

prognostication. TTE and TEE could be useful complementary imaging modalities in conjunction with lung, abdomen and optic nerve ultrasound. Further investigation should be needed for the performance of multimodal sonographic assessment in postresuscitation care.

Acknowledgements

Conflicts of interest

There are no conflicts of interest.

References

- 1 Hsu CY, Chen JY, Lee AF, Huang SS, Lien WC, Chang WT, Huang CH. Ultrasound in postresuscitation care: a narrative review. *Eur J Emerg Med* 2022; **29**:246–252.
- 2 Lazzeri C, Bonizzoli M, Peris A. Echocardiography in cardiac arrest: strengths and limitations. *Eur J Emerg Med* 2022; **29**:458–459.
- 3 Teran F, Dean AJ, Centeno C, Panebianco NL, Zeidan AJ, Chan W, Abella BS. Evaluation of out-of-hospital cardiac arrest using transesophageal echocardiography in the emergency department. *Resuscitation* 2019; **137**:140–147.
- 4 Arntfield R, Pace J, Hewak M, Thompson D. Focused transesophageal echocardiography by emergency physicians is feasible and clinically influential: observational results from a novel ultrasound program. *J Emerg Med* 2016; **50**:286–294.
- 5 Hilberath JN, Oakes DA, Shernan SK, Bulwer BE, D'Ambra MN, Eltzschig HK. Safety of transesophageal echocardiography. *J Am Soc Echocardiogr* 2010; **23**:1115–27; quiz 1220.
- 6 Chu SE, Chang CJ, Chen HA, Chiu YC, Huang CY, Huang EP, et al. Core Ultrasound in REsuscitation (CURE): a novel protocol for ultrasound-assisted life support via application of both transesophageal and transthoracic ultrasound. *Resuscitation* 2022; **173**:1–3.
- 7 Si X, Ma J, Cao DY, Xu HL, Zuo LY, Chen MY, et al. Transesophageal echocardiography instead or in addition to transthoracic echocardiography in evaluating haemodynamic problems in intubated critically ill patients. *Ann Transl Med* 2020; **8**:785.

DOI: 10.1097/MEJ.0000000000000974

OPEN

Association of patient satisfaction with use of text message by an emergency medical communication centre

John Collins^a, Roger Henry^a, Deven Kulkarni^a, Kusum Punjabi^b, Daniel Gundersen^c, Pamela Ohman-Strickland^d and Jonathan McCoy^b,
^aRutgers Robert Wood Johnson Medical School, ^bDepartment of Emergency Medicine, Rutgers Robert Wood Johnson Medical School, New Brunswick, New Jersey, ^cDana-Farber Cancer Institute, Boston, Massachusetts and ^dRutgers School of Public Health, Piscataway, New Jersey, USA

Correspondence to John Collins, MD, Department of Emergency Medicine, Rutgers - Robert Wood Johnson Medical School, One Robert Wood Johnson Place, MEB 288 New Brunswick 08901, New Jersey, USA
 Tel: +1 732 235 8717; fax: +1 732 235 7379

Received 29 May 2022 Accepted 6 June 2022

It was exciting to read Reuter *et al*'s [1] study assessing patients' satisfaction after receiving medical advice via text from Emergency Medical Communication Centres (EMCCs).

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-No Derivatives License 4.0 (CCBY-NC-ND), where it is permissible to download and share the work provided it is properly cited. The work cannot be changed in any way or used commercially without permission from the journal.

The authors' study is a tremendous achievement demonstrating text messaging can potentially improve prehospital communication with patients, especially during times of pandemic or surge for calls soliciting medical advice. That the majority of responding subjects found text messaging in this setting 'very suitable or suitable' and only 2% required hospitalization was also encouraging [1].

Yet, while Reuter *et al*'s [1] efforts are impressive, their low response rate of 28% is remarkable. The authors attribute this to 'dissatisfaction' or 'a state of health' preventing subjects from responding. On that basis, such a large proportion of nonresponders might suggest text messaging is not suitable for broad communication.

However, knowing more about the nonresponding cohort, such as mean age, might be informative and help EMCCs successfully tailor methods of communication for this group.

My colleagues and I have unpublished data indicating a preference for healthcare communication via text, email or telephone is highly variable and older subjects prefer telephone to texting (Collins J, Henry R, Kulkarni D, Punjabi K, Ohman-Strickland P, McCoy J. A survey of text messaging and email as alternative means for emergency department follow-up).

In the USA, variable success rates of contacting emergency department (ED) patients after discharge (i.e. for follow-up, satisfaction or pending results) ranging from 10 to 82% has prompted searches for improved means of communication [2]. Yet, attempts via telephone, email or text message postdischarge have also shown variable success [3,4]. The goal of our study was to determine patient preference for communication via text, telephone or email after ED discharge.

From April to June 2015, we surveyed a convenience sample of 150 patients in a busy urban academic ED with annual visits of 73 000 in central New Jersey, USA. Our survey had 19 multiple-choice items exploring demographics and preferences for communication via text, telephone and email. We surveyed 75 native English speakers and 75 native Spanish speakers. Spanish translation assisted Spanish-speaking subjects. Inclusion criteria were age 21 years or older, normal vital signs and willingness to participate. We used cognitive interviewing to validate our questions.

