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Report to the VDGM group.

Qualitative analysis of the communications to the WONCA group Vasco De Gama annual meeting 2018, Porto.

Abstract

Background: Past and current General Practice/ Family Medicine (GP/FM) meeting data is often lost. Or, when available, it is not managed in a proper way, making the retrieval of specific abstracts difficult. We argue that GP/FM suffers from a deficit of knowledge management (KM) which hinders the visibility as a scientific corpus.

Aim: Qualitative analysis of the 97 communications (including keynotes) exchanged during the 2018 congress of the WONCA Vasco De Gama group.

Methods : The analysis is performed with the software ATLAS.ti by an unique researcher, using the Core Content Classification of General Practice (3CGP) as an indexing system. The main domains of interest and the preoccupation of the participaning General Practitioners (GPs) have been examined, identified and coded using 3CGP, a mix of the International Classification of Primary Care (ICPC-2) and Q-Codes, a new classification of contextual features in General Practice / Family Medicine.

Results: The full database of communications is presented with the results of the coding process. The 97 communications allow one to identify 380 coding with 119 different Q-Codes and 102 coding with 79 ICPC-2 codes.

Discussion:

The purpose of this study is to identify areas of interest for physicians presenting at the VDGM 2018 Annual Conference. For comparison purposes, four 3CGP coded congresses are available. Various relations between communications, quotations and codes are presented and analyzed.

Conclusion: Qualitative techniques give a new visibility to young GPs' domains of interest. We hope to open a new era of Knowledge Management of the productions of GPs, by giving a better visibility to the intensive and extensive responsibilities of GPs in Primary Care. We also hope, through this study, to make young GPs proud of the work they have done and open new horizons to them.

Background

Young General Practitioners and family physicians, family doctors in their first five years of practice, in-training family doctors, or medical students are organized worldwide through their memberships of the World Organization of Family Doctors (WONCA). Such groups exist on each continent. They are called Waynakay in South America, Polaris in the States, Rajakumar Movement in Asia Pacific, Spice Route in South Asia, AfriWon in the Africa region, Al Razi movement the East Mediterranean region and Vasco de Gama (VDGM) in Europe.
(http://www.globalfamilydoctor.com/groups/YoungDoctorsMovements.aspx)

These groups organize activities and annual meetings which often follow the ongoing way of Information technology, relying to Twitter and Youtube and out of the influence of the industry [1]. The material gathered for the meetings is usually accessible through a dedicated website. Data from past meetings is often lost. When available, it is not managed in a proper way, making the retrieval of specific abstracts difficult. We argue that General Practice/ Family Medicine (GP/FM) suffers from a deficit of Knowledge Management (KM), including uniform

requirements for manuscripts [2], which hinders the visibility as a scientific corpus. Work done by enthusiastic General Practitioners (GPs) cannot be exchanged outside the time of a congress. Organization of congresses is not standardized. Networks of researchers are not easy to organize due to lack of information about the interest of the participants. Neither the evolution of the interest nor the quality of the interventions can be assessed[3]. To face this KM deficit we propose a management of abstracts and an indexing system which allows for the retrieval and gathering of works done in appropriate manageable knowledge bases.

The Q-Codes taxonomy for indexing GP/FM contextual content was developed by a multi-disciplinary team of knowledge engineers, linguists and general practitioners, through a qualitative and iterative analysis of 1702 abstracts from six GP/FM conferences using Atlas.ti software [4, 5]. In the ongoing Q-Codes version 2.5, a total of 187 concepts representing professional aspects of GP/FM, were identified and organised in a taxonomy of 9 domains.

The International Classification of Primary Care, now in its second edition (ICPC-2) is the de facto standard taxonomy to classify activities of family doctors facing patient's health problems. The theoretical framework used to assign inclusion criteria in this classification is based on the presence of four general categories of diagnosis in primary care: aetiological and pathological disease entities, pathophysiological conditions, nosological diagnoses (syndromes), and symptom diagnoses[6]. ICPC also includes a taxonomy of the main process in Primary Care (PC). This part of ICPC is known as the ICPC-Process and has been revised by the WONCA International classification Committee (WICC) in 2016. So far, ICPC-2 is available in 21 languages and ICPC-Process 2016 in 4 languages. Refer to the web page of the WICC for more information (http://www.ph3c.org).

ICPC-2 and ICPC Process have been diverted from their initial use, the clinics, to form a clinical indexing system for identification of clinical concepts in communications of GPs during congresses or for the same use in indexing Master's theses in GP/FM. The association of ICPC-2 and Q-Codes is proposed under the name Core Content Classification in General Practice/Family Medicine (3CGP)(see http://3cgp.docpatient.net/).

The 3CGP databases are available on the server of the Department of Medical Information and Informatics (D2IM) of the University of Rouen, France (free access with inscription) on www.hetop.eu[7]. These taxonomies are published as online terminological resources, using semantic web techniques and Web Ontology Language (OWL). Each Q-Code is identified with a Uniform Resource Identifier (URI), which is a stable and standardized Uniform Resource Locator (URL)[8], and provided with preferred terms, formal definitions in ten languages (pt, es, en, fr, nl, ko, vi, tr, ka, de) and search filters for Medline and web searches. The Q-Codes taxonomy has its dedicated server (www.hetop.eu/Q).

Currently, 3CGP is also used by tree Universities in French-speaking Belgium (www.mgtfe.be) and at the University of Coimbra, Portugal for the coding of master's theses[9]. In Uruguay it serves to standardize a virtual bibliographic repository [10]. Q-Codes has also been tested to annotate Second Opinion Requests from rural Brazilian primary healthcare providers [11].

Aim

We present here the results of the management of abstracts and qualitative coding of the 97 communications (including keynotes) exchanged during the 2018 congress of the WONCA Vasco De Gama group- i.e., the young European doctors, held in Porto, Portugal in end of January 2018.

Methods.

The analysis is performed by a unique researcher using 3CGP as an indexing system. The main domains of interest and the preoccupation of the participaning GPs have been examined, identified and coded using 3CGP.

How does the coding process work with 3CGP?

The texts available online on the website of VDGM were transcribed manually in an Excel database of which different fields are: ID, identifier of the abstract; Type, type of communications such as Case report, Workshops, Posters, etc., full text of the abstract and 3CGP codes attributed after careful analysis using ATLAS.ti (http://atlasti.com), a Computer-assisted qualitative data analysis software (CAQDAS). This database is available in a separate file (see below).

The ICPC-2 codes, including the Process codes associated with the recently published Q-Codes, under the acronym 3CGP, have been used as coding system. There are 734 ICPC-2 codes and 187 Q-Codes in 3CGP. In the present text, each 3CGP concept, either clinical or contextual, is highlighted by its own Internet address in a URI format, which allows the reader to go deeper into the understanding and knowledge associated with the concept. As an example the concept QD22 comprehensiveness is linked to its URI http://www.hetop.eu/hetop/Q?la=en&rr=CGP_QC_QD22 or in French http://www.hetop.eu/hetop/Q?la=fr&rr=CGP_QC_QD22, or in any of the chosen language. To change the language, replace la=en by the corresponding ISO-639-1 code for the languages, ie la=pt for Portuguese, es for Spanish, nl for Dutch etc. [12]

Example of coding of a workshop abstract

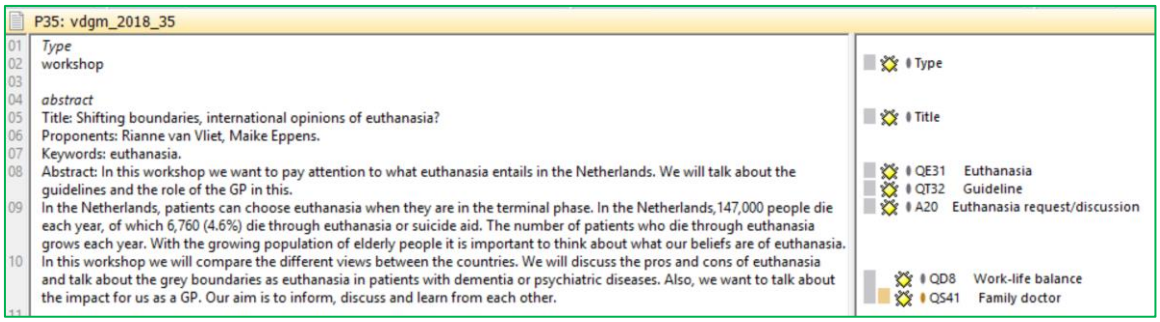


Figure 1 VDGM 2018 workshop abstract showing the coding process with 3CGP (Software ATLAS-ti)

In the screen copy presenting the VDGM abstract #35 (Fig1), dealing with the question of Euthanasia in the Netherlands, both Q-Codes and ICPC-2 are used to identify the concept of euthanasia. The QE31 Euthanasia identifies Euthanasia as a contextual dimension of the GP's job while the ICPC-2 code A20 Euthanasia request/discussion reflects the clinical issue expressing the choice or the discussion with the patient. The abstract deals also with QT32 Guideline and with the personal impact on the GPs. As the ethical question is not specifically quoted in the text, the code QD8 work life balance has been chosen to address the question of the impact on the QS41 Family doctor. QE1 Personal ethical view could have been chosen too if more precise information had been available.

