

Letter to the Editor

Early communication: Does a national campaign to improve hand hygiene in the NHS work? Initial English and Welsh experience from the NOSEC study (National Observational Study to Evaluate the CleanYourHandsCampaign)

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Early communication: Does a national campaign to improve hand hygiene in the NHS work? Initial English and Welsh experience from the NOSEC study (National Observational Study to Evaluate the CleanYourHandsCampaign) The National Patient Safety Agency's 'CleanYourHandsCampaign' (CYHC) seeks to improve healthcare workers' (HCWs) hand-hygiene behaviour in England and Wales and was rolled out to 187 acute hospitals between December 2004 and June 2005.¹⁻³ It consists of provision of 'near-patient alcohol hand rub (AHR)', at the bedside, 'talking walls' (posters on each ward changed every month) and 'patient empowerment' (materials telling patients to ask HCWs to clean their hands). An optional component was six-monthly audit and feedback of hand hygiene. The aims of the multidisciplinary NOSEC study are to determine whether the campaign is implemented successfully and sustained, whether it results in increased hand hygiene, and to document concurrent changes in healthcare-associated infection (HCAI) rates.

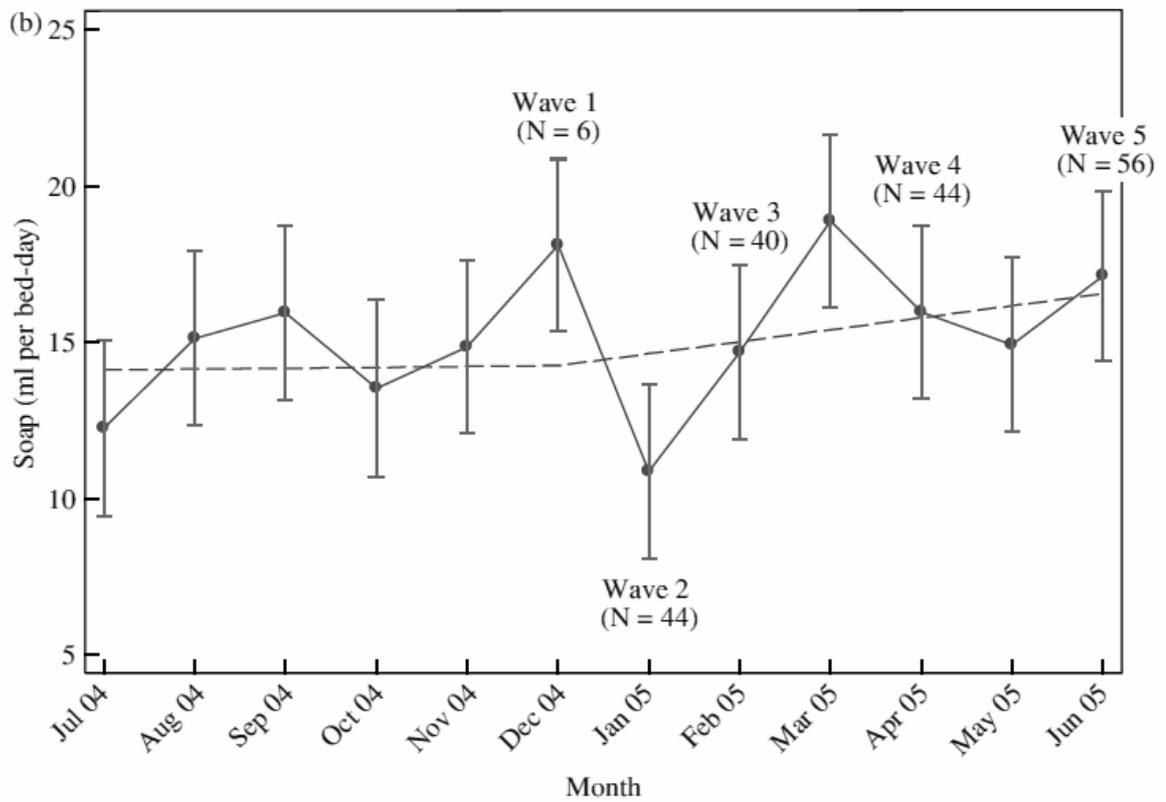
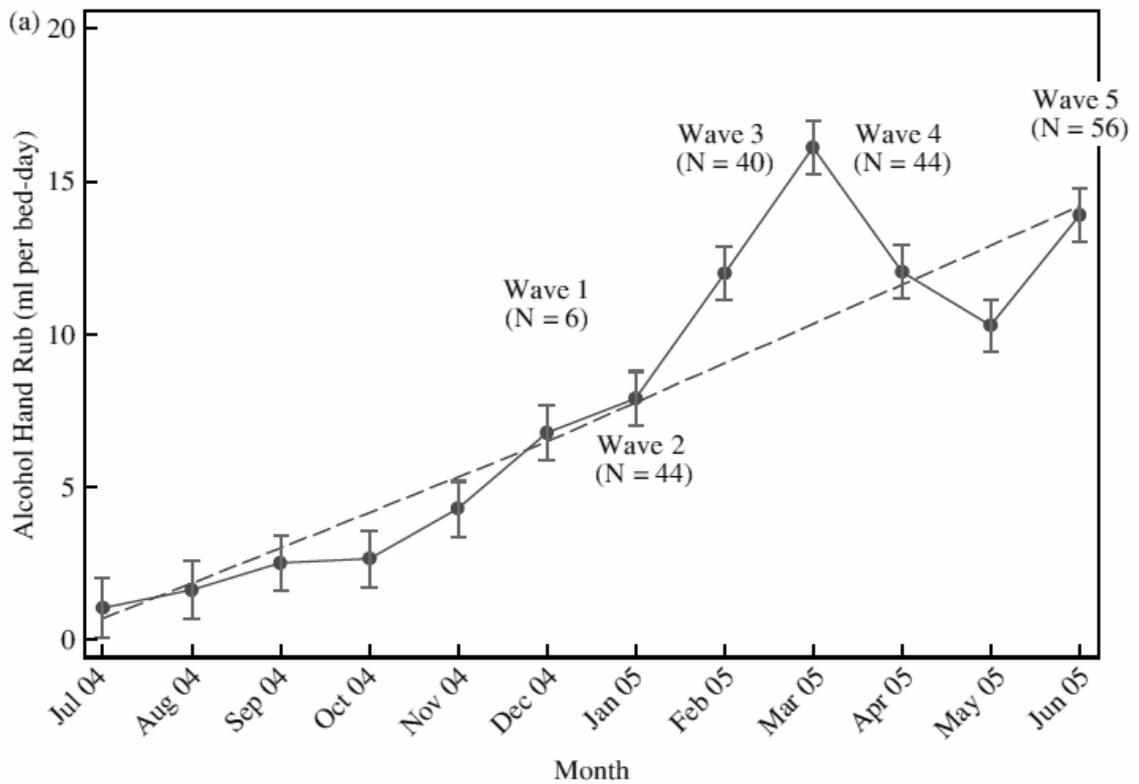


