Evaluating costs and health consequences of sick leave strategies against pandemic and seasonal influenza in Norway using a dynamic model

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SUPPLEMENTARY FILE 2: FIGURES

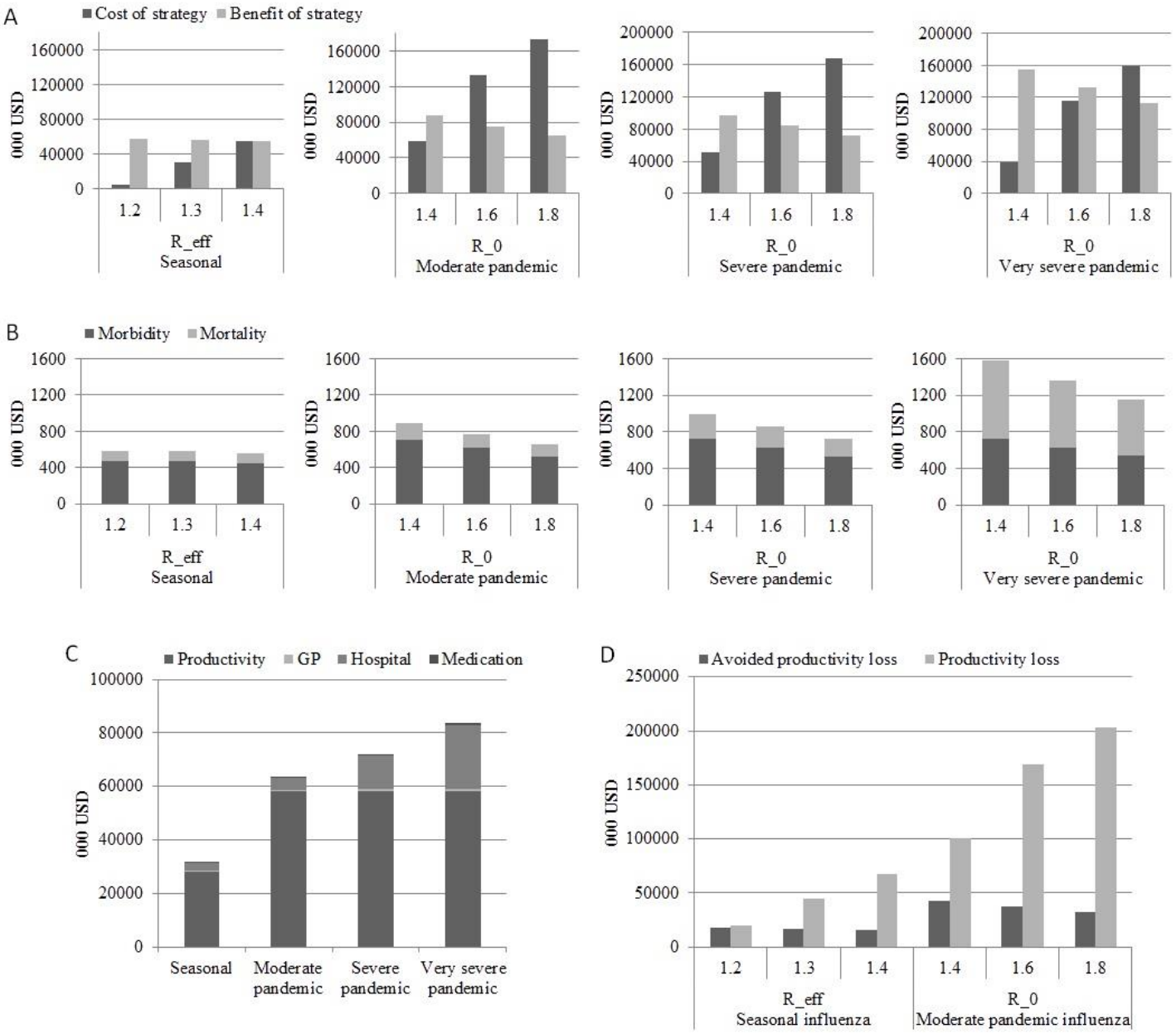


Figure S1: The effect transmissibility and pandemic severity on economic parameters for the intervention involving 90% of sick persons taking sick leave within 0.5 days of onset; no extra mixing assumed. A) Total monetary costs and benefits of the intervention under seasonal and pandemic scenarios. B) Benefits from avoided morbidity and mortality under seasonal and pandemic scenarios. C) Proportion of costs avoided due to avoided hospitalizations, GP-visits, medication use and productivity losses under seasonal and pandemic influenza. D) Baseline productivity losses and productivity losses avoided due to the sick leave intervention under seasonal and moderate pandemic influenza (the same pattern follows for more severe pandemic influenza scenarios.