Example of coding a IMRAD formatted Poster abstract

The abstract presented in Figure 2 deals with secondary prevention in a primary care setting. It raises a qualitative assurance issue- i.e., an intervention study to check abnormal test outcomes in the follow up of patients. Doing this shows how to enhance the continuity of care by an appropriate management of practice. (ICPC-2 codes: 2, Q-Codes: 6).

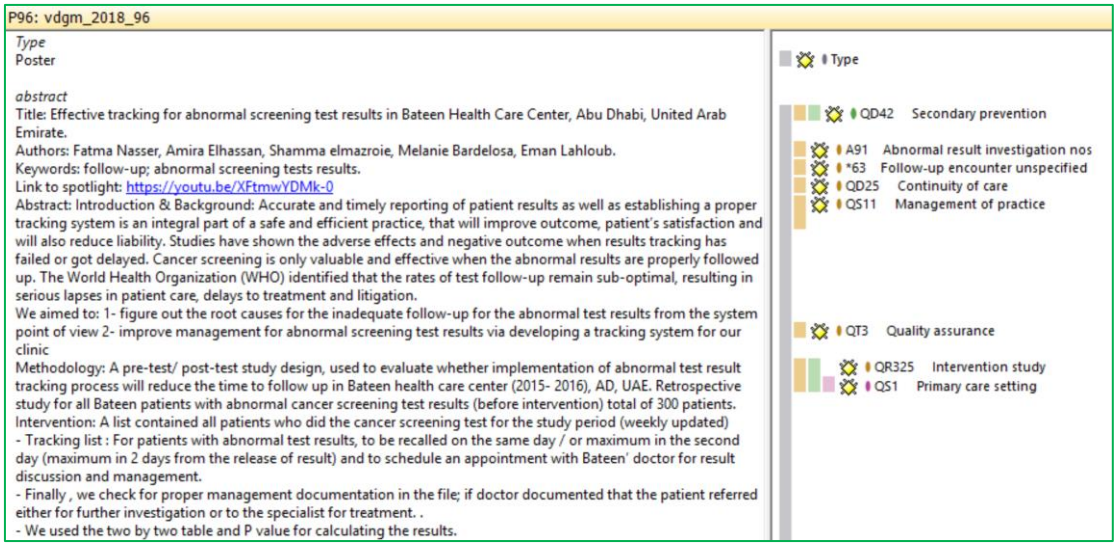


Figure 2 VDGM 2018 abstract (partial view –results excluded) showing the coding process with 3CGP (Software ATLAS-ti)

Coding keywords

The keywords of the intervening expert (Figure 3) have been translated into 4 Q-Codes, which one can consider as an attempt to standardize keywords in GP/FM. Note that a standardized keyword takes the name of *descriptor*. One could consider Q-Codes as a proposal of a set of hierarchically managed descriptors specific to GP/FM. ICPC-2 is a stable classification tool, and evolution to ICPC-3 is ongoing. Q-Codes are presented here in version 2.5. The concepts identified so far are managed in a hierarchical way. It is inevitable and hoped that new concepts will emerge from the discussion of GPs. Each coding exercise is also a search for yet unidentified concepts or emerging ones.

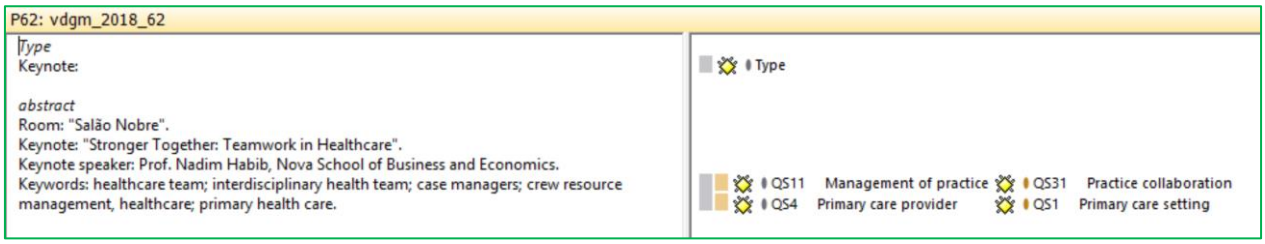


Figure 3 VDGM 2018 keynote announcement showing the coding process with 3CGP (Software ATLAS-ti)

Not yet identified concept or emerging ones

The letters QO represent the Q-Codes, Other. The code QO4 indicates an item which could be considered as a quote for a new code in 3CGP. The use of QO4 allows for the discovery of yet unidentified, missing or emerging concepts which have to be included in version 2.6. The hope of the coder is two-fold: find unidentified concepts and be able to introduce them in the taxonomy, assessing the robustness of the taxonomic construct. We discuss this issue further later on.

Link between identifier of abstract, concepts, codes and quotations

In the following Figure 4, the sentences read (yellow) in the communications are quoted (gray) and linked to the choosen subcategory QD22 Comprehensiveness (green) of which the category QD2 Doctor as a carer is shown here (blue) . The first number of the quote is the identifier of the communication (software ATLAS.ti). For instance, the notation (31:4) means that the Code QD22 has been chosen to identify the sentence beginning with *The health*

problems shows to be.. in the abstract number 31 at the line 4. The scope note for *Comprehensiveness* in the HeTOP database is; *the practice of continuing comprehensive care is the concurrent prevention and management of multiple physical and emotional health problems of a patient over a period of time in relationship to family, life events and environment. (AAFP).* Thus the 3 abstracts #31, 39 and 42 are considered addressing the same concept.

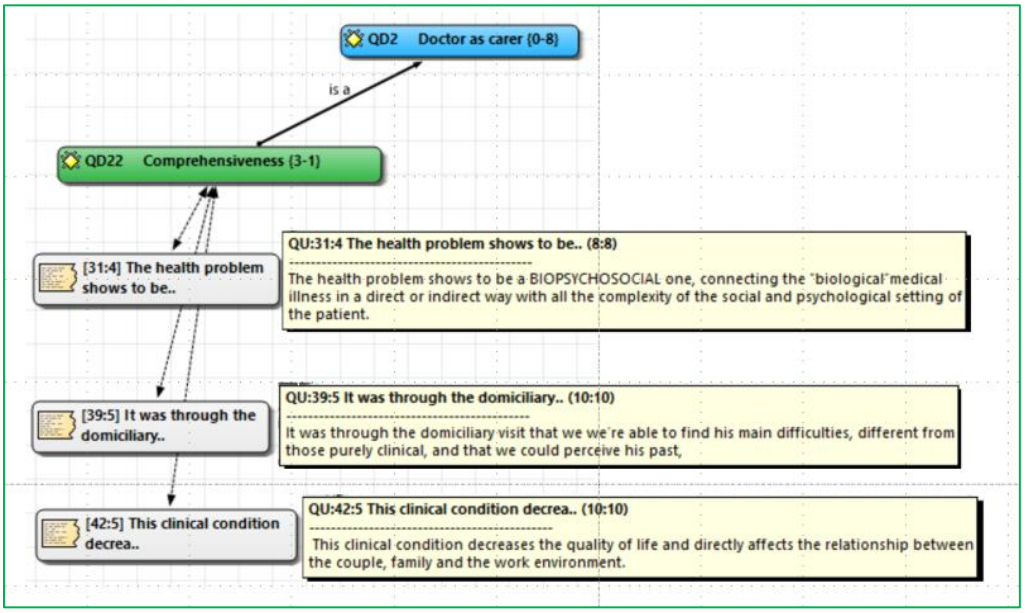


Figure 4 VDGM-2018. Tree quotations (yellow) from the abstracts (grey) dealing with the concept Comprehensiveness

Results

Formal disposition of the communications

- In terms of communications with the attendees, they are very well presented on http://vdgm.woncaeurope.org/5vdgmf/scientific . The program available online has a very good design and is very dynamic. The idea to link a poster to a YouTube presentation of the group is also wonderful, giving a touch of personalization from exchanging GPs.

