

Gaps in the TB care cascade and their importance for transmission

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Board Meeting, Stop TB Partnership

18 May 2017

A fictional setting

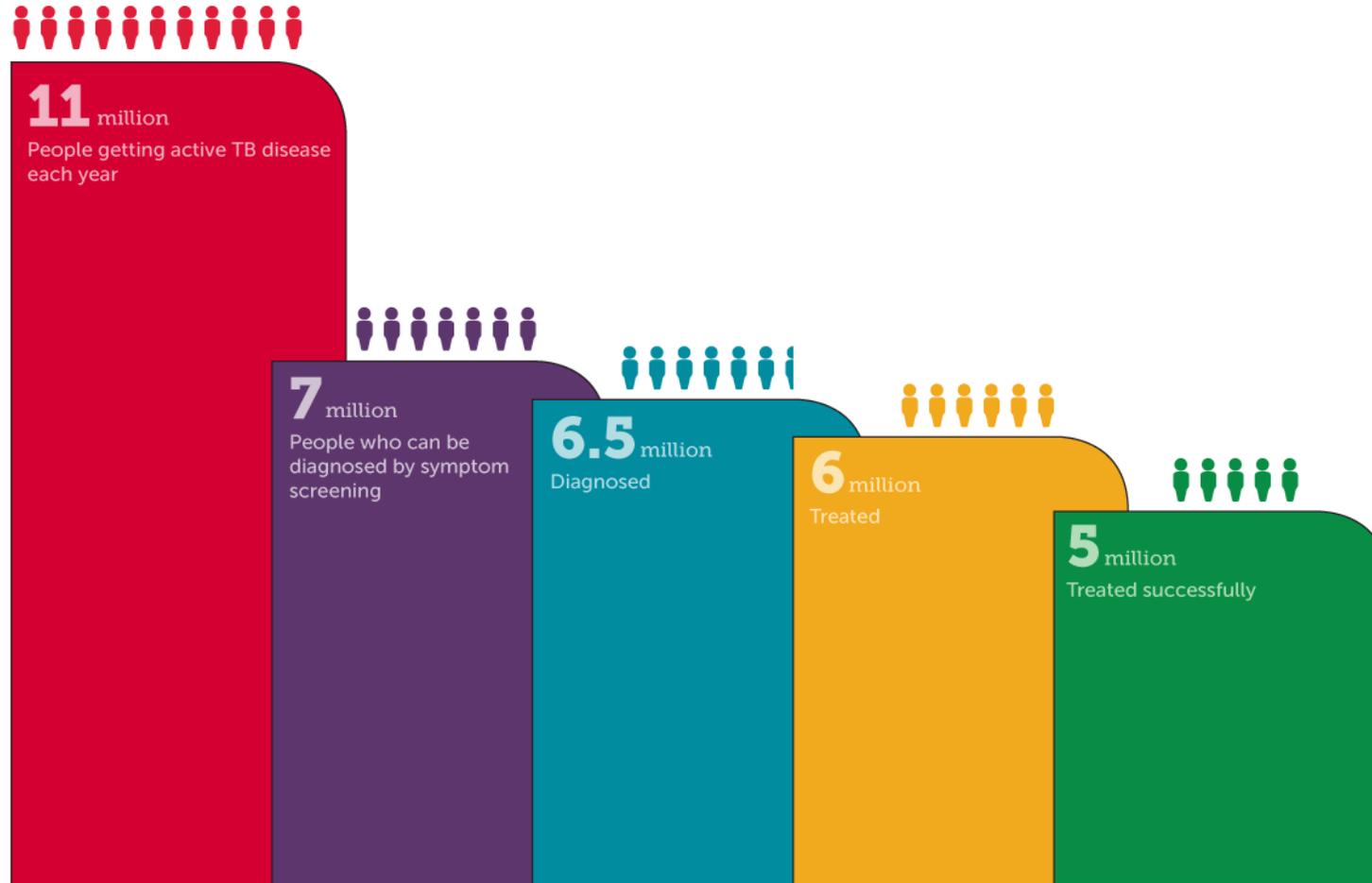
Consider a country with:

- Annual TB incidence of 142 per 100,000 population
- Annual DR-TB incidence of 7.9 per 100,000 population
- ~60% case notification
- Only an estimated 22% of DR cases being diagnosed

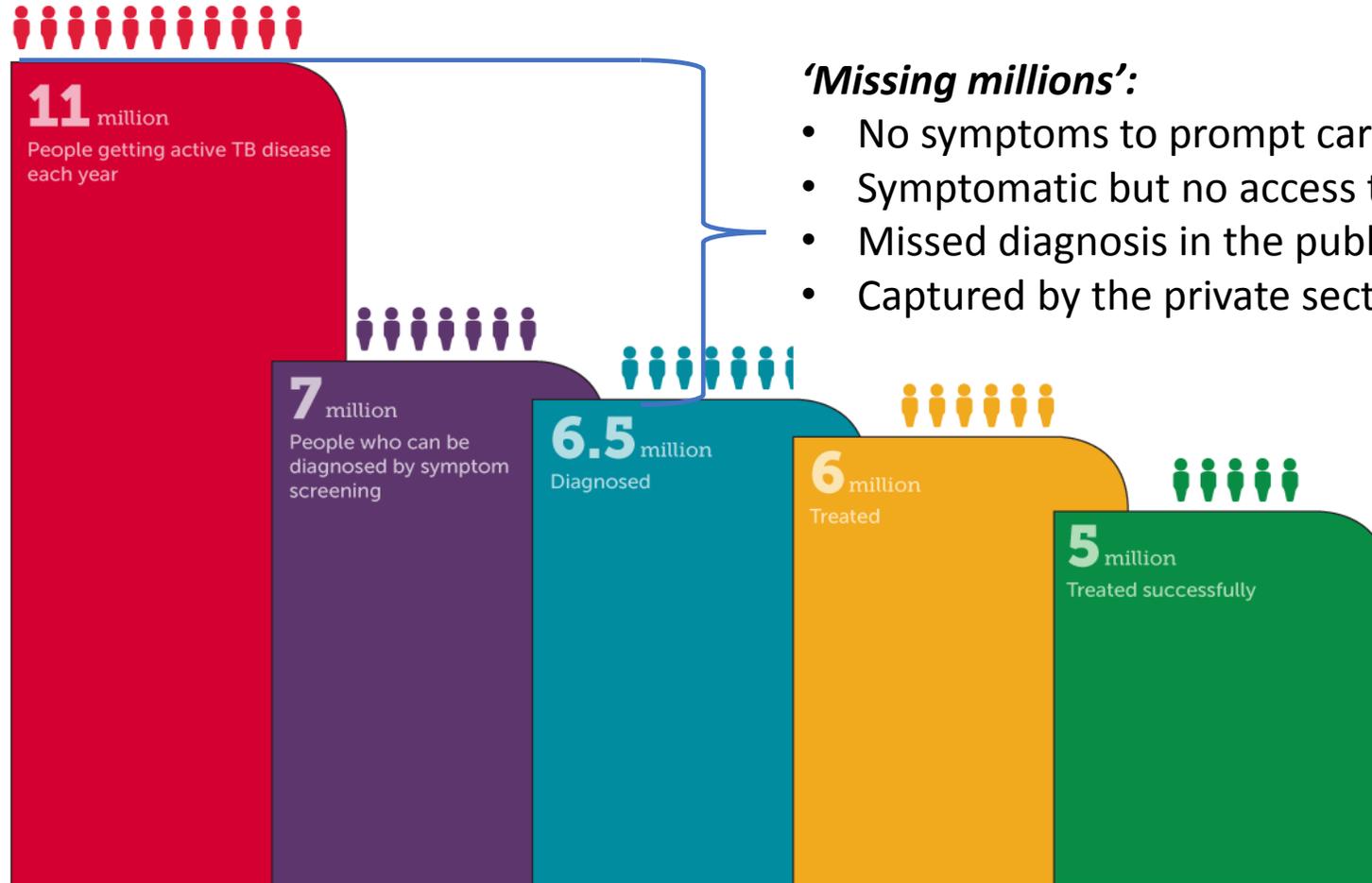
In other words...

- **Reflective of global TB burden**
- What are the control priorities in this setting?

1 in 2 people with TB fall between the cracks



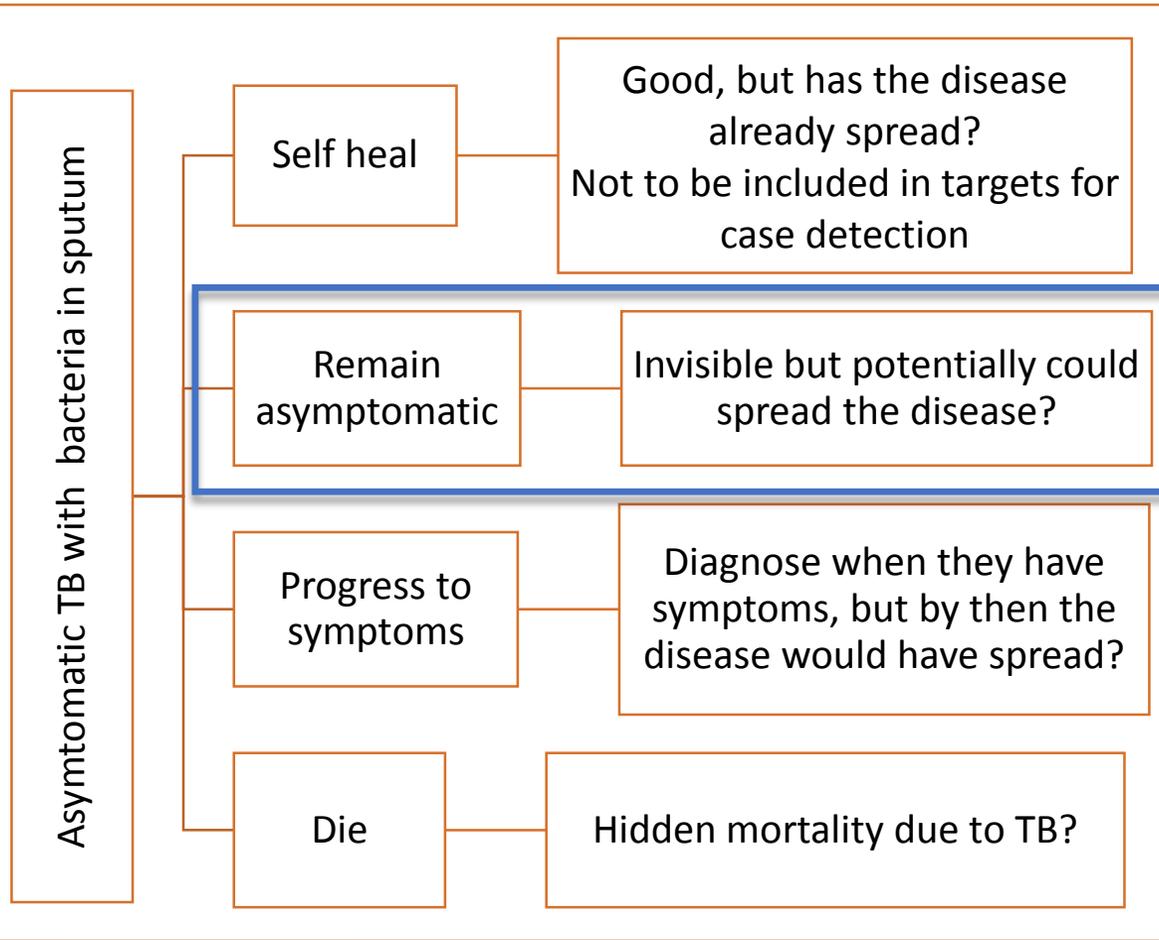
1 in 2 people with TB fall between the cracks