Our subjects were predominantly female ($N=86$, 58%). A considerable portion were 20–30 years old ($N=48$, 32%) whereas a smaller portion were over age of 60 years ($N=34$, 23%). A considerable portion had completed high-school ($N=55$, 37%) or college ($N=53$, 35%), and were Latino ($N=69$, 48%). Most had incomes less than \$40 000 ($N=91$, 65%).

The majority of subjects preferred text communication to phone communication (61 vs. 37%) and text communication to email communication (67 vs. 28%). Examining

age, subjects less than 60 years old preferred text communication to phone communication ($N=64$, 67%). However, subjects over 60 years old preferred phone communication to text communication ($N=20$, 62.5%). Many also cited their preference for email communication and phone communication to text communication as being uncomfortable texting about health information.

We concluded that while ED patients prefer text communication to phone communication and email communication after ED discharge, preferences vary and tailoring mode of communication by demographics and patient preference might improve successful communication postdischarge.

Despite differences in our population and context to that studied by Reuter *et al.*, [1] our results suggest value to knowing the mean age of the nonresponding cohort. While the authors selected for a population less than 70 years old based on health screening, if the nonresponders mean age is greater than 60 years (vs. responders' mean of 45 years) this could indicate future texting initiatives by EMCCs should target populations younger than 60 years. Additionally, knowing nonresponders' preferences about sharing health information via text might serve to optimize the potential benefits of text messaging in prehospital communication as demonstrated by Reuter *et al.* [1].

Acknowledgements

Conflicts of interest

There are no conflicts of interest.

References

- 1 Reuter PG, Perolat N, Boutet J, Douge G, Loeb T. Association of patient satisfaction with use of text message by an emergency medical communication centre. *Eur J Emerg Med* 2022; **29**:140–141.
- 2 Ferrigno RF, Bradley K, Werdmann MJ. A simple strategy for improving patient contact after ED discharge. *Am J Emerg Med* 2001; **19**:46–48.
- 3 Ezenkwele UA, Sites FD, Shofer FS, Pritchett EN, Hollander JE. A randomized study of electronic mail versus telephone follow-up after emergency department visit. *J Emerg Med* 2003; **24**:125–130.
- 4 Shuen JA, Wilson MP, Kreshak A, Mullinax S, Brennan J, Castillo EM, *et al.* Telephoned, texted, or typed out: a randomized trial of physician-patient communication after emergency department discharge. *J Emerg Med* 2018; **55**:573–581.

DOI: 10.1097/MEJ.0000000000000963

Response to 'Association of patient satisfaction with use of text message by an emergency medical communication centre'

Paul-Georges Reuter^{a,b}, Nicolas Perolat^a, Jérémie Boutet^a, Guillaume Douge^a and Thomas Loeb^a, ^aSamu des Hauts-de-Seine, Assistance Publique-Hôpitaux de Paris, Hôpital Raymond Poincaré, Garches and ^bUniversité Paris-Saclay, UVSQ, Univ. Paris-Sud, Inserm, Équipe Soins Primaires et Prévention, CESP, Villejuif, France

Correspondence to Paul-Georges Reuter, MD, PhD, CHU Raymond Poincaré, 104, boulevard Raymond Poincaré, 92380 Garches, France
Tel: +33 1 41 97 26 59; e-mail: pgreuter@hotmail.com

Received 30 June 2022 Accepted 4 July 2022

We thank Dr. Collins and colleagues [1] for their correspondence and encouragement. Their findings on patient contact patterns are exciting. The authors show a variation in patient preference according to age [1]. Understanding the reasons behind this needs to be further investigated. The impact of lifestyle habits with less texting at a certain age cannot be excluded. With the increase in the use of texting and social networking, their results may soon change. In our cohort, the median age of the patients was 43 years (IQR, 34–53 years), supporting the authors' impression that the high satisfaction rate may be biased [2].

The low response rate to our survey was pointed out by Collins *et al.* [1] Indeed, a low response rate to a questionnaire raises questions about the interpretability of the findings. This issue was investigated by Santin *et al.* [3]. For simple questions, as in our questionnaire, the nonresponse bias was questionable.

Efforts should be maintained to assess the communication channels used by patients. The simplest method could be a personalized response, asking the patient their preference as the health system must remain agile and adaptable.

Acknowledgements

Conflicts of interest

There are no conflicts of interest.

References

- 1 Collins J, Henry R, Kulkarni D, Punjabi K, Gundersen D, Ohman-Strickland P, McCoy J. Association of patient satisfaction with use of text message by an emergency medical communication centre. *Eur J Emerg Med* 2022; **29**:460–461.
- 2 Reuter PG, Perolat N, Boutet J, Douge G, Loeb T. Association of patient satisfaction with use of text message by an emergency medical communication centre. *Eur J Emerg Med* 2022; **29**:460–461.
- 3 Santin G, Bénézet L, Geoffroy-Perez B, Bouyer J, Guéguen A. A two-phase sampling survey for nonresponse and its paradata to correct nonresponse bias in a health surveillance survey. *Rev Epidemiol Sante Publique* 2017; **65**:71–79.

DOI: 10.1097/MEJ.0000000000000966