Management and Training of Linguistic Volunteers: A Case Study of Translation at Cochrane Germany

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Abstract

Cochrane is a global, non-profit organisation that synthesizes health-related research evidence. It established a translation strategy in 2014 to increase the significance of its information beyond the English-speaking world. Under the strategy, translation at Cochrane is achieved mostly through the efforts of linguistic volunteers. Translation in crisis settings, too, relies on the work of volunteers; however, appropriate ways to manage and train these volunteers are unclear. We carried out a study of the case of translation at one part of Cochrane, Cochrane Germany, to learn about the management and training of linguistic volunteers there and in Cochrane more broadly. Thematic analysis of data gathered by the researcher during a two-month secondment to the offices of Cochrane Germany– including data from formal interviews, informal meetings, field notes, a reflective journal, and a large corpus of grey literature – generated three main themes. The themes relate to appropriate conceptualisations of linguistic volunteers, project management in the assurance of quality volunteer work, and feedback as a form of volunteer training. Recommendations are made to apply these lessons learned to future work on crisis translation and for possible improvements to linguistic volunteer management and training at Cochrane.

Keywords: Cochrane; crisis translation; volunteers; management; training

Introduction

Volunteers are understood to be people who contribute in the public sphere (Erickson, 2012) by offering their time and effort freely to help others, usually without compensation in the form of wages or salaries (Milligan, 2007). That is not to say that the presence of financial compensation precludes volunteering; stipends, expense repayments, and other payments-in-kind are sometimes used to support volunteers in their work (Ellis, 1985). Volunteering is not a universally-understood phenomenon, and different geographic and cultural settings create distinct voluntary sectors based on

varied needs, attitudes, histories, and infrastructures (Greenspan *et al.*, 2018; Milligan, 2007). Of these, infrastructure to manage and direct volunteering efforts has been singled out as particularly important to the functioning of volunteering activity, and the mechanisms involved in the recruitment, screening, management, administration, motivation, control, and supervision of volunteers require examination (Ellis, 1985; Greenspan *et al.*, 2018). Volunteers' motivations, too, are regularly studied. Various typologies have been proposed, with functional psychological perspectives dominating. For instance, Clary *et al.* (1998) provide a comprehensive typology of functional motivations that include expressing altruistic concern, developing skills and career prospects, engaging socially with others, mitigating negative feelings about oneself, and enhancing positive feelings about oneself.

Academics in Translation Studies are also interested in the phenomenon of volunteer work. Researchers enquire into the forms of volunteering present in the creation and dissemination of multilingual content by linguistic volunteers, the functioning of global volunteer communities, especially online, and the motivations linguistic volunteers hold for carrying out such tasks (Dombek, 2014; Olohan, 2014). Other issues of concern for translation scholars include demonetisation and deprofessionalisation of the translation and interpreting professions because of volunteering, problematising an equation of volunteer with non-professional, technologies that facilitate crowdsourcing and collaborative work, and broader issues of quality and community (see Brownlie, 2010; McDonough Dolmaya, 2012; O'Hagan, 2011; Pérez-González and Susam-Sarajeva, 2012).

Volunteering is also a significant feature of humanitarian contexts.

Dissatisfaction with the ability of the state and market to provide social services effectively (Hung, 2007; Linderberg, 1999; Milligan, 2007) have contributed to massive

growth in recent years in social and economic services being provided by voluntary, community-based, non-governmental, non-profit organisations and charities (Ellis, 1985). A large body of research indicates that linguistic volunteers have provided their services in various crisis settings in the form of translation and interpreting (see, e.g., Bulut and Kurultay, 2001; Businaro, 2012; Cadwell, 2015; Federici and Cadwell, 2018; Lewis *et al.*, 2011; Morrow *et al.*, 2011; Moser-Mercer *et al.*, 2014; Munro, 2013). At the same time, there is a perception in the literature on volunteering of '...good-hearted, well-meaning volunteers doing important and challenging work but with little training or accountability' (Erickson, 2012, p. 167).

With this problem statement as a contextual point of departure, we in the INTERACT research network carried out a case study to better understand the management and training of linguistic volunteers. INTERACT, the International Network on Crisis Translation, is an EU-funded Research and Innovation Staff Exchange under the Marie Skłodowska-Curie programme led by Dr Sharon O'Brien at Dublin City University. The network brings together academic, industry, and non-profit members and facilitates knowledge sharing, research, and deeper contacts through inter-network secondments. One non-profit member of the network is Cochrane, an organisation that harnesses volunteer contributions to translate summaries of health-related research evidence. Researchers from Dublin City University were seconded to Cochrane Germany in July and August 2018 to carry out a case study which asked the following questions: what can be learned from the management and training of linguistic volunteers at Cochrane Germany and the Cochrane organisation more generally, and how can these lessons be applied to translation in crises?

This chapter begins with a description of Cochrane and the case study methodology used to answer these questions. There follows a discussion of translation

at Cochrane Germany and the themes derived from analysis of the case study data. The chapter ends with conclusions on how these themes relate to crisis translation in general and the future work of the INTERACT research network in particular.