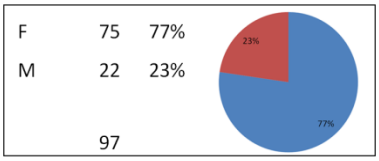


Figure 5 VDGM 2018. Presenting authors. Sex distribution

- In terms of Knowledge Management, there are several problems. The abstracts are not presented in a manageable database, as they have no identifiers. Only some abstracts are structured following the IMRAD format. It is somewhat difficult to identify the aim, the population, the methods or the expected results of the communications as the texts are not always presented in a scientifically structured way. The lengths of the abstracts are very variable. Keywords are not MeSH related. None of the 3 Keynotes have a text available. Two communications use acronyms or acronym-like in their title which hinders "*non-members of the club*" to understand what is at stake. The female participation is surprisingly high (Fig.5).

Among the presenting authors, 77% are women. The available texts are very expressive and identification of concepts has been easy throughout the 97 communications.

Qualitative content of the communication

General distribution of ICPC-2 in the 97 communications

We present in the Table 1 & 2 and Figure 6 the titles and the number of ICPC-2 codes used to identify the clinical concepts in the 97 abstracts.

*34 Blood test	3	D21 Swallowing problem	1	N99 Neurological disease other	1	T85 Hyperthyroidism/thyrotoxicosis	2
*39 Physical function test	1	D74 Malignant neoplasm stomach	1	P Psychological	1	T89 Diabetes insulin dependent	2
*43 Other diagnostic procedure	2	D76 Malignant neoplasm pancreas	1	P15 Chronic alcohol abuse	1	T90 Diabetes non-insulin dependent	3
*45 Observation/health education/advice/diet	3	D78 Neoplasm digestive system benign/unspecified	1	P17 Tobacco abuse	1	U71 Cystitis/urinary infection other	1
*50 Medication/prescription/renewal/injection	2	D97 Liver disease nos	1	P18 Medication abuse	1	U88 Glomerulonephritis/nephrosis	1
*63 Follow-up encounter unspecified	1	D99 Disease digestive system other	1	P19 Drug abuse	1	U95 Urinary calculus	1
*67 Referral to physician/specialist/clinic/hospital	3	K Cardiovascular	1	P70 Dementia	1	W15 Infertility/subfertility female	3
A01 Pain general/multiple sites	1	K22 Risk factor for cardiovascular disease	1	P72 Schizophrenia	1	W18 Post-partum symptom/complaint other	1
A20 Euthanasia request/discussion	1	K77 Heart failure	1	P74 Anxiety disorder/anxiety state	1	W19 Breast/lactation symptom/complaint	2
A75 Infectious mononucleosis	1	K83 Heart valve disease nos	1	P76 Depressive disorder	2	W78 Pregnancy	1
A85 Adverse effect medical agent	1	K86 Hypertension uncomplicated	1	P77 Suicide/suicide attempt	1	W90 Uncomplicated labour/delivery livebirth	1
A90 Congenital anomaly nos/multiple	1	K93 Pulmonary embolism	1	R71 Whooping cough	1	Y10 Infertility/subfertility male	2
A91 Abnormal result investigation nos	1	L02 Back symptom/complaint	1	R72 Strep throat	1	Y77 Malignant neoplasm prostate	1
B80 Iron deficiency anaemia	1	L04 Chest symptom/complaint	1	R74 Upper respiratory infection acute	1	Z01 Poverty/financial problem	1
B81 Anaemia vit b12/folate deficiency	1	L18 Muscle pain	1	R75 Sinusitis acute/chronic	1	Z04 Social cultural problem	3
B90 Hiv-infection/aids	2	L29 Musculoskeletal symptom/complaint other	1	R95 Chronic obstructive pulmonary disease	1	Z08 Social welfare problem	1
D07 Dyspepsia/indigestion	1	L86 Back syndrome with radiating pain	1	R96 Asthma	1	Z11 Compliance/being ill problem	1
D11 Diarrhoea	1	L95 Osteoporosis	1	S Skin	2	Z14 Partner illness problem	1
D20 Mouth/tongue/lip symptom/complaint	1	N27 Fear of neurological disease other	1	T Metabolic & Nutritional	1	Z25 Assault/harmful event problem	2
		N88 Epilepsy	1	T08 Weight loss	1		
				T82 Obesity	2		

Table 1 Clinical concepts addressed in the VDGM 2018 communications. 102 coding for 79 ICPC-2 codes.

*Process	15	15%
A General	6	6%
B Blood	4	4%
D Digestive	9	9%
F Eye	0	0%
H Ear	0	0%
K Circulatory	6	6%
L Locomotor	6	6%
N Neurological	3	3%
P Psychological	11	11%
R respiratory	6	6%
S Skin	2	2%
T Metabolic Nutritional	11	11%
U Urinary	3	3%
W Pregnancy	8	8%
X Genital female	0	0%
Y Genital male	3	3%
Z Social	9	9%
	102	100%

Table 2 Distribution of the 102 coding

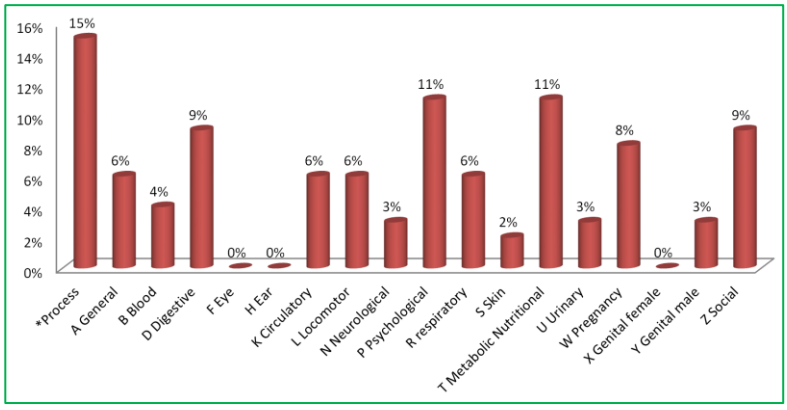


Figure 6 Clinical concepts addressed in the VDGM 2018 communications. 102 coding for 79 codes. (Expressed in % of ICPC-2 chapter)

General distribution of Q-Codes in the 97 communications

We present in the Table 3 & 4 and Figure 7 the titles and the number of Q-Codes version 2.5 used to identify the clinical concepts in the 97 abstracts according to the number of coding in descending order

