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# ESPERIENZE INTERNAZIONALI DI QUESTIONARIO DIGITALIZZATO

**PIERO MARSON**

*Direttore UOC Immunotrasfusionale AOPD*

*Coordinatore DIMT Padova*



Centro Nazionale Trapianti



**WEBINAR**

**Telemedicina  
in ambito trasfusionale:  
stato dell'arte e prospettive del  
questionario anamnestico digitalizzato**

*Progetto nazionale sulla digitalizzazione  
del questionario anamnestico dei donatori (CCM 2021)*

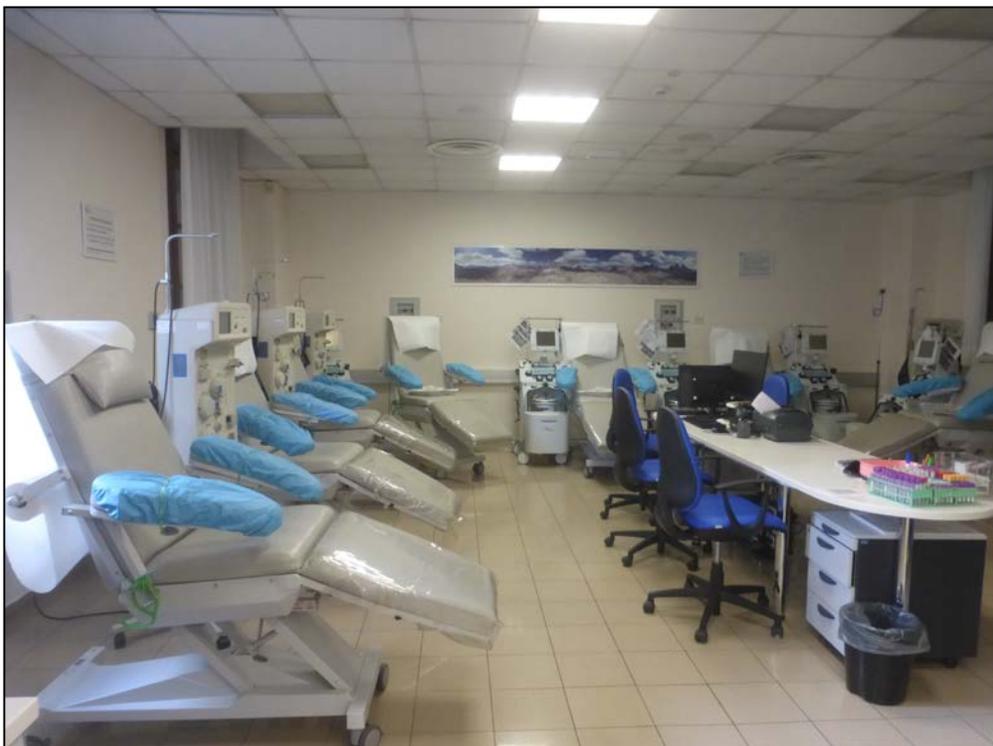
**27.11.2024**  
**ore 14:00 - 16:00**

Il sottoscritto dott. MARSON PIERO, in qualità di relatore, dichiara che:

*Nell'esercizio della Sua funzione e per l'evento in oggetto, NON è in alcun modo portatrice di interessi commerciali propri o di terzi; e che gli eventuali rapporti avuti con soggetti portatori di interessi commerciali non sono tali da permettere a tali soggetti di influenzare le sue funzioni al fine di trarne vantaggio.*

**L'attività del questionario online, presso il Centro Raccolta Sangue dell'UOC Immunotrasfusionale AOPD (*Ospedale dei Colli Padova*) si è svolta dal **27/04/2023** al **30/08/2023**.**







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## Digital questionnaire platform in the Danish Blood Donor Study



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L.W. Thørner <sup>a</sup>, O.B. Pedersen <sup>d</sup>, E. Sørensen <sup>a</sup>, K.R. Nielsen <sup>e</sup>,  
M.T. Bruun <sup>f</sup>, T. Werge <sup>b</sup>, C. Erikstrup <sup>c</sup>, T. Hansen <sup>b</sup>, H. Ullum <sup>a</sup>

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**Conclusion:** The digital platform is a faster, cost-effective and more flexible solution to collect valid data from participating donors compared to paper-based questionnaires. The overall system can be used around the world by the use of Internet connection, but the level of security depends on the sensitivity of the data to be collected.

