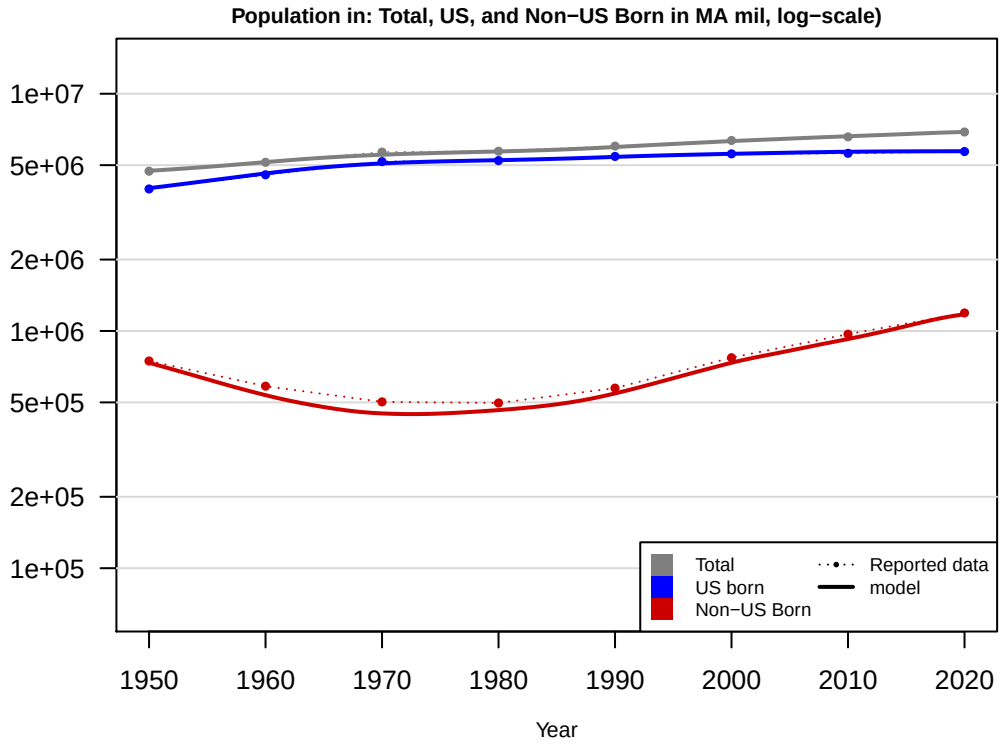
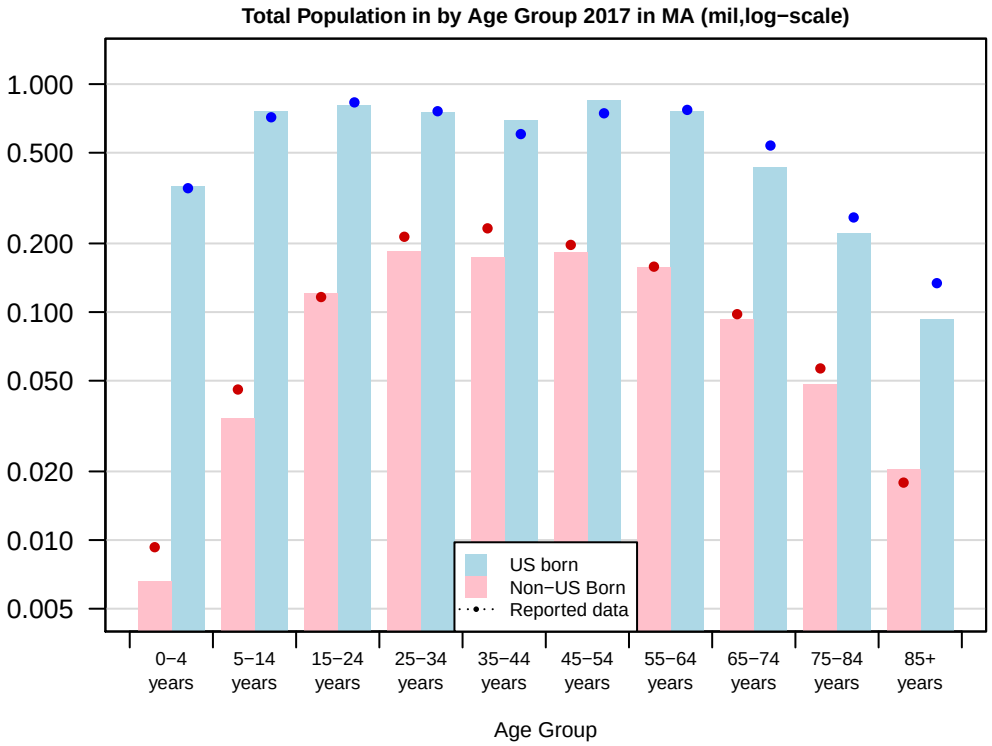
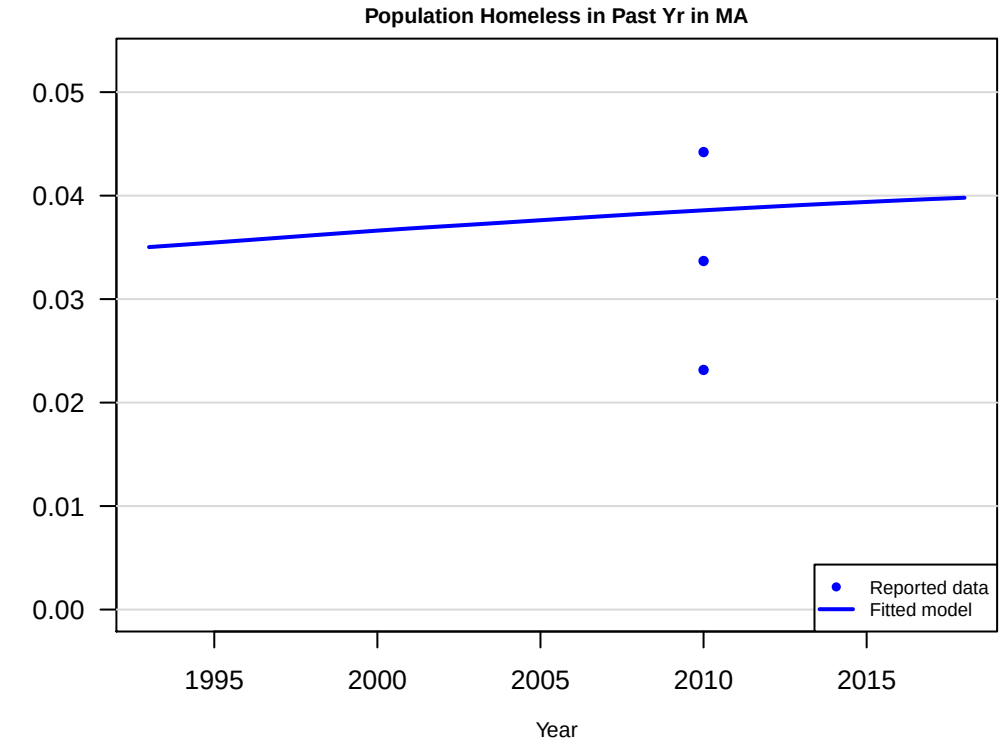
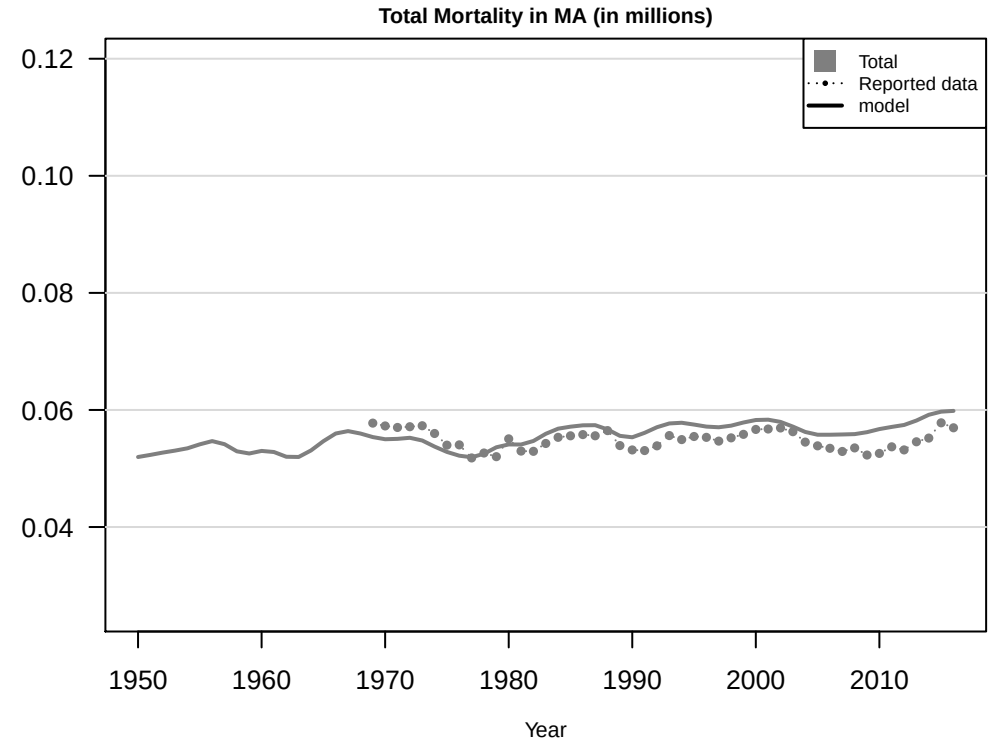
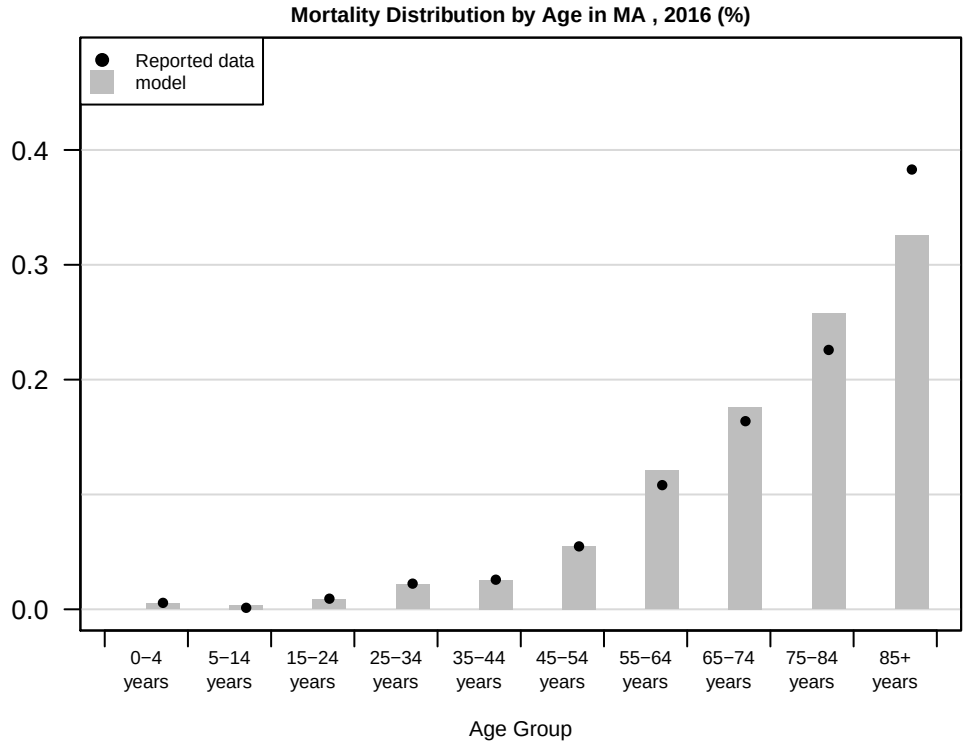
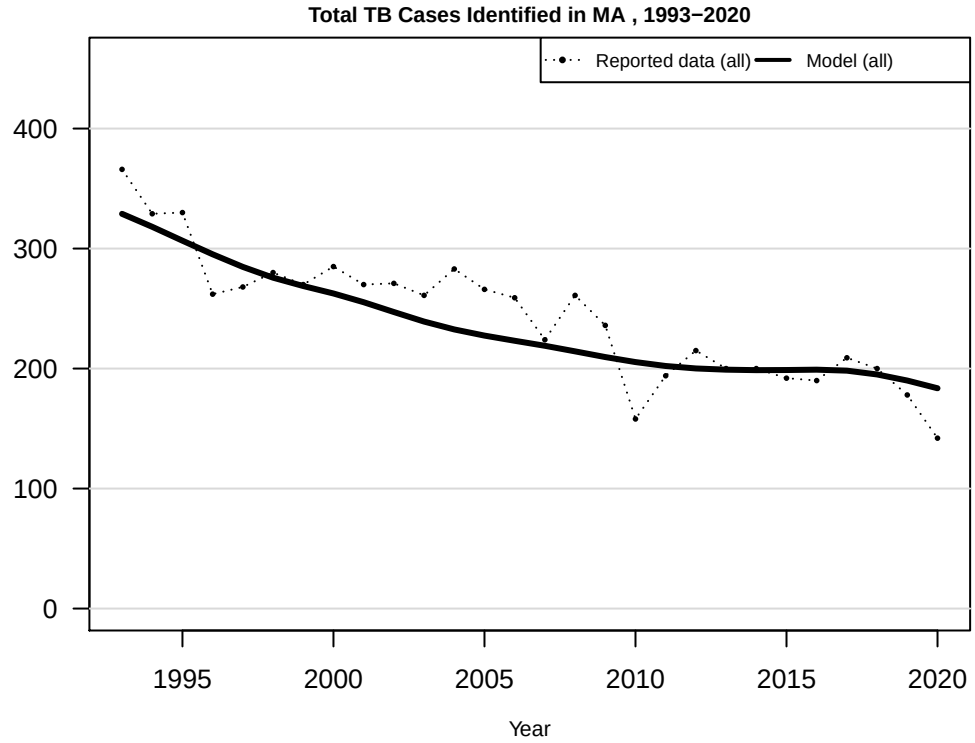

