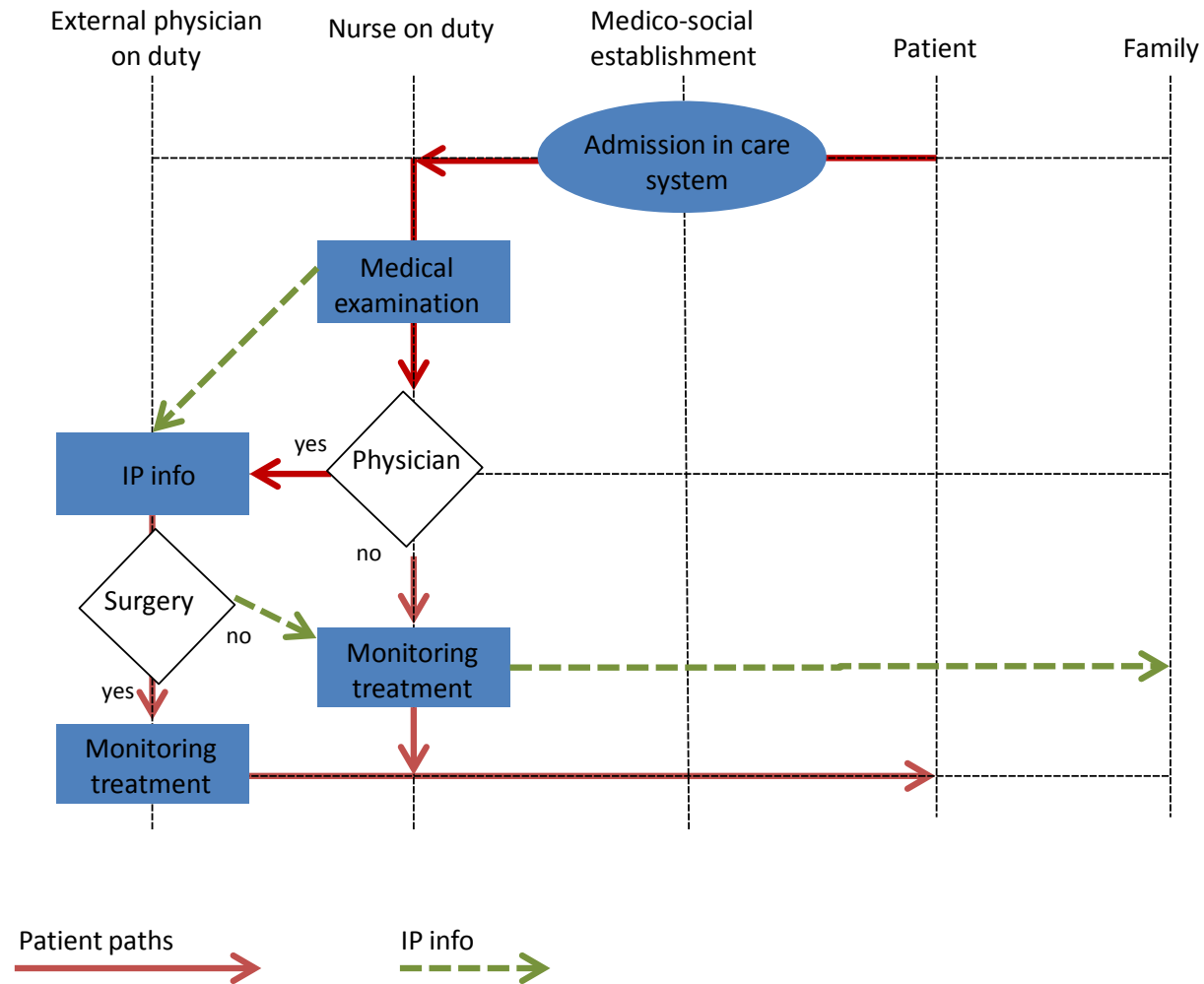


### Patient / file paths – Model 2 / Module 2

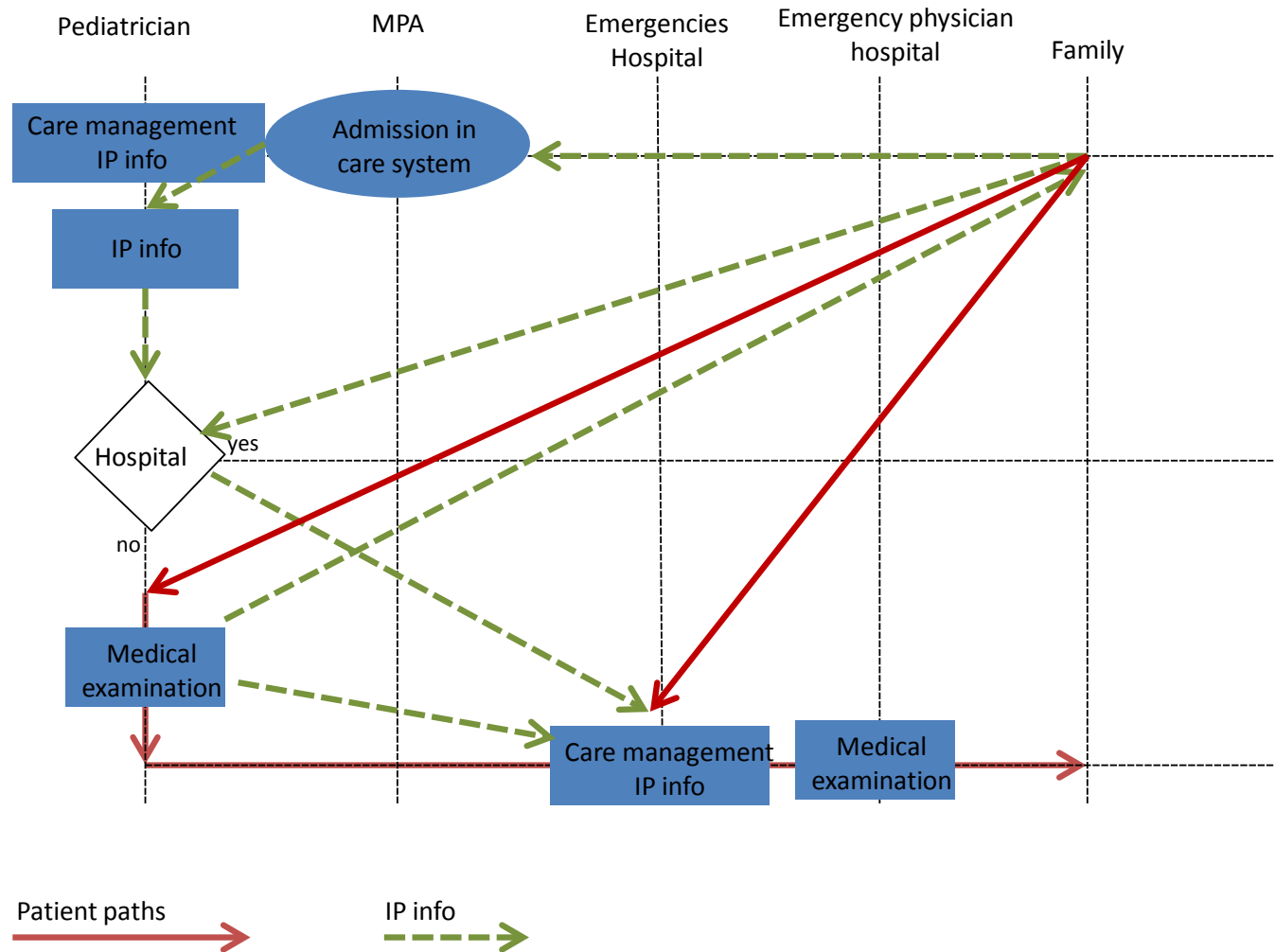




## Patient / file paths – Model 2 / Module 3



### Patient / file paths – Model 2 / Module 4



Appendix 6

## Development matrix of the interprofessionality models – Model 3 (Case sequential IP follow-up)

Model 3	Sequential Module-Case1	Sequential Module-Case2	Sequential Module-Case3	Sequential Module-Case4
Training objectives for model 3 : At the end of this model, the participants must be able to : <ul style="list-style-type: none"> <li>○ Master the language and the professional functioning modes of each profession</li> <li>○ Adapt one's communication to the patient (including taking into account the cultural origin of the patient)</li> <li>○ Adapt one's communication with the other professions</li> <li>○ Know the roles and expertise of the various IP participants of the ambulatory care system</li> </ul>				
<b>Patient trajectory</b>	Discharged from hospital with interprofessional monitoring	Discharged from hospital with interprofessional rehabilitation and psycho-social reintegration	Provide follow-up care of an elderly multimorbid patient after an acute hospital stay	Interprofessional monitoring of a case of chronic pain
<b>Scenario</b>	<ul style="list-style-type: none"> <li>• Obstetric patient after the birth of her first child (might not speak a national language)</li> </ul>	<ul style="list-style-type: none"> <li>• Unemployed young man living alone, road traffic injury with locomotive trauma, post-traumatic psychological after-effect</li> </ul>	<ul style="list-style-type: none"> <li>• 90 year old patient, married, returning home after a head trauma following a fall due to poorly controlled diabetes or a terminal heart failure.</li> </ul>	<ul style="list-style-type: none"> <li>• 35 year old mother, suffering for several years of rheumatoid polyarthritis</li> </ul>
<b>Possible composition of the group/team</b>	<ul style="list-style-type: none"> <li>• Midwife, gynecologist, pediatrician, pediatric care nurse, pharmacist, dietician</li> </ul>	<ul style="list-style-type: none"> <li>• GP, physiotherapist, orthopedist, pharmacist, psychotherapist, occupational therapist, social services</li> </ul>	<ul style="list-style-type: none"> <li>• GP, MPA, dietician, physiotherapist, pharmacist, occupational therapist, geriatric care nurse, diabetologist, cardiologist, medical-social service</li> </ul>	<ul style="list-style-type: none"> <li>• GP, pain physician, medical-social service, pharmacist, physiotherapist, occupational therapist</li> </ul>
<b>IP team</b>	<ul style="list-style-type: none"> <li>• Gynecologist + postpartum network</li> </ul>	<ul style="list-style-type: none"> <li>• Medical practice+ ad hoc post-traumatic network</li> </ul>	<ul style="list-style-type: none"> <li>• Medical practice+ ad hoc network</li> </ul>	<ul style="list-style-type: none"> <li>• IP network</li> </ul>
<b>Set up, IP activation (by the doctor)</b>	<ul style="list-style-type: none"> <li>• Active (via the midwife)</li> </ul>	<ul style="list-style-type: none"> <li>• Active</li> </ul>	<ul style="list-style-type: none"> <li>• Reactive</li> </ul>	<ul style="list-style-type: none"> <li>• Active, reactive</li> </ul>

