

Investigating the Use of Translation Apps and Websites in Health Care Settings – Study Protocol (Poster 53)

- Use of translation apps and websites poses risk of misinterpretation and provision of inaccurate health information to patients.
- Current NSW Health policy prohibits use of translation by non-professional interpreters or translation apps in health care settings (Policy Directive PD2017_044).
- Most prior research has focused on the accuracy of translation apps in health care; scarce evidence on patterns of this use.



UNSW
Sydney

**Investigating the Use of Translation Apps and Websites in Health Care Settings
Study Protocol**

Sameera Ansari¹, Ben Harris-Roxas¹, Lisa Woodland^{2,1}, Joanne Corcoran²
Jane Lloyd¹ and Mark Harris¹

CPHCE
¹Centre for Primary Health Care and Equity, UNSW Medicine, UNSW Sydney, NSW, Australia
²Multicultural Health Service, South Eastern Sydney Local Health District, NSW, Australia



Background

The use of translation apps, such as Google Translate, is increasing rapidly given their increasing sophistication, accessibility and convenience¹. However, there is recognised variability between languages regarding the reliability and quality of translation apps². This raises concerns regarding appropriate delivery of health care and health services when translation apps are used in health care settings. A 2017 staff survey undertaken by South Eastern Sydney Local Health District (SES-LHD) in New South Wales, Australia, revealed that about 20% of participants had used translation apps during clinical encounters. Current NSW Health policy does not support the use of non-professional translation in health care settings³. With prior research having mostly focussed on the accuracy of translation apps and websites in health care^{4,5}, there is scarce evidence on the patterns of this use, particularly in Australian settings.



Methods

This is an exploratory, mixed-method study being conducted across five Local Health Districts (LHDs) in New South Wales, Australia.

Data Collection

- Quantitative data will be collected through an anonymous, online survey of staff from participating LHDs. The estimated sample size is about 3,000.
- Qualitative data will be collected via semi-structured, telephone interviews with health care providers from the LHDs and policy officers from the NSW Ministry of Health. Purpose sampling will be used for recruiting potential participants. Up to 20 interviews will be conducted.

Data Analysis

- Quantitative data will be interpreted using bivariate regression analysis with the aid of SPSS[®] software.
- Qualitative data will be inductively coded using NVivo[®] and thematically analysed through an Interpretive Description⁶ approach.

Objectives

This research study endeavours to answer the following questions:

- What are the potential risks and benefits of using translation apps and websites in health care settings?
- What is the nature and extent of the use of translation apps and websites in health care settings?
- How can health services and health systems respond to the use of translation apps and websites in health care settings?

Contribution to Policy, Practice and Research

- The findings will potentially direct the role of health providers and health services towards navigating the use of translation apps and websites.
- The study will provide an insight into the circumstances under which translation apps and websites are used in health care settings.
- The findings will inform existing policy regulating the use of non-professional translation during clinical encounters.
- The study will add to the limited body of evidence on the patterns of using translation apps and websites in health care settings.

Project Partners

This study is being guided by a Steering Committee including representatives from the following organisations:

- Multicultural Health Service (South Eastern Sydney Local Health District)
- NSW Refugee Health Service (South Western Sydney Local Health District)
- Translation Service (Western Sydney Local Health District)
- Health Care Interpreter Service (Sydney Local Health District)
- Multicultural Health Service (Hunter New England Local Health District)
- Health and Social Policy Branch (NSW Ministry of Health)
- NSW Multicultural Health Communication Service
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- South Eastern Sydney Research Collaboration Hub

Project Activities

- Steering Committee meeting held in March 2018 to finalise scope of study.
- Survey instrument piloted among the Steering Committee in April 2018.
- Multi-site ethics application submitted to the SESLHD Human Research Ethics Committee in June 2018.
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Acknowledgements

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Correspondence
Dr Sameera Ansari
South Eastern Sydney Research Collaboration Hub,
Centre for Primary Health Care and Equity, UNSW Sydney,
Kensington, Sydney, NSW 2052, Australia.
Email: sameera.ansari@unsw.edu.au | @sameeraansari_3