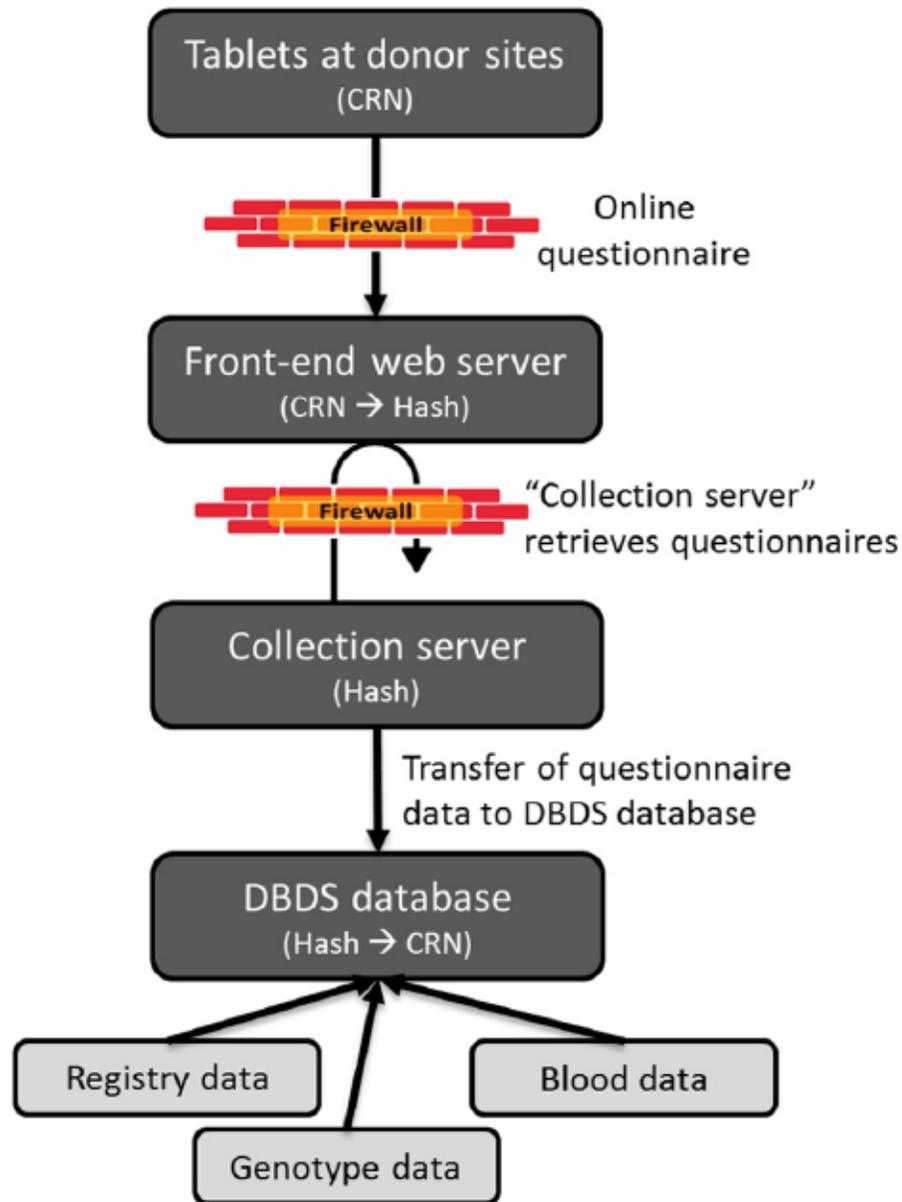


Fig. 1 – Description of dataflow.

## 2. Methods

All participating blood donors complete a digital questionnaire on tablets during their visit to a blood bank (Fig. 1). The questionnaire is accessed online using a homepage at the front-end web server and will be saved following completion by the blood donor. The collection server retrieves the completed questionnaires and subsequently deletes them from the front-end web server every hour as an additional safety precaution to protect the person-identifiable data. The questionnaire data are frequently transferred from the collection server to the central DBDS database. Data from blood samples and verification of signed informed consent are then transferred to and merged with the questionnaire data in the DBDS database.