QR36 Case report	24
QS1 Primary care setting	23
QS41 Family doctor	19
QD32 Health issue management	18
QS11 Management of practice	14
QO4 consider new code	13
QD24 Clinical competence	12
QT3 Quality assurance	10
QR323 Cross-sectional study	8
QT33 Critical reading	6
QO2 acronym	5
QT1 Teaching family medicine	5
QT23 Continuous medical education	5
QT42 Online knowledge-sharing	5
QC15 Elderly	4
QC32 Refugees & migrants	4
QD1 Communicator	4
QD22 Comprehensiveness	4
QD23 Health education	4
QD325 Prescribing behaviour	4
QP4 Patient perspective	4
QP44 Patient cultural background	4
QP51 Patient alimentation issues	4
QP6 Patient's participation	4
QR1 Philosophy of science	4
QR325 Intervention study	4
QR4 Research network	4
QS31 Practice collaboration	4
QS4 Primary care provider	4
QS44 Allied health professionals	4
QT32 Guideline	4
QC3 Social high risk	3
QD21 Problem solving	3
QD25 Continuity of care	3
QD322 Multimorbidity	3
QD34 Genetic issues	3
QD41 Primary prevention	3
QP21 Accessibility	3
QP23 Cultural competency	3
QR Research and development	3
QR52 Scales and questionnaires	3
QS33 Coordination of care	3
QT2 Field training in medicine	3
QT22 Vocational training	3
QC12 Child	2
QC2 Gender issue	2
QD14 Systems thinking	2
QD26 Palliative care	2
QD31 Health risk management	2
QD321 Medically unexplained symptom	2
QD324 Incidentaloma	2
QD42 Secondary prevention	2
QD43 Tertiary prevention	2
QD445 Overdiagnosis	2
QD446 Overtreatment	2
QD5 Complementary and Alternative Medicine	2
QD8 Work-life balance	2
QE Medical ethics	2
QE2 Professional ethics	2
QO1 unable to code, unclear	2
QP2 Patient-centredness	2
QP24 Affordability	2
QP41 Patient satisfaction	2
QP42 Patient knowledge	2
QP52 Patient's sexuality	2
QR2 Epidemiology of primary care	2
QR22 Community-based study	2
QR51 Classifications, terminologies and ontologies	2
QS13 Health information management	2
QS14 Practice equipment	2
QS3 Practice relationship	2
QS32 Referral & counter-referral	2
QT11 Pedagogic methods	2
QT4 Knowledge translation	2
QT52 Adverse event & pharmacovigilance	2
Q Q-Codes taxonomy	1
QC11 Infant	1
QC13 Adolescent	1
QC14 Adult	1
QC22 Women's health	1
QC24 Transgender	1
QC42 Street drug addict	1
QC51 Gender-based violence	1
QC52 Child abuse	1
QD11 Encounter	1
QD12 Doctor-patient relationship	1
QD27 Family planning	1
QD3 Care manager	1
QD323 Shared decision making	1
QD33 Health status assesment	1
QD4 Clinical prevention	1
QD44 Quaternary prevention	1
QD442 Disease mongering	1
QE1 Personal ethical view	1
QE31 Euthanasia	1
QE42 Informed consent	1
QO3 out of scope of family medicine	1
QP1 Patient safety	1
QP25 Acceptability	1
QP3 Quality of health care	1
QP43 Patient autonomy	1
QP5 Health behaviour	1
QP61 Social network	1
QP7 Patient advocacy	1
QR21 Pharmacoepidemiology	1
QR3 Research methods	1
QR31 Qualitative study	1
QR324 Longitudinal study	1
QR33 Mixed method research	1
QR35 Action research	1
QR6 Expert advice	1
QR7 Economics, primary health care	1
QS43 Midwife	1
QT13 Teaching evaluation	1
QT14 Academic organization	1
QT21 Undergraduate in medicine	1
QT34 Peer review	1
QT36 Quality indicator	1
QT43 Digital library	1
380 coding with 119 different Q-Codes	

Table 3 Contextual concepts (380 coding) addressed in the 97 VDGM 2018 communications, detail of the 119 codes used.

Q Q-Codes taxonomy	1	0,3%
QC Category patient	23	6,1%
QD Doctor issues	92	24,2%
QE Ethical issue	7	1,8%
QH Planetary Health	0	0,0%
QO Other	21	5,5%
QP Patient issue	39	10,3%
QR Research	64	16,8%
QS Structure	80	21,1%
QT Knowledge Management	53	13,9%
	380	100,0%

Table 4 Distribution of Q-Codes in 97 abstracts VDGM 2018

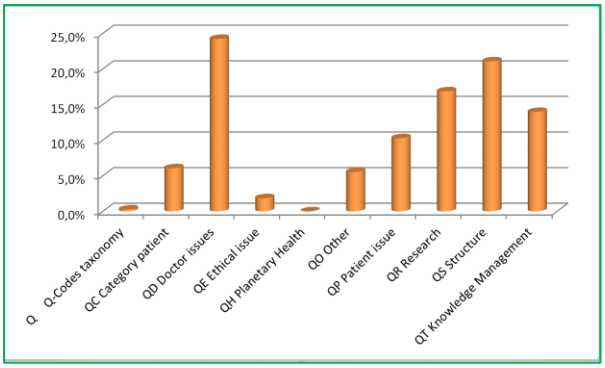


Figure 7 Contextual concepts (380 coding) addressed in the 97 VDGM 2018 communications. Number of coding and % of Q-Codes domains.

We have analyzed all the communications, including Keynotes. The lengths of the available texts were variable, Keynotes being shorter. But Keynotes have very clear titles and chosen keywords allow for easy coding. There are 380 codings of contextual features with 119 different Q-Codes (out of 187 available) and 102 coding of clinical

items with 79 different ICPC-2 codes (on 734 available). The 7 quotes of Ethical issues represent 1,8% of the used codes, and there are no communications encompassing Planetary Health. One author has used the terms *job description* and *Curriculum* as a keyword. The code Q itself has been used for the coding of this abstract (#8). There are no communications addressing Planetary Health issues.

Doctor's issues (like continuity, comprehensiveness) attract 92 codings (24,2%). Patient's issues (like accessibility, participation, safety) attract 39 codings (10,3%). Structure attracts 80 codes (21%) This high rate is attributable to the coding of the concepts QS41 family doctor (19 codings) and QS1 primary care (23 codings), which are cited by the authors as their frame of reference.

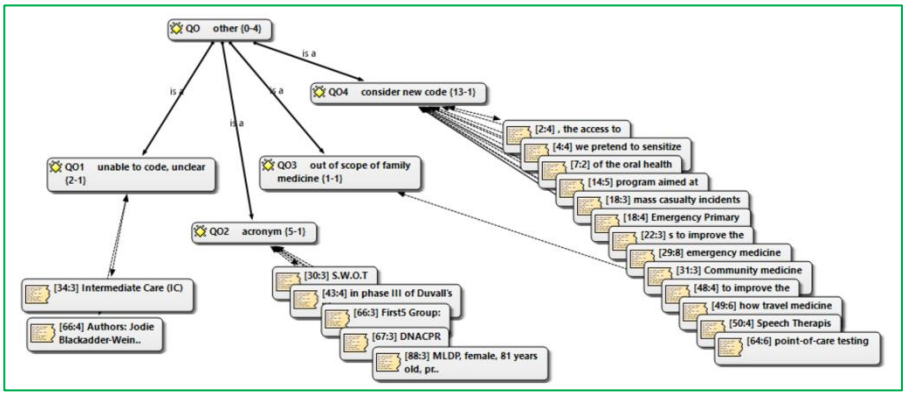


Figure 8 The domain QO Other and its rubrics in the VDGM_2018 abstracts

The domain Q0 has 21 codings (5,5%). Fig 9 shows the opening of the QO Other domain. Two abstracts contain concepts unclear for non UK residents (#34 & 63); five use acronyms in such a way that the reading and understanding is unclear (#30, 43, 66, 67 & 88); one is out of the scope of Family Medicine, or more exactly, out of range of Q-Codes (Travel medicine)(#29). But the most interesting results are the 13 codings involving the Q04 code which considers new code for further version of the taxonomy. This last point is discussed further.

Discussion

We have therefore gathered material for qualitative coding of 97 abstracts from the European Congress of Young Doctors of WONCA 2018. We carry out an analysis according to two points of view. The first, called clinical, examines the abstracts from the angle of the symptoms, complaints, process of care and diagnosis discussed by the participants. This view uses ICPC as the encoding system. The second, called contextual, considers the founding themes of the practice of family medicine covered in the abstracts, as coded by the Q-Codes system.

