Introduction:
Positive fluid balance in ICU patients has been correlated with worse outcomes [1]. Consequently, we developed a protocol to guide fluid resuscitation. The protocol was introduced in 2011 and mandates that fluid responsiveness is assessed when administering fluid boluses. Once a patient becomes fluid unresponsive, no further resuscitation fluid should be administered. To assess responsiveness, the protocol advises the use of haemodynamic data such as heart rate and blood pressure as well as the change in stroke volume (SV) measured by a LiDCOplus monitor. After years of use and a rolling education program this protocol was felt to be well ingrained in our unit culture. We then assessed how well it was being followed.

Methods:
Staff performing fluid challenges were asked to fill out a form recording the haemodynamic and SV data measured before and after a fluid challenge. They were also asked to record their interpretation of just the haemodynamic data and then this data combined with the SV data.

Results:
Forty five forms were completed. The protocol was not followed on 16 occasions (36%). Four patients who should have been assessed as responsive were deemed to be unresponsive. Six patients who should have been assessed as unresponsive were assessed as being responsive. The remaining deviations from the protocol represent misinterpretation of the haemodynamic data but correct use of the SV data to reach a correct final assessment.

Conclusion:
Despite being a longstanding ingrained practice in our ICU, this review suggests that the protocol for fluid resuscitation is being followed incorrectly approximately a third of the time. This could result in inappropriate under or over administration of IV fluid. We plan to review the educational programme and raise awareness of the protocol to try and improve future compliance.

References: