

Serveur Académique Lausannois SERVAL serval.unil.ch

Author Manuscript

Faculty of Biology and Medicine Publication

This paper has been peer-reviewed but does not include the final publisher proof-corrections or journal pagination.

Published in final edited form as:

Title: Advancing synoptic cancer reports beyond English: the University of Bern/PathoLink approach.

Authors: Banz Y, Berezowska S, de Leval L, Rubbia-Brandt L, Tolnay M, Moch H, Perren A, Hewer E

Journal: Virchows Archiv : an international journal of pathology

Year: 2018 Nov

Issue: 473

Volume: 5

Pages: 655-656

DOI: 10.1007/s00428-018-2431-0

In the absence of a copyright statement, users should assume that standard copyright protection applies, unless the article contains an explicit statement to the contrary. In case of doubt, contact the journal publisher to verify the copyright status of an article.

Virchows Archiv

Advancing synoptic cancer reports beyond English: The University of Bern/PathoLink approach

--Manuscript Draft--

| | |
|--|---|
| Manuscript Number: | |
| Full Title: | Advancing synoptic cancer reports beyond English: The University of Bern/PathoLink approach |
| Article Type: | Letter to the Editor |
| Corresponding Author: | Ekkehard Hewer University of Bern Bern, SWITZERLAND |
| Corresponding Author Secondary Information: | |
| Corresponding Author's Institution: | University of Bern |
| Corresponding Author's Secondary Institution: | |
| First Author: | Yara Banz |
| First Author Secondary Information: | |
| Order of Authors: | Yara Banz Sabina Berezowska Laurence de Leval Laura Rubbia-Brandt Markus Tolnay Holger Moch Aurel Perren Ekkehard Hewer |
| Order of Authors Secondary Information: | |
| Funding Information: | |
| Abstract: | (not applicable) |
| Suggested Reviewers: | John Srigley John.Srigley@thp.ca Internationally leading expert on synoptic/structured reporting Familiar with bilingual (English/French) health system in Canada Iris Nagtegaal iris.nagtegaal@radboudumc.nl Leading expert on Synoptic/structured reporting |
| Opposed Reviewers: | |

Letter to the Editor

Advancing synoptic cancer reports beyond English: The University of Bern/PathoLink approach

Yara Banz¹, Sabina Berezowska¹, Laurence de Leval², Laura Rubbia-Brandt³, Markus Tolnay⁴, Holger Moch⁵, Aurel Perren¹, Ekkehard Hewer^{1*}

1: Institute of Pathology, University of Bern, Bern, Switzerland

2: Institute of Pathology, Lausanne University Hospital (CHUV), Lausanne, Switzerland.

3: Division of Clinical Pathology, Geneva University Hospital and Faculty of Medicine of Geneva, Geneva, Switzerland

4: Institute for Medical Genetics and Pathology, University Hospital Basel, Basel, Switzerland

5: Department of Pathology and Molecular Pathology, University Hospital Zurich, Zurich, Switzerland

*Correspondence to: Ekkehard Hewer, Institute of Pathology, University of Bern, Murtenstrasse 31, 3008 Bern, Switzerland – Telephone: +41 31 632 3211 – ekkehard.hewer@pathology.unibe.ch

Authors' ORCID: YB: 0000-0003-4474-3132; SB: 0000-0001-5442-9791; AP: 0000-0002-6819-6092; EH: 0000-0002-9128-0364

Keywords: Synoptic Reporting; Structured Reporting; Pathology; Medical Terminology; Multilingual

Word count: 537

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

Synoptic reporting (SR) increases completeness and improves the understanding of pathology reports for tumours as compared to the more traditional “narrative” style. Furthermore, it is an important step towards higher levels of structured data capture[4]. SR is defined by a set of required data elements (RDE) specific for each tumour type and a characteristic paired format of RDE and response. The College of American Pathologists (CAP) requires accredited pathology laboratories to report many cancer types in a synoptic format and for this purpose publishes a comprehensive set of protocols[1]. More recently, the International Collaboration for Cancer Reporting (ICCR) – sponsored amongst others by the European Society of Pathology – has started to publish synoptic protocols with the aim to “produce internationally standardised and evidence-based datasets for the pathology reporting of cancer”[2].

One arguably underestimated challenge with regard to widespread implementation of SR is that – with the noteworthy exception of Dutch protocols published by the PALGA foundation[3] – protocols are exclusively available in English. This does not only result in barriers to introduce SR for pathology departments that report in other languages, but also jeopardizes one of the main benefits of SR, i.e. uniformity of terminology between institutions, across country and language barriers. The Institute of Pathology at the University of Bern recently launched an initiative for SR of all major cancer types. Given that the Canton of Bern is bilingual (German and French) and that we report in both languages, we sought to define an approach for translating existing protocols to German as well as French, ensuring precision, clarity and consistency between protocols. Because of the currently much more comprehensive set of protocols, we opted to use CAP (rather than ICCR) protocols, which are freely available (with certain restrictions regarding integration into pathology information systems).