<b>Lead team IP</b>	<ul style="list-style-type: none"> <li>Independent midwife</li> </ul>	<ul style="list-style-type: none"> <li>Doctor, social assistant</li> </ul>	<ul style="list-style-type: none"> <li>Situational (diabetologist, cardiologist, dietician, pharmacist)</li> </ul>	<ul style="list-style-type: none"> <li>Rheumatologist, family doctor</li> </ul>
<b>Possible interfaces</b>	<ul style="list-style-type: none"> <li>Patient / family – midwife</li> <li>Patient /family – pediatrician or gynecologist</li> <li>Patient – pharmacist</li> <li>midwife – dietician</li> </ul>	<ul style="list-style-type: none"> <li>Patient – GP</li> <li>Patient – primary care practice</li> <li>Patient – social services</li> <li>Social services – psychologist</li> </ul>	<ul style="list-style-type: none"> <li>Patient – GP</li> <li>Patient / family – medico-social service</li> <li>Independent nurse – GP</li> <li>Medical practice– acute care hospital</li> <li>Medical practice – occupational therapist</li> </ul>	<ul style="list-style-type: none"> <li>Patient – GP</li> <li>Patient / family – medico-social service</li> <li>Medical practice– rheumatologist</li> <li>GP – Physiotherapist / occupational therapist</li> </ul>
<b>Roles canMEDS</b>	<ul style="list-style-type: none"> <li>Expert</li> <li>Communicator</li> <li>Collaborator</li> <li>Scholar</li> </ul>	<ul style="list-style-type: none"> <li>Communicator</li> <li>Collaborator</li> </ul>	<ul style="list-style-type: none"> <li>Expert</li> <li>Communicator</li> <li>Health advocate</li> </ul>	<ul style="list-style-type: none"> <li>Health advocate</li> <li>Scholar</li> </ul>
<b>Key competencies</b>	<ul style="list-style-type: none"> <li><i>Provide comprehensive and continuing care throughout the life cycle incorporating preventive, diagnostic and therapeutic interventions</i></li> <li><i>Attend to complex clinical situations in family medicine effectively</i></li> <li><i>Accurately elicit and synthesize information from, and perspectives of, patients and families, colleagues and other professionals</i></li> <li><i>Engage patients or specific groups of patients and their families as active participants in their care</i></li> <li><i>Facilitates the learning of patients, families and other collaborators (=</i></li> </ul>	<ul style="list-style-type: none"> <li>Develops common understanding on problems with patients and other professionals</li> <li><i>Develop a common understanding on issues, problems and plans with patients and families, colleagues and other professionals to develop, provide and follow-up on shared plan of care.</i></li> <li>Convey effective information about a medical encounter</li> <li><i>Convey effective oral and written information</i></li> <li><i>Maintain a positive working</i></li> </ul>	<ul style="list-style-type: none"> <li>Seeks consultation from other health professionals (own limits)</li> <li><i>Provide coordination of the patient care including collaboration and consultation with other health professionals and caregivers</i></li> <li>Develops common understanding on problems with patients and other professionals</li> <li><i>Develop a common understanding on issues, problems and plans with patients and families, colleagues and other</i></li> </ul>	<ul style="list-style-type: none"> <li>Responds to individual patients health needs and issues as part of patient care</li> <li>Contributes to the creation, dissemination, application and translation of new knowledge and practices</li> </ul>

