

# Hypoglycemia in Diabetes: An Opportunity for Deprescribing

Laura Rozka B.Sc.(Pharm), Greg Egan B.Sc.(Pharm), ACPR, PharmD, BCGP; Amneet Aulakh B.Sc.(Pharm), PharmD; Graydon Meneilly MD, Nilu Partovi B.Sc.(Pharm), PharmD, FCSHP; Karen Dahri B.Sc., B.Sc.(Pharm), PharmD, ACPR, FCSHP

## Background

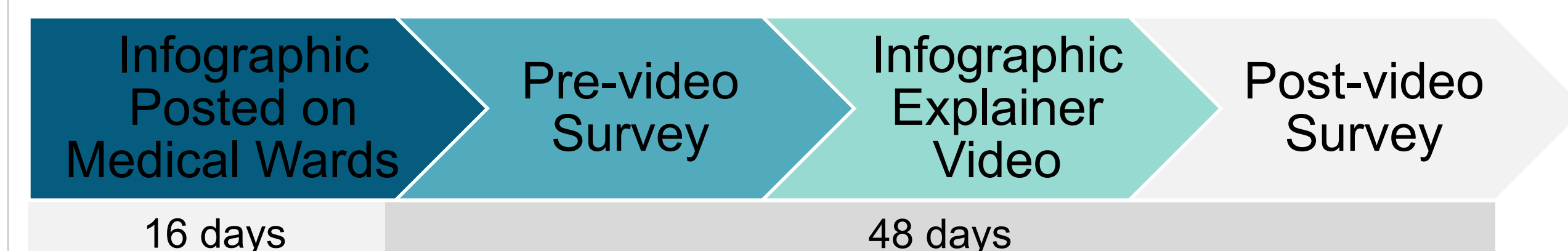
- Antihyperglycemics (AHGs) can cause hypoglycemia and adverse events such as falls and fractures
- Preliminary results of a retrospective review (N=108) at Vancouver General Hospital (VGH) from 2014 to 2017 found 30% of hypoglycemic events leading to hospital admission were medication related
- Patients presenting with hypoglycemia provide an opportunity for deprescribing; however, there is a lack of an evidence-based approach to guide deprescribing in acute settings

## Objectives

- Primary:** Create an educational intervention outlining an evidence-based approach to deprescribing
- Secondary:** Evaluate ability of educational intervention to increase knowledge and awareness of deprescribing through a pre and post survey

## Methods

**Design:** Single-centered, multi-ward, survey



- Educational Interventions:** ward-displayed infographic, explainer video of the infographic embedded in the survey
- Inclusion:**
  - All pharmacists and pharmacy residents at VGH
  - All learners and healthcare professionals on an Internal Medicine unit at VGH
- Ethics:** obtained from UBC BREB and informed consent was obtained from all participants
- Statistical Analysis:** descriptive statistics

