Adult Markov model transition probabilities

Subcutaneous immunotherapy arm

Start immunotherapy
- Given that an adult with hay fever first started on SCIT treatment, what is the probability that they:
  - continue with SCIT without adding any symptomatic treatment?
  - then add on treatments to control all of their symptoms?
  - then add on treatments to control some of their symptoms (symptoms partly controlled)?
- Given that an adult with hay fever is on SCIT only (without any symptomatic treatment), what is the probability that they:
  - will survive within 1 year?
  - will quit SCIT within 1 year?
- Given that an adult with hay fever is on SCIT and treatments to control all of their symptoms, what is the probability that they:
  - will survive within 1 year?
  - will quit SCIT within 1 year?
- Given that an adult with hay fever is on SCIT and treatments to control only some of their symptoms, what is the probability that they:
  - will survive within 1 year?
  - will quit SCIT within 1 year?

On immunotherapy, no symptomatic treatment
- Given that an adult with hay fever has carried on from the previous year on SCIT only (without any symptomatic treatment), what is the probability that they:
  - continue with this treatment from the second year onwards?
  - will add on treatments to control all of their symptoms from the second year onwards?
  - will add on treatments to control only some of their symptoms from the second year onwards?
- Given that an adult with hay fever has carried on from the previous year on SCIT only (without any symptomatic treatment):
  - and then continued with this treatment from the second year onwards, what is the probability that they will quit SCIT treatment?
  - and then added treatments to control all of their symptoms from the second year onwards, what is the probability that they will quit SCIT treatment?
  - and then added treatments to control only some of their symptoms from the second year onwards, what is the probability that they will quit SCIT treatment?

On immunotherapy, symptoms controlled
- Given that an adult with hay fever has carried on from the previous year on SCIT and treatments to control all of their symptoms, what is the probability that they:
  - continue only with SCIT from the second year onwards?
  - continue with this treatment from the second year onwards?
  - will continue with SCIT but switch to treatments that control only some of their symptoms at some point within the second year?
- Given that an adult with hay fever has carried on from the previous year on SCIT and treatments to control all of their symptoms:
  - but then continued with only SCIT treatment at some point within the second year, what is the probability that they will quit SCIT treatment?

- and then continued with this treatment from the second year onwards, what is the probability that they will quit SCIT treatment?
- and then switched to treatments that control all of their symptoms at some point within the second year, what is the probability that they will quit SCIT treatment?

On immunotherapy, symptoms part controlled
- Given that an adult with hay fever has carried on from the previous year on SCIT and treatments to control only some of their symptoms, what is the probability that they:
  - will continue only with SCIT from the second year onwards?
  - will continue with SCIT but switch to treatments that control all of their symptoms at some point within the second year?
  - will continue with this treatment from the second year onwards?
- Given that an adult with hay fever has carried on from the previous year on SCIT and treatments to control only some of their symptoms:
  - but then continued with only SCIT treatment at some point within the second year, what is the probability that they will quit SCIT treatment?
  - and then continued with SCIT and switched to treatments that control all of their symptoms at some point within the second year, what is the probability that they will quit SCIT treatment?
- Given that an adult with hay fever has carried on from the previous year on SCIT and treatments to control all of their symptoms and then continued with this treatment from the second year onwards, what is the probability that they will quit SCIT treatment?

Completed immunotherapy, no symptomatic treatment
- Given that an adult with hay fever completed treatment with SCIT in the first year and is not on any other treatment, what is the probability that they:
  - continue this way from the second year onwards?
  - will add treatments to control all of their symptoms at some point within the second year?
  - will add treatments to control some of their symptoms at some point within the second year?

Completed immunotherapy, symptoms controlled
- Given that an adult with hay fever completed treatment with SCIT in the first year and is on treatment to control all of their symptoms, what is the probability that they:
  - will not have any symptomatic treatment from the second year onwards?
  - will continue with this treatment from the second year onwards?
  - will switch to treatments that control only some of their symptoms at some point within the second year?

Completed immunotherapy, symptoms part controlled
- Given that an adult with hay fever completed treatment with SCIT in the first year and is on treatment to control only some of their symptoms, what is the probability that they:
  - will not have any symptomatic treatment from the second year onwards?
  - will switch to treatments to control all of their symptoms at some point within the second year?
  - will continue with the same treatment from the second year onwards?

