REPORT BY SHAKILA MAHMUDA FATIMA

Part 1. Midway report

Introduction and summary of task:

My placement is in a company named Care to Translate. The company has developed an app named 'Care to Translate' in order to reduce language barriers in healthcare and improve the communication between patients and healthcare providers to ensure the patients' safety and quality of care. Everyday due to language barriers different types of adverse events like medication error, diagnostic error, problems in treatment and follow up, fluid and pain management etc. (Al Shamsi et al., 2020; Bowen et al., 2017& F. van Rose et al., 2016) are happening within the healthcare system. But according to F. van Rose et al. (2016) detecting and reporting of language barrier is very limited. F. van Rose et al. (2016) also reported that due to cost many hospitals do not avail professional interpreters, who can be a solution of language barriers. Thus the quality of care is being affected. Care to Translate has started to work on the provision of patient safety, quality of care, efficacy and cost in the healthcare system regarding language barrier and patient-care providers' communication. They have developed the app CTT that considers as a new public health intervention and working consistently reducing the burden of language barrier in healthcare system. Right now, the CTT app deals with 39 languages and the free version has 32,900 active users all over the world. At present the company is mainly navigating within Scandinavian healthcare system, but has started to approach the global market.

I started my task in the company by evaluating the CTT app as a user, with both patient and care provider perspectives, and gave my opinion about the ongoing improvement of the app. Then I was assigned to explore the possible impacts of the CTT app and categorized the impacts and stakeholders. At the same time, I was assigned by my supervisor to extract facts from different articles related to language barrier in the healthcare system. After that I formulated the impact evaluation questionnaire for users under the supervision of my supervisor. At this 5 weeks time period, I have attended many meetings. Specifically 'prioritizing the language' meeting was directly related to the public health intervention. In this meeting the company decided which languages are needed to be prioritized considering public health impacts. In my remaining week I will measure the public health impacts from the users of healthcare through individual interviews and the prioritization of content in the app will be continued. I will also be able to observe the current situation within the healthcare system for my remaining time.

Description of six themes addressing one or more suggestions:

 The Company 'Care to Translate' set their goal "to enable communication between healthcare staff and patients no matter what language they speak". In order to put their goal into action they developed a digital translation tool for healthcare staff and patients. The company wants to tear down the language barriers within healthcare to ensure equal care to all patients. To reach their goal the company addressed different levels of healthcare providers, both individual and organizational level. They have several ongoing projects for example the project in the 'Gynecology and Obstetrics' ward of Visby Lasarett hospital, Soodia Radiology clinic etc. To achieve their goal through these projects they are quite successful. Interviews from the management of wards and nurses from these projects show that they have positive impressions for the company's digital translation tool. In the interview one of the nurses in emergency maternity ward said, "She uses the phrase-'We don't have an interpreter at the moment' and patients understand, older patients may be confused at first but this is not a big issue." The nurse also mentions that the nurse-patient relationship has improved by using this app when there is language barrier.

I am working with the public health issue of health and healthcare services in the provision of patient safety, efficacy and quality of care within the regulations of 'Care to Translate'.

Patients' safety and quality of care are important global public health issues and they are fundamental components of Universal Health Coverage. Provision of safe and high quality health care is one of the prerequisites for augmenting health care systems and going towards effective and progressive universal health coverage under Sustainable Development Goal 3 (Hasan, S. A. W., 2019). The target 3.8 is directly related to UHC by reducing financial risk, ensuring quality of essential health care services, ensuring access to safe, effective, quality medications and vaccine for all. The provision of safe services will lend a hand to restore communities' trust in their health care system (Hasan, S. A. W., 2019) and communication is an important aspect of better healthcare services that the company Care to Translate deals with.

The Company is a health tech start-up, that was started in the beginning of 2018 with a vission to tear down language barriers within healthcare to ensure equal care to patients. The company consists of different teams like language team, technical team involved in product development

and design, marketing team, sales and finance team and management team. All the teams work together to develop their digital tool used in healthcare. Transparency is the motto of the company and all the teams work in a transparent way. The work plans of every team are shared to all members and all financial decisions and matters are handled with the knowing of all members. The way the company deals with their clients are known to all members and it goes in a systematic way. The company usually deals with the healthcare organizations of Sweden but recently it has started to work towards other countries within Europe.

