Methods We present our journey in developing a secure, easy to manage automated text message follow up application. This application is built to integrate with the Microsoft Teams platform, ensuring data security and easy access for all clinicians within our anaesthetic department.

Results The automated text message system sends a simple questionnaire via SMS to all patients who have received a peripheral nerve block, assessing block effectiveness, consumer satisfaction, and screens for both motor and sensory complications. Concerning responses are then highlighted on the dashboard to allow easy identification for further follow up. Monthly or yearly statistical reports of results are easy to create. We have found patient response rate is currently 56%; following on from this we plan to commence a cycle of improvement focusing on ways to increase this response rate and better reflect patient experience.

Conclusions We believe that with the wide availability of Microsoft products, this secure, user-friendly, automated text message system can improve the efficiency of patient follow up post peripheral nerve blockade and allow easy identification of patients that require further clinician contact with minimal cost or technical expertise.

Background and Aims We have previously reported that the exposure of human mononuclear cells THP-1 to pulsed radiofrequency (PRF) electric field increased the mRNA for β-endorphin (J Pain Res 2018;11:2887–96), while it has not yet been clarified whether PRF application increases the production of acute inflammatory cytokines or chemokines from these cells. If the latter occurs, it will be beneficial to recruit and stimulate the donor for enhanced because these cytokines/chemokines have a property of alleviating pain through the production of β-endorphin may be enhanced because these cytokines/chemokines have a property to recruit and stimulate the donor for β-endorphin.

Methods PRF was applied for 15 min at the maximum power by using a NeuroTherm NT-500 radiofrequency generator to the pellet of THP-1 cells sedimented in a microtube filled with the culture medium incubated at 37°C as previously described. (J Pain Res 2018;11:2887–96) After the PRF application, cell culture continued for pre-selected period and the supernatant of THP-1 cells was collected for multiplex immunoassay (Bio-Rad Bio-Plex #m500kcaf0y).

Results Level of RANTES, chemokine c-c motif ligand 5 (CCL5), as well as those of two acute inflammatory cytokines, IL-1β and IL-15, in the supernatant of THP-1 cells was significantly increased by PRF application as compared by those without application of PRF.Because RANTES plays an active role in recruiting leukocytes, and the latter cytokines stimulate the recruited leukocytes, the increase in the production of these cytokines/chemokines may enhance the beneficial action of PRF to alleviate pain.

Conclusions Exposure of THP-1 cells to the electric field of PRF for 15 min increased the production of RANTES, IL-1β and IL-15 from these cells.