Early quit immunotherapy, no symptomatic treatment
- Given that an adult with hay fever quit treatment with SCIT early in the first year and is not on any other treatment, what is the probability that they:
  - continue this way from the second year onwards?
  - will add treatments to control all of their symptoms at some point in the second year?
  - will add treatments to control some of their symptoms at some point in the second year?

Early quit immunotherapy, symptoms controlled
- Given that an adult with hay fever quit treatment with SCIT early in the first year and is on treatment to control all of their symptoms, what is the probability that they:
  - will not have any symptomatic treatment from the second year onwards?
  - will continue with this treatment from the second year onwards?
  - will switch to treatments that control only some of their symptoms at some point within the second year?

Early quit immunotherapy, symptoms part controlled
- Given that an adult with hay fever quit treatment with SCIT early in the first year and is on treatment to control only some of their symptoms, what is the probability that they:
  - will not have any symptomatic treatment from the second year onwards?
  - will switch to treatments that control all of their symptoms at some point within the second year?
  - will continue with the same treatment from the second year onwards?

Sublingual immunotherapy arm
Same as for SCIT arm: replace 'SCIT' with 'SLIT'.

Symptomatic treatment-only arm
- Given that an adult with hay fever first started on symptomatic treatment only, what is the probability that they:
  - will continue without any symptomatic treatment?
  - will continue with treatments to control all of their symptoms?
  - will continue with treatments to control some of their symptoms?

No symptomatic treatment
- Given that an adult with hay fever has carried on from the previous year on no symptomatic treatment, what is the probability that they:
  - will continue without any symptomatic treatment from the second year onwards?
  - will add treatments to control all of their symptoms at some point within the second year?
  - will add treatments to control only some of their symptoms at some point within the second year?

Symptoms controlled
- Given that an adult with hay fever has carried on from the previous year on treatments that control all of their symptoms, what is the probability that they:
  - will continue without any symptomatic treatment from the second year onwards?
  - will continue with this treatment from the second year onwards?
  - switch to treatments that control only some of their symptoms at some point within the second year?

Symptoms part controlled
- Given that an adult with hay fever has carried on from the previous year on treatments that control only some of their symptoms, what is the probability that they:
  - will continue without any symptomatic treatment from the second year onwards?
  - switch to treatments that control all of their symptoms at some point within the second year?
  - will continue with this treatment from the second year onwards?

Child Markov model transition probabilities

Subcutaneous immunotherapy arm

Start immunotherapy
- Given that a child with hay fever first started on SCIT treatment, what is the probability that in the first hay fever season:
  - the patient does not require symptomatic treatment?
  - they then add on treatments to control all of their symptoms?
  - they then add on treatments to control some of their symptoms (symptoms partly controlled)?
- Given that a child with hay fever is on SCIT only (without any symptomatic treatment), what is the probability that they will also have asthma after 1 year?
- Given that a child with hay fever is on SCIT and treatments to control all of their symptoms, what is the probability that they will also have asthma after 1 year?
- Given that a child with hay fever is on SCIT and treatments to control only some of their symptoms, what is the probability that they will also have asthma after 1 year?
- Given that a child with hay fever is on SCIT only (without any symptomatic treatment), what is the probability that they will quit SCIT after 1 year if they do not have asthma?
- Given that a child with hay fever is on SCIT and treatments to control all of their symptoms, what is the probability that they will quit SCIT after 1 year if they do not have asthma?
- Given that a child with hay fever is on SCIT and treatments to control only some of their symptoms, what is the probability that they will quit SCIT within 1 year if they do not have asthma?
- Given that a child with hay fever is on SCIT only (without any symptomatic treatment), what is the probability that they will quit SCIT after 1 year if they have asthma?
- Given that a child with hay fever is on SCIT and treatments to control all of their symptoms, what is the probability that they will quit SCIT after 1 year if they have asthma?
- Given that a child with hay fever is on SCIT and treatments to control only some of their symptoms, what is the probability that they will quit SCIT within 1 year if they have asthma?

On immunotherapy, no symptomatic treatment without asthma
- Given that a non-asthmatic child with hay fever has carried on from the previous year on SCIT only (without any symptomatic treatment); what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they then add on treatments to control all of their symptoms?
  - they then add on treatments to control some of their symptoms (symptoms partly controlled)?
- Given that a non-asthmatic child with hay fever has carried on from the previous year on SCIT only (without any symptomatic treatment):
  - and then continued with this treatment during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then added treatments to control all of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then added treatments to control only some of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then continued with this treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they did not develop asthma?
  - and then added treatments to control all of their symptoms during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they did not develop asthma?
  - and then added treatments to control only some of their symptoms during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they did not develop asthma?
  - and then continued with this treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they developed asthma?