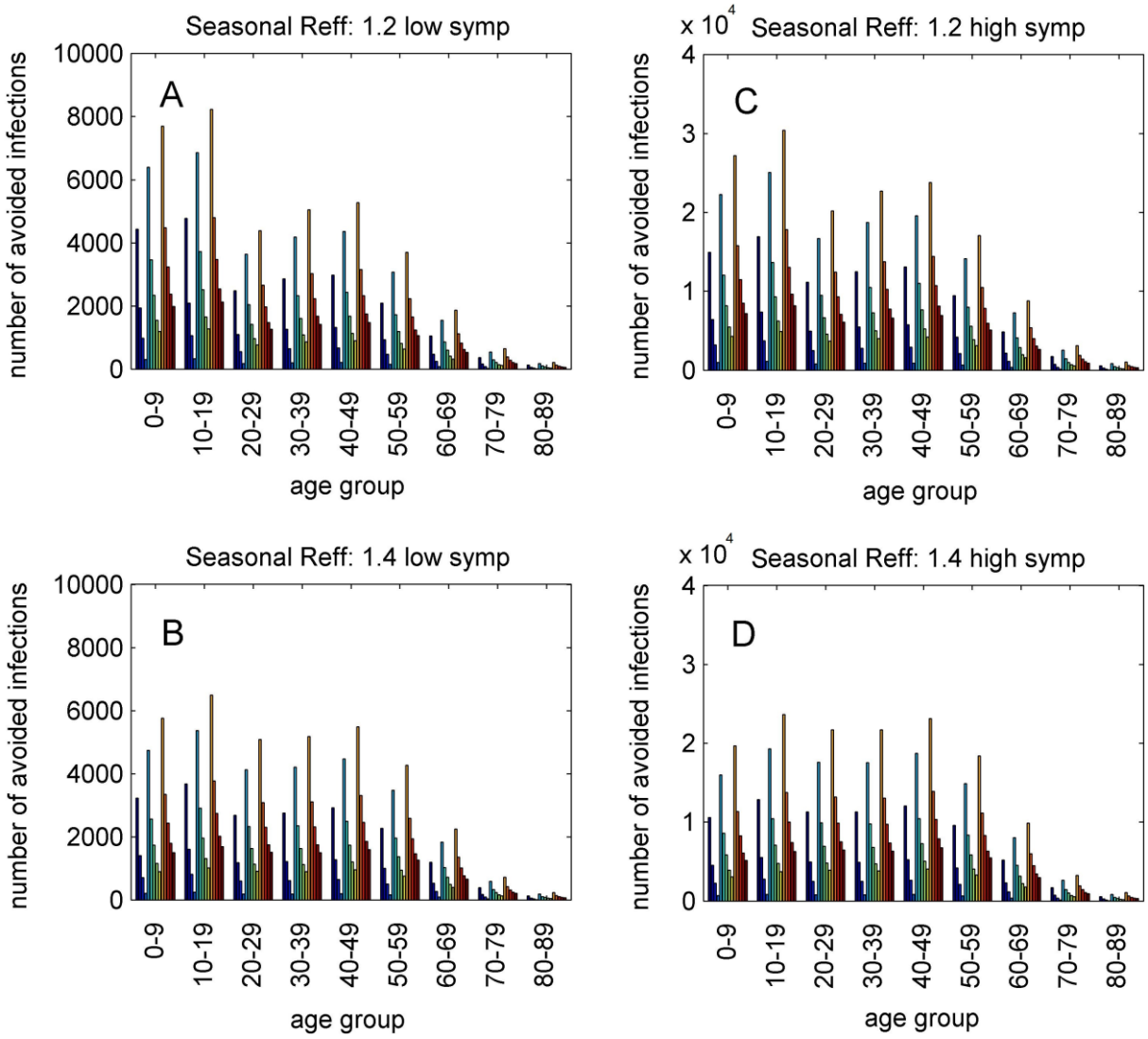


Figure S2: Absolute number of avoided clinical cases for selected seasonal scenarios, grouped according to median age, for all 14 interventions.
Interventions 1-4: Shades of blue: (65%; 0.5, 1, 1.5, and 2 days)
Interventions 5-9: Shades of green to yellow: (80%; 0.5, 1, 1.5, 2, and 4 days)
Interventions 10-14: Shades of orange to red: (90%; 0.5, 1, 1.5, 2, and 4 days)

