



# New Directions for TB Program Evaluation in Virginia

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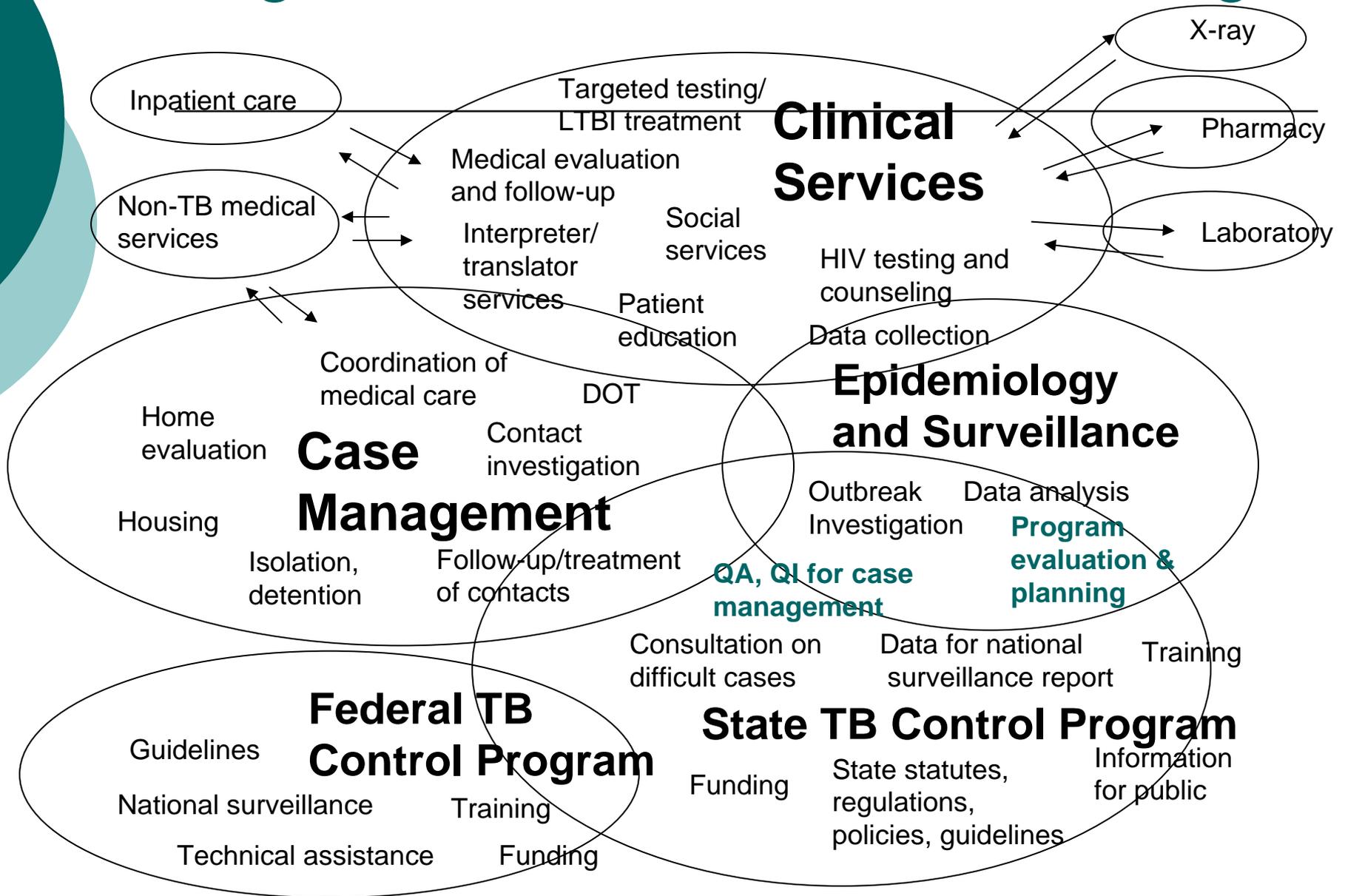
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# Why