- and then added treatments to control all of their symptoms during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they developed asthma?
- and then added treatments to control only some of their symptoms during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they developed asthma?

On immunotherapy, no symptomatic treatment with asthma
- Given that an asthmatic child with hay fever has carried on from the previous year on SCIT only (without any symptomatic treatment), what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they then add on treatments to control all of their symptoms?
  - they then add on treatments to control some of their symptoms (symptoms partly controlled)?
- Given that an asthmatic child with hay fever has carried on from the previous year on SCIT only (without any symptomatic treatment):
  - and then continued with this treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year?
  - and then added treatments to control all of their symptoms during the second year, what is the probability that they will quit SCIT treatment before the start of the third year?
  - and then added treatments to control only some of their symptoms during the second year, what is the probability that they will quit SCIT treatment before the start of the third year?

On immunotherapy, symptoms controlled without asthma
- Given that a non-asthmatic child with hay fever has carried on from the previous year on SCIT and treatments to control all of their symptoms, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they continue with treatments to control all of their symptoms?
  - they switch to treatments to control some of their symptoms (symptoms partly controlled)?
- Given that a non-asthmatic child with hay fever has carried on from the previous year SCIT and treatments to control all of their symptoms:
  - but then continued with only SCIT treatment during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then continued with this treatment during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then switched to treatments that control only some of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?
  - but then continued with only SCIT treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they did not develop asthma?
  - and then continued with this treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they did not develop asthma?
  - and then switched to treatments that control only some of their symptoms during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they did not develop asthma?
  - but then continued with only SCIT treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they developed asthma?
  - and then continued with this treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they developed asthma?
  - and then switched to treatments that control only some of their symptoms during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they developed asthma?

On immunotherapy, symptoms controlled with asthma

- Given that an asthmatic child with hay fever has carried on from the previous year on SCIT and treatments to control all of their symptoms, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they continue with treatments to control all of their symptoms?
  - they switch to treatments to control some of their symptoms (symptoms partly controlled)?
- Given that an asthmatic child with hay fever has carried on from the previous year SCIT and treatments to control all of their symptoms:
  - but then continued with only SCIT treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year?
  - and then continued with this treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year?
  - and then switched to treatments that control only some of their symptoms during the second year, what is the probability that they will quit SCIT treatment before the start of the third year?

On immunotherapy, symptoms part controlled without asthma

- Given that a non-asthmatic child with hay fever has carried on from the previous year on SCIT and treatments to control only some of their symptoms, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they switch to treatments to control all of their symptoms?
  - they continue with treatments to control only some of their symptoms (symptoms partly controlled)?
- Given that a non-asthmatic child with hay fever has carried on from the previous year on SCIT and treatments to control only some of their symptoms:
  - but then continued with only SCIT treatment during the second year, what is the probability that they develop asthma by the end of the third year?
  - but then switched to treatments to control all of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then continued with this treatment during the second year, what is the probability that they develop asthma by the end of the third year?
  - but then continued with only SCIT treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they did not develop asthma?
  - but then switched to treatments to control all of their symptoms during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they did not develop asthma?
  - and then continued with this treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they did not develop asthma?
  - but then continued with only SCIT treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they developed asthma?
  - but then switched to treatments to control all of their symptoms during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they developed asthma?
  - and then continued with this treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year if they developed asthma?

On immunotherapy symptoms part controlled with asthma

- Given that an asthmatic child with hay fever has carried on from the previous year on SCIT and treatments to control only some of their symptoms, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they switch to treatments to control all of their symptoms?
  - they continue with treatments to control only some of their symptoms (symptoms partly controlled)?

- Given that an asthmatic child with hay fever has carried on from the previous year on SCIT and treatments to control only some of their symptoms but then continued with only SCIT treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year?
- Given that an asthmatic child with hay fever has carried on from the previous year on SCIT and treatments to control only some of their symptoms but then switched to treatments to control all of their symptoms during the second year, what is the probability that they will quit SCIT treatment before the start of the third year?
- Given that an asthmatic child with hay fever has carried on from the previous year on SCIT and treatments to control only some of their symptoms and then continued with this treatment during the second year, what is the probability that they will quit SCIT treatment before the start of the third year?

