

Ventura County, California Community Health/EMS Collaboration





OPEN

Pete's
BREAKFAST
HOUSE



2400 BC: Egyptian Mummy



460 BC Hippocrates said, “Consumption is the most widespread disease of our time and it’s always fatal.”



1842 Dr. Robert Koch: Cultures Mycobacterium Tuberculosis



#2 Killer Worldwide due to Infection



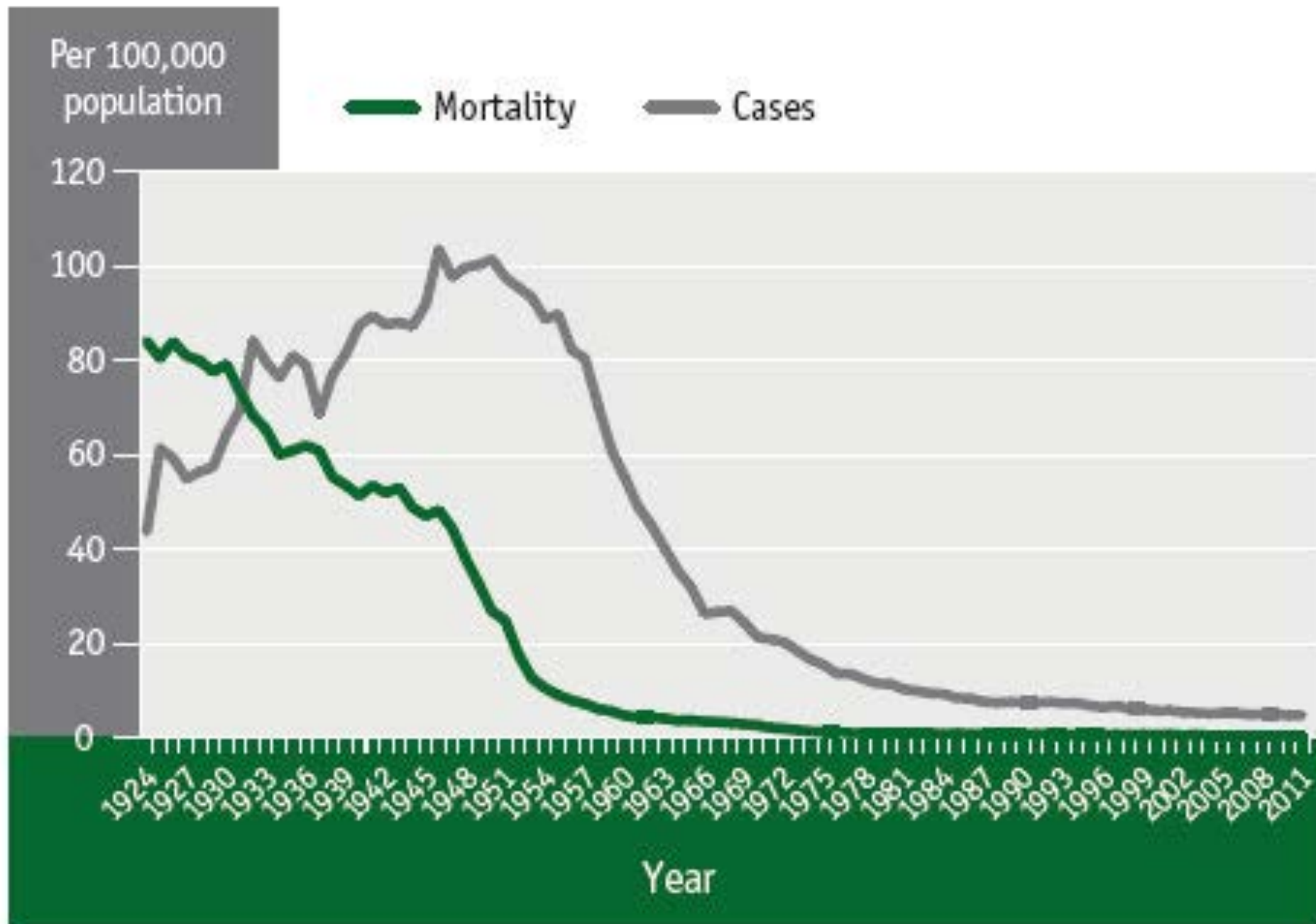
#2 Killer Worldwide due to Infection 9 Million/Year Come Down with Disease

