

# Feasibility and acceptability of a nurse-led model of care for managing glucocorticoid induced hyperglycaemia among oncology and haematology patients.

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## INTRODUCTION

- Glucocorticoid therapy (GT) is frequently part of cancer therapy.
- However, GT can cause glucocorticoid induced-hyperglycaemia (GIH) that can adversely affect outcomes with reported incidences of 32 - 64% (Liu et al., 2013).
- Glucocorticoids not only exacerbate hyperglycaemia in patients with known diabetes, but also cause GIH in 30% of patients without known diabetes (Vilder et al., 2017).

## AIMS

To pilot a nurse-led model of care (MOC) for patients requiring chemotherapy that includes high-dose glucocorticoids (HDG) at Bankstown-Lidcombe Hospital (BLH) to:

- Assess feasibility of this MOC for managing GIH
- Assess patient and healthcare professionals (HCP) experience

## METHODOLOGY

- A single-site prospective descriptive cohort study of eligible cancer patients aged >18, receiving chemotherapy including HDG at BLH, with no prior diagnosis of diabetes/prediabetes, and not at end-of-life. (Figure 1)
- Following consent, patients had HbA1c and random/fasting plasma glucose screening for undiagnosed diabetes. Patients without pre-existing diabetes were educated on the risk of GIH and the need for self-monitoring blood glucose QID on days of GT plus 1 extra day for the first four cycles of treatment.
- Patient and staff surveys were conducted to explore their experiences of this new MOC.

