

INTRODUCTION / PURPOSE

- Glaucoma is a leading cause of irreversible blindness worldwide¹ and 50% of Australians are undiagnosed.²
- The iCareTrack study found that Glaucoma care by Australian Optometrists was delivered in line with evidence-based guidelines in 63% of patient interactions, however 14 clinical indicators were delivered at a suboptimal level below 60% appropriateness.³
- The Theoretical Domains Framework (TDF) (Fig. 1) brings together many behavioural theories that assist in comprehensively assessing the drivers of behaviour to identify possible barriers and facilitators of behaviour change.⁴
- The Behaviour Change Wheel (BCW) (Fig. 2) is a framework that describes the underlying elements that drive behaviour (capability, opportunity and motivation – COM-B) and links these drivers to interventions and policies that will be effective in changing behaviour.⁵ The 14 domains of the TDF have been mapped to the COM-B from the BCW.⁴

Aim:

1. To explore optometrists' perspectives on barriers and facilitators to Glaucoma Care.
2. To identify candidate interventions to improve Glaucoma Care delivery using a theory-based approach.

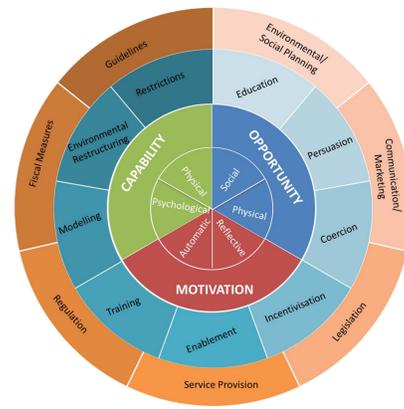


Fig 1. Theoretical Domains Framework colour coded to the BCW COM-B⁴

Fig 2. Behaviour Change Wheel – adapted from Michie et al 2011⁵

METHODS

Qualitative Study Design

- Data Collection Method: Focus Groups following COREQ procedure.⁶
- 4 focus groups (Sydney, Melbourne, Brisbane, Townsville); more to follow till data saturation is reached.
- Recruitment (convenience sampling) of Optometry Australia membership.
- 9 suboptimal Clinical Indicators from the iCareTrack study were selected via a prioritisation process. (Table 1)
- Semi-structured interview questions were used to prompt discussion on barriers and facilitators to suboptimal Glaucoma care clinical indicators.
- Discussions were audiotaped and transcribed.

Indicator	Indicator	Indicator
Compliance to Medication	VFA with SAP	Current and Past Steroid Use
Pattern of Neuroretinal Rim	Side Effects of Ocular Medication	Low Blood Pressure Status
AC Assessment (Gonio or Van Herrick)	Size of Optic Disc	Ethnicity

AC = anterior chamber; VFA = visual field assessment; SAP = standard automated perimetry

Analysis

- Transcriptions were uploaded to NVivo® software (QSR International, Doncaster).
- Barriers and facilitators to suboptimal clinical indicators were independently coded by two researchers to the TDF and consensus reached by discussion.
- Candidate interventions to improve Glaucoma care were identified by mapping the top five barrier TDF domains to the COM-B from the BCW.

RESULTS



4 Focus Groups
15 participants

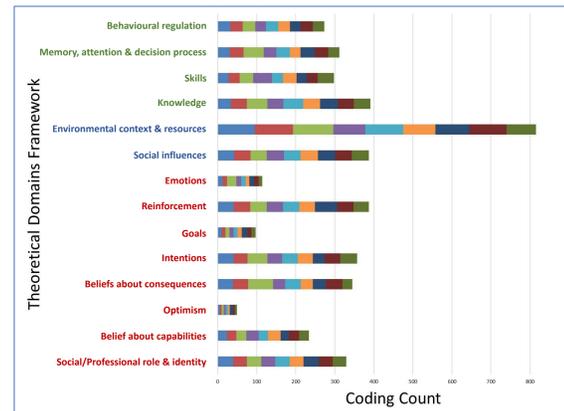


M:F 6:9
Age: 28-70yo

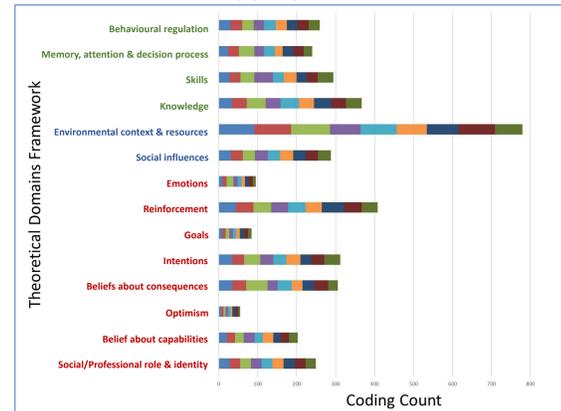


Various practice modalities (private, corporate, speciality clinics)