Population in: Total, US, and Non−US Born in MA mil, log−scale)
1e+07
5e+06
2e+06
1e+06
5e+05
2e+05
1e+05
1950
1960
1970
1980
1990
2000
2010
2020
Year
Total
US born
Non−US Born
Reported data
model

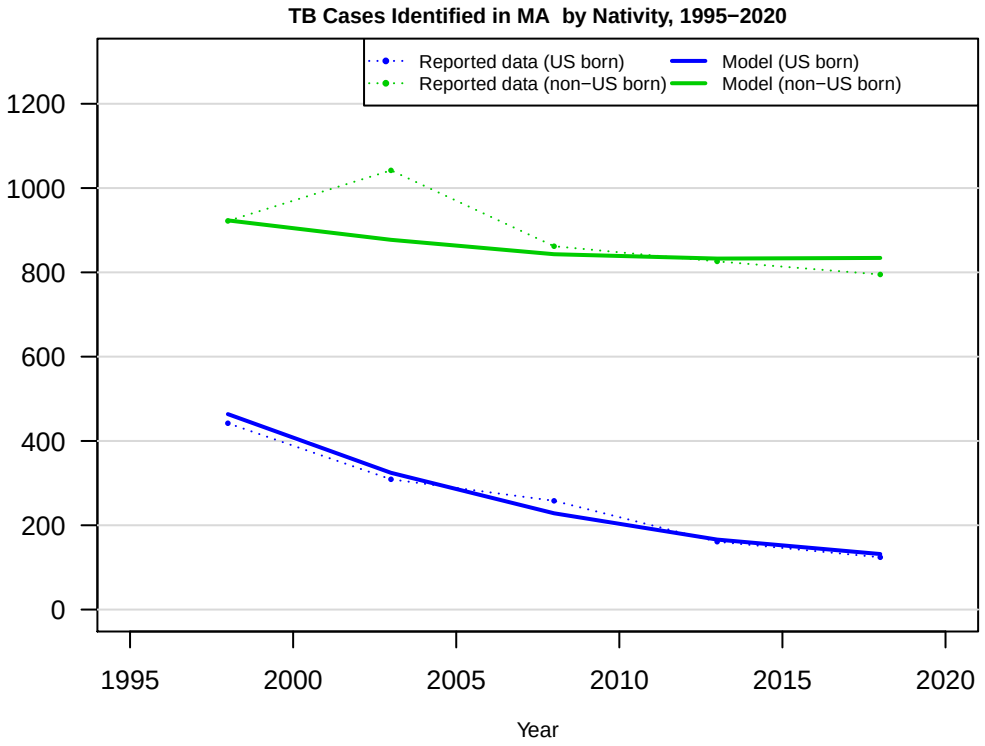

Total Population in by Age Group 2017 in MA (mil,log−scale)
1.000
0.500
0.200
0.100
0.050
0.020
0.010
0.005
0−4 years
5−14 years
15−24 years
25−34 years
35−44 years
45−54 years
55−64 years
65−74 years
75−84 years
85+ years
Age Group
US born
Non−US Born
Reported data