1 in 2 people with TB fall between the cracks

11 million
People getting active TB disease each year

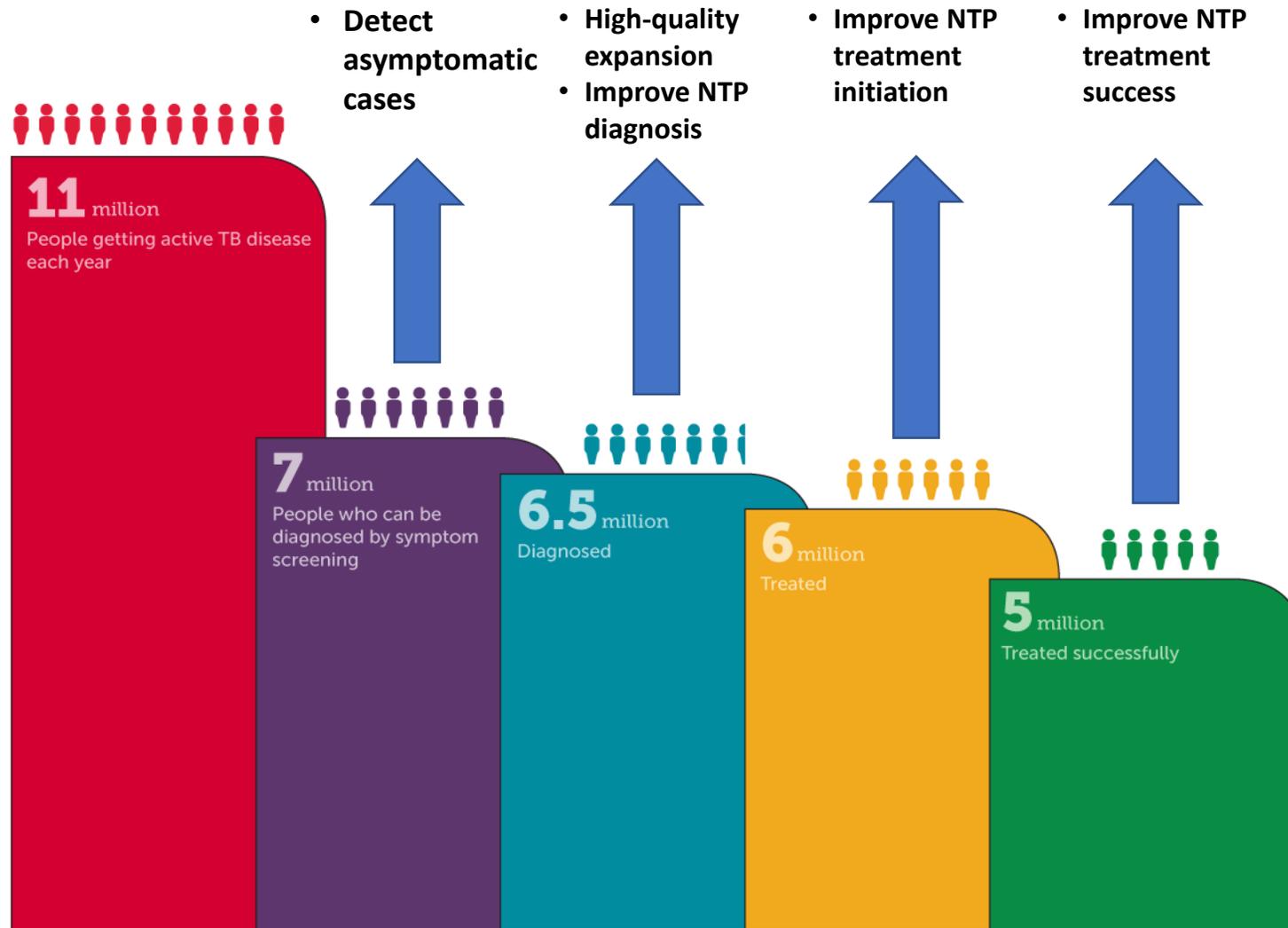
7 million
People who can be diagnosed by screening