	<i>Health Literacy)</i>	<i>environment with consulting health professionals, health care team members, and community agencies</i>	<i>professionals to develop, provide and follow-up on shared plan of care.</i> <ul style="list-style-type: none"> <li>• <i>Responds to individual patients health needs and issues as part of patient care</i></li> </ul>	
<b>Training objectives</b>	<ul style="list-style-type: none"> <li>• Master the language of the other professions</li> <li>• Know the various potential IP participants in the medical follow-up care for mother and child</li> <li>• Understand communication and multiculturalism in healthcare</li> </ul>	<ul style="list-style-type: none"> <li>• Adapt the communication to (the needs of) the other professions</li> <li>• Know the various potential IP participants in the post-traumatic ambulatory care system</li> </ul>	<ul style="list-style-type: none"> <li>• Involve the relatives who are helping the patient in the care project</li> <li>• Advance directives and legal impact</li> <li>• How to avoid re-hospitalisation by optimising the interprofessional network surrounding the patient</li> </ul>	<ul style="list-style-type: none"> <li>• Acquire interprofessional scientific information on an unfamiliar illness (with the practitioner)</li> <li>• Promote and maintain the IP activity in favour of the patient</li> </ul>
<b>Outcomes (what are we evaluating?)</b>	<ul style="list-style-type: none"> <li>• Recordings of communications</li> <li>• Fictive patient feedback</li> </ul>	<ul style="list-style-type: none"> <li>• Fictive professional or patient feedback</li> <li>• Social rehabilitation management plan</li> </ul>	<ul style="list-style-type: none"> <li>• Audio-video communication documents with relatives</li> <li>• Network and inter-institutional coordination plan</li> </ul>	<ul style="list-style-type: none"> <li>• Formulation of an IP patient management proposal and a medico-social support</li> <li>• Home care assistance criteria</li> </ul>
<b>Level of education doctor</b>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup> – 2<sup>nd</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup>– 2<sup>nd</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>• 3<sup>rd</sup> – 4<sup>th</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup> – 2<sup>nd</sup> year</li> </ul>
<b>Level of education other professions</b>	<ul style="list-style-type: none"> <li>• To be determined</li> </ul>	<ul style="list-style-type: none"> <li>• To be determined</li> </ul>	<ul style="list-style-type: none"> <li>• To be determined</li> </ul>	<ul style="list-style-type: none"> <li>• To be determined</li> </ul>
<b>Informative method</b>	<ul style="list-style-type: none"> <li>• Work in teams on case reports</li> <li>• Professional contacts role-play (phone)</li> </ul>	<ul style="list-style-type: none"> <li>• Work in teams on case reports</li> <li>• Professional contacts role-play (phone)</li> </ul>	<ul style="list-style-type: none"> <li>• Work in teams on case reports</li> <li>• Communication with family and patient role-play</li> </ul>	<ul style="list-style-type: none"> <li>• Group work on the IP approach possibilities of a painful and invalidating chronic illness</li> </ul>

			<ul style="list-style-type: none"> <li>• Network meeting simulation</li> </ul>	
<b>Group work guidance documents</b>	<ul style="list-style-type: none"> <li>• Multicultural communication tools</li> <li>• To be discussed</li> </ul>	<ul style="list-style-type: none"> <li>• SUVA documents? (Swiss national accident insurance)</li> <li>• To be discussed</li> </ul>	<ul style="list-style-type: none"> <li>• Rules on advance directives</li> <li>• To be discussed</li> </ul>	<ul style="list-style-type: none"> <li>• Documents from associations for patients suffering from polyarthritis</li> <li>• To be discussed</li> </ul>
<b>Examples of bibliographical references</b>		<ul style="list-style-type: none"> <li>• Frey P., Goette J., Vitulano D., Rüttsche A., Fattinger K., Stimimann C. (2011), Projekt: Follow-MeD, (UniBE, BIHAM)</li> <li>• SGIM (2002), SGIM-Charta : Zusammenarbeit Spital – Praxis.</li> </ul>	<ul style="list-style-type: none"> <li>• Beer J. (2012), Patienten nach Spitalaustritt begleiten, Care Management, 5(3) :35-36</li> </ul>	<ul style="list-style-type: none"> <li>• McDonnough R.P., Doucette W. (2001), Developing Collaborative Working Relationship Between Pharmacists and Physicians, Journal of the American Pharmaceutical Association, 41(5):682-692.</li> </ul>

Appendix 7



## Development matrix of the interprofessionality models – Model 4 (Multimorbid patient)

Model 4	Module multimorbid -Case1	Module multimorbid -Case2	Module multimorbid-Case3
Training objectives for model 4 : At the end of this model, the participants must be able to : <ul style="list-style-type: none"> <li>○ Define an IP vision of the patient and his/her health problems</li> <li>○ Include the relatives in the care project of the patient, whilst upholding the confidentiality rules</li> <li>○ Anticipate and formulate interprofessional needs</li> <li>○ Anticipate “doctor-shopping”</li> </ul>			
<b>Patient trajectory</b>	Analyse the problems of an elderly multimorbid patient in a primary care practice	Prepare in IP the admission of an elderly multimorbid patient in a medico-social institution	Manage an infectious multimorbid case outside of an institution
<b>Scenario</b>	<ul style="list-style-type: none"> <li>• 83 year widow showing signs of dementia/depression, recurrent cystitis and chronic constipation (including situation of social precariousness).</li> </ul>	<ul style="list-style-type: none"> <li>• 77 year old married patient, showing signs of dementia with aggressiveness, “locomotive difficulties following hip replacement complications</li> </ul>	<ul style="list-style-type: none"> <li>• 67 year old married patient, suffering from urinary MRSA</li> </ul>
<b>Possible composition of the group/team</b>	<ul style="list-style-type: none"> <li>• GP, MPA, postgraduate training assistant, psychologist / psychiatrist, dietician, physiotherapist, pharmacist, occupational therapist, geriatric care nurse</li> </ul>	<ul style="list-style-type: none"> <li>• GP, MPA, pharmacist, geriatric care nurse, occupational therapist, medico-social service, social healthcare establishment (day stay), psychologist / psychiatrist (inc. for the patient's wife)</li> </ul>	<ul style="list-style-type: none"> <li>• GP, infectious disease specialist, independent nurse, pharmacist</li> </ul>
<b>IP team</b>	<ul style="list-style-type: none"> <li>• Medical practice + ad hoc network</li> </ul>	<ul style="list-style-type: none"> <li>• Medical practice + ad hoc network + medico-social establishment (day hospital ?)</li> </ul>	<ul style="list-style-type: none"> <li>• Medical practice + ad hoc network</li> </ul>
<b>Set up, IP activation (by the doctor)</b>	<ul style="list-style-type: none"> <li>• Consultant - active</li> </ul>	<ul style="list-style-type: none"> <li>• Reactive</li> </ul>	<ul style="list-style-type: none"> <li>• Reactive</li> </ul>
<b>Lead team IP</b>	<ul style="list-style-type: none"> <li>• Doctor</li> </ul>	<ul style="list-style-type: none"> <li>• Family of the patient, medico-social service (Spitex)</li> </ul>	<ul style="list-style-type: none"> <li>• Infectious disease specialist</li> </ul>

<b>Possible interfaces</b>	<ul style="list-style-type: none"> <li>• Patient – GP</li> <li>• GP – specialists</li> <li>• GP– MPA</li> <li>• GP – postgrad assistant</li> <li>• Patient – postgrad assistant</li> <li>• Pharmacist – medical practice (MPA)</li> <li>• Medical practice – occupational therapist</li> </ul>	<ul style="list-style-type: none"> <li>• Patient's wife – GP</li> <li>• GP – psychiatrist</li> <li>• Patient's wife – medico-social institute</li> <li>• GP – hospital specialist</li> <li>• Medical practice - occupational therapist</li> </ul>	<ul style="list-style-type: none"> <li>• Patient – GP</li> <li>• Patient – pharmacist</li> <li>• Patient – nurse</li> <li>• Patient – family</li> <li>• GP – infectious disease specialist</li> </ul>
<b>Roles canMEDS</b>	<ul style="list-style-type: none"> <li>• Expert</li> <li>• Communicator</li> </ul>	<ul style="list-style-type: none"> <li>• Communicator</li> <li>• Collaborator</li> <li>• Manager</li> </ul>	<ul style="list-style-type: none"> <li>• Expert</li> <li>• Communicator</li> <li>• Health advocate</li> <li>• Scholar</li> <li>•</li> </ul>
<b>Key competencies</b>	<ul style="list-style-type: none"> <li>• Performs assessment to his/her practice</li> <li>• <i>Demonstrate proficient assessment and management of patients using the patient-centered clinical method</i></li> <li>• Uses medical interventions effectively</li> <li>• <i>Attend to complex clinical situations in family medicine effectively</i></li> <li>• Elicits and synthesizes info of patients and other professionals</li> <li>• <i>Accurately elicit and synthesize information from, and perspectives of, patients and families, colleagues and other professionals</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Develop a common understanding on issues, problems and plans with patients and families, colleagues and other professionals to develop, provide and follow-up on shared plan of care.</i></li> <li>• Effectively works with other professionals to prevent and resolve IP conflicts</li> <li>• <i>Maintain a positive working environment with consulting health professionals, health care team members, and community agencies</i></li> <li>• <i>Serve in administration and leadership roles, as appropriate</i></li> </ul>	<ul style="list-style-type: none"> <li>• ... foster infection control</li> <li>• ... promote health of patients and the community</li> <li>• Convey effective information about a medical encounter</li> <li>• <i>Convey effective oral and written information</i></li> <li>• <i>Responds to health needs of the community that they serve (SCLO: recognize issues, settings, circumstances or situations which require advocacy on behalf of patients, professions or society</i></li> <li>• Facilitates the learning of patients, families, and other collaborators</li> <li>• <i>Facilitate the education of patients, families, trainees, other health professional colleagues, and the public, as appropriate</i></li> </ul>
<b>Training objectives</b>	<ul style="list-style-type: none"> <li>• Define an IP vision of the patient and his/her health problems</li> <li>• Notions of delegation of responsibility</li> </ul>	<ul style="list-style-type: none"> <li>• Anticipate and formulate the interprofessional needs</li> <li>• Perceptions and expectations of the</li> </ul>	<ul style="list-style-type: none"> <li>• Involve the relatives helping the patient in the care project</li> <li>• By extension, know the legislation relating to epidemics and the legislation on</li> </ul>