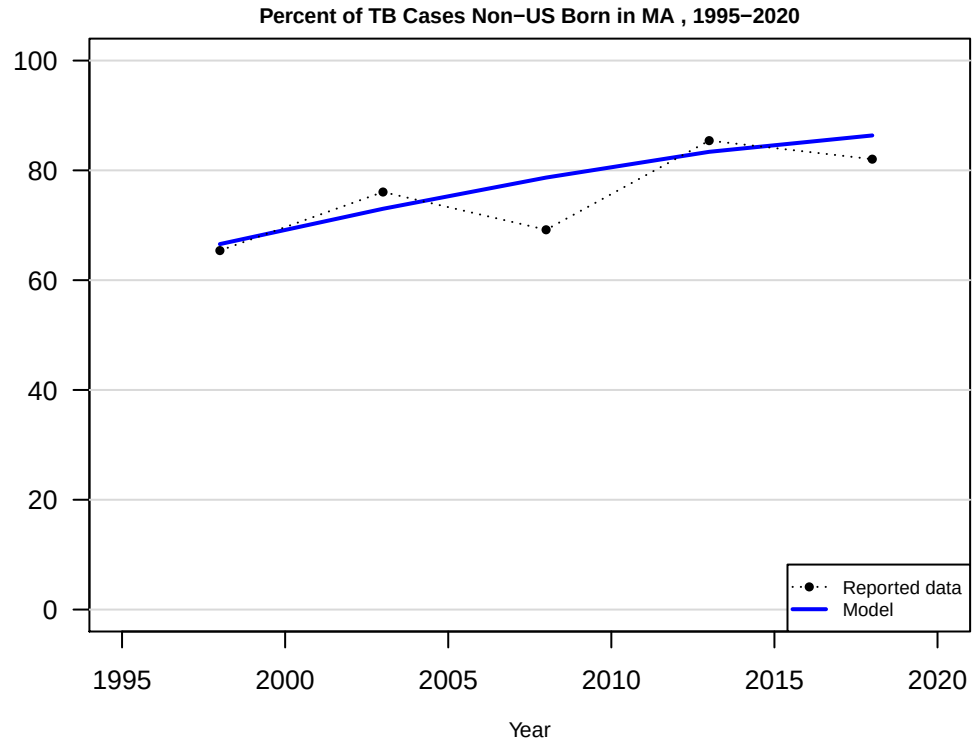

Population Homeless in Past Yr in MA
0.05
0.04
0.03
0.02
0.01
0.00
1995
2000
2005
2010
2015
Year
Reported data
Fitted model

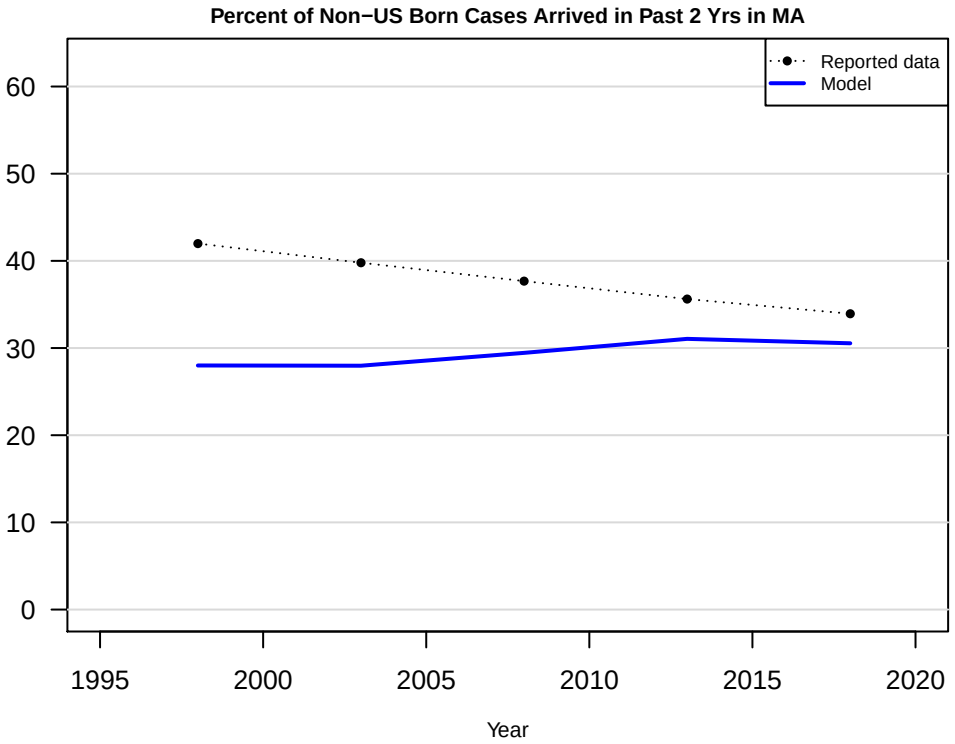

Total Mortality in MA (in millions)
0.12
0.10
0.08
0.06
0.04
1950
1960
1970
1980
1990
2000
2010
Year
Total
Reported data
model

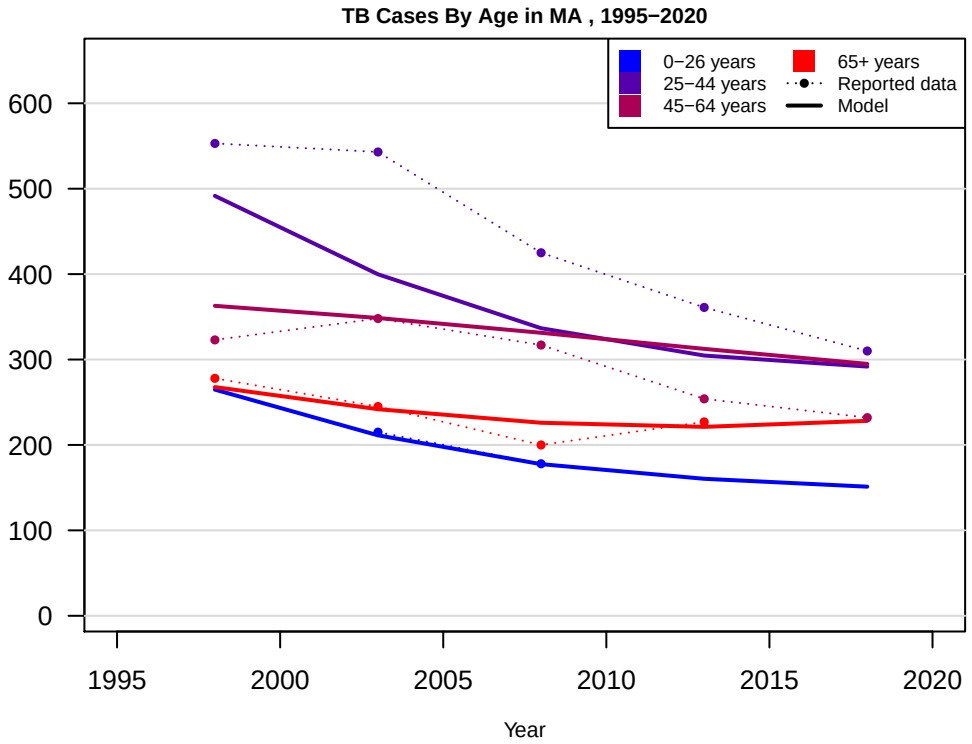

Mortality Distribution by Age in MA , 2016 (%)
Reported data
model
0.4
0.3
0.2
0.0
0–4 years
5–14 years
15–24 years
25–34 years
35–44 years
45–54 years
55–64 years
65–74 years
75–84 years
85+ years
Age Group