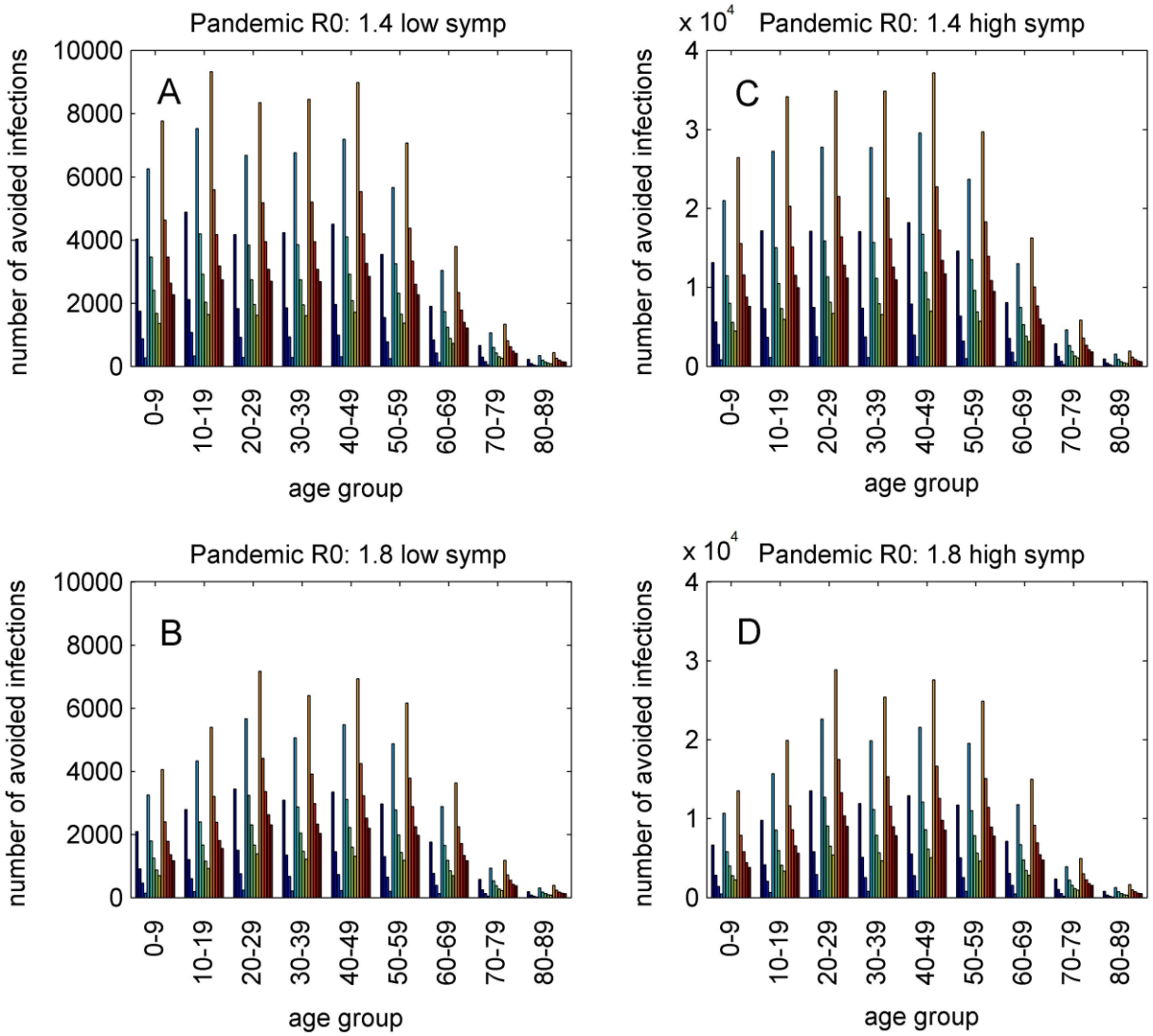
