Modernising Subject Payments in Clinical Trials

Currently, the majority of clinical trial sites in the United States use paper cheques as their primary method of payment, although it is proven that this process requires far higher administrative costs and yields lower subject retention rates than electronic payments. This payment preference persists despite recent data that approximately 25% of the American adult population does not have a bank account, causing many patients to incur a handling charge of up to 20% of the cheque’s face value. Without a simple and cost-effective payment method, recruitment and retention of clinical trial patients is greatly impaired, even while studies indicate that the success of a clinical trial hinges upon subject retention. It is estimated that between 20 and 30% of patients drop out of Phase II/III trials, meaning that 90% of studies miss their target completion dates.1

Fortunately, recent technological developments have led to the introduction of electronic payment solutions, designed to track and monitor trial-related payment activities. This article overviews the conventional subject payment process, identifies its shortcomings, and discusses how new electronic payment solutions are set to revolutionise subject payment in clinical trials.

The Conventional Subject Payment Process

Traditionally, paper cheques have been used to reimburse subjects participating in clinical trials. Nevertheless, this approach is particularly inefficient, cumbersome, time-consuming and often decentralised, even when clinical trial management systems (CTMS) are employed. Using paper cheques to process subject stipends creates an administrative burden and results in unnecessary use of limited site resources. Clinical research organisations (CROs) incur real costs when drafting, distributing, tracking, and reconciling paper cheques. An additional limitation is that any lost or stolen cheques must be stopped and then reissued.

A 2010 survey among members of the Association of Clinical Research Professionals (ACRP) revealed that 65% of sites use cheques as their primary method of payment. Many of these sites pay subjects only on a monthly or quarterly basis due to the significant administrative time required to process cheques. A significant 44% of the sites reported that four or more unique manual administrative steps (Figure 1) are required to process a single payment. Additionally, it was demonstrated that more than 60% of the sites require ten or more minutes to complete the entire process (Figure 2).

In response, debit card payment systems were introduced to address the shortcomings associated with the use of paper cheques.

Debit Card Payment Systems

Prepaid cards—including general purpose reloadable cards, consumer incentive cards and corporate incentive cards—have been used as a payment solution since the early 1970s. In particular, branded cards have been used as a replacement for cheques for both business and consumer payments.2 In comparison to paper-based payment methods, prepaid debit cards are more efficient and cost less, while also allowing the millions of American adults who do not have a bank account to use a debit card for purchases. These debit cards may be PIN-protected, FDIC-insured and subject to consumer protection regulations.

Recent technological advancements have resulted in the development of electronic prepaid debit card systems. These innovative systems offer an efficient alternative to the conventional paper-based payment methods, being cost-effective, easy-to-use and improving subject retention. It has been estimated that the use of electronic debit card payment systems results in considerable administrative time savings, reducing site workload by 2.3 people annually.

Web-Based Advancements

The latest innovations in web-based payment technologies have revolutionised subject payment and communications within clinical trials by automating site-level and sponsor-level processes associated with paying and communicating with subjects. The new systems function as web-based payment and communication platforms, thus eliminating the need for paper cheques. This is achieved by introducing prepaid debit card technology and automated accounting and reporting of fund disbursement.

By using the advanced web-based payment systems, investigators and study teams are able to determine payment status and efficiently serve patients. The systems can be configured to automatically pay participants based on a study-specific schedule, make ad-hoc payments, or add funds remotely in order to instantly cover travel-related costs for a subject who would not otherwise make an appointment. As a consequence, the systems provide more rapid access to funds for subjects, providing immediate reimbursement and reinforcing positive study behaviour. The end result is increased subject satisfaction and subject retention.

New web-based payment and communication engines incorporate an optional fully-blinded multi-level

Figure 1
The overall patient’s experience within the study environment is improved. Finally, electronic debit card systems can easily integrate with any clinical trial management software platform, including CTMS, EDC, IVRS, IWRS and ePRO in order to automatically trigger payments and further reduce administrative burden at the site.

**Conclusion**

It is clear that the use of paper cheques is soon to be an obsolete method of subject payment, due to its inherently time-consuming, inefficient and often decentralised nature. The response to these shortcomings has been web-based payment systems.

Clinical trial sponsors stand to benefit from downstream savings provided by these systems, and will enjoy increased return on investment. Newer automated systems have been specifically engineered to provide the most efficient payment process and ensure optimal subject retention through streamlined delivery of funds and appropriate use of study-specific patient messaging programmes. Other advantages include reduced administration, technology-driven study controls, site-specific payment schedules, and reduced cash flow burden at individual sites. The systems can be used in conjunction with various eClinical technology platforms to capture operational synergies and further increase efficiency.

It seems inevitable that the use of web-based payment technology will become industry standard. The new systems have already been adopted by leading pharmaceutical, biotechnology and medical device companies in Europe and North America, and have been implemented as the preferred method of payment by numerous universities and research hospitals, including an Ivy League institution.

**References**


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