CORONAVIRUS — HEALTH MODELLING — OMICRON VARIANT

377. Ms M.J. Davies to the Premier:

I refer to the document WA Department of Health Omicron COVID-19 modelling, tabled 22 February 2022 in the Legislative Assembly as tabled paper 963, and I ask:

(a) Please confirm all variables input into the modelling;

(b) How many sets of scenarios based on 'simulations of epidemic growth' were used as the basis for the modelling; and

(c) For each simulation:

(i) On what date was peak vaccine immunity expected to be reached;

(ii) On what date was the anticipated peak for cases;

(iii) What was the estimated daily number of positive cases leaking into the community expected to be;

(iv) How many individuals were anticipated to be triaged from hospital by using COVID at home;

(v) How many individuals were anticipated to require some sort of hospitalisation; and

(vi) How many individuals were anticipated to require intervention through intensive care?

Mr M. McGowan replied:

(a) The WA Department of Health Omicron COVID-19 modelling considers a range of variables including transmissibility of the virus, protection conferred against infection and serious disease by two or three doses of the vaccine, benefits of the booster doses at various population coverage, waning of vaccine protection against infection and serious disease, and the severity of disease in both vaccination and unvaccinated populations leading to hospitalisations, intensive care unit admissions and deaths.

Hospitalisation variables identified in Legislative Assembly tabled paper 963, WA Department of Health Omicron COVID-19 modelling, include:

Time from symptom onset to hospital admission: 6 days, with a standard deviation of +/– 1 day;

Time spent in a general ward: 4 days, with a standard deviation of +/– 1.71 days;

Time spent in a ventilated ICU bed: 5 days, with a standard deviation of +/– 2 days;

Time spent in a non-ventilated ICU bed: 2 days, with a standard deviation of +/– 0.7 days;

Time spent in a general ward before admission to ICU: 1 day; and

Time spent in a general ward after discharge from ICU: 1 day.

(b) The modelling conducted by the Department of Health analysed a number of pandemic scenarios for WA, based on a simulation of epidemic growth. Certain scenarios were not modelled due to the lack of available data and the diminishing efficacy of modelling at a too granular level.

(c) For the scenario published in Legislative Assembly tabled paper 963, WA Department of Health Omicron COVID-19 modelling:

(i) Peak vaccine immunity was expected to be reached in March 2022.

(ii) It was anticipated that cases would peak 55 days from the start of epidemic growth, based on a concept of 'day zero' rather than a specific date.

(iii) The estimated daily number of positive cases leaking in the community from interstate and international arrivals only was 13. The total daily number of positive cases leaking into the community from all sources was not estimated.

(iv) The 'COVID at home' program was out-of-scope of the scenario modelling.

(v) Between 4,545 and 6,826 individuals were anticipated to require some sort of hospitalisation within a period of 180 days.

(vi) Between 547 and 883 individuals were anticipated to require intervention through intensive care within a period of 180 days.