

Additional file 3: Sample matrix of performance objectives, determinants and change objectives

The actor	What do people/organisations do?	Why do people do that? (Determinants)				Why does this matter?
		Parental Perspective	Child's perspective	HCP perspective	Community perspective	
Parent	Don't present to the GP with initial symptoms	Misattribution of symptoms: they think it's a cold or cough and therefore suitable for home management; don't think it is something to be concerned with		Communication barrier: some words do not translate, not known in South Asian communities, parents don't speak English	Misattribution: mixed up between cough/cold/chest infection; give other causes such as damp house	Chronic symptoms are being seen as normal or being attributed to the UK climate/housing conditions. Not being recognised as potential treatable illness. Then exacerbated by overlap between colds/asthma attacks; families feel no value in attending GP as will be dismissed
The Actor	What do we want them to do instead? (Performance outcomes)					
	Parents	Child	HCPs	Community		
Parents	To recognise potential symptoms from normal behaviour		Enable families to present repeatedly	Be aware of potential symptoms of asthma		
The actor	(Change Objectives)	Outcome Expectations	Self-efficacy	Risk perception/Fear	How should we do this? (Theoretical Model) Examples	Interventions or Theoretical model if no good example intervention
	Knowledge and Skills					
Parents	Parent: ability to identify symptoms of asthma	Parents: believe that going to GP has value to them and their child	Parents: believe that they are able to have an effective conversation with their GP	Parents: perceive that without treatment asthma could be dangerous to their child	Knowledge of asthma symptoms: modelling behaviour	Community vignettes