## 3. Systems

We chose a platform consisting of free and open source software that can be acquired at little or no cost. The questionnaire is built in Limesurvey [4] (<https://www.limesurvey.org/> Version 2.06±), which is run on a Red Hat Enterprise Linux Server (ver.6.7) using the Apache web server (ver.2.2), MySQL database (ver.5.1) and PHP (ver.5.3).

## Health questionnaire for blood donors

In English

1 / 17

Please fill in this health questionnaire on **the day of the donation or one day beforehand**. You can fill in the survey anywhere: at home or for example on your way to the donation venue.

Submitted forms are stored in our system today and tomorrow.

We assess your eligibility to donate blood based on your answers to the health questionnaire and an interview at the donor session. The purpose of the health assessment is to ensure the safety of you and the patient receiving your blood.

First name \*

Surname \*

Personal ID \*

[ i ]

Enter the personal identity code in the official format (no full stops or spaces)

Gender \*

[ i ]

The gender of the blood donor is defined on the basis of the gender to be determined from the personal identity code. This information affects the safety of blood donation; e.g. permitted minimum donation intervals, haemoglobin limit values and content of the health questionnaire.

female

male



## The Impact of Digital Transformation on Blood Donation and Donor Characteristics

Norbert Niklas Claudia Loimayr Julia Lenz Susanne Süßner  
Gerhard Schuster David Jungwirth Werner Watzinger Stephan Federsel

Red Cross Transfusion Service of Upper Austria, Linz, Austria

☐ APP: 18 MESI DI UTILIZZO  
(45.000 UTILIZZATORI)

☐ RIDUZIONE DEGLI INTERVALLI: 32%  
(DA 316 A 193 GIORNI)

RESEARCH ARTICLE

## The impact of COVID-19 on blood donations

Besarta Veseli, Sabrina Sandner, Sinika Studte, Michel Clement \*

Institute for Marketing, Hamburg Business School, University of Hamburg, Hamburg, Germany

\* [michel.clement@uni-hamburg.de](mailto:michel.clement@uni-hamburg.de)

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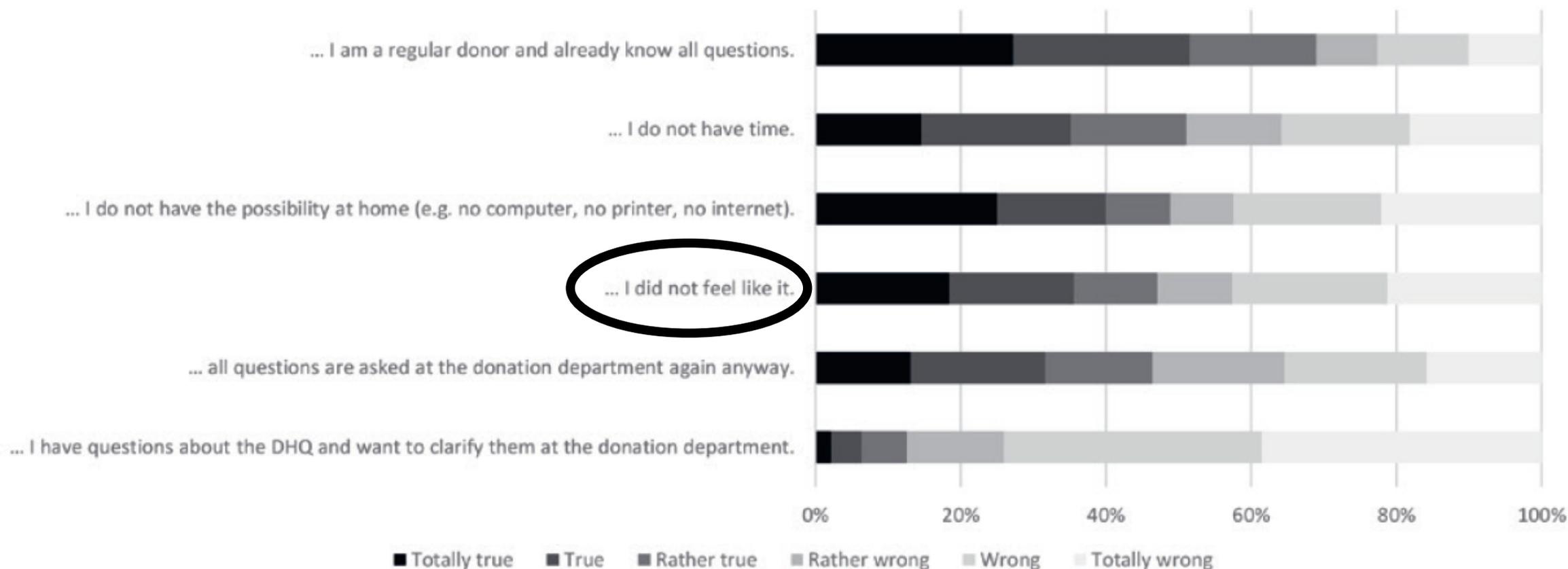
## Completing the Donor History Questionnaire before the Donation Visit Can Improve Blood Safety