From a clinical point of view, a review of tables 1 and 2 shows 102 codings with 79 different ICPC-2 codes. Clinical issues are addressed in 42 out of 97 abstracts. The P (Psychological), W (Pregnancy and Family Planning) and Z (Social) chapters are well represented. The P & Z chapters represent the psychosocial interest of the participant. Among the 7 Process codes used, Medication (*50) is present twice, which is much less than in previous congresses. All the abstracts have a Q-Code. One could follow the contextual features of the abstracts in Tables 3 and 4.

The most used code is Case record (24) which in 19 cases is also coded jointly with Health Issue management. This shows that young GPs prefer to describe what they have learned to do- i.e, identifying and following diseases. Figure 9 shows the close relation between both concepts and highlights one abstract (#42) which is addressing the major anxiety associated with overtreatment of male and female infertility. The reporting of the case addresses comprehensiveness and shows that those GPs know what system thinking is. Note that none of the Case reports use qualitative research technics which could allow giving the point of view of the patient in a narrative approach [13].

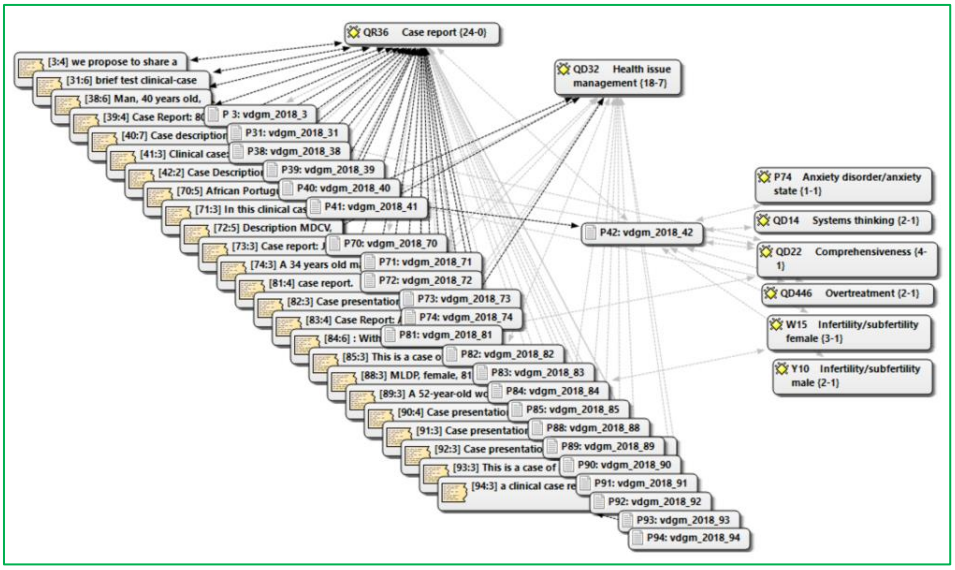
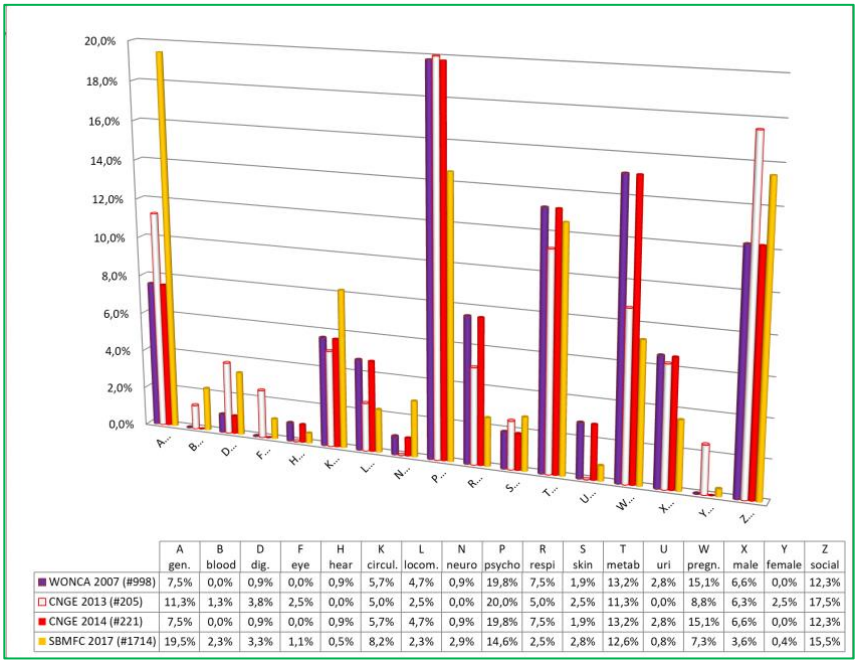


Figure 9 Case reports and their links to Health management. The link of the abstract 42 are highlighted

Comparison with former congresses issue

The purpose of this study is to identify areas of interest for physicians presenting at the VDGM 2018 Annual Conference. For comparison purposes, a series of 3CGP coded congresses are available. All but one were coded by the same author. The Curutiba Congress of the Brazilian Society of Family and Community Medicine (SBMFC) was coded by the participants themselves at the time of abstract submission. To allow the comparison, the following Figures 10 and 11 show the general distribution of coding for 4 congresses: WONCA Europe 2007, CNGE (France) 2013 and 2014 and SBMFC 2017 [14]. Figure 10 show the distribution of clinical coding by ICPC-2 in the four congresses. The preeminence of the coding in P, psychological; W, pregnancy and family planning; and Z, social, are striking and not very usual in practice. This Figure 10 can be easily compared to Figure 5, representing the use of ICPC-2 in the present study.



	A gen.	B blood	D dig.	F eye	H hear	K circul.	L locom.	N neuro	P psycho	R respi	S skin	T metab	U uri	W pregn.	X male	Y female	Z social
WONCA 2007 (#998)	7,5%	0,0%	0,9%	0,0%	0,9%	5,7%	4,7%	0,9%	19,8%	7,5%	1,9%	13,2%	2,8%	15,1%	6,6%	0,0%	12,3%
CNGE 2013 (#205)	11,3%	1,3%	3,8%	2,5%	0,0%	5,0%	2,5%	0,0%	20,0%	5,0%	2,5%	11,3%	0,0%	8,8%	6,3%	2,5%	17,5%
CNGE 2014 (#221)	7,5%	0,0%	0,9%	0,0%	0,9%	5,7%	4,7%	0,9%	19,8%	7,5%	1,9%	13,2%	2,8%	15,1%	6,6%	0,0%	12,3%
SBMFC 2017 (#1714)	19,5%	2,3%	3,3%	1,1%	0,5%	8,2%	2,3%	2,9%	14,6%	2,5%	2,8%	12,6%	0,8%	7,3%	3,6%	0,4%	15,5%