Importantly, we identified recurrent terms and ensured that these were translated consistently between the different protocols (Table 1). We sought to adhere as close as possible to the original English terminology, but found literal translation impracticable for some terms. We made a particular effort to ensure patient safety by avoiding terms prone to misinterpretation. For this purpose, for example, we translated “well differentiated” to German “gut differenziert” rather than the widely used alternative “hoch differenziert” – literally translated: “highly differentiated”. This was done to avoid confusion with “hochgradig” (“high grade”). We also made sure that positive and negative responses would not differ by only a single word, the accidental omission of which would invert the meaning. For instance, we translated “not identified” to German “nicht nachgewiesen” rather than the more customary term “nicht vorhanden” for a negative finding, which would differ from “vorhanden” (“present”) only by the negation “nicht”. Sample reports for the lung carcinoma protocol to highlight these points are provided as supplementary data.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61
62
63
64
65

Based on our experience with two years of SR, 20 surgical and biomarker protocols adopted so far, and more than 1000 synoptic reports issued, we conclude that widespread implementation of SR in languages other than English is feasible, but neither a trivial nor an effortless endeavour.

All five Swiss academic pathology institutes collaborate to date on PathoLink, a common bilingual (German and French) structured reporting system to enhance data interoperability for cancer registration and data exchange in the frame of personalized health.

Compliance with ethical standards

The authors declare that they have no conflicts of interest.

Authors' contributions: YB, SB, AP and EH contributed to the University of Bern approach to translating and implementing synoptic protocols described herein. LdL, LRB, MT, HM and AP set up the medical and scientific framework of the PathoLink project. EH drafted the manuscript. All authors approved the final version of the manuscript.

| English | German | French |
|--|---|---|
| Recurrent Terms | | |
| Procedure | Art der Resektion | Type de pièce opératoire |
| Tumor Site | Tumorlokalisation | Localisation de la tumeur |
| Histological type | Histologischer Typ | Type histologique |
| Histological Grade | Histologischer Grad | Grade histologique |
| Tumor Size, Greatest Dimension | Maximaler Tumordurchmesser | Taille de la tumeur, Plus grande dimension |
| Margin | Resektionsrand | Berge d'exérèse |
| Treatment Effect | Therapie-Effekt | Réponse au traitement |
| Regional Lymph Nodes | Regionäre Lymphknoten | Ganglions lymphatiques régionaux |
| Tumor extension (<i>Lymph Nodes etc.</i>) submitted | Tumorausdehnung Eingesandte (<i>Lymphknoten etc.</i>) | Extension tumorale (<i>Ganglions etc.</i>) soumis |
| (<i>Lymph Nodes etc.</i>) examined | Untersuchte (<i>Lymphknoten etc.</i>) | (<i>Ganglions etc.</i>) examinés |
| (<i>Lymph Nodes etc.</i>) involved | Befallen (<i>Lymphknoten etc.</i>) | (<i>Ganglions etc.</i>) envahis |
| Additional Pathologic Findings | Zusätzliche pathologische Befunde | Autres lésions histopathologiques |
| Mitotic rate | Mitoserate | Index mitotique |
| Ki-67 labeling index | Proliferationsrate (Ki-67) | Index de prolifération (Ki-67) |
| Perineural invasion | Perineuralscheideninfiltration | Infiltration périnerveuse |
| Not applicable | Nicht zutreffend | Non applicable |
| Cannot be assessed | Kann nicht beurteilt werden | Ne peut être évalué |
| Cannot be determined | Kann nicht bestimmt werden | Impossible à déterminer |
| Recurrent Terms – Special considerations | | |
| Tumor focality | Anzahl Tumorherde <i>Literally: "Number of Tumor Foci"</i> | Nombre de foyers tumoraux <i>Literally: "Number of Tumor Foci"</i> |
| Extranodal Extension | Extrakapsuläre Ausbreitung <i>Widely used term</i> | Effraction capsulaire |
| Brisk / Non-brisk <i>Semiquantitative assessment of Tumour-infiltrating lymphocytes in melanoma</i> | Reichlich vorhanden ("brisk") / spärlich vorhanden ("non-brisk") <i>Established English terms in parentheses</i> | Intense ("brisk") / modéré ("non-brisk") |
| Uninvolved | Tumorfrei <i>Literally: "Free of Tumor"</i> | Sain <i>Literally: "Healthy"</i> |
| Well differentiated | Gut differenziert <i>Rather than "hoch differenziert" to avoid confusion with "high grade"</i> | Bien différencié |
| Moderately differentiated | Mässig differenziert | Moyennement différencié |
| Poorly differentiated | Wenig differenziert | Peu différencié |
| Present | Vorhanden | Présent |
| Not identified | Nicht nachgewiesen <i>Rather than "nicht vorhanden" in order not to differ from "vorhanden" only by one word</i> | Non identifié |

Table 1: Examples of German and French translations for recurrent terms in the CAP protocols.

Comments in *italics*.

References

1. College of American Pathologists. www.cap.org. Accessed 26/06/2018
2. International Collaboration for Cancer Reporting. <http://www.iccr-cancer.org/>. Accessed 26/06/2018
3. Pathologisch-Anatomisch Landelijk Geautomatiseerd Archief. www.palga.nl. Accessed 26/06/2018
4. Ellis DW, Srigley J (2016) Does standardised structured reporting contribute to quality in diagnostic pathology? The importance of evidence-based datasets Virchows Arch 468:51-59. doi: 10.1007/s00428-015-1834-4



Click here to access/download
Supplementary Material
Synoptic_Bilingual_Supplem.docx