1. Cochrane: Volunteers Providing Health-Related Information in Multiple Languages

Cochrane is a non-profit organisation comprised of researchers, health professionals, patients, and others interested in healthcare across the world who collaborate to synthesize health-related research evidence and make it available for informed decision-making (The Cochrane Collaboration, 2016, 2019a). Founded in 1993 and named after British epidemiologist Archibald Leman Cochrane (The Cochrane Collaboration, 2019b), this UK-registered charity has developed to become a collection of some 11,000 members and more than 50,000 active contributors in over 120 countries (The Cochrane Collaboration, 2019a, 2019c).

Cochrane's main activity involves summarising the results of available healthcare studies in systematic reviews following a carefully-designed, proprietary methodology to provide evidence on the effectiveness of healthcare interventions; a database of these systematic reviews is published continuously as part of the subscription-based Cochrane Library (Wiley, 2019). An elected Governing Board directs the work of Cochrane and contributors affiliate with Cochrane through a complex array of entities including Review Group Networks, Fields, Methods Groups, Centres (Geographic Groups), and the Cochrane Consumer Network depending on their expertise, interests, and geographical location (The Cochrane Collaboration, 2016, 2019d). These entities are typically supported by universities, and sometimes by ministries, healthcare authorities, and research funds (The Cochrane Collaboration, 2019e), whereas commercial funders with potential conflicts of interest such as

pharmaceutical companies are not permitted to sponsor reviews (The Cochrane Collaboration, 2019f). The majority of contributors are not employed nor reimbursed by Cochrane for their work, but participate as part of their day jobs as health professionals or researchers, or on a voluntary basis.

A desire for greater global accessibility and increasing the significance of its information beyond the English-speaking world prompted the organisation to establish a translation strategy in 2014 (Ried, 2018a) as part of a greater knowledge translation drive to increase the dissemination, use, and impact of Cochrane's health-related evidence (The Cochrane Collaboration, 2017). Multilingual knowledge translation will be achieved, the strategy outlines, mostly through the efforts of linguistic volunteers combined with translation technology solutions and strategic partnerships with other organisations (Translation Strategy Working Group, 2014). Translations at Cochrane are mostly of plain language summaries and abstracts of systematic reviews and are published along with the English systematic review on the Cochrane Library database as well as on cochrane.org, which has been translated into 15 languages at the time of writing.² There has been massive growth in non-English access to Cochrane evidence via the cochrane.org website since translation activities have been strategically pursued: currently, approximately three quarters of visitors to cochrane.org come from non-English browsers, and approximately two thirds of visitors access translated content (The Cochrane Collaboration, 2019c). More than 23,000 translations across different languages have been published by Cochrane's various entities (Ried, 2018a).

As an organisation that coordinates the work of a large number of volunteers around the globe to produce multilingual content, Cochrane provides an instructive context to learn more about the management and training of linguistic volunteers. At the same time, Cochrane is a complex organisation, with diverse entities. Of these entities,

Geographic Centres have specific responsibilities for the training of and support for contributors and the coordination of translation efforts (The Cochrane Collaboration, 2019g). In this research, therefore, we focus only on the case of translation at Cochrane Germany (*Cochrane Deutschland*). The next section describes the ways in which our case study of Cochrane Germany was carried out.

2. Methodology

Two researchers from Dublin City University were seconded to the offices of Cochrane Germany in Freiburg, Germany for July and August 2018. The aims of the secondment were to learn about translation at Cochrane in general and its linguistic volunteers, as well as to share knowledge about translator training being developed within the INTERACT network. We focused on the case of translation at Cochrane Germany and compared this case to other cases in the broader Cochrane organisational structure. Data gathered and generated for the case study consist of: audio recordings of formal interviews with six translation project managers operating across Europe and Asia and one coordinator of project managers³; field notes taken during or after informal meetings with four key members of the Cochrane Central Executive Team (responsible for supporting the work of all the Cochrane entities across the globe); a research journal of reflections maintained over the period of the secondment; and detailed analysis of 26 documents (strategy documents, induction manuals, websites, training databases, and other grey literature) that explain Cochrane and its workings. A thematic analytical strategy adapted from Braun and Clarke (2006) was used to combine these diverse data sets into the themes presented for discussion in this chapter. Ethical approval for this project was received from Dublin City University under application number DCUREC/2017/112.

3. Translation at Cochrane Germany: A Case Study of Managing and Training Linguistic Volunteers

Data from interviews with the translation project manager of the team in Germany were combined with data from grey literature and observations made while on secondment in the Freiburg office to create a process map of translation and its management at Cochrane Germany. The process map created by the researcher is illustrated in Figures 2, 3, and 4 and has been validated by the translation project manager. Figures 2, 3, and 4 should be conceptualized as interconnected stages in one overall process map rather than as discrete maps; they have been separated here for ease of presentation. The knowledge in the map was developed according to principles outlined in Project Management Institute (2008) and depicted according to conventions explained in ISO 5807 (ISO, 1985). Figure 1 summarizes the symbols used in the process map.