Figure 10 Clinical issues in four previous congresses, coded by ICPC-2

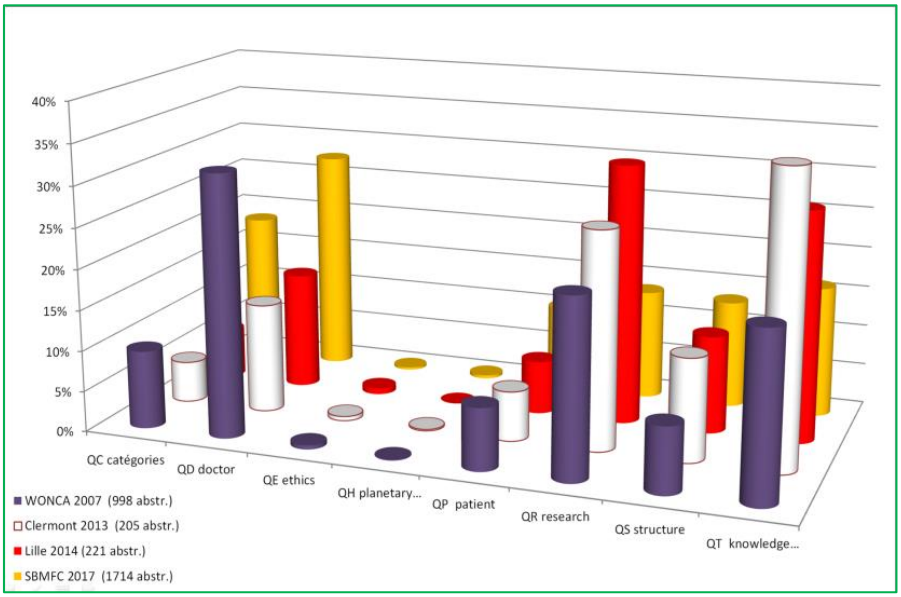


Figure 11 Contextual issues in four previous congresses, coded with Q-Codes

From the contextual point of view, Figure 11 has to be compared to Figure 6. The Figure 6 shows the same preeminence of P, W and Z but not in the same proportion. Among the 97 abstract, 54 have no ICPC code at all as they are not dealing directly with clinical issues. The Doctor's issues, like continuity or comprehensiveness or communicator reach the same percentage as in WONCA Europe 2007. We are struck by the relative poverty in the abstract of QE Medical Ethics field and the absence of an abstract dealing with Planetary Health in four congresses shown in Figure 11. However, Figure 6 shows that there is proportionately more Ethical notations in the VDGM congress, but that there is no abstract dealing with the environment or its impact on patients.

Four communications dealing with QR1 Philosophy of sciences

Four communications are coded under QR1 Philosophy of Science. In the HeTOP database the chosen scope note for this concept is: *philosophy of science is a branch of philosophy concerned with the foundations, methods, and implications of science. The central questions concern what counts as science, the reliability of scientific theories, and the purpose of science (DBpedia).* In the HeTOP terminological record, the conceptual content of this concept quotes heuristic, humanism, epistemology and the MeSH Symbolic interactionism edited in 2018. All those domains could be considered as metacognition as they are knowledge about knowledge. Four authors (abstracts #12, 13, 21, 48) ask fundamental questions about the positioning of a physician scientist in the face of ideological and political issues and propose a critical approach facing human challenges.

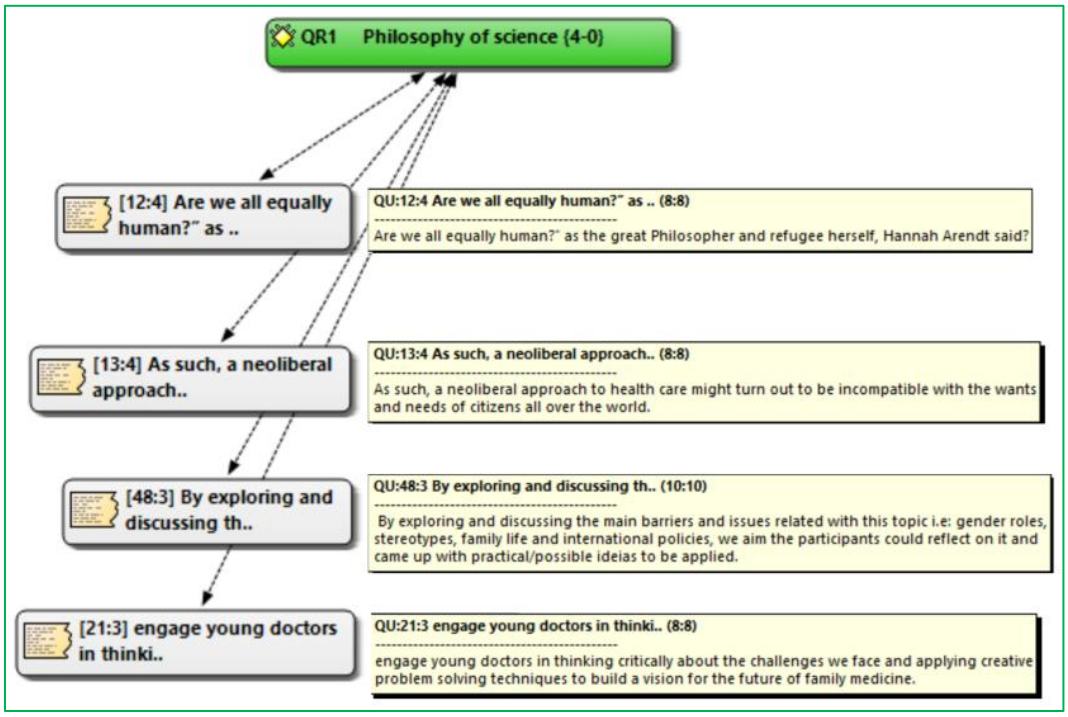


Figure 12 Four abstracts dealing with philosophical issues. Quotes in yellow with the corresponding abstracts in grey, all coded with QR1 Philosophy of sciences

Seven communications dealing with Ethical issues

As shown in figure 11, the ethical issue domain is very scarce in the Q-Codes in the congresses analyzed so far.In this congress, there are 7 abstracts (1,8%) addressing ethical issues (Figure 13). Abstact #35 addresses the Euthanasia experience in the Netherlands (see Figure 1), while abstract #80 considers the ethics of palliative care knowledge among young medical graduates. The author of abstract #13 uses the term Ethics in his keywords, considering the compatibility of the neoliberal approach and the interests of the patients. The author of communication #11 also uses the term ethics in his keywords, considering the daily dilemmas while the abstract #12 discuss the right of the migrants to be treated as a human being. Communication #6 considers a more personal point of view, facing risk-taking patients. Informed consent is addressed in poster #67 in a quality assurance study.

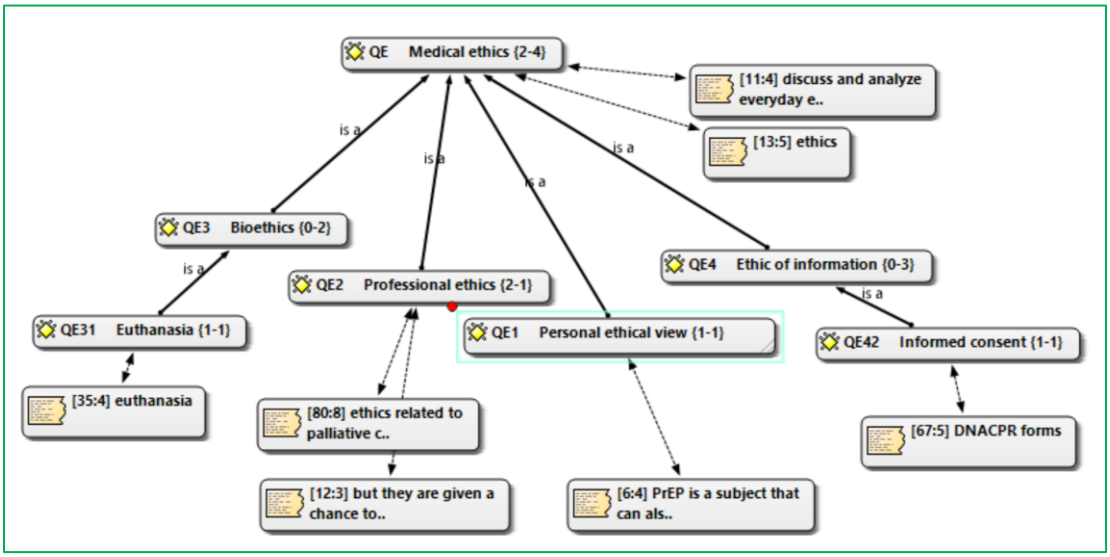


Figure 13 Distribution of the QE Medical ethics coding among 7 abstracts

General Practice / Family Medicine or Primary Health Care?

Terms related to those two concepts have been retrieved in 30 of 97 communications. They have been classified in QS41 (Family doctor) or in QS41 (Primary Care setting). In this text, we use the acronyms GP/FM for General Practice/Family Medicine and PHC for Primary Health care. In the quotations for QS41(Family doctors) the following terms are used : General Practitionner, GP, General practice, Family doctor, Family medicine. In the QS1(Primary Care) setting the following: Primary Care unit, Primary Care (PC), Primary Health Care, Family Health Center, Primary Care Practice, emergency Primary Care Setting, Primary Heath Care Unit. The difference between GP/FM and PHC.