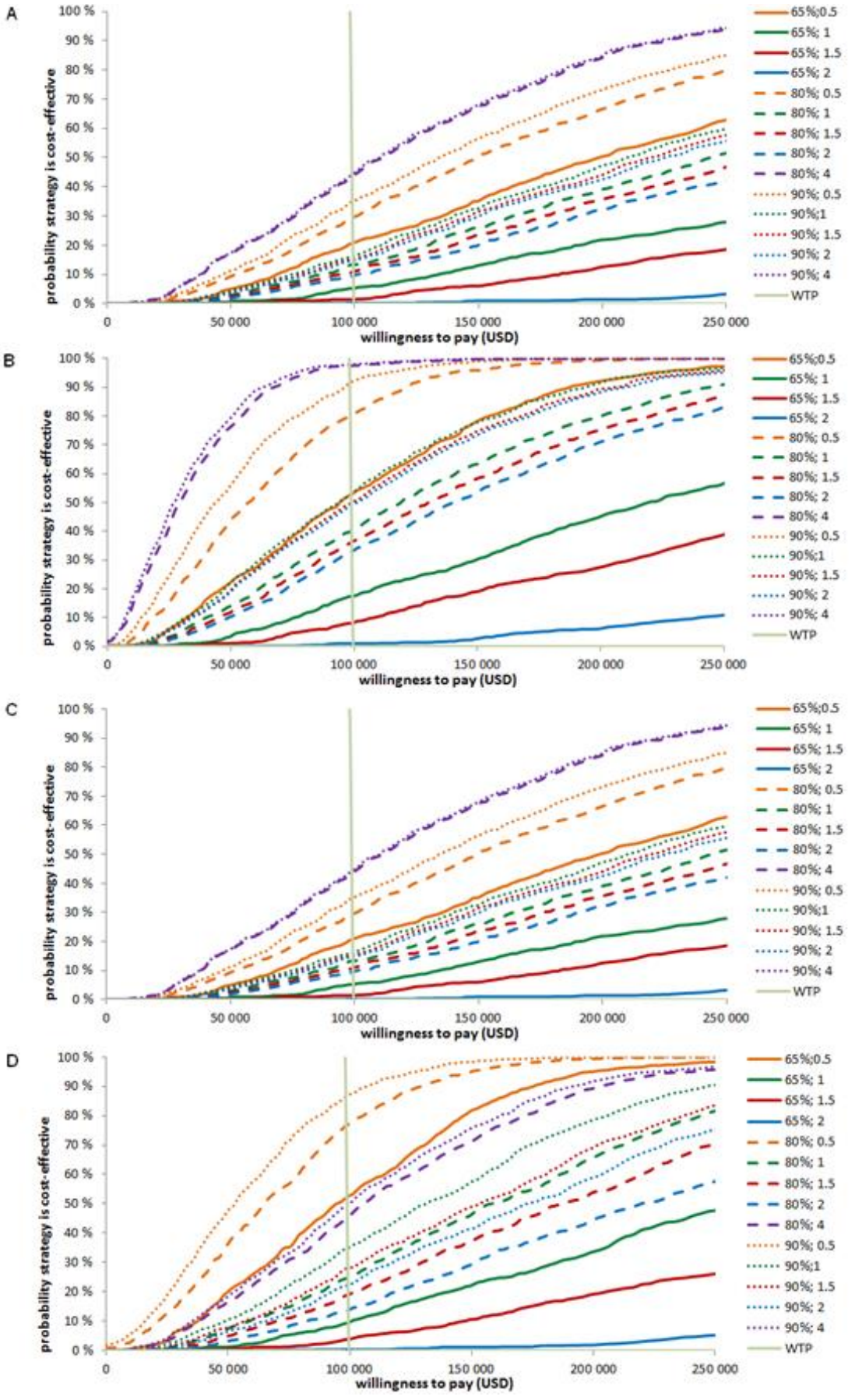