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- Increased CDC emphasis on accountability, quality assurance and program evaluation
  - Program evaluation activities initiated in 2005
    - Review of contact investigation resources with Maryland and DC
    - Review of cases with no contacts
    - Review of infected contacts who did start treatment

# The Virginia View of a TB Control Program





# NTIP – the driving force

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- CDC's National TB Indicators Project
  - Program performance measurement
- 15 indicators
- Each state required to submit 5-year plan detailing planned progress towards meeting national objective

# Objective 1 – Completion of Treatment

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- For patients with newly diagnosed TB for whom 12 months or less of treatment is indicated, increase the proportion of patients who complete treatment within 12 months to 93.0%
  - Five year average 2003-2007 – 84.5%
  - \*2007 – 78.4%

	2010	2011	2012	2013	2014
Objective 1	86%	87%	89%	91%	93%

\* - most recent data available

## Objective 2 – TB Case Rates

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- Target 1 – decrease the TB case rate for U.S.-born person to less than 0.7 cases per 100,000
  - 2004-2008 – average 1.5/100,000
  - 2008 – 1.2/100,000

	2010	2011	2012	2013	2014
Target 1	1.4	1.2	1.0	0.9	0.7

# Objective 2 – TB Case Rates

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- Target 2 – decrease the TB case rate for foreign-born persons to less than 14.0 cases per 100,000
  - Five year average – 29.6/100,000
  - 2008 – 27/100,000

	2010	2011	2012	2013	2014
Target 2	29	28	27	26	25

## Objective 2 – TB Case Rates

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- Target 3 – decrease the TB case rate for U.S.-born non-Hispanic blacks to less than 1.3 cases per 100,000
  - Five year average – 4/100,000
  - 2008 – 2.5/100,000

	2010	2011	2012	2013	2014
Target 3	2.4	2.1	1.9	1.8	1.7

## Objective 2 – TB Case Rates

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- Target 4 – decrease the TB case rate for children younger than 5 years of age to less than 0.4 cases per 100,000
  - Five year average – 2.3/100,000
  - 2008 – 1.0/100,000

	2010	2011	2012	2013	2014
Target 4	1.0	0.9	0.8	0.7	0.6

# Objective 3 – Contact Investigation

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- Target 1 – increase the proportion of TB patients with positive acid-fast bacillus (AFB) sputum smear results who have contacts elicited to 100.0%
  - 2002-2006 – 92.6%
  - \*2006 – 87.9%

	2010	2011	2012	2013	2014
Target 1	90	93	95	97	99

\* - most recent data available

# Objective 3 – Contact Investigation

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- Target 2 – increase the proportion of contacts to sputum AFB smear-positive TB patients who are evaluated for infection and disease to 93.0%
  - 2002-2006 – 92.1%
  - \*2006 – 90.5%
  - Met or exceeded target 3 of 5 years – 2002-2004-2005

	2010	2011	2012	2013	2014
Target 2	92.1	92.4	92.5	92.8	93

\* - most recent data available

# Objective 3 – Contact Investigation

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- Target 3 – increase the proportion of contacts to sputum AFB smear-positive TB patients with newly diagnosed latent TB infection (LTBI) who start treatment to 88%
  - 2002-2006 – 64.9%
  - \*2006 – 60.5%

	2010	2011	2012	2013	2014
Target 3	65	67	70	72.5	75

\* - most recent data available

# Objective 3 – Contact Investigation

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- Target 4 – for contacts to sputum AFB smear-positive TB patients who have started treatment for the newly diagnosed LTBI, increase the proportion who complete treatment to 79.0%
  - 2002-2006- - 67.7%
  - \*2006 – 61.6%

	2010	2011	2012	2013	2014
Target 4	68	69	70	71	72

\* - most recent data available

# Objective 4- Laboratory Reporting

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- Two targets aimed at improved laboratory performance
- Target 2 – increase the proportion of culture-positive TB cases with initial drug-susceptibility results reported to 100%
  - 2004-2008 – 91.6%
  - 2008 – 84.1%