INSERT FIGURE 1 ABOUT HERE

Figure 1. Key to symbols used in process mapping.

Translation at a Cochrane entity can include volunteer, professional, and machine translation depending on local circumstances (Ried, 2018a). Nevertheless, only a small number of language teams have resources to employ professional translators, and a majority of translation activities depend on the efforts of linguistic volunteers, usually with health domain experience and sometimes with translation experience (The Cochrane Collaboration, 2019h); this is the case at Cochrane Germany. Figure 2 depicts the beginning of a relationship between Cochrane Germany and a potential linguistic volunteer.

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Figure 2. Process map for translation at Cochrane Germany: a prospective translator joins.

Volunteers can join at any time via the Cochrane website, and a translator agreement — common across all Cochrane entities — is accepted by them on one occasion at their first log in before they can proceed further in the volunteer process. Under the agreement, Cochrane translators warrant that the work they produce is their own, will be translated accurately, and will be written in clear and simple language (Ried, 2018b). In addition, they assign ownership, copyright, and modification rights to Cochrane (ibid.). Furthermore, the agreement clarifies that 'Cochrane translators are volunteers unless otherwise agreed. Volunteer translators are not employees of Cochrane. Therefore, Cochrane will make no payments to volunteer translators' (ibid., n.p.). Finally, the agreement indicates that Cochrane will endeavour to attribute translations to translators, however, this step relies on translation teams using published translation notes for that purpose. It can also be seen from Figure 2 that a translation test is required in the process of volunteering linguistic services at Cochrane Germany, indicating that there is a potential barrier to entry for volunteers.

Figure 3 details the next stage in the process in which translation tests taken by prospective linguistic volunteers are evaluated by the translation project manager.

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Figure 3. Process map for translation at Cochrane Germany: a test translation is evaluated

At the time of the secondments, there was no special quality assessment guideline used to evaluate translation tests at Cochrane Germany. Of interest at this stage of the process, too, is the fact that failing the translation test does not preclude further collaboration with the organisation; if a prospective linguistic volunteer fails, it may be suggested that they contribute to a crowdsourced citizen science project in which no previous experience is required, for instance.⁴ Those who pass the translation test are

provided with some initial training resources by the translation project manager: a template email explaining translation workflows, a flyer about volunteer translation at Cochrane Germany, a glossary of key terms, and links to a Translation Knowledge Base and to a webinar introducing the automated translation management system to be used in translation tasks. (At the time of writing, the system used by Cochrane Germany is Memsource⁵). The challenge at this early stage in the process is to avoid overwhelming a new volunteer with training information while still ensuring that their quality and ease of work are supported. Finally, note in Figure 3 that sustained volunteering efforts are encouraged from the outset through a request for the completion of 12 translations a year and that volunteers are given freedom to pursue translation in domains that interest them.

Figure 4 illustrates the translation project cycle that is followed once a linguistic volunteer has begun to translate for Cochrane Germany.

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Figure 4. Process map for translation at Cochrane Germany: the translation project cycle.

The translation project manager estimated in an interview that some 80% of translations done at Cochrane Germany are of plain language summaries for a general audience and that almost all of the remaining 20% of translations are of abstracts for a more specialist audience. She further explained that some volunteers never continue after a first translation attempt and that there is currently no standardized process to follow up on incomplete projects due to workload and time constraints. For this reason, important translations are not allocated to a linguistic volunteer until they have completed more than one translation. Nevertheless, a volunteer could become active again at any time; hence, there is no depiction in this process map of a translator leaving the translation

project cycle. At the time of writing, Cochrane Germany can call on a pool of approximately 30-40 active and reliable linguistic volunteers. It is also worth noting in Figure 4 the number of administrative tasks required of the translation project manager. Note, too, that the end goal of a translation is for it to be sent to a media manager for advertising and dissemination, indicating a potentially larger role for translation at Cochrane than the isolated production of target texts.

Linguistic volunteers are managed by Cochrane Germany because funding is rare for other forms of translation, such as professional outsourced translation that is considered to be cost-intensive. The work of volunteer translators keeps translation costs low while still allowing evidence to be more accessible in German. Approximately 10% of those who translate voluntarily for Cochrane Germany are professional translators. The project manager expressed no concern at working with linguistic volunteers, but she explained that ensuring accuracy in their translations requires a lot of effort and planning. The translation project manager revealed that Cochrane Germany does not place full reliance on linguistic volunteers to complete translation tasks. When a translation task is urgent or especially important, it is not uncommon that the project manager carries out a translation herself or assigns it to one of two editors, rather than assigning it to linguistic volunteers. Cochrane translation project managers and editors are primarily health professionals, not translators, and they manage or edit translation projects alongside other work, usually health research. Sometimes they are volunteers themselves. It is seen as an advantage to have health professionals as managers and editors because they can ensure that medical content is accurate.

