A brief history of DERS: How did we get here and what has stopped us going further?

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1990s ‘Dumb’ pumps

- Led to ‘Death by decimal’ headlines

‘Smart’ pumps. Defined by:

- Dose error reduction software (DERS)
- Infusion rate calculation
- Event capture log

- Widely accepted and implemented across US
- First piloted in UK in 2003
- Slow progress since

IV drug administration practice US vs UK:

US	UK
Predominantly large volume infusion	Significant syringe-based infusion
Standardised concns.	Weight-based concns.
Prepared in pharmacy	Prepared on ward
Variable infusion rate	Fixed infusion rate

“Well, Europe is just gonna have to change”

2011. Low uptake of DERS attributed to:

- Lack of equipment standardisation
- Low investment
- Resistance to change in IV practice
- Poor evidence of effectiveness
- Low promotion by the manufacturers
- Pharmacist involvement

So, just where are we now?

2013. Key challenges to DERS success:

- Standardisation of IV practice, especially drug concentrations
- Availability of template drug libraries
- Enhanced customer support from manufacturers
- Networked connectivity of infusion devices

How successfully have these challenges been addressed?