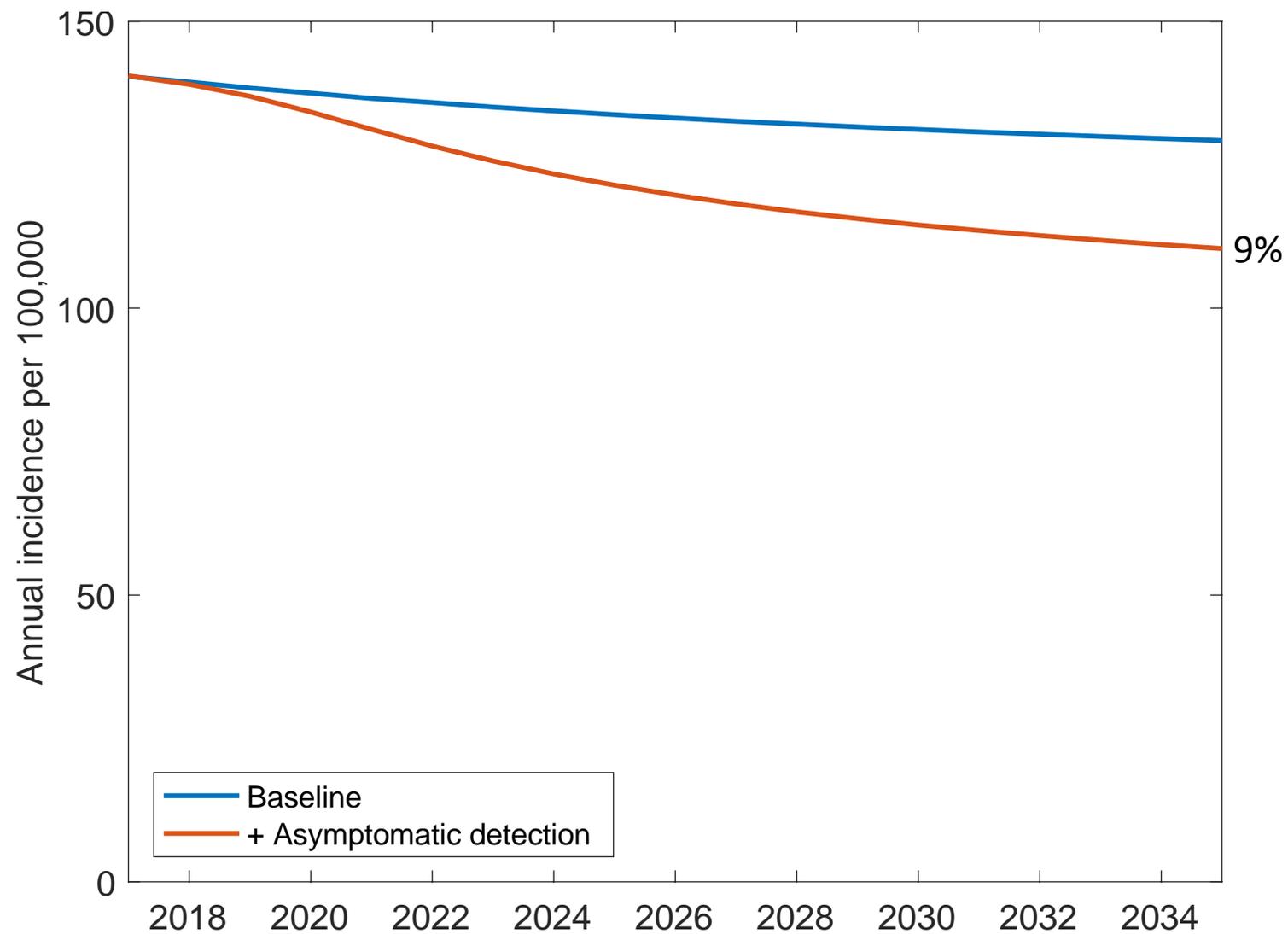
20% as infectious as symptomatic TB



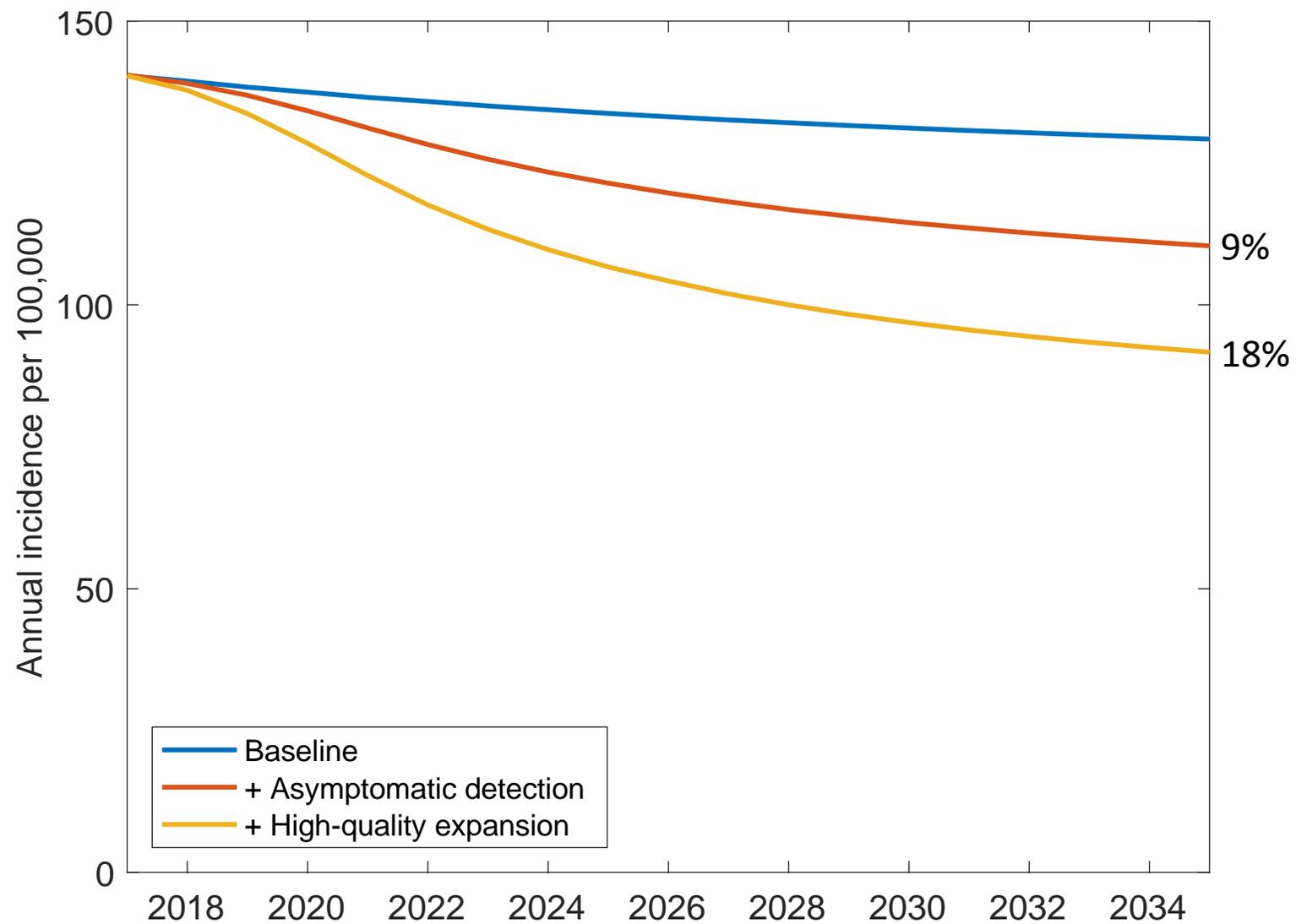
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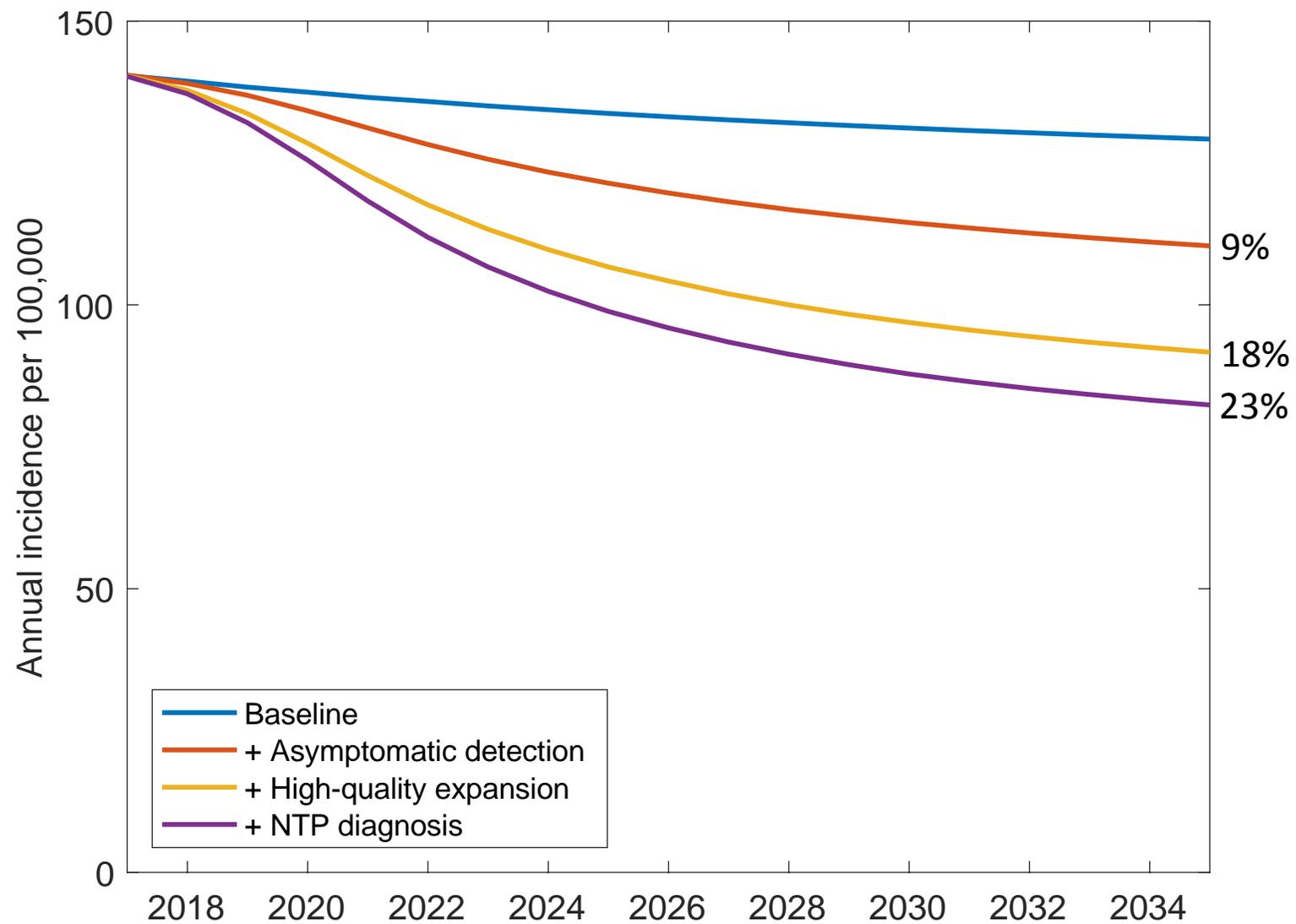
Plugging
each of the
gaps