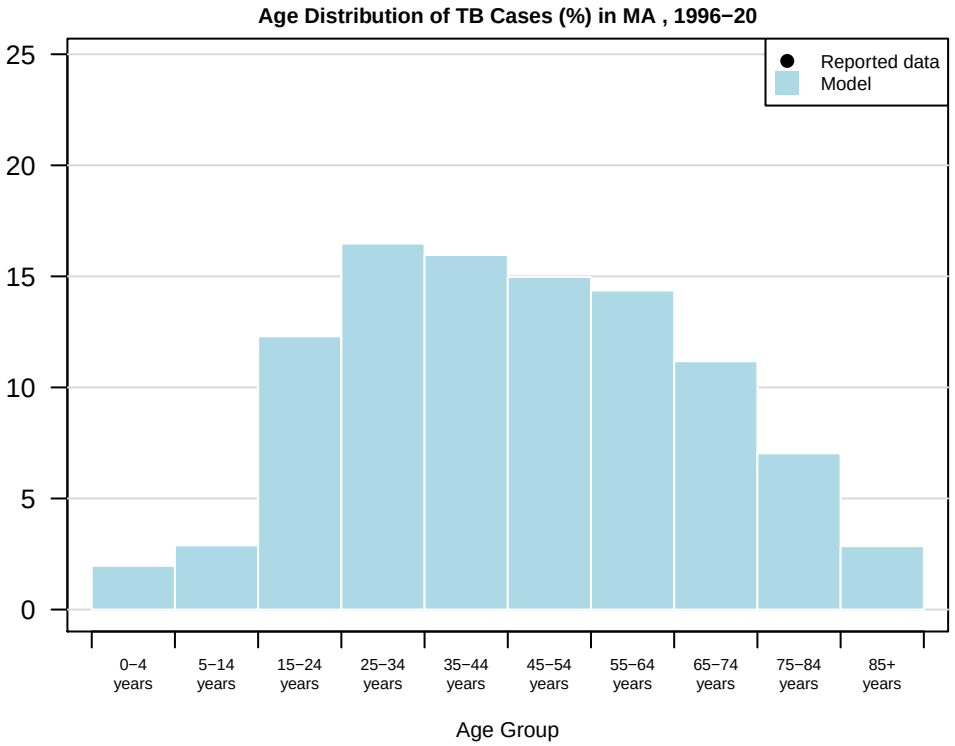

Total TB Cases Identified in MA , 1993–2020
Reported data (all)
Model (all)
400
300
200
100
0
1995
2000
2005
2010
2015
2020
Year

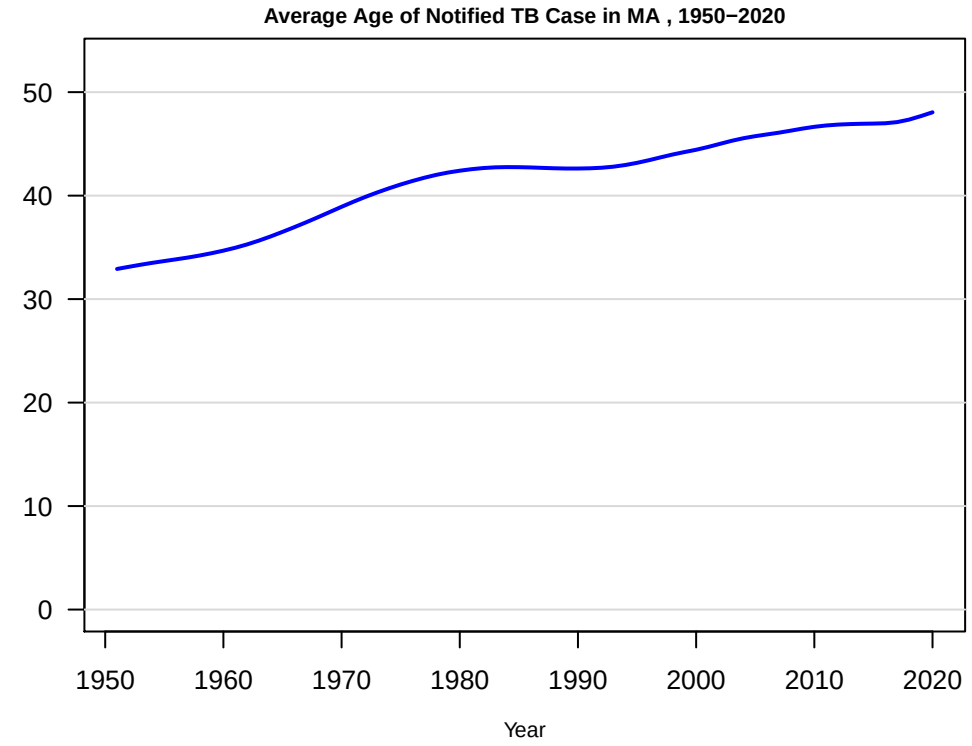

TB Cases Identified in MA by Nativity, 1995–2020
Reported data (US born)
Reported data (non–US born)
Model (US born)
Model (non–US born)
1200
1000
800
600
400
200
0
1995
2000
2005
2010
2015
2020
Year

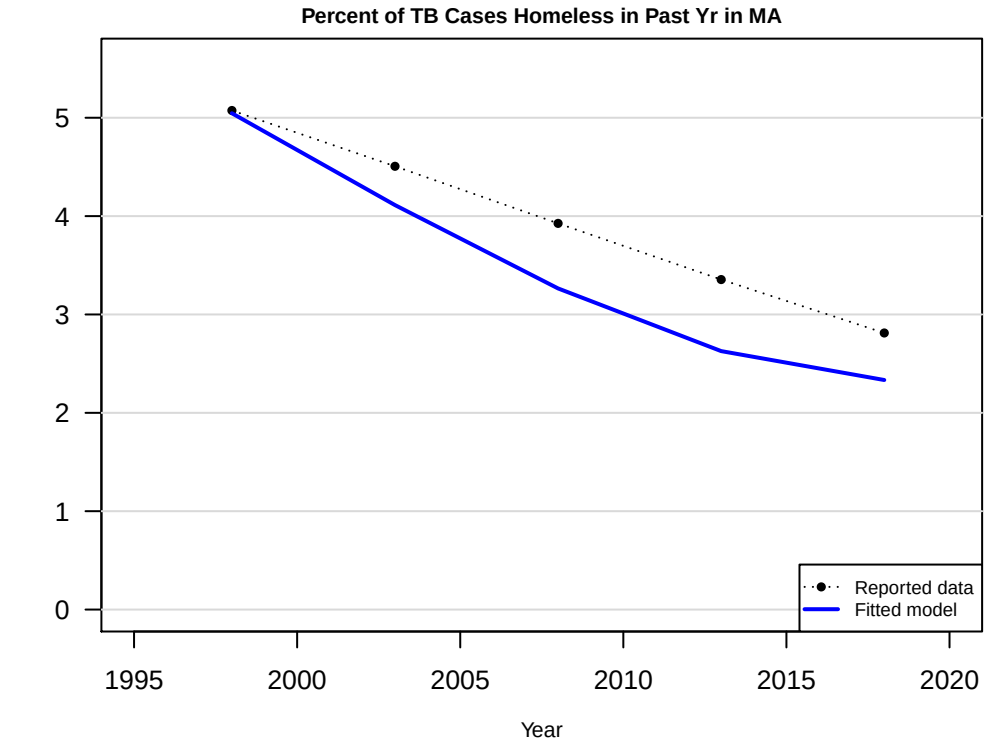

Percent of TB Cases Non–US Born in MA , 1995–2020
100
80
60
40
20
0
Reported data
Model
1995
2000
2005
2010
2015
2020
Year

