Appendix A. Disease burden and cost inputs

Disease incidence

To estimate the vaccine-preventable HPV 16,18-related cervical cancer incidence in Mozambique, we used data for Mozambique from the ICO Information Centre on HPV and Cancer.[8] This entailed multiplying the Mozambique-specific crude incidence of cervical cancer by the prevalence of HPV 16 and/or 18 among women with cervical cancer to arrive at an incidence rate of 23 (16-30) per 100,000 at-risk individuals. Reported cases are not discounted.

DALYs

To estimate the average DALYs incurred per case of cervical cancer, we worked with results published by Goldie and colleagues on potential benefits of HPV 16,18 immunization in Mozambique.[16] We divided the discounted cervical cancer-related DALYs averted by the number of cervical cancer cases averted for an average of 3.6 discounted DALYs per case. We present discounted DALYs to maintain consistency with the discounted economic benefits reported and thereby present the value of all benefits in 2015.

Disease costs

Average discounted healthcare costs per case of cervical cancer ($1,792 ($896-$3,584)) were derived by weighting the cost per case for various stages of cervical cancer by the relative proportions of people experiencing the different levels of severity, and adjusting costs to 2015 USD. We used data published by Goldie et al for the direct medical costs incurred for each case, as well as the relative proportions of each level of disease severity.[16] We used World Bank GDP deflator estimates for Mozambique to adjust costs to 2015 USD.[17] Productivity losses were

estimated by multiplying DALYs by World Bank estimates of the 2015 Mozambique GNI per capita.[19]