References

- Kaplan M (2016). Is translation app just writing words on the wall? A survey of research into post-writing and eWrit. *The Journal of Applied Translation Studies*, 25:140-146.
- Vishwakarma G, Smith S, Ombaka C and Somers (2017). Usefulness of a Mobile App to Assist Pakistani Patients with Limited English Proficiency. *Research Journal of Medical Science*, 10:100-105.
- NSW Health (2017). *Interpreters – Standard Procedures for Working with Health Care Interpreters* (Policy Directive PD2017_044). NSW Ministry of Health, Sydney, Australia.
- Azizbek R, Moloney M and Takahiro K (2015). Evaluation of online translation apps by nursing cases. *Clinical Computing Informatics*, 11(2): 80-87.
- Ballard K, Smith S, Ombaka C, Somers K and Moloney M (2017). Reliability of Google Translate: a user study of online translation services. *2017 Annual Conference of the European Association for Machine Translation (EAMT)*, Prague, Czech Republic.
- NSWSPS Statistics. <https://www.nsw.gov.au/health/using-statistics>
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- Travis L, Kibbenich and Macdonald from (2016). Interpretive Description: a conceptual qualitative alternative for developing nursing knowledge. *Nurs Health*, 23(2): 148-172.

Poster Highlights presentation at the 2018 Primary Health Care Research Conference, 1st August 2018, Melbourne, Australia.

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Research Questions

- What are the potential risks and benefits of using translation apps and websites in health care settings?
- What is the nature and extent of the use?
- How can health services and health systems respond to such use?

Study setting

Five Local Health Districts (LHDs) in New South Wales:

- South Eastern Sydney
- South Western Sydney
- Western Sydney
- Sydney
- Hunter New England



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Objectives

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- What is the nature and extent of the use of translation apps and websites in health care settings?
- How can health services and health systems respond to the use of translation apps and websites in health care settings?

Contribution to Policy, Practice and Research

- The findings will potentially direct the role of health providers and health services towards navigating the use of translation apps and websites.
- The study will provide an insight into the circumstances under which translation apps and websites are used in health care settings.
- The findings will inform existing policy regulating the use of non-professional translation during clinical encounters.
- The study will add to the limited body of evidence on the patterns of using translation apps and websites in health care settings.

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- Vishwakarma D, Smith S, Ombaka C and Somers J (2017). Usefulness of a Mobile App to Assist Patients with Limited English Proficiency. *Research Journal of Medical Science*. 10:180-185.
- NSW Health (2017). *Interpreters – Standard Procedures for Working with Health Care Interpreters* (Policy Directive PD2017_246). NSW Ministry of Health, Sydney, Australia.
- Alexander R, Millman H and Takahiro K (2015). Evaluation of online translation app for nursing uses. *Clinical Computing Informatics*. 11(2): 482-487.
- Ballard K, Mitchell S, Spinkman R, Trivedi M and Mehal M (2017). Reliability of Google Translate: a user study of Google Translate. *Proceedings of the 2017 Annual Conference of the European Association for Machine Translation (EAMT)*, Prague, Czech Republic.
- IBM SPSS Statistics. <https://www.ibm.com/analytics/spss-statistics-software>
- NVivo. <https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home>
- Travis L, Kitchin N and Macdonald H (2015). Interpretive Description: A conceptual qualitative alternative to developing nursing knowledge. *Nurs Health*. 23(2): 148-172.

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Data Collection

- Anonymous, online survey of staff from participating LHDs. Estimated sample size – 3800 participants.
- Up to 20 semi-structured, telephone interviews with health care providers from LHDs and policy officers from NSW Ministry of Health.

Proposed Outcomes

- Evidence on the patterns of use of translation apps and websites in health care settings.
- Direct health professionals and health services towards navigating the use, and inform existing policy.



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SEaRCH
SOUTH EASTERN SYDNEY RESEARCH COLLABORATION HUB

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- NSW Health (2017). *Interpreters – Standard Procedures for Working with Health Care Interpreters (Policy Directive PD2017_240)*. NSW Ministry of Health, Sydney, Australia.
- Azizbek R, Mollnes H and Tekstén K (2015). Evaluation of online translation apps by nursing cases. *Clinical Computer Informatics*. 11(2): 482-487.
- Buchheit M, Weiskopf S, Spiekermann H, Schneider M and Hebel M (2017). Reliability of Google Translate: a user study of German University Hospitals (2015). 20th Annual Conference of the European Association for Machine Translation (EAMT), Prague, Czech Republic.
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- Wardle H. (2015). <https://www.gov.uk/guidance/using-google-translate>
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