Figure S3: Absolute number of avoided clinical cases for selected pandemic scenarios, grouped according to median age, for all 14 interventions.
Interventions 1-4: Shades of blue: (65%; 0.5, 1, 1.5, and 2 days)
Interventions 5-9: Shades of green to yellow: (80%; 0.5, 1, 1.5, 2, and 4 days)
Interventions 10-14: Shades of orange to red: (90%; 0.5, 1, 1.5, 2, and 4 days)

Figure S4: Acceptability curves without extra mixing.

A) Seasonal influenza (R_eff=1.3), low symptomatic proportions (35% children and 25% adults symptomatic), without extra mixing, B) Seasonal influenza (R_eff=1.3), high symptomatic proportions (65% children and 55% adults symptomatic) without extra mixing, C) Pandemic influenza (R_0=1.6), low symptomatic proportions (35% children and 25% adults symptomatic), without extra mixing, D) Pandemic influenza (R_0=1.6), high symptomatic proportions (65% children and 55% adults symptomatic) without extra mixing.



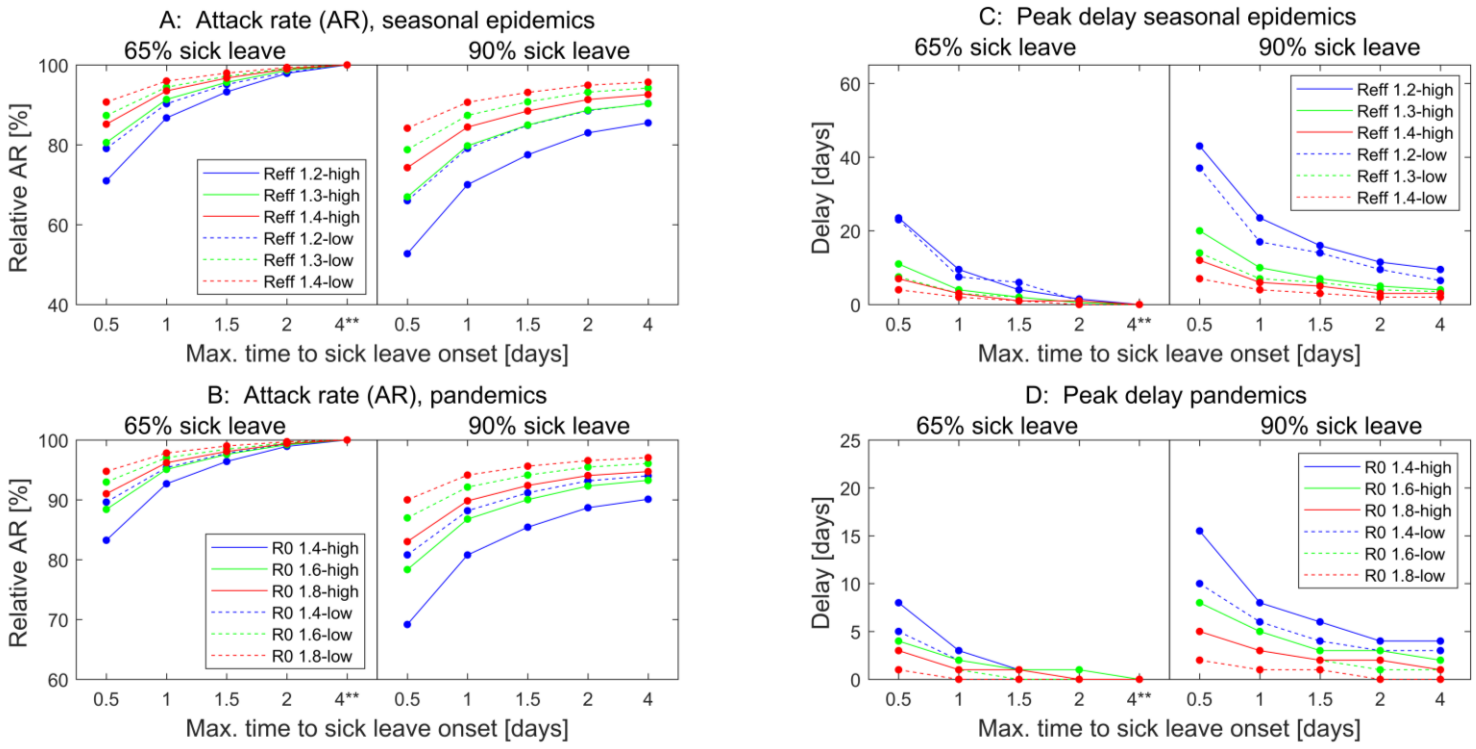


Figure S5: Impact of workplace-based interventions on clinical attack rate and timing of peak for seasonal epidemics (panels A and C) and for pandemics (panels B and D) with extra mixing in the households and the general population. Scenarios assuming low symptomatic proportions (35% children, 25% adults develop symptoms) are depicted with stippled lines; scenarios assuming high symptomatic proportions (65% children, 55% adults develop symptoms) are depicted with solid lines. Each level of transmissibility has a unique colour (blue = lowest transmissibility, green = medium transmissibility, and red = highest transmissibility). The figure shows sick leave interventions with 65% and 90% adherence combined with absence onset within 0.5, 1, 1.5, 2, and 4 days. The baseline intervention (65% adherence and sick leave onset within 4 days of symptom onset) is indicated by **.