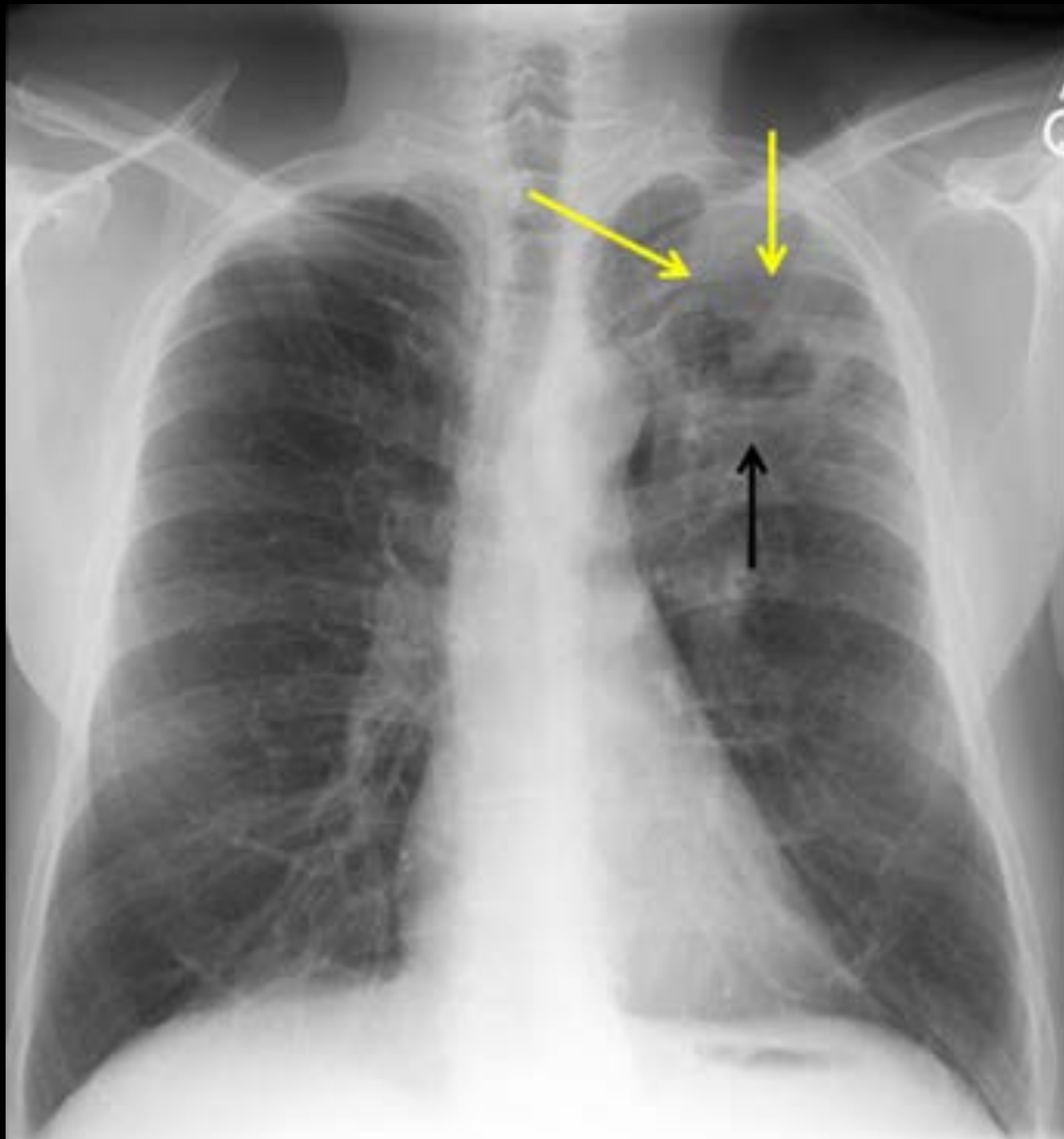


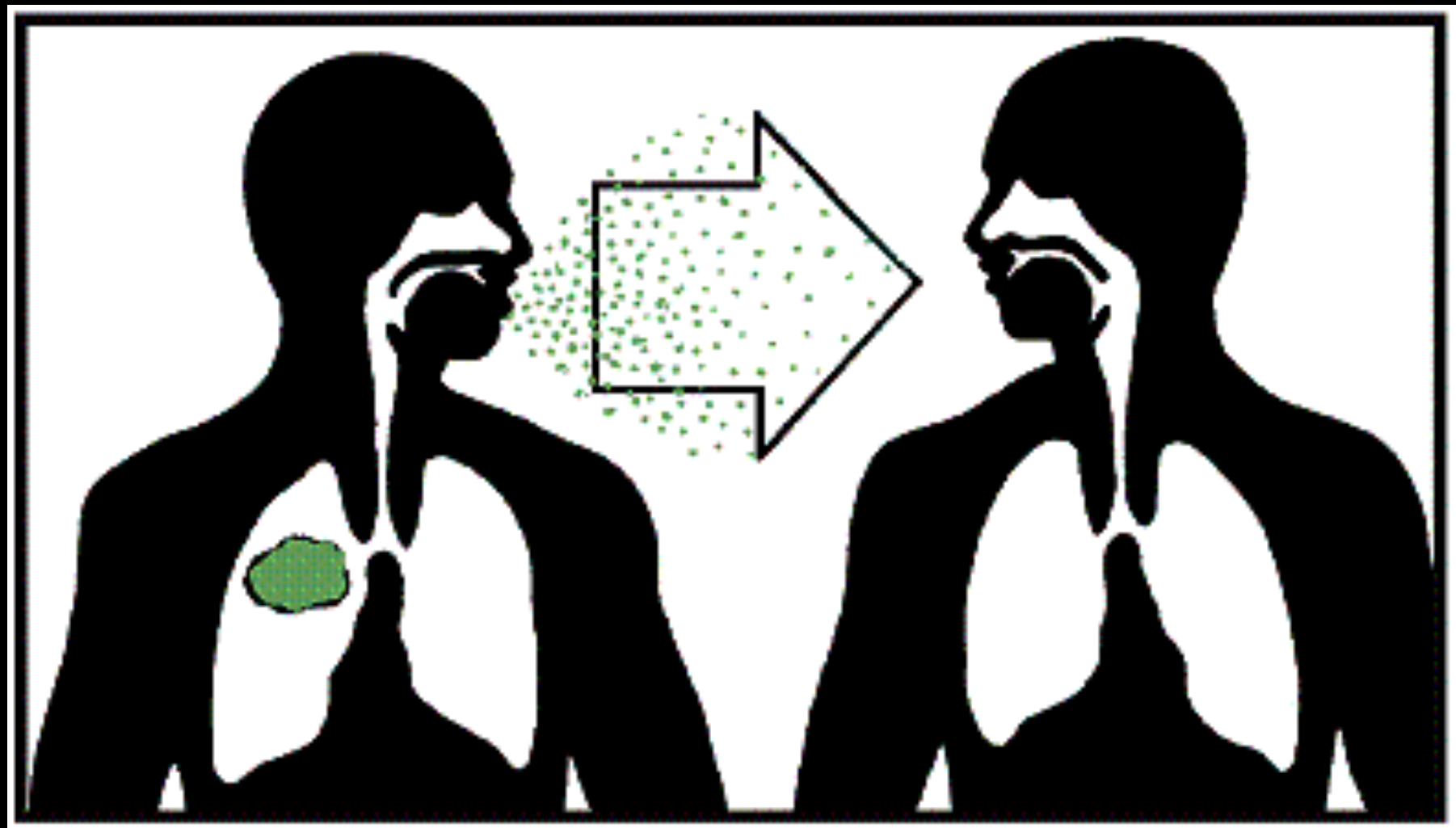
#2 Killer Worldwide due to Infection
9 Million/Year Come Down with Disease
1.5 Million Die