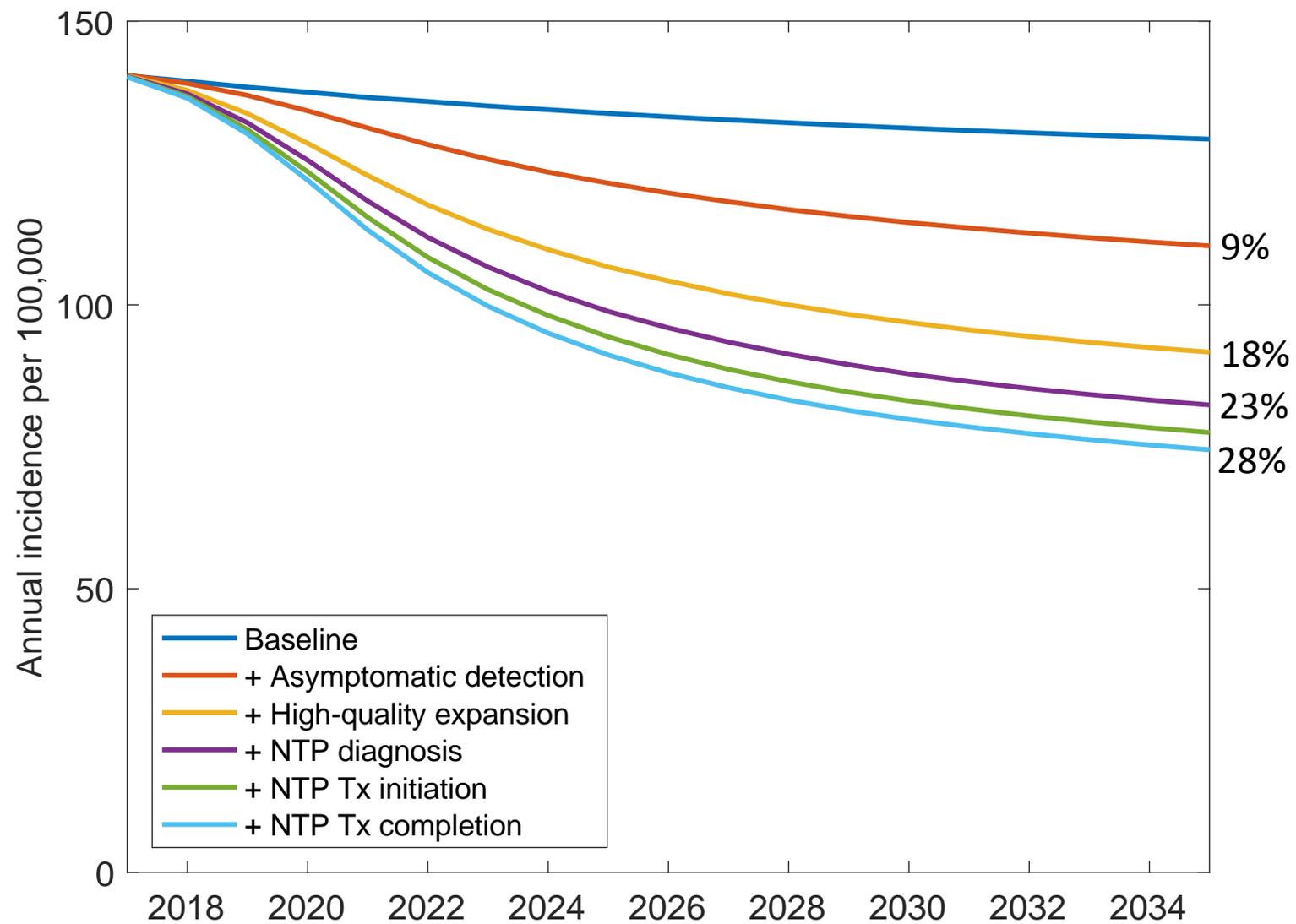
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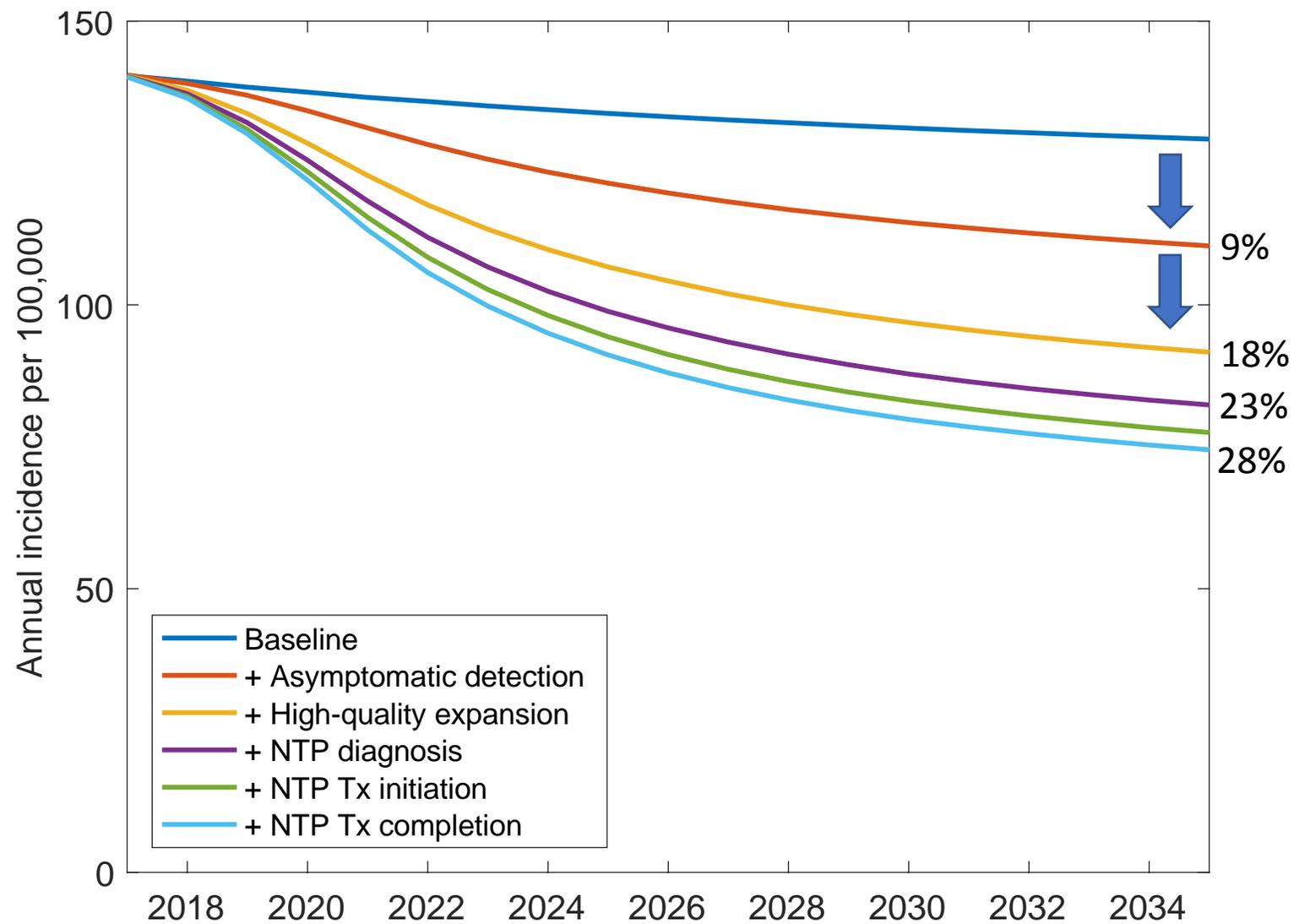
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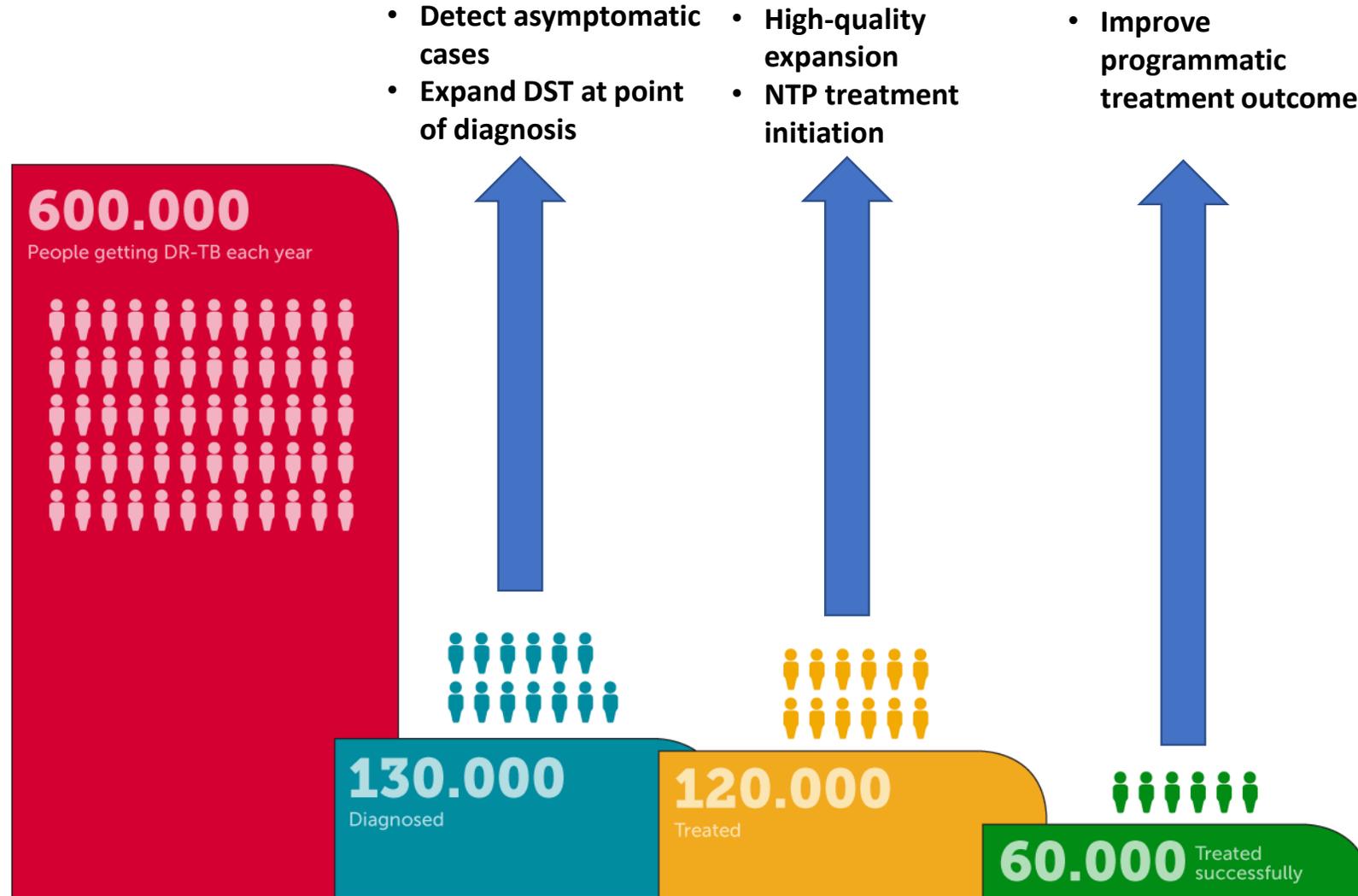
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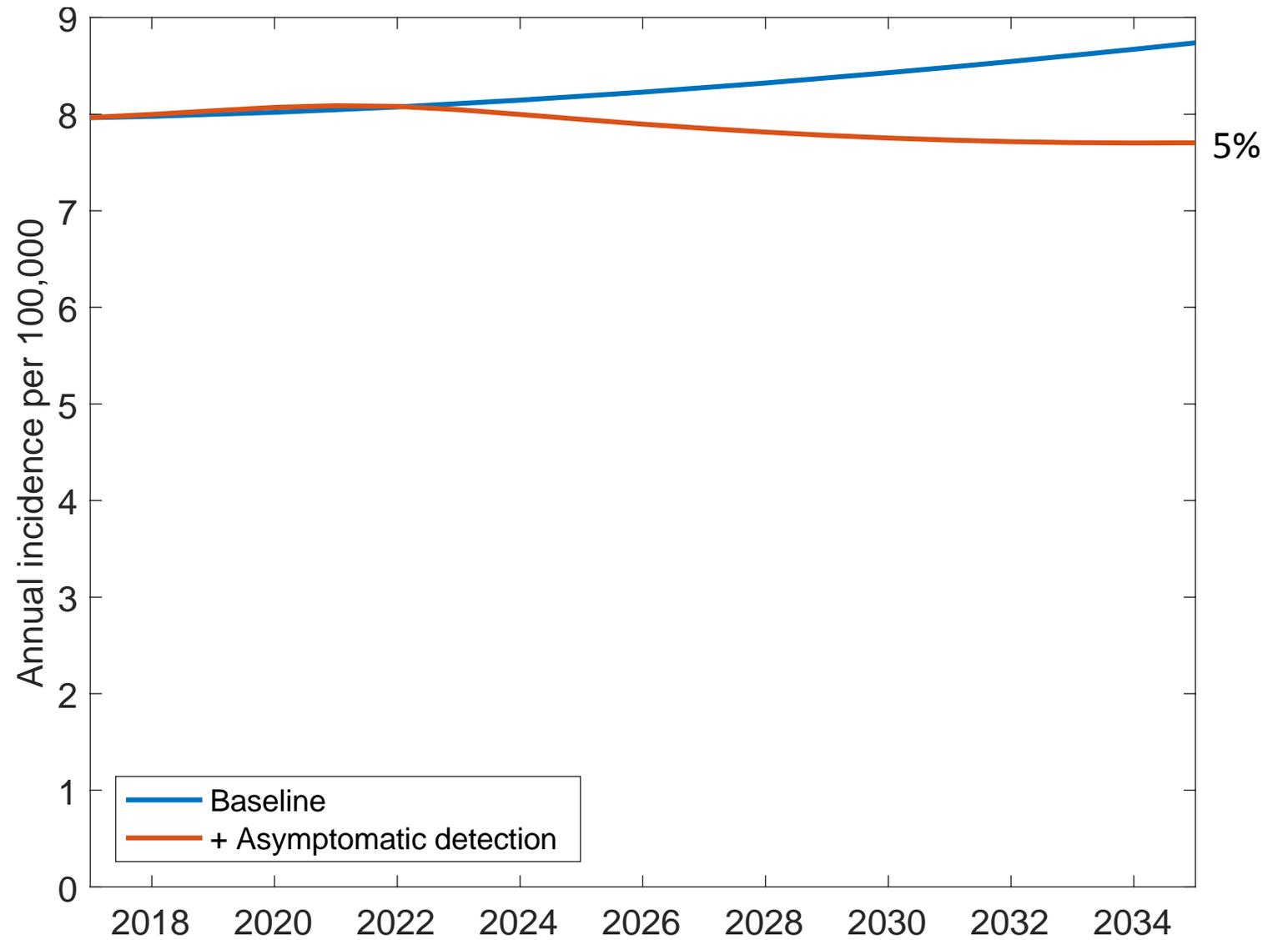
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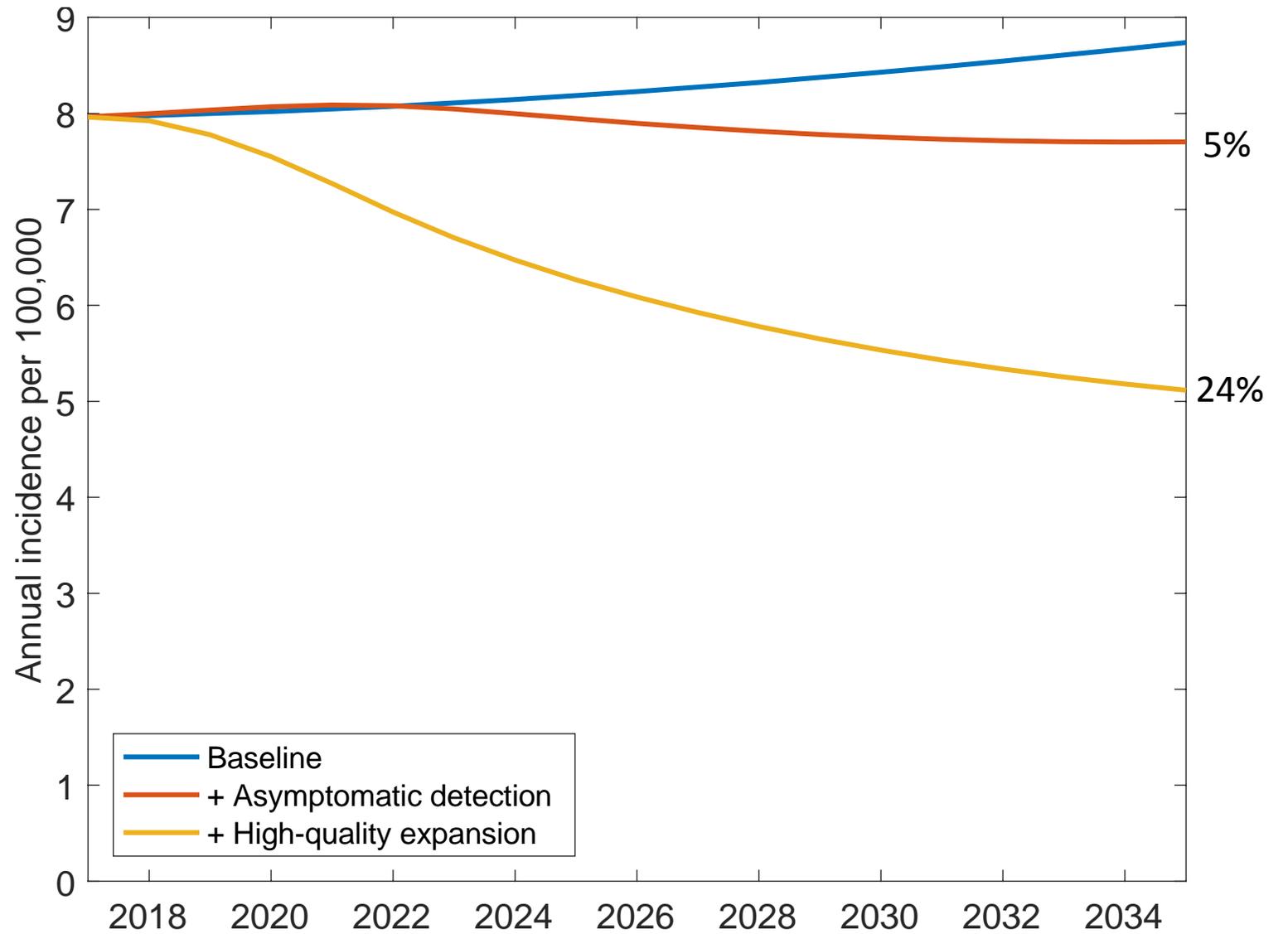
9 in 10 people with DR-TB fall between the cracks



