Breastfeeding Promotion

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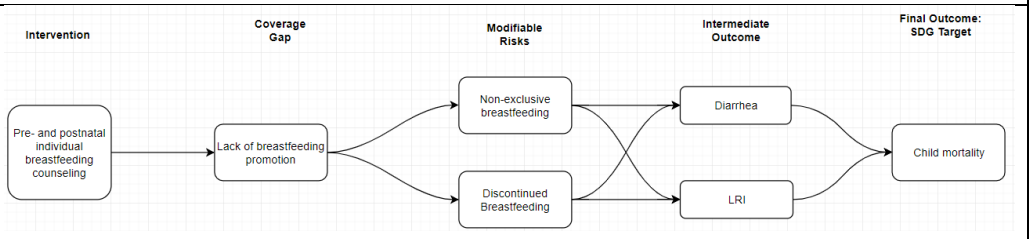
Intervention Definition	## Breastfeeding Promotion
	• Case definition(s)
	  ○ CONIC case definition: At least 4 pre- and/or post-natal counseling sessions. We intentionally do not specify the precise composition of the sessions, as it varies between the Cochrane review sources.
	  ○ LIST case definition: broad definition: "activities designed to promote breastfeeding" which range from Baby-Friendly Hospital Initiative, media promotion, individual counseling, etc
	• Intervention target(s):
	  ○ Exclusive breastfeeding
	  ○ Continued breastfeeding
	  ○ Early Initiation of Breastfeeding
	• How well does GBD capture intervention targets?
	  ○ Missing risks: Early initiation of breastfeeding
	  ○ Missing or aggregate causes: NA
	  ○ Missing risk-outcome pairs: NA
	  ○ Other: NA

Concept Model Diagram	 **NOTE –** this diagram was made on draw.io. It is saved as an example on the following Hub page: https://hub.ihme.washington.edu/display/COS/Concept+Model+Templates+and+Guide
Likely Demographics	## Population • Prospective cohort, 2015-2020

	• Smallest simulation time step (approximate): 1 week • Locations of Interest: key countries in West Africa (e.g. Nigeria, Mali, Burkina Faso) • Size of largest starting population (approximate): 10,000 • Youngest start-age & oldest end-age: 0-5 • Exit age (at what age to stop tracking simulants): 5 ### Fertility • Crude Birth Rate ### Other • NA
Minimal Model Implementation	### Coverage gap • Non-exclusive and discontinued breastfeeding risks • The intensity of this intervention is higher than standard practice, so we assume zero existing coverage • Magic Wand raising coverage to set target (e.g. 50%) with linear scale-up • We assume that a child is born with the intervention or born without it (even though the sessions are a mix of pre- and post-natal)
Full Model Implementation	### Effects • Possibly add intensity dimension (e.g. did you receive 4 or 8 visits), but this would require further work on the effect size analysis, so doubtful we do this. ### Treatment Algorithm • Raise coverage to ANC4 level ### Scenarios • Possibly add different platforms: healthcare (raise to ANC4 level) and community (raise to e.g. 50% community coverage). This would likely only be of interest it we had correlated risks (and added ANC4 propensity to the correlation matrix)
Risk Specifications	### Non-exclusive breastfeeding • rei_id 136 • Exposure distribution: ordered polytomous

	• Affects incidence rate of diarrhea & LRI • Age restrictions: age 0-6 months ### Discontinued breastfeeding • rei_id 137 • Exposure distribution: dichotmous • Affects incidence rate of diarrhea • Age restrictions: age 6-24 months
Cause Specifications	### Diarrhea • cause_id 302 • modelable_entity_id 1181 • Not modelling sequelae or etiologies • No age restrictions • Mortality and disability • SIS model, using remission from MEID 1181 ### Lower Respiratory Infections • cause_id 322 • modelable_entity_id 1258 • Not modelling sequelae or etiologies • No age restrictions • Mortality and disability • SIS model, using remission from MEID 1258
Costing Strategy	• Unit Cost: 4 outpatient visits, incurred at birth • Programmatic cost: add X% (refer to Hub page) for program overhead, incurred with unit cost

Desired Outputs	• Primary model outcomes:
	  ○ Total lives saved (total, and LRI/diarrhea) at country level (yearly & aggregate, 2015-2020)
	  ○ Change in (all-cause, and LRI/diarrhea) deaths per live birth (yearly, 2015-2020)
	  ○ Total intervention cost at country level (yearly & aggregate, 2015-2020)
	  ○ ICERs for all-cause & cause-specific deaths & YLLs (using aggregated costs, deaths, and YLLs 2015-2020)
	• Secondary model outcomes:

	○ Change in U5MR per 100K (all-cause & LRI/diarrhea) ○ Change in proportion of children (0-6 months) w/ exclusive breastfeeding (yearly 2015-2020) ○ Change in proportion of children (6-24 months) w/ continued breastfeeding (yearly 2015-2020) • Custom stratifications: some secondary outcomes will need non-GBD age group stratifications to match the risk age restrictions (0-6 months, 6-24 months)