Barriers to Appropriate Glaucoma Care



Facilitators to Appropriate Glaucoma Care



TDF domains are colour coded to COM-B from BCW
Capability Opportunity Motivation

Suboptimal Clinical Indicators

- Compliance to medication
- Gonio or Van Herrick
- SAP Visual Field
- Current and past steroid use
- Low blood pressure
- Side effects of ocular medication
- Ethnicity
- Pattern of NRR
- Size of Optic Disc

Key Themes for Barriers

TDF Domain	Barrier	In their words
Capability	Lack of understanding	B5 "...just not familiar with the interpretation, even if I do it..." (AC Assessment Gonio or Van Herrick)
	Lack of awareness	M1 "How do you tell how big an optic nerve is?" (Size of optic disc) S6 "I don't feel like I've heard what a definition of low pressure is even" (Low blood pressure status)
Opportunity	Group conformity	M2 "So if your mentor doesn't record that, then you're not going to record it..." (Compliance to medication)
	Social norm	B2 "In all the practices I have ever worked in, I have never seen anyone write down the size of the disc, ever, and I would only write it down if there was a small crowded disc." (Size of optic disc)
Opportunity	Time	T1 "A lot of the corporate practices...have very strict time, 20 minutes and that's it...so the optometrist is under pressure all the time." (VFA with SAP)
	Lack of equipment	S2 "And they don't have visual fields." (VFA with SAP)
Motivation	Stability of intentions	T2 "I wouldn't actually measure it, no." (Size of optic disc)
	Lack of motivation	B5 "As much as I hate to say it...there is probably, just a little undercurrent of laziness." (VFA with SAP)
Motivation	Disincentives	M2 "So, I think incentives, financial or you have performance incentives, sometimes will make people not do things." (Size of optic disc)

CONCLUSION

The next stage of this research will be to design, implement and evaluate an intervention to improve the appropriateness of Glaucoma Care by Australian optometrists.

EMAIL CONTACT

The study is ongoing. Contact m.toomey@unsw.edu.au if you have a different perspective to share. We would love to hear from you!

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Mapping Barrier TDF Domains to BCW

TDF Domain	Interventions Linked to COM-B Component
Capability Knowledge	✓ Education ✓ Enablement Training
Opportunity Social influences Environmental context & resources	✓ Enablement ✓ Environmental restructuring Restriction
Motivation Intentions Reinforcement	✓ Education ✓ Enablement ✓ Environmental restructuring Persuasion Incentivisation Coercion Modelling

Candidate Interventions to Improve Glaucoma Care

Education	Enablement	Environmental Restructuring
Increasing knowledge or understanding	Increasing means/reducing barriers to increase capability or opportunity	Changing the physical or social context

DISCUSSION

- The TDF domains that barriers were coded to most frequently were: Environmental context and resources; Knowledge; Social influences; Reinforcement; and Intentions.
- The TDF domains that facilitators were coded to most frequently were: Environmental context and resources; Reinforcement; Knowledge; Intentions; and Belief about consequences.
- This research aligns with previous findings from Ireland and United Kingdom.⁷⁻¹⁰
- Of the candidate interventions identified from the mapping process, the interventions that were common across each of the COM-B components were: Education, Enablement, and Environmental restructuring, indicating the potential benefit of peer assisted learning such as peer learning and teaching, peer audit and feedback, and peer mentoring/coaching.¹¹
- Policies that will support the interventions include Guidelines and Regulations. New Continuing Professional Development Standards will be leveraged to support the interventions. (<https://www.optometryboard.gov.au/Registration-Standards/CPD.aspx>)
- Limitations of this study include sampling bias and low response rate.
- This is an ongoing study that will continue until data saturation is reached.

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