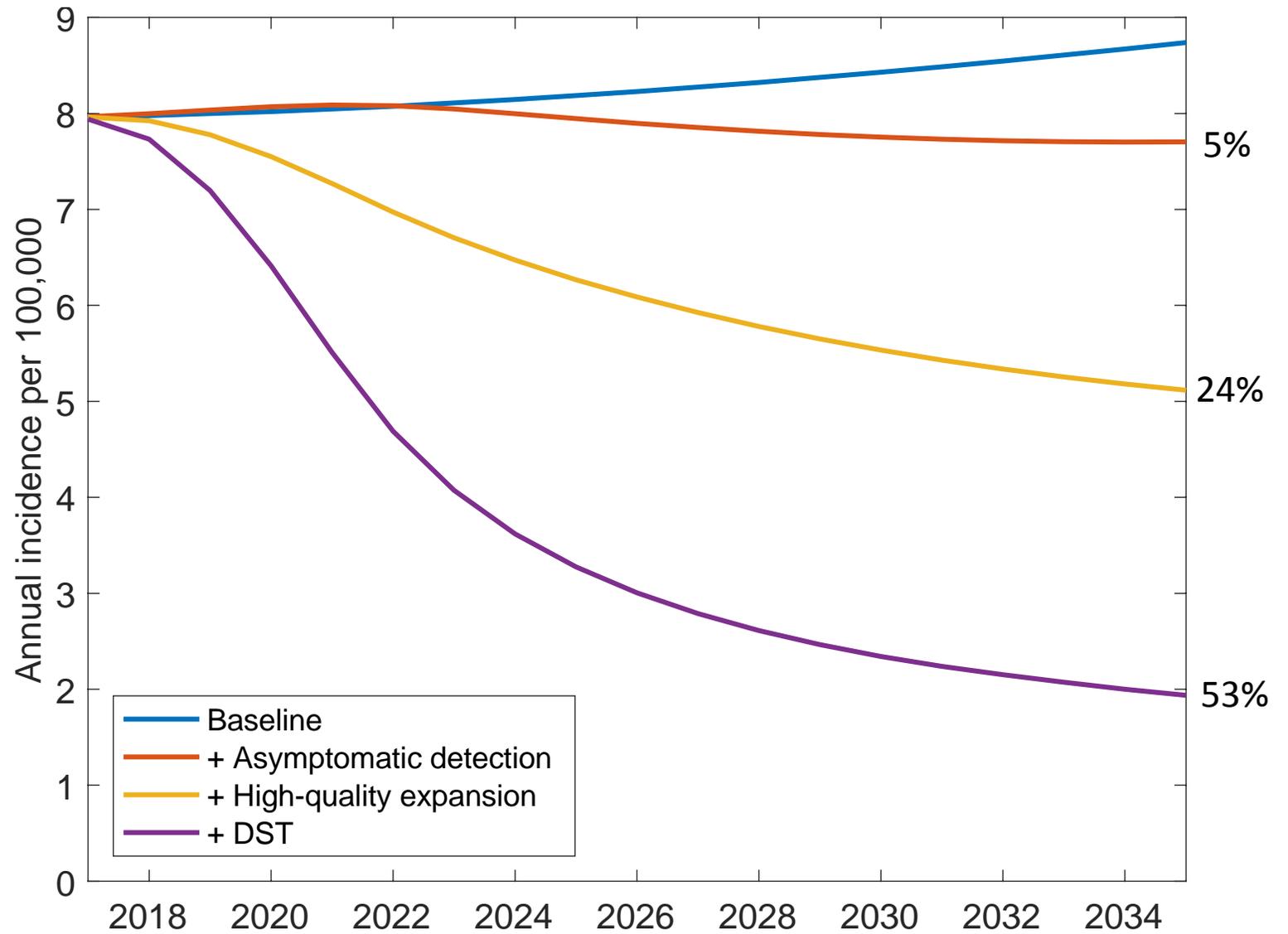
Plugging
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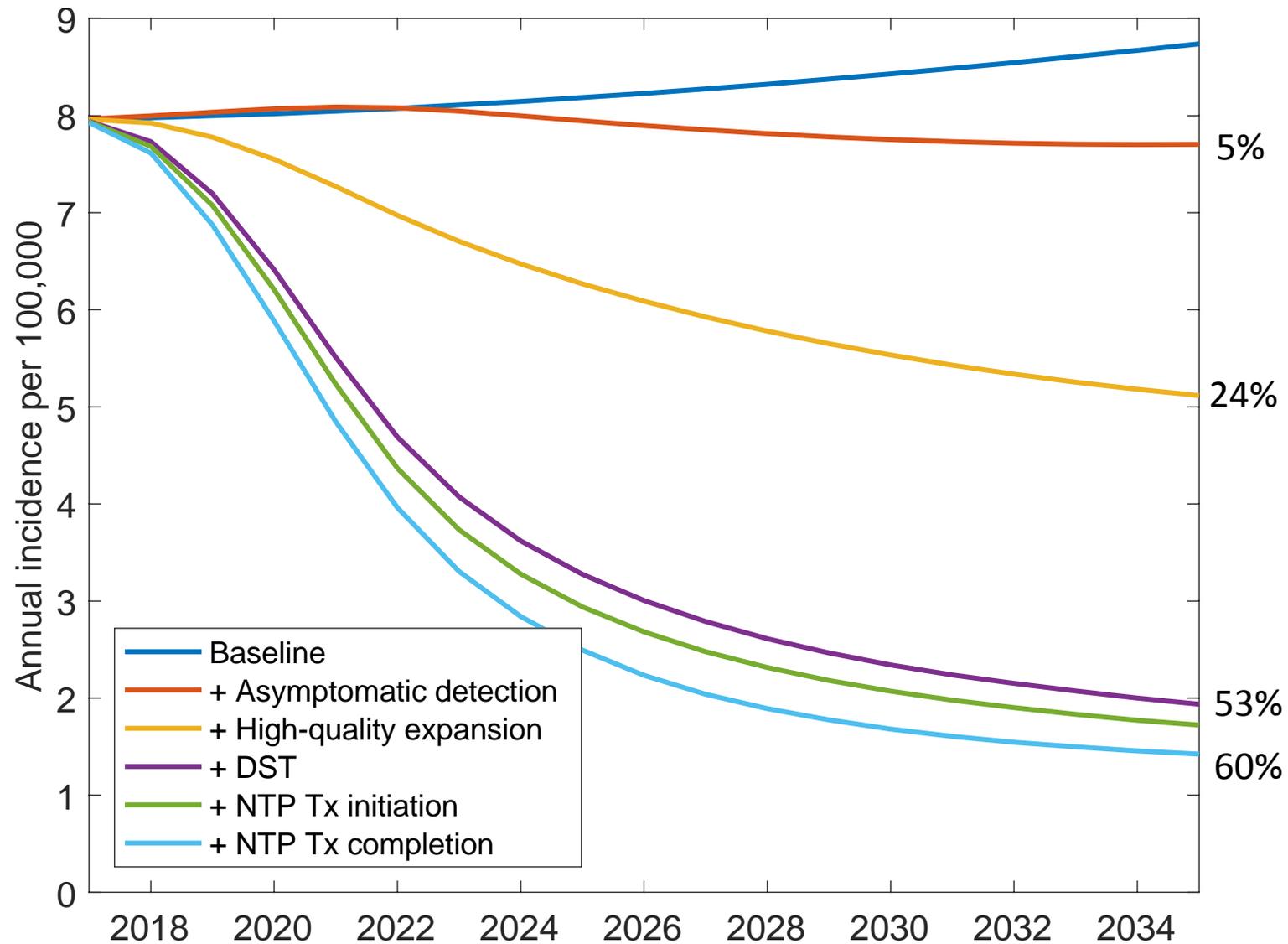
Plugging
each of the
DR-TB gaps