Juliane Neugebauer Christina Hagen Christian Brockmann David Juhl  
Sven Ole Schuster Dagmar Steppat Siegfried Görg Malte Ziemann

Institute for Transfusion Medicine, University Hospital of Schleswig-Holstein, Lübeck, Germany

Conclusively, completing the DHQ already beforehand and checking whether all answers are still up-to-date at the donation center is feasible. Most donors find it easy to answer the questions at home and would like to maintain this option. 8% of donors taking part in the survey postponed a planned donation visit after going through the DHQ at home, which reduced the rate of ineligible donors presenting at the donation center. The greatest benefit of filling in the DHQ at home might be an increased infection safety of blood products, as the discomfort of being deferred once already having come to the donation center is an important reason to answer the DHQ dishonestly. Whether this potential benefit actually leads to increased blood safety has to be verified by future, larger studies also including objective safety data such as numbers of donors tested positive for hepatitis virus or HIV.

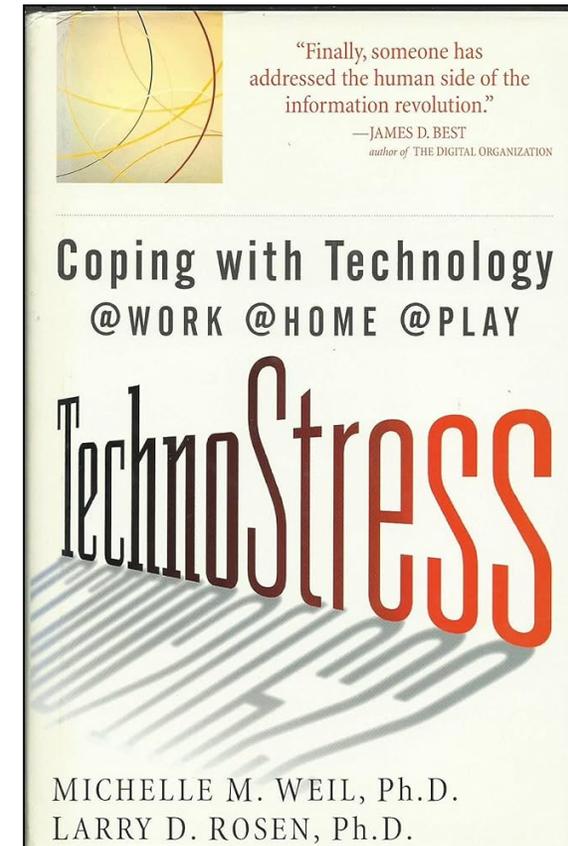
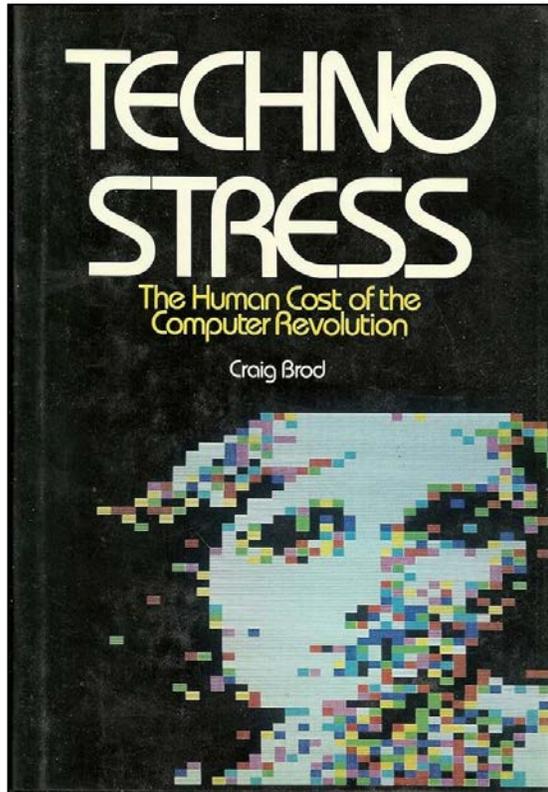
### I do not fill in the DHQ at home, because ...