TB in Canada









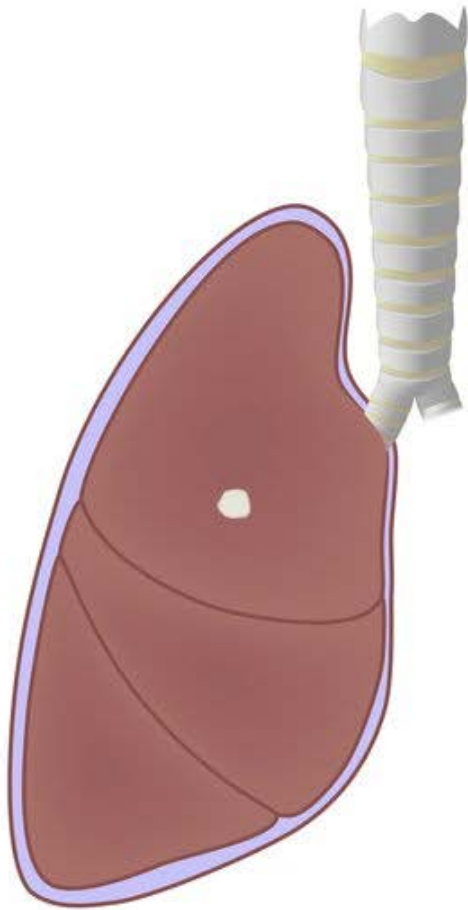




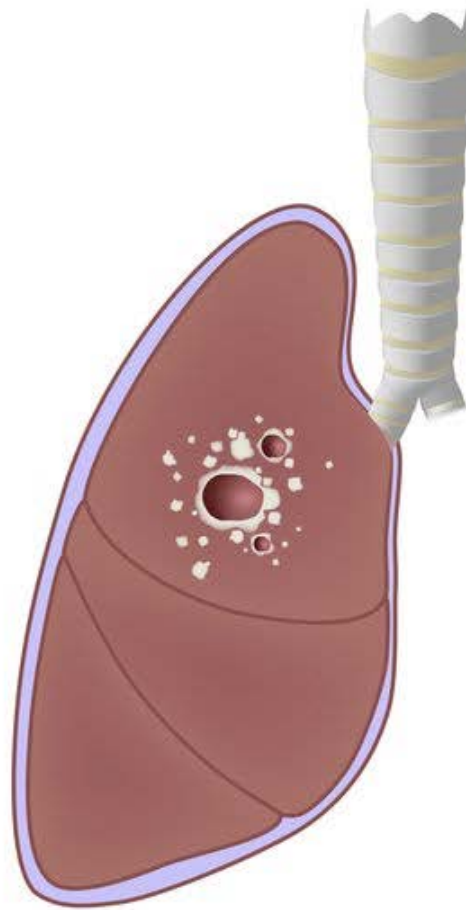




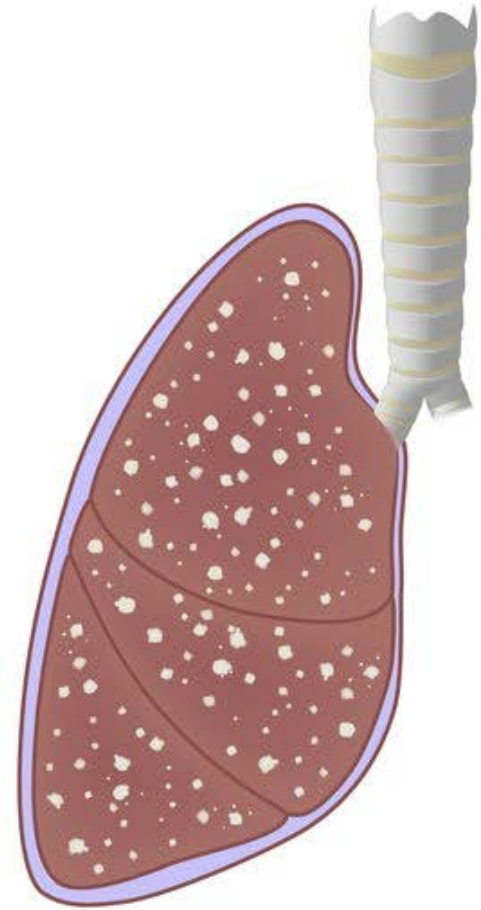
Tuberculosis



Latent
infection



Cavitary
tuberculosis



Miliary
tuberculosis



Ventura EMS/Public Health TB Partnership

Population Health

Triple AIM



Experience of Care

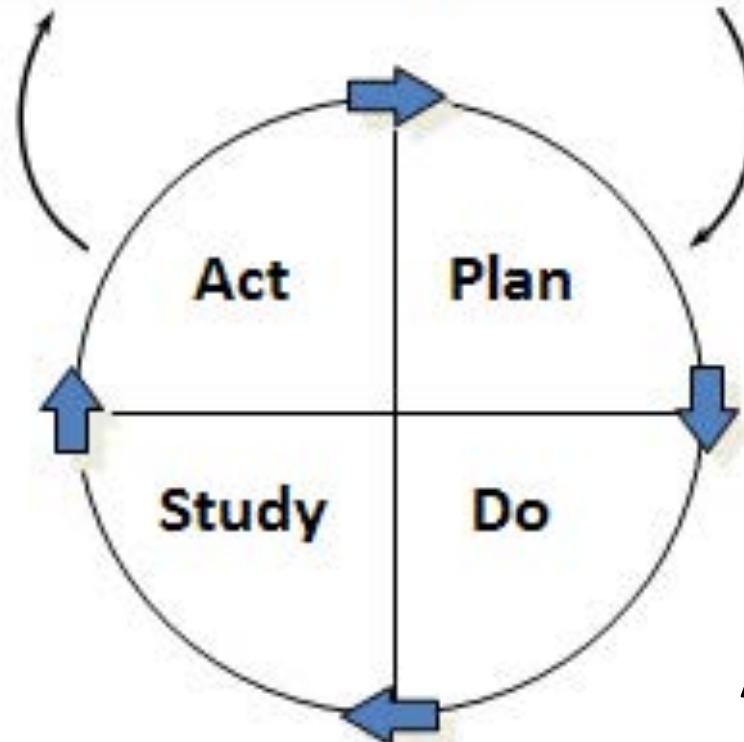
Per Capita Cost

Model for Improvement

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?



API

AIM

Decrease the cost and improve the patient experience patients with TB in Ventura County.



Change = Improvement?

Cost to deliver DOT per patient will decrease by 50% and patients will feel like the system takes care of their needs.



Changes?

Have Community Paramedics provide Directly Observed Therapy (DOT) for people with TB in collaboration with the TB clinic



VENTURA

County Map, California




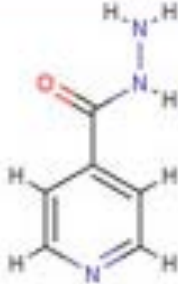



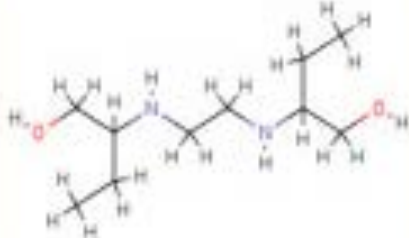

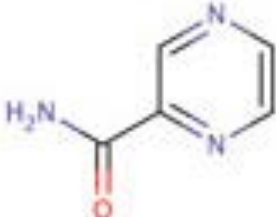
VENTURA

County Map, California





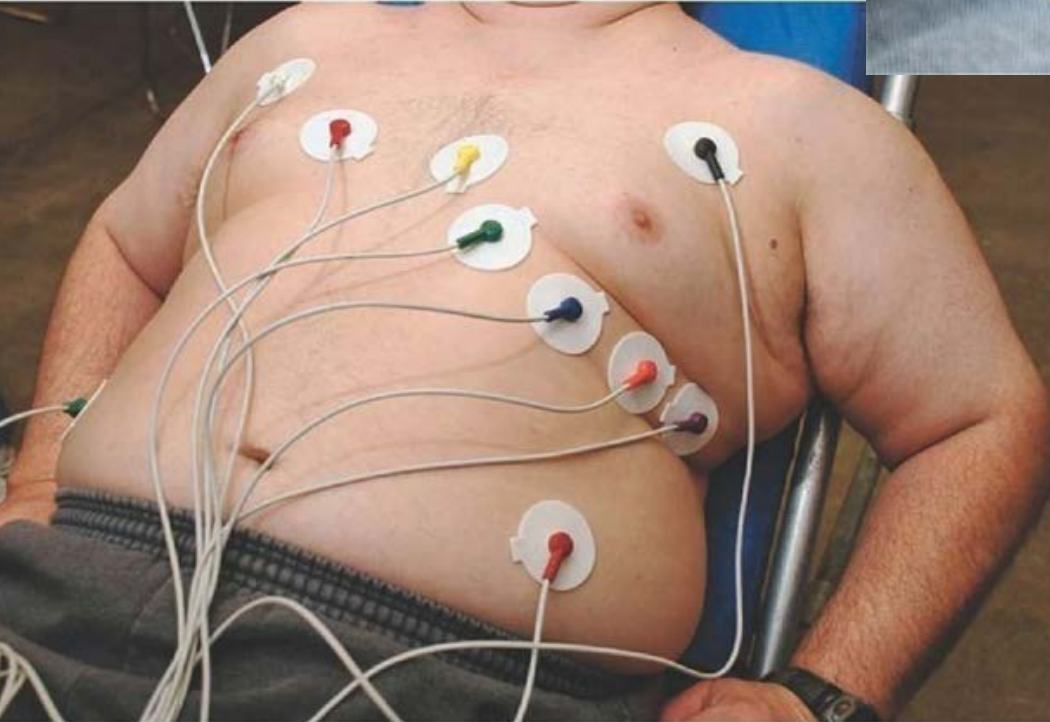


Drug Name	Formulation	Chemical Structure
Isoniazid		 <chem>NC(=O)c1ccncc1</chem>
Rifampin		
Ethambutol		 <chem>CCN(CC)C(O)CC(O)CN</chem>
Pyrazinamide		 <chem>NC(=O)c1ccncc1</chem>

Side Effect Management



Monitor Patients





40 Year Old Male



40 Year Old Male

Pulmonary TB Smear
Negative



40 Year Old Male

Pulmonary TB Smear
Negative

Diabetic, poorly controlled
with HgA1C 14



40 Year Old Male

Pulmonary TB Smear
Negative

Diabetic, poorly controlled
with HgA1C 14

Alcoholic



40 Year Old Male

Pulmonary TB Smear
Negative

Diabetic, poorly controlled
with HgA1C 14

Alcoholic

Schizophrenia



40 Year Old Male

Pulmonary TB Smear
Negative

Diabetic, poorly controlled
with HgA1C 14

Alcoholic

Schizophrenia

Lives in shed behind house

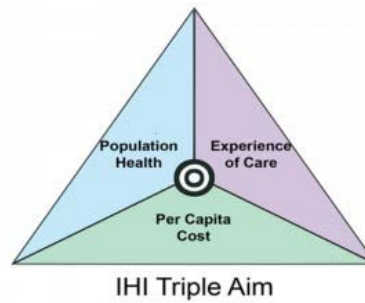


TB Project

October 2012-May 2016

48 Patients Complete Treatment
1 MDR Patient

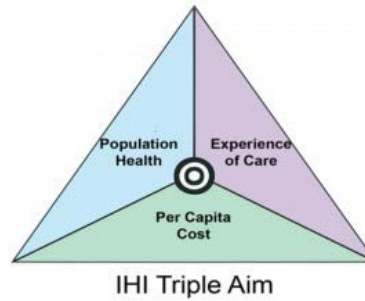
TB Project



TB Project

Population

Weekends and Holidays

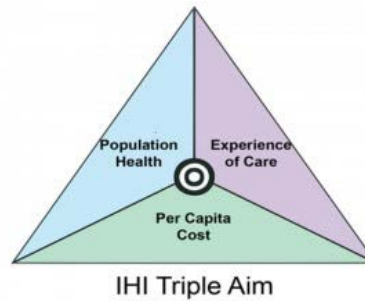


TB Project

Population

Weekends and Holidays

Side Effects
Management



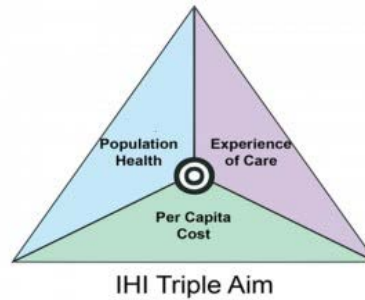
TB Project

Population

Weekends and Holidays

Side Effects
Management

Identify/Monitor
Toxicity



TB Project

Population

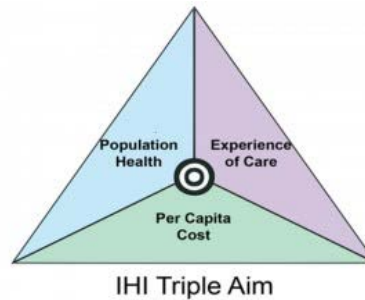
Weekends and Holidays

Side Effects
Management

Identify/Monitor
Toxicity

Experience

DOT just before bed



TB Project

Population

Weekends and Holidays

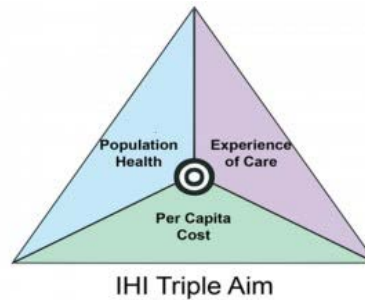
Side Effects
Management

Identify/Monitor
Toxicity

Experience

DOT just before bed

Food, Shelter, diabetes
self-care



TB Project

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Weekends and Holidays

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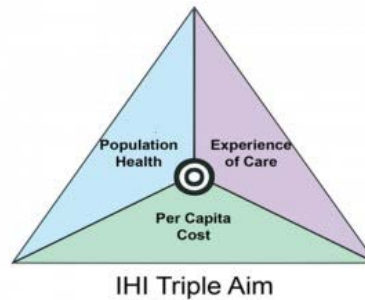
Identify/Monitor
Toxicity

Experience

DOT just before bed

Food, Shelter, diabetes
self-care

Completion
Celebrations



TB Project

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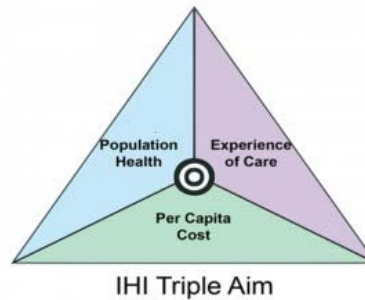
Identify/Monitor
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Cost

Dispense not Deliver

TB Project

Population

Weekends and Holidays

Side Effects
Management

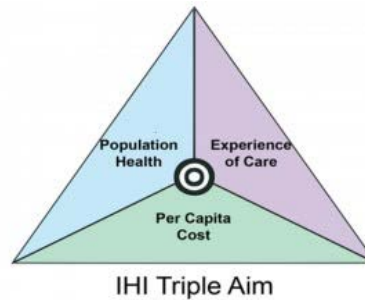
Identify/Monitor
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DOT just before bed

Food, Shelter, diabetes
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Completion
Celebrations



Cost

Dispense not Deliver

Clinic staff OT = 0
Estimated savings of
\$40,000

Thank You

Mike Taigman, MS, Improvement Advisor

Improvement Guide

FirstWatch

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Cell 510-593-5730



Every Record. In Real Time. Automatically.