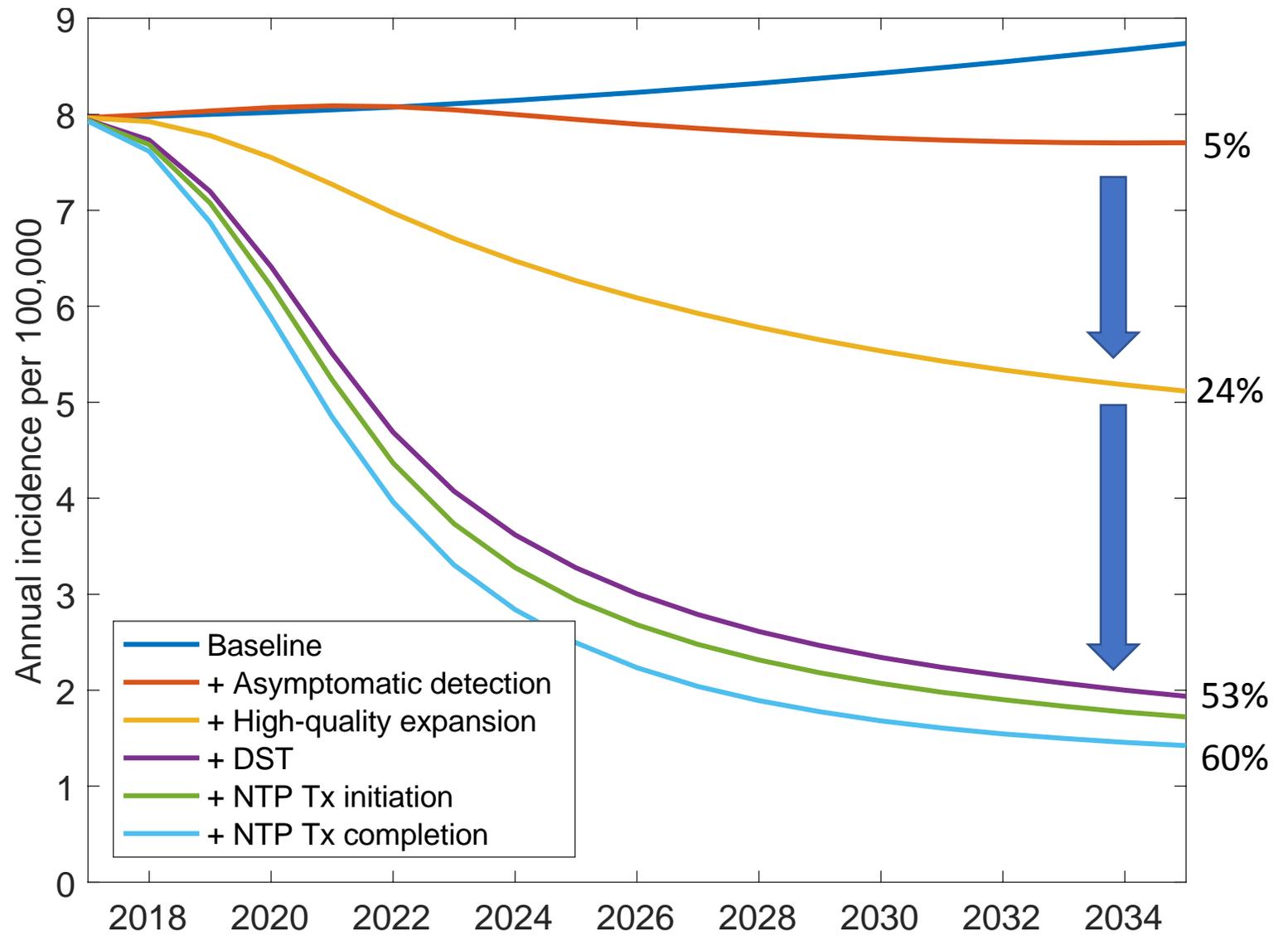
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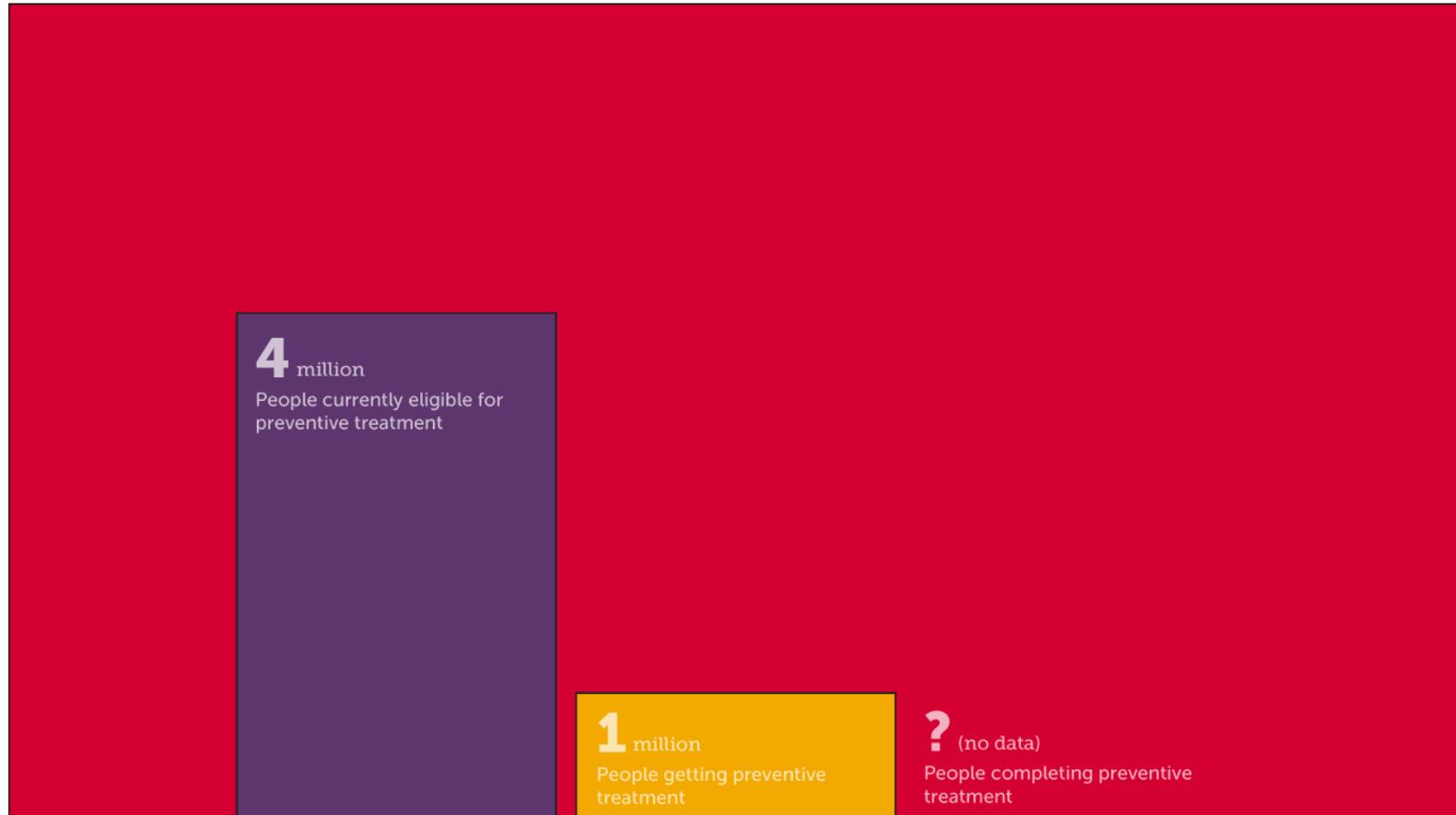
Plugging
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Plugging
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Almost all people infected with TB fall between the cracks