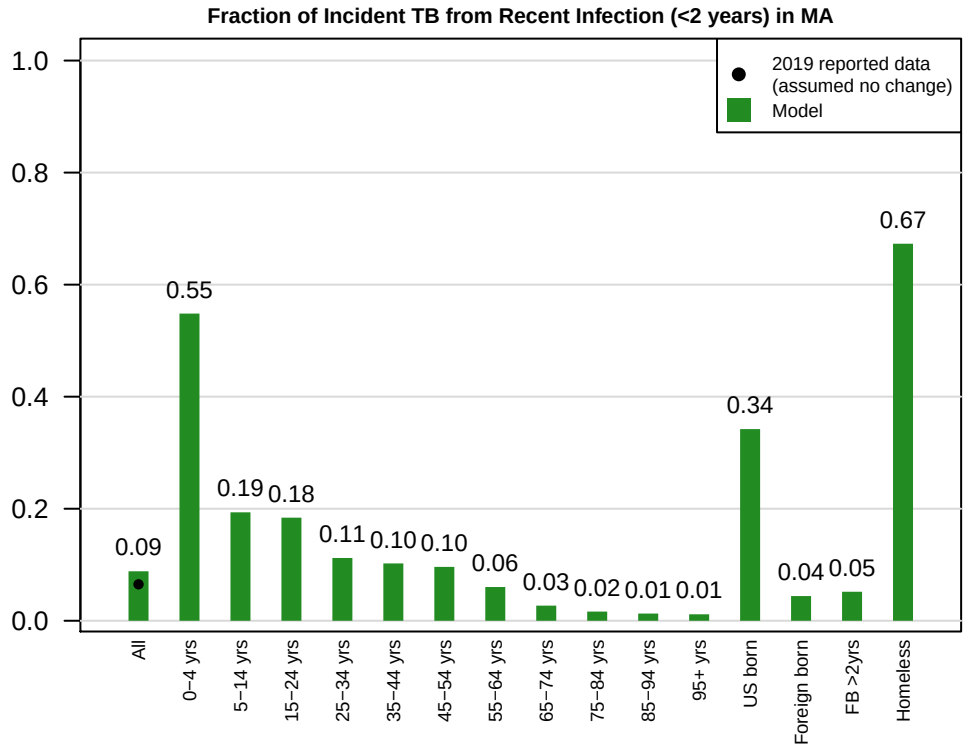

Percent of Non−US Born Cases Arrived in Past 2 Yrs in MA
Reported data
Model
60
50
40
30
20
10
0
1995
2000
2005
2010
2015
2020
Year

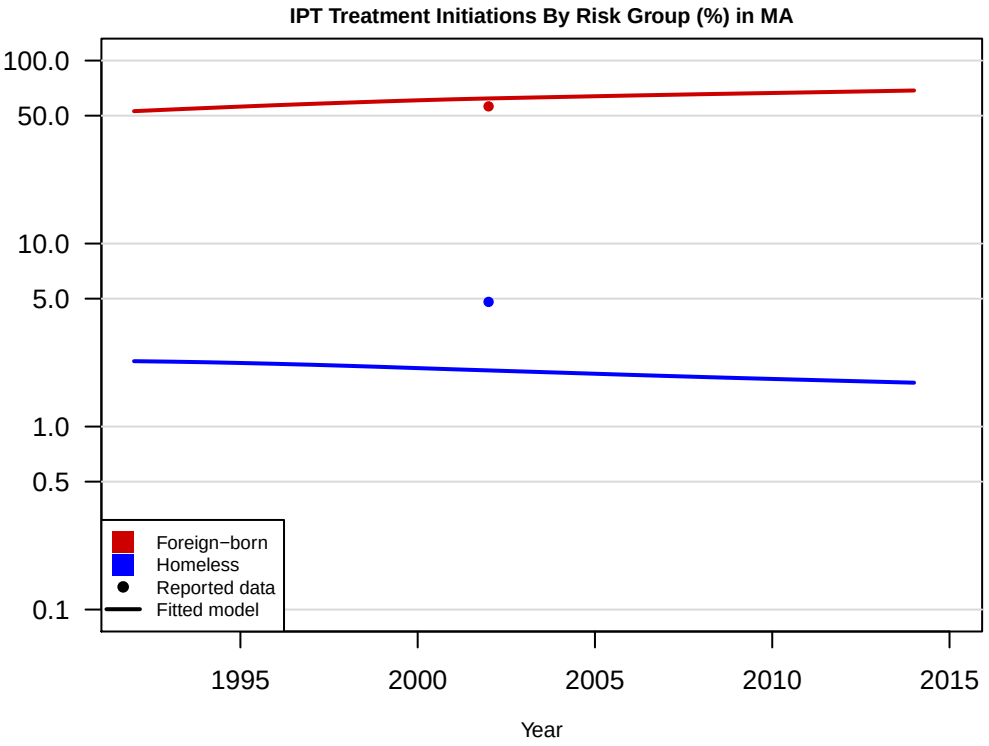

TB Cases By Age in MA , 1995−2020
0−26 years
25−44 years
45−64 years
65+ years
Reported data
Model
600
500
400
300
200
100
0
1995
2000
2005
2010
2015
2020
Year

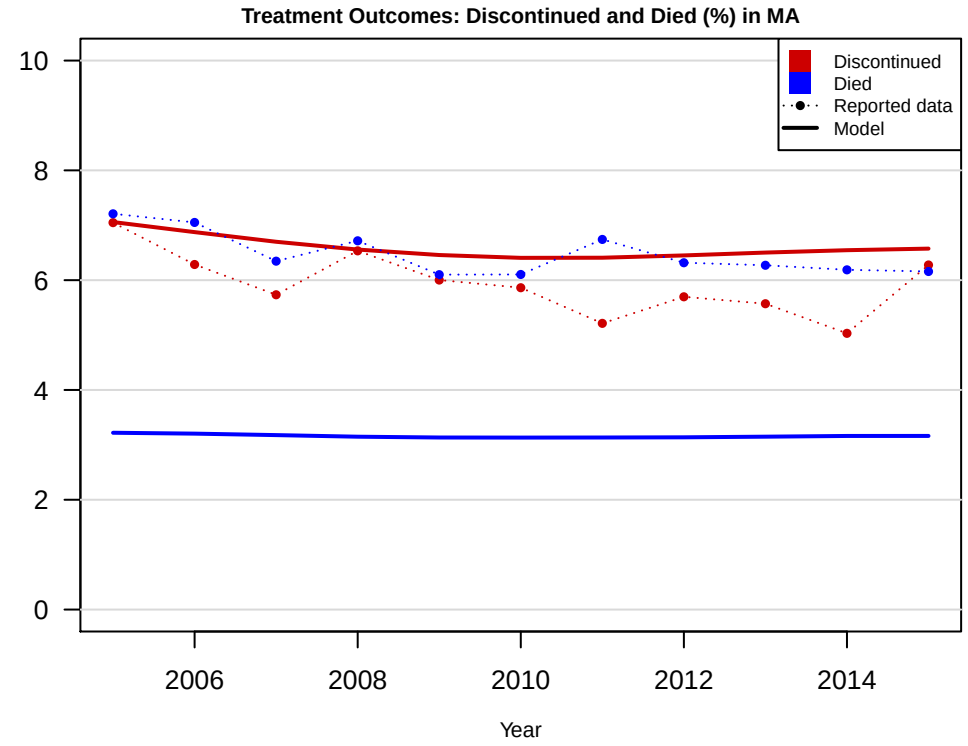

Age Distribution of TB Cases (%) in MA , 1996−20
Reported data
Model
25
20
15
10
5
0
0−4 years
5−14 years
15−24 years
25−34 years
35−44 years
45−54 years
55−64 years
65−74 years
75−84 years
85+ years
Age Group