The broader Cochrane organisation supports translation activities principally through the provision of central support and technical infrastructure and resources for the management and training of linguistic volunteers. Some translation teams receive a

small amount of funding from Cochrane which they can use as they see fit, but which they mostly use to fund a part-time translation project manager. There is a model for management and training in which resources are provided centrally (usually online) to all geographic groups and other entities and in which local delivery of these resources in ways that are tailored to local needs is encouraged.

With respect to managing linguistic volunteers, for instance, a large, freely available Translations Knowledge Base hosted on a Wiki-style information sharing platform provides explicit guidance to translation project managers. Advice includes ensuring someone is in place who can dedicate time regularly to: designing a workflow that separates translation steps (performed by linguistic volunteers) from editing steps (performed ideally by experienced contributors with domain expertise); monitoring and supporting translation tasks through the creation and implementation of style guides, glossaries, and other resources; and authorising and publishing finalized translations (The Cochrane Collaboration, 2019g). Guidance on managing and motivating linguistic volunteers includes: effective record-keeping; regular communication, feedback, and expressions of gratitude; translation acknowledgment and attribution; targeted training appropriate to local circumstances; responding to linguistic or technological queries; periodic recruitment of new linguistic volunteers, especially through student and professional networks; and consideration of strategic partnerships with other organisations to build translation capacity (Ried, 2018a).

Cochrane assembles training for its contributors under a Cochrane Training portal.⁶ Centrally-supported training activities have been ongoing since 2010 (Cumpston, 2014). Learning opportunities are focussed mainly on the conduct of systematic reviews – Cochrane supporters' core activity – but they aim more generally to enable supporters 'to gain and enhance the skills and knowledge they need to

contribute to Cochrane effectively, irrespective of geography and language' (Cumpston, 2014, p. 4), and this includes information for linguistic volunteers under the classification of Knowledge Translation in Multi-Language Activities. The Translations Knowledge Base, mentioned previously, also provides detailed guidance for translators on where to find translation resources online, how to consider target audiences, and how to achieve greater accuracy, consistency, and fluency (Hassan, 2018a). The database also provides a useful checklist for linguistic volunteers to consider before submitting a translation (ibid.).

In addition to centrally-located resources to help Cochrane entities manage and train their linguistic volunteers, there is also a Translation Advisory Group in Cochrane that meets at colloquiums and governance meetings of the organisation, and interacts via email. It acts as a forum for representatives of translation teams to come together to address common issues of concern and develops strategy to support linguistic translation.

4. Discussion of Themes

Thematic analysis of data related to translation at Cochrane Germany combined with interviews with other project managers in Cochrane and the other forms of data outlined in the Methodology section allowed the identification of three main themes. These themes – concerning ways to conceptualize linguistic volunteers, quality control mechanisms in linguistic volunteering, and uses of feedback in training linguistic volunteers – are discussed here and are related to crisis translation in the Conclusions section.

4.1. Linguistic Volunteering: A Broader Activity than Target Text Production How can we conceptualize a linguistic volunteer in the kind of multilingual content

creation and dissemination carried out by Cochrane? What profiles, skills, and motivations do volunteers hold, and what concerns, if any, should we have about their work?

When discussing the profiles of linguistic volunteers, most interview participants talked most frequently about healthcare professionals and healthcare students. Language students were sometimes mentioned, while language professionals and lay people (e.g., people living with a particular health condition) were also noted on rare occasions. Pathways to volunteering across the Cochrane organisation are more varied than simply entry through the website; some translation teams call on personal networks of colleagues, students, and other contacts, too. Linguistic volunteering in Cochrane implies in almost all cases unpaid work provided freely, though there are exceptions. For instance, translation projects have occasionally been framed for students as compulsory, credit-bearing projects.

We also have students who are students of translation, and they do the translations as a part of their class, and these are totally different people from the other volunteers. We can call them volunteers but they do it as a part of their obligatory classes. (Interview Participant 3)

Translation project managers also frequently contribute in a voluntary capacity, though institutional funding structures sometimes allow them to include Cochrane tasks as part of their salaried work.

Some of them are also volunteers themselves or somehow volunteering. I think they are very conscious of what that implies and the fact that people are doing it out of no [financial] interest at all – out of willing to help and to provide Cochrane evidence to their community. (Interview Participant 1)

Furthermore, the presence of language professionals in project managers' accounts of translation work reinforces the idea that volunteering is not synonymous with a non-

professional identity.

Four main skill sets were identified for linguistic volunteers at Cochrane: target language skills; source language skills; domain expertise and experience; and computer skills. While all skill sets are valorized, they are not valorized equally. On balance, specialist knowledge of the health domain in question and target language skills (especially an ability to use one's first language in an effective way for the end user of the translation) are particularly valued.

When we have volunteers who don't have medical experience, they sometimes have a problem with some terms, medical terms, so the quality of translation, plain language translation, is poor." (Interview Participant 4)

Motivation has been much discussed in literature on volunteering, as was shown in the Introduction section. Motivations of linguistic volunteers at Cochrane correspond to the well-known functional typologies and include altruism, social engagement, mitigation of negative feelings, and enhancement of positive feelings. Development of new skills and career prospects were singled out frequently by project managers.