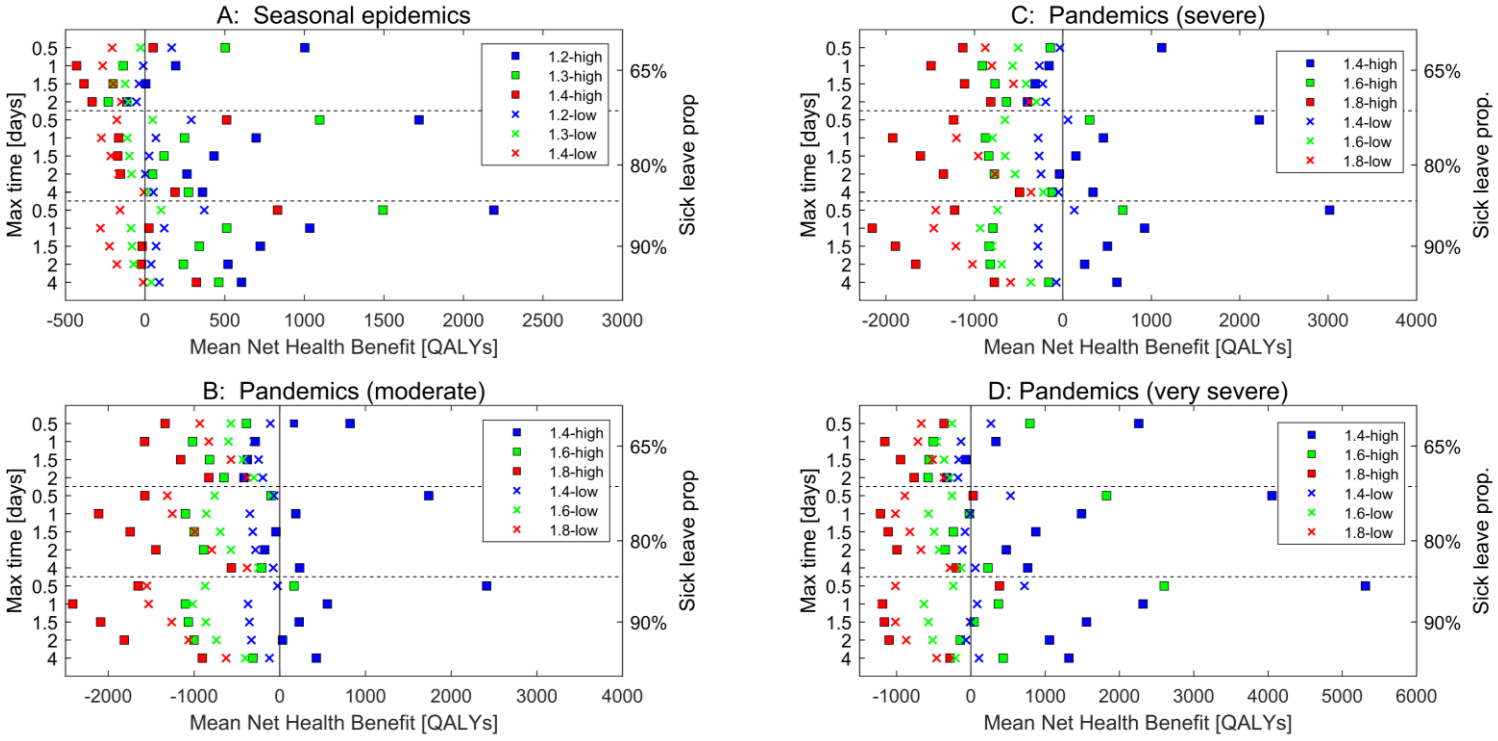


Figure S6: Mean Net Health Benefit (NHB) of workplace-based interventions for all scenarios assuming extra mixing in households and the general population; seasonal epidemics (A), moderate pandemics (B), severe pandemics (C), very severe pandemics (D).

Scenarios assuming low symptomatic proportions (35% children, 25% adults develop symptoms) are depicted as crosses, and scenarios assuming high symptomatic proportions (65% children, 55% adults develop symptoms) are depicted as squares. Each level of transmissibility has a unique colour (blue = lowest transmissibility, green = medium transmissibility, and red = highest transmissibility)

Figure S7: Acceptability curves with mixing.

A) Seasonal influenza (R_eff=1.3), low symptomatic proportions (35% children and 25% adults symptomatic), without extra mixing, B) Seasonal influenza (R_eff=1.3), high symptomatic proportions (65% children and 55% adults symptomatic) without extra mixing, C) Pandemic influenza (R_0=1.6), low symptomatic proportions (35% children and 25% adults symptomatic), without extra mixing, D) Pandemic influenza (R_0=1.6), high symptomatic proportions (65% children and 55% adults symptomatic) without extra mixing.