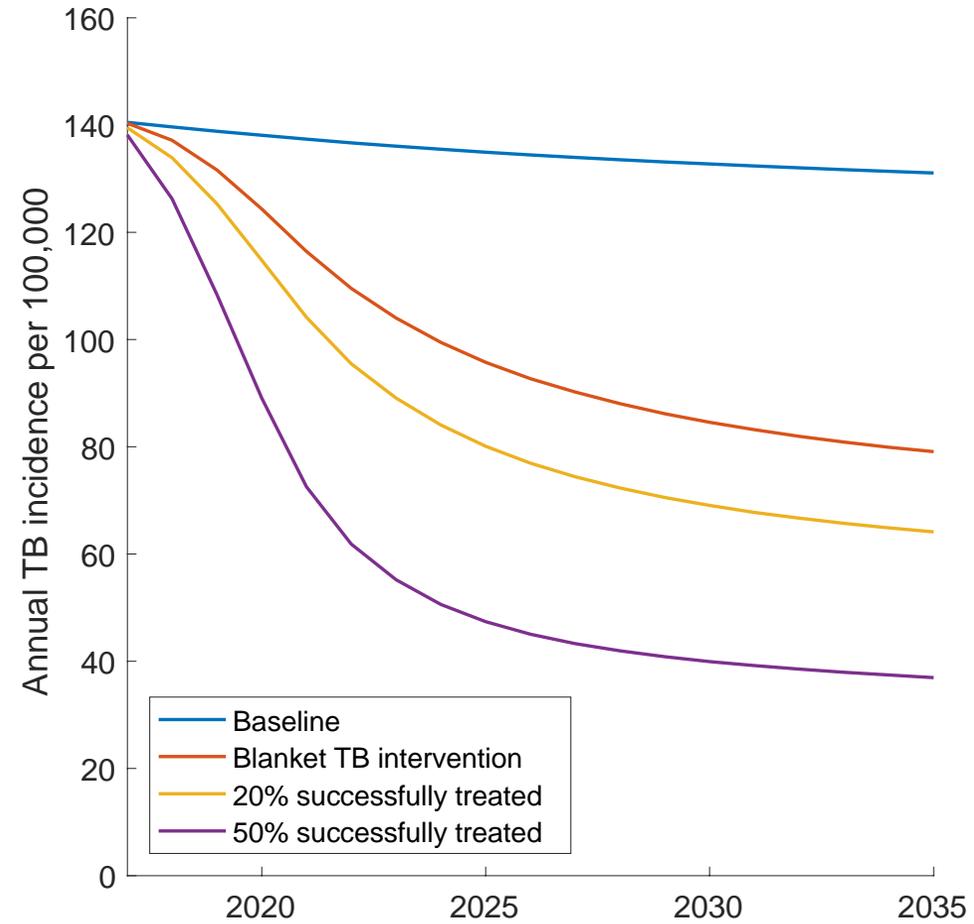


However, not all infections will develop disease

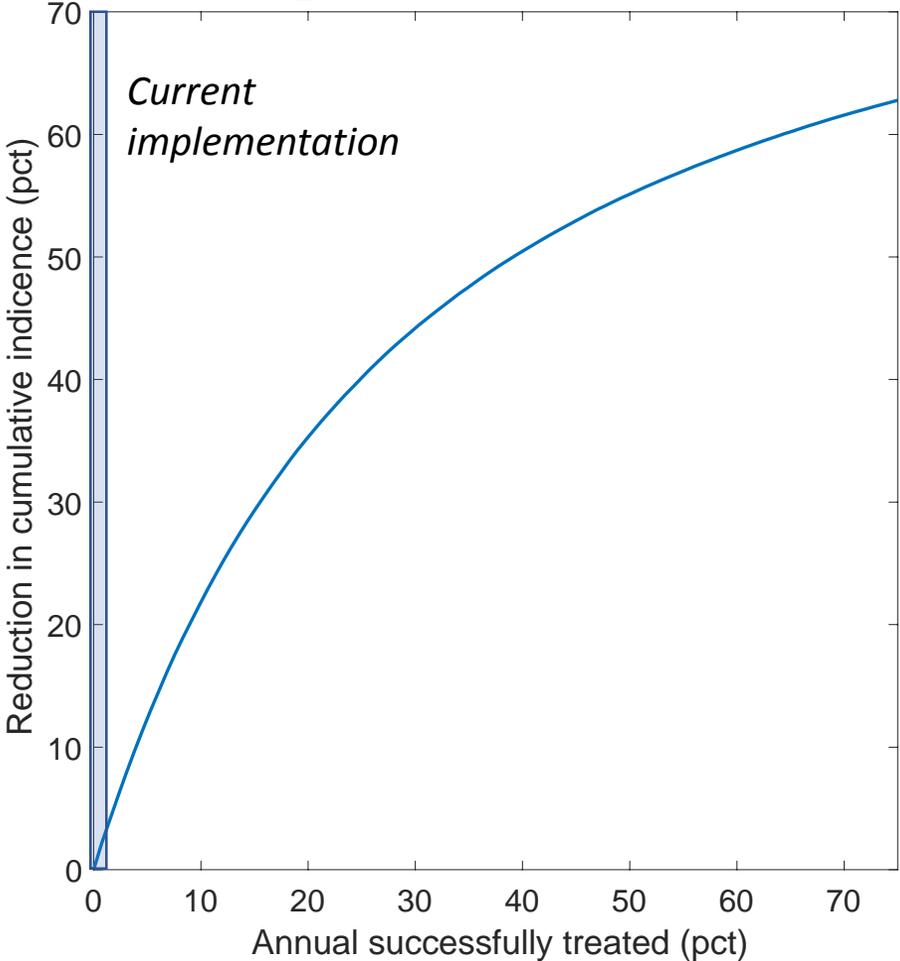
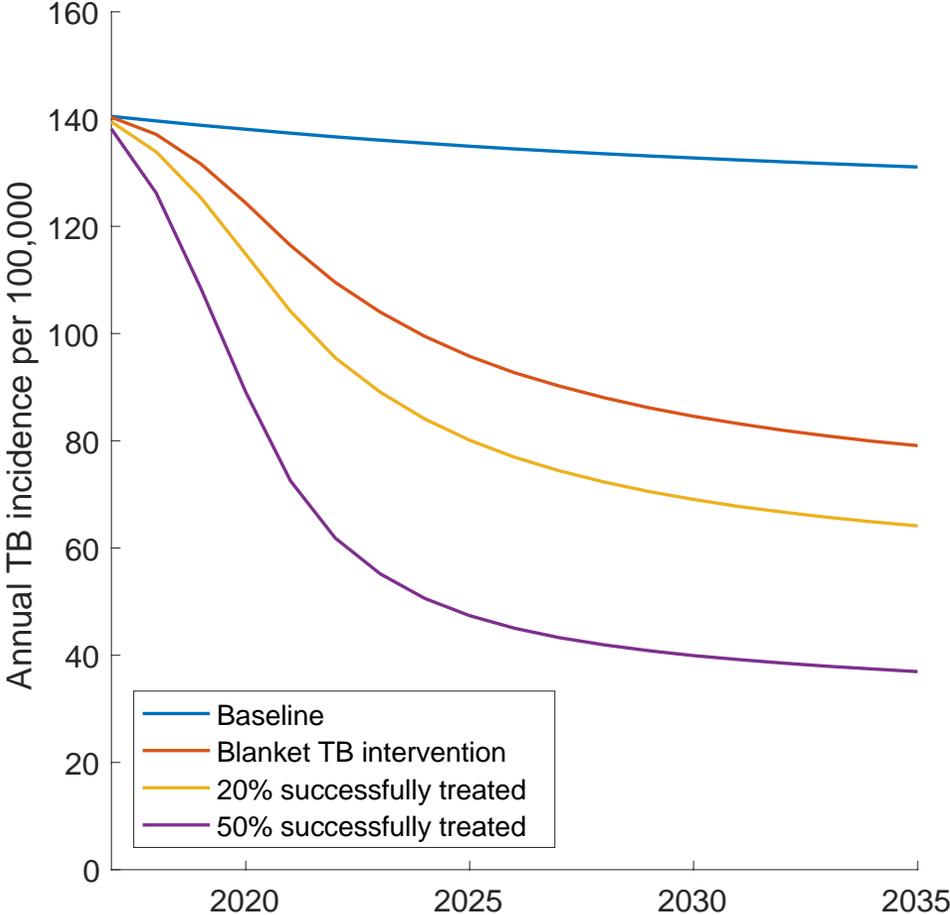
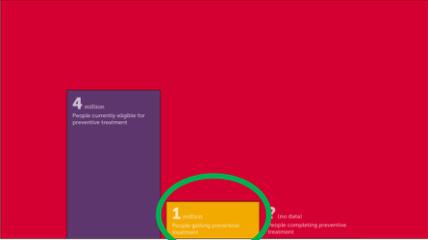
What if we could better identify those who would benefit from preventive therapy?

~ 2% of the population

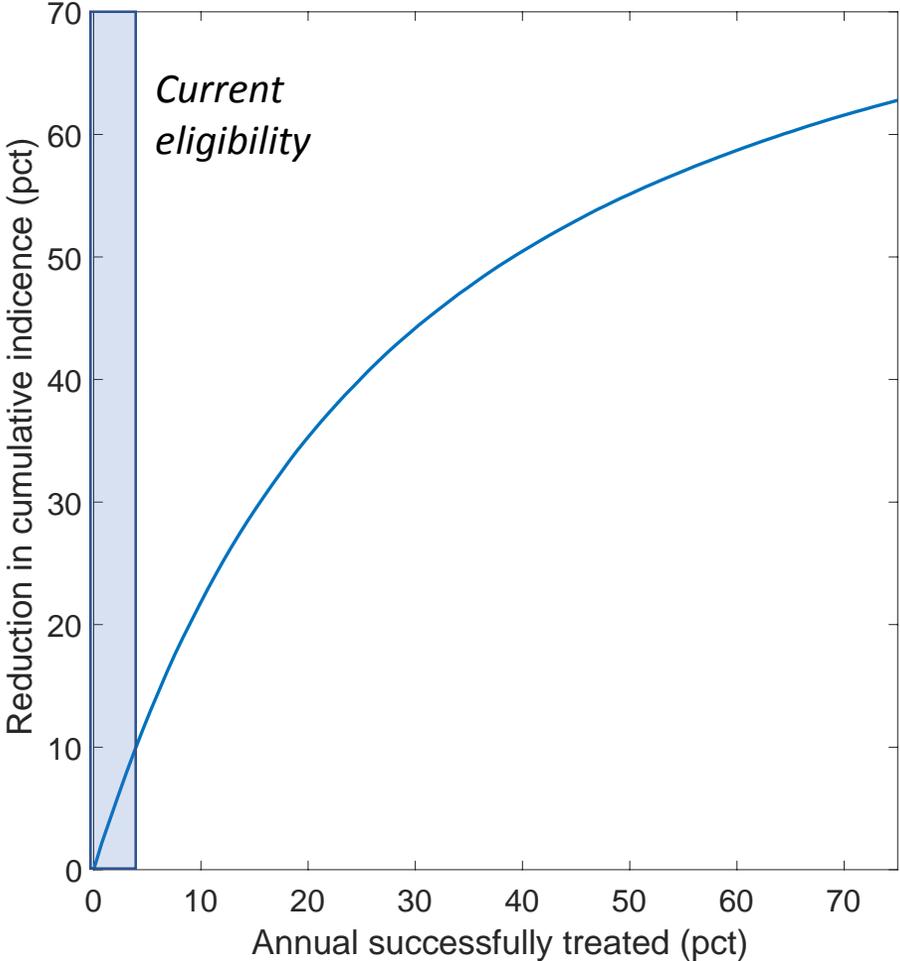
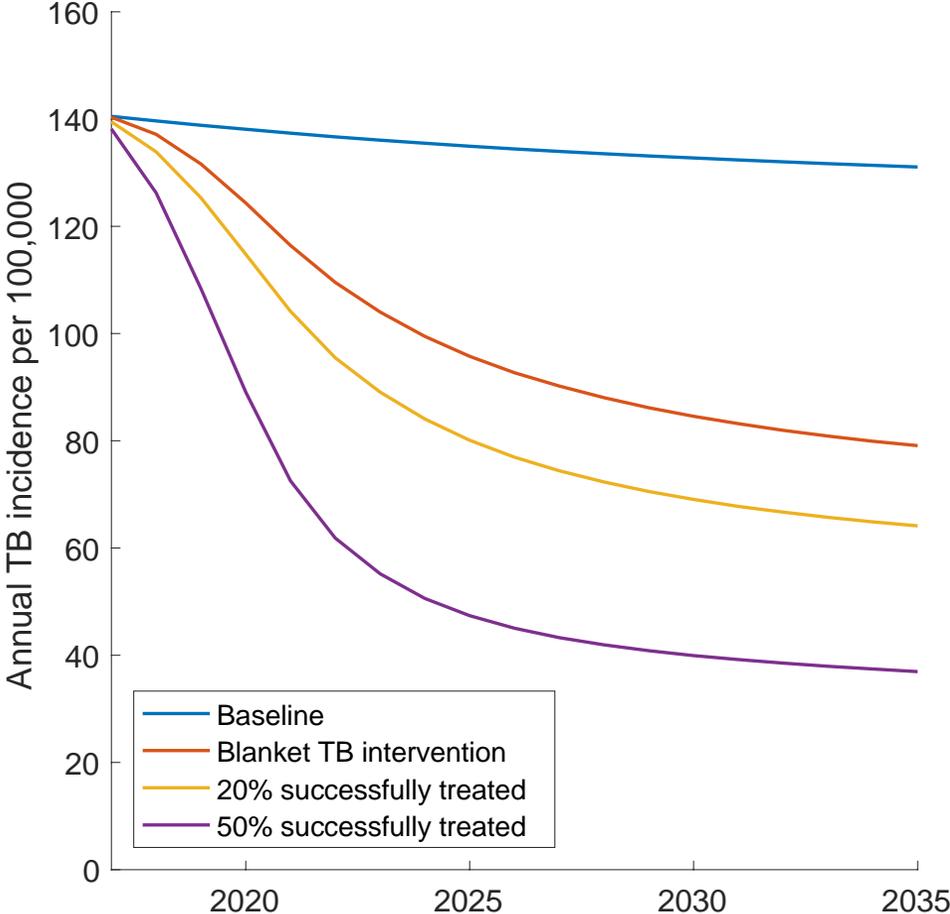
LTBI control scenarios