It might be, yes, that some of them were hoping that after being involved for some time they would be eligible for a job. (Interview with Participant 5)

I got the impression that they want to build their CV. Get some credentials that they translated something for Cochrane, medical translations. (Interview Participant 7)

Cochrane aims to satisfy this functional motivation for linguistic volunteers by providing them with access to valuable training materials⁷ or membership of Cochrane (Ried, 2018a). Cochrane membership – with the reputational benefits, voting rights, and contacts, etc. that this entails – can be earned through contribution, and regular translation counts as one such possible contribution. Indeed, it was revealed in

interviews that a driving force of this concept of membership through contribution was that, while the translation community in Cochrane was growing, they felt disenfranchised, and earning membership was a way to give translators recognition and a home within Cochrane.

Advocacy and a belief in Cochrane's broader mission were also highlighted as major motivators for linguistic volunteers. Collaboration and building on an individual's eagerness to contribute to Cochrane's goals are guiding principles in Cochrane's overall strategy (The Cochrane Collaboration, 2019a). The creation of a systematic review is a complex task requiring specials skills and mastery of specific methodologies. It was revealed in the interviews that, if someone does not have the capacity to conduct a review, translation can be suggested as an alternative means of harnessing this volunteering enthusiasm. Similarly, as was seen in the case study of Cochrane Germany, if a linguistic volunteer does not meet the quality threshold required for translations, other opportunities to contribute are presented for consideration to keep the person within the Cochrane community. Thus, linguistic volunteering at Cochrane can be seen as one pathway to integrate interested and enthusiastic individuals into Cochrane's broader mission. Advocacy – rather than target text production in isolation – appears to be how many translation groups conceptualize their role; many groups maintain blogs, create podcasts, and disseminate other materials to advocate for health evidence in their communities in their languages. Translators, and especially translation project managers, exert some control over the choice of target texts that they produce and express their agency as advocates for health evidence.

There are many teams that also translate dissemination materials, like podcasts, for example, infographics, press releases, and so on, all sort of dissemination materials created by Cochrane or by the Cochrane Review Groups which are then

disseminated throughout the internal community first and then each translation group decides what they want to translate. (Interview Participant 1)

Translation project managers expressed very little concern at the idea of working with linguistic volunteers and satisfaction seemed high. Overwhelmingly, any worry about working using the services of volunteers for translation projects related to the sustainability and timeliness of volunteers' contributions. Turnover is high, and many translators fail to contribute again after a first translation, or even for a first time after registering.

Volunteers are coming and going. I think we have a very long list of names of volunteers, but probably only less than 10% of them remains loyal. (Interview Participant 6)

There is a high number of translators who pass the translation test but don't start a single translation. I don't really know what are [sic] the reasons for this. (Interview Participant 2)

Deadlines are also an issue of some concern. It is Cochrane's policy not to impose deadlines and new translators are guided that they should work at their own pace (Ried, 2018a); the fact that deadlines cannot be implemented poses understandable problems for project managers, and some managers struggle to create timelines and avoid bottlenecks for projects.

We do have some people who take a translation and then they don't translate it for six months. And then I take it back. I don't think it's a problem in somebody saying I'm sorry I can't actually do this... they can be actually old news by the time they are translated. (Interview Participant 7)

It's never a strict deadline. It's never like, 'You have to do your homework by this time'. It's never that way. It just helps us, helps our team to set some kind of a target...we remind the translator and we give options to reassign to different

translators. The word deadline is probably too harsh. It is a timeline, perhaps. (Interview Participant 6)

Despite the expression of some concern about sustainability and deadlines with respect to volunteer work, the relatively high expression of satisfaction with volunteering as a model for translation projects probably comes from the fact that a small but regular contribution provides adequate results for project managers' purposes.

We have some volunteers that are, let's say, consistently a little bit productive. They will translate something every once in a while, but not a lot. But I guess in a long period they contribute significantly because they will do a little bit here once in a while. (Interview Participant 7)

This section examined appropriate conceptualisations of linguistic volunteers at Cochrane. A special role for the translation project manager became evident in this discussion. The next section argues that the project manager is, in fact, the key role on which the success or failure of translation efforts rest and is an important mechanism for negotiating tensions between quality and speed when harnessing the efforts of linguistic volunteers.

4.2. Project Management: A Quality Control Mechanism

Translation project management at Cochrane is frequently a voluntary activity. Even in cases where a project manager's role is compensated through institutional funding, it is usually in the form of a split contract and project managers must accommodate

Cochrane translation tasks within other workloads and are unable to devote full attention to Cochrane translation work. The voluntary nature of the role raises serious questions about its sustainability.