	in patient care management	relatives, answer by IP planning (including doctor-shopping prevention)	transmissible disease
<b>Outcomes (what are we evaluating?)</b>	<ul style="list-style-type: none"> <li>Case management plan (documentation for the patient)</li> <li>Conduct of a network meeting</li> </ul>	<ul style="list-style-type: none"> <li>Case management plan (IP documentation)</li> <li>Maintaining of confidentiality rules and patient dignity</li> </ul>	<ul style="list-style-type: none"> <li>Instructions to the patient and the relatives</li> <li>Infections and other communicable disease management protocols</li> </ul>
<b>Level of education doctor</b>	<ul style="list-style-type: none"> <li>5<sup>th</sup> – 6<sup>th</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>4<sup>th</sup> – 5<sup>th</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>4<sup>th</sup> – 5<sup>th</sup> year</li> </ul>
<b>Level of education other professions</b>	<ul style="list-style-type: none"> <li>3<sup>rd</sup> year Bachelor or Master</li> </ul>	<ul style="list-style-type: none"> <li>3<sup>rd</sup> year Bachelor</li> </ul>	<ul style="list-style-type: none"> <li>3<sup>rd</sup> year Bachelor or Master</li> </ul>
<b>Informative method</b>	<ul style="list-style-type: none"> <li>Work in teams on case reports</li> <li>Professional contacts role-play (within a medical practice)</li> </ul>	<ul style="list-style-type: none"> <li>Work in teams on case reports</li> <li>IP work role-play</li> <li>Patients actors (OSCE - objective structured clinical examination)</li> </ul>	<ul style="list-style-type: none"> <li>Work in teams on case reports</li> <li>Communication with family and patient role-play</li> </ul>
<b>Group work guidance documents</b>	<ul style="list-style-type: none"> <li>To be discussed</li> </ul>	<ul style="list-style-type: none"> <li>To be discussed</li> </ul>	<ul style="list-style-type: none"> <li>Lep (epidemic disease act)</li> <li>Declaration systems</li> <li>To be discussed</li> </ul>
<b>Examples of bibliographical references</b>	<ul style="list-style-type: none"> <li>Huard P., Schaller P. (2010), Améliorer la prise en charge des pathologies chroniques – 1. Problématique, Pratiques et Organisation des Soins, 41(3) :237-45.</li> <li>Idem, 2. Stratégie, Pratiques et Organisation des Soins, 41(3) :247-255.</li> <li>Schulz-Nieswandt F. (2007), Innovationen in der Gesundheitsversorgung in Zürich, Sociale Medizin 4.07 :19-22.</li> <li>Bonsack S. (2011), Leben mit Lanzeiterkrankung – Projekt Leila, Care Management, 4(5):8-10.</li> </ul>	<ul style="list-style-type: none"> <li>Salonen P., Haverinen R. (2003), Providing integrated health and social care for older persons in Finland, Procure, National Report.</li> <li>Jenkins R. (2012), Ich arbeite jeden Tag vernetzt, Care Management, 5(3):9-10.</li> <li>Steurer-Stey C., Rosemann T. (2010), Das Chronic Care Model – Ein konkreter Ansatz für eine Verbesserung der Versorgung chronisch kranker Menschen, UniZH (internet)</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>

NB : in this context, could also be considered the case of a polymorbid patient, needing home care (for example, following an hemiplegia), whose care would mainly be provided by Spitex in collaboration with the members of a health care team and, if required, the intervention of members of other health professions. The medical follow-up, often provided by a GP, is done more on an ad hoc basis (Spitex 3x/week, physiotherapy and occupational therapy, when needed, a medical visit every six months or when needed, for example if new medical problems appear or an aggravation in the patient's health. For cases like these, the care is not an element of the follow-up of medical treatment but an important factor of continuity. Consequently, the lead could for example be provided by Spitex. The medical intervention would ideally be based on the evaluation and information from nursing professionals, who would initiate it.

Appendix 8

## Development matrix of the interprofessionality models – Model 5 (Palliative care)

Model 5	Module palliative-Case1	Module palliative-Case2	Module palliative-Case3
Training objectives of model 5 : At the end of this model, the participants must be able to : <ul style="list-style-type: none"> <li>○ Define the care framework (including legal and ethical aspects, etc.) of a patient receiving palliative care</li> <li>○ Adapt to the approach of the patient's death ("end of life" talks)</li> <li>○ Accept the non care (advance decisions)</li> <li>○ Define and guarantee the needs for confidentiality</li> </ul>			
<b>Patient trajectory</b>	Patient in a medical practice	Patient returning at home for end of life (possibility/wish for assisted suicide)	End of life patient needing to be admitted in a palliative care establishment
<b>Scenario</b>	<ul style="list-style-type: none"> <li>• Practice work relating to a patient with untreatable chronic condition inquiring about the advance decisions</li> </ul>	<ul style="list-style-type: none"> <li>• Patient with terminal cancer, at home for end of life, palliative care management, in particular pain</li> </ul>	<ul style="list-style-type: none"> <li>• Mother with AIDS at the end of triple therapy or patient suffering from terminal breast cancer</li> </ul>
<b>Possible composition of the group/team</b>	<ul style="list-style-type: none"> <li>• GP</li> <li>• Collaborators of the medical practice</li> <li>• Dietician</li> </ul>	<ul style="list-style-type: none"> <li>• GP, oncologist, minister of religion, medico-social service, expert in assisted suicide<sup>1,2</sup>, independent nurse, psychologist / psychiatrist, dietician</li> </ul>	<ul style="list-style-type: none"> <li>• GP, social services, palliative care specialist, palliative care nurse</li> </ul>
<b>IP team</b>	<ul style="list-style-type: none"> <li>• Medical practice</li> </ul>	<ul style="list-style-type: none"> <li>• Medical practice + ad hoc network</li> </ul>	<ul style="list-style-type: none"> <li>• Medical practice + social services + palliative care network</li> </ul>

<sup>1</sup>OFSP / CDS (2012), Concept national de formation « soins palliatifs et formation » - document stratégique 2013 – 2015 (recommandations)  
<http://www.bag.admin.ch/themen/gesundheitspolitik/13764/13769/index.html?lang=fr>

