

Table S1 Development of the causal loop diagram through expert workshops

Modelling workshops	Purpose	Date and location	No. of participants	Participants' area of expertise
1 st workshop: problem scoping & CLD conceptualisation	<ul style="list-style-type: none"> • Identification of the key variables in regard to uptake of lung cancer screening • Identification of relationships among identified key variables • Identification of feedback loops 	January 2023; Sydney	6	<ul style="list-style-type: none"> • 2 lung cancer nurses • 1 health economist • 1 general practitioner • 1 person with experience of lung cancer • 1 Aboriginal patient representative
2 nd workshop: CLD confirmation and refinement	<ul style="list-style-type: none"> • Refinement of the preliminary CLD developed based on the first workshop • Identification of key leverage points to intervene a system 	February 2023; Gold Coast	10	<ul style="list-style-type: none"> • 6 respiratory physicians • 1 medical oncologist • 2 specialist lung cancer nurses • 1 consumer advocate

CLD, causal loop diagram.