I am not sure this is sustainable. I am now the key volunteer. If I step down, I really don't see who would replace me because I tried to involve some other people who

would be [sic] project managers before, and there were some people participating like this, but then they also stopped contributing in a while and there is nothing you can do. They are not on the payroll. (Interview Participant 7)

The role contains a significant administrative element, as can be seen in Figures 2-4 in the case study. This administration does not require highly specialized skills; more importantly, it requires time and sustained effort. Sometimes this administrative load is supported and project managers are assisted in their tasks by other personnel. However, the support needs to be sustained and motivated to be helpful.

Quality is central to the Cochrane brand and supporters of Cochrane see their work as 'recognized as representing an international gold standard for high quality, trusted information' (The Cochrane Collaboration, 2016, p. 2). Translation project managers at Cochrane take their involvement in the dissemination of high-quality evidence seriously. Equally, Cochrane recognizes the importance of quality in translation projects, and the Translations Knowledge Base states, for instance, that '[g]iven the content of our Reviews and the potential impact on the health of humans, it is very important that the translations are accurate, high quality and clear. Don't compromise on quality – it is more important than quantity' (Hassan, 2018b, n.p.).

Translation project managers revealed in their interviews that they have taken an approach to quality in which the initial barriers to entry for linguistic volunteers are not high, and in which robust engagement of editors and managers, therefore, must be ensured. This approach can create delays and pressure points, especially as all translations tend to pass through the project manager or an editor. Indeed, rather than motivating and sustaining the linguistic volunteers, some project managers argued that first and foremost the managers and editors need to have *their own* motivation sustained and their efforts supported, even to the extent that resources should be allocated to project management and editing to make them financially-compensated occupations.

At the moment, I am showing the coordinator part to another colleague who will support me in the future so that I only can concentrate on the quality check. I check the accuracy of all translations. Every translation is checked by two employees at [Cochrane entity]. I am always the one who, I am mostly the one who does an accuracy check. (Interview Participant 2)

From my observations, if you have someone who is dealing with the editing on a regular basis, you have someone who is devoted and motivated to do it, you would have – no matter how many translators you have – you will have plenty of translated plain language summaries. If you have someone who does this from time to time, like in our team, then you will have a smaller number of translations. (Interview Participant 3)

Several interviewees asserted that reducing the administrative load involved in the management of translation projects would allow for the speedier production of quality translations. Tensions between necessary administration of linguistic volunteers, quality assurance of their output, and delivery of target texts within reasonable timelines appear to be the major tensions that remain to be resolved in many translation teams.

The coordination is very administrative work, and I think when I am able to focus on the quality check, we can translate more and faster perhaps. I think that would be a helpful project. (Interview Participant 2)

In sum, this section has shown that the management of linguistic volunteers and the quality assurance of their work in translation projects require planning, infrastructure, and resource allocation and that the project manager role is central to this. The final major theme developed in our analysis of the case study data that could be instructive for crisis translation relates to feedback and its potential as a mechanism for volunteer training.

4.3. Training Linguistic Volunteers: A Role for Sustainable Feedback

Cochrane puts many training resources online. These are certainly valorized, especially for the more technical elements of the linguistic volunteering task.

What they [Cochrane] do is they provide a toolkit that contains all the necessary information, all the technical information needed by translators. We find that very useful and every time we get a new volunteer, we just give them the link. (Interview Participant 6)

Cochrane managers revealed in interviews that they think sustainably about the creation of these training resources. For instance, a webinar to train a group of supporters will not just be delivered; it will also be preserved (e.g., through recording), edited (e.g., into short videos), and archived (e.g., to an online portal that can be accessed widely). They also aim to introduce an element of interconnectivity and collaboration into these online learning environments that allow people to learn from each other, help each other, and share with each other.

In my kind of role, I think that experience from other countries, other teams, and branches are very important. Like good practice, yes. What do other translation teams do? (Interview Participant 4)

However, archiving training content online and disseminating links to the resources through email are not sufficient to train volunteers, especially time-poor volunteers. It must be remembered that volunteers may need to take time off other paid work in order to engage with such training.

There are a lot of these materials, a lot of emails. So you have to invest time. And for me this is also a voluntary participation and I am also a teacher and a researcher, basically I work three real jobs...and I am paid for all these works and on top of this I volunteer for Cochrane and sometimes it is hard to find time for all

this volunteering, to read these emails and watch all these videos. (Interview Participant 7)

Cochrane managers revealed in interviews that large drop off rates are reportedly experienced for contributions in citizen science. However, they also explained that Cochrane has found a positive correlation between the provision of feedback (in the form of statistics on tasks completed, accuracy, and impact) and volunteer retention. Translation project managers also recognize the importance of feedback to linguistic volunteers and its role as a form of training. Feedback is used eagerly by some linguistic volunteers to enhance their learning and improve their future contributions.

Feedback? Well, I think it is important mostly for those volunteers who come really as volunteers through the website. They come with their first work and they are asking via emails "how was it?" They are anxious to get the confirmation that they performed to the required level. (Interview with Participant 5)

Some of them are very interested in feedback, to see the final version and what they can do better the next time, so that is very nice. (Interview Participant 2)

Sometimes we send the PLS [plain language summary] which is published with track changes, and give advice which kind of medical terms they should use. Some like that. (Interview Participant 4)

Nonetheless, several project managers interviewed recognized the commitment of resources required to provide feedback consistently and sustainably and that this might not be possible in all teams at all times.