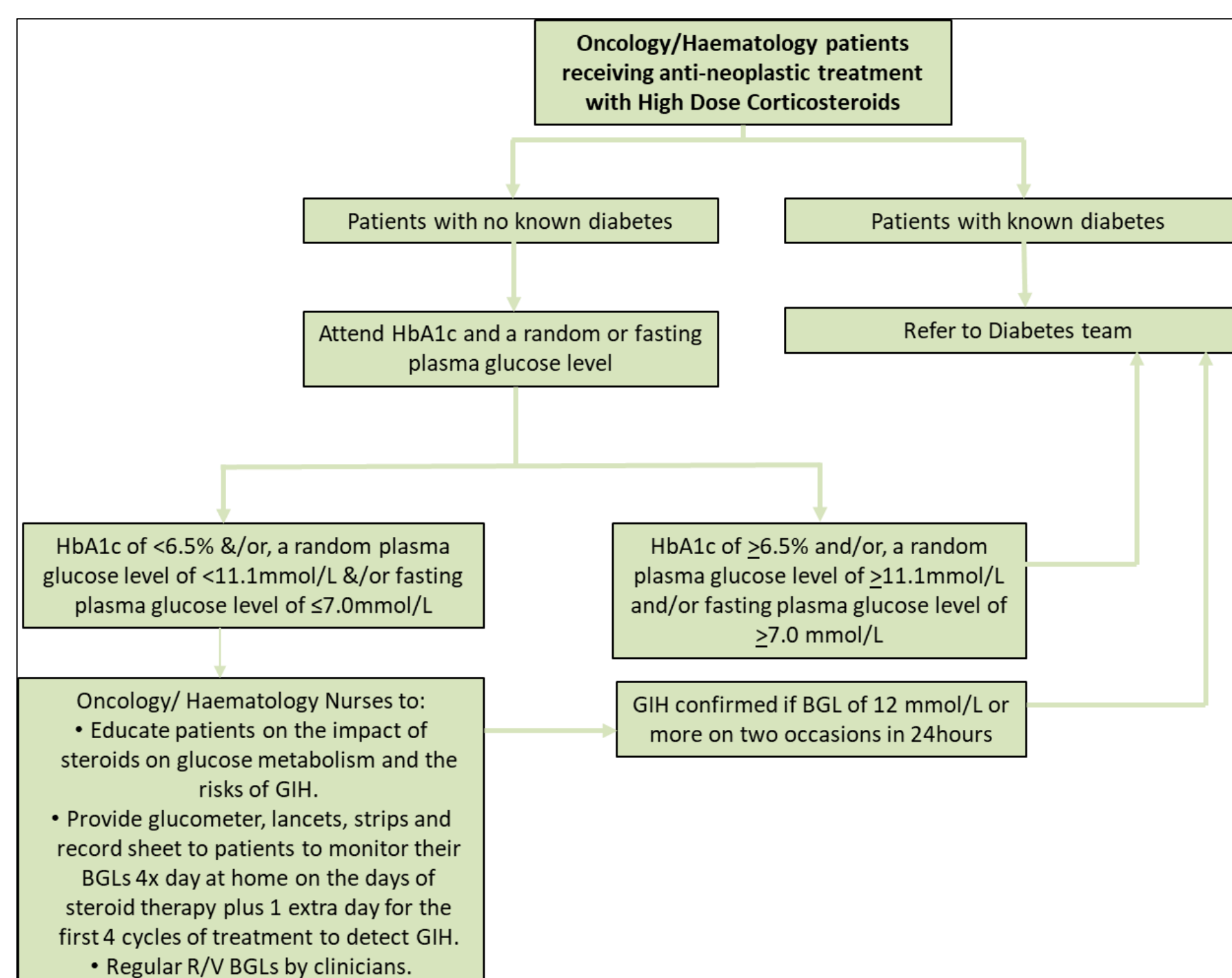


Figure 1: Study Design

## RESULTS

- 314 patients were diagnosed with cancer at BLH between February 2022-August 2023.
- Of the 211 patients meeting the inclusion criteria, 74 (35%) were invited to participate and 35 (16.5%) consented.
- Six participants (17%) withdrew from the study. (Figure 2)
- Barriers to participation included being onerous, feeling overwhelmed and not wanting to participate in research.(Figure 3)
- Nine HCP responded, five nurses and four doctors. All reported the MOC was good/very good regarding collaboration with the diabetes team, improving patient's clinical outcomes and would speak highly of the MOC with colleagues (Figure 5).