**Fig. 3.** Motivations of the 2,036 donors reporting not reading the donor history questionnaire (DHQ) at home.

# ATTENZIONE AL TECNOSTRESS...

*«a modern disease of adaption caused by an inability to cope with the new computer technologies in a healthy manner»*



# ATTENZIONE AL TECNOSTRESS...

## ❑ Ragu-Nathan et al. (2008)

# the high dependency on technology in the workplace

# knowledge gap between workers and advanced technology

# change in working environment and culture due to the use of technology

## ❑ Taradfar et al. (2007)

# Techno-overload

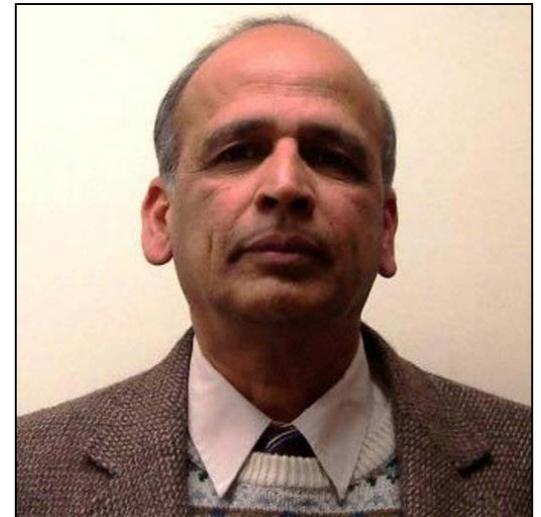
# Techno-invasion

# Techno-complexity

# Techno-insecurity

# Techno-uncertainty

T.S. Ragu-Nathan



Monideepa Taradfar

# Predicting technostress: The Big Five model of personality and subjective well-being

Dámaris Cuadrado \*, Inmaculada Otero , Alexandra Martínez , Tania París ,  
Silvia Moscoso 

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PLOS ONE | <https://doi.org/10.1371/journal.pone.0313247> November 4, 2024



- EMOTIONAL STABILITY
- EXTRAVERSION
- OPENNESS TO EXPERIENCE
- AGREEABLENESS
- CONSCIENTIOUSNESS

- ANXIETY
- FATIGUE
- SKEPTICISM
- LOW COMPETENCE





Società Italiana  
di Medicina Trasfusionale  
e Immunoematologia

70° Anniversario fondazione SIMTI

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Rimini | 29-31 maggio 2024  
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**SETS** Sociedad Española de Transfusión Sanguínea y Terapia Celular



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#### ABSTRACT BOOK

45° Convegno Nazionale di Studi di Medicina Trasfusionale  
Rimini, 29-31 maggio 2024

Guest Editors: Francesco Fiorin, Patrizia Di Gregorio, Pierluigi Berti,  
Antonella Matteocci, Giorgio Gandini, Serelina Coluzzi, Renato Messina,  
Silvano Rossini, Gianluca Ubezio, Domenico Visceglie, Giuseppe Aprili

[www.bloodtransfusion.it](http://www.bloodtransfusion.it)

Edizioni SIMTI



**ABS111 - Questionario anamnestico informatizzato: 4 anni di esperienza dei Centri Raccolta Sangue della USL Umbria 2**

Antonella Germani <sup>(1)</sup> - Maria Letizia Ottaviani <sup>(1)</sup> -

Manuela Costantini <sup>(1)</sup> - Alessio Cicioni <sup>(2)</sup> - Marta

Micheli <sup>(1)</sup>

*SSD Servizio Trasfusionale, USL Umbria 2, Foligno <sup>(1)</sup> - SSD Servizio*