Figure 1 Hand-hygiene consumables use in acute NHS Trusts. (a) Estimated monthly median alcohol hand-rub use and (b) estimated monthly median liquid soap use for all acute NHS Trusts during baseline and roll out phases of the CleanYourHandsCampaign. The live dates for each Wave of Implementation are 1 December 2004, 10 January 2005, 1 February 2005, 11 April 2005 and 1 June 2005.

In this early communication, we report on changes in soap and AHR use and HCAI rates in the baseline (July-December 2004) and roll out phases (January-June 2005), and on implementation of the main CYHC components at 6 and 12 months post roll out (November 2005 and June 2006). NHS Logistics provided monthly data for each hospital on soap and AHR use (millilitres). Hospital Episode Statistics data enabled this to be expressed per patient-bed-day, and HCAI rates per 1000 bed-days. Postal questionnaires were sent six-monthly to all 187 acute Trusts. The first and second questionnaires measured CYHC implementation in November 2005 and June 2006, and requested quarterly mandatory HCAI data for the baseline and roll out phases respectively [i.e. numbers of meticillin-resistant *Staphylococcus aureus* (MRSA), meticillin-susceptible *Staphylococcus aureus* and glycopeptide-resistant enterococcal bacteraemias, *Clostridium difficile*-associated diarrhoea (CDAD)], new MRSA acquisitions, extended-spectrum beta-lactamase-producing and carbapenem-resistant *Acinetobacter* isolates and cases of norovirus. Postal and phone reminders maximized response rates. Trends in soap and AHR use were assessed by a quantile (median) regression model, and in HCAI rates by Poisson regression. A thematic analysis of CYHC preparation materials assessed the relative emphases on use of hand rub and soap.²

Questionnaire response rates were 72 and 66% respectively, with 89 and 98% of respondents providing HCAI data, with quarterly national mandatory data reported more frequently than nonmandatory.

Thematic analysis showed that only five of 78 hand-hygiene and consumable references in CYHC documents referred to handwashing or soap.²

Responses on CYHC implementation showed that near-patient AHR was distributed widely, at the end of bed in at least 75% of wards at six and 12 months post roll out (54 and 52% of Trusts respectively), at the bedside side locker or wall (43 and 35%), but rarely at both. Other data comprised posters being on all wards (66 and 61% of Trusts), posters in at least 75% of wards (90 and 80%) and posters changed on schedule (66 and 57%).

Patient empowerment materials were perceived, at 6 and 12 months post-roll out, to reach patients in 66 and 48% of Trusts respectively and affected their behaviour in 47 and 41%. Audit and feedback of hand hygiene occurred over the previous six months in at least 75% of wards in 48 and 52% of Trusts, although very little audit was performed in 30% of Trusts.

At six and 12 months post roll out, CYHC was perceived to be a top priority in 79 and 53% of Trusts, respectively. Clear mechanisms were reported to be in place to deal with problems of

campaign implementation in 60 and 57%. Feedback of audits to directorates was sustained in 57 and 60% of Trusts respectively.

Median AHR use rose significantly ($P < 0.001$) with a trend towards increased soap usage ($P = 0.06$) during the roll out phase (January to June 2005) (Figure 1). Combined median use of AHR and soap rose from 13.2 to 31 ml/patientbed- day. It is possible that this increase may have been confounded by a change in soap/AHR provider, although at six and 12 months post roll out 75 and 74% of Trusts respectively obtained their AHR, and 73 and 66% their soap, from NHS Logistics. There were no changes in HCAI rates, except for transient seasonal rises in CDAD and norovirus. Although possible confounders need to be explored, and the potential limitations of self-reported data acknowledged, this study achieved a high response rate. It shows that a national campaign, targeting use of AHR, has changed many aspects of hand-hygiene behaviour, increasing AHR use in particular, across the acute sector of the NHS without reducing soap usage. Audit and feedback, a component emphasized much less than AHR and posters, was less widely implemented. This may change following its emphasis in the relaunch of CYHC and the implementation of Saving Lives.⁴ The latter, into which the CYHC is embedded, may be replacing it as an institutional priority.⁵ The next questionnaires will examine whether use of AHR/soap continues to rise, and explore institutional engagement further.

References

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