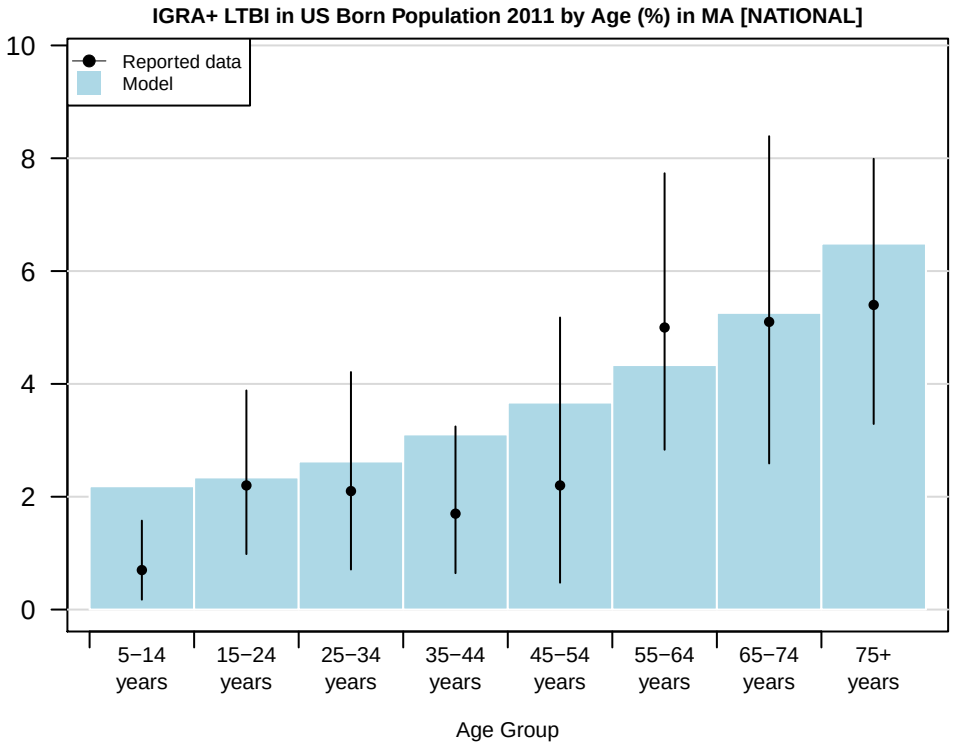

Average Age of Notified TB Case in MA , 1950−2020
50
40
30
20
10
0
1950
1960
1970
1980
1990
2000
2010
2020
Year

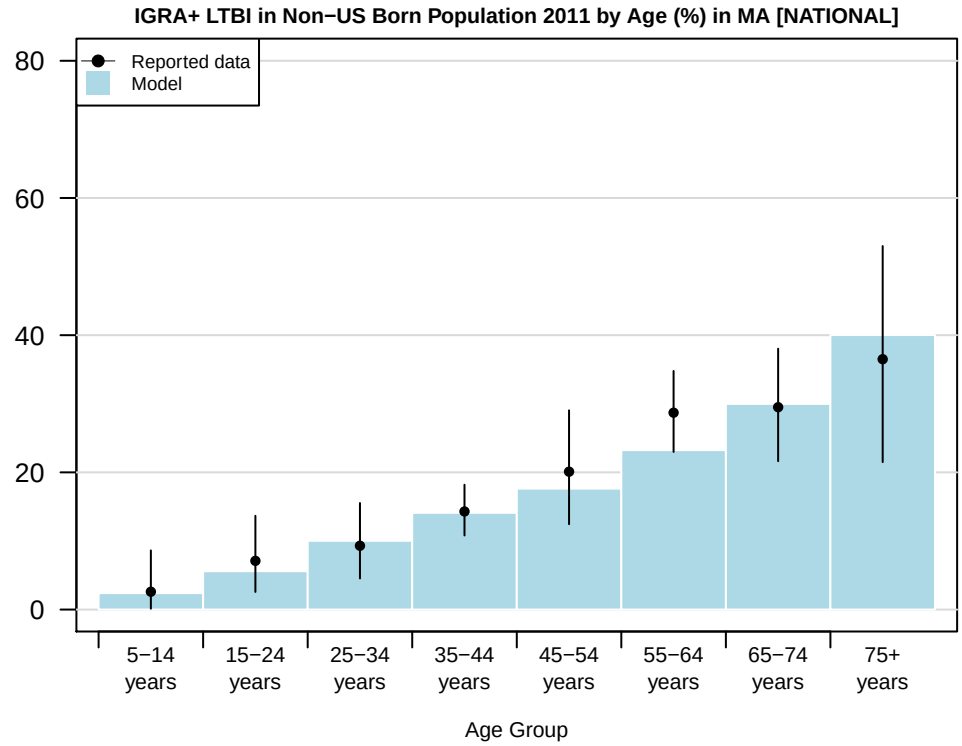

Percent of TB Cases Homeless in Past Yr in MA
5
4
3
2
1
0
1995
2000
2005
2010
2015
2020
Year
Reported data
Fitted model

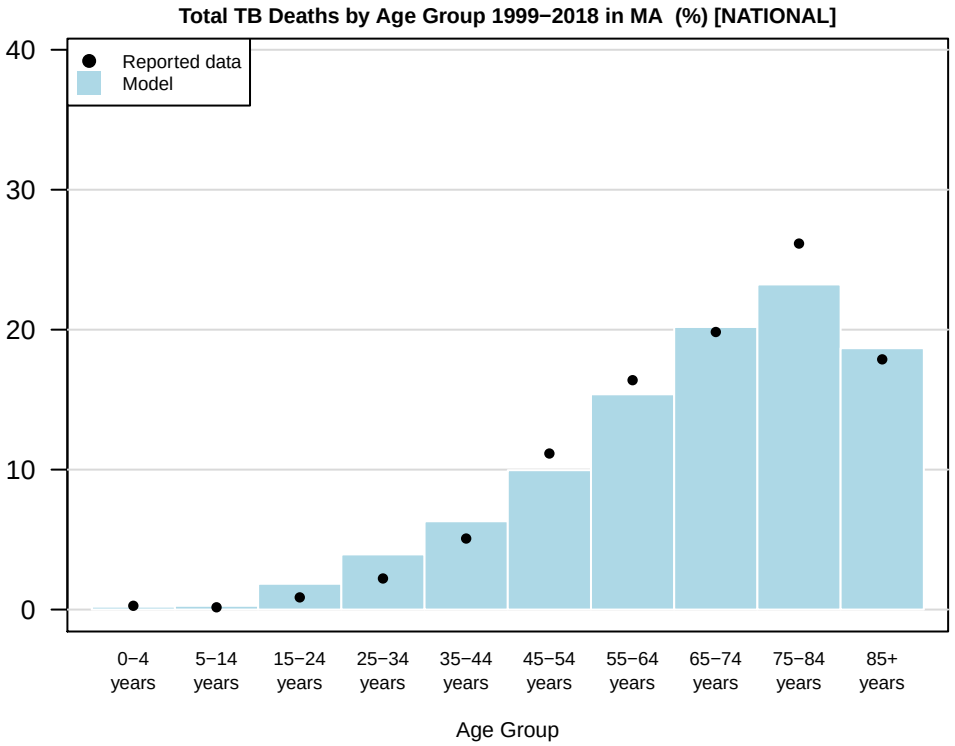

Fraction of Incident TB from Recent Infection (<2 years) in MA
1.0
0.8
0.6
0.4
0.2
0.0
2019 reported data
(assumed no change)
Model
0.09
0.55
0.19
0.18
0.11
0.10
0.10
0.06
0.03
0.02
0.01
0.01
0.34
0.04
0.05
0.67
All
0–4 yrs
5–14 yrs
15–24 yrs
25–34 yrs
35–44 yrs
45–54 yrs
55–64 yrs
65–74 yrs
75–84 yrs
85–94 yrs
95+ yrs
US born
Foreign born
FB >2yrs
Homeless