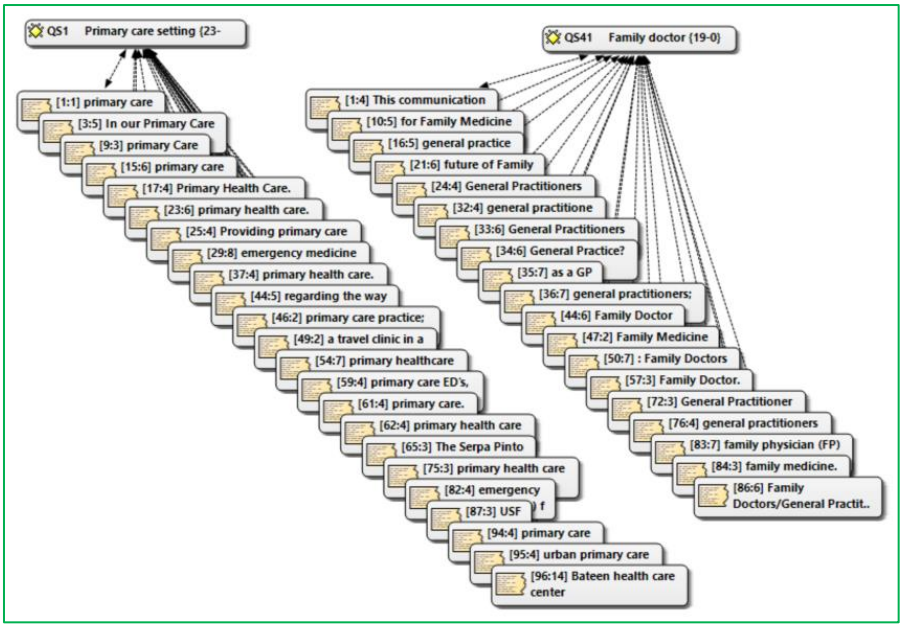


Figure 14 The two concepts Family doctors and Primary care and their related quotations in the abstracts (first number is the number of the abstract)

This raises the issue of the content of concepts used by young doctors. The content of those concepts have been extensively studied in a recent publication[15]. There are numerous definitions of General Practice/Family Medicine (GP/FM) and Primary Health Care (PHC). The governance of these concepts is related to their origin in two distinct institutions: The World Association of Family Doctors (WONCA) and the World Health Organization (WHO). Textual analysis of the definitions for GP/FM and PHC shows two distinct entities, which overlap and share common extensions such as centeredness, continuity or shared decision-making. But, the concepts differ by their intension[16], GP/FM deals with a human being in charge of care, PHC describes an institution[*]. The rather undifferentiated use between the two kinds of designations by young European family doctors shows that the World Health Organization and the World Organization of Family Doctors conceptually share a concept of the first level of care in terms of orientation and management, which could strengthen their collaboration.

Primary care setting, family doctor, emergency primary care settings, management issues attract numerous communications. One could wonder why we count PHC and GP/FM related concepts as valuable to code. The very reason is maybe that those family physicians need to recall they are dealing with their job as they feel themselves unsure of its importance. Indeed, cardiologists and neurologists don't need recall in their communications to congresses that they are speaking as cardiologist or neurologist or that they are dealing with hospital-based care.

Importance of Quality assurance in communications

A glance at Figure 14 shows the importance given by many participants to quality approach. The numbers in the figure represent the identifiers of the abstracts. Having such a list and database of abstracts would allow participants interested in this process to focus on these presentations.

[*] Intension ; in Philosophy, Intension is the core content of a concept. GP/FM is a profession, Primary Health care is a kind of management.

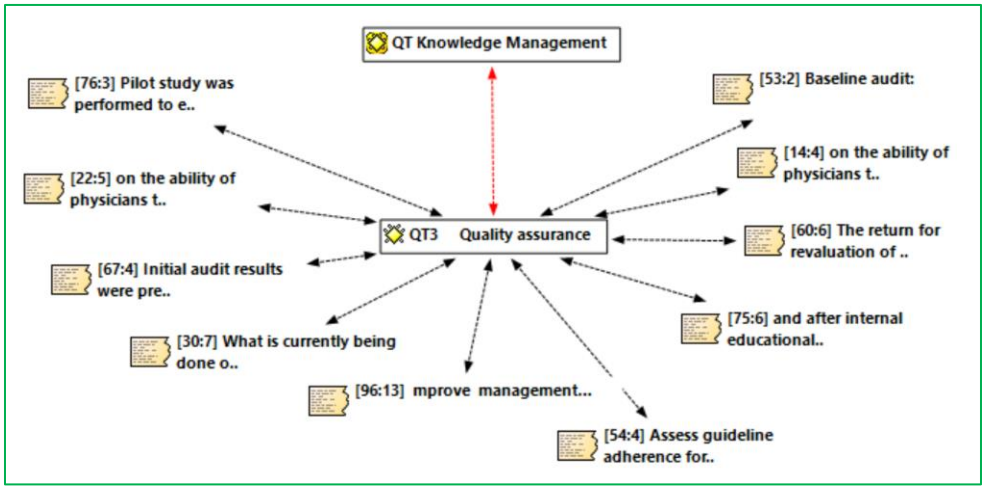


Figure 15 Ten communications dealing with Quality assurance

Limitations

Only one researcher analyzed the abstracts. Bradley, Curry, and Devers, qualitative data analysis experts, argue that a single researcher conducting all the coding is both sufficient and preferred [17]. The search is about organizing knowledge around concepts and no longer around the terms of a particular language. English serves only as a working language. The sophisticated interface available online allows each translator to see the result of his/her work and compare it to other languages. The conference abstracts analyzed in the present work were written mainly by European GPs. Thus, the Q-Codes concepts might not be fully representative of other geographical areas. Moreover the organization of knowledge specific to GP/FM has to be considered till now as a personal view of the author, as there are no standardized tables of contents in GP/FM. Therefore, despite the fact that we are convinced that the bottom-up approach is the preferable method, there is no denying that, by defining a hierarchy of concepts and choosing the best definitions through this approach, we are subject to the influence of personal values and beliefs. Classifying and standardizing are also introductions of researcher bias. But any taxonomy has to evolve to fit to the needs of its users. Taking in account that no matter how much effort that may be put in by all involved, there will always be a lack of universal consistency.

Suggestion for changes in Q-Codes after analysis of VDGM 2018. Preparing Q-Codes version 2.6

With 97 communications, this congress looks small compared to big international congresses. Nevertheless, one has been able to find a set of concepts not present in the Q-Codes version 2.5. as shown by the 21 occurrences of the Q04 consider new code. The careful decryption of the 97 abstracts made it possible to highlight some missing items in version 2.5 of the Q-Codes. The Figure 17 shows the Q-Codes (in green), the abstract numbers "vdgm_2018", the quotes for the choice of Q-Codes and the memos attached to the quotations.(software ATLAS.ti).

Proposed new entries for Q-Codes version 2.6

1. *Patient physical activity* (from abstract 4) should take place as subcategory of the category QP5 Health behavior . QP54 is available. Thus new item : *QP54 Patient physical activity* will be studied
2. *Dentist* (abstract 7) *and Nutritionist* (abstract 2) should take place as subcategories of the category QS44 Allied health professional.

