

# The Use and Limitations of SMS Reminders to Improve Outpatient Attendance Rates

## Abstract:

Sir,

Missed appointments and non-attendance at outpatient clinics are a major cause of inefficiency in the health service. It is estimated that this problem currently costs the Health Service Executive (HSE) up to 33 million annually; each individual non-attendance costs 80 and adds a burden to lengthening waiting lists and a potential delay in assessment and treatment of the non-attending patient. Outpatient Breast Services are currently under particular pressure with a 60% increase in referrals to the Symptomatic Breast Units (SBU) since services were centralised under the auspices of the NCCP in 2007<sup>1</sup>.

Numerous strategies have been reported in an attempt to reduce non-attendance rates including postal, phone call and short message service (SMS) text reminders. SMS text reminders have the advantage of instant delivery, lower cost and the potential to deliver multiple messages simultaneously. It has been shown that SMS text reminders increase attendance at healthcare appointments compared to no reminders or postal reminders<sup>2,3</sup>. In an effort to reduce non attendance and improve efficiency at the SBU in Beaumont Hospital we introduced SMS text reminders, sent to patients 3 days before their scheduled appointment. The rates of non-attendance at the SBU were audited for 4 weeks before and after the introduction of the SMS reminder service. Contrary to previous reports<sup>2,3</sup>, we did not observe a reduction in overall non-attendance rates at the SBU following the introduction of the SMS reminder service; the non attendance rate in the 4 weeks prior to SMS text reminders was 11.3% and in the 4 weeks following initiation of the service the overall non-attendance rate was 11.6%. However, the potential impact of this service was considerably limited by the fact that only 56% (n=337) of patients scheduled to attend the SBU had a valid mobile phone number registered on the hospital administration system. Subgroup analysis of these patients revealed that the SMS text reminder service did in fact result in a decreased in non-attendance rates to 6.6%.

These findings, while confirming the potential of an SMS text reminder service to reduce non-attendance rates at SBU, highlight an important deficit in patient contact information as a component of the outpatient referral process. The National Cancer Control Programme (NCCP) has comprehensive guidelines, including a standardised referral form, for referrals to the symptomatic breast service. The SBU referral form includes a section for patient contact details and a specific subsection to include mobile phone number. Despite this, and the fact that mobile phone ownership statistics for Ireland report a penetrance of >90%, only 56% of patients scheduled to attend the SBU had a mobile phone number provided with the referral. This limitation impacted negatively on the potential for SMS text reminders to reduce non-attendance rates and improve efficiency in the SBU. We conclude that the provision of complete patient contact details including mobile phone number should be a mandatory component of the referral system if we are to improve the efficiency and feasibility of SMS text reminders and benefit from the resultant improvement in attendance rates and service efficiency.

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## References

1. Review of referral patterns and triage processes in symptomatic breast units â a hospital perspective. Oâ Rourke N. National Cancer Control Programme, 2012.
2. Mobile phone messaging reminders for attendance at healthcare appointments. Car J, Gurol-Urganci I, de Jongh T, Vodopivec-Jamsek V, Atun R. Cochrane Database Syst Rev. 2012 Jul 11;7:CD007458.doi: 10.1002/14651858.
3. The use of text messaging to reduce non-attendance at outpatients clinic â a departmental experience. Ellanti P, Manecksha RP, Flynn R. Ir Med J, Vol 104 Jan 2011.

Comments: