Stop TB Partnership TB REACH hosted by UNOPS

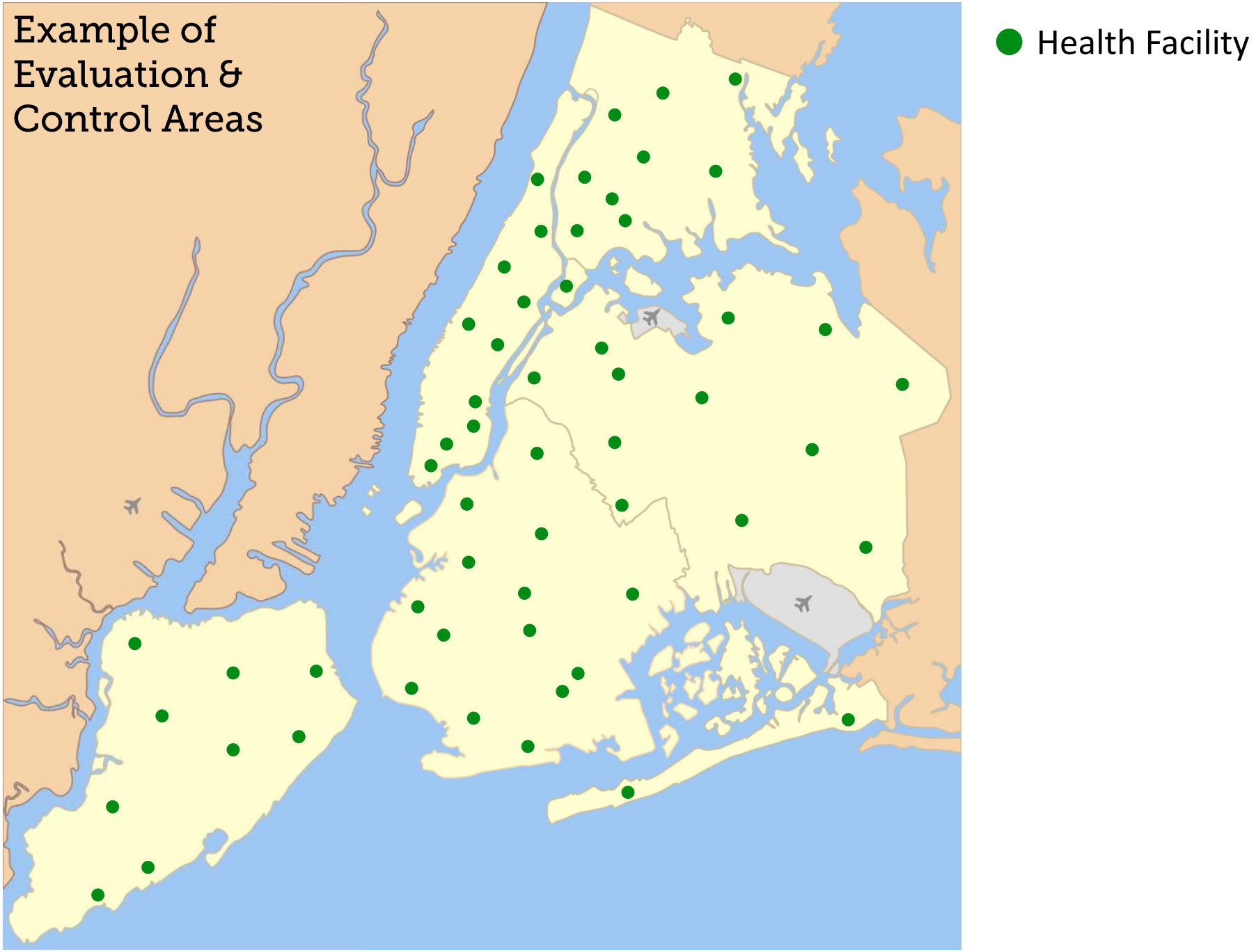
END TB

TB REACH's Monitoring & Evaluation (M&E) Framework

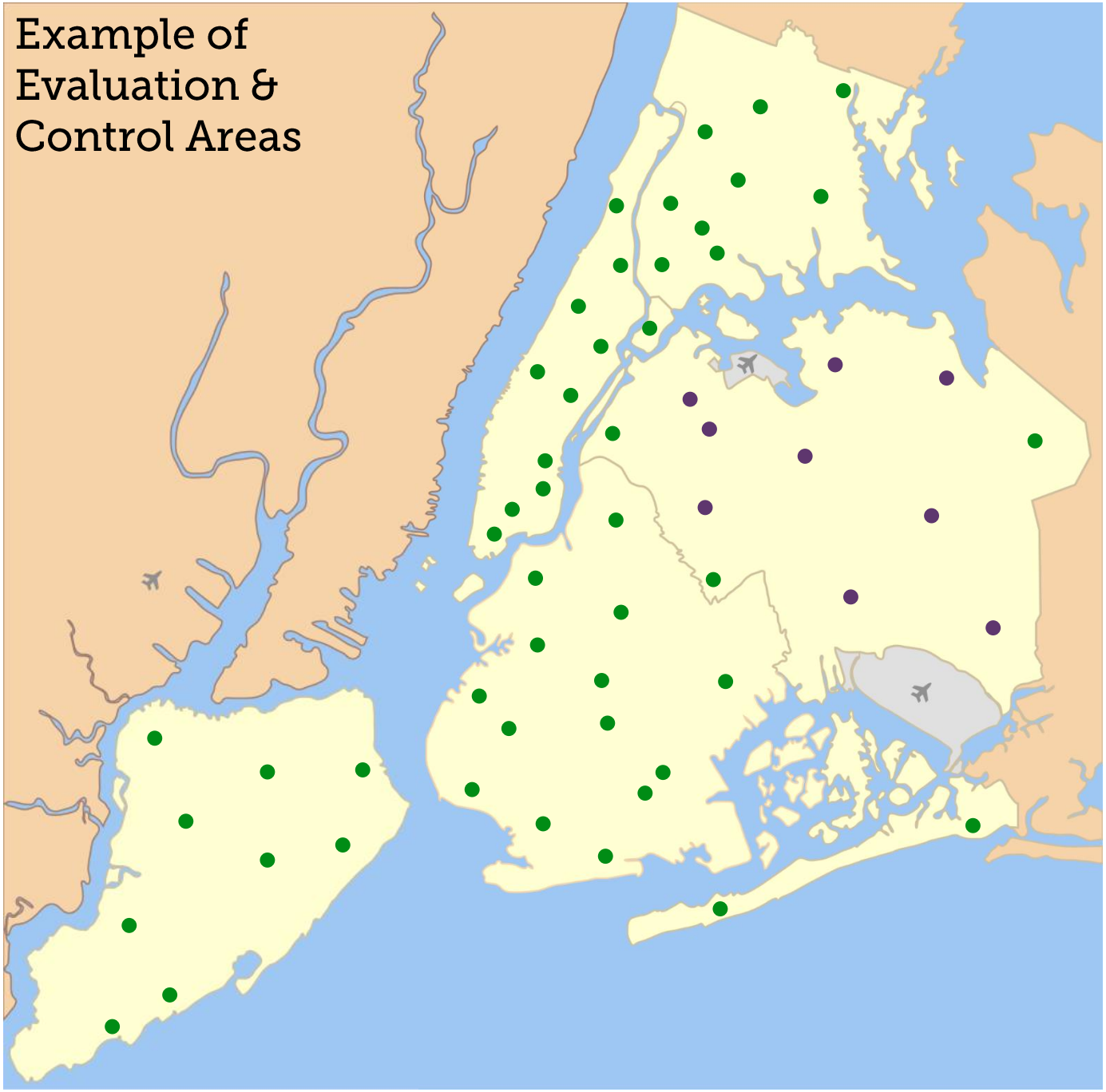
This information note has been developed to assist applicants in better understanding TB REACH's M&E framework and the concept of additionality. It is supplemented by these important definitions.

Section 1 is designed for 'Improving detection, linkage to treatment and reporting of TB' applicants. Section 2 is designed for 'Improving TB treatment adherence and outcomes' applicants.

Section 1
Improving detection, linkage to treatment and reporting of TB


Example of Evaluation & Control Areas
Health Facility

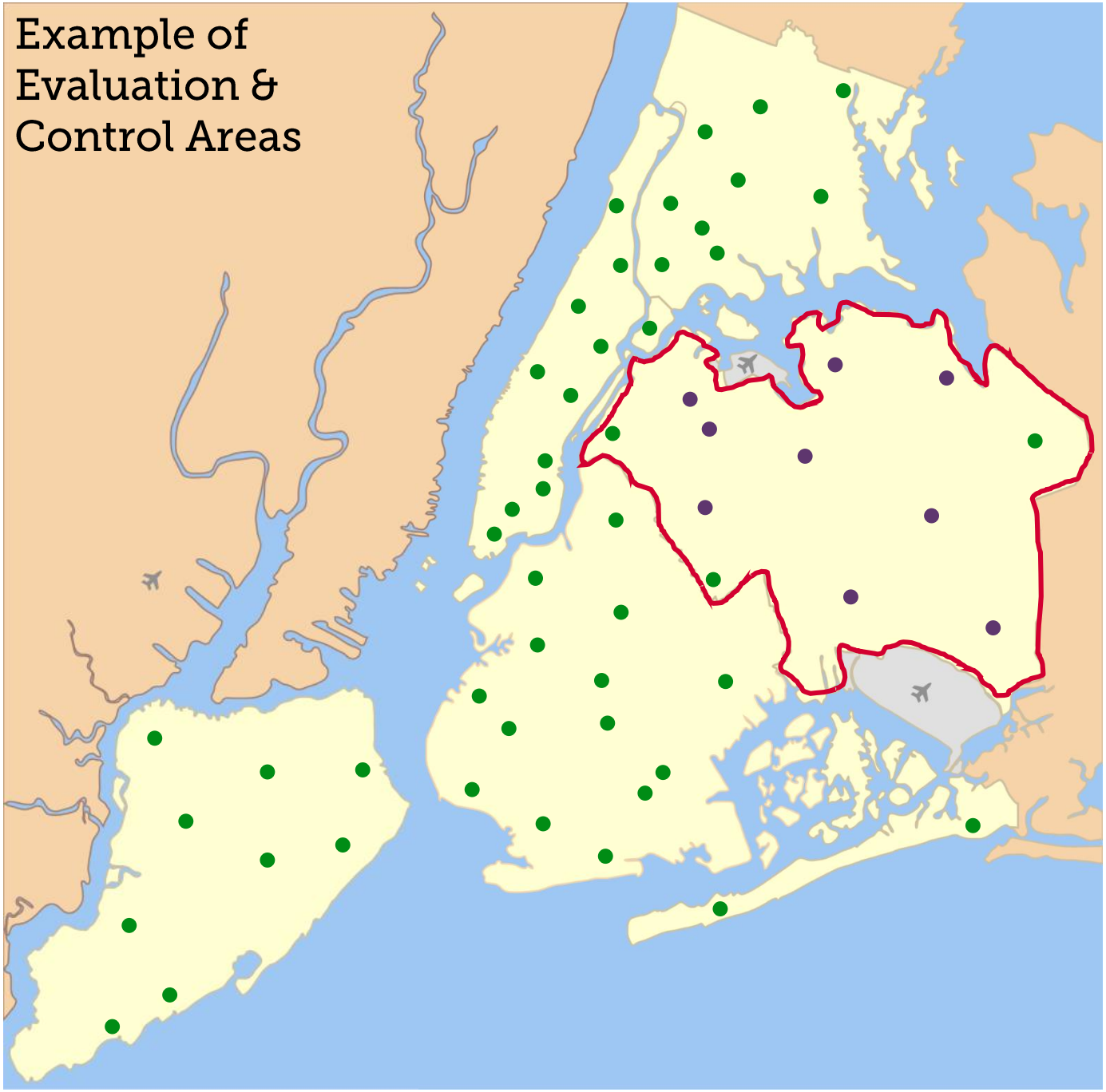
Example of Evaluation & Control Areas



- Health Facility
- Intervention Health Facility

A TB REACH project uses community workers to go door to door screening people who live within 3 kilometres from a health facility (***target population***) to identify people with suspected TB and to refer them to the health facility for diagnostic testing.

Example of Evaluation & Control Areas



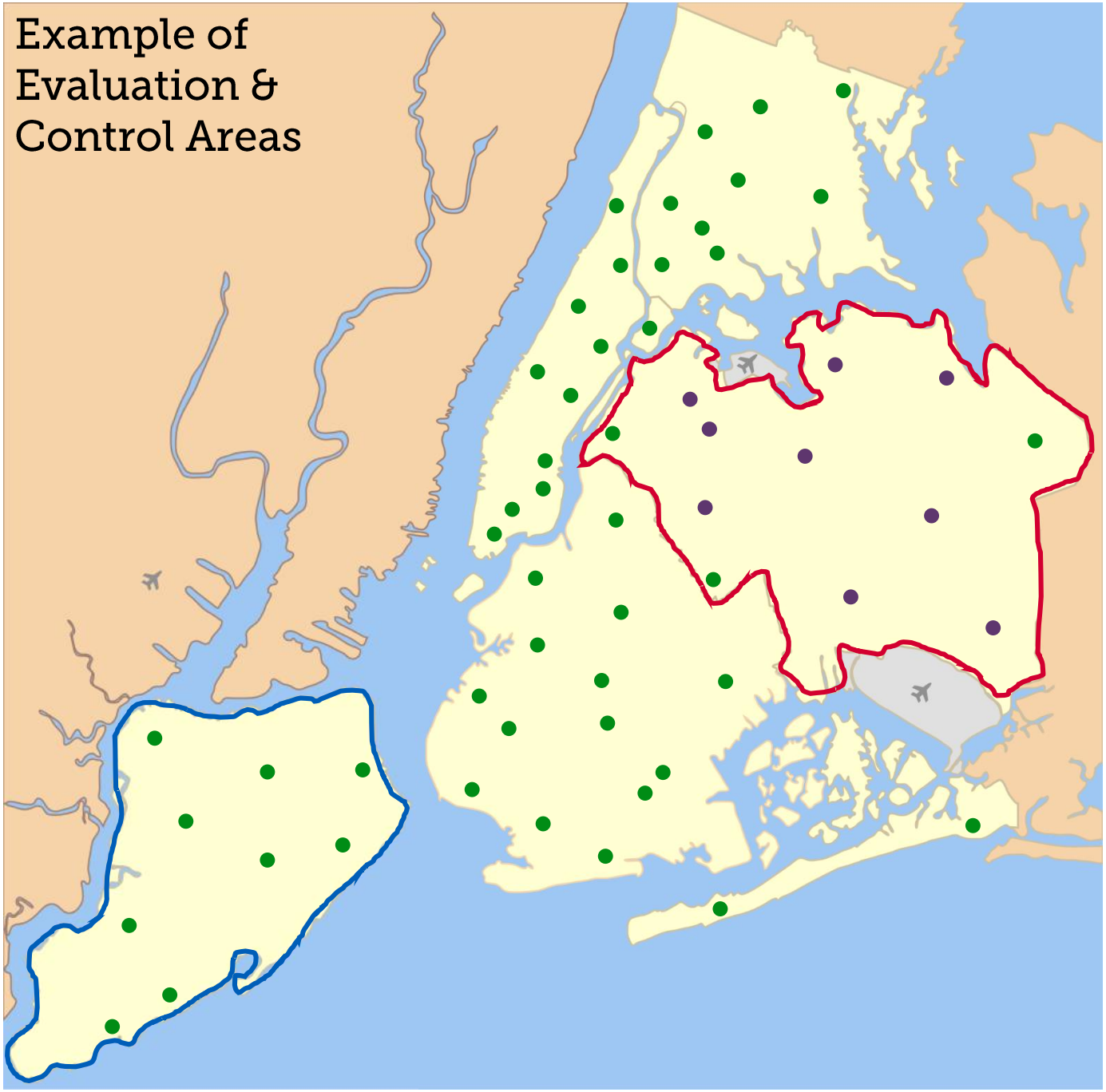
- Health Facility
- Intervention Health Facility
- Evaluation Area

An ***evaluation area*** is the geographic area in which a project's ***target group*** lives, which includes all intervention health facilities as well as some non-intervention health facilities.

Selecting the right Evaluation Area

- If possible, the evaluation area should include non-intervention health facilities.
    1. People with TB who live near non-intervention health facilities may choose to visit an intervention health facility because of its increased activity (better tests, fast-track care, etc). This represents a transfer of patients from one health facility to another, without an increase in the total number of people treated for TB. If you only monitored intervention health facilities, you would think you are finding lots of additional notifications.
    2. There may be a halo / knock-on effect where the impact of the intervention spills over into non-intervention sites. For example, because more people are treated for TB in the evaluation area, someone who has not interacted with the project, but knows a friend who has, may recognize their TB symptoms and visit a non-intervention health facility near their home. If you only monitored intervention health facilities, you would not count such additional notifications.
- The evaluation area should not be too large relative to the target population because your direct yield will be small relative to the evaluation area and impact on additional notifications will be diluted and may even be undetectable.

Example of Evaluation & Control Areas



- Health Facility
- Intervention Health Facility
- Evaluation Area
- Control Area

The project should also identify another geographical area to serve as the ***control area*** which is similar to the intervention area but somewhat distanced and comprises only non-intervention health facilities.

Basic Process Indicators

B/A – Acceptance

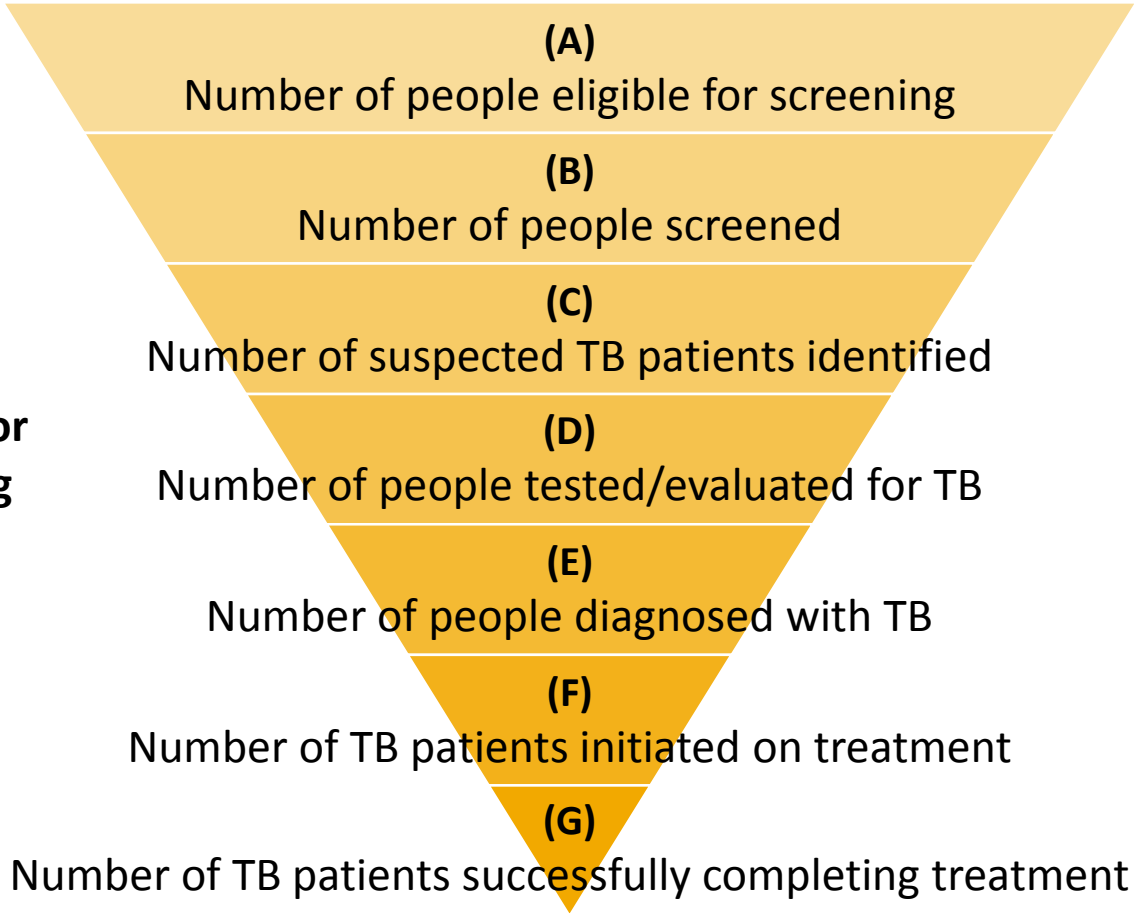
D minus E – Eligible for TB infection screening

B/E – NNS

D/E – NNT

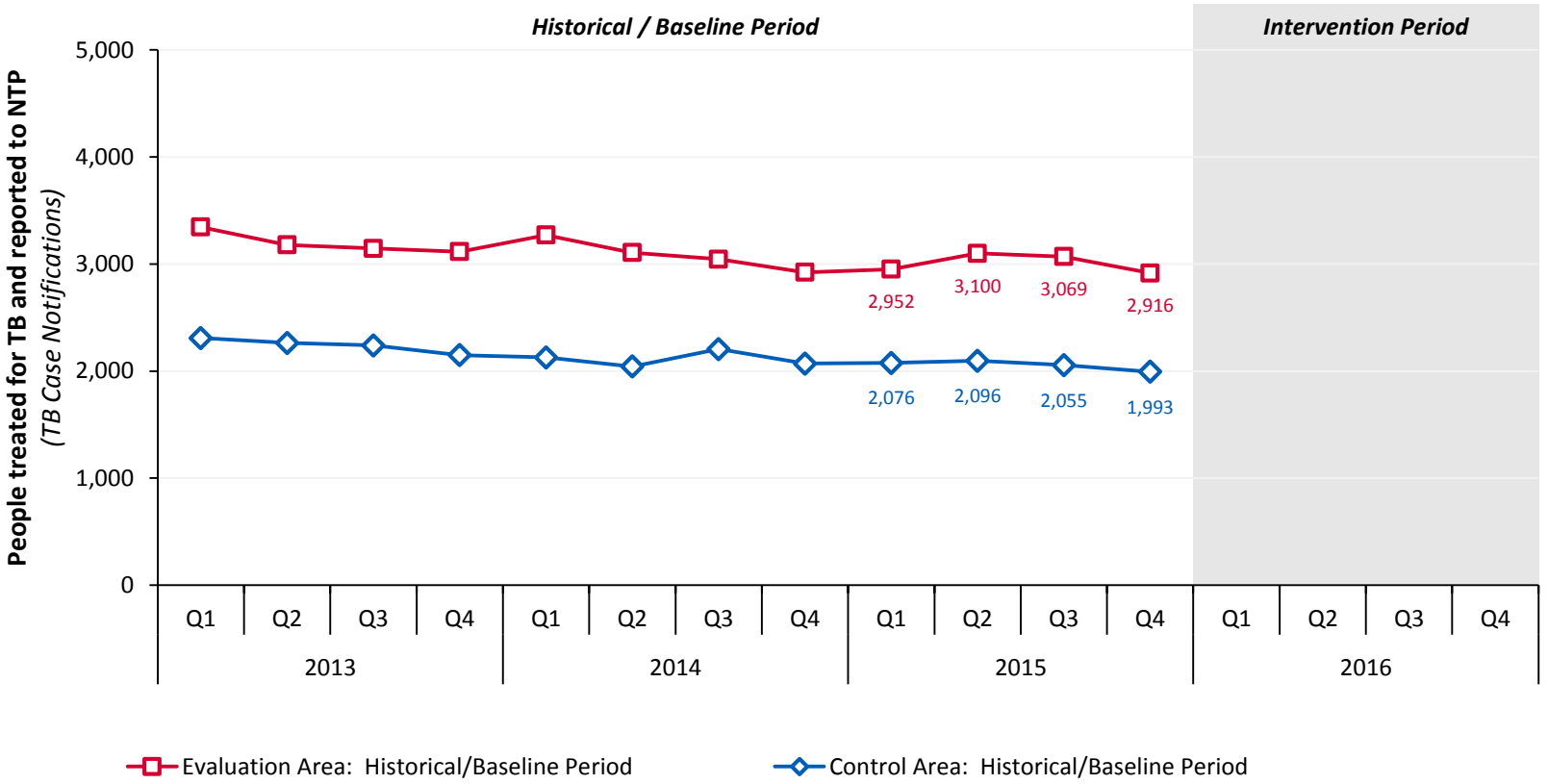
F/E – PTLFU

G/F – Tx Success

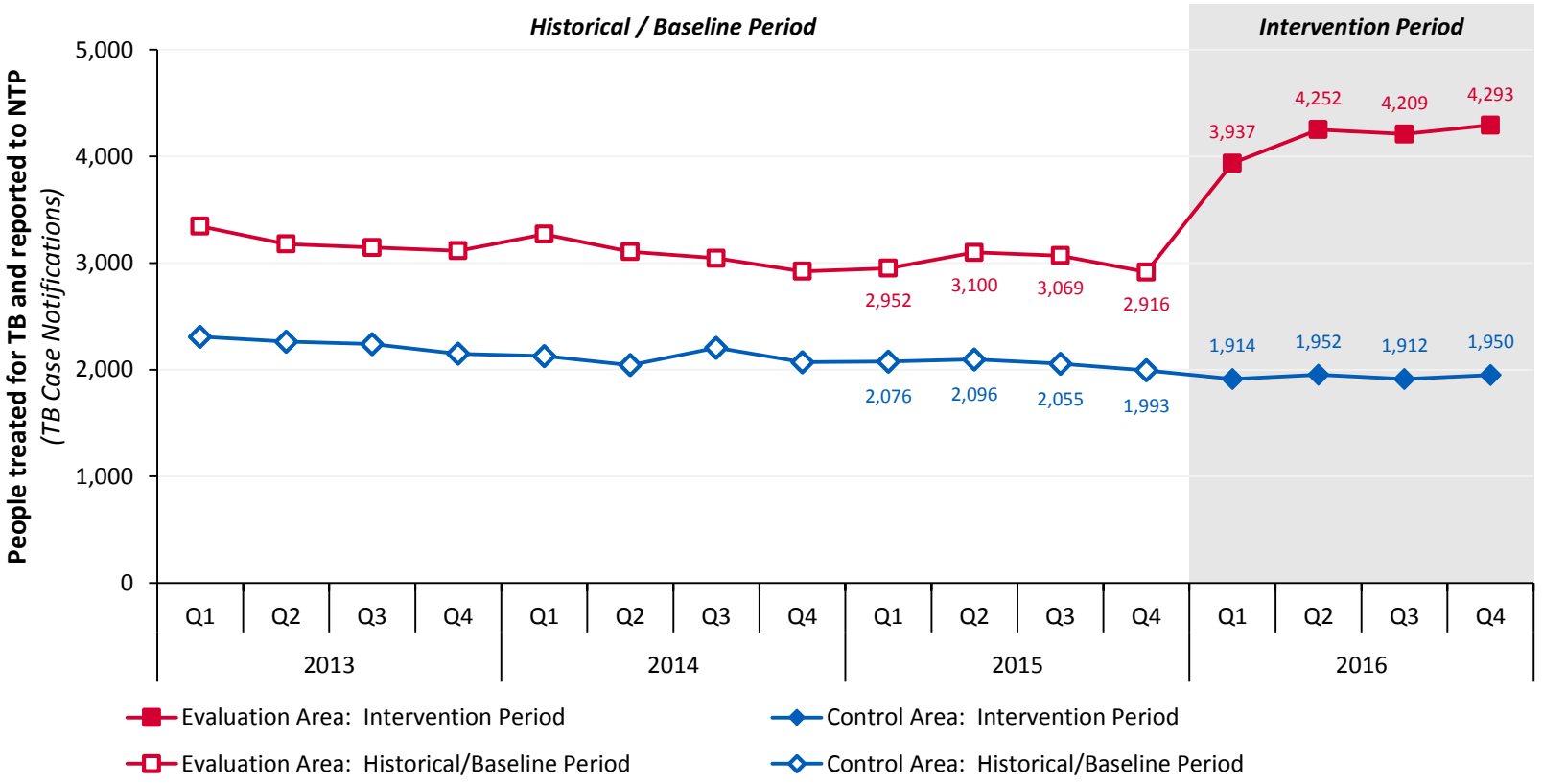


doi: 10.1093/inthealth/ihu055

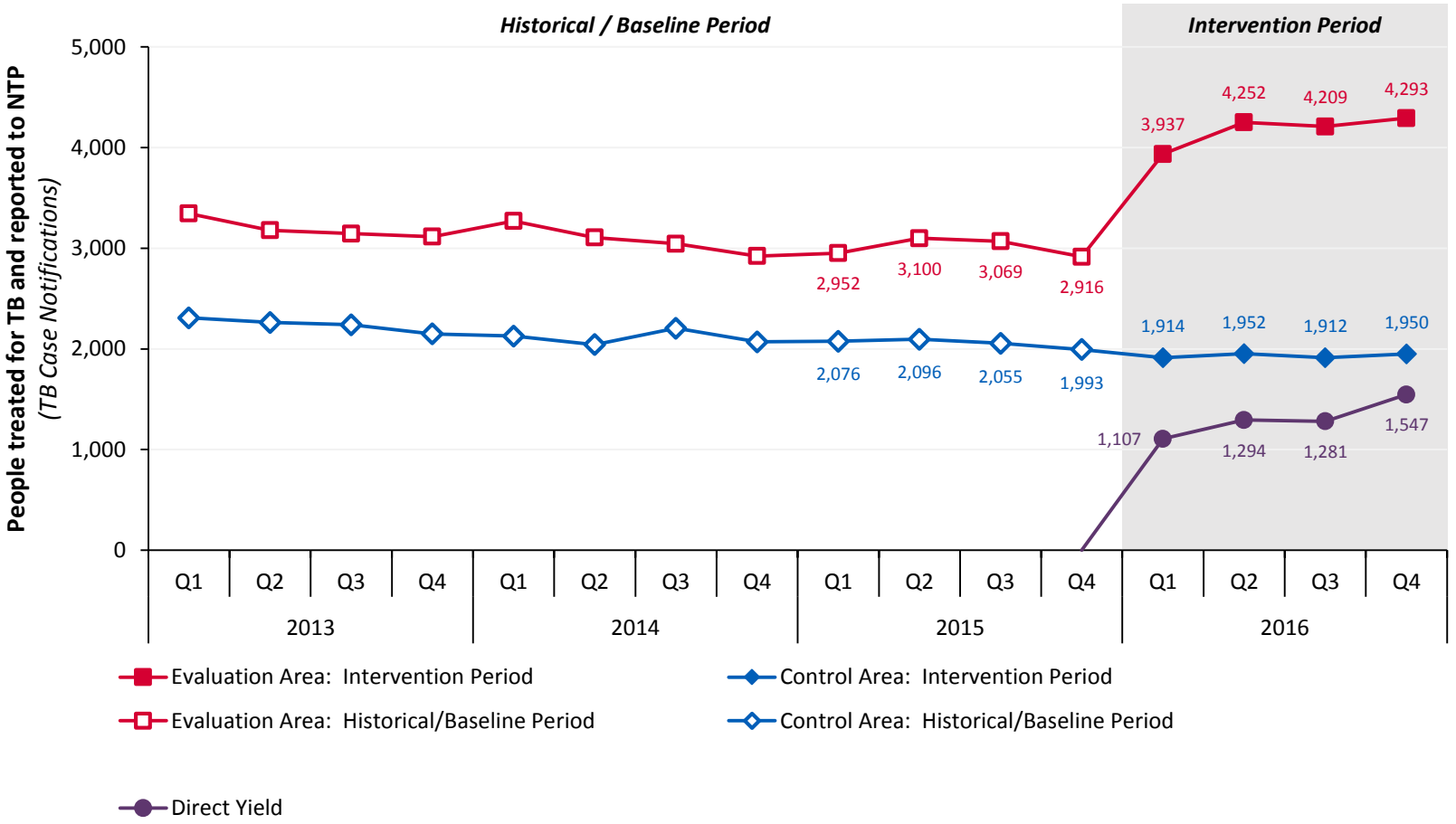
Calculating Additional Notifications



Calculating Additional Notifications



Calculating Additional Notifications



Calculating Additional Notifications

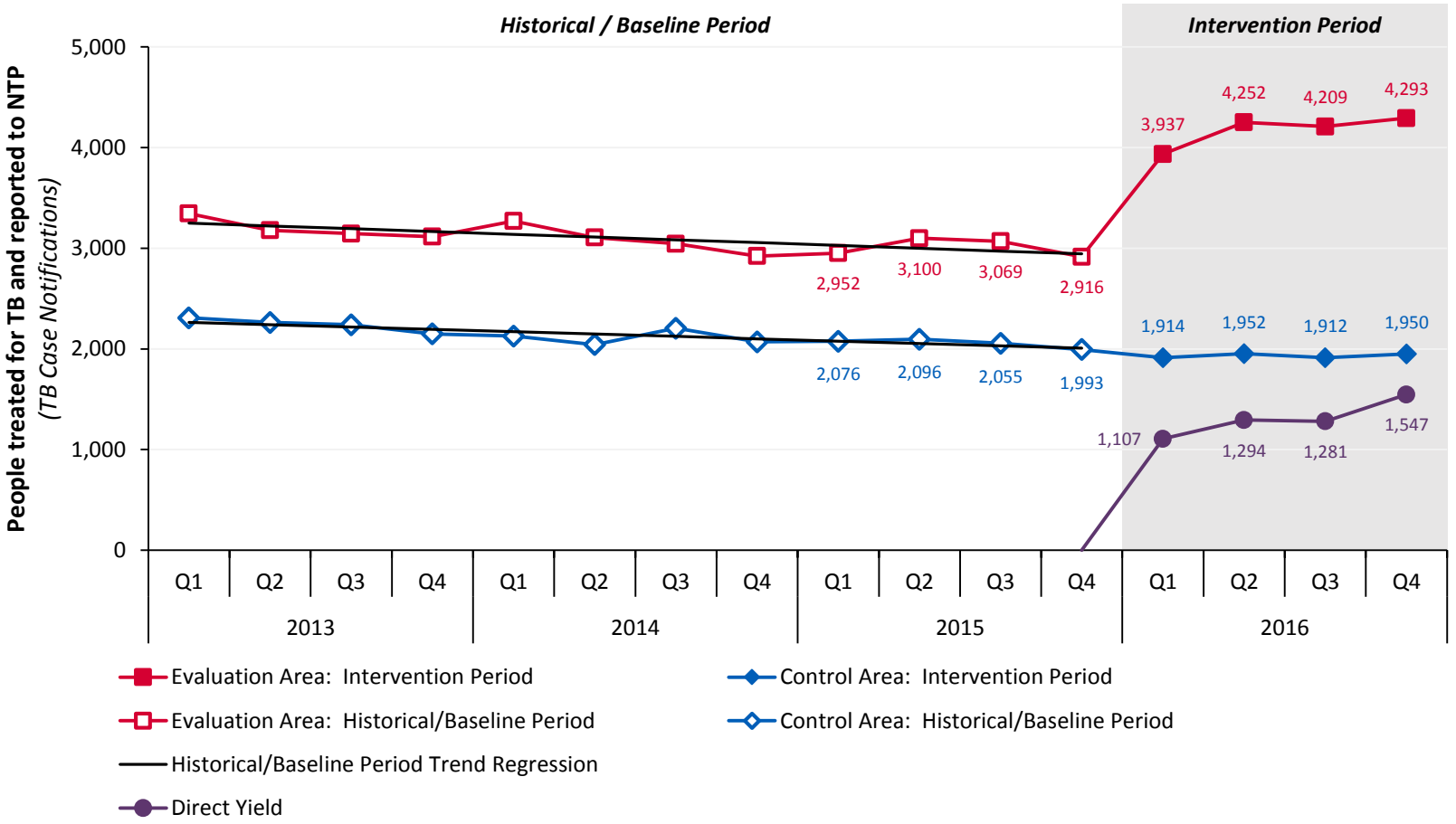
	Baseline/Historical Period				
	2015				Sum
	Q1	Q2	Q3	Q4	(BP)
Evaluation Area	2,952	3,100	3,069	2,916	**12,037**
Direct Yield	0	0	0	0	**0**
Control Area	2,076	2,096	2,055	1,993	**8,220**

	Intervention Period				
	2016				Sum
	Q1	Q2	Q3	Q4	(IP)
Evaluation Area	3,937	4,252	4,209	4,293	**16,691**
Direct Yield	1,107	1,294	1,281	1,547	**5,229**
Control Area	1,914	1,952	1,912	1,950	**7,728**

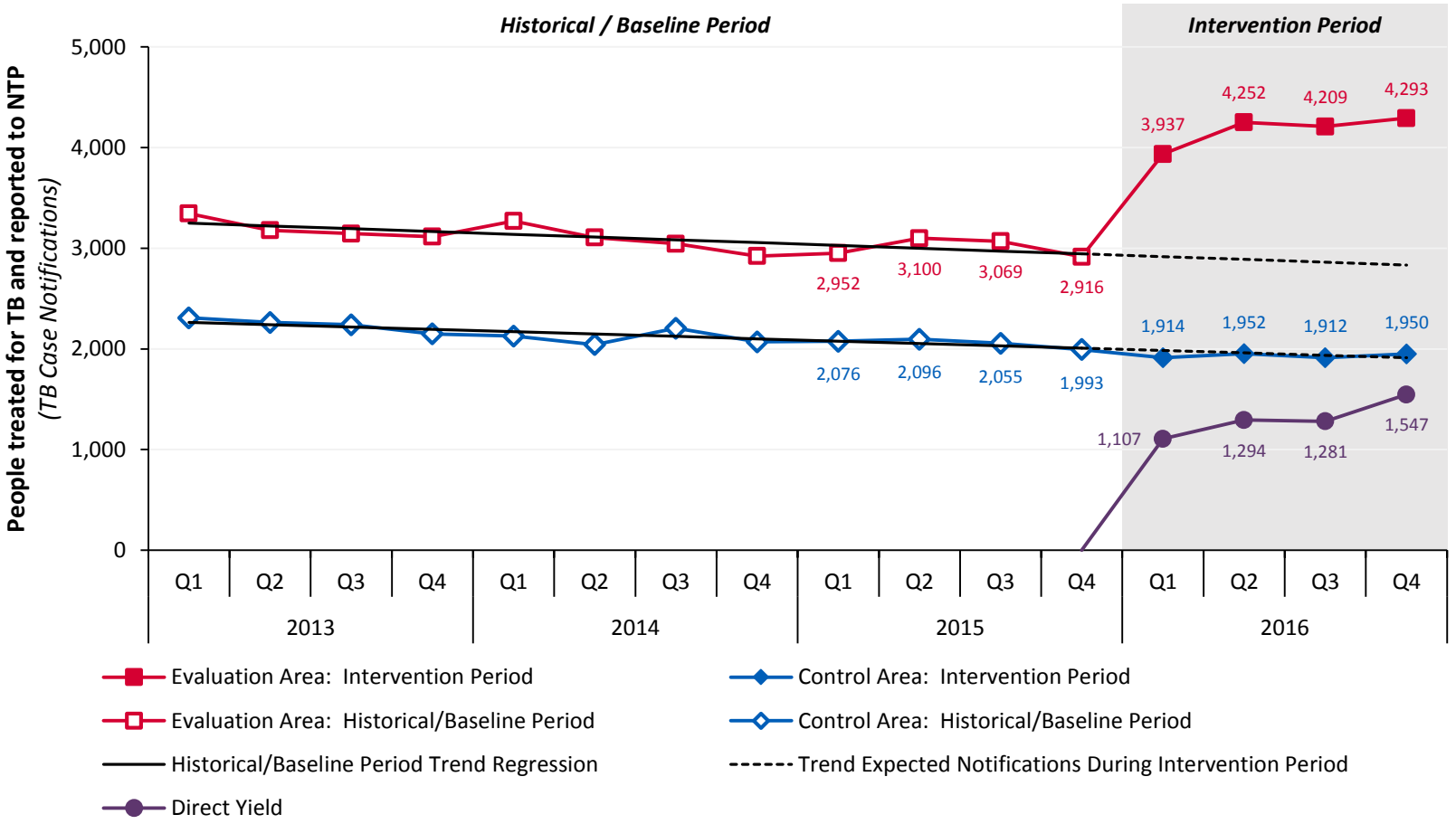
Additional Notifications *[IP-BP (IP/BP)]*	
Evaluation Area	4,654 (+38.7%)
Control Area	-492 (-6.0%)

Note that the control area notifications declined by -6.0%

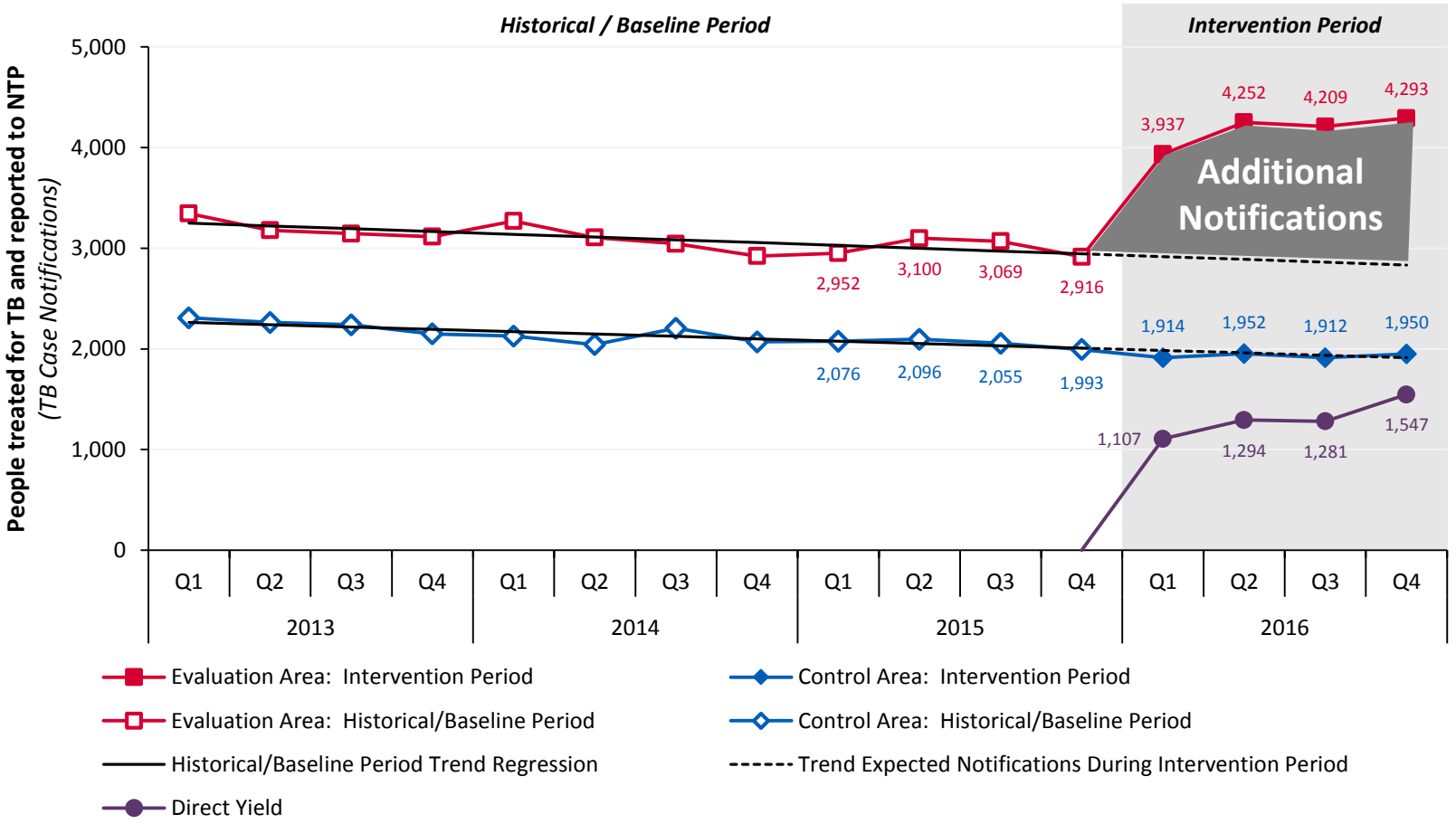
Trend-Adjusted Additional Notifications



Trend-Adjusted Additional Notifications



Trend-Adjusted Additional Notifications



Trend-Adjusted Additional Notifications

	Baseline/Historical Period					Trend-Expected Notifications				
	2015				Sum	2016				Sum
	Q1	Q2	Q3	Q4	(BP)	Q1	Q2	Q3	Q4	(TEN)
Evaluation Area	2,952	3,100	3,069	2,916	**12,037**	2,917	2,889	2,861	2,833	**11,500**
Direct Yield	0	0	0	0	**0**	0	0	0	0	**0**
Control Area	2,076	2,096	2,055	1,993	**8,220**	1,983	1,960	1,936	1,913	**7,792**

	Intervention Period				
	2016				Sum
	Q1	Q2	Q3	Q4	(IP)
Evaluation Area	3,937	4,252	4,209	4,293	**16,691**
Direct Yield	1,107	1,294	1,281	1,547	**5,229**
Control Area	1,914	1,952	1,912	1,950	**7,728**

Additional Notifications *[IP-BP (IP/BP)]*	
Evaluation Area	4,654 (+38.7%)
Control Area	-492 (-6.0%)

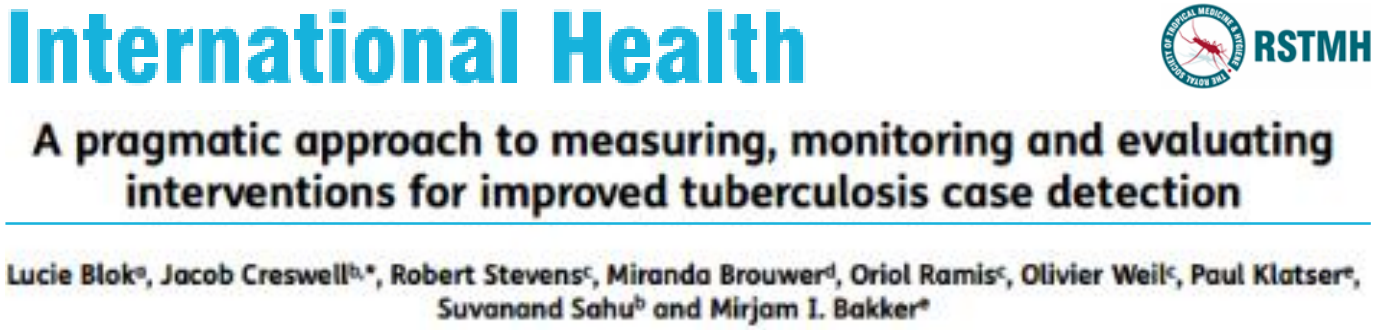
Trend-Adjusted Additional Notifications *[IP-TEN (IP/TEN)]*	
Evaluation Area	5,191 (+45.1%)
Control Area	-64 (-0.8%)

Other Notifications

- The same methods can be used to evaluate additional notifications for MDR-TB and TB infection

- For interventions (e.g. screening of children or people with HIV, roll out of universal DST, etc) it could be important to measure other notification gains

More Reading



Link to PDF of manuscript.

Section 2
Improving TB treatment adherence and outcomes

Selecting Evaluation and Control Areas/Populations

- Selection of areas can be similar to the description on slides 4-8

- However, the selection could be more sophisticated – randomizing health facilities or patients within a given facility, etc
  - No need to include non-intervention health facilities in your evaluation area

- **Interventions will almost certainly need to collect patient-level data as aggregate NTP data come with a 1 year delay**

Process Indicators

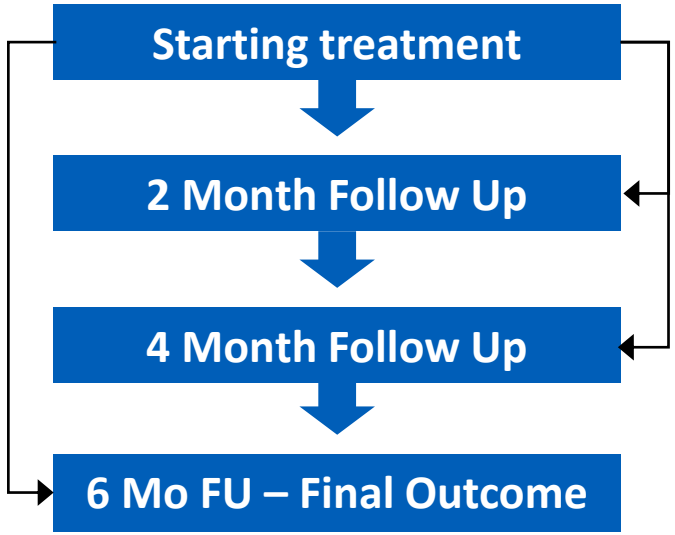
- It is not possible to define a *single set* of process indicators for *all* people treated for TB (TB infection, drug-susceptible TB and drug-resistant TB)

- Informative indicators are highly dependent on the prescribed regimen and follow-up care practices

- The following slide presents an indicator framework for treatment of drug-susceptible TB
  - Additional steps in cascade could be added and measured based on local follow up practices
  - Reporting could be disaggregated by quarterly patient cohorts, gender, treatment sites, etc

Sample Process Indicators
for Drug-Susceptible TB

TB treatment cascade for drug-susceptible TB



Persistence measures (early) loss to follow up for any reason in the treatment cascade

$$\frac{\text{Number patients } \textit{still} \text{ on treatment at the 2 [or 4] month follow up}}{\text{Patients started on treatment (≥2 [or 4] months ago)}} \times 100\%$$

Conversion measures changes in bacteriological status following testing with smear or culture

$$\frac{\text{Number Bac+ patients started on treatment, now Bac- at the 2 [or 4] month follow up}}{\text{Number Bac+ patients started on treatment (≥2 [or 4] months ago)}} \times 100\%$$

Treatment Success measures how many patients completed treatment or were cured

$$\frac{\text{Number patients completing treatment or cured at 6 month follow up}}{\text{Number patients started on treatment (≥6 months ago)}} \times 100\%$$

Sample Process Indicators
for Other Types of TB Treatment

Drug-resistant TB

- TB REACH project timelines are just 18 months, so consider choosing a standard interim milestone at which to measure outcomes, unless you are evaluating the short regimen

TB Infection

- Not possible to measure conversion or cure, so focus should be on persistence and treatment completion

Measuring Gains

- All projects in this category of funding will be **evaluated by measuring gains in final TB treatment outcomes**
  - Final outcomes defined by WHO
  - Other than MDR-TB: see previous slide

- Should also consider evaluating impact on early loss to follow up (persistence)