	2010	2011	2012	2013	2014
Target 2	92	94	96	98	100



## Objective 5- Treatment Initiation

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- Increase the proportion of TB patients with positive AFB sputum-smear results who initiate treatment within 7 days of specimen collection to n%
  - No current data available
  - Begin data collection in 2009
  - Current status and targets to follow

# Objective 6 – Sputum Culture Conversion

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- Increase the proportion of TB patients with positive sputum culture results who have documented conversion to sputum culture-negative within 60 days of treatment initiation to 61.5%
  - 2004-2008 – 46.9%
  - 2008 – 27.8%

	2010	2011	2012	2013	2014
Objective 6	40%	45%	50%	55%	60%

# Objective 7 – Data Reporting

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- Three targets to improve completeness of data reporting
- Target 1 – increase the completeness of each core Report of Verified Case of Tuberculosis (RVCT) data item reported to CDC, as described in the TB Cooperative Agreement announcement, to 99.2%
  - 2007 – 98.3% completeness
  - 2008 – 17 of 21 variables exceeded 2015 target

	2010	2011	2012	2013	2014
Objective 7	98.5	98.7	99	99.1	99.2

# Objective 8 – Recommended Initial Therapy

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- Increase the proportion of patients who are started on the recommended initial 4-drug regimen when suspected of having TB disease to 93.4%
  - 2004-2008 – 90%
  - 2008 – 90.9%
  - Health departments – 91.8%
  - Private providers – 72.7%

	2010	2011	2012	2013	2014
Objective 8	91.4%	91.7%	92%	92.5%	93%

# Objective 9 – Universal genotyping

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- Increase the proportion of culture-confirmed TB cases with genotyping result reported to 94.0%.
  - 2005-2008 – 73.2%
  - 2008 – 68.7

	2010	2011	2012	2013	2014
Objective 9	75%	80%	85%	90%	94%

# Objective 10 – Known HIV Status

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- Increase the proportion of TB cases with positive or negative HIV test result reported to 88.7%
  - 2004-2008 – 75.1%
  - 2008 – 75.7%
  - Met prior objective targeting selected age range

	2010	2011	2012	2013	2014
Objective 10	75%	77.1%	79.3%	81.3%	83%

# Objective 11 – Evaluation of Immigrants and Refugees

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- Four targets
  - No current data available
  - Begin data collection in 2009
  - Current status and targets to follow
- Two aimed at improving evaluation of immigrants and refugees within certain timeframes
- Two focus on improving treatment for LTBI by infected immigrants and refugees

# Objective 12 – Sputum Culture Reported

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- Increase the proportion of TB cases with a pleural or respiratory site of disease in patients ages 12 years or older that have a sputum-culture result reported to 95.7%
  - 2004-2008 – 87.7%
  - 2008 – 82.6%

	2010	2011	2012	2013	2014
Objective 12	88%	89%	90%	91%	92%



# Objective 13 – Program Evaluation

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- Increase the percent of cooperative agreement recipients that have an evaluation focal point.
  - Virginia has a designated Evaluation Focal Point



# Objective 14 – Human Resource Development Plan

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- Increase the percent of cooperative agreement recipients who submit a program-specific human resource development plan (HRD), as outlined in the TB Cooperative Agreement announcement, to 100.0%
  - Virginia submitted annual HRD plans



## Objective 15 – Training Focal Point

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- Increase the percent of cooperative agreement recipients that have a TB training focal point.
- Virginia has a designated TB Training Focal Point

# The Next Steps

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- 5 year program evaluation plan required for federal cooperative agreement
- Focus on key NTIP performance indicators:
  - Completion of treatment
  - Recommended 4-drug initial therapy
  - Sputum culture conversion within 60 days
  - Sputum collected on all pleural/respiratory disease sites
  - Known drug susceptibility results
  - Known HIV results



# The Next Steps

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- Case reviews – ongoing & continuing
- Cohort reviews – coming in 2010
- District program evaluations
  - Every three year process beginning in mid-2010