The targeted population of the company is usually the healthcare providers and the patients with language barrier who are seeking healthcare. As the app is used digitally, those who have a smart device can use it irrespective of place and time. During prioritizing the coming languages in the app the company keeps in mind sveral issues like the number of speaker of that language all over the world, the language used in the areas where conflicts and wars are taking place, because people of this area are more prone to migrate and language of the people who are vulnarable to climate change. Recent years many people have migrated to Sweden from all over the world due to war and conflict and also for work purpose. Many of them don't know Swedish but they need healthcare somehow and there is a need of interpretation service. The company has considered this need and proposed their digital translation app to help the healthcare providers to treat the patients that have language barriers.

The Company has established a fixed-phrase digital translation tool. Care to Translate AB is both providing the app as a freemium version available for anyone to download and at the same time they are selling the product to healthcare providers of various types and sizes as a "Business to business" solution. In the latter case a clinic, a hospital, a whole municipality or region is usually provided with the translation tool during the trial period, during which they can test the app and can provide feedback to Care to Translate on what content may need to be added to fit the specific organization's needs. For non-profit NGO'S with a clear philanthropic mission, it is possible to apply to get Care to Translate for free. Currently e.g. "Läkare i Världen" (Médecins du Monde) is using the application.

The right to equal access to healthcare irrespective of language barrier, ethnic and socio-cultural difference is a human right needed to be protected (San Giorgi, 2012). Getting immediate emergency care and proper health literacy about the treatment regimen is also a matter of

medical ethics (Meuter et al., 2015). The company is trying to preserve this human right and ethical issues.

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Part 2. Final report

Public health Relevance of the CTT app

- Proper communication is essential to ensure the patients' safety and quality of care

- Due to language barriers different types of adverse events like

  o medication error,

  o diagnostic error,

  o problems in treatment and follow up,

  o fluid and pain management etc. are happening within the healthcare system (Al Shamsi et al., 2020; Bowen et al., 2017& F. van Rose et al., 2016).

- Detecting and reporting of language barrier is very limited.

- Due to cost many hospitals do not avail professional interpreters, who can be a solution of language barriers
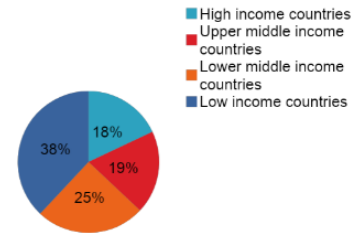

Fig 1: Pie chart showing the percentage of mortality and morbidity caused by adverse events in 2015 (Slawomirski et al., 2017).

Public health goals and Strategies of Care to Translate

- Care to Translate works on the provision of

  o patient safety,

  o quality of care,

  o efficacy and cost in the healthcare system

  o patient-care providers' communication.

- The company addressed different levels of healthcare providers, both individual and organizational level.

- They have several ongoing projects

  o The project in the 'Gynecology and Obstetrics' ward of Visby Lasarett hospital Soodia Radiology clinic etc.

To measure the successes of these projects interviews of user were taken.

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Public health issue addressed

Health and healthcare services in the provision of patient safety, efficacy and quality of care within the regulations of 'Care to Translate'. Patients' safety and quality of care are important global public health issues fundamental components of Universal Health Coverage. Prerequisites for achieving universal health coverage under Sustainable Development Goal 3.

Communication is an important aspect of safe and better healthcare services that the company Care to Translate deals with. (Hasan, S. A. W., 2019).

The population perspective

- The targeted population of the company :
  - Healthcare providers and the patients with language barrier who are seeking healthcare.
  - Those who have smart device can use this app irrespective of time and place.
- During prioritization of a new language several population related issues are addressed
  - Number of speakers of that language
  - The areas where the language is used, conflicts and wars affected or not
  - People who are more vulnerable to climate change etc.
  - Recent years many people have migrated to Sweden from all over the world due to war and conflict and also for work purpose.

Ethical question, connection between theoretical and practical knowledge and reflection

It is a human right to get equal access to healthcare irrespective of language barrier, ethnic and socio-cultural difference is needed to protect (San Giorgi, 2012).

A matter of medical ethics to get immediate emergency care and proper health literacy about the treatment regimen is also needed to address (Meuter et al., 2015).

The company is trying to preserve this human right and ethical issues.