Completed immunotherapy no symptomatic treatment without asthma
- Given that a non-asthmatic child with hay fever completed 3 years' treatment with SCIT and did not require symptomatic treatment in the previous year, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they then add treatments to control all of their symptoms?
  - they then add treatments to control some of their symptoms (symptoms partly controlled)?
- Given that a non-asthmatic child with hay fever completed 3 years' treatment with SCIT only (without any symptomatic treatment):
  - and then continued with no symptomatic treatment during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then added treatments to control all of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then added treatments to control only some of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?

Completed immunotherapy, no symptomatic treatment with asthma
- Given that an asthmatic child with hay fever has completed 3 years' treatment with SCIT and did not require symptomatic treatment in the previous year, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they then add treatments to control all of their symptoms?
  - they then add treatments to control some of their symptoms (symptoms partly controlled)?

Completed immunotherapy, symptoms controlled without asthma
- Given that a non-asthmatic child with hay fever completed 3 years' treatment with SCIT and was on treatment to control all of their symptoms in the previous year, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they continue with treatments to control all of their symptoms?
  - they switch to treatments to control only some of their symptoms?
- Given that a non-asthmatic child with hay fever completed 3 years' treatment with SCIT and was on treatment to control all of their symptoms in the previous year:
  - but continued without any SCIT or treatments to control their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then continued with treatments to control all of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then switched to treatments to control only some of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?

Completed immunotherapy symptoms controlled with asthma

- Given that an asthmatic child with hay fever completed 3 years' treatment with SCIT and was on treatment to control all of their symptoms in the previous year, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they continue with treatments to control all of their symptoms?
  - they switch to treatments to control only some of their symptoms?

Completed immunotherapy symptoms part controlled without asthma

- Given that a non-asthmatic child with hay fever completed 3 years' treatment with SCIT and was on treatment to control only some of their symptoms in the previous year, what is the probability that in the current year;
  - the child does not require symptomatic treatment?
  - they switch to treatments to control all of their symptoms?
  - they continue with treatments to control only some of their symptoms?
- Given that a non-asthmatic child with hay fever completed 3 years' treatment with SCIT and was on treatment to control only some of their symptoms in the previous year
  - but continued without any SCIT or treatments to control their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then switched to treatments to control all of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then continued with treatments to control only some of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?

Completed immunotherapy symptoms part controlled with asthma

- Given that an asthmatic child with hay fever completed 3 years' treatment with SCIT and was on treatment to control only some of their symptoms in the previous year, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they switch to treatments to control all of their symptoms?
  - they continue with treatments to control only some of their symptoms?

Early quit immunotherapy, no symptomatic treatment without asthma

- Given that a non-asthmatic child with hay fever quit treatment with SCIT before the start of the third year and is not on any other treatment, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they then add treatments to control all of their symptoms?
  - they then add treatments to control some of their symptoms (symptoms partly controlled)?
- Given that a non-asthmatic child with hay fever quit treatment with SCIT before the start of the third year and was not on any other treatment
  - and continued without any treatment during the second year, what is the probability that they develop asthma by the end of the third year?
  - but then added treatments to control all of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?
  - but then added treatments to control only some of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?

Early quit immunotherapy, no symptomatic treatment with asthma

- Given that an asthmatic child with hay fever quit treatment with SCIT before the start of the third year and is not on any other treatment, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they then add treatments to control all of their symptoms?
  - they then add treatments to control some of their symptoms (symptoms partly controlled)?

Early quit immunotherapy, symptoms controlled without asthma
- Given that a non-asthmatic child with hay fever quit treatment with SCIT before the start of the third year and is on treatment to control all of their symptoms, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they continue with treatments to control all of their symptoms?
  - they switch to treatments to control only some of their symptoms?
- Given that a non-asthmatic child with hay fever quit treatment with SCIT before the start of the third year and was on treatment to control all of their symptoms
  - and then continued without any treatments to control their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then continued with treatments to control all of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then switched to treatments to control only some of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?

Early quit immunotherapy, symptoms controlled with asthma
- Given that an asthmatic child with hay fever quit treatment with SCIT before the start of the third year and is on treatment to control all of their symptoms, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they continue with treatments to control all of their symptoms?
  - they switch to treatments to control only some of their symptoms?