Thus new items : *QS444 Nutritionist* and

3. *QS445 Dentist* to be studied
4. *QS446 Speech therapist* to be studied
5. The rubric QS2 Out-of Hours could be remodeled in
   QS2 *Emergency primary care setting* (from abstracts #18)
   a. QS21 *Out-of Hours* (from Q-Codes version 2.5 QS2)
   b. QS22 *Mass casualty management* (from abstract #18)
6. Community *medicine* (from abstract #31) could be added as subcategory of QS3 Practice relationships, thus maybe *QS34 Community medicine*
7. One item *Travel medicine* (from abstract #49) could not find its place in Q-Codes as Q-Codes are not intended to categorize the various sub-specialties a family doctor can develop. But this raises the issue of a new Q-Code in the domain Other. *QO5 Out-of-scope of Q-Codes*

Those 8 proposals have to be studied in depth before being integrated as a definitive change

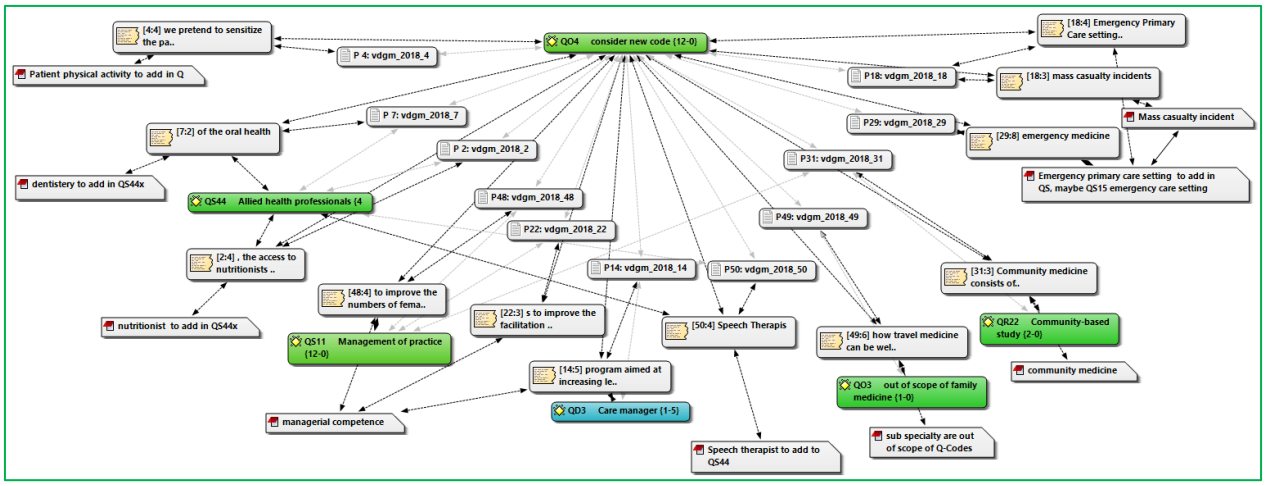


Figure 16 Distribution of QO4 codes "consider new code" in the coding of the 97 abstracts of VDGM 2018

One is struck by the outset of the relative absence of technology in these communications. It can be said that the exploration ground in research and exchange between GPs is occupied by communication (in every sense of the word) and management. It should be noted that communication and management have little market value in our societies. The lack of any added value on the activity of General Practitioners, except for pharmaceutical companies, may explain the limited investment made in the first line of care in technologically advanced countries. This hypothesis deserves a thorough economic study

Conclusion

We have shown that standardized keywords, called descriptors, managed in a taxonomic way and linked to an online knowledge base could be useful to identify the domain of interest of participating GPs.

This indexing system could also be used to organize a congress by developing a smartphone application allowing the participant to find the communications along his/her domains of interest.

The database of the congress could be available online with a query system. This would show the importance of communications and researches in GP/FM and would reinforce the sense of belonging to a scientific branch of medicine and a group of practitioners around the world.

Such a database, well organized and well indexed, would give more visibility to the discipline of GP/FM as major actor of Primary Health Care.

And last but not least, the hard research and training work of dedicated practitioners will enjoy a kind of diffusion that is impossible to obtain from referenced publications due to difficulty in publishing and associated costs, thus allowing the easy constitution of interest sharing and research networks.

Figure 17 Word cloud of the VDGM congress 2018

Citation :

Jamoulle, M. (2018). Report to the VDGM group. Qualitative analysis of the communications to the WONCA group Vasco De Gama annual meeting 2018, Porto, Portugal. 17p. http://hdl.handle.net/2268/217828

Data : http://orbi.ulg.ac.be/bitstream/2268/217828/1/vdgm_2018_data.pdf

Sources

1 Benavides, S. M., & del Campo, R. R. (2012). Reflexiones tras el xxxii congreso semFYC: atención de calidad en tiempos de crisis e innovación en la gestión del conocimiento propio. Atención Primaria, 44(10), 571-572.

2 International Committee of Medical Journal Editors (2011). Uniform requirements for manuscripts submitted to biomedical journals: Writing and editing for biomedical publication Available from: http://www.ICMJE.org.

3 Mann, E., & Meyer, G. (2011). Reporting quality of conference abstracts on randomised controlled trials in gerontology and geriatrics: a cross-sectional investigation. Zeitschrift für Evidenz, Fortbildung und Qualität im Gesundheitswesen, 105(6), 459-462.

4 Jamoulle, M. (2017). Towards a system of concepts for Family Medicine. Multilingual indexing in General Practice/Family Medicine in the era of Semantic Web (Doctoral dissertation, Université de Liège, Liège, Belgique). http://orbi.ulg.ac.be/handle/2268/216132

5 Jamoulle, M., Resnick, M., Grosjean, J., Ittoo, A., Cardillo, E., Vander Stichele, R., Darmoni, S. J. & Vanmeerbeek, M. (2017). Development, dissemination, and applications of a new terminological resource, the Q-Code taxonomy for professional aspects of general practice/family medicine. European Journal of General Practice, 1-6. 10.1080/13814788.2017.1404986

6 WONCA International Classification Committee. (1998). International Classification of Primary Care, ICPC-2. Oxford University Press, Oxford.

7 Grosjean, J., Merabti, T., Griffon, N., Dahamna, B., Soualmia, L. F., & Darmoni, S. J. (2012). Multi-terminology cross-lingual modeling in the Health Terminology/Ontology Portal. In AMIA 2012.

[8] Aghaei, S. (2012). Evolution of the World Wide Web : From Web 1.0 to Web 4.0. International Journal of Web & Semantic Technology, 3(1), 1–10. https://doi.org/10.5121/ijwest.2012.3101

[9] *de Oliveira Tavares, Ariana. (2018). Classificação temática das teses de mestrado integrado em medicina da fmuc, na área de medicina geral e familiar segundo a "terminologia multilíngue de clínica geral/medicina geral e familiar". Mestrado integrado em medicina, Faculdade de medicina da universidade de Coimbra (submitted)*

[10] Pizzanelli M. (2018) PROYECTO NOTASL@CAS / M@DNOTES PROJECT. https://tinyurl.com/Proyecto-NotasLocas

[11] Melissa P. Resnick, Cardillo E, Jamoulle M, de Araujo Novaes M, Shamenek FS. (2018) Towards the Semantic Annotation of Second Opinion Requests from Rural Brazilian Primary Healthcare Providers: the Q-Codes Use Case. Accepted Abstract. 15th International ISKO conference, Porto.

12 Jamoulle Marc, Julien Grosjean, Stefan Darmoni. Access to multilingual individual rubrics in URI format for ICPC-2 and the Q-Codes version 2.5. D2IM. University of Rouen June 2017 http://www.ph3c.org/PH3C/docs/27/000453/0000846.pdf

13 Greenhalgh,T., Hurwitz, B. (1999). Narrative based medicine: Why study narrative?. BMJ: British Medical Journal, 318(7175), 48.

14 Knupp, D. A., Rebolho, R., Jamoulle, M., Poli Neto, P., & Gusso, G. (2017). Coding of papers submitted to the 14th Congresso Brasileiro de Medicina de Família e Comunidade. http://orbi.ulg.ac.be/handle/2268/214643

15 Jamoulle, M., Resnick, M., Vander Stichele, R., Ittoo, A., Cardillo, E., & Vanmeerbeek, M. (2017). Analysis of definitions of general practice, family medicine, and primary health care: a terminological analysis. BJGP Open, BJGP-2017.

16 Sadegh-Zadeh, Kazem (2015). Handbook of Analytic Philosophy of Medicine. 2nd. Dordrecht: Springer, p. 777

17 Bradley, E. H., Curry, L. A., & Devers, K. J. (2007). Qualitative data analysis for health services research: developing taxonomy, themes, and theory. Health services research, 42(4), 1758-1772.