<sup>2</sup>Pereira J., Porchet F., Schröter C., Gamondi Palmesino C., Pautex S., Bucher B., Waldmann E., Zaug K. (2012): Compétences et niveaux de formation en soins palliatifs en Suisse: progression du travail du Groupe Formation. Internet : [http://www.palliative.ch/fileadmin/user\\_upload/palliative/fachwelt/E\\_Standards/E\\_2\\_5\\_Publikation\\_Kompetenzen\\_f.pdf](http://www.palliative.ch/fileadmin/user_upload/palliative/fachwelt/E_Standards/E_2_5_Publikation_Kompetenzen_f.pdf)

<b>Set up, IP activation</b> (by the doctor)	<ul style="list-style-type: none"> <li>• Consultant</li> </ul>	<ul style="list-style-type: none"> <li>• Reactive</li> </ul>	<ul style="list-style-type: none"> <li>• Reactive</li> </ul>
<b>Lead team IP</b>	<ul style="list-style-type: none"> <li>• Physician or experienced MPA</li> </ul>	<ul style="list-style-type: none"> <li>• Patient and family</li> <li>• Expert in assisted suicide</li> </ul>	<ul style="list-style-type: none"> <li>• Social services, patient</li> </ul>
<b>Possible interfaces</b>	<ul style="list-style-type: none"> <li>• IP work within the medical practice</li> </ul>	<ul style="list-style-type: none"> <li>• Family – GP</li> <li>• GP – oncologist</li> <li>• Family – psychologist</li> <li>• Independent nurse – medico-social services</li> <li>• Dietician – family</li> </ul>	<ul style="list-style-type: none"> <li>• GP – palliative care institute</li> <li>• GP – social services</li> <li>• Family - GP</li> <li>• GP– psychologist (personal support)</li> </ul>
<b>Roles canMEDS</b>	<ul style="list-style-type: none"> <li>• Expert</li> <li>• Collaborator</li> <li>• Professional</li> </ul>	<ul style="list-style-type: none"> <li>• Communicator</li> <li>• Collaborator</li> <li>• Manager</li> <li>• Professional</li> </ul>	<ul style="list-style-type: none"> <li>• Communicator</li> <li>• Professional</li> </ul>
<b>Key competencies</b>	<ul style="list-style-type: none"> <li>• Uses medical interventions effectively</li> <li>• <i>Attend to complex clinical situations in family medicine effectively</i></li> <li>• Participates in an interprofessional healthcare team</li> <li>• <i>Participate in a collaborative team-based model and with consulting health professionals in the care of patients</i></li> <li>• Demonstrates commitment to <i>their</i> patients, profession, society through ethical practice</li> </ul>	<ul style="list-style-type: none"> <li>• Develops relationship with patients and families</li> <li>• <i>Develop rapport, trust and ethical therapeutic relationships with patients and families</i></li> <li>• Develops common understanding on problems with patients and other professionals</li> <li>• <i>Develop a common understanding on issues, problems and plans with patients and families, colleagues and other professionals to develop, provide and follow-up on shared plan of care.</i></li> <li>• Effectively works with other professionals to prevent and resolve IP conflicts</li> <li>• <i>Maintain a positive working</i></li> </ul>	<ul style="list-style-type: none"> <li>• Develops relationship with patients and families</li> <li>• <i>Develop rapport, trust and ethical therapeutic relationships with patients and families</i></li> <li>• Demonstrates commitment to <i>their</i> patients, profession, society through ethical practice</li> <li>• Demonstrate a commitment to physician health and sustainable practice</li> </ul>

		<p><i>environment with consulting health professionals, health care team members, and community agencies</i></p> <ul style="list-style-type: none"> <li>• <i>Allocates finites healthcare resources appropriately</i></li> <li>• Demonstrates commitment to <i>their</i> patients, profession, society through <i>participation in</i> profession-led regulation</li> </ul>	
<b>Training objectives</b>	<ul style="list-style-type: none"> <li>• Accept the non care (advance decisions)</li> <li>• Guarantee patient dignity</li> </ul>	<ul style="list-style-type: none"> <li>• Define the care framework (including legal and ethical aspects, etc.)</li> </ul>	<ul style="list-style-type: none"> <li>• Adapt to the approach of the patient's death</li> </ul>
<b>Outcomes (what are we evaluating?)</b>	<ul style="list-style-type: none"> <li>• Advance decisions documents</li> <li>• Formulation of confidentiality rules within a medical practice</li> </ul>	<ul style="list-style-type: none"> <li>• Situational answer to the patient's needs</li> </ul>	<ul style="list-style-type: none"> <li>• Concept of psychological support from the doctor and his/her care team</li> </ul>
<b>Level of education doctor</b>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup> – 2<sup>nd</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>• 5<sup>th</sup> – 6<sup>th</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>• 3<sup>rd</sup> – 4<sup>th</sup> year</li> </ul>
<b>Level of education other professions</b>	<ul style="list-style-type: none"> <li>• 1-2<sup>nd</sup> bachelor</li> </ul>	<ul style="list-style-type: none"> <li>• 3<sup>rd</sup> year Bachelor or Master</li> </ul>	<ul style="list-style-type: none"> <li>• 3<sup>rd</sup> year Bachelor or Master</li> </ul>
<b>Informative method</b>	<ul style="list-style-type: none"> <li>• Group work on advance directives</li> </ul>	<ul style="list-style-type: none"> <li>• Group work on case reports, hosted by a palliative care specialist</li> <li>• Debriefing by a specialist (palliative care/psychology)</li> </ul>	<ul style="list-style-type: none"> <li>• Group work on possibilities of psychological support and counseling for the family</li> <li>• Work on documents from a hospice (I.e: Fondation Riveneuve VD, Switzerland)</li> </ul>



<b>Group work guidance documents</b>	<ul style="list-style-type: none"> <li>Directives Swiss Academy of Medical Science (SAMS) and Swiss Physicians' Association (FMH)</li> </ul>	<ul style="list-style-type: none"> <li>Directives based on the Liverpool Care Pathway (LCP)</li> <li>Directives SAMS</li> </ul>	<ul style="list-style-type: none"> <li>Cancer pain management according to WHO</li> </ul>
<b>Examples of bibliographical references</b>	<ul style="list-style-type: none"> <li>Müller-Busch H.C. (2010), Ernährung und Ernährungstherapie unter palliativen Aspekten – ambulant und stationär, Zeitschrift für Palliativmedizin, 11 :291-303.</li> <li>OFSP – CDS (2010), Directives nationales concernant les soins palliatifs.</li> <li>Marie Curie Palliative Care Institute (2010), What is the Liverpool care pathway for the dying patient (LCP) ?, Liverpool, UK.</li> </ul>	<ul style="list-style-type: none"> <li>OMS (1997), Traitement de la douleur cancéreuse, 2<sup>ème</sup> édition</li> <li>Wasner M., Roser T., Fittkau-Tännesmann B., Borasio G.D. (2008), Spiritualität und psychosoziale Begleitung als wichtige Lehrinhalte, Deutsches Ärzteblatt, 105(13):674-5.</li> <li>Fox L.A. (2008), The impact of interprofessional communication / collaboration during times of transition for cancer patients with advanced disease, Master thesis of nursing, University of Toronto, Canada.</li> </ul>	<ul style="list-style-type: none"> <li>Cina C. (2012), Solothurn : erster Kanton mit einheitlichem Betreuungsplan für Schwerkranken, SÄZ, 93(31/32):1123-24.</li> <li>Weber A. (2012), Mehr Lebensqualität vor dem Tod, Care Management, 5(3):33-34.</li> <li>Bastami et al. (2011), Interprofessionale Kommunikationsprozesse – schwierige Gesprächssituationen mit Patientinnen und Patienten, Ethik Med, DOI 10.1007/s00481-011-0177-1.</li> </ul>