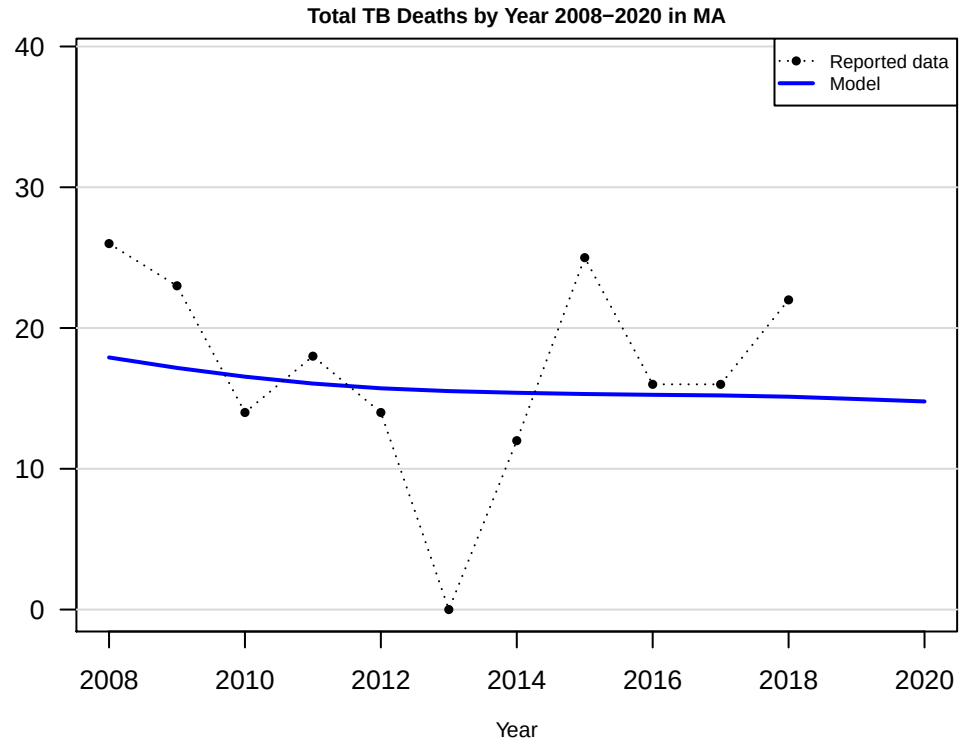

IPT Treatment Initiations By Risk Group (%) in MA
100.0
50.0
10.0
5.0
1.0
0.5
0.1
1995
2000
2005
2010
2015
Year
Foreign−born
Homeless
Reported data
Fitted model

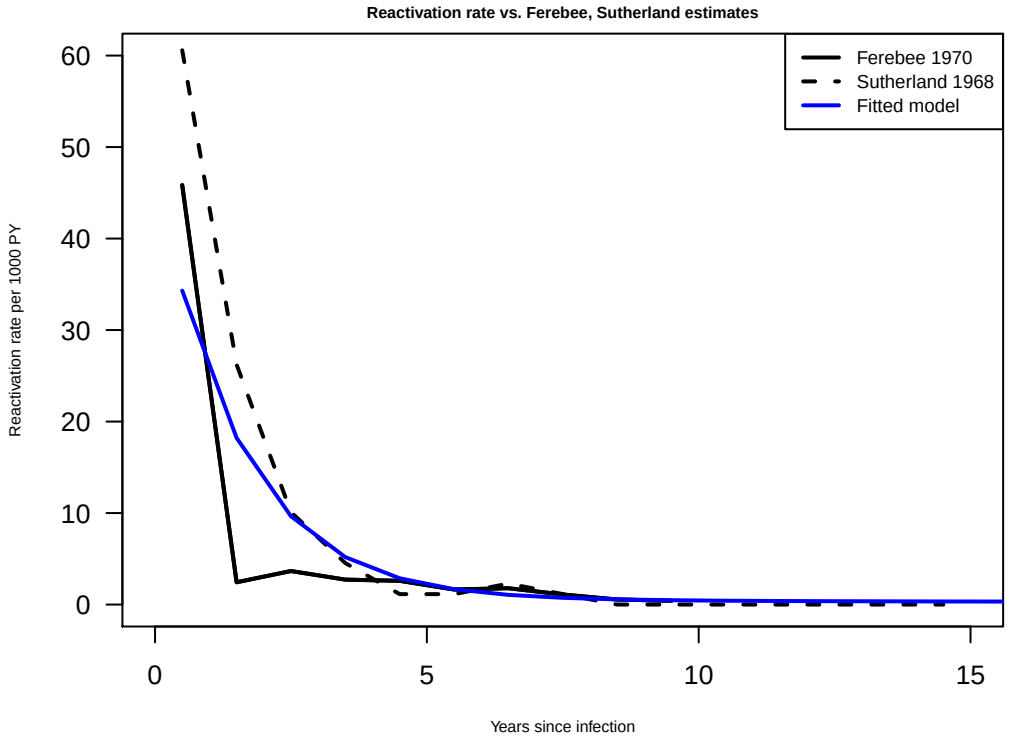

Treatment Outcomes: Discontinued and Died (%) in MA
10
8
6
4
2
0
2006
2008
2010
2012
2014
Year
Discontinued
Died
Reported data
Model

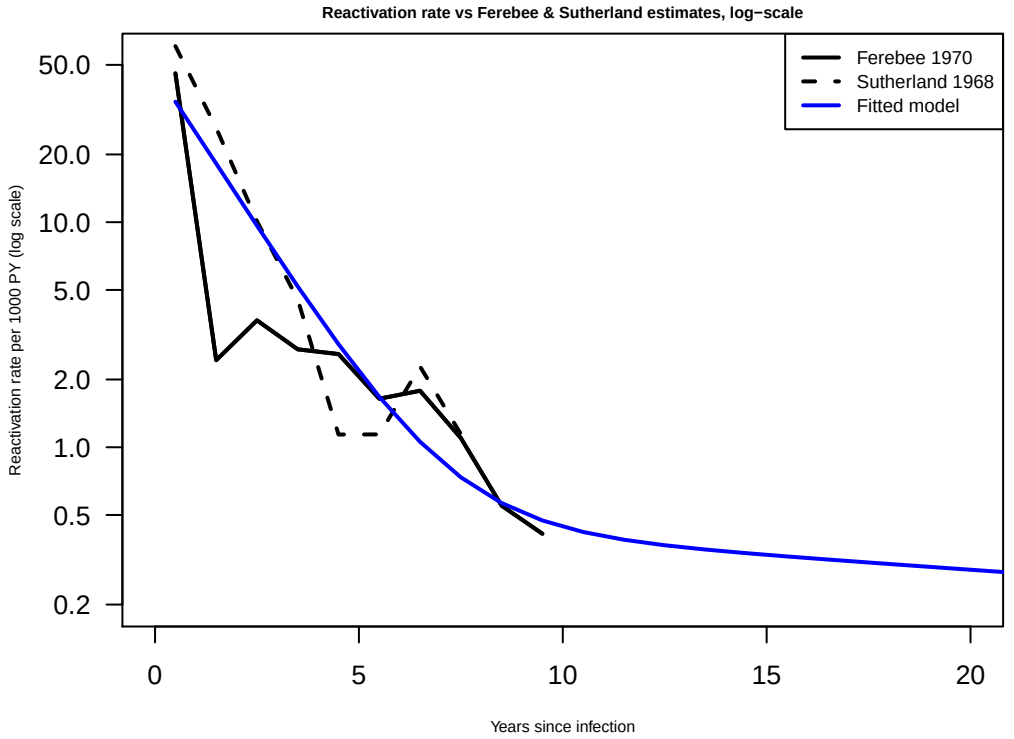

IGRA+ LTBI in US Born Population 2011 by Age (%) in MA [NATIONAL]
Reported data
Model
0
2
4
6
8
10
5−14 years
15−24 years
25−34 years
35−44 years
45−54 years
55−64 years
65−74 years
75+ years
Age Group