What would be beneficial is to show track changes to translators so that they can see you have changed they could improve but would be very time intensive. This would be great if this could be delivered consistently to all translators but I am not sure who has capacity to do this. (Interview Participant 7)

The question then becomes how to ensure that the provision of feedback to linguistic

volunteers – considering its relevance as a motivator and a training tool – is organized in as low-resource and easy a way as possible. Furthermore, feedback from end-users of the translations was also recognized by some translation project managers as another form of training to increase overall translation quality that should be considered.

Ten times a year somebody will contact them to criticize the translation or correct a mistake or make an ideological change. They [the linguistic volunteers] value it and just correct the issue if it is valid. (Interview Participant 7)

We have been thinking of having some translation auditing to look into the quality of our translations: whether or not it can be understood by lay readers and whether or not it tells what it is supposed to tell. (Interview Participant 6)

5. Conclusions

As has been shown elsewhere in this volume, translation in crisis settings shares some concerns with the translation activities carried out by Cochrane described here. These include: a reliance on volunteers; constrained resources; potentially life-saving content; tensions between timeliness and accuracy; and complex content that needs to be communicated clearly to diverse audiences with differing needs and expectations. While making generalisations from case study data can be problematic and should be approached with caution (see, e.g., Gomm *et al.*, 2000), it can be supported in the context of drawing theoretical generalisations to guide further study (e.g., Mitchell, 2000). As a result, we argue that lessons learned from the Cochrane example can be used to guide further research into the management and training of linguistic volunteers in crisis translation in general and the future work of the INTERACT research network in particular.

Firstly, in crisis translation it may be useful to conceptualize translation projects carried out by linguistic volunteers as having aims beyond the isolated production of

target texts. Cochrane uses translation as a potential pathway to integrate enthusiastic individuals into their community and to facilitate their contribution to a common good in ways that are aligned with Cochrane's overarching mission. In crisis settings, too, the act of translating with others could be used as a tool for community integration or advocacy for a greater communal good, such as better health outcomes, improved crisis education, greater disaster resilience, and so on. In fact, translation was used as a tool for community development and improved disaster resilience in an INTERACT collaboration with the New Zealand Red Cross that began in 2017 (see Federici and Cadwell, 2018; Shackleton, 2018). In this collaboration, the term citizen translation was proposed as a form of translation in which the voluntary translational activity is carried out 'with the assumption of achieving a common good' (Federici and Cadwell, 2018, p. 22). We see some of the linguistic volunteering at Cochrane as another example of citizen translation. However, citizen translation alone is not sufficient to satisfy translation needs in crisis settings, just as citizen translation is not enough to satisfy all translation needs at Cochrane. Analysis in this case study showed that there was a rarely full reliance on citizen translation at Cochrane, especially in cases where other funding was available, where a target text needed to be produced quickly, or where necessary infrastructure for managing volunteers was still not in place. There is certainly a place for citizen translation in crisis contexts, however, needs assessment should be used to identify cases in which professional translation, community translation, or machine translation would be more appropriate to the task. It was interesting, too, to notice the agency given to linguistic volunteers and translation project managers at Cochrane, especially in relation to source text choice. Choices of texts were based on potential impact of content, timeliness, and the interest or motivation of the volunteer. Crisis settings are characterized by constrained resources, meaning that prioritisation of texts

for translation is frequently required. Researchers interested in crisis translation should consider how this prioritisation can be facilitated. We in the INTERACT network have made a first attempt by providing ethical guidance on the type of prioritisation that may be required of translation in crisis settings (see O'Mathúna *et al.*, 2019), and more will be done to integrate prioritisation skills into the translation training that we are producing within the network.

Secondly, when linguistic volunteers are involved, quality still needs to be assured, even where target text production may not be the only goal of the translation project. At Cochrane, this quality assurance was achieved through a well-established and well-supported – though somewhat precarious – infrastructure of translation project managers. Such an infrastructure for translation projects is not widely available in crisis settings. Nonetheless, community development workers in humanitarian nongovernmental organisations could be trained quickly to carry out a translation project manager role, and this was the case in INTERACT's 2017 collaboration with New Zealand Red Cross (see Federici and Cadwell, 2018; Shackleton, 2018). In future work, we in the INTERACT network intend to develop and test train-the-trainer content for the delivery of crisis translation training materials currently being developed in the network. We envisage these as 'how to' guides for our training. We will take inspiration from the experiences of Cochrane and will focus not only on the train-the-trainer materials, but also on the pedagogy involved, on evaluation of the training, and on ways in which to bring trainers together to collaborate and share knowledge. Crucially, we will also focus on training trainers in sustainable methods for ensuring the provision of feedback to linguistic volunteers. We also plan to create train-the-trainer materials at different levels of intensity based on the differing skill sets of trainers. For instance, we have been working at three academic institutions – the University of Auckland,

University College London, and Dublin City University – to develop curricula on translation in crises for delivery to Master's level students who are already protoprofessionals or professionals in translation and interpreting (Federici *et al.*, in review). These academic courses provide training in crisis translation at a more advanced level of intensity than a 'how to' guide for a community development worker or linguistic volunteer and aim to produce graduates who will be capable of consulting on or managing large-scale, complex crisis translation projects.