Appendix 9

## Development matrix of the interprofessionality models – Model 6 (Prevention)

Model 6	Module Prevention-Case1	Module Prevention-Case2	Module Prevention-Case3	Module Prevention-Case4
Training objectives of model 6 : At the end of this model, the participants must be able to : <ul style="list-style-type: none"> <li>○ Understand the interprofessional decision making in a practice or an institution</li> <li>○ Explain the role and importance of IP in the taking of preventive measures for a group of patients at risk</li> <li>○ Know the role of non-conventional medicine in health maintenance (primary prevention) for some groups of patients at risk</li> </ul>				
<b>Patient trajectory</b>	Management of the groups of patients at risk in a medical practice	Admission in the care system for a check-up	Risk management for the patients of an institution (secondary prevention)	Collaboration within a primary prevention for patients at risk
<b>Scenario</b>	<ul style="list-style-type: none"> <li>• Opinion forming on themes of primary prevention (vaccines, childbirth preparation, AIDS, smoking, alcohol) prepared by the assistant in postgraduate education</li> </ul>	<ul style="list-style-type: none"> <li>• Adult patient in the context of a check-up or primary prevention (screening campaign launched by the public health authorities and the pharmacists/physicians) ; found to have mild diabetes or excess weight</li> </ul>	<ul style="list-style-type: none"> <li>• IP setting up of a concept of prevention of falls in the elderly (in a medico-social institution)</li> </ul>	<ul style="list-style-type: none"> <li>• Elderly patient asks for advice to health maintenance at the end of a routine consultation with her GP</li> </ul>
<b>Possible composition of the group/team</b>	<ul style="list-style-type: none"> <li>• Family doctor, MPA, consultant/specialist in prevention, teachers, social workers</li> </ul>	<ul style="list-style-type: none"> <li>• Family doctor, MPA, dietician, specialist, pharmacist</li> </ul>	<ul style="list-style-type: none"> <li>• Doctor, physiotherapist, occupational therapist, nurses and healthcare team, cleaners, administration, interior designer (?)</li> </ul>	<ul style="list-style-type: none"> <li>• Doctor, non-conventional medicine specialist, MPA, independent nurse, pharmacist, physiotherapist, occupational therapist</li> </ul>
<b>IP team</b>	<ul style="list-style-type: none"> <li>• Medical practice</li> </ul>	<ul style="list-style-type: none"> <li>• Medical practice + ad hoc network</li> </ul>	<ul style="list-style-type: none"> <li>• Care home staff + doctor</li> </ul>	<ul style="list-style-type: none"> <li>• Medical practice + ad hoc network (inc. Spitex)</li> </ul>
<b>Set up, IP activation (by the doctor)</b>	<ul style="list-style-type: none"> <li>• Consultant</li> </ul>	<ul style="list-style-type: none"> <li>• Active</li> </ul>	<ul style="list-style-type: none"> <li>• Consultant</li> </ul>	<ul style="list-style-type: none"> <li>• Active</li> </ul>

<b>Lead team IP</b>	<ul style="list-style-type: none"> <li>• Postgraduate assistant</li> </ul>	<ul style="list-style-type: none"> <li>• Dietician</li> <li>• Patient</li> </ul>	<ul style="list-style-type: none"> <li>• Head nurse of the establishment, occupational therapist</li> </ul>	<ul style="list-style-type: none"> <li>• Physiotherapist, MPA</li> </ul>
<b>Possible interfaces</b>	<ul style="list-style-type: none"> <li>• Patient – practice</li> <li>• Pharmacist – practice</li> <li>• Patient – non-conventional therapist</li> <li>• Medical practice– prevention network</li> </ul>	<ul style="list-style-type: none"> <li>• Patient – cabinet</li> <li>• Cabinet – medical specialist</li> <li>• Patient – health specialist</li> </ul>	<ul style="list-style-type: none"> <li>• Administration – nurses</li> <li>• Nurses – cleaners</li> <li>• Patients – physiotherapist / occupational therapist</li> <li>• Doctor – patient</li> <li>• Nurses – family</li> </ul>	<ul style="list-style-type: none"> <li>• Patient – cabinet</li> <li>• Patient – pharmacist</li> <li>• Patient – independent nurse / physiotherapist / occupational therapist</li> </ul>
<b>Roles canMEDS</b>	<ul style="list-style-type: none"> <li>• Expert</li> <li>• Health advocate</li> <li>• Professional</li> </ul>	<ul style="list-style-type: none"> <li>• Health advocate</li> <li>• Communicator</li> <li>• Scholar</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborator</li> <li>• Health advocate</li> </ul>	<ul style="list-style-type: none"> <li>• Health advocate</li> </ul>
<b>Key competencies</b>	<ul style="list-style-type: none"> <li>• <i>Establish and maintain clinical knowledge, skills and attitudes required to meet the needs of the practice and patient population served.</i></li> <li>• Responds to health needs of the community that they serve</li> <li>• <i>Promotes the health of individual patients, communities and populations</i></li> <li>• <i>Demonstrate a commitment to reflective practice</i></li> </ul>	<ul style="list-style-type: none"> <li>• Convey informations to patients and other professionals</li> <li>• Responds to individual patients health needs and issues as part of patient care</li> <li>• <i>Facilitates the education of patients, families, trainees, other health professional colleagues and the public, as appropriate</i></li> </ul>	<ul style="list-style-type: none"> <li>• <i>Engage patients or specific groups of patients and their families as active participants in their care</i></li> <li>• Identifies the determinants of health of the population / within their communities</li> </ul>	<ul style="list-style-type: none"> <li>• <i>Promotes the health of individual patients, communities and populations</i></li> </ul>
<b>Training objectives</b>	<ul style="list-style-type: none"> <li>• IP awareness of medico-social problems (such as domestic violence)</li> <li>• Understand the interprofessional decision</li> </ul>	<ul style="list-style-type: none"> <li>• Communicate to the patient the options of tertiary prevention</li> </ul>	<ul style="list-style-type: none"> <li>• Participate in the taking of interprofessional preventive measures for a group of patients at risk</li> </ul>	<ul style="list-style-type: none"> <li>• Know the role of non-conventional medicine in health maintenance (primary prevention) for</li> </ul>

	making in a practice			certain groups of patients
<b>Outcomes (what are we evaluating?)</b>	<ul style="list-style-type: none"> <li>• Patient info sheets on certain prevention themes</li> </ul>	<ul style="list-style-type: none"> <li>• Medical follow-up plan of a fictive patient (Case report)</li> </ul>	<ul style="list-style-type: none"> <li>• IP setting up of a concept of prevention of falls in the elderly (in a medico-social establishment)</li> </ul>	<ul style="list-style-type: none"> <li>• Proposition of a Tai chi class as falls prevention</li> <li>• Preparation of an evening of information/display for groups at risk on the possibilities of non conventional medicine</li> </ul>
<b>Level of education doctor</b>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup>-2<sup>nd</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>• 3<sup>rd</sup> – 4<sup>th</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup>-2<sup>nd</sup> year</li> </ul>	<ul style="list-style-type: none"> <li>• 1<sup>st</sup>-2<sup>nd</sup> year</li> </ul>
<b>Level of education other professions</b>	<ul style="list-style-type: none"> <li>• To be determined</li> </ul>	<ul style="list-style-type: none"> <li>• To be determined</li> </ul>	<ul style="list-style-type: none"> <li>• To be determined</li> </ul>	<ul style="list-style-type: none"> <li>• To be determined</li> </ul>
<b>Informative method</b>	<ul style="list-style-type: none"> <li>• Group work on documentation</li> </ul>	<ul style="list-style-type: none"> <li>• Group work on a medical problem (case report)</li> <li>• Role play with fictive patient</li> </ul>	<ul style="list-style-type: none"> <li>• Search of documentation on risk and groups at risk (falls)</li> <li>• Group work on documentation</li> </ul>	<ul style="list-style-type: none"> <li>• Group work on documentation</li> <li>• Search for a speaker in non-conventional medicine for an information evening</li> </ul>
<b>Group work guidance documents</b>	<ul style="list-style-type: none"> <li>• Documentation on primary, secondary and tertiary prevention on various topic</li> <li>• CEDAW documentation on domestic violence</li> </ul>	<ul style="list-style-type: none"> <li>• Prevention directives (FOPH, specialty college, etc.)</li> <li>• Documents for patients information</li> <li>• Publications on the positive effects of prevention</li> </ul>	<ul style="list-style-type: none"> <li>• Plan and organisation of work in a care home</li> <li>• Literature on falls prevention</li> </ul>	<ul style="list-style-type: none"> <li>• To be collected by the group at the beginning of the IP work, depending on the subject chosen</li> </ul>