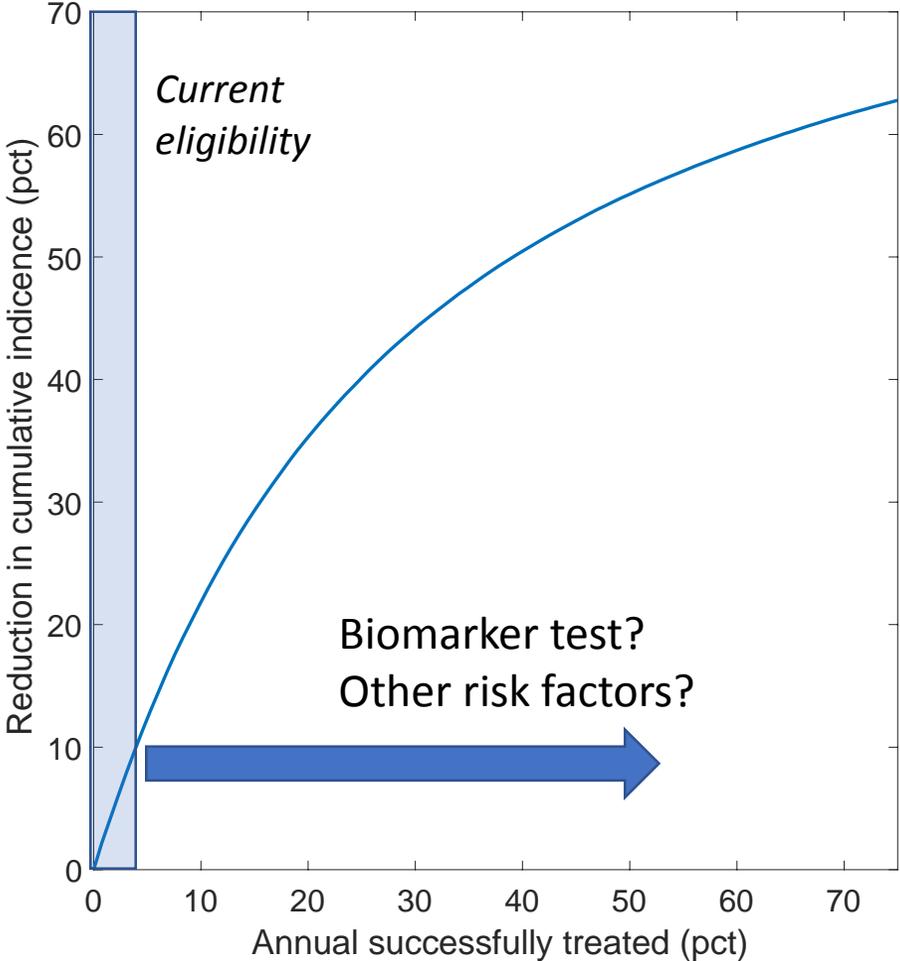
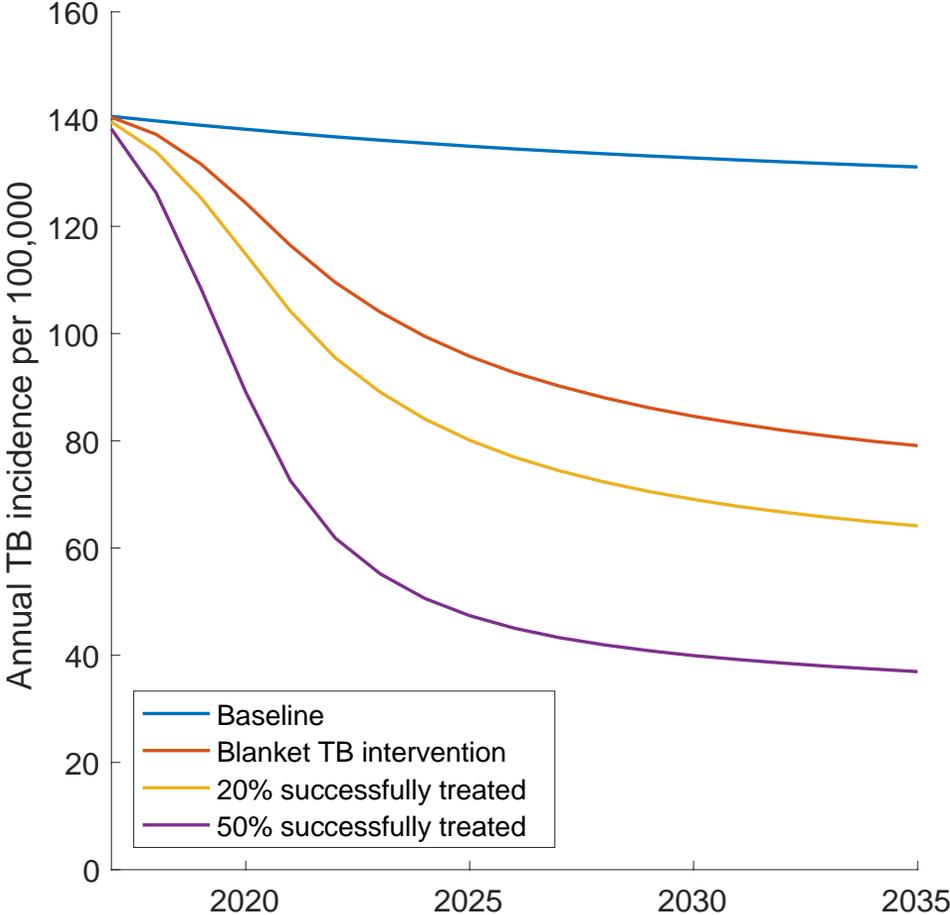
LTBI control scenarios



LTBI control scenarios



LTBI control scenarios



Some cautions

- This simple picture is representative only of our imaginary country, and *not* definitive of global priorities
 - Merely an indicative starting point
- In practice, 'real' countries will need country-specific interventions
 - E.g. India: private sector engagement and adherence
- But important questions....
 - Are we looking under the lamp-post?



Chest
symptomatics
seeking care



Private sector
capture of TB
patients

Chest
symptomatics
seeking care

Asymptomatic TB

'Turning off the tap' at the point of latent infection?

Patient delays before first presentation for care?

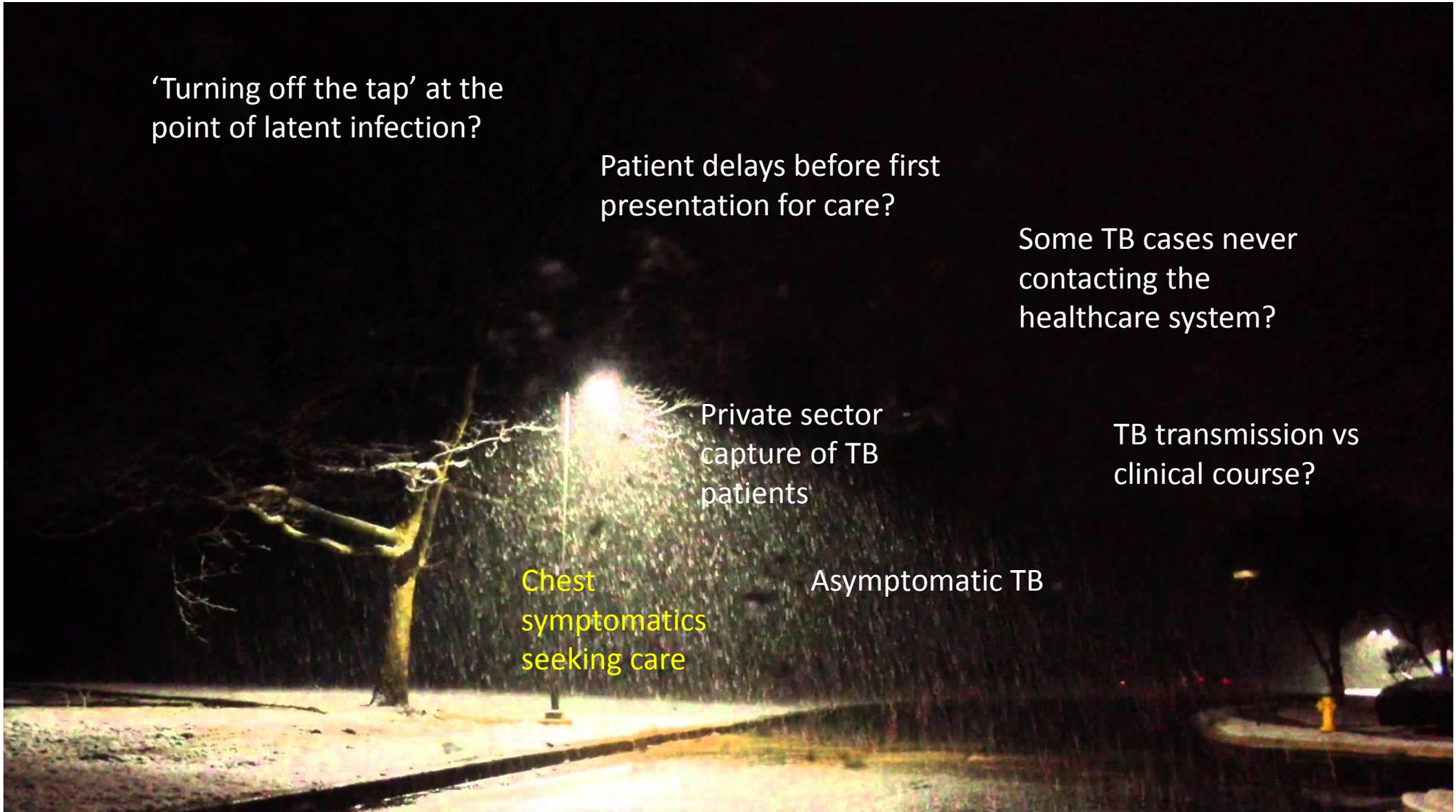
Some TB cases never contacting the healthcare system?

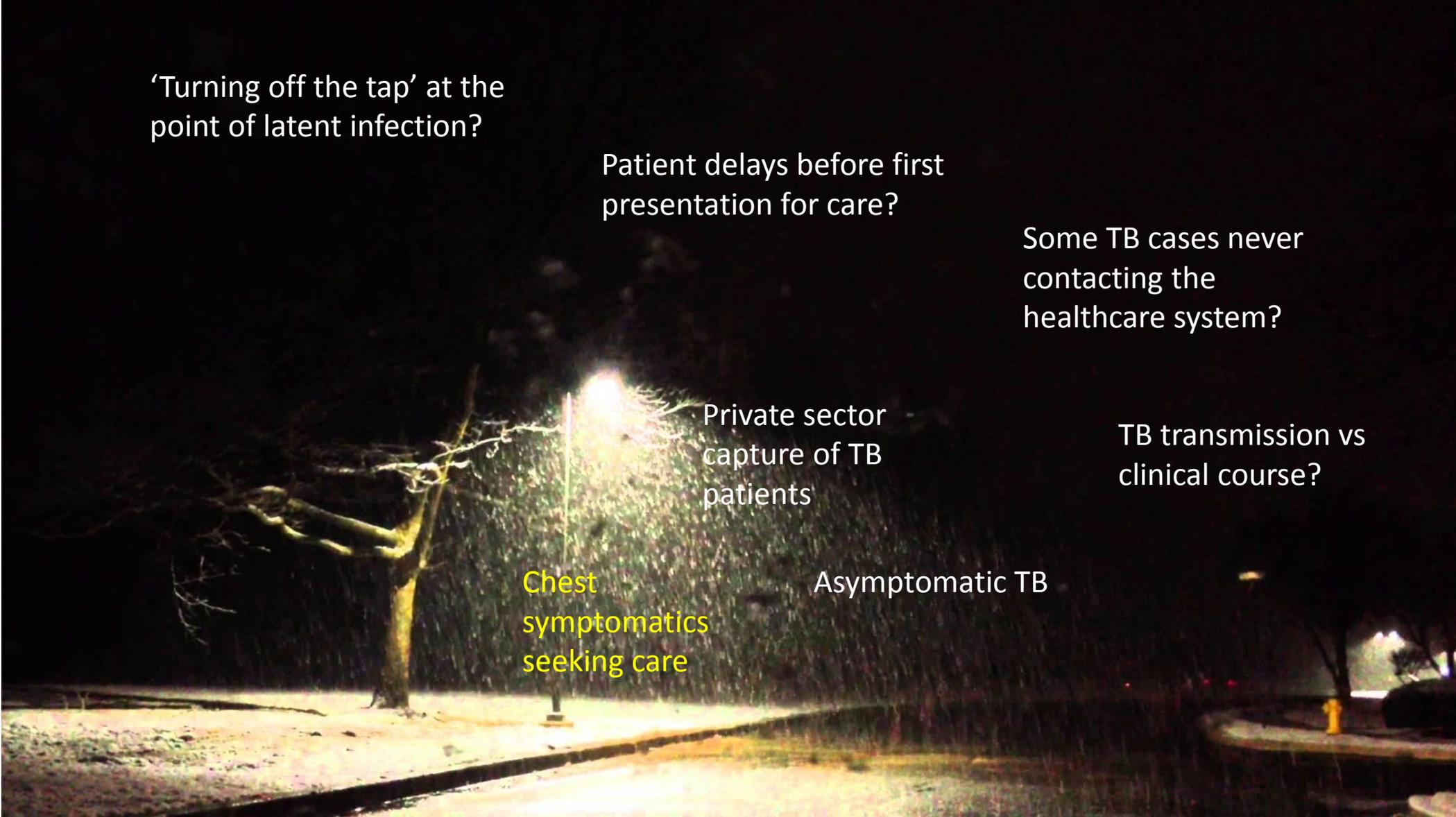
Private sector capture of TB patients

TB transmission vs clinical course?

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We need to understand where transmission is coming from

Thank you