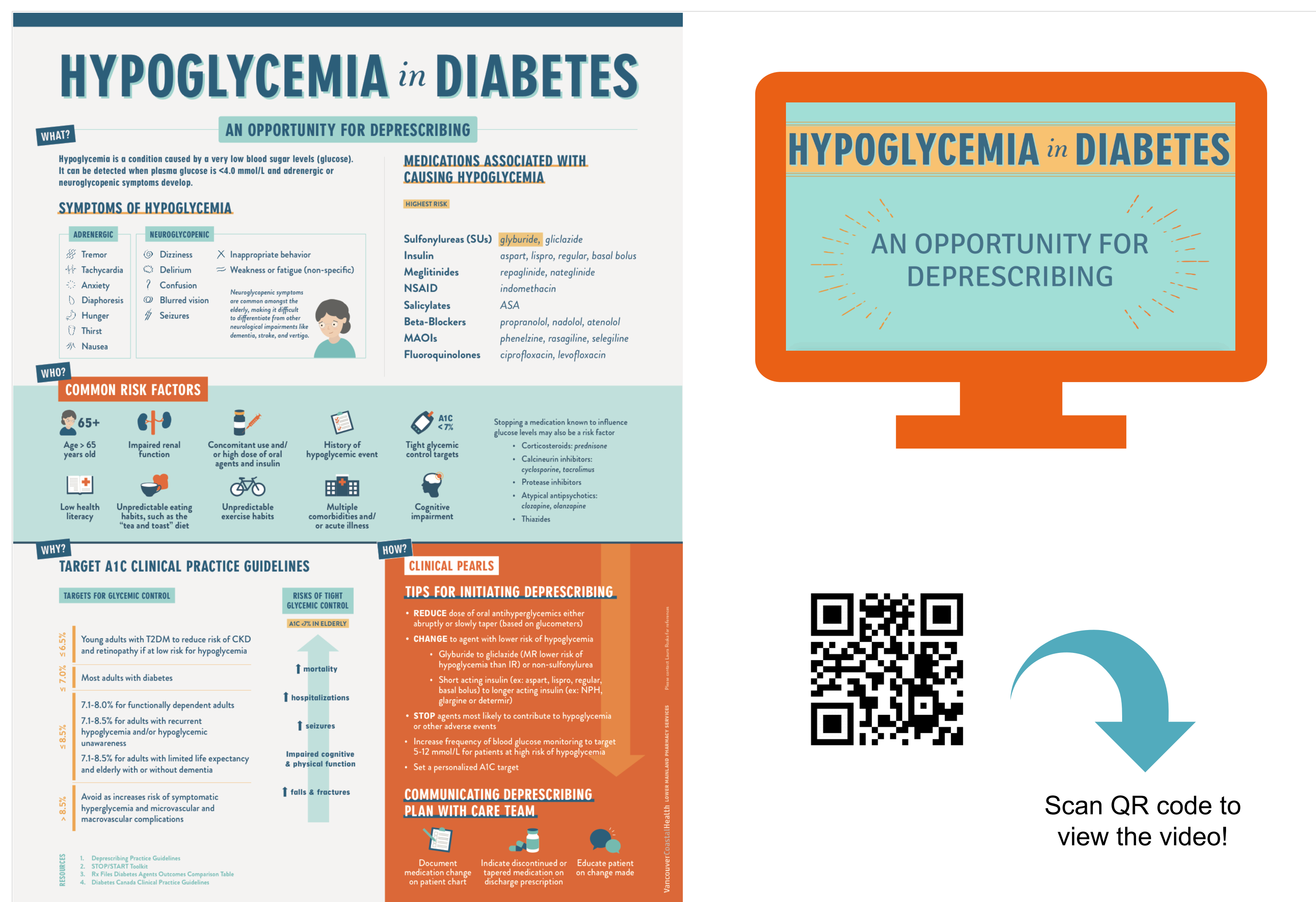


Figure 1. Educational Interventions

## Results

- Survey distributed to ~500 potential participants, ~6% response rate (N=28)
- 3 blank responses

Pre-video Responses (n=25)	Profession	Nurse	Pharmacist	Pharmacy Resident	Medical Resident	Social Worker
	Number (%)		7 (28)	15 (60)	1 (4)	1 (4)
Post-video Responses (n=18)	Profession	Nurse	Pharmacist	Pharmacy Resident	Medical Resident	Social Worker
	Number (%)		5 (27)	11 (61)	0 (0)	1 (6)

Table 1. Respondent Demographics

- 100%** correctly identified the definition of the term “deprescribing”
- 71%** were comfortable with the term “deprescribing” pre-video
- 88%** were not aware of the infographic posted on the wards

Figure 2. Pre-video Survey Highlights

- 83%** indicated that the educational video enhanced their understanding of the deprescribing infographic
- No change** in comfort with initiating deprescribing

Figure 3. Post-video Survey Highlights

## Discussion and Conclusions

- Most respondents were not aware of the infographic, suggesting the need for more active interventions versus passive interventions
- Respondent’s comfort with deprescribing did not change pre-video and post-video, suggesting that exposure to information alone does not influence comfort level
- Did not capture equal representation from all possible healthcare professions

## Limitations

- Single site
- Low response rate
- E-mail database not authenticated
- Unable to evaluate effect on participant’s deprescribing rates
- Video embedded within survey did not capture participants that viewed infographic independently
- Incomplete data limits the interpretation of the pre and post survey results

## Next Steps

- Complete retrospective review characterizing hypoglycemia leading to hospital presentation at VGH
- Re-implement educational material using more active interventions and evaluate the interventions
- Characterize deprescribing rates of AHGs at VGH and reassess educational material according to results