<p><b>Examples of bibliographical references</b></p>	<ul style="list-style-type: none"> <li>• BAG (008), Nationales Programm Ernährung und Bewegung 2008 – 2012 (NPEB).</li> <li>• Bastino C., Zraggen C., Pralong G., Bosshard W. (2010), Introduction d'une démarche interdisciplinaire dans la prise en charge des patients diabétiques par une infirmière clinicienne, Hôpital de Lavaux, Internet.</li> </ul>		<ul style="list-style-type: none"> <li>• Robinovitch S.N., Feldman F., Yang Y., Schonnop R., Leung P.M., Sarraf T., Sims-Gould J., Loughin M. (2013), Video capture of the circumstances of falls in elderly people residing in long-term care : an observational study, Lancet, 381 :47-54.</li> </ul>	<ul style="list-style-type: none"> <li>• Stück A.E., Meyer K., Born S. (2009), Gesundheitsförderung und Prävention im Alter, Obsan. Internet: <a href="http://www.obsan.ch">www.obsan.ch</a></li> </ul>
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Appendix 10

## Appendix 10: Summary of non-medical IP education/training in Switzerland (As of 22.10.2013)<sup>3</sup>

### Undergraduate Education

Institution	Subject	IP Fields	Education Level	Doctor Integration	Status	Notes
School of Higher Education St Gallen (FHS)	IP Education (Lectures, etc.)	BSc Nursing BSc Social Work BSc Economics Administration	AB	--	Under development	
FHS St Gallen	Clinical assessment (Practice module)	MSc Nursing	AB	Masters level	Under development	
University of Applied Sciences and Arts of Southern Switzerland (SUPSI)	Manage complex cases (acute, PC, Rehab, home care)	BSc Nursing BSc Physio BSc Occupational Therapy (OT)	AB	--		
SUPSI	Palliative Care Course A2	BSc Nursing BSc Physio BSc OT	AB	--		
Lausanne University (UNIL)	Introduction IP	Nursing, Physio, Midwifery, Medical Radiology Technician (MRT)	AB	Bachelor		Weekend
Bern University of Applied Sciences (BFH)	Basic knowledge IP	Stud Physio Stud Nursing Stud Midwifery Stud Dietetics	AB	--		Listen together
BFH	IP Health project	Stud Physio Stud Nursing Stud Midwifery Stud Dietetics	AB	--		Do together
BFH	Health professions in dialogue	Stud Physio Stud Nursing Stud Midwifery Stud Dietetics	AB	Med stud (7.Semester)	Under development	Analyse and correlate together
Careum	Module "IP communication process – difficult communication situations with patients"	HF Nursing	AB	Med Faculty ZH	Since 2011	Ongoing at Careum educ centre
Careum	"Care in emergencies" module	HF Nursing	AB	Med Faculty ZH	Yearly since 2007	Ongoing at Careum educ centre
Careum	Motivational talks on IPC	Stud Healthcare Dental hygienist,	AB	Med Faculty ZH	In implement	In cooperation between med

<sup>3</sup>On the basis of a feedback collected by the working group



		Surgery technicians/nurse, Biomedical lab technician, MRT, Nursing			ation	faculty and Careum educ centre / foundation elective
Berner Bildungszentrum Nursing	IP Education (Practical training)	Stud Nursing	AB (1 <sup>st</sup> year)	Stud med (elective course)		Mutual presentation, common patients care, common, common anatomy lessons
BZ Nursing	IP Education (Practical training)	Stud Nursing	AB (2 <sup>nd</sup> year)	Stud med (Bachelor level)		Communication training, simulated patients, conflict solving, applied anatomy (i.e. during ultrasonography)
Zurich University of Applied Sciences (ZHAW G)	Scientific work, IPC health and society	BSc Ergo, BSc Midwifery, BSc Nursing, BSc Physio	AB	--	Implementation and development	Different mandatory modules (27 ECTS credits)
University Basel Institute for Nursing Science (INS)	Clinical Assessment	MSc Nursing Science	AB	Teaching BSc/MSc levels	Established lectures for MSc Nursing	
UNIBas INS*	eHealth	MSc Nursing Science	AB	Possibly BSc/MSc levels	Pilot in Winter-semester 2013	
UNIBas INS*	Patients safety and quality of care	MSc Nursing Science	AB	Possibly BSc/MSc levels	Established lectures for MSc Nursing	Curriculum following the WHO directives for patient safety IPE
Uni Geneva	IP Module	5 courses HES GE	AB			Yearly since 2013
Uni Geneva	IP Module 2	Stud. Nursing, Midwives, MRT	AB	Master	Simulated practices workshop	See CIS = IP centre for health simulation (Med faculty Geneva / HES GE

LV = Lectures

## Postgrade and continuing Education

Institution	Subject	IP Fields	Education level	Doctor integration	Status	Notes
Kalaidos University of Applied Sciences	DAS Palliative Care	Dipl Nursing Theol Dipl Physio	WB	Doctor		
Kalaidos	DAS Wound Care	Dipl Nursing	WB	Doctor		
SUPSI	CAS Palliative Care	MSc Nursing MSc Physio MSc OT Psy, Social Work., Theol	WB	Masters level (after course A or A2)		
SUPSI	DAS Health management	Dipl Nursing Dipl Physio Dipl OT Dipl TMR Dipl Paramedic.	WB	--		
SUPSI	MAS Health management	Every profession with DAS or Uni qualification	WB	Doctor		
CHUV	Bad news	BSc Nursing BSc Midwifery	WB	Masters level		
CHUV	Vital emergencies	BSc Nursing	WB	Doctor		Simulator
CHUV	Psycho oncology workshop	Dipl Nursing Social Work, Psychol., Theol	WB	Doctor		
BFH	Diverse CAS		WB			
BFH	Diverse specialist courses		WB	In part		I.e Adherence Therapy
Gesellsch. Für klinische Ernährung (GESKE)	Course certificate in Clinical Nutrition		WB	Doctor		Sponsorship SVDE
University Hospital Basel (Clinical Trial Unit CTU)	Clinical Research 1  Clinical trial Planning and conduct	Clinical research professionals with basic or intermediate level of experience  Graduates form life sciences/ medicine without experience in clinical research	CAS	Post graduate level	Registration	
University Hospital Basel (CTU)	Clinical Research 2  Advanced clinical trial management	Clinical research professionals with intermediate to higher level of experience	CAS	Post graduate level)	Registration	
University Hospital Basel (CTU)	Clinical Trial Practice and Management	Clinical research professionals with basic or	DAS	Post graduate level	Planning stage	

		intermediate level of experience; Graduates from life sciences/ medicine without experience in clinical research			Pre-Registration	
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Appendix 11

## **Annexe 11: Specific competencies for health professions**

### **Specific competencies for nursing**

In the text that follows, the generic term of "nurse" is used. Two types of courses lead to it. One of which is School of higher professional education type and the other University of Applied Sciences type (HES). For the first one, the competencies were defined according to CanMeds roles, whereas for the second one, a curriculum framework recognised by SERI was established on a national level, in which the work processes were described precisely. In the context of this report, the University of Applied Sciences bachelor level is mainly taken into account, whereas the master level is not usually considered, except for Advanced Nurse Practitioners ANP).