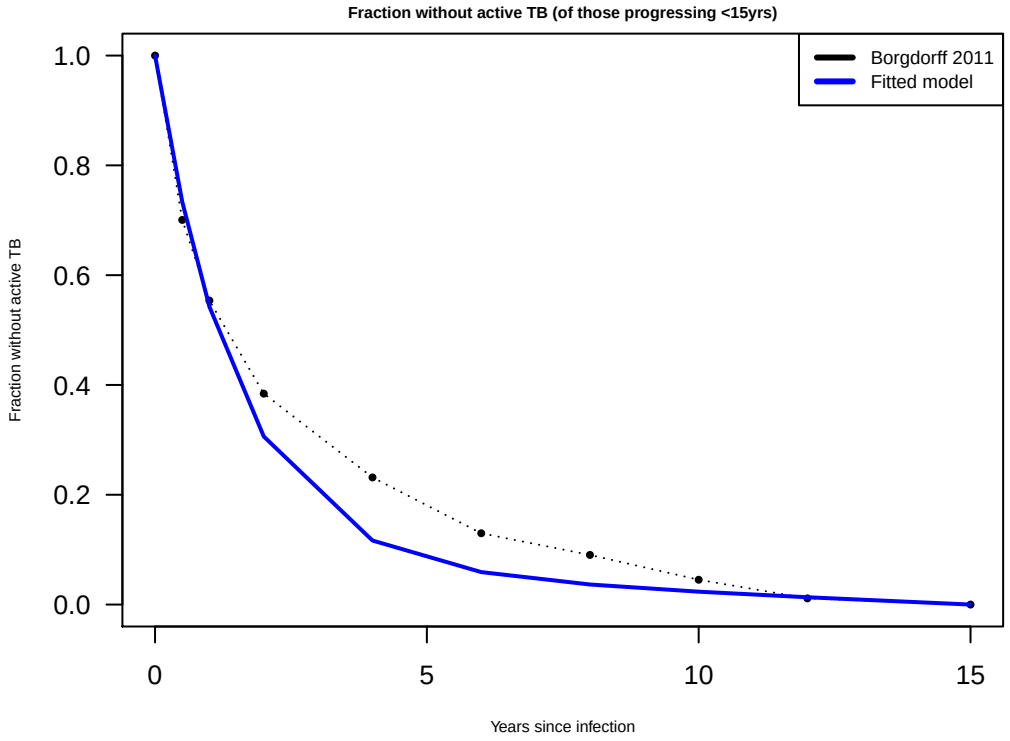

IGRA+ LTBI in Non−US Born Population 2011 by Age (%) in MA [NATIONAL]
Reported data
Model
0
20
40
60
80
5−14 years
15−24 years
25−34 years
35−44 years
45−54 years
55−64 years
65−74 years
75+ years
Age Group

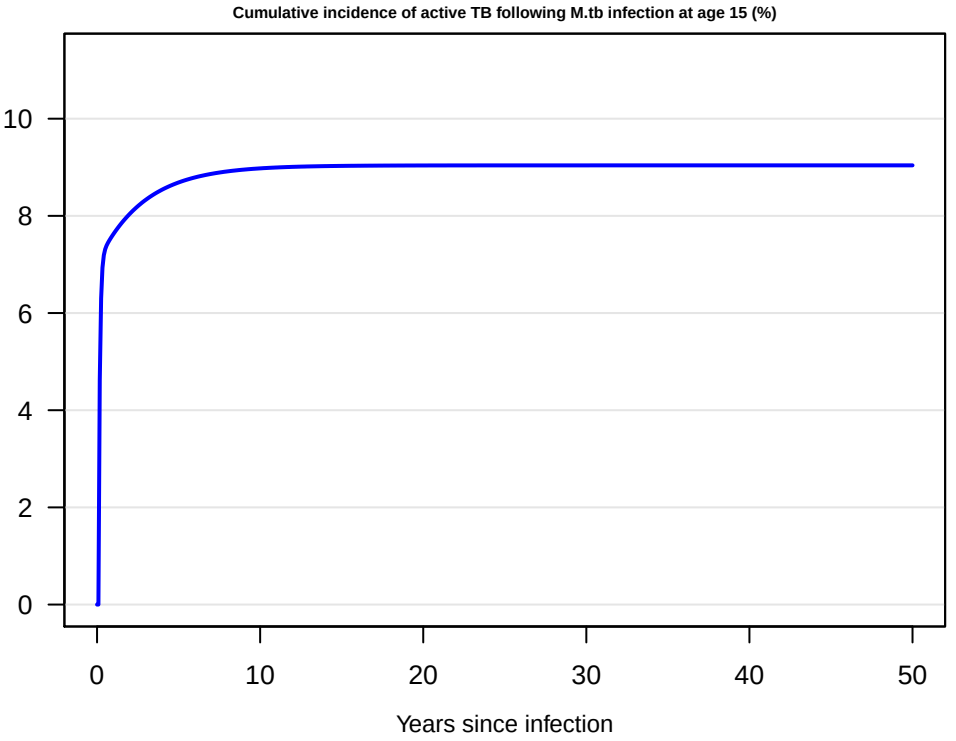

Total TB Deaths by Age Group 1999−2018 in MA (%) [NATIONAL]
Reported data
Model
0
10
20
30
40
0−4 years
5−14 years
15−24 years
25−34 years
35−44 years
45−54 years
55−64 years
65−74 years
75−84 years
85+ years
Age Group

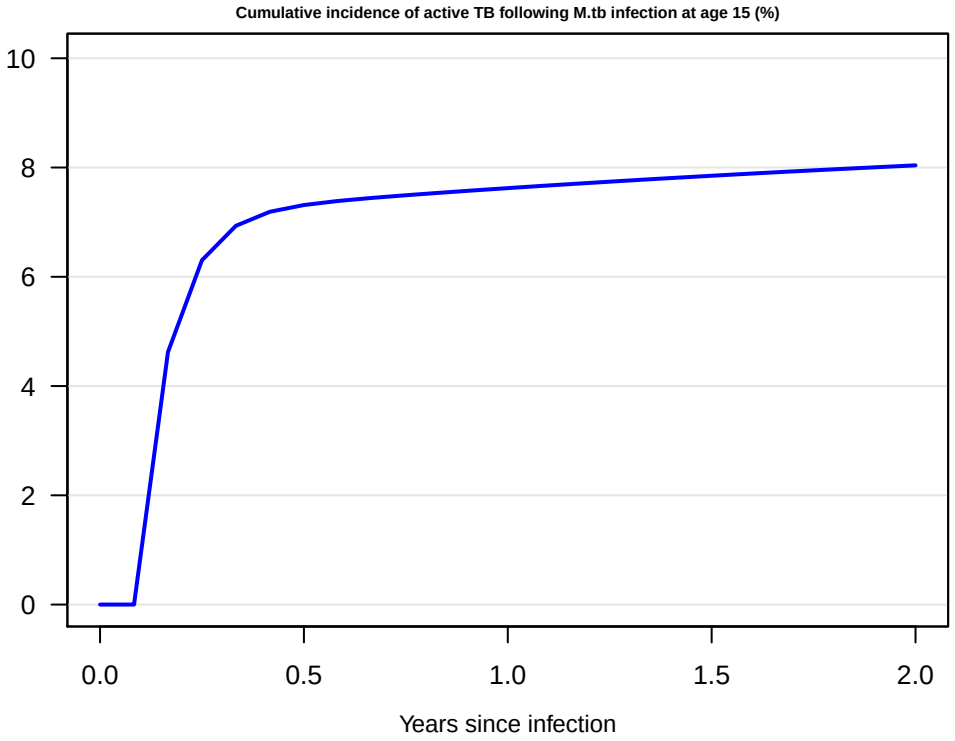

Total TB Deaths by Year 2008−2020 in MA
Reported data
Model
0
10
20
30
40
2008
2010
2012
2014
2016
2018
2020
Year


Reactivation rate vs. Ferebee, Sutherland estimates
Ferebee 1970
Sutherland 1968
Fitted model
Reactivation rate per 1000 PY
Years since infection
0
10
20
30
40
50
60
0
5
10
15


Reactivation rate vs Ferebee & Sutherland estimates, log−scale
Ferebee 1970
Sutherland 1968
Fitted model
Reactivation rate per 1000 PY (log scale)
Years since infection
0.2
0.5
1.0
2.0
5.0
10.0
20.0
50.0
0
5
10
15
20


Fraction without active TB (of those progressing <15yrs)
Borgdorff 2011
Fitted model
Fraction without active TB
Years since infection
0.0
0.2
0.4
0.6
0.8
1.0
0
5
10
15


Cumulative incidence of active TB following M.tb infection at age 15 (%)
Years since infection
0
2
4
6
8
10
0
10
20
30
40
50


Cumulative incidence of active TB following M.tb infection at age 15 (%)
10
8
6
4
2
0
0.0
0.5
1.0
1.5
2.0
Years since infection