Finally, despite the obvious success of translation at Cochrane and the sophisticated management and training of linguistic volunteers revealed by analysis of our case study data, we believe some improvements to the processes at Cochrane could be considered. The administration of the project management function is timeconsuming and labour intensive. Further standardisation and automation of the administrative and evaluative steps could enable translation project managers to focus more on quality assurance and communication and engagement with volunteers. Implementing a translation quality assessment framework to test potential volunteers and to include as part of the evaluation of all target texts could prove beneficial; translation quality assessment carried out by project managers and editors currently appears intuitive and ad hoc and may impose a significant temporal and cognitive load on these editors and project managers who are themselves frequently volunteers. (See, for instance, the Multidimensional Quality Metrics (MQM) framework, developed by the EU-funded QTLaunchPad project for translation quality assessment guidelines that could be adapted to Cochrane needs⁸). As for automation, highlighting to all project managers the ability to provide tracked-change feedback to volunteers through the Memsource tool would be useful, as not all managers were aware that this is possible. In addition to standardisation and automation within the project management role,

facilitating knowledge sharing within and between translation teams could be beneficial. In particular, considering the fact that professional translators are already within the network of linguistic volunteers in many translation teams, the creation of a peer mentoring or peer training system led by these professional translators for the benefit of inexperienced linguistic volunteers could be useful. Finally, the sustainability of the translation project management role is a cause for concern in several teams, and the continuity of multilingual knowledge translation in some languages rests largely on one individual performing the task in a voluntary capacity. If resources are to be allocated from central funds to translation teams, it would seem that ensuring the sustainability of the translation project manager role as a salaried or part-salaried occupation should be a priority.

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¹ For further details about the INTERACT network, see https://sites.google.com/view/crisistran slation/home (accessed April 7, 2019).

- ² Cochrane.org has been translated into Croatian, French, German, Japanese, Korean, Malay, Persian, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Tamil, Thai, and Traditional Chinese at the time of writing. Target languages have developed organically out of enthusiasm for disseminating Cochrane evidence in certain geographic locations, and translation activities have been supported by Cochrane if enough volunteers are willing to commit sufficient resources at sufficient levels of quality (Ried, 2018a).
- ³ The geographic locations of these managers will not be specified in this research to protect the anonymity of the interview participants.
- Opportunities for alternative contribution include: Cochrane Crowd, the citizen science platform of the organisation in which volunteers collaborate to categorize health-related evidence; and Cochrane Task Exchange, a marketplace that connects people offering skills required in the production of systematic reviews including language translation with those who might need such skills. Cochrane Crowd is available at http://crowd.cochrane.org/index.html and Cochrane Task Exchange is available at https://taskexchange.cochrane.org/ (accessed April 7, 2019).

⁵ See https://www.memsource.com/ (accessed April 7, 2019)

⁶ See https://training.cochrane.org/ (accessed April 7, 2019)

⁷ For instance, active involvement in a translation project grants a translator, editor, or translation project manager free access to Cochrane's interactive learning modules. See https://documentation.cochrane.org/display/TH/Access+to+Cochrane+Interactive+Learnin g (accessed April 6, 2019).

⁸ For more information on QTLaunchPad's Multidimensional Quality Metrics, go to: http://www.qt21.eu/mqm-definition/definition-2015-12-30.html (accessed April 8, 2019).





Figure 2

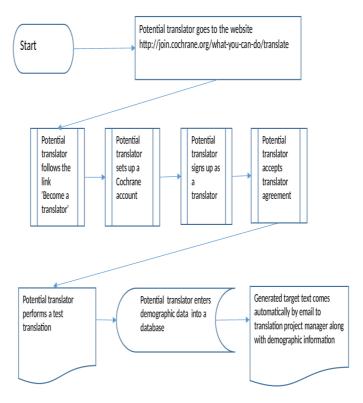


Figure 3

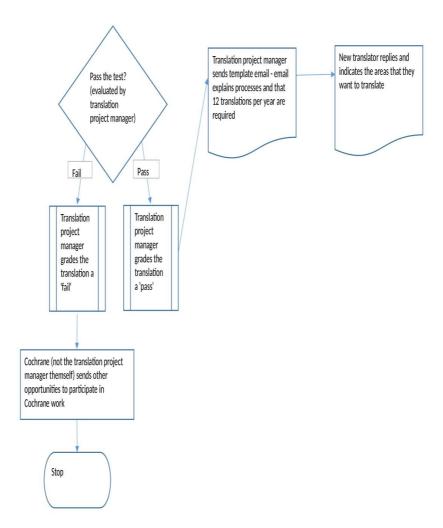


Figure 4