Early quit immunotherapy, symptoms part controlled without asthma
- Given that a non-asthmatic child with hay fever quit treatment with SCIT before the start of the third year and is on treatment to control only some of their symptoms, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they switch to treatments to control all of their symptoms?
  - they continue with treatments to control only some of their symptoms (symptoms partly controlled)?
- Given that a non-asthmatic child with hay fever quit treatment with SCIT before the start of the third year and is on treatment to control only some of their symptoms
  - and then continued without any treatments to control their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then switched to treatments to control all of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?
  - and then continued with treatments to control only some of their symptoms during the second year, what is the probability that they develop asthma by the end of the third year?

Early quit immunotherapy, symptoms part controlled with asthma
- Given that an asthmatic child with hay fever quit treatment with SCIT before the start of the third year and is on treatment to control only some of their symptoms, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they switch to treatments to control all of their symptoms?
  - they continue with treatments to control only some of their symptoms (symptoms partly controlled)?

Sublingual immunotherapy arm
Same as for SCIT arm: replace 'SCIT' with 'SLIT'.

Symptomatic treatment-only arm

No symptomatic treatment without asthma
- Given that a non-asthmatic child with hay fever has carried on from the previous year on no symptomatic treatment, what is the probability that in the current year:
    - the child does not require symptomatic treatment?
    - they then add treatments to control all of their symptoms?
    - they then add treatments to control some of their symptoms (symptoms partly controlled)?
- Given that a non-asthmatic child with hay fever has carried on from the previous year on no symptomatic treatment:
    - and then continued without symptomatic treatment during the subsequent year, what is the probability that they develop asthma by the end of the third year?
    - and then switched to treatments to control all of their symptoms during the subsequent year, what is the probability that they develop asthma by the end of the third year?
    - and then switched to treatments to control only some of their symptoms during the subsequent year, what is the probability that they develop asthma by the end of the third year?

No symptomatic treatment with asthma
- Given that an asthmatic child with hay fever has carried on from the previous year on no symptomatic treatment, what is the probability that in the current year:
    - the child does not require symptomatic treatment?
    - they then add treatments to control all of their symptoms?
    - they then add treatments to control some of their symptoms (symptoms partly controlled)?

Symptoms controlled without asthma
- Given that a non-asthmatic child with hay fever has carried on from the previous year on treatments that control all of their symptoms, what is the probability that in the current year:
    - the child does not require symptomatic treatment?
    - they continue with treatments to control all of their symptoms?
    - they switch to treatments to control only some of their symptoms (symptoms partly controlled)?
- Given that a non-asthmatic child with hay fever has carried on from the previous year on treatments that control all of their symptoms
    - and then continued without symptomatic treatment during the subsequent year, what is the probability that they develop asthma by the end of the third year?
    - and then continued with this treatment during the subsequent year, what is the probability that they develop asthma by the end of the third year?
    - and then switched to treatments to control only some of their symptoms during the subsequent year, what is the probability that they develop asthma by the end of the third year?

Symptoms controlled with asthma
- Given that an asthmatic child with hay fever has carried on from the previous year on treatments that control all of their symptoms, what is the probability that in the current year:
    - the child does not require symptomatic treatment?
    - they continue with treatments to control all of their symptoms?
    - they switch to treatments to control only some of their symptoms (symptoms partly controlled)?

Symptoms part controlled without asthma
- Given that a non-asthmatic child with hay fever has carried on from the previous year on treatments that control only some of their symptoms, what is the probability that in the current year:
    - the child does not require symptomatic treatment?

- they switch to treatments to control all of their symptoms?
  - they continue with treatments to control only some of their symptoms (symptoms partly controlled)?
- Given that a non-asthmatic child with hay fever has carried on from the previous year on treatments that control only some of their symptoms
  - and then continued without symptomatic treatment during the subsequent year, what is the probability that they develop asthma by the end of the third year?
  - and then switched to treatments to control all of their symptoms during the subsequent year, what is the probability that they develop asthma by the end of the third year?
  - and then continued with this treatment during the subsequent year, what is the probability that they develop asthma by the end of the third year?

Symptoms part controlled with asthma
- Given that an asthmatic child with hay fever has carried on from the previous year on treatments that control only some of their symptoms, what is the probability that in the current year:
  - the child does not require symptomatic treatment?
  - they switch to treatments to control all of their symptoms?
  - they continue with treatments to control only some of their symptoms (symptoms partly controlled)?