**The Healthcare Seeking Behaviour Module**

*7th May, 2020*

The Health Seeking Behaviour Module represents persons seeking care in the healthcare system in response to the onset of symptoms. Note that this does not relate to the attending at healthcare appointments for on-going care of an existing condition.

Each day, the Healthcare Seeking Behaviour module examines persons who have had newly onset symptoms in the previous day. For each such person, it determines the probability that they seek care.

* Any person with symptom that is labelled as causing ‘emergency care’ seeking will have a *GenericEmergencyFirstAppt* HSI scheduled for the same day;
* Otherwise, the probability of seeking care is determined (see below), and for those that do seek care, a *GenericFirstAppointment* (non-emergency) HIS is scheduled for a date that is between 0 and 7 days later.

The probability of health care seeking in response to the onset of a generic symptom is determined by the *Health Seeking Equation*, which is based findings of Ng’ambi *et al*. [1, 2], a summary of which is provided below.

Estimating the Probability of Seeking Care Following the Onset of Symptoms

Two analyses used reports of onset of symptoms and reported health care seeking from the Malawi Integrated Household Surveys separately for adults [1] and children [2]. Persons reported the presence of symptoms in the two weeks prior, and among those that that did, whether or not care was sought. A logistic regression model established that the overall probability of seeking care given onset of such acute generic symptoms was high (58%) and related to region, urbanicity of residential setting, sex, age and the presence/absence of current symptoms. (The statistical analysis also found that calendar year and the presence/absence of a chronic condition had an effect, but these were not used in the analysis). The full model for each of adults (aged 15+ years) and children (aged <15 years are shown below.

*HSB Equation for Adults (aged 15+)*

The output of the data for adults has been generated by STATA command[[1]](#footnote-1):

*melogit hsb i.sex i.age\_grp i.reside i.reg i.sep i.fev i.vomit i.stomach i.sorethr i.respirat i.head i.skin i.dental i.inj i.back i.eye || hhid: ||id\_code:, or*

Reference Category – Male, Rural, Northern, 15-34y.o.,

*Baseline odds of seeking care is given by the \_cons = 1.291*



*HSB Equation for Children (aged 0-14 years)*

The output of the data for adults has been generated by STATA command:

*melogit hsb i.sex i.age\_grp i.reside i.reg i.sep i.fev i.vomit i.stomach i.sorethr i.respirat i.head i.skin i.dental i.inj i.eye i.chronic || hhid: ||id\_code:, or*

Reference Category – Male, Rural, Northern, 0-4y.o.,

Baseline odds of seeking care is given by the \_cons = 2.209285



References

[1] https://www.ajol.info/index.php/mmj/article/view/202965

[2] https://onlinelibrary.wiley.com/doi/abs/10.1111/tmi.13499

1. Health care seeking with diarrhea is taken to be the same as stomachache.

For wealth we used the odds ratio for the for the highest category

Sep = socioeconomic position: higher is mapped to ‘*li\_wealth’ >= 4* [↑](#footnote-ref-1)