*Informativo e Telecomunicazioni, USL Umbria 2, Terni <sup>(2)</sup>*

**ABS121 - "TELE-ASSESSMENT DONORS" progetto pilota: la telemedicina a servizio della rete trasfusionale della USL Umbria 2**

Emanuele Flavoni <sup>(1)</sup> - Elisa Martini <sup>(1)</sup> - Sandro Argenti <sup>(1)</sup> -

Maria Letizia Ottaviani <sup>(1)</sup> - Alessio Cicioni <sup>(2)</sup> - Marta

Micheli <sup>(1)</sup>

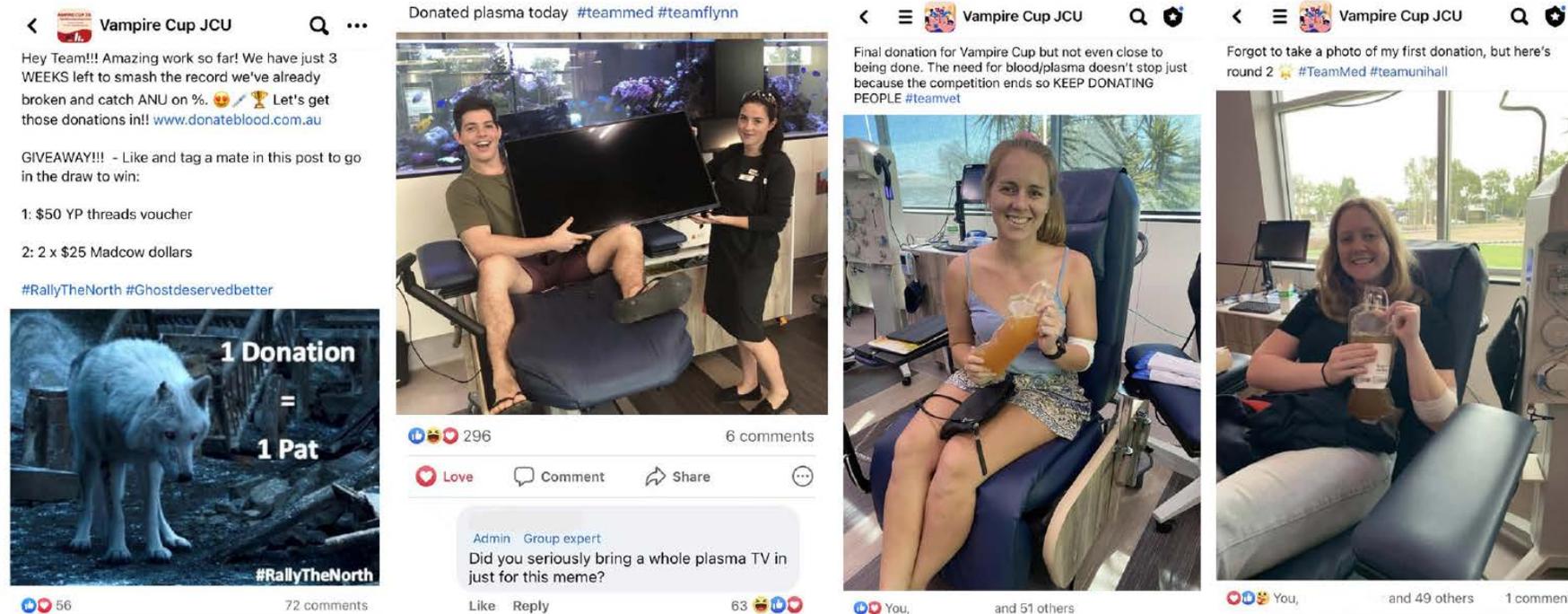
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*SSD Servizio Informativo e Telecomunicazioni, USL Umbria 2, Terni <sup>(2)</sup>*

# Using competition for plasma donor recruitment and retention: An Australian university case study

Jack Bryant<sup>1</sup> | Torres Woolley<sup>1</sup> | Tarun Sen Gupta<sup>1</sup> | Kathleen Chell<sup>2</sup> 

Vox Sanguinis. 2024;119:155–165.



**FIGURE 4** The James Cook University Medical Student Association Facebook Group post examples. All participants pictured have provided consent for their image to be used in this publication.

*GRAZIE PER L'ATTENZIONE!*

