

Abstract

Our blood center instituted an audiovisual donor self-interviewing system in 2007 to decrease the number of units having to be discarded because of incomplete histories, missing donor signatures, or other errors such as those caused by illegible handwriting. The system was received favorably by donors except that the interview took longer for them than the previous manual, face-to-face interview. Donors were informed that the system further tailors donor interviews based on first time or repeat use of the system with repeat use requiring less time. With the success of electronic donor screening, we investigated other avenues to utilize the donor's time more efficiently. As a result, we began implementation of a system that allows donors to complete their health history interview over the Internet, before going to the blood drive.

We have done a number of things to streamline the blood donation process. We obtain the donor's mini-physical first to allow the donor who does not meet the eligibility requirements to leave without answering the medical history questions. Newer technology in hemoglobin determination gives results in 10 seconds and the use of automated blood pressure and pulse monitors is thought to be more accurate and allows the Donor Care Specialist to multi-task. Implementing donor self-interviews over the Internet allows donors to complete the donor history questionnaire from their home or office. The system prints a bar-coded receipt and the donor brings it to the donor center/mobile drive. Pilot studies of this technology established that donors prefer the Internet self-interview even more than on-site self-interview, which is generally strongly preferred over manual interviewing.

We have implemented the Internet donor interview slowly so we can anticipate donor complaints and frustrations before a more global introduction. Initial use of Internet interviewing by donors to answer the medical history questions is being offered as a benefit available only to frequent donors such as platelet pheresis donors. There is concern about using it for first time donors who are unfamiliar with the basic donor eligibility requirements but we are excited at the prospect of offering this to all of our repeat donors so they can spend less time at the blood center.

Objectives

To determine the extent to which theoretical benefits of Internet donor screening are achieved in practice. Theoretical benefits include reduced donor and staff time at the blood drive by eliminating the time required to conduct the health history interview on-site, with a consequent accelerated workflow and greater donor satisfaction. As a secondary benefit, we expect this methodology to appeal to businesses and schools that sponsor blood drives because it reduces the time donors are away from their work.

Methods

Donors like having their mini-physical performed first to save their time. It sometimes requires them to move to more stations and repeat their name more often which is an irritant. When the donor uses the Internet to answer their medical history questions, the history review will be performed first and if the donor is eligible, the mini-physical will be performed last with the donor remaining at the same interview station and with the same Donor Care Specialist. For a donor who completes the Internet interview, they do not have to interview onsite. Instead, they present the bar-coded receipt, which is scanned and the answered medical history questions appear on the computer screen for review. The donor will only have to state his/her name at registration, interview, and phlebotomy which will make our donors happy.

The Internet based donor screening/health interviewing software system (hereafter the Internet Interview System or "IIS") is based on our existing electronic donor screening system. IIS implementation requires a US Food & Drug Administration CBE-30 report. The only additional hardware required is a bar-code scanner for each donor screening workstation. We decided to offer use of IIS initially to frequently visiting donors such as platelet pheresis donors. We have initiated this program slowly so we can anticipate donor complaints and frustrations prior to a more universal rollout. There is concern for first time donors who are unfamiliar with the basic donor eligibility requirements using the IIS method of answering the medical history. To implement IIS, we filed a CBE-30 report, as noted above, reporting associated changes in SOPs along with updated documentation. We conducted staff training and began by inviting frequent apheresis donors to try IIS on their next visit.

Results

Implementation of IIS began in September 2009 and has been very slow by design but is expected to pick up steam soon. At this point (mid-October) there are not sufficient data to determine whether our objectives have been met. Initial results suggest that we are realizing all expected benefits but it will be some time before we have valid and reliable measures. Based on the limited experience to date, we expect to broaden our recruiting efforts to include a larger group of donors being invited to use IIS.

Thank You
Please print this page and take it to the blood collection site today.

Donor Receipt

1	
2	
3	

10/19/2009 4:05:50 PM (EST)

Identification Code: diketo

Bar-Coded Receipt From Remote Donor Interview

Conclusions

It is still too early in the implementation process to confirm that implementation of IIS achieves the expected benefits. However early results strongly suggests that the basic benefit – reduction of donor and staff time for each donor encounter – is indeed taking place. Anecdotal evidence is sufficiently encouraging that we have decided to include a larger group of donors as early candidates for IIS use.

References

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2. Katz LM, Cumming PD, Wallace EL, Abrams PS. Audiovisual touch-screen computer-assisted self-interviewing for donor health histories: results from two years experience with the system. *Transfusion* 2005;45 171-180.
3. Katz LM, Cumming PD, Wallace EM. Computer-Based Blood Donor Screening: A Status Report. *Transfusion Medicine Reviews*, Vol 21, No 1 (January), 2007: pp 13-25.