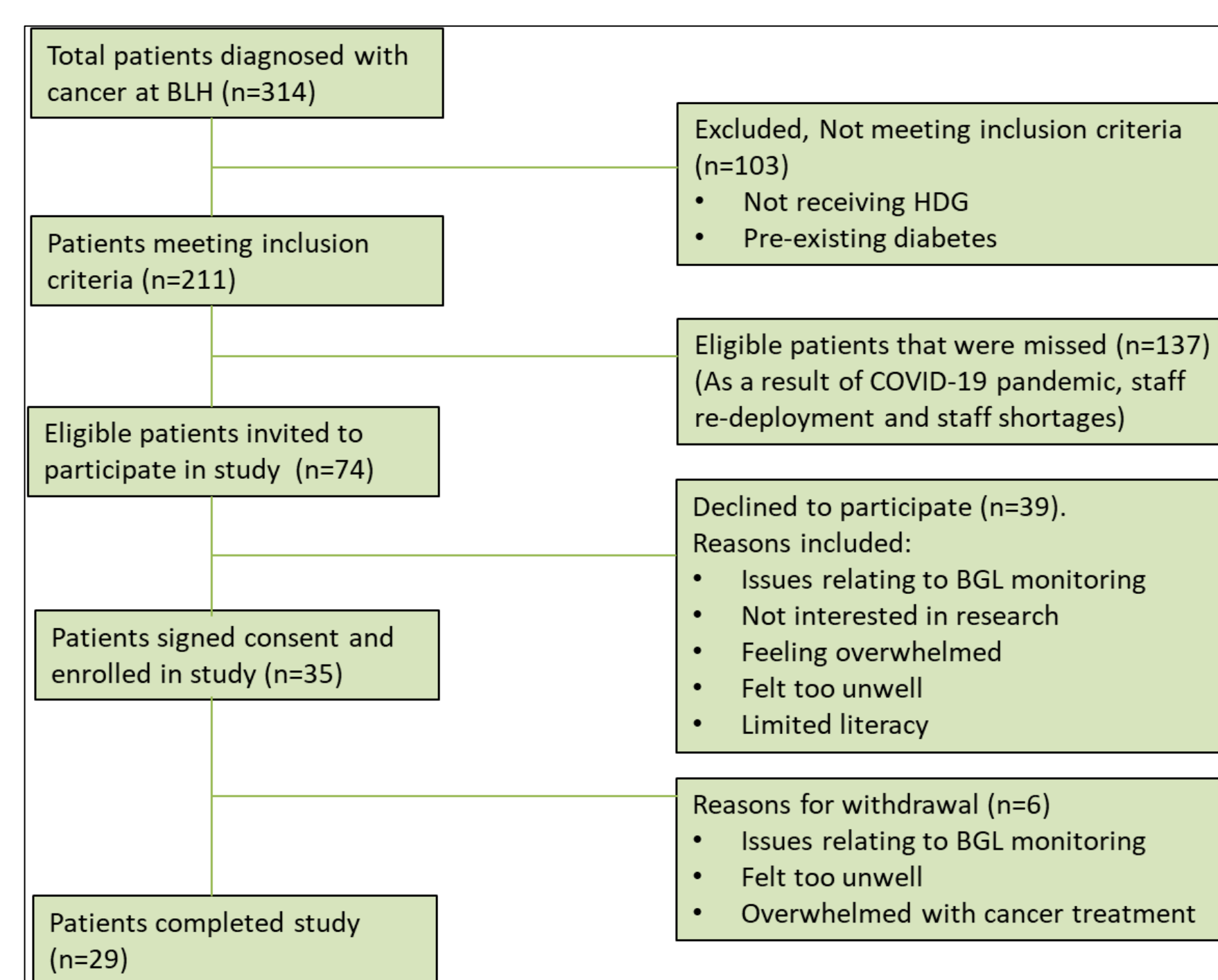


Figure 2: Recruitment diagram



Figure 3: Barriers to participation



Figure 4: Positive patient feedback

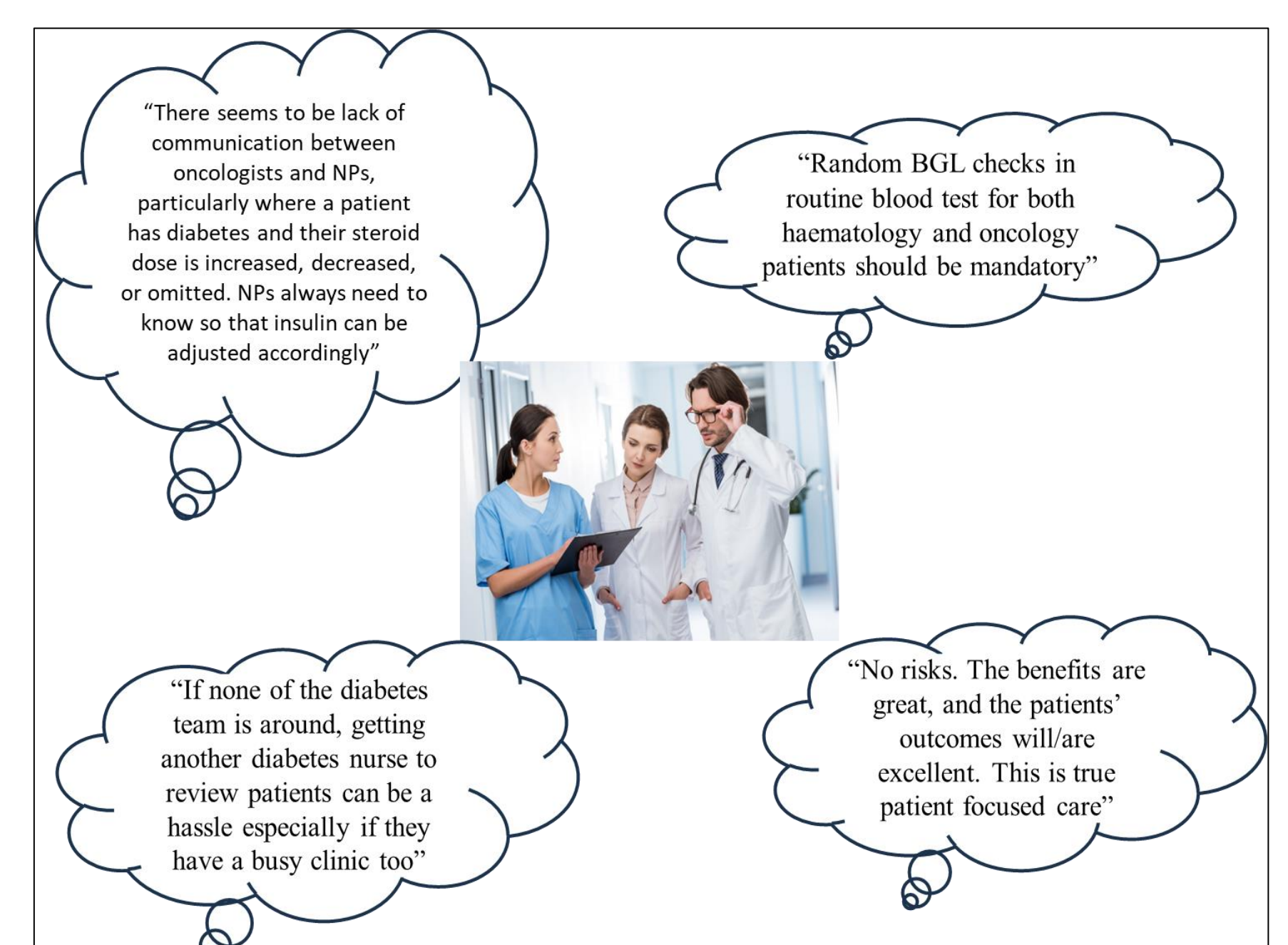


Figure 5: Health care professional feedback

## CONCLUSION

A nurse led intervention took place at BLH to manage patients with GIH. The intervention was identified to be a feasible MOC for screening individuals receiving GT with undiagnosed diabetes. Issues did arise relating to the acceptance of patients adopting regular BGL monitoring practices. Overall, this may have impacted the results of the study.

Reference:

- 1.Liu et al., 2014. Annals of Nutrition & Metabolism.
- 2.Vilder et al., 2017. Journal of clinical & translational endocrinology