Further details can be found here:

[http://www.kfh.ch/uploads/dkfh/doku/2\\_Compétences\\_finales\\_pour\\_les\\_professions\\_de\\_la\\_santé\\_HE\\_S\\_annexe.pdf](http://www.kfh.ch/uploads/dkfh/doku/2_Compétences_finales_pour_les_professions_de_la_santé_HE_S_annexe.pdf)

[http://www.kfh.ch/uploads/dkfh/doku/2\\_KFH\\_\\_\\_Projekt\\_Abschlusskompetenzen\\_in\\_FH\\_Gesundheitsberufe\\_Anhang.pdf](http://www.kfh.ch/uploads/dkfh/doku/2_KFH___Projekt_Abschlusskompetenzen_in_FH_Gesundheitsberufe_Anhang.pdf)

### **Specific competencies for advanced practice nurses (APN)**

Details can be found here:

Reglementierung der Pflegeexpertin APN: Zusammenfassung und Gründe für die separate Reglementierung. Positionspapier. Schweizer Berufsverband der Pflegefachfrauen und Pflegefachmänner (SBK), swiss ANP, Schweizer Verein für Pflegewissenschaft (VfP), CHUV Institut universitaire de formation et recherche en soins (IUFRS). Bern, 10. Oktober 2012

[http://www.sbk-](http://www.sbk-asi.ch/webseiten/deutsch/0default/pdf/2012%2010%2010%20%20Registrierung%20ANP.pdf)

[asi.ch/webseiten/deutsch/0default/pdf/2012%2010%2010%20%20Registrierung%20ANP.pdf](http://www.sbk-asi.ch/webseiten/deutsch/0default/pdf/2012%2010%2010%20%20Registrierung%20ANP.pdf)

### **Specific competencies for midwives**

Details can be found here:

[http://www.kfh.ch/uploads/dkfh/doku/2\\_Compétences\\_finales\\_pour\\_les\\_professions\\_de\\_la\\_santé\\_HE\\_S\\_annexe.pdf](http://www.kfh.ch/uploads/dkfh/doku/2_Compétences_finales_pour_les_professions_de_la_santé_HE_S_annexe.pdf)

[http://www.kfh.ch/uploads/dkfh/doku/2\\_KFH\\_\\_\\_Projekt\\_Abschlusskompetenzen\\_in\\_FH\\_Gesundheitsberufe\\_Anhang.pdf](http://www.kfh.ch/uploads/dkfh/doku/2_KFH___Projekt_Abschlusskompetenzen_in_FH_Gesundheitsberufe_Anhang.pdf)

### **Specific competencies for physiotherapy**

Details can be found here:

[http://www.kfh.ch/uploads/dkfh/doku/2\\_Compétences\\_finales\\_pour\\_les\\_professions\\_de\\_la\\_santé\\_HE\\_S\\_annexe.pdf](http://www.kfh.ch/uploads/dkfh/doku/2_Compétences_finales_pour_les_professions_de_la_santé_HE_S_annexe.pdf)

[http://www.kfh.ch/uploads/dkfh/doku/2\\_KFH\\_\\_\\_Projekt\\_Abschlusskompetenzen\\_in\\_FH\\_Gesundheitsberufe\\_Anhang.pdf](http://www.kfh.ch/uploads/dkfh/doku/2_KFH___Projekt_Abschlusskompetenzen_in_FH_Gesundheitsberufe_Anhang.pdf)

### **Specific competencies for occupational therapy**

Details can be found here:

[http://www.kfh.ch/uploads/dkfh/doku/2\\_Compétences\\_finales\\_pour\\_les\\_professions\\_de\\_la\\_santé\\_HE\\_S\\_annexe.pdf](http://www.kfh.ch/uploads/dkfh/doku/2_Compétences_finales_pour_les_professions_de_la_santé_HE_S_annexe.pdf)

[http://www.kfh.ch/uploads/dkfh/doku/2\\_KFH\\_\\_\\_Projekt\\_Abschlusskompetenzen\\_in\\_FH\\_Gesundheitsberufe\\_Anhang.pdf](http://www.kfh.ch/uploads/dkfh/doku/2_KFH___Projekt_Abschlusskompetenzen_in_FH_Gesundheitsberufe_Anhang.pdf)

## Specific competencies for dieticians

Details can be found here:

[http://www.kfh.ch/uploads/dkfh/doku/2\\_Competences\\_finales\\_pour\\_les\\_professions\\_de\\_la\\_sante\\_HE\\_S\\_annexe.pdf](http://www.kfh.ch/uploads/dkfh/doku/2_Competences_finales_pour_les_professions_de_la_sante_HE_S_annexe.pdf)

[http://www.kfh.ch/uploads/dkfh/doku/2\\_KFH\\_Projekt\\_Abschlusskompetenzen\\_in\\_FH\\_Gesundheitsberufe\\_Anhang.pdf](http://www.kfh.ch/uploads/dkfh/doku/2_KFH_Projekt_Abschlusskompetenzen_in_FH_Gesundheitsberufe_Anhang.pdf)

## Specific competencies for medical practice assistants MPA

Profession profile according to *Verordnung für VO Medizinische PraxisassistentInnen* (BBT). Detailed information can be found in the *Bildungsplan zur Verordnung über die berufliche Grundbildung Medizinische Praxisassistentin / Medizinischer Praxisassistent* du BBT.

The medical practice assistants of the EFZ level (Federal Certificate of Capacity) especially master the following tasks and demonstrate it with the following:

- They welcome and care for patients, gather necessary information, document them and pass them on. They communicate adequately with the patients and external partners, in the local language as well as in at least one foreign language.
- They do therapeutic and diagnostic work and processes on their own under the supervision of a doctor. They support and relieve the doctor in his/her work. For this they dispose of an adequate knowledge in medicine and natural sciences.
- They master the management processes in the fields of administration, correspondence and organisation and thus ensure the proper functioning of the practice and the external communication.
- They work according to the legal prescriptions and the standards of the practice in the sectors of hygiene, environment and health and safety.

The objectives and requirements for the basic training are described in the form of **core competencies**:

The professional competencies includes knowledge and skills in the following fields :

- Dealing with patients;
- Diagnostic and therapeutic processes;
- Practice management;
- Medical basic knowledge;
- Hygiene, health safety and promotion at work, environmental protection;
- Foreign language.

The methodical competencies includes knowledge and skills in the following fields:

- Work technique and problem solving;
- Process orientated, integrated thinking and performing;
- Information and communications strategies;
- Learning strategies for lifelong learning;
- Advice technique;
- Quality focused care.

The social and personal competencies includes the following fields:

- ethical behavior with patients;
- Secrecy and discretion;
- independent performance;
- lifelong learning;
- Ability to communicate and empathy;
- Ability to handle conflict situations;
- Team work;

- Good manners and presentation;
- Ability to cope with pressure;
- Sensibility for environmental accountability and respectful handling of resources and wastes;

### **Specific competencies for other professions**

For certain modules, it might be useful to widen the range of professions to be taken into account in an institutional or an ad hoc IPC network (depending on the regions). In that case, several documents that specify the professional profiles or the training objectives are available. In particular :

- Nursing expert
- Expert in infection prevention
- Sport science and kinesiology
- Health expert
- Healthcare assistant
- Long-term care specialist
- Social worker (with vocational health and social work assistant)

Further informations can be found in the documents or on the following websites:

- Obsan (2012), Datenlage bei den nicht universitären Gesundheitsberufe.
- SBFI, höhere Berufsbildung
- OdA Santé
- [www.savoirsocial.ch](http://www.savoirsocial.ch)