

Improving Glycaemic Monitoring in Inpatients on High Dose Steroids



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Introduction

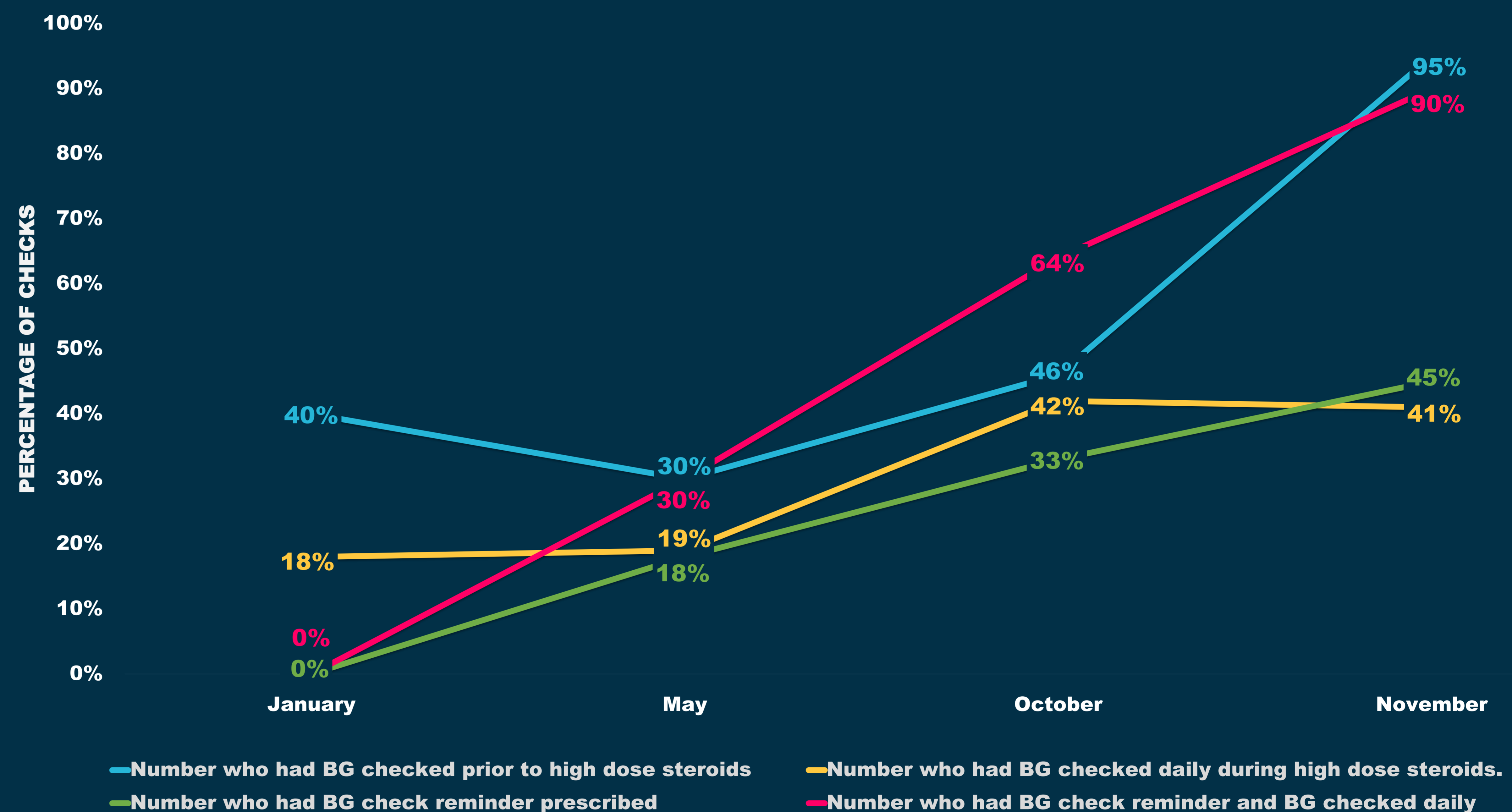
Glucocorticoids (steroids) are widely prescribed in hospital inpatients and are associated with hyperglycaemia in people with and without diabetes. Our hospital's Medicine Safety Group highlighted several adverse incidents of hyperglycaemia secondary to high dose steroid treatment. Similar findings have been highlighted in other UK hospitals¹. The aim of the project was to improve awareness of this complication in those without pre-existing diabetes on high-dose steroids & to improve recognition & safety by increasing the frequency of capillary blood glucose (CBG) at least once daily during hospital admission, as per Joint British Diabetes Society (JBDS) Guidelines². The audit standard set by JBDS is 90% of this group should be screened².

Method

All inpatients prescribed high-dose steroids (defined as ≥ 20 mg prednisolone or equivalent) during 1 week in January, May, October and November 2020 were identified by the pharmacy team through the electronic prescribing system. Those known to have diabetes (if recorded in their electronic clinical notes) were excluded. Following the first round of data collection in January, prescribers were asked to prescribe a 'CBG check reminder' on our electronic prescribing software when starting high dose steroids. Prompts were sent to prescribers before the May, October and November audit cycles highlighting the study objectives and reminding them to prescribe daily CBG checks. To further increase awareness, we presented interim results to staff at a regional Grand Round in early November.

Results

These show a substantial improvement in CBG monitoring in people without diabetes who have been prescribed high dose steroid across 4 audit cycles between January and November. By November, 90% of those with a BG check reminder had their CBG checked daily. This now meets the standard set out by JBDS.



Conclusion

Regular reminders of the risk of hyperglycaemia with high dose steroids via email and presentation of examples at medical grand rounds alongside the introduction of an electronic CBG check reminder substantially increased the number and proportion of patients who receive daily CBG checks while taking high dose steroids in hospital. We hope with this improvement in CBG checks, further adverse incidents will be prevented.

References



1. Limbachia V Dhatariya K - Surveillance of diabetes with inpatients on glucocorticoids are the JBDS standards being met



2. Joint British Diabetes Societies for Independent Care. Management of Hyperglycaemia and Steroid Therapy.

	January	May	October	November
Total number prescribed high dose steroids	50	57	33	22
% who had BG checked prior to high dose steroids	20 (40%)	17 (30%)	15 (46%)	21 (95%)
% who had BG checked daily during high dose steroids.	9 (18%)	11 (19%)	14 (42%)	9 (41%)
% who had BG check reminder prescribed	0 (0%)	10 (18%)	11 (33%)	10 (45%)
% who had BG check reminder and BG checked daily	N/A	3